The Effectiveness of Mandatory-Random Student Drug Testing

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DISCLOSURE OF POTENTIAL CONFLICTS OF INTEREST

The research team for this evaluation consists of a prime contractor, RMC Research Corporation, and one major subcontractor, Mathematica Policy Research. None of these organizations or their key staff members have financial interests that could be affected by findings from the study. None of the members of the Technical Working Group, convened by the research team to provide advice and guidance, have financial interests that could be affected by findings from the study.

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EXECUTIVE SUMMARY

Despite a decline in adolescent substance use over the past 10 years, the prevalence of illicit substance use among youth remains high and a cause of concern. Recent national estimates indicate that 47 percent of students report having ever used illicit drugs and 72 percent report having ever drunk alcohol before leaving high school (Johnston et al. 2008). The negative consequences associated with substance use in adolescence include low academic outcomes, delinquency, and risky sexual behaviors (Baskin-Sommers and Sommers 2006; Ellickson et al. 2003; Roebuck et al. 2004).

One approach to addressing student substance use is school-based mandatory-random student drug testing (MRSDT). Under MRSDT, students and their parents sign consent forms agreeing to the students' random drug testing as a condition of participation in athletics and other school-sponsored competitive extracurricular activities. The programs are designed to supplement existing school-based substance use prevention strategies and have the twin goals of (1) identifying students with substance use problems for referral to appropriate counseling or treatment services and (2) deterring student substance use. Recent national estimates indicate that 14 percent of U.S. public school districts conducted random drug testing in at least one of their high schools during the 2004–2005 school year (Ringwalt et al. 2008); since 2003, the U.S. Department of Education's Office of Safe and Drug-Free Schools (OSDFS) has operated a grant program to support MRSDT programs in schools.

To help assess the effects of school-based random drug testing programs, the U.S. Department of Education's Institute of Education Sciences (IES) contracted with RMC Research Corporation and Mathematica Policy Research to conduct an experimental evaluation of the MRSDT programs in 36 high schools within seven districts that received OSDFS grants in 2006. This report describes the implementation of the MRSDT programs and their impacts on students—focusing primarily on student-reported substance use but also examining other outcomes.

The study's key findings indicate that:

1. Consistent with the goals of the program, students subject to MRSDT reported less substance use than comparable students in high schools without MRSDT. Specifically, student-reported past-30-day use of substances tested under their districts' MRSDT policies was lower in schools implementing MRSDT than in schools without such policies. A similar, though not statistically significant, pattern was observed on other student-reported substance use measures.

2. However, the MRSDT program had no "spillover effects" on the substance use reported by students who were not subject to testing and had no effect on any group of students' reported intentions to use substances in the future.

3. Contrary to concerns raised about the possible unintentional negative consequences of random drug testing, the MRSDT program had no effect on the proportion of students

participating in activities subject to drug testing or on students' attitudes toward school and perceived consequences of substance use.

4. There was some evidence that impacts of the MRSDT program were related to the ways in which the programs were implemented. Both testing for a larger number of substances and testing for alcohol and tobacco were significantly correlated with lower substance use in the treatment schools relative to the control schools. However, it was not possible to distinguish between these two factors due to the fact that districts that tested for a larger number of substances were also those districts that tested for alcohol or tobacco. Impacts were not significantly related to other implementation characteristics examined.

Background on MRSDT Programs and Evaluation

In 2003, the MRSDT grant program sponsored by OSDFS began supporting MRSDT in schools. The goal of the MRSDT grants is to reduce substance use among students enrolled in high schools whose districts apply for and receive funding to implement MRSDT programs. The programs are meant to supplement—not replace—other school-based prevention strategies, so in order to receive grant funding, districts must document the other policies and programs that they already have in place to prevent substance use.

The OSDFS grant program leaves a number of implementation decisions to the discretion of individual grantees. All districts are required to follow a basic set of testing procedures, including administering tests to a minimum of 50 percent of eligible students; testing for a minimum of five substances (marijuana, amphetamines, cocaine, methamphetamines, and opiates); and establishing procedures to maintain the confidentiality of test results. However, within these basic requirements, individual districts determine the following four criteria: (1) the list of competitive extracurricular activities that will be covered by their drug testing policies, (2) the frequency of testing and proportion of eligible (covered) students to be tested during each testing event, (3) any additional substances for which testing will be conducted beyond those required by the grant, and (4) the period of the school year during which eligible students may be subject to testing. The study examined whether and how these various implementation decisions relate to the effectiveness of the MRSDT programs.

The evaluation of these programs is guided by a logic model predicting that MRSDT may reduce student substance use in three ways:

1. *By Deterring Substance Use.* If students are sufficiently aware of the possibility of drug testing, the threat of testing may cause students to stop using substances or give them a reason to refuse offers from peers to use substances.

2. *By Detecting Substance Use.* Students who test positive for drugs can be identified by school staff and referred to appropriate drug treatment or counseling services.

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│                        OVERVIEW OF EVALUATION                                 │
│                                                                               │
│  **Intervention:** MRSDT, funded by OSDFS grants, requires that students      │
│  consent to random drug testing as a condition of participating in covered    │
│  activities. A parent or guardian must also consent to the student's testing. │
│                                                                               │
│  **Study sample:** 7 grantees, 36 high schools, and 4,723 9th through 12th    │
│  grade students. Participating districts and their schools received MRSDT      │
│  grants from OSDFS in fall 2006.                                              │
│                                                                               │
│  **Research design:** After baseline data collection, about half the schools  │
│  within each grantee district were randomly assigned either to the treatment  │
│  group that was permitted to begin implementing MRSDT immediately (and        │
│  during the 2007–2008 school year) or to the control group that was not       │
│  permitted to begin implementing MRSDT until after the follow-up student      │
│  survey was conducted in spring 2008.                                         │
│                                                                               │
│  **Key outcomes:** Students' self-reported substance use, perceptions of the  │
│  consequences of substance use, connectedness with school, intentions to use  │
│  substances in the future, and participation in activities covered by MRSDT;  │
│  number of disciplinary incidents reported by school officials.               │
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3. ***By Having Spillover Effects on Nonparticipants.*** Although MRSDT is most likely to affect the substance use of students who participate in activities subject to drug testing, it may also have spillover effects to other students in the school, as they observe and are influenced by the behavior of their peers.

Study Design

The study was designed as a rigorous program evaluation focused on assessing the effectiveness of MRSDT programs implemented in real-world settings. Schools were randomly assigned within districts either to a treatment group that was permitted to begin implementing MRSDT immediately after random assignment was conducted in spring 2007 (and to continue implementation during the 2007–2008 school year) or to a control group that was not permitted to implement MRSDT until after the study's spring 2008 follow-up survey was administered. Thus, impacts for this study are calculated over a one-year period (spring 2007–2008) and do not represent longer-term effects.

Within the treatment and control schools, students in grades 9–12 were randomly sampled to participate in data collection. As shown in Table 1, the evaluation is based on data collected from six sources: (1) student rosters provided by each district, (2) student surveys administered at baseline (spring 2007) and follow up (spring 2008), (3) school-records information collected from each study school, (4) forms documenting the drug testing procedures used in the study's treatment schools, (5) structured interviews with a key staff member at each study school, and (6) structured interviews with a staff member from each district. Active parental consent, which was required for study participation, was not obtained for all students sampled for the surveys, and thus the study's results are not necessarily generalizable to the schools as a whole.

The study's impact analysis focuses on comparing rates of self-reported substance use among students in the treatment and control schools based on data from the spring 2008 follow-up survey. Results of the drug tests conducted in the treatment schools are described in aggregate

TABLE 1

DATA COLLECTION INSTRUMENTS

Data Source	Time Collected	Description of Data
Student Rosters	January 2007 (baseline sampling), August 2007 (second sampling), March 2008 (follow up)	These rosters provided personal identifying information used to sample students and track the study sample, such as the student's name, gender, grade level, date of birth, and home address.
Student Survey	April-May 2007 (baseline), March– April 2008 (follow up)	This survey included questions about student demographics, participation in school activities, retrospective substance use (lifetime, 6-month, and 30-day), attitudes toward substance use, attitudes toward school, and awareness of school policies.
Schoolwide Records Collection Form	April-November 2007 (baseline), March– May 2008 (follow up)	This form gathered data on student demographics, school policies, substance use incidents, prevention programs, teacher training, and student mobility.
Drug Testing Collection Form	September 2007 – July 2008	This form collected data on the demographics of tested students, testing procedures, substances for which tests were conducted, and aggregated test results.
School Staff Interviews	May 2008	These interviews gathered two types of data. In both treatment and control schools, the interviews collected information on substance abuse prevention strategies, school policies regarding suspicion of student drug use, and student awareness of drug testing. In treatment schools, the interviews also collected information on the procedures used for mandatory random-student drug testing.
District Staff Interviews	March 2009	These interviews collected data on the period in which students were subject to drug testing and the information students received about the substances covered by the tests.

as a part of the study's implementation analysis, but do not factor into the study's impact analysis as the drug tests were not administered to students in control schools.

To determine whether MRSDT affects the substance use and attitudes reported by students who are subject to testing, we compared students in the treatment and control schools who participated in activities covered under their districts' MRSDT policies. For example, if football and soccer were covered activities, we compared rates of substance use reported by football and soccer players in the treatment and control schools. Due to the experimental design used in this study, differences in outcomes of students in the treatment and control groups are attributable to the effect of the MRSDT program (not other factors). To determine whether MRSDT has spillover effects to other students in the school, we estimated impacts for students who did *not* participate in covered activities.

Findings from the Study's Primary Impact Questions

The study's primary research questions were shaped by two factors. First, because the MRSDT programs are intended to affect most directly students who are subject to drug testing, the primary research questions focus on students who participate in athletics or other extracurricular activities covered under their district's testing policy. Second, although the study is primarily concerned with impacts on student substance use, to capture the full range of effects of MRSDT programs the study also examines impacts on other student outcomes, such as participation in activities subject to drug testing and attitudes toward school. Accordingly, the study's five main research questions and the study's findings on each question are:

1. **Do students who are subject to MRSDT report less use of alcohol, tobacco, and other illicit substances than comparable students in high schools without MRSDT?**

   Sixteen percent of students subject to MRSDT reported using substances covered by their district's MRSDT policy in the past 30 days, compared with 22 percent of comparable students in schools without MRSDT (see Figure 1). Similar patterns were observed on other student-reported substance use measures (see Figure 1), but those differences were not statistically significant.

2. **Are students who are subject to MRSDT less likely to report that they will use illicit substances in the future than comparable students in high schools without MRSDT?**

   No, 34 percent of students subject to MRSDT reported that they "definitely will" or "probably will" use substances in the next 12 months, compared with 33 percent of comparable students in schools without MRSDT.

3. **Do students who are subject to MRSDT report different perceptions of the consequences of substance use than comparable students in high schools without MRSDT?**

   No, on two measures of students' perceptions of the positive and negative consequences of using substances, students subject to MRSDT did not report having different perceptions of the consequences of substance use relative to comparable students in high schools without MRSDT. The lack of statistically significant impacts on students' perceived consequences of substance use in this study differs from prior research suggesting that MRSDT may have unintended negative consequences on these outcomes (Goldberg et al. 2003, 2007).

4. **Do students in high schools with MRSDT have different participation rates in extracurricular activities than comparable students in high schools without MRSDT?**

   No, 53 percent of students in treatment schools reported participating in an activity covered by MRSDT, relative to 54 percent of comparable students in high schools without MRSDT.

FIGURE 1

IMPACTS OF MRSDT ON RETROSPECTIVE SUBSTANCE USE
FOR PARTICIPANTS IN COVERED ACTIVITIES

Percentages

70

60

50

40

30

20

10

0

| | Used Any Substance | Used Any Substance Excluding Alcohol and Tobacco | Used Any Substance Covered Under District Testing Policy |

Treatment Schools, Past 30 Days   Control Schools, Past 30 Days   Treatment Schools, Past 6 Months   Control Schools, Past 6 Months
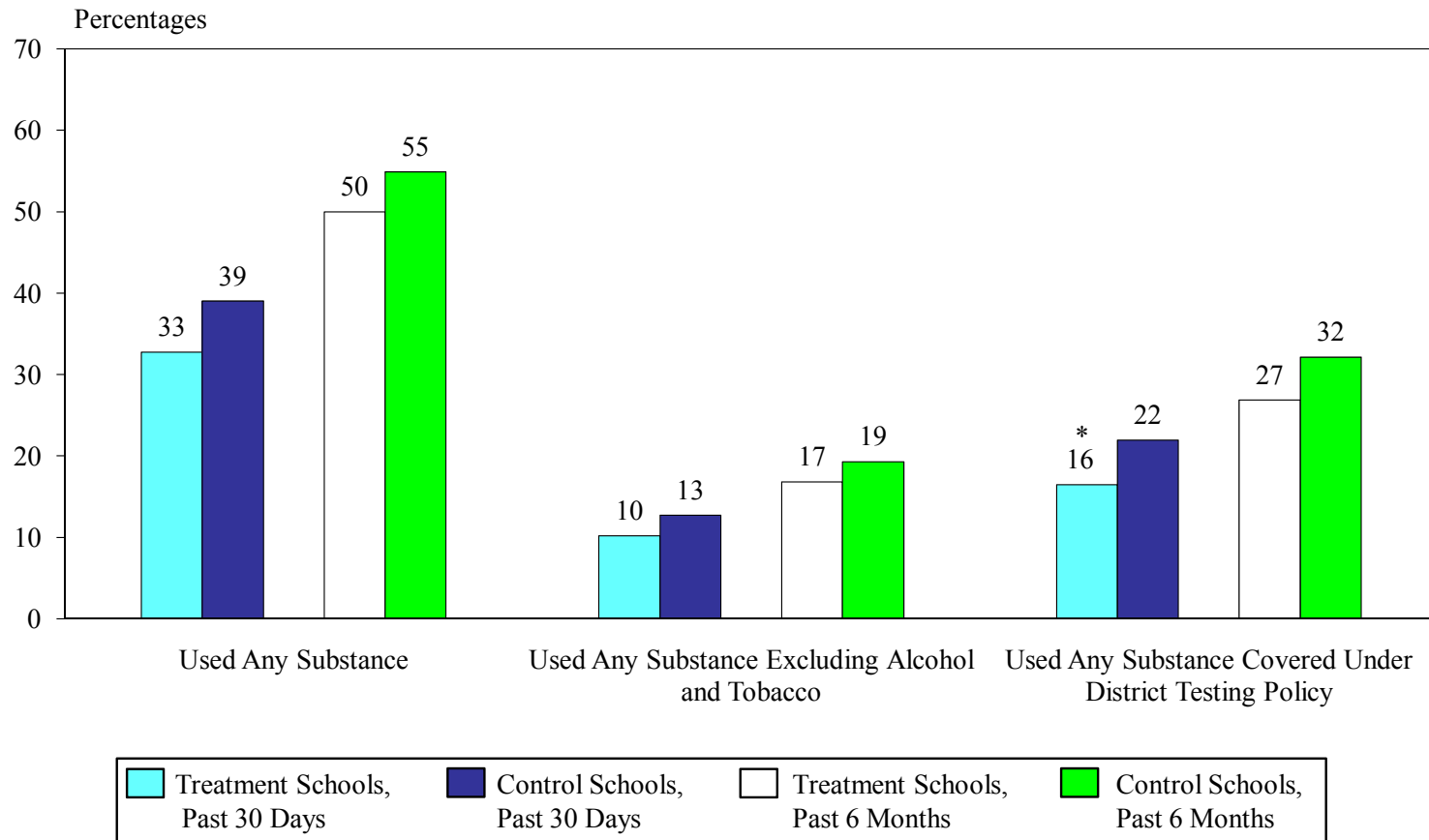
*Statistically different from the control group at the .05 level.

5. **Do students who are subject to MRSDT report different attitudes toward school than comparable students in high schools without MRSDT?**

   No, there was no impact on the extent to which students reported feeling connected to their schools. The lack of statistically significant impacts on students' attitudes toward school in this study differs from prior research suggesting that MRSDT may have unintended negative consequences on these outcomes (Goldberg et al. 2003, 2007).

Findings from the Study's Secondary Impact Questions

Secondary research questions examined possible spillover effects of MRSDT to other students in the school who are *not* subject to testing, and the impact of MRSDT on the number of reported disciplinary incidents in schools. Other secondary questions examined whether the impacts of MRSDT were related to differences in program implementation and other grantee characteristics. For example, impacts might be larger for programs that test for a broader range of substances, conduct testing more frequently, subject a larger number or higher proportion of students to testing, or that have a higher level of student awareness of the testing program.

The three main secondary research questions and the study's findings on each question are:

1. **Does the MRSDT program have spillover effects on the substance use or other outcomes of students who are not covered by the MRSDT policies?**

   No, the MRSDT program had no spillover effects. For example, 36 percent of students not covered by the MRSDT policy in treatment schools and 36 percent of comparable students in control schools reported using a substance in the past 30 days (see Figure 2).

2. **Does the MRSDT program affect the number of disciplinary incidents reported by schools?**

   No, the MRSDT program had no impact on school-reported disciplinary incidents. For example, treatment schools reported an average of five instances per 1,000 students of distribution, possession, or use of illegal drugs compared with four such instances in control schools.

3. **Are the impacts of the MRSDT program associated with the way in which the program was implemented?**

   There was some evidence that impacts of the MRSDT program were related to implementation characteristics. Both testing for a larger number of substances and testing for alcohol and tobacco were significantly correlated with lower substance use in the treatment schools relative to the control schools. However, it was not possible to distinguish between these two factors due to the fact that districts that tested for a larger number of substances were also those districts that tested for alcohol or tobacco. Impacts were not significantly related to testing frequency, number of drug tests conducted, or level of student awareness of MRSDT.

FIGURE 2

IMPACTS OF MRSDT ON RETROSPECTIVE SUBSTANCE USE
FOR NONPARTICIPANTS
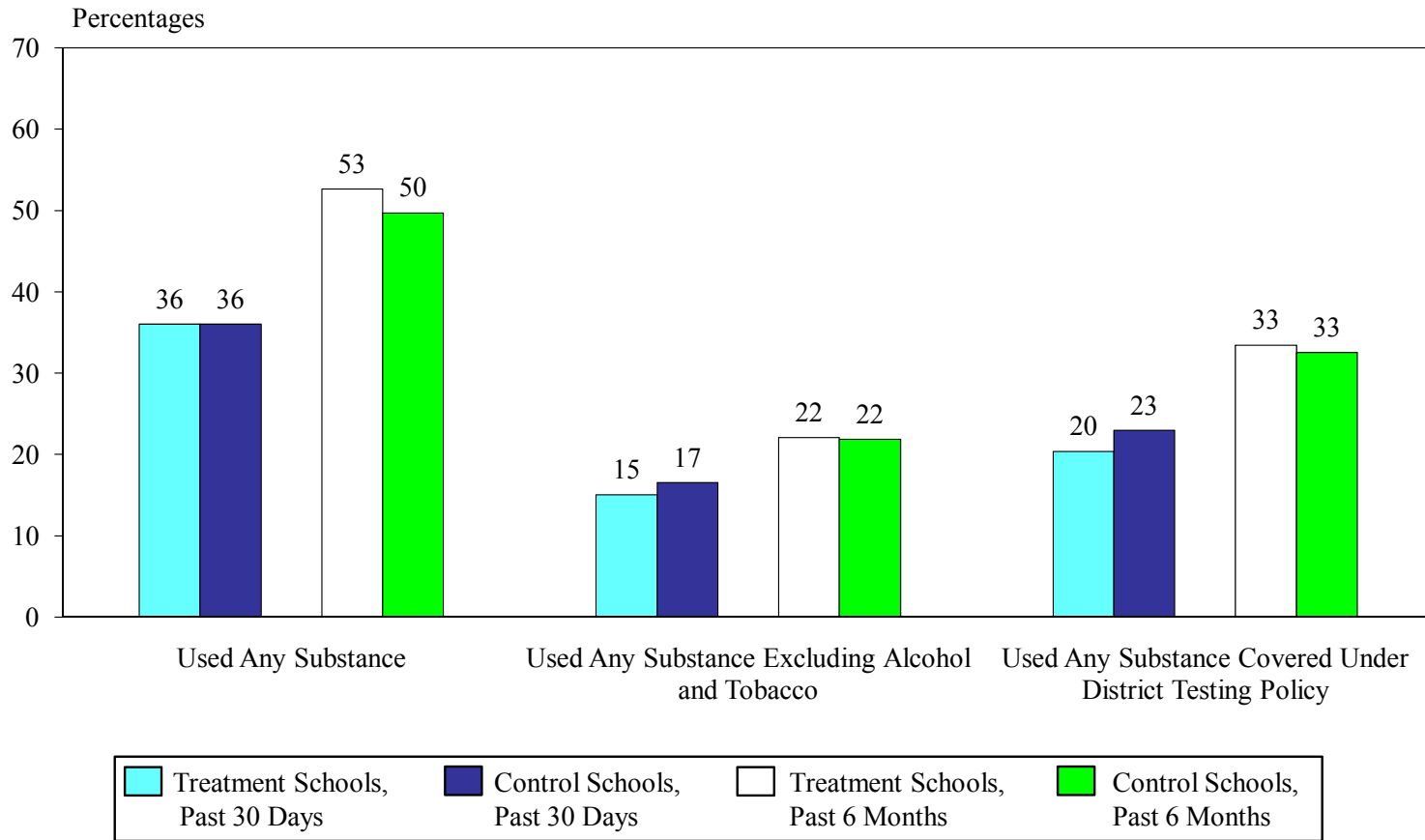
Description of the MRSDT Program

The study examined the characteristics of the MRSDT programs being implemented by participating schools. One purpose of the implementation analysis was to describe the key features of the drug testing programs implemented by treatment schools. Understanding how the programs were implemented is important for two reasons: (1) this study is an evaluation of MRSDT programs as they were carried out in real-world conditions, rather than an efficacy study carried out in more tightly controlled conditions; and (2) variation in program implementation may be correlated with the impacts of the program (as noted earlier).

The key characteristics of the MRSDT programs implemented by the participating treatment schools include:

- Five of the seven study districts chose to cover both sports and other competitive extracurricular activities in their MRSDT policies. Two districts limited MRSDT to student athletes.

- The frequency with which treatment schools conducted drug testing through their MRSDT grants ranged from four times per year to five or six times per month.

- Six of the seven districts tested for the five substances required by their grant award (marijuana, amphetamines, methamphetamines, opiates, and cocaine). The remaining district tested for three of the five required substances.

- Across the study's 20 treatment schools, a total of 3,476 drug tests were conducted during 324 testing events.

- The rate of positive drug tests—38 of 3,476 tests—was lower than the rate at which students reported using substances, a finding that is consistent with prior research (DuPont 2008a, 2008b).

Because MRSDT is thought to deter substance use through the threat of testing, the implementation analysis examined the extent to which students were aware of the MRSDT program. At follow up, students' awareness of the presence of MRSDT was higher in treatment schools than in control schools. In particular, 84 percent of treatment school students reported

that students in their schools who participated in sports or other activities could be randomly tested for drugs, compared with 50 percent of students in the control schools.[1]

Other Substance Use Prevention Activities in Study Schools

The analysis also examined the other substance use prevention strategies that were used in treatment and control schools—information that is important for understanding the context within which the MRSDT programs operated and for assessing whether control schools attempted to compensate for their control group assignment through the implementation of other substance use prevention programs or policies during the evaluation period. There was no evidence that control schools attempted to compensate for their assignment to the control group through the implementation of other substance use prevention strategies. At follow up, the implementation of other substance use prevention strategies—for example, policies for students suspected of being under the influence of drugs or for students found in the possession of drugs—was no higher in control schools than in treatment schools. In addition, there was no evidence that the implementation of MRSDT in the treatment schools influenced the substance use of students in the control schools. In particular, over the one-year evaluation period (spring 2007–2008), trends in student substance use were no different in control schools than in a similar set of schools outside the study districts recruited by the study team to serve as a nonexperimental comparison group.

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[1] The study team expected some reported awareness of MRSDT in the control schools, for two reasons. First, as part of the OSDFS grant requirements, schools assigned to the control group were instructed not to announce, promote, or implement MRSDT until after the study's spring 2008 follow-up survey was administered. However, it is possible that, through school board or community meetings, the grant application process, or the implementation of MRSDT in the districts' treatment schools, students in control schools became aware of the testing program. Second, the study team also found evidence that even in schools *without* MRSDT programs, some students mistakenly believe that extracurricular activity participants can be randomly tested for drugs. In particular, in data the study team collected from a nonexperimental sample of seven high schools outside the study districts, 32 percent of students reported that students in their schools could be randomly tested for drugs, even though none of the seven schools had MRSDT programs.

I. INTRODUCTION

Despite a decline in adolescent substance use over the past 10 years, the prevalence of illicit substance use among youth remains high and is a cause for concern. Recent national estimates indicate that 47 percent of students report having ever used illicit drugs and 72 percent report having ever drunk alcohol before leaving high school (Johnston et al. 2008). The negative consequences associated with substance use in adolescence include low academic outcomes, delinquency, and risky sexual behaviors (Baskin-Sommers and Sommers 2006; Ellickson et al. 2003; Roebuck et al. 2004). Substance use is also a leading cause of health problems in adolescence and adulthood (Anderson and Smith 2005; Brook et al. 2004; Oesterle et al. 2004). For these reasons, identifying approaches to reduce adolescent substance use remains an important goal for social policy and research.

One approach to address student substance use is school-based mandatory-random student drug testing (MRSDT). Under MRSDT, students and their parents sign consent forms agreeing to the students' random drug testing as a condition of participation in athletics and other school-sponsored competitive extracurricular activities. The programs are designed to supplement existing school-based substance use prevention strategies and have the twin goals of (1) identifying students with substance use problems for referral to appropriate counseling or treatment services and (2) deterring substance use among all students. Recent national estimates indicate that 14 percent of U.S. public school districts conducted random drug testing in at least one of their high schools during the 2004–2005 school year (Ringwalt et al. 2008), and since 2003, the U.S. Department of Education's Office of Safe and Drug-Free Schools (OSDFS) has operated a grant program to support MRSDT programs in schools. However, few studies have rigorously tested the effects of MRSDT on student substance use, and some research suggests that random drug testing may have unintended negative consequences on student attitudes toward school and other risk factors for future substance use (Goldberg et al. 2003, 2007).

To help assess the effects of school-based random drug testing programs, the U.S. Department of Education's Institute of Education Sciences (IES) commissioned this experimental evaluation of the MRSDT programs in 36 high schools within districts that received OSDFS grants in 2006. The primary focus of the study concerns the impacts of MRSDT on student-reported substance use; however, to capture other possible effects of MRSDT programs, the study also examines impacts on participation in activities subject to drug testing, attitudes toward school, intention for future substance use, and perceived consequences of substance use.

This report describes the implementation of the MRSDT programs and their impacts on students. As a background for those results, this chapter provides an overview of MRSDT programs and this evaluation, reviews the existing research on MRSDT programs, and presents the study's key research questions. The remainder of the report describes the design of the evaluation and presents findings from the implementation and impact analyses.

A. BACKGROUND ON MRSDT PROGRAMS AND EVALUATION

Random drug testing in schools began in the late 1980s (DuPont and Brady 2005). Earlier that decade, the U.S. military had started a random drug testing program to reduce substance use among military personnel (Mehay and Webb 2007). During the 1980s and 1990s, the number of civilian workplaces with drug testing programs also increased (Hartwell et al. 1996). The first school-based drug testing programs followed these models, often requiring random testing as a condition for participating in school-sponsored athletics (DuPont and Brady 2005).

The scope of MRSDT programs has since been shaped by two U.S. Supreme Court decisions. First, a 1995 decision upheld the constitutionality of random drug testing without suspicion for students who elect to participate in school-sponsored athletics (Vernonia School District 47J v. Acton 1995). Second, a 2002 decision extended the scope of testing to include students who participate in any extracurricular activity (Board of Education of Independent School District No. 92 of Pottawatomie County et al. v. Earls et al. 2002). The U.S. Supreme Court has not ruled on a case involving random drug testing of all students in a school.

In 2003, the MRSDT grant program sponsored by OSDFS began supporting mandatory-random drug testing in schools. The goal of the MRSDT grants is to reduce substance use among students enrolled in high schools whose districts apply for and receive funding to implement MRSDT programs. The programs are meant to supplement—not replace—other school-based prevention strategies, so in order to receive grant funding, districts must document the other policies and programs that they already have in place to prevent substance use. For the seven grantees included in this evaluation, the two- to four-year grant awards ranged from $36,306 to $309,153, with the average grant award totaling $158,568. Over the life of the grant, districts received $18 to $120 per enrolled student in funding.

The OSDFS grant program leaves a number of implementation decisions to the discretion of individual grantees. All districts are required to follow a basic set of testing procedures, including administering tests to a minimum of 50 percent of eligible students, testing for a minimum of five substances (marijuana, amphetamines, cocaine, methamphetamines, and opiates), and establishing procedures to maintain the confidentiality of test results. However, within these basic requirements, individual districts determine (1) a list of competitive extracurricular activities that will be "covered" by their drug testing policies, (2) the frequency of testing and proportion of eligible (covered) students to be tested during each testing event, (3) any additional substances for which testing will be conducted beyond those required by the grant, and (4) the period of the school year during which eligible students may be subject to testing. We examine whether and how these various implementation decisions relate to the effectiveness of the MRSDT programs in Chapter V.

To determine whether the OSDFS-funded MRSDT programs are effective in reducing student substance use, IES contracted with RMC Research Corporation and Mathematica Policy Research to conduct a rigorous evaluation among the seven grantees, and their 36 high schools, that received OSDFS grants in fiscal year 2006 and agreed as a condition of their grants to participate in the evaluation. As described in more detail in Chapter II, the study relies on randomly assigning schools either to a treatment group that was permitted to begin implementing MRSDT immediately after random assignment was conducted in spring 2007 or to a control group that was not permitted to implement MRSDT until after the study's spring 2008 follow-up

student survey was administered. Thus, impacts for this study are calculated over a one-year period (spring 2007 through spring 2008) and do not represent longer-term effects.

The evaluation is guided by a logic model predicting that MRSDT may reduce student substance use in three ways:

1. ***By Deterring Substance Use.*** If students are sufficiently aware of the possibility of drug testing, the threat of testing may cause them to stop using substances or give them a reason to refuse offers from peers to use substances. Such deterrent effects are most likely to occur when students are directly subject to testing (for example, during the school sports seasons) and for the specific substances covered by the school's drug testing policy. These changes in behavior may then carry over to periods when students are not directly subject to testing (for example, during summer months, winter break, or after graduation) and to substances not covered under the school's testing policy.

2. ***By Detecting Substance Use.*** Students who test positive for drugs can be identified by school staff and referred to appropriate drug treatment or counseling services.

3. ***By Having Spillover Effects on Nonparticipants.*** Although MRSDT is most likely to affect the substance use of students who participate in activities subject to drug testing, it may also have spillover effects to other students in the school, as they observe and are influenced by the behavior of their peers.

Given this model, the evaluation's primary research questions focus on the impact of MRSDT on students who participate in activities covered under their district's drug testing policy. Secondary questions focus on possible spillover effects to students who do not participate in covered activities. The study's research questions are described in more detail in section C below.

B. PAST RESEARCH ON THE EFFECTIVENESS OF MRSDT

The few prior studies of MRSDT offer little definitive evidence on the effectiveness of these programs. Most of the evidence (described in detail below) comes from nonexperimental "pre-post" studies that examine how student-reported substance use changes when schools adopt or stop implementing MRSDT programs, or from comparison group studies comparing a school that is implementing MRSDT with a school that is not. In the one prior experimental study of MRSDT (Goldberg et al. 2007), 7 of the 18 participating schools (39 percent) left the study early and were therefore excluded from the analysis, which made the findings difficult to interpret.

Two pre-post studies of MRSDT programs reported a correlation between rates of student substance use and changes in school drug testing policy. A study of Hunterdon Central Regional High School in Flemington, New Jersey, found that rates of student-reported substance use declined after the school adopted an MRSDT policy in 1997 and increased after the policy was suspended in 2000 (Dupont and Brady 2005). Similarly, in a study of 71 Indiana high schools with random drug testing programs, McKinney (2002) found that in 80 percent of those schools,

the school principal reported an increase in illicit drug use among students after the testing programs were suspended for the 2000–2001 school year. The conclusions that can be drawn from such studies are limited, however, because the observed changes in student substance use could have been due to reasons such as a change in the composition of the student body or to other school or community factors unrelated to the random drug testing programs.

A nonexperimental comparison group study of two Oregon high schools also found a correlation between MRSDT and lower rates of student-reported substance use. In this study, Goldberg et al. (2003) compared students in two Oregon high schools, one with a random drug testing program for student athletes and one without. After one year of testing, student athletes in the school with MRSDT reported less use in the past 30 days of both illicit drugs and athletic performance-enhancing substances (such as androstenedione or anabolic steroids) relative to student athletes in the school without drug testing. However, student athletes in the school with MRSDT also reported a less positive attitude toward school, fewer perceived negative consequences of substance use, and other attitudes that might put them at greater risk for future substance use. Because each of the study's two research groups contained only one school, and because the schools were not randomly assigned to each group, it is possible that the differences in student outcomes were not the result of random drug testing.

The largest nonexperimental study to date found no statistically significant difference in levels of student drug use between schools with and without drug testing programs (Yamaguchi et al. 2003a). The study used student survey data from the Monitoring the Future (MTF) study to compare rates of substance use in national samples of schools with and without student drug testing programs. However, information was not available to distinguish the type of drug testing being conducted, so schools with random drug testing could not be distinguished from schools with suspicion-based drug testing or other types of testing programs. To address this limitation, in a follow-up study conducted by the same group of researchers (Yamaguchi et al. 2003b), schools with random drug testing policies (either voluntary or mandatory) covering the entire student body—not just athletes or participants in extracurricular activities—were distinguished from other schools in the study. Results showed that students in schools with random drug testing policies covering all students reported lower rates of marijuana use but higher rates of other illicit drug use compared with students in other schools. These differences were not statistically significant.

The one previous experimental study of MRSDT produced mixed results. Goldberg et al. (2007) conducted a randomized controlled trial of 18 Oregon high schools. Nine schools were randomly assigned to implement an MRSDT program for student athletes, and nine were randomly assigned to a control group that deferred implementation of the program for two years. Seven of the 18 participating schools (39 percent) left the study and were not included in the analysis, which undermined the experimental design and could have introduced systematic differences between the treatment and control groups. Focusing on data for the 11 schools that remained in the sample, the study authors found no statistically significant impact of MRSDT on student self-reported substance use in the past 30 days. However, for two of the four follow-up surveys (administered after one school year and after two school years), there was a significant impact on self-reported substance use in the past 12 months, with student athletes in the schools with MRSDT reporting less use than their control-school counterparts. Consistent with findings of prior research, the study also found that student athletes in schools with MRSDT were more

likely to express attitudes that might put them at greater risk for future substance use, including a negative attitude toward drug testing and a greater preference for risk-taking behaviors.

C. RESEARCH QUESTIONS

Because the MRSDT programs are intended to most directly affect students who are subject to drug testing, the primary research questions for this evaluation focus on students who participate in athletics or other extracurricular activities covered under their district's testing policy. Although the study is primarily concerned with impacts on student-reported substance use, to capture the full range of effects of MRSDT programs, the study also examines impacts on other student outcomes, such as participation in activities subject to drug testing and attitudes toward school. Accordingly, the study addresses the following questions:

- Compared to similar students in schools without MRSDT, do students who are subject to MRSDT report:

  - less use of alcohol, tobacco, and other illicit substances?

  - different perceptions of the consequences of substance use?

  - different attitudes toward school?

- Are students who are subject to MRSDT less likely to report that they will use illicit substances in the future than similar students in high schools without MRSDT?

- Do students in high schools with MRSDT report different participation rates in extracurricular activities than students in high schools without MRSDT?

To detect possible "spillover" effects to students who are not subject to testing, the study also examines the impacts of MRSDT on the attitudes and reported substance use of students who do not participate in activities subject to drug testing. To get an overall sense of the effectiveness of MRSDT on study schools, we also examine impacts on the entire student body, including students who are subject to testing and those who are not.

Secondary research questions focus on the implementation of the MRSDT programs and their impacts on the number of reported disciplinary incidents in schools. In particular, for the implementation analysis, the study is designed to address two main questions: (1) What are the characteristics of the MRSDT programs implemented by the participating treatment schools? and (2) What other strategies are treatment and control schools using to reduce substance use among students?

Additional secondary research questions examine how the impacts of MRSDT differ across grantees and whether the impact variation appears related to differences in program implementation and other grantee characteristics—the number of substances being tested, the frequency of testing, the proportion of students tested, and the level of student awareness of MRSDT. Finally, analyses showing how impacts vary across student subgroups defined by

gender, race, ethnicity, grade level, self-reported academic grades, past substance use, and knowledge of the presence of MRSDT are included in Appendix I.

D. ROADMAP FOR THE REPORT

The remaining chapters of this report provide further background on the study design and present findings from the implementation and impact analyses. Chapter II provides information on the study design, the types of data collected, the analytic approach used to estimate program impacts, and the characteristics of participating districts, schools, and students. Chapter III describes the results of the implementation analysis, including details on the implementation of the MRSDT programs, student awareness of the programs, and the other substance use prevention programs being implemented in study schools. Chapter IV describes the main impact findings. Chapter V presents findings from analyses relating MRSDT program impacts to implementation characteristics.

II. STUDY DESIGN AND DATA COLLECTION

The study was designed as a rigorous program evaluation focused on assessing the effectiveness of mandatory-random student drug testing (MRSDT) programs implemented in real-world settings among districts receiving funding from the OSDFS grant program. Schools were randomly assigned within districts either to a treatment group that was permitted to begin implementing MRSDT immediately after random assignment was conducted in spring 2007 (and to continue testing during the 2007–2008 school year) or to a control group that was not permitted to implement MRSDT until after the study's spring 2008 follow-up survey was administered. The study was conducted among seven grantee school districts that applied for and received funding from the OSDFS grant program in 2006.[2]

This chapter presents information about the design of the MRSDT study and data collection, focusing on the way in which the study was structured to provide answers to the study's key questions of interest. The box below provides an overview of the evaluation's key features. The sections that follow present in more detail the design of the study; the types of data collected; the analytic approach used to estimate program impacts; and the characteristics of the participating districts, schools, and students.

A. STUDY DESIGN

In this section, we describe the study's approach to random assignment and the sampling of students. We also describe the study's power to detect program impacts and our approach for addressing four key design challenges: the possibility that MRSDT might impact (1) the proportion or types of students who participate in activities subject to drug testing, (2) rates of student mobility out of study districts, (3) the honesty of student responses to self-reported substance use questions, or (4) the possibility that students assigned to control schools might be "contaminated" (by becoming aware of the MRSDT program).

1. Random Assignment

The random assignment approach in this evaluation relied on randomly assigning schools within grantee districts to the treatment group—those permitted to begin their MRSDT program immediately upon learning of their treatment assignment in spring 2007—or to the control group—those required to delay their implementation of MRSDT until after the follow-up student survey for this study was administered in spring 2008.

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[2] Technically, the study includes seven grantees but a total of eight school districts, because one grantee includes two neighboring school districts.

This approach was shaped by three factors:

1. ***School—Rather than Student-Level—Assignment.*** Because MRSDT programs are implemented schoolwide, with expectations of spillover to students not directly covered by the MRSDT program, the evaluation design was based on random assignment of schools within each grantee district.

2. ***Assignment to Different Implementation Start Dates.*** In spring 2007 (after baseline data collection), within each of the seven grantee districts, the 36 high schools were randomly assigned either to the treatment group (n = 20), which was permitted to begin implementing MRSDT immediately, or to the control group (n = 16), which was not permitted to implement MRSDT until after the follow-up student survey in spring 2008. With this design, the study team was able to calculate impacts of one year of MRSDT implementation but could not calculate impacts for more than one year of implementation (since the terms of the MRSDT grant program permitted the control group schools to begin implementation after one year).[3]

3. ***Blocking.*** The number of schools within each district ranged from 2 to 12, raising the possibility that random assignment of schools within districts could produce an imbalance between the treatment and control groups. To reduce the probability of an imbalance, random assignment was conducted separately within blocks of schools in each grantee district. Blocks were formed first by grouping schools by grantee. For the three grantees with the largest number of schools, additional blocks were formed by grouping together schools with similar characteristics (described in Appendix A). This "within-grantee" blocking was not used for the remaining four study grantees, as they each had fewer than four schools. In total, random assignment was conducted separately within each of 15 blocks of schools.

Although schools assigned to the control group were not permitted to conduct MRSDT during the impact study data-collection period, both the treatment and control schools were able to continue implementing other substance use prevention activities. Due to the experimental design used in this study, differences in outcomes of students in the treatment and control groups are attributable to the effect of the MRSDT program relative to these activities in the control schools.

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[3] This staggered design was used to help make participation in the study more palatable for school districts applying for the OSDFS MRSDT grants in fiscal year 2006, which required participation in this study. A longer two-year impact study had been planned the previous year for districts applying for OSDFS grants in 2005 but not enough districts applied for the grants. This two-year study design would have allowed for a longer follow-up period to detect possible spillover effects on students not subject to testing.

Intervention: MRSDT, funded by OSDFS grants, requires that students consent to random drug testing as a condition of participating in covered activities. A parent or guardian must also consent to the student's testing.

Study sample: Seven grantees, 36 high schools, and 4,723 9th through 12th grade students. Participating districts and their schools received MRSDT grants from OSDFS in fall 2006. In each school, students were randomly sampled at two points for the study: (1) 9th through 11th grade students were sampled in early 2007 (the baseline sample), and (2) incoming 9th grade students were sampled during fall 2007. Therefore, at the time of the follow-up data collection in spring 2008, the study sample consisted of students in grades 9 through 12.

Research design: After baseline data collection, about half the schools within each grantee district were randomly assigned either to the treatment group that was permitted to begin implementing MRSDT immediately (and during the 2007–2008 school year) or to the control group that was not permitted to begin implementing MRSDT until after the follow-up student survey was conducted in spring 2008. To collect baseline (spring 2007) data on students' substance use, participation in extracurricular activities, attitudes toward school, demographics, and other topics, the study team administered a survey to consenting students sampled in early 2007. During the 2007–2008 school year, the study team continued its efforts to obtain consent from students sampled at baseline as well as from students sampled in fall 2007. At the end of the school year, the study team administered a follow-up student survey to the full sample of consenting students. The study team also collected data from school administrative records and staff interviews. The impact analyses compare outcomes of students in the treatment and control schools.

Key Outcomes: Students' self-reported substance use, perceptions of the consequences of substance use, connectedness with school, intentions to use substances in the future, and participation in activities covered by MRSDT; number of disciplinary incidents reported by school officials.

2. Sampling of Students

Because MRSDT is a schoolwide intervention, the study team sought a representative sample of students enrolled at each of the 36 study schools after one school year of MRSDT implementation at treatment schools (hereafter referred to as follow-up) in spring 2008. To achieve this goal, samples were drawn at two time points. The first sampling occurred in early 2007 (prior to administration of the baseline survey), when the team drew, from each school, stratified random samples of students in grades 9, 10, and 11. Students in grade 12 were excluded because they would not be present at the follow-up data collection point in spring 2008.

The second sampling of students occurred in fall 2007, after random assignment, when the study team selected a random sample of 9th graders (as of the 2007–2008 school year) who were new to the study schools.[4] For this fall 2007 sample, the student rosters needed to draw a simple random sample were not available from schools at the start of the school year. Because the study team wanted to begin obtaining consent from students' parents at the start of the year, the study

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[4] The fall 2007 sample for one of the seven grantees also includes 10th grade students, because at the time of the first student sampling in spring 2007, the high schools in that district did not include 9th graders. Therefore, we needed to sample 10th grade students in fall 2007 in those schools to ensure we had a sample of 9th through 12th grade students to whom we could administer follow-up student surveys in spring 2008.

team developed an alternative sampling method, based on the first letter of the student's last name. In particular, for each grantee, the team randomly selected a set of three to nine letters (for example, for one grantee the letters were G, D, and S) and then included all students whose last names began with one of the letters in the study sample.[5] Within each grantee, the same letters were used to sample students in both treatment and control schools, so that the sampling approach would not be correlated with treatment status.

The sampling strategy overall and within individual schools took into account the following:

- ***Desired Survey Sample Within Each Study School.*** To achieve the target minimum detectable effects (MDEs) of the impact evaluation (discussed in the next section), we estimated that on average a minimum of 84 students per school would need to complete the follow-up survey. To achieve this goal, we sampled different proportions of students in each school, with larger proportions needed in schools with smaller student enrollments.

- ***Proportion of Students Participating in Activities Covered by MRSDT.*** To achieve the target MDEs for our primary research questions concerning the impacts of MRSDT on students who were subject to drug testing, we estimated that our target sample of 84 students per school would need to include at least 67 students who participated in activities covered by their district's drug testing policy. To achieve this goal, we sampled a larger proportion of students in schools with lower rates of participation in athletics and extracurricular activities.[6] Although we also estimate program impacts on students who were *not* subject to testing, these analyses are part of the study's secondary research questions and therefore did not dictate the study's sampling design.

- ***Study Budget.*** Study funds supported surveying large proportions of students only in study schools with small enrollments.

In all, 10,983 students were sampled for the study out of a total of 43,292 students enrolled at study schools. The number of students sampled in each school ranged from 166 to 553. The sample is representative of all students attending the study's 20 treatment and 16 control schools in spring 2008, with two exceptions: because of the time needed to obtain consent, it was not possible to include (1) students in grades 10, 11, and 12 in 2007–2008 who transferred into study districts after the baseline sample was drawn and before the follow-up student survey was administered in spring 2008 and (2) students in grade 9 who transferred into study districts during the 2007–2008 school year. School-records data collected from each study school

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[5] This approach enabled the study team to work with schools to begin distributing consent information to all students whose names started with the sampled letters. As soon as the rosters were available, the study team was able to identify the specific students whose names began with the sampled letters, and were, therefore, included in the study sample.

[6] Prior to sampling, the study team obtained from each grantee district estimates of the approximate rate of activity participation in each school.

indicated that new transfer students accounted for 10 percent of total student enrollment in spring 2008.

3.   Power to Detect Effects

The smallest impacts on student substance use we can detect with high probability range from 1.2 to 7.2 percentage points, depending on the outcome measure (see Table II.1). For outcomes with 30 percent prevalence among control school students, we can detect an impact of 7.2 percentage points. For outcomes with 2 percent prevalence among control school students, we can detect an impact of 1.2 percentage points. In Table II.1, we focus on prevalence rates of 2, 5, and 30 percent because they correspond to levels of substance use reported among the control group members of our sample (for steroids, amphetamines, and a composite measure of illicit drug use, respectively).[7]

Because two of the study's research questions concern the impacts of MRSDT on students' attitudes toward school and their perceived consequences of substance use, we also assessed the study's statistical power with respect to a continuous measure of student attitudes (see Table II.1, last column). In particular, for our measure of students' attitudes toward school, the study can detect an impact of 0.18 standard deviations, which is smaller than the impact on student attitudes reported in a previous study of MRSDT (Goldberg et al. 2003).

The study's statistical power is lower when using schools—not students—as the units of the analysis, due to the relatively small number of schools in the study (N = 36). For example, to answer the study's secondary research question concerning the impact of MRSDT on the number of disciplinary incidents reported in schools, the effect size that we can detect is greater than 0.70 standard deviations. This relatively limited power for school-level analyses also affects the baseline comparisons of school characteristics (described later in this chapter) and the school-level implementation analyses presented in Chapter III.

4.   Design Challenges

The study was designed recognizing four main challenges for the analysis that, if unaddressed, could have threatened the study's results:

1. ***Impacts on Participation in Covered Activities.*** To estimate the impacts of MRSDT on students who are subject to drug testing, we sought to compare students in the treatment and control schools who participated in activities covered under their district's MRSDT policy. For example, if football and soccer were covered activities, we compared rates of substance use reported by football and soccer players in the

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[7] The minimum detectable impacts reported in Table II.1 are similar to or smaller than those reported in prior studies of MRSDT. In particular, Goldberg et al. (2003) found an impact of 14.1 percentage points on the use of illicit drugs at follow-up by student athletes, meaning that the prevalence of illicit drug use was 14.1 percentage points lower for the treatment group than for the control group (5.3 percent versus 19.4 percent).

TABLE II.1

MINIMUM DETECTABLE EFFECTS ON STUDENT OUTCOMES

Design Parameter	30 Percent Prevalence	5 Percent Prevalence	2 Percent Prevalence	Continuous Outcome
Intraclass Correlation	0.02	0.007	0.007	0.04
Student Level R^2	0.14	0.15	0.23	0.18
School Level R^2	0.78	0.99	0.99	0.44
Multiple Hypothesis Tests	6	1	1	1
ECA Participants per School	68	68	68	68
Minimum Detectable Effect (Percentage Points)	**7.2**	**2.1**	**1.2**	**--**
Minimum Detectable Effect Size (Proportion of a Standard Deviation)	**--**	**--**	**--**	**0.18**

Source: Study team's calculations based on follow-up student survey.

Note: The minimum detectable effects (MDEs) were calculated assuming a two-tailed test based on the following formula:

$$fct\left(\alpha,\beta,df\right)*\sqrt{(1-R^2_{school})*\rho\left(\frac{\sigma^2_T}{s_T}+\frac{\sigma^2_C}{s_C}\right)+(1-R^2_{student})*(1-\rho)\left(\frac{\sigma^2_T}{n_T}+\frac{\sigma^2_C}{n_C}\right)},$$

where σ^2_T (σ^2_C) is the variance of the outcome variable in the treatment (control) group, R^2_{School} ($R^2_{Student}$) is the regression R-squared value at the school (student) level; ρ is the intraclass correlation at the school level; s_T and s_C are the number of treatment (20) and control (16) schools; n_T and n_C are the available follow-up survey sample sizes for the treatment and control groups; and fct(.) is a constant that is a function of the significance level (α), statistical power (β), and the number of degrees of freedom (*df*), based on the number of schools in the study). The ICC and R^2 values in the columns of this table were calculated using follow-up data on four study outcomes: (1) use of any district-tested substance, (2) use of amphetamines, (3) use of steroids, and (4) a scale measuring school connectedness. The MDE in the first column includes a multiple hypothesis testing (MHT) adjustment for 6 tests which corresponds to the number of tests used to assess whether mandatory-random student drug testing reduces the retrospective substance use of student activity participants. For the remaining columns with dichotomous outcomes, no MHT adjustment is used because these MDEs correspond to the low prevalence individual substance use measures that are analyzed only for exploratory purposes. The MDE for school connectedness has no MHT adjustment because only one test is used to assess impacts on school connectedness.

treatment and control schools (see section C below for a more detailed explanation). However, if MRSDT affects the proportion or types of students who participate in covered activities—for example, by making drug users less likely to participate or nonusers more likely to participate—these groups might not be comparable across the treatment and control schools.

2. ***Impacts on Student Mobility Out of Study Districts.*** The study did not have resources to track and administer follow-up surveys to students who transferred out of study districts after being sampled. Therefore, differences in out-of-district mobility between the treatment and control groups could bias our impact estimates, especially if students were transferring out of treatment schools to avoid drug testing.

3. ***Impacts on Student Honesty.*** As described below in Section B, we estimated the impacts of MRSDT on student substance use and other outcomes using self-reported survey data. One possible concern with this approach is that MRSDT might affect the honesty of student responses to self-reported surveys. For example, students in the treatment schools may be less likely to admit to using drugs if they believe there may be negative consequences. In a random assignment impact evaluation of MRSDT, the main concern is not the general type of underreporting that may equally affect students in both the treatment and control schools, but rather differential underreporting that disproportionately affects students in the treatment schools.

4. ***Potential for Control Group Contamination.*** As part of the OSDFS grant requirements, schools assigned to the control group were instructed not to announce, promote, or implement MRSDT until after the study's spring 2008 follow-up survey was administered. The study team confirmed that none of the control schools implemented MRSDT during the evaluation period.[8] However, it is possible that, through school board or community meetings, the grant application process, or the implementation of MRSDT in the districts' treatment schools, students in control schools became aware of the testing program and either reduced or increased their substance use in advance of the future implementation of MRSDT in their schools.

To address these challenges, we conducted a series of diagnostic analyses to estimate the impacts of MRSDT on student participation in covered activities, mobility out of study districts, and three measures of student honesty (for example, the number of substance use questions skipped on the survey). To examine whether contamination of students in the control schools may have occurred, we recruited an "external" sample of seven high schools outside the study districts—one per grantee—to serve as a nonexperimental comparison group. We describe these analyses in more detail in Appendix D. In brief, we found no statistically significant findings in any of these diagnostic analyses, providing supporting evidence that our primary results are not biased by any of these four design challenges.

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[8] In one grantee district, both the treatment schools and the control schools became eligible in 2007–2008 to participate in a statewide random testing program for steroids funded by the state legislature; however, this program did not cover substances other than steroids, was limited to five sports (football, baseball, softball, girls' flag football, and weight lifting), and was only intended to test approximately 1 percent of all eligible students.

In addition, to further address the challenge of possible impacts on student participation in activities subject to drug testing, we also estimated impacts for student subgroups defined by students' participation in activities in the year before random assignment (2006–2007 school year), which could not have been affected by MRSDT. The results of these analyses (described in more detail in Appendix G) show impacts similar to those presented in Chapter IV for students who participated in covered activities during the 2007–2008 school year.

B. DATA COLLECTED ON STUDENTS, SCHOOLS, AND MRSDT PROGRAMS

This section describes the data collected for the evaluation. Specifically, the first section describes the study instruments and the second section describes the key outcome measures that were constructed based on the data collected for the study.

1. Study Instruments

The evaluation is based on data collected from six sources (see Table II.2): (1) student rosters provided by each district, (2) student surveys administered at baseline (spring 2007) and follow-up (spring 2008), (3) school-records information collected from each study school, (4) forms documenting the drug testing procedures used in the study's treatment schools, (5) structured interviews with a key staff member at each study school, and (6) structured interviews with a staff member from each district. All study instruments are included in Appendix J. Response rates for each instrument are reported in Appendix C.

Student Rosters. Each school participating in the study provided student rosters to the study team at three time points: (1) in early 2007, to facilitate the study team's baseline sampling of 9th–11th grade students; (2) near the start of the 2007–2008 school year, to facilitate the study team's selection of a new sample of 9th grade students (see section A of this chapter for a description of this sample); and (3) shortly before the spring 2008 survey administration, to determine whether sampled students were still enrolled in their initial study school, enrolled in another high school within the same district, or no longer enrolled in a district high school. Data from the school rosters were also used to construct sampling weights (described in Appendix F) and to analyze out-of-district mobility (described in the previous section).

Student Survey. Student-level data were derived from a student survey administered at baseline (spring 2007) and at follow-up (spring 2008). The survey included a detailed set of questions on retrospective substance use as well as sections on demographics; prior and current participation in extracurricular activities; intention to use substances in the future; and attitudes toward school, drugs, and academic performance. The survey drew critical elements from established national surveys of adolescents, including the Monitoring the Future (MTF) survey (Johnston et al. 2008), the Student Athlete Testing Using Random Notification (SATURN) study (Goldberg et al. 2007), and a study on school connectedness (Brown and Evans 2002). The survey was developed by the study team and approved by the Office of Management and Budget and the Portland State University Institutional Review Board in early 2007. Because the survey collected data from minors on sensitive topics such as substance use, active parental consent was required.

TABLE II.2

DATA COLLECTION INSTRUMENTS

Data Source	Time Collected	Description of Data
Student Rosters	January 2007 (baseline sampling), August 2007 (second sampling), March 2008 (follow up)	These rosters provided personal identifying information used to sample students and track the study sample, such as the student's name, gender, grade level, date of birth, and home address.
Student Survey	April-May 2007 (baseline), March–April 2008 (follow up)	This survey included questions about student demographics, participation in school activities, retrospective substance use (lifetime, 6-month, and 30-day), attitudes toward substance use, attitudes toward school, and awareness of school policies.
Schoolwide Records Collection Form	April-November 2007 (baseline), March–May 2008 (follow up)	This form gathered data on student demographics, school policies, substance use incidents, prevention programs, teacher training, and student mobility.
Drug Testing Collection Form	September 2007–July 2008	This form collected data on the demographics of tested students, testing procedures, substances for which tests were conducted, and aggregated test results.
School Staff Interviews	May 2008	These interviews gathered two types of data. In both treatment and control schools, the interviews collected information on substance abuse prevention strategies, school policies regarding suspicion of student drug use, and student awareness of drug testing. In treatment schools, the interviews also collected information on the procedures used for mandatory random-student drug testing.
District Staff Interviews	March 2009	These interviews collected data on the period in which students were subject to drug testing and the information students received about the substances covered by the tests.

The study achieved consent and response rates similar to those of other adolescent health studies requiring active parental consent. Prior studies have found that obtaining active parental consent for studies of adolescent risk behaviors can be challenging, with expected consent rates ranging from 30 to 60 percent (Tigges 2003). In our study, out of a total of 8,898 sampled students still enrolled in study schools during the follow-up survey administration in spring 2008, 73 percent returned a consent form, 59 percent provided affirmative parental consent, and 53 percent completed the follow-up survey—meaning that 89 percent of students whose parents provided active consent completed the follow-up survey. Although nonresponse weights (described in the next section) are used in the impact analyses, these consent rates suggest that the study results may not be representative of all students in study schools. Details on the efforts the study team made to achieve high consent rates are presented in Appendix B.

Consent and response rates for the treatment and control groups were not significantly different. Among the students still enrolled in study schools at the follow-up survey administration in spring 2008, the affirmative consent rate was 57 percent for the treatment group, compared with 62 percent for the control group (see Table B.1 in Appendix B). Similarly, the response rate was 52 percent for the treatment group and 55 percent for the control group (see Table C.1 in Appendix C).[9]

Schoolwide Records Collection Form. This form was completed once in spring 2007 and again in spring 2008 by a staff member at each school to provide information on schoolwide student demographics, absenteeism, school security measures, suspensions and expulsions, school-documented substance- or violence-related incidents, and student transfers into and out of the school. We used this information to examine the context in which MRSDT operates and to describe the counterfactual experiences of students in control schools during this study's experimental period. We also used it to examine the impact of MRSDT on school-level outcomes such as substance- or violence-related incidents.

Drug Testing Collection Form. During the 2007–2008 school year, school staff completed this form every time drug testing was conducted. The form was used to collect detailed information regarding the implementation of the MRSDT programs in each of the 20 treatment schools, including the number of students identified for testing, the number of students tested, substances for which testing was conducted, and the number of positive test results for each substance. This information allowed the study team to describe, in detail, the results from the testing conducted as part of the study schools' MRSDT programs.[10] For confidentiality reasons, the form did not identify individual students who were subject to testing and cannot be linked with data from the student survey.

School Staff Interviews. At follow-up in spring 2008, the study team used a structured protocol to conduct interviews with the Safe and Drug-Free Schools coordinator or another knowledgeable staff member at each study school (in both the treatment and the control

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[9] The comparability in rates between the treatment and control groups suggests that the study's impact estimates are not biased by differential consent or response rates.

[10] To provide technical assistance on filling out the Drug Testing Collection Form, study team members visited the drug testing coordinator in each treatment school before it initiated its MRSDT program.

groups).[11] Topics included substance use prevention programs implemented at the school, school substance use policies, and student awareness of the drug testing program. In treatment schools, coordinators were also asked about drug testing procedures. We used this information to describe the implementation of MRSDT in treatment schools and the counterfactual condition in control schools.

District Staff Interviews. In winter 2008–2009, the study team conducted structured interviews with a contact from each district knowledgeable about the district's MRSDT program. The interviews were designed to collect information about the period during which covered students were subject to drug testing. For example, in districts that listed football as a covered activity, district staff members asked whether football players were subject to testing for the entire year or only during the football season. We used this information both to describe differences in how the MRSDT programs were implemented (Chapter III) and to define the sample of covered activity participants used for our impact analyses (Chapter IV).

2. Outcome Measures

The outcome measures are divided into six domains corresponding to the study's main research questions (see Table II.3): (1) retrospective substance use, (2) intention to use substances, (3) perceived consequences of substance use, (4) participation in covered activities, (5) school connectedness, and (6) number of reported disciplinary incidents in schools.

Retrospective Substance Use. The measures of retrospective substance use are the most central to the evaluation, as they are used to examine the study's primary research question of whether MRSDT affected student substance use. The student survey included separate questions on students' use of 10 different substances, ranging from relatively high-prevalence substances such as alcohol and tobacco to less prevalent substances such as steroids, cocaine, and narcotics. For each substance, students were asked how frequently they had used the substance over three reference periods: the past 30 days, the past 6 months, and ever in their lifetimes.

We used students' responses to each individual item to create binary composite measures (yes/no) of the following: use of any substance; use of any substance excluding alcohol and tobacco; and use of any substance from the student survey that was covered under the drug testing policy of the student's district. We created these composite measures to limit the number of outcome measures included in our analysis to help avoid drawing false conclusions about the program's effectiveness from a chance impact on one of the 10 individual substance use items. It may also be more difficult to detect program impacts on low prevalence substances such as steroids, cocaine, and narcotics when analyzing each item separately. Appendix E presents more detailed information on how the composite measures were constructed. In Appendix H, we report impacts separately on both the prevalence and frequency of use for the 10 individual substance use items.

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[11] In some cases the staff member was a district-level employee who was interviewed for more than one school.

TABLE II.3

OUTCOME MEASURES

Measure	Definition
Retrospective Substance Use	
Use of any substance	Binary variable: equals 1 if student reported any substance use in the past 6 months (or 30 days); equals 0 if student reported no substance use.
Use of any substance excluding alcohol and tobacco	Binary variable: equals 1 if student reported use of any substance other than alcohol or tobacco in the past 6 months (or 30 days); equals 0 if student reported no use of these substances.
Use of any district-tested substance	Binary variable: equals 1 if student reported use of any substance covered under district testing policy in the past 6 months (or 30 days); equals 0 if student reported no use of these substances.
Intentions to Use Substances	
Intention to use any substance	Binary variable: equals 1 if student reported intention to use any substances in the next 12 months; equals 0 if student reported no intention to use substances.
Intention to use any substance excluding alcohol and tobacco	Binary variable: equals 1 if student reported intention to use substances other than alcohol and tobacco in the next 12 months; equals 0 if student reported no intention to use these substances.
Perceived Consequences of Substance Use	
Perceived positive consequences	Continuous (scale) variable: average of responses to four survey questions (see Appendix E for list). Variable ranges from 0-3, with higher values indicating more perceived positive consequences of substance use.
Perceived negative consequences	Continuous (scale) variable: average of responses to four survey questions (see Appendix E for list). Variable ranges from 0-3, with higher values indicating more perceived negative consequences of substance use.
Participation in Covered Activities	
Participated in covered activity during 2007-2008 school year	Binary variable: equals 1 if student participated in an activity covered under district testing policy; equals 0 if student did not participate in a covered activity.
School Connectedness	
Connection to school	Continuous (scale) variable: average of responses to 16 survey questions (see Appendix E for list). Variable ranges from 0-3, with higher values indicating greater connection to school.
Reported Disciplinary Incidents in Schools	
Expulsions	Continuous variable: number of expulsions reported by schools during the 2007-2008 school year per 1,000 students.
Illegal drug incidents	Continuous variable: number of incidents reported by schools for the distribution, possession, or use of illegal drugs during the 2007-2008 school year per 1,000 students.
Alcohol-related incidents	Continuous variable: number of incidents reported by schools for the distribution, possession, or use of alcohol during the 2007-2008 school year per 1,000 students.
Physical attacks or fights	Continuous variable: number of physical attacks or fights reported by schools during the 2007-2008 school year per 1,000 students.

The composite measure of any district-tested substance is most closely linked with the program's logic model, which predicts that deterrent effects are most likely for those substances that are covered under the district's testing program (see Chapter I). However, both because changes in student behavior may carry over to substances not directly subject to testing, and because students may not be fully aware of the exact list of substances subject to testing, we also created measures for use of any substance and use of any substance excluding alcohol and tobacco.

Separate outcome measures were constructed for past 6-month and past 30-day use. The measure of past 6-month use was included because this reference period most closely matched the implementation period for the treatment (the 2007–2008 school year) and encompassed fall, winter, and spring sports. We also included the 30-day reference period, because student responses to this question on the follow-up survey would reflect substance use after MRSDT had been fully implemented. The trade-off is that the 30-day measure might miss impacts on substance use among participants in fall activities, while impacts on 6-month use could be attenuated if students were not immediately aware of MRSDT at the beginning of the school year.

Intention to Use Substances. To examine whether the impacts of drug testing carry over to students' future use of substances (for example, during summer months, after graduation, or during the next school year), we measured both students' reported intention to use any substance in the next 12 months and students' reported intention to use any substance excluding alcohol and tobacco in the next 12 months.

Perceived Consequences of Substance Use. Following prior research evidence that indicated that students subject to MRSDT might paradoxically perceive fewer negative consequences of substance use (see Chapter I), we included measures of both perceived negative and perceived positive consequences of substance use. Both scales were derived from a prior study on MRSDT by Goldberg et al. (2003) and have high internal reliability (for both scales, the alpha coefficient for the follow-up survey was 0.85). For the measure of perceived negative consequences, students were asked whether they agree or disagree with statements such as "Using illegal drugs leads to serious health problems" and "If I used drugs, I would get into trouble." For the measure of perceived positive consequences, the statements were different—for example, "Using illegal drugs or alcohol makes it easier to be part of a group" and "Using illegal drugs or drinking is cool." Appendix E presents a full list of items in each scale.

Participation in Covered Activities. As described in the previous section, MRSDT might reduce or increase student participation in athletics and other extracurricular activities covered under their district's testing policy. We measured covered-activity participation with a binary indicator of whether the student participated in a covered activity any time during the 2007–2008 school year. To identify participants in covered activities, students were asked on the spring 2008 follow-up survey to indicate all of the sports, clubs, and other activities in which they participated during the 2007–2008 school year. We then compared this survey data to lists of

covered activities obtained from each district.[12] A list of activities covered in each district is presented in Chapter III.

School Connectedness. Given prior evidence that students subject to MRSDT might have a more negative attitude toward school (see Chapter I), we included a 16-item scale measuring students' connection to school. The scale was developed in a prior study on school connection by Brown and Evans (2002) and has high internal reliability (the alpha coefficient for the follow-up survey was 0.89). For this measure, students were asked whether they agree or disagree with statements such as "I feel like I belong at this school" and "Adults at this school listen to student concerns." Appendix E presents a full list of items in this scale.

Number of Reported Disciplinary Incidents in Schools. If MRSDT is successful in reducing student substance use, it might also lead to fewer disciplinary incidents reported by schools. To estimate impacts on school disciplinary incidents, we used data from the schoolwide records collection form to calculate, for the 2007–2008 school year, the number per 1,000 students of each of the following: expulsions, illegal-drug incidents, alcohol-related incidents, and physical attacks or fights.

C. ANALYTIC METHODS

The main impact findings of this report (presented in Chapter IV) are based on the study team's "benchmark" approach for estimating program impacts. Within the study's random assignment evaluation design, there are several ways to estimate the impacts of MRSDT. Our benchmark approach reflects the particular set of analytic methods the study team determined were most appropriate for this evaluation. In Appendix G, we show the robustness of the study's findings to alternative methods.

Our benchmark approach uses a regression model to estimate the impacts of MRSDT on student- and school-level outcomes. Relative to a simple comparison of mean outcomes for students in the treatment and control groups, the regression model allows for the improvement of the precision of the impact estimates by controlling for baseline covariates and the blocks of schools in which random assignment was conducted (described above in Section A). To estimate impacts on retrospective substance use and other dichotomous outcome variables, we used the following logistic regression model:

$$(1) \ \mathrm{P}\left(Y_{1ij}=1\right)=\Lambda\left(\beta_0+\beta_1 T_j+\beta_2 Y_{0ij}+\sum_k \lambda_k BLOCK_k+\gamma Z_{0ij}\right)$$

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[12] Students were counted as having participated in a covered activity only when they reported an exact match to an activity on the district list. For example, in districts that listed "marching band" as a covered activity, students who reported participating in "marching band" were counted as covered activity participants, but students who reported participating in "band" were counted as nonparticipants (because "band" may not refer specifically to "marching band").

Using the logistic function (Λ), the model relates postintervention outcomes (such as substance use) (Y_{1ij}) for student i in school j to a constant term (β_0), a treatment indicator (T_j), the baseline measure of the outcome variable (Y_{0ij}), indicator variables for the random assignment blocks ($BLOCK_k$), and other baseline student and school characteristics (Z_{0ij}) that were found to improve statistical precision. For continuous outcomes, a comparable linear regression model was estimated.

We calculated program impacts from the logistic version of this model as mean marginal effects.[13] In particular, we began by calculating two predicted values for every student in the sample using the student's characteristics and the coefficients from the regression model. The first predicted value was calculated with the treatment variable set equal to 1, and the second was calculated with the treatment variable set equal to zero. Averaged across students, these predicted values were used to determine the average outcomes for the treatment and control groups, respectively. The difference in these average outcomes indicates the impact of MRSDT.[14]

In addition to controlling for baseline covariates, the benchmark approach adjusts for the following: clustering of students within schools, to account for the correlation between students in the same schools; multiple hypothesis testing, because answers to key research questions are based on the impact of MRSDT on multiple outcomes; and analytic weights, to account for differences in random assignment probabilities and ensure generalizability to all students in participating schools.

- *Clustering.* For the clustering adjustment, we use the generalized estimating equations (GEE) approach,[15] which calculates an impact that generalizes to the finite population of schools and students included in the study.

- *Multiple Hypothesis Testing.* For the adjustment for multiple hypothesis testing, we calculate statistical significance tests based on critical values from the multivariate t-distribution, taking into account correlations among tests.[16] Adjustments for multiple hypothesis testing are made for all tests that are used to answer the same research question. For example, when answering the question of whether MRSDT affects the retrospective substance use of students who participate in activities subject to drug testing, we calculate impacts on six outcomes and conduct six tests of statistical significance.

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[13] The mean marginal effect is the regression-adjusted version of the difference in means between the treatment and control groups. In a linear regression, the parameter estimates from the regression are the mean marginal effects. In a logistic regression, however, the parameter estimates are not directly interpretable.

[14] We also calculated statistical significance levels based on the standard errors of the mean marginal effects, not the standard errors of the regression coefficients. The standard errors of the mean marginal effects are calculated using the delta method (Greene 2003).

[15] This is also known as the "sandwich estimator" or Taylor series linearization.

[16] Accounting for correlations among tests reduces the magnitude of the adjustment for multiple hypothesis testing, thereby increasing statistical power while still controlling the probability of finding a false impact. See Hothorn, Bretz, and Westfall (2008).

- *Analytic Weights.* For the analytic weights, we adjust for differences across schools in random assignment, sampling, consent, and nonresponse probabilities. The weights are also rescaled so that, apart from differences in random assignment probabilities, each school contributes equally to the impact estimates. More details about the benchmark analytic approach can be found in Appendix F.

The sensitivity of findings to variations on the benchmark approach is summarized in Chapter IV and described in more detail in Appendix G.

Impacts were estimated separately for three analysis samples:

1. *Participants in Covered Activities.* To answer the study's primary research questions of whether MRSDT affects the substance use and attitudes reported by students who are subject to testing (see Chapter I), we estimated impacts for students who participated in athletics or other extracurricular activities covered by their district's testing program during the 2007–2008 school year. As described earlier in section B, we identified covered activity participants by comparing information on activity participation from the student survey with lists of covered activities obtained from each district.[17] We describe our approach for identifying these students in section B above.

2. *Nonparticipants.* To answer the study's secondary research question of whether MRSDT has spillover effects to other students in the school, we estimated impacts for students who did *not* participate in covered activities during the 2007–2008 school year. We defined this group as all students not included in the group of activity participants described in the previous point.

3. *All Students.* To answer the study's secondary research question of whether MRSDT affects the substance use and attitudes reported by the school's entire student body, we combined the samples of covered-activity participants and nonparticipants to estimate impacts for the full student sample. We also used the full student sample to estimate the impact of MRSDT on rates of student participation in covered activities.

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[17] In our main impact models, the sample of covered-activity participants includes students who participated in a covered activity at any point during the year. However (as described in more detail in Chapter III), in three of the seven study districts, students in treatment schools were subject to drug testing only during the season in which they participated (for example, football players were subject to testing during the fall football season but not during the winter or spring sports seasons, unless they participated in other covered winter or spring activities). In these three districts, it is therefore possible that some of the treatment school students we identify as covered activity participants were not directly subject to drug testing at the follow-up survey administration in spring 2008 (when past 30-day substance use and past 6-month substance use were measured). To address this limitation, we also report impact estimates separately for a sample of students who were covered by drug testing in the 30 days before the follow-up survey.

D. CHARACTERISTICS OF STUDY DISTRICTS

The school districts that participated in this study can be characterized in two ways:

1. The districts are representative of those that have applied for and received funding from the OSDFS grant program, suggesting that the results of this study may generalize to this larger group of OSDFS grantees.

2. The districts are not representative of all districts in the country, suggesting that the results may not generalize to all schools nationwide.

As noted at the beginning of this chapter, the school districts participating in this study are those that received OSDFS grants to implement MRSDT in fiscal year 2006. A total of 7 grantees and 36 schools are included in the study (see Table II.4). The grantees are spread across seven states. The number of participating high schools within each grantee district ranges from 2 to 12.

The districts included in the study were significantly larger than the average U.S. school district and more likely to be located in the South (see Table II.5). In particular, the study districts included more schools (32 versus 6) and students (17,560 versus 3,187) than the average U.S. district. Seventy-five percent of the study districts were located in the South, compared to 22 percent of all U.S. districts.[18] Significant differences were not observed for other characteristics examined, including Title I status, urban or rural location, number of teachers per district, or the percentage of the district's students who were eligible for free or reduced-price lunch.

To assess the similarity of the districts participating in the study to the broader set of districts that have received OSDFS grants to implement MRSDT since the program's inception, we compared the characteristics of the study districts (who received grants in fiscal year 2006) to the characteristics of all the other districts who received OSDFS grants in fiscal years 2003, 2005, 2007, and 2008 (see Table II.6). We found no statistically significant difference between the study districts and other OSDFS grantee districts on any of the seven characteristics examined.

E. BASELINE CHARACTERISTICS OF TREATMENT AND CONTROL GROUPS

The random assignment of schools yielded treatment and control groups that were similar at baseline. We found no significant differences when comparing the baseline characteristics of schools in the treatment and control groups (see Table II.7). In particular, schools were similar in terms of Title I status, geographic location, number of students per teacher, the percentage of students eligible for free- or reduced-price lunch, and racial/ethnic composition. The groups were

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[18] As noted at the beginning of this chapter, the study technically includes seven grantees but a total of eight school districts, since one grantee includes two high schools from neighboring school districts. Six of the eight school districts (and six of seven grantees) were located in the South.

TABLE II.4

NUMBER OF STUDY DISTRICTS, SCHOOLS,
AND STUDENTS IN STUDY SAMPLE

Intervention	Number of Grantee Districts[a]	Number of Schools	Number of Students[b]
Treatment Group	7	20	2,699
Control Group	7	16	2,024
Total	**7**	**36**	**4,723**

[a]Technically, the study includes seven grantees but a total of eight school districts because one grantee includes two neighboring school districts.

[b]This number includes all consenting students who completed a follow-up survey in spring 2008.

also similar on baseline measures of school-level outcome variables—namely, the number of incidents per 1,000 students reported by school officials for expulsions; the distribution, possession, or use of illegal drugs; the distribution, possession, or use of alcohol; and physical attacks or fights. As described above in Section A, the power of these analyses to detect statistically significant differences between the treatment and control groups is limited by the relatively small number of schools in the study (N = 36).

For the sample of students who participated in activities covered by their district's MRSDT policy during the 2007–2008 school year, we compared the treatment and control groups on 27 characteristics (see Table II.8). We observed one statistically significant difference: students in the treatment group were less likely to be 16 years old than students in the control group (24.0 percent versus 27.5 percent). One significant difference is what we might expect by chance when examining differences in 27 characteristics with a 5 percent critical value (that is, 5 percent of 27 = 1.35). We accounted for this difference in the impact models for activity participants presented later in this report by including an indicator variable for 16-year-old students as a covariate in the models.

For both the sample of nonparticipants (see Table II.9) and the full sample of all students (see Table II.10), there were no statistically significant differences between students in the treatment and control groups on either demographic characteristics or any baseline version of the outcome measures.

TABLE II.5

CHARACTERISTICS OF DISTRICTS IN THE STUDY

Characteristics	U.S. Districts[a]	Districts in Study	Difference	p-value
Number of Schools per District[b]	6.3	32.3	-26.0*	0.00
Title I Schools per District (Percentage)[b]				
Title I eligible	65.5	64.1	1.4	0.90
Schoolwide Title I	31.8	44.1	-12.3	0.38
District Location (Percentage)[c]				
Urban	12.8	12.5	0.3	0.98
Suburban	20.0	37.5	-17.5	0.22
Town	16.8	12.5	4.3	0.74
Rural area	50.4	37.5	12.9	0.47
Geographic Region (Percentage)[d]				
Northeast	20.6	0.0	20.6	0.15
Midwest	37.1	25.0	12.1	0.48
South	22.3	75.0	-52.8*	0.00
West	20.0	0.0	20.0	0.16
Number of Full-Time Teachers per District[e]	146	333	-187	0.45
Number of Students per District[f]	3,187	17,560	-14,381*	0.00
Percentage of Students Eligible for Free or Reduced-Price Lunch[g]	40.6	44.0	-3.4	0.69
Number of Districts[h]	**16,029**	**7**		

Source: 2006–2007 *Common Core of Data* (CCD).

Note: All *p*-values are based on two-tailed t-tests.

[a]Data include districts with one or more regular high schools. Regular schools are defined as public schools that do not focus primarily on vocational, special, or alternative education.

[b]Data is missing for 2 percent of districts with at least one regular high school nationwide.

[c]Data is missing for less than 1/2 percent of districts with at least one regular high school nationwide.

[d]Regions are defined using U.S. Census Bureau designations as of February 2009. Less than 0.1 percent of districts in the CCD sample with at least one regular high school are considered as being in "offshore areas," which include U.S. territories, possessions and U.S. military bases, and are not in any designated census region.

[e]Data is missing for 18 percent of districts with at least one regular high school nationwide and 50 percent of study districts.

[f]Data is missing for 3 percent of districts with at least one regular high school nationwide.

[g]Data is missing for 6 percent of districts with at least one regular high school nationwide.

[h]Technically, the study includes seven grantees but a total of eight school districts because one grantee includes two neighboring school districts.

*Statistically different at the .05 level.

TABLE II.6

CHARACTERISTICS OF STUDY DISTRICTS COMPARED
TO OTHER OSDFS GRANTEES

Characteristics	Other OSDFS Grantees[a]	Districts in Study	Difference	p-value
Number of Schools per District	24.9	32.3	-7.4	0.69
Title I Schools per District (Percentage)				
Title I eligible	64.9	64.1	0.8	0.93
Schoolwide Title I	49.1	44.1	5.0	0.71
District Location (Percentage)				
Urban	11.9	12.5	-0.6	0.96
Suburban	29.7	37.5	-7.8	0.65
Town	16.8	12.5	4.3	0.75
Rural area	41.6	37.5	4.1	0.82
Number of Full-Time Teachers per District[b]	498	333	166	0.76
Geographic Region (Percentage)[c]				
Northeast	9.9	0.0	9.9	0.35
Midwest	11.9	25.0	-13.1	0.28
South	63.4	75.0	-11.6	0.51
West	14.9	0.0	14.9	0.24
Number of Students per District	15,998	17,560	-1,562	0.91
Percentage of Students Eligible for Free or Reduced-Price Lunch[d]	46.6	44.0	2.6	0.75
Number of Districts[e]	**101**	**7**		

Source: 2006–2007 *Common Core of Data* (CCD).

Note: All *p*-values are based on two-tailed t-tests.

[a]This group includes districts awarded MSRDT grants in fiscal years 2003, 2005, 2007, and 2008, as listed on the OSDFS website (see http://www.ed.gov/programs/drugtesting/awards.html).

[b]Data is missing for 48.5 percent of other OSDFS grantee districts and 50 percent of study districts.

[c]Regions are defined using U.S. Census Bureau designations as of February 2009.

[d]Data is missing for 1 percent of other OSDFS grantee districts.

[e]Technically, the study includes seven grantees but a total of eight school districts because one grantee includes two neighboring school districts.

*Statistically different at the .05 level.

MRSDT = Mandatory-Random Student Drug Testing.

OSDFS = Office of Safe and Drug-Free Schools.

TABLE II.7

CHARACTERISTICS OF SCHOOLS IN THE STUDY

Characteristics	Treatment Schools	Control Schools	Difference	p-value
Schools Receiving Title I (Percentage)				
Title I eligible school	10	24	-14	0.26
Schoolwide Title I	10	24	-14	0.26
School Location (Percentage)				
Urban	22	22	-1	0.96
Suburban	33	47	-15	0.38
Town	5	6	-1	0.93
Rural area	41	25	16	0.33
Students per Teacher (Average)	17	17	0	0.79
Number of Students per School (Average)	1,112	1,119	-7	0.97
Students Eligible for Free or Reduced-Price Lunch (Percentage)	37	41	-4	0.49
Student Race/Ethnicity (Percentage)				
White	65	64	1	0.96
Black	21	24	-2	0.78
Hispanic	11	9	2	0.77
Asian	1	1	0	0.48
Native American	2	2	0	0.98
Number of the Following Incidents (per 1,000 Students) Reported by Schools During the 2006-2007 School Year:[a]				
Expulsions	10	9	1	0.78
Distribution, possession, or use of illegal drugs	8	5	3	0.28
Distribution, possession, or use of alcohol	3	3	0	0.82
Physical attacks or fights	23	22	1	0.83
Number of Schools	**20**	**16**		

Source: 2006–2007 *Common Core of Data* (CCD) and schoolwide records forms administered by study team.

Note: Data are weighted to account for differences across schools in the probability of random assignment to the treatment or control groups. All *p*-values are based on two-tailed t-tests.

[a]Data on the number of disciplinary incidents are from the baseline schoolwide records form collected by the study team.

TABLE II.8

BASELINE EQUIVALENCE FOR PARTICIPANTS IN COVERED ACTIVITIES

Measure	Treatment Group	Control Group	Difference	p-value
Demographic Characteristics				
Age (Percentage)				
13-14	8.5	8.7	-0.2	.83
15	25.9	23.5	2.4	.28
16	24.0	27.5	-3.5	.03*
17	25.0	25.4	-0.4	.97
18	16.3	15.0	1.3	.40
Female (Percentage)	50.9	49.6	1.3	.64
Grade Level (Percentage)				
9th	50.7	51.7	-1.0	.75
10th	26.7	27.4	-0.7	.82
11th	22.7	21.0	1.7	.13
Hispanic (Percentage)	11.8	11.9	-0.1	.98
Race (Percentage)				
American Indian/Alaska Native	1.7	2.8	-1.1	.17
Asian	1.7	1.0	0.7	.12
Black/African American	21.4	22.7	-1.3	.88
Native Hawaiian/Other Pacific Islander	1.1	1.0	0.1	.90
White	70.3	67.7	2.6	.80
More than one race reported	3.9	4.9	-1.0	.51
Baseline Versions of Outcome Measures[a]				
Use of the Following in the Past Six Months (Percentage):				
Any substance[b]	43.8	48.0	-4.2	.14
Any substance except alcohol and tobacco	13.9	15.0	-1.1	.66
Any substance tested by the district's MRSDT program[c]	25.0	27.6	-2.6	.70
Use of the Following in the Past 30 Days (Percentage):				
Any substance[b]	29.0	29.7	-0.7	.83
Any substance except alcohol and tobacco	7.8	9.9	-2.1	.25
Any substance tested by the district's MRSDT program[c]	14.6	15.9	-1.3	.79
"Probably Will" or "Definitely Will" Use the Following Within the Next Year (Percentage):				
Any substance[d]	26.2	26.2	0.0	.99
Any substance except alcohol and tobacco	5.2	6.5	-1.3	.48
Perceived Positive Consequences of Substance Use Scale Score (Average)[e]	1.99	2.03	-0.04	.54
Perceived Negative Consequences of Substance Use Scale Score (Average)[f]	4.18	4.22	-0.04	.54
School Connectedness Scale Score (Average)[g]	2.94	2.97	-0.03	.69
Sample Size[h]	**1,349**	**1,096**		

TABLE II.8 *(continued)*

Source: Student surveys administered by study team.

Note: All *p*-values are based on two-tailed t-tests that account for the clustering of students within schools.

[a]Limited to students who completed both the baseline and follow-up surveys.

[b]This category reflects students' reported use of the following substances: cigarettes, chewing tobacco, alcohol, marijuana, cocaine, steroids or other muscle-building drugs, glue or other inhalants, narcotic drugs such as heroin or codeine, amphetamines or methamphetamines without a prescription, and any other illegal drug.

[c]This category reflects the substances tested by each participating district as part of its MRSDT program. The tested substances vary *across* districts but are the same *within* each district.

[d]This category reflects students' intended use of the following substances: cigarettes, chewing tobacco, alcohol, marijuana, or any other illegal drug.

[e]The Perceived Positive Consequences of Substance Use Scale averages student responses to four items from the student survey: (16e) "Using illegal drugs or alcohol makes it easier to be part of a group," (16f) "Using illegal drugs or drinking is cool," (16g) "Using illegal drugs or drinking makes everything seem better," and (16h) "Using illegal drugs or drinking makes it easier to have a good time with friends." Responses are coded on a 5-point scale ranging from strongly disagree to strongly agree. Higher values on the scale indicate more positive attitudes toward substance use.

[f]The Perceived Negative Consequences of Substance Use Scale averages student responses to four items from the study survey: (16a) "Using illegal drugs leads to serious health problems," (16b) "Drinking alcohol leads to serious health problems, (16c) "If I used drugs, I would get into trouble," and (16d) "If I drank, I would get into trouble." Responses are coded on a 5-point scale ranging from strongly disagree to strongly agree. Higher values on the scale indicate more negative attitudes toward substance use.

[g]The School Connectedness Scale averages student responses to 16 items from the student survey (items 11a–p). For each item, students indicated on a 4-point scale whether they agreed or disagreed with statements such as (11b) "I feel like I belong at this school," (11d) "We do not waste time in my classes," (11f) "Adults at this school act on student concerns," and (11k) "I can be a success at this school." Higher values on the scale indicate greater connection to school.

[h]The reported sample size is the number of activity participants who completed a follow-up survey.

*Significantly different from zero at the .05 level, two-tailed test.

MRSDT = Mandatory-Random Student Drug Testing.

TABLE II.9

BASELINE EQUIVALENCE FOR NONPARTICIPANTS

Measure	Treatment Group	Control Group	Difference	p-value
Demographic Characteristics				
Age (Percentage)				
13-14	7.2	5.5	1.7	.14
15	24.4	25.9	-1.5	.61
16	28.3	27.6	0.7	.66
17	25.2	24.7	0.5	.66
18	14.9	16.3	-1.4	.43
Female (Percentage)	53.2	51.1	2.1	.34
Grade Level (Percentage)				
9th	53.1	52.0	1.1	.74
10th	26.0	25.1	0.9	.76
11th	20.9	22.9	-2.0	.09
Hispanic (Percentage)	16.0	17.3	-1.3	.83
Race (Percentage)				
American Indian/Alaska Native	2.6	2.3	0.3	.30
Asian	1.8	1.0	0.8	.79
Black/African American	21.4	23.7	-2.3	.38
Native Hawaiian/Other Pacific Islander	1.3	2.1	-0.8	.75
White	69.9	66.7	3.2	.35
More than one race reported	3.0	4.1	-1.1	.30
Baseline Versions of Outcome Measures[a]				
Use of the Following in the Past Six Months (Percentage):				
Any substance	47.7	49.7	-2.0	.62
Any substance except alcohol and tobacco	17.4	20.6	-3.2	.37
Any substance tested by the district's MRSDT program	30.6	32.3	-1.7	.81
Use of the Following in the Past 30 Days (Percentage):				
Any substance	30.8	32.8	-2.0	.60
Any substance except alcohol and tobacco	10.8	12.6	-1.8	.51
Any substance tested by the district's MRSDT program	18.2	18.2	0.0	.99
"Probably Will" or "Definitely Will" Use the Following Within the Next Year (Percentage):				
Any substance	29.5	31.9	-2.4	.44
Any substance except alcohol and tobacco	8.1	11.8	-3.7	.08
Perceived Positive Consequences of Substance Use Scale Score (Average)	1.94	2.05	-0.09	.31
Perceived Negative Consequences of Substance Use Scale Score (Average)	4.11	4.02	-0.09	.30
School Connectedness Scale Score (Average)	2.83	2.85	-0.02	.80
Sample Size[b]	**1,350**	**928**		

TABLE II.9 *(continued)*

Source: Student surveys administered by study team.

Note: All *p*-values are based on two-tailed t-tests that account for the clustering of students within schools.

[a]Limited to students who completed both the baseline and follow-up surveys; see Table II.8 for a detailed description of each measure.

[b]The reported sample size is the number of nonparticipants who completed a follow-up survey.

MRSDT = Mandatory-Random Student Drug Testing.

TABLE II.10

BASELINE EQUIVALENCE FOR ALL STUDENTS

Measure	Treatment Group	Control Group	Difference	*p*-value
Demographic Characteristics				
Age (Percentage)				
13-14	7.9	7.3	0.6	.54
15	25.2	24.6	0.6	.62
16	26.1	27.6	-1.5	.19
17	25.3	25.0	0.3	.81
18	15.6	15.6	0.0	.93
Female (Percentage)	52.0	50.3	1.7	.33
Grade Level (Percentage)				
9th	51.9	51.8	0.1	.99
10th	26.3	26.3	0.0	.99
11th	21.8	21.8	0.0	.97
Hispanic (Percentage)	13.8	14.4	-0.6	.92
Race (Percentage)				
American Indian/Alaska Native	2.1	2.6	-0.5	.55
Asian	1.8	1.0	0.8	.08
Black/African American	21.4	23.2	-1.8	.83
Native Hawaiian/Other Pacific Islander	1.2	1.5	-0.3	.57
White	70.1	67.2	2.9	.77
More than one race reported	3.5	4.6	-1.1	.39
Baseline Versions of Outcome Measures[a]				
Use of the Following in the Past Six Months (Percentage):				
Any substance	45.6	48.8	-3.2	.27
Any substance except alcohol and tobacco	15.5	17.6	-2.1	.42
Any substance tested by the district's MRSDT program	27.6	29.7	-2.1	.74
Use of the Following in the Past 30 Days (Percentage):				
Any substance	29.8	31.1	-1.2	.67
Any substance except alcohol and tobacco	9.2	11.1	-1.9	.34
Any substance tested by the district's MRSDT program	16.3	16.9	-0.6	.87
"Probably Will" or "Definitely Will" Use the Following Within the Next Year (Percentage):				
Any substance	27.7	28.8	-1.1	.74
Any substance except alcohol and tobacco	6.6	8.9	-2.3	.18
Participated in a Covered Activity During the 2006-2007 School Year (Percentage)	54.7	57.7	-3.0	.56
Perceived Positive Consequences of Substance Use Scale Score (Average)	1.97	2.04	-0.07	.32
Perceived Negative Consequences of Substance Use Scale Score (Average)	4.15	4.13	-0.02	.77
School Connectedness Scale Score (Average)	2.89	2.91	-0.02	.71
Sample Size[b]	**2,699**	**2,024**		

TABLE II.10 *(continued)*

Source: Student surveys administered by study team.

Note: All *p*-values are based on two-tailed t-tests that account for the clustering of students within schools.

[a]Limited to students who completed both the baseline and follow-up surveys; see Table II.8 for a detailed description of each measure.

[b]The reported sample size is the number of students who completed a follow-up survey.

MRSDT = Mandatory-Random Student Drug Testing.

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III. IMPLEMENTATION FINDINGS

This chapter describes how the MRSDT programs were implemented in the study's treatment schools during the 2007–2008 school year. For both the treatment and control schools, we also describe the range of other substance use prevention activities that occurred during the year. The chapter's first section describes the key features of the drug testing programs implemented by treatment schools. Understanding how the programs were implemented is important for two reasons: (1) this study is an evaluation of MRSDT programs as they were carried out in real-world conditions, rather than an efficacy study carried out in more tightly controlled conditions; and (2) variation in program implementation may be correlated with the impacts of the program (see Chapter V for analyses that explore this relationship). The main findings from this section are as follows:

- Five of the seven study districts tested both student athletes and participants in competitive extracurricular activities (for example, school clubs, marching band, and choir), whereas two districts limited MRSDT to student athletes.

- The frequency with which treatment schools conducted drug testing through their MRSDT grants ranged from four times per year to five or six times per month.

- Six of the seven districts tested for the five substances required by the OSDFS grant award (marijuana, amphetamines, methamphetamines, opiates, and cocaine); the remaining district tested for three of the five required substances.

- Across the seven districts, a total of 3,476 drug tests were conducted during 324 testing events. The rate of positive drug tests—38 out of 3,476 tests—was lower than the rate at which students reported using substances, which is consistent with reports elsewhere in the literature (DuPont 2008a, 2008b).

Because MRSDT is thought to deter substance use through, in part, the threat of testing (see Chapter I), this chapter's second section examines the strategies that schools used to publicize the MRSDT program and the extent to which students were aware of it. The main finding from this analysis is:

- At follow-up, students' awareness of the presence of MRSDT was higher in treatment schools than in control schools. In particular, treatment school students were significantly more likely than control school students to report that students in their school who participated in sports or other activities could be randomly tested for drugs (84 percent versus 50 percent).

The chapter's final section examines the other substance use prevention strategies that were used in treatment and control schools—information that is important for understanding the context within which the MRSDT programs operated and for assessing whether control schools

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attempted to compensate for their control group assignment through the implementation of other substance use prevention programs or policies during the evaluation period. In this analysis:

- The study team found no evidence that control schools attempted to compensate for their assignment to the control group through the implementation of other substance use prevention strategies. In particular, control schools were not significantly more likely than treatment schools to offer other prevention strategies.

A. IMPLEMENTATION OF MRSDT

This section describes how the MRSDT programs were implemented in the study's 20 treatment schools during the 2007–2008 school year.[19] In particular, we describe key features of MRSDT that were required by the OSDFS grant, school activities covered by MRSDT, the period of MRSDT coverage during the school year, testing procedures, the frequency of testing, drugs for which testing was conducted, and the number of drug tests conducted through the OSDFS grant funding—including the number of positive drug tests.

As discussed in Chapter I, the OSDFS grant required each district to identify a set of school-sponsored competitive extracurricular activities that would be "covered" under the district's drug testing policy (the next section discusses this in more detail). Districts were also required by the grant to follow certain testing procedures. These included administering drug tests to at least 50 percent of eligible students annually, testing for a minimum of five substances (marijuana, amphetamines, cocaine, methamphetamines, and opiates), referring students with positive drug test results to treatment and counseling services, subjecting positive test results to review and verification by a certified medical-review officer, and establishing safeguards to maintain the confidentiality of drug test results. In the sections that follow, we discuss several of these grant requirements in more detail, as well as some aspects of MRSDT implementation that were left up to the discretion of individual grantees.

Covered Activities. The majority of districts decided to cover sports and other competitive extracurricular activities in their MRSDT policies. In particular, five districts set up their MRSDT policies to cover sports and competitive extracurricular activities such as choir, cheerleading, and marching band, while the other two districts set up their MRSDT policies to cover only sports (see Table III.1).[20] All of the districts' MRSDT policies covered football, volleyball, basketball, track and field, golf, softball, and baseball.

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[19] In addition to collecting information on MRSDT programs implemented in the treatment schools, we also confirmed that no control school conducted MRSDT during the evaluation period. In one grantee district, both the treatment schools and the control schools became eligible in 2007–2008 to participate in a statewide random testing program for steroids funded by the state legislature; however, this program did not cover substances other than steroids, was limited to five sports (football, baseball, softball, girls' flag football, and weight lifting), and was only intended to test approximately 1 percent of all eligible students.

[20] In Table III.1, the two districts that covered only sports are labeled District 3 and District 5. In District 5, cheerleading was covered by the MRSDT policy but was considered a sport.

TABLE III.1

ACTIVITIES COVERED BY DISTRICT MRSDT POLICIES

School Sport or Activity	District Number							Number of Districts Covering
	1	2	3	4	5	6	7	
School Sports								
Football	√	√	√	√	√	√	√	7
Volleyball	√	√	√	√	√	√	√	7
Cross country	√	√	√	√	√	√	NA	6
Soccer	NA	√	√	√	√	√	√	6
Basketball	√	√	√	√	√	√	√	7
Wrestling	NA	√	√	√	√	√	√	6
Swimming or diving	NA	√	√	√	NA	√	NA	4
Track and field	√	√	√	√	√	√	√	7
Tennis	√	√	√	√	NA	√	√	6
Golf	√	√	√	√	√	√	√	7
Softball	√	√	√	√	√	√	√	7
Baseball	√	√	√	√	√	√	√	7
Weightlifting	√	NA	NA	0	NA	NA	√	2
Bowling	NA	NA	0	√	√	NA	NA	2
School Clubs and Other Activities								
Drama	0	0	0	0	0	√	√	2
Band	√	0	0	√	0	√	√	4
Choir	√	0	0	√	0	√	√	4
Cheerleading or rally	√	√	0	√	√	√	√	6
Dance	√	0	0	√	NA	0	0	2
Drill	√	0	NA	√	0	0	0	2
Academic clubs	√	0	0	√	0	√	0	3
Other (e.g., Future Farmers of America, 4-H, art clubs, etc.)	√	0	0	√	0	√	0	3

Source: District MRSDT policies and communication with district staff.

Note: The activities listed as "covered" in this table include cases in which only certain types of participants were covered by MRSDT (e.g., "band" is listed as a covered activity if students in "marching band" were covered by MRSDT even if students participating in other types of band were not covered by MRSDT).

√ = activity offered in at least one school and covered under district's MRSDT policy.

0 = activity offered in at least one school but *not* covered under district's MRSDT policy.

MRSDT = Mandatory-Random Student Drug Testing.

NA = not applicable; activity not offered in any district schools.

Period of Coverage. In four of the districts, students who participated in covered sports or activities were subject to drug testing all year (or from the time they first began participating in a covered sport or activity until the end of the year). In the remaining three districts, students were subject to drug testing for only the part of the school year during which they participated in the covered activity. The OSDFS grants for MRSDT permitted districts to determine the period during which students participating in covered activities were subject to drug testing.

All covered students in all treatment schools were subject to MRSDT in some portion of the school year prior to the follow-up survey administration, but depending on the season of their sports or activities, they may or may not have been subject to MRSDT in the 30 days prior to the follow-up survey administration.[21] Thus, in addition to examining impacts of MRSDT on both past 30-day and past 6-month substance use on participants and nonparticipants in covered activities, we also examined program impacts for students who were participating in a covered activity at the time of the follow-up survey (see Chapter IV).

Testing Procedures. Information on the procedures used for testing was collected during interviews with school staff. In all treatment schools, school staff reported that decisions about drug testing were made at the district—not school—level, and that all districts decided to contract with an outside drug testing company to supply test kits, manage the selection of students for testing, administer the tests, and analyze test specimens. All of the treatment schools followed the drug testing company's established procedures for collecting samples from students and for handling and processing the samples. All of the treatment schools reported using random sampling to select students for drug testing, and in all treatment schools students could be sampled for multiple testing events. All of the treatment schools reported having policies for students who refused to be tested: 68 percent had a policy to suspend students from activity participation for a year, 32 percent had a policy to temporarily suspend students from activity participation, and 58 percent had a policy to notify parents of a student's refusal to be tested.[22]

Frequency of Testing. Schools conducted drug testing on a variety of schedules, ranging from four times per year to five or six times per month (not shown in table). Seventy-nine percent of treatment schools conducted testing at least once per month: 32 percent tested five or six times per month, 5 percent tested weekly, 5 percent tested twice per month, and 37 percent tested monthly. The remaining 21 percent conducted testing either quarterly (5 percent) or on a seasonal basis (16 percent). We examined the frequency of drug testing as it may be related to impacts on substance use (see Chapter V for analyses that explore this relationship). These findings are based on data from interviews with school staff.

Drugs for Which Tests Were Conducted. Six of the seven districts tested for the five substances required by the OSDFS grant (marijuana, amphetamines, methamphetamines, opiates,

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[21] Specifically, in the three districts with MRSDT in effect only during the period of participation in a covered activity, none of the students participating in a fall activity and all of the students participating in a spring activity were subject to drug testing within 30 days of the follow-up survey administration. Students participating in winter activities were subject to MRSDT in the 30 days prior to the follow-up survey administration in two of these three districts.

[22] Across the study's 20 treatment schools, four students selected for testing refused to be tested during the 2007–2008 school year.

and cocaine).[23] Based on the drug testing forms collected by the study team, one district did not test for all of the required substances (this district did not conduct tests for opiates or cocaine). Some districts also tested for a variety of other substances not required by the grant, including alcohol, tobacco, steroids, or other drugs (see Table III.2).

Number of Tests Conducted. In the one-year study implementation period, across all 20 treatment schools in the study, a total of 3,476 drug tests were conducted during a total of 324 testing "events"—the separate occasions on which tests were conducted (see Table III.2). On average, each treatment school held 16 drug testing events. The average number of testing events per treatment school ranged across districts from a low of four (testing approximately every other month) to a high of 37 (testing approximately once per week). Across all testing events, the rate of testing ranged from a low of 8 tests per 100 students (in District 2) to a high of 89 tests per 100 students (in District 5).

The study team did not have access to the data needed to determine the number of districts that met the OSDFS grant requirement of testing at least 50 percent of eligible students. However, by dividing the total number of drug tests conducted by the number of students who participated in covered activities, we estimated that the number of drug tests per 100 covered-activity participants ranged from 19 to 163 (see Table III.2). These numbers are not based on direct comparisons of lists of eligible students to names of students who were tested and may double count students tested more than once. Keeping these caveats in mind, our calculations suggest that four of the seven districts may have been close to or exceeded the 50 percent testing target, while three of the seven may have fallen short of this target.

KEY MRSDT IMPLEMENTATION FEATURES AT A GLANCE

- Five of the seven districts' MRSDT policies covered sports and other competitive extracurricular activities. The remaining districts covered only sports.

- In four of seven districts, students who participated in covered activities were subject to testing all year (or from the time their participation in a covered activity began through the end of the year). In the remaining districts, students who participated in covered activities were only subject to testing while participating in the covered activity.

- All districts contracted with a drug testing company to administer the MRSDT program.

- The testing frequency ranged from four times per year up to five or six times per month.

- Of the five substances required by the OSDFS grants, all districts tested for marijuana and amphetamines/methamphetamines, and six of the seven districts tested for opiates and cocaine. Some districts tested for other substances.

- The testing rate ranged from 8 tests per 100 students to 89 tests per 100 students.

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[23] In the Drug Testing Collection Form administered by the study team, information on tests for amphetamines and methamphetamines were reported together.

TABLE III.2

NUMBER OF TESTING EVENTS AND DRUG TESTS CONDUCTED,
BY DISTRICT

	District Number:							Total Across Districts
	1	2	3	4	5	6	7	
Number of Testing Events								
Total Number of Testing Events Across All Schools	16	33	33	177	14	14	37	324
Average Number of Testing Events per Treatment School	4	8	17	30	14	7	37	16
Number of Drug Tests Conducted Across All Testing Events[a]								
Total Number of Drug Tests Conducted	568	551	548	846	423	392	148	3,476
Number of Drug Tests Conducted per 100 Students[b]	34	8	22	10	89	16	27	15
Number of Drug Tests Conducted per 100 Covered Activity Participants	49	19	75	21	163	26	48	30
Percentage of Tests Analyzed for Each Substance[c]								
Substances Required by OSDFS Grant:								
Marijuana	100	100	100	100	100	100	100	100
Amphetamine or methamphetamine	100	100	100	100	91	100	100	99
Opiates (heroin, morphine, codeine)	100	100	100	100	0	100	100	88
Cocaine	100	100	100	100	0	100	100	88
Other Tested Substances:								
Phencyclidine (PCP)	100	100	100	100	0	0	100	77
Benzodiazepine	100	0	96	100	0	100	0	67
Synthetic opiates	100	0	100	100	72	0	0	65
Barbiturate	100	0	96	100	0	0	0	56
Propoxyphene	100	0	96	100	0	0	0	56
Alcohol	0	0	72	100	100	0	0	48
Ecstasy	0	0	84	100	13	0	100	43
Steroids	0	0	100	100	7	0	0	41
Methaqualone	100	0	0	100	0	0	0	41
Lysergic acid diethylamide (LSD)	0	0	84	100	0	0	0	38
Gamma hydroxy butyrate (GHB)	0	0	75	100	0	0	0	36
Nicotine	0	0	0	100	100	0	0	37

Source: Drug Testing Collection Form administered by study team.

[a]The total number of drug tests conducted can include multiple tests of the same student across multiple testing events. The total number of students tested across all events is unknown.

[b]This measure equals the total number of drug tests conducted divided by the combined student enrollment of the districts' treatment schools.

[c]The list of substances analyzed in each test varies both across districts and within the same district across multiple testing events.

OSDFS = Office of Safe and Drug-Free Schools.

Number of Positive Drug Tests. Of the 3,476 drug tests conducted across the seven districts in this evaluation during the 2007–2008 school year, a total of 38 positive drug tests were reported (see Table III.3). Positive drug tests were most common for marijuana (23 of the 38 positive drug tests). A total of 17 of the 38 positive drug tests were submitted for confirmatory testing, and all 17 confirmatory tests were positive. The percentage of positive tests is low compared to students' self-reported substance use; this is consistent with previously reported results. Research suggests that schools with established MRSDT programs and a level of substance use comparable to national averages can expect about 4 percent of the total number of drug tests conducted to produce a positive result (DuPont 2008a, 2008b). According to these studies, the actual percentage of positive tests will vary, depending on the level of student drug use and the characteristics of the drug testing program (for example, the proportion of eligible students who are tested during the year and the substances for which tests are conducted). In addition, the percentage of positive drug tests will always be lower than the prevalence of substance use among the student population, because random tests are unlikely to be administered frequently enough to detect infrequent substance use (DuPont 2008b). One recent study of eight U.S. high schools with established MRSDT programs found rates of positive drug tests ranging from a low of 0 percent to a high of 9 percent (DuPont et al. 2008). Thus, the finding in the current study that 1 percent (38 out of 3,476) of the drug tests was positive is consistent with what might be expected based on prior research.

B. STUDENT AWARENESS OF DRUG TESTING

As discussed in Chapter I, the MRSDT program's theory of action predicts that drug testing reduces student substance use in part by deterrence through the threat of testing. The more students are aware of the program, the greater the impacts of the program may be. Therefore, it is important to know how treatment schools publicized their program and how aware students were of the program. It is also important to measure the awareness of testing among students in control schools, as the impact of the program could be attenuated if students in control schools were aware of the drug testing program (or if they thought they could be tested).

Methods Used to Publicize MRSDT. As shown in Table III.4, the most common methods treatment schools used to publicize their MRSDT program were an announcement at a preseason athletic meeting (90 percent), a media release (90 percent), and an announcement over the school's public-address system (79 percent). Other methods that schools used to publicize the program included an announcement in the school handbook or at a public meeting (63 percent for both), a letter or email to parents (53 percent), or an announcement at a mid-season athletic meeting (42 percent). Five of the districts provided information about the MRSDT program to students prior to, or at the beginning of, the school year. Two of the districts provided information about the program to students at the beginning of each season (fall, winter, and spring).

Students' Awareness of the MRSDT Program. The study's random assignment design implies that at the time of the baseline student survey, students in treatment and control schools would have been equally likely (or unlikely) to report that a random drug testing program existed in their schools. However, at the time of the follow-up student survey—after the MRSDT programs had been implemented in treatment schools—treatment school students should have

TABLE III.3

DRUG TESTING RESULTS

Substance	Number of Tests Analyzed for Each Substance	Number of Positive Tests	Percentage of Tests That Were Positive	Number of Confirmatory Tests[a]	Percentage of Confirmatory Tests That Were Positive
Substances Required by OSDFS Grant					
Marijuana	3,476	23	0.7	6	100
Amphetamine or methamphetamine	3,438	5	0.1	3	100
Opiates (heroin, morphine, codeine)	3,053	0	0.0	0	NA
Cocaine	3,053	0	0.0	0	NA
Other Tested Substances					
Phencyclidine (PCP)	2,661	0	0.0	0	NA
Benzodiazepine[b]	2,334	0	0.0	0	NA
Synthetic opiates	2,268	0	0.0	0	NA
Barbiturate	1,942	0	0.0	0	NA
Propoxyphene[c]	1,942	1	0.1	1	100
Alcohol	1,662	5	0.3	3	100
Ecstasy	1,511	0	0.0	0	NA
Steroids	1,424	1	0.1	1	100
Methaqualone[d]	1,414	0	0.0	0	NA
Lysergic acid diethylamide (LSD)	1,308	0	0.0	0	NA
Gamma hydroxy butyrate (GHB)	1,259	0	0.0	0	NA
Nicotine	1,269	3	0.2	3	100

Source: Drug Testing Collection Form administered by study team.

[a]Cases where the original sample was retested to verify a positive result.

[b]Benzodiazepine is a prescription tranquilizer (e.g., Valium, Xanax).

[c]Propoxyphene is a prescription pain medication (e.g., Darvon).

[d]Methaqualone is a sedative-hypnotic (e.g., Quaalude).

NA = not applicable; no confirmatory tests were conducted for these substances.

OSDFS = Office of Safe and Drug-Free Schools.

TABLE III.4

SCHOOL STAFF REPORTS OF METHODS USED TO PUBLICIZE MRSDT PROGRAMS

Publicity Method	Percentage of Schools Using Method[a]
Announcement at pre-season athletic meeting	89.5
Media release (newspaper, television, or radio)	89.5
School public address system	78.9
Announcement in school handbook	63.2
Announcement at public meeting (school board, PTA, etc.)	63.2
Letter or e-mail to parent	52.6
Announcement at mid-season athletic meeting	42.1
Announcement at meeting of full student body	36.8
Announcement on school's web page	36.8
Letter or e-mail to student	31.6
School newsletter	26.3
Call to parent	10.5
Other[b]	31.6
Sample Size[c]	**19**

Source: School staff interviews conducted by study team.

[a]Percentages sum to greater than 100 percent because schools could report using more than one method.

[b]Other publicity methods included parental consent forms and informational brochures.

[c]The reported sample size is the number of treatment schools in which staff interviews were conducted.

MRSDT = Mandatory-Random Student Drug Testing.

been more likely than control school students to report the presence of a random drug testing program in their schools. We found the evidence to be consistent with this pattern.

In particular, at baseline, student awareness of the MRSDT program was not significantly different between treatment and control schools (see Table III.5). Students in treatment schools were no more likely than students in control schools to report being aware of random drug testing in their schools (43 percent for both groups). There are several possible explanations for finding that 43 percent of students in both treatment and control schools mistakenly thought testing existed at their school at baseline (a point at which none of the participating schools were conducting random drug testing). In particular, students may have confused MRSDT with other existing voluntary or suspicion-based programs or with a workplace drug testing program; there may have been announcements related to the MRSDT program at public meetings prior to baseline—for example, school board meetings at which the MRSDT programs were considered; and at least one district had previously implemented a MRSDT program, so students may have mistakenly thought that program was still in place. In Appendix I, we examine whether program impacts are smaller for students who, at baseline, already thought they were subject to drug testing.

At follow-up, we found that student awareness of the MRSDT program—critical to the program's theory of action—was 34 percentage points higher in treatment schools than in control schools (a statistically significant difference). In particular, students in treatment schools were more likely than students in control schools to report being aware of random drug testing (84 percent versus 50 percent). These findings indicate that implementation of MRSDT in treatment schools had the intended effect of increasing student awareness of random drug testing, which is a necessary precursor for the program to have a deterrent effect on students' substance use.

There were also statistically significant differences at follow-up between students in treatment and control schools in response to questions about whether their schools planned to test students for drugs in the near future, whether students could have been tested for drugs in the past six months, and whether the student or someone he or she knew had been tested for drugs in the past six months. Although these three questions did not specifically refer to "random" drug testing, the finding of significant differences at follow-up—but not baseline—suggests that students may have been answering these questions with random testing in mind. Thus, these findings provide additional corroborating evidence that students in treatment schools were more likely than students in control schools to think that drug testing was being conducted in their schools.

Findings from interviews with school staff were generally consistent with students' self-reports, indicating a high level of student awareness of the MRSDT program in treatment schools relative to control schools, as shown in Table III.6. In particular, staff in treatment schools reported that students were aware that MRSDT had been implemented. On a scale of 1 (no students aware) to 5 (all or nearly all students aware), the average staff rating of students' awareness of MRSDT in treatment schools was 4.8. Interviews with control school staff also showed some awareness of plans to implement MRSDT among students in control schools. In particular, on a similar scale of 1 to 5, the average staff rating of students' awareness of plans to implement MRSDT in control schools was 3.2. It is important to note that these survey questions were different for treatment and control schools, with the treatment school version referring to

TABLE III.5

STUDENT AWARENESS OF DRUG TESTING, BY TREATMENT STATUS

Measures of Student Awareness	Baseline Survey[a]				Follow-Up Survey[b]			
	Treatment Schools	Control Schools	Difference	p-value[c]	Treatment Schools	Control Schools	Difference	p-value[c]
At my school students who participate in some sports or other activities may be randomly tested for drugs.								
True	43.3	43.4	-0.1	.91	84.4	50.1	34.3*	<.001
False	18.2	18.8	-0.6		3.5	15.3	-11.8*	
Don't Know	38.6	37.8	0.8		12.1	34.6	-22.5*	
My school plans to test students for drugs in the near future.								
True	35.8	39.4	-3.6	.06	59.1	34.7	24.4*	<.001
False	6.6	9.7	-3.1		5.2	8.4	-3.2*	
Don't Know	57.6	50.9	6.7		35.7	57.0	-21.3*	
In the past 6 months I could have been tested for drugs by my school.								
True	16.8	18.4	-1.6	.80	48.2	21.6	26.6*	<.001
False	43.9	43.9	0.0		30.2	42.6	-12.4*	
Don't Know	39.4	37.8	1.6		21.6	35.7	-14.1*	
In the past 6 months I or someone I know was tested for drugs by my school.								
True	15.4	15.8	-0.4	.63	66.5	16.5	50.0*	<.001
False	43.6	45.4	-1.8		14.6	43.9	-29.3*	
Don't Know	41.0	38.7	2.3		18.9	39.6	-20.7*	
Sample Size	**1,310**	**1,102**			**2,699**	**2,024**		

Source: Student surveys administered by study team.

Note: Numbers in this table (except p-values and sample sizes) show the percentage of students responding "true," "false," or "don't know" to each item. The data are weighted to account for random assignment, sampling, consent, and nonresponse probabilities. The weights are scaled so that, conditional on random assignment probabilities, each school receives equal weight.

[a]The reported sample size for the analysis of data from the baseline survey is the number of students who completed both the baseline and follow-up surveys.

[b]The reported sample size for the analysis of data from the follow-up survey is the number of students who completed the follow-up survey.

[c]p-values were calculated from chi-square tests comparing the distribution of responses between the treatment and control groups.

*Difference in distributions is statistically significant at the .05 level.

TABLE III.6

STAFF PERCEPTIONS OF STUDENT AWARENESS OF MRSDT,
BY TREATMENT STATUS

Measure of Student Awareness	Treatment Schools	Control Schools
Percentage of Schools in Which Staff Reported That Students Were Aware That:[a]		
MRSDT had been implemented	100	NA
School planned to implement MRSDT	NA	100
Mean Staff Rating of Student Awareness That:[b]		
MRSDT had been implemented	4.84	NA
School planned to implement MRSDT	NA	3.19
Sample Size[c]	**19**	**16**

Source: School staff interviews conducted by study team.

[a]Staff in treatment schools were asked whether students were aware that an MRSDT program had been implemented; staff in control schools were asked whether students were aware of plans to implement MRSDT.

[b]Staff in treatment schools were asked to rate on a five-point scale student awareness that an MRSDT program had been implemented; staff in control schools were asked to rate on a five-point scale student awareness of plans to implement MRSDT. Response categories ranged from "no (or very few) students are aware" to "all (or nearly all) students are aware." Higher values indicate greater student awareness.

[c]The reported sample size is the number of schools in which staff interviews were conducted.

MRSDT = Mandatory-Random Student Drug Testing.

NA = not applicable; staff in treatment and control schools were asked different questions.

students' awareness that MRSDT *had been implemented* and the control school version referring to students' awareness of *plans to implement* MRSDT. For this reason, direct comparisons of these two ratings are not appropriate.

C. IMPLEMENTATION OF OTHER SUBSTANCE USE PREVENTION STRATEGIES

High schools across the country employ a range of programs and strategies designed to prevent adolescent substance use—the same overarching goal as that of MRSDT. In their grant application for OSDFS funding for MRSDT, districts were required to explain how the drug testing program would fit into an existing substance use prevention strategy. We would not expect to observe any differences between treatment and control group schools in the types or intensity of other prevention strategies offered, due to random assignment of schools within districts to treatment and control groups. However, one potential threat to the design of the study is that control group schools may have implemented new programs or increased the intensity of existing programs during the evaluation period to compensate for being assigned to a delayed implementation of MRSDT. If so, it would lessen our confidence that the impact estimates represent a comparison of treatment schools to schools acting in a way that is consistent with "business as usual" approaches. Conversely, it is possible that treatment group schools may have stopped implementing or reduced the intensity of existing programs—which might attenuate the program's effect.

We found no evidence of control schools having engaged in compensatory behaviors as a result of their assignment to the control group. We examined school policies for handling students suspected of being under the influence of drugs or alcohol or students found in possession of drugs or alcohol (see Table III.7), the other types of substance use prevention strategies implemented by the schools (see Table III.8), and the hours of these other types of strategies offered in the 2007–2008 school year (see Table III.9). Control schools were not significantly more likely than treatment schools to implement other types of substance use prevention strategies, nor did they offer significantly more hours of these other substance use prevention strategies than did treatment schools.[24] These findings increase our confidence that program impacts were not attenuated by compensatory actions on the part of control group schools.

Similarly, we found no evidence that the introduction of MRSDT led treatment schools to reduce the other substance use prevention strategies they had in place prior to the introduction of MRSDT. Specifically, we found no evidence that treatment schools were significantly less likely than control schools to have other drug- or alcohol-related school policies (Table III.7), to implement other types of substance use prevention strategies (Table III.8), or to offer fewer hours of other substance use prevention strategies (Table III.9). These findings increase our confidence that program impacts were not attenuated by reduced substance use prevention efforts on the part of treatment schools.

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[24] All the analyses described in this section were conducted using two-tailed significance tests. As described in Chapter II, the power of these analyses to detect statistically significant differences between the treatment and control schools is limited by the relatively small number of schools in the study (N = 36).

TABLE III.7

STAFF REPORTS OF SCHOOL SUBSTANCE USE POLICIES,
BY TREATMENT STATUS

School Policy	Percentage of Treatment Schools	Percentage of Control Schools
Policies for Students Suspected of Being Under the Influence of Drugs or Alcohol		
Inspect student's locker, vehicle, or backpack	100.0	93.8
Notify parents	94.7	93.8
Meet with other school officials	84.2	93.8
Notify school police	73.7	81.3
Notify law enforcement	63.2	56.3
Meet with school counselor	57.9	56.3
Submit to screening/drug test	31.6	18.8
Meet with drug counselor	10.5	12.5
Policies for Students Found in the Possession of Drugs or Alcohol		
Out-of-school suspension	100.0	93.8
Notify parents	100.0	93.8
Inspect student's locker, vehicle, or backpack	94.7	87.5
Meet with other school officials	94.7	87.5
Notify school police	89.5	81.3
Notify law enforcement	84.2	75.0
Meet with school counselor	52.6	56.3
Counseling	31.6	56.3
Expulsion	42.1	62.5
Treatment	15.8	43.8
Meet with drug counselor	5.3	6.3
Sample Size[a]	**19**	**16**

Source: School staff interviews conducted by study team.

Note: Percentages sum to greater than 100 percent because staff could report more than one policy.

[a]The reported sample size is the number of schools in which staff interviews were conducted.

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TABLE III.8

STAFF REPORTS OF SCHOOL SUBSTANCE USE PREVENTION STRATEGIES,
BY TREATMENT STATUS

Prevention Strategy	Percentage of Treatment Schools	Percentage of Control Schools
Curriculum or student programs offered during school hours:[a]		
Prevention curriculum	100.0	62.5
Assemblies	73.7	68.8
Programs or activities offered outside of school hours:[b]		
Recreational activities	26.3	31.3
Assemblies	10.5	18.8
Health fairs	0.0	6.3
Counseling and intervention for students:[c]		
Behavioral	15.8	25.0
Therapeutic	15.8	25.0
Training:[d]		
For teachers	73.7	31.3
For parents	47.4	12.5
Sample Size[e]	**19**	**16**

Source: School staff interviews conducted by study team.

[a]This category includes classroom-based materials on substance abuse prevention-related topics presented or taught to high school students. These may include lectures, videos, and pamphlets (all of which can be integrated into existing traditional lessons), as well as presentations or assemblies during school hours.

[b]This category includes any activity that occurs outside of regular school hours that has a specific substance use prevention component, such as a health fair.

[c]This category includes mentoring of students by school or community agency personnel, counselors, or professionals to prevent or stop drug use. This counseling and intervention usually occurs when a student is suspected of drug use, and it generally implies one-on-one attention given to an at-risk student.

[d]This category includes any training sessions designed to make teachers and/or parents proficient with providing specialized instruction, coaching, and practice to students to prevent substance use. These trainings generally utilize a training manual or instructional guide, and can include lessons and information designed to prepare teachers or parents to participate or lead a drug prevention program in the school.

[e]The reported sample size is the number of schools in which staff interviews were conducted.

TABLE III.9

STAFF REPORTS OF INTENSITY OF SCHOOL SUBSTANCE USE PREVENTION STRATEGIES,
BY TREATMENT STATUS

| Prevention Strategy[a] | Average Number of Hours Each Strategy is Offered: | | | | | | | |
| | 9th Grade | | 10th Grade | | 11th Grade | | 12th Grade | |
	T Schools	C Schools	T Schools	C Schools	T Schools	C Schools	T Schools	C Schools
Curriculum								
Prevention curriculum	12.8	19.2	1.9	8.5	2.1	8.5	1.9	8.5
Assemblies	0.8	1.9	0.5	1.7	1.0	2.1	0.8	1.9
Outside Programs								
Recreational	7.1	6.1	7.1	6.1	7.1	6.1	7.1	6.1
Assemblies	0.1	0.2	0.1	0.2	0.1	0.2	0.1	0.2
Health fairs	0.0	0.6	0.0	0.6	0.0	0.6	0.0	0.6
Counseling								
Behavioral	1.1	2.9	0.2	2.9	0.2	2.9	0.2	2.9
Therapeutic	3.8	0.3	3.8	0.3	3.8	0.3	3.8	0.3
Training								
For teachers	2.3	1.0	2.3	1.0	2.3	1.0	2.3	1.0
For parents	0.7	0.1	0.6	0.1	0.6	0.1	0.6	0.1
Sample Size[b]	**19**	**16**	**19**	**16**	**19**	**16**	**19**	**16**

Source:　School staff interviews conducted by study team.

Note:　The hours listed in this table reflect prevention strategies offered to both the entire student body and to subgroups of student athletes.

[a]See Table III.8 for a detailed description of each prevention strategy.

[b]The reported sample size is the number of schools in which staff interviews were conducted.

C Schools = control schools.

T Schools = treatment schools.

The results shown in Table III.7 through Table III.9 confirm that MRSDT was used in tandem with other substance use prevention strategies, as intended by the OSDFS grant program. The most common strategies reported by staff in both treatment and control schools to address students suspected of being under the influence of drugs or alcohol were inspection of the student's locker, vehicle, or backpack; notification of the student's parents; and convening a meeting of school officials (see Table III.7). For students found in possession of drugs or alcohol, the most common policies reported by staff in both treatment and control schools were out-of-school suspension; notification of the student's parents; inspection of the student's locker, vehicle, or backpack; and convening a meeting of school officials. In addition to these policies, schools in both the treatment and control groups also employed a range of other substance use prevention strategies (as shown in Table III.8), the most common of which were substance use prevention curricula and school assemblies. Substance use prevention curricula offered during school, as well as recreational programs offered outside of the school day, were offered for the largest number of hours (see Table III.9).

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IV. MAIN IMPACT FINDINGS

The primary focus of this evaluation is to assess the impacts of MRSDT on the substance use and attitudes reported by students who participate in athletics or other extracurricular activities covered under their district's drug testing policy. Secondary questions concern possible "spillover" effects to students who do not participate in covered activities. The study also assesses the impacts of MRSDT on the number of disciplinary incidents reported by schools.

The following points summarize the key findings from these analyses:

- Students subject to MRSDT reported less substance use than comparable students in high schools without MRSDT. Specifically, student-reported past-30-day use of substances tested under their districts' MRSDT policies was lower in schools implementing MRSDT than in schools without such policies. A similar, though not significant, pattern was observed on other substance use measures.

- The MRSDT program had no "spillover" effects on the substance use reported by students who were not subject to testing and had no effect on any group of students' reported intentions to use substances in the future.

- There were no statistically significant impacts (for either participants or nonparticipants) on students' reported attitudes toward school and perceived consequences of substance use, the proportion of students participating in covered activities, or the number of disciplinary incidents reported by schools.

In the remainder of this chapter, we describe these findings in greater detail. Specifically, the first section presents impact findings for retrospective substance use and intended substance use, the next section presents impact findings for the other student- and school-level outcomes, and the last section describes the robustness of the findings to changes in our analytic approach.

A. STATISTICALLY SIGNIFICANT IMPACTS ON RETROSPECTIVE STUDENT SUBSTANCE USE

For participants in covered activities, MRSDT had a statistically significant impact on retrospective, student-reported substance use (as shown in Table IV.1). In particular, covered-activity participants in treatment schools were significantly less likely than students in control schools to report any past 30-day use of substances covered by their district's MRSDT policy (16.5 percent versus 21.9 percent, effect size = –0.21). Rates of self-reported substance use were also lower for covered-activity participants in treatment schools than for those in control schools on the five other composite substance use measures we identified, though these differences were not statistically significant after accounting for multiple hypothesis testing (MHT).

Levels of statistical significance shown in the tables and discussed in the text are based on adjusted p-values that account for the study team's approach to MHT, which is described

TABLE IV.1

IMPACTS OF MRSDT ON RETROSPECTIVE SUBSTANCE USE
FOR PARTICIPANTS IN COVERED ACTIVITIES

Substance Use Measure	Treatment Group	Control Group	Difference	p-value[a]	Percent Change[b]	Effect Size[c]
Percentage of Students That Reported Using the Following in the Last Six Months:						
Any substance[d]	49.96	54.91	-4.95	0.255	-9.02	-0.12
Any substance except alcohol and tobacco	16.83	19.31	-2.48	0.673	-12.87	-0.10
Any substance tested by the district's MRSDT program[e]	26.88	32.16	-5.28†	0.146	-16.41	-0.15
Percentage of Students That Reported Using the Following in the Last 30 Days:						
Any substance[d]	32.74	38.50	-5.75†	0.126	-14.94	-0.15
Any substance except alcohol and tobacco	10.16	12.69	-2.53	0.531	-19.93	-0.15
Any substance tested by the district's MRSDT program[e]	16.47	21.92	-5.46†*	0.045	-24.89	-0.21
Sample Size[f]	**1,349**	**1,096**				

Source: Student surveys administered by study team.

Note: For each outcome, the numbers reported in the columns labeled "Treatment Group" and "Control Group" are the average predicted outcomes for all students as if they were in the treatment and control groups, respectively. Specifically, two predicted outcomes are generated for every student using the student's actual characteristics and the coefficients from the impact regression. The first predicted value is calculated with the treatment variable set equal to 1 (the average outcome for the treatment group is the average of these predicted values). The second predicted value is calculated setting the treatment variable equal to zero (the average predicted outcome for the control group is the average of these predicted values). Differences in substance use between the treatment and control groups are regression adjusted for random assignment block indicator variables, baseline measures of the outcome variables, and additional covariates that were chosen to improve statistical precision (the method for selecting covariates is described in Appendix F). A variable indicating which students were 16 years old was also included as a covariate in impact models for activity participants, since the analysis of baseline equivalence found a statistically significant treatment/control difference on that variable. The data are weighted to account for random assignment, sampling, consent, and nonresponse probabilities. The weights are scaled so that, conditional on random assignment probabilities, each school receives equal weight.

[a]The p-values reported in this table account for the clustering of students within schools and for multiple hypothesis testing (MHT) to control the probability of finding any falsely significant impacts (the family-wise error rate) at 5 percent. The adjustment for MHT is based on the multivariate t-distribution and takes into account correlations among test statistics. The adjustment accounts for the six tests presented in this table but not for tests presented in other tables of this report.

[b]Percent change is calculated as the difference between the treatment and control groups divided by the average predicted outcome for the control group.

[c]For dichotomous outcomes, the effect size is calculated using the Cox index, which equals the standardized log odds ratio between the treatment and control groups (Cox 1970).

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TABLE IV.1 *(continued)*

[d]The "Any Substance" category reflects students' reported use of the following substances: cigarettes, chewing tobacco, alcohol, marijuana, cocaine, steroids or other muscle-building drugs, glue or other inhalants, narcotic drugs such as heroin or codeine, amphetamines or methamphetamines without a prescription, and any other illegal drug.

[e]This category reflects the substances tested by each participating district as part of its MRSDT program. The tested substances vary *across* districts but are the same *within* each district.

[f]The reported sample size is the number of activity participants who completed a follow-up survey.

[†]Statistically different from zero at the .05 level, two-tailed test. This measure of statistical significance is based on *p*-values that are *not* adjusted for multiple hypotheses testing.

*Statistically different from zero at the .05 level, two-tailed test. This measure of statistical significance is based on *p*-values that *are* adjusted for multiple hypotheses testing.

MRSDT = Mandatory-Random Student Drug Testing.

in Appendix F. However, for readers who are interested in one particular test or who wish to apply an alternative MHT adjustment, unadjusted *p*-values that do *not* account for MHT are reported separately in Appendix F. The use of unadjusted *p*-values lowers the threshold for reporting any one particular test as statistically significant and increases the likelihood of reporting a chance finding as statistically significant. Results of these unadjusted analyses show statistically significant impacts on three measures of retrospective substance use: (1) past 30-day use of any substance, (2) past 30-day use of any district-tested substance, and (3) past 6-month use of any district-tested substance.

Findings are similar when the sample is limited to students who were participating in activities covered by testing in the 30 days before the follow-up survey, as shown in Table IV.2. As discussed in more detail in Chapter II, because of differences in the way MRSDT was implemented across study districts, not all students who participated in a covered activity during the 2007–2008 school year were subject to testing in the 6 months or 30 days before the follow-up survey administration—the reference periods for retrospective substance use questions. The results in Table IV.2 examine the sensitivity of findings to this issue by excluding from the analysis any activity participants who were not participating in covered activities in the 30 days before the follow-up survey. The impact on past 30-day use of district-tested substances remains statistically significant, and the point estimate is –5.99 percentage points instead of –5.46 percentage points for the analogous impact in Table IV.1.

To investigate further the significant impact on past 30-day use of tested substances for covered-activity participants, we estimated impacts separately for each of the individual substance use items on the student survey. The results of these analyses are reported in Table H.1 in Appendix H.

MRSDT had no statistically significant spillover effects on the retrospective substance use reported by students not participating in covered activities. For nonparticipants, there was no significant difference in self-reported substance use between the treatment and control schools (see Table IV.3). There was also no significant difference when looking at the full sample of all students (see Table IV.4).

For intended substance use, MRSDT had no statistically significant impacts for any of the three analysis samples, as shown in Table IV.5. Students in treatment schools were as likely as students in control schools to report that they "definitely will" or "probably will" use substances in the next 12 months.

B. NO IMPACTS ON OTHER OUTCOMES

MRSDT had no statistically significant impact on any other student- or school-level outcome, including students' perceived consequences of substance use, the proportion of students who participate in covered activities, students' connection to school, or the number of disciplinary incidents reported by schools.

For students' perceived consequences of substance use, there was no statistically significant difference in average scale scores between students in the treatment and control schools for either perceived positive consequences or perceived negative consequences of substance use

TABLE IV.2

IMPACTS OF MRSDT ON RETROSPECTIVE SUBSTANCE USE
FOR PAST 30-DAY PARTICIPANTS IN COVERED ACTIVITIES

Substance Use Measure	Treatment Group	Control Group	Difference	p-value[a]	Percent Change[b]	Effect Size[c]
Percentage of Students That Reported Using the Following in the Last Six Months:						
Any substance[d]	50.19	54.84	-4.66	.377	-8.50	-0.11
Any substance except alcohol and tobacco	16.59	19.68	-3.10	.585	-15.73	-0.13
Any substance tested by the district's MRSDT program[e]	27.75	33.06	-5.31	.200	-16.06	-0.15
Percentage of Students That Reported Using the Following in the Last 30 Days:						
Any substance[d]	33.01	38.70	-5.69	.274	-14.70	-0.15
Any substance except alcohol and tobacco	10.12	12.92	-2.80	.525	-21.66	-0.17
Any substance tested by the district's MRSDT program[e]	16.92	22.90	-5.99†*	.047	-26.14	-0.23
Sample Size[f]	**1,158**	**959**				

Source: Student surveys administered by study team.

Note: For each outcome, the numbers reported in the columns labeled "Treatment Group" and "Control Group" are the average predicted outcomes for all students as if they were in the treatment and control groups, respectively. Specifically, two predicted outcomes are generated for every student using the student's actual characteristics and the coefficients from the impact regression. The first predicted value is calculated with the treatment variable set equal to 1 (the average outcome for the treatment group is the average of these predicted values). The second predicted value is calculated setting the treatment variable equal to zero (the average predicted outcome for the control group is the average of these predicted values). Differences in substance use between the treatment and control groups are regression adjusted for random assignment block indicator variables, baseline measures of the outcome variables, and additional covariates that were chosen to improve statistical precision (the method for selecting covariates is described in Appendix F). A variable indicating which students were 16 years old was also included as a covariate in impact models for activity participants, since the analysis of baseline equivalence found a statistically significant treatment/control difference on that variable. The data are weighted to account for random assignment, sampling, consent, and nonresponse probabilities. The weights are scaled so that, conditional on random assignment probabilities, each school receives equal weight.

[a]The p-values reported in this table account for the clustering of students within schools and for multiple hypothesis testing (MHT) to control the probability of finding any falsely significant impacts (the family-wise error rate) at 5 percent. The adjustment for MHT is based on the multivariate t-distribution and takes into account correlations among test statistics. The adjustment accounts for the six tests presented in this table but not for tests presented in other tables of this report.

[b]Percent change is calculated as the difference between the treatment and control groups divided by the average predicted outcome for the control group.

[c]For dichotomous outcomes, the effect size is calculated using the Cox index, which equals the standardized log odds ratio between the treatment and control groups (Cox 1970).

TABLE IV.2 *(continued)*

[d]The "Any Substance" category reflects students' reported use of the following substances: cigarettes, chewing tobacco, alcohol, marijuana, cocaine, steroids or other muscle-building drugs, glue or other inhalants, narcotic drugs such as heroin or codeine, amphetamines or methamphetamines without a prescription, and any other illegal drug.

[e]This category reflects the substances tested by each participating district as part of its MRSDT program. The tested substances vary *across* districts but are the same *within* each district.

[f]The reported sample size is the number of activity participants who completed a follow-up survey and were covered by their district's MRSDT policy in the 30 days before the survey.

[†]Statistically different from zero at the .05 level, two-tailed test. This measure of statistical significance is based on *p*-values that are *not* adjusted for multiple hypotheses testing.

[*]Statistically different from zero at the .05 level, two-tailed test. This measure of statistical significance is based on *p*-values that *are* adjusted for multiple hypotheses testing.

MRSDT = Mandatory-Random Student Drug Testing.

TABLE IV.3

IMPACTS OF MRSDT ON RETROSPECTIVE SUBSTANCE USE
FOR NONPARTICIPANTS

Substance Use Measure	Treatment Group	Control Group	Difference	p-value[a]	Percent Change[b]	Effect Size[c]
Percentage of Students That Reported Using the Following in the Last Six Months:						
Any substance[d]	52.61	49.72	2.90	0.835	5.82	0.07
Any substance except alcohol and tobacco	22.11	21.89	0.23	1.000	1.05	0.01
Any substance tested by the district's MRSDT program[e]	33.43	32.55	0.89	0.984	2.72	0.02
Percentage of Students That Reported Using the Following in the Last 30 Days:						
Any substance[d]	36.04	35.70	0.34	1.000	0.96	0.01
Any substance except alcohol and tobacco	15.03	16.52	-1.49	0.910	-9.04	-0.07
Any substance tested by the district's MRSDT program[e]	20.37	22.94	-2.57	0.508	-11.20	-0.09
Sample Size[f]	**1,350**	**928**				

Source: Student surveys administered by study team.

Note: For each outcome, the numbers reported in the columns labeled "Treatment Group" and "Control Group" are the average predicted outcomes for all students as if they were in the treatment and control groups, respectively. Specifically, two predicted outcomes are generated for every student using the student's actual characteristics and the coefficients from the impact regression. The first predicted value is calculated with the treatment variable set equal to 1 (the average outcome for the treatment group is the average of these predicted values). The second predicted value is calculated setting the treatment variable equal to zero (the average predicted outcome for the control group is the average of these predicted values). Differences in substance use between the treatment and control groups are regression adjusted for random assignment block indicator variables, baseline measures of the outcome variables, and additional covariates that were chosen to improve statistical precision (the method for selecting covariates is described in Appendix F). The data are weighted to account for random assignment, sampling, consent, and nonresponse probabilities. The weights are scaled so that, conditional on random assignment probabilities, each school receives equal weight.

[a]The p-values reported in this table account for the clustering of students within schools and for multiple hypothesis testing (MHT) to control the probability of finding any falsely significant impacts (the family-wise error rate) at 5 percent. The adjustment for MHT is based on the multivariate t-distribution and takes into account correlations among test statistics. The adjustment accounts for the six tests presented in this table but not for tests presented in other tables of this report.

[b]Percent change is calculated as the difference between the treatment and control groups divided by the average predicted outcome for the control group.

[c]For dichotomous outcomes, the effect size is calculated using the Cox index, which equals the standardized log odds ratio between the treatment and control groups (Cox 1970).

[d]The "Any Substance" category reflects students' reported use of the following substances: cigarettes, chewing tobacco, alcohol, marijuana, cocaine, steroids or other muscle-building drugs, glue or other inhalants, narcotic drugs such as heroin or codeine, amphetamines or methamphetamines without a prescription, and any other illegal drug.

TABLE IV.3 *(continued)*

[e]This category reflects the substances tested by each participating district as part of its MRSDT program. The tested substances vary *across* districts but are the same *within* each district.

[f]The reported sample size is the number of nonparticipants who completed a follow-up survey.

MRSDT = Mandatory-Random Student Drug Testing.

TABLE IV.4

IMPACTS OF MRSDT ON RETROSPECTIVE SUBSTANCE USE
FOR ALL STUDENTS

Substance Use Measure	Treatment Group	Control Group	Difference	p-value[a]	Percent Change[b]	Effect Size[c]
Percentage of Students That Reported Using the Following in the Last Six Months:						
Any substance[d]	51.18	52.66	-1.48	0.920	-2.81	-0.04
Any substance except alcohol and tobacco	19.30	20.56	-1.26	0.922	-6.14	-0.05
Any substance tested by the district's MRSDT program[e]	29.94	32.46	-2.52	0.477	-7.76	-0.07
Percentage of Students That Reported Using the Following in the Last 30 Days:						
Any substance[d]	34.32	37.28	-2.96	0.449	-7.93	-0.08
Any substance except alcohol and tobacco	12.48	14.45	-1.97	0.494	-13.64	-0.10
Any substance tested by the district's MRSDT program[e]	18.31	22.49	-4.19†	0.054	-18.61	-0.16
Sample Size[f]	**2,699**	**2,024**				

Source: Student surveys administered by study team.

Note: For each outcome, the numbers reported in the columns labeled "Treatment Group" and "Control Group" are the average predicted outcomes for all students as if they were in the treatment and control groups, respectively. Specifically, two predicted outcomes are generated for every student using the student's actual characteristics and the coefficients from the impact regression. The first predicted value is calculated with the treatment variable set equal to 1 (the average outcome for the treatment group is the average of these predicted values). The second predicted value is calculated setting the treatment variable equal to zero (the average predicted outcome for the control group is the average of these predicted values). Differences in substance use between the treatment and control groups are regression adjusted for random assignment block indicator variables, baseline measures of the outcome variables, and additional covariates that were chosen to improve statistical precision (the method for selecting covariates is described in Appendix F). The data are weighted to account for random assignment, sampling, consent, and nonresponse probabilities. The weights are scaled so that, conditional on random assignment probabilities, each school receives equal weight.

[a]The p-values reported in this table account for the clustering of students within schools and for multiple hypothesis testing (MHT) to control the probability of finding any falsely significant impacts (the family-wise error rate) at 5 percent. The adjustment for MHT is based on the multivariate t-distribution and takes into account correlations among test statistics. The adjustment accounts for the six tests presented in this table but not for tests presented in other tables of this report.

[b]Percent change is calculated as the difference between the treatment and control groups divided by the average predicted outcome for the control group.

[c]For dichotomous outcomes, the effect size is calculated using the Cox index, which equals the standardized log odds ratio between the treatment and control groups (Cox 1970).

[d]The "Any Substance" category reflects students' reported use of the following substances: cigarettes, chewing tobacco, alcohol, marijuana, cocaine, steroids or other muscle-building drugs, glue or other inhalants, narcotic drugs such as heroin or codeine, amphetamines or methamphetamines without a prescription, and any other illegal drug.

[e]This category reflects the substances tested by each participating district as part of its MRSDT program. The tested substances vary *across* districts but are the same *within* each district.

TABLE IV.4 *(continued)*

[f]The reported sample size is the number of students who completed a follow-up survey.

[†]Statistically different from zero at the .05 level, two-tailed test. This measure of statistical significance is based on *p*-values that are *not* adjusted for multiple hypotheses testing.

MRSDT = Mandatory-Random Student Drug Testing.

TABLE IV.5

IMPACTS OF MRSDT ON STUDENTS' INTENTIONS TO USE SUBSTANCES
WITHIN THE NEXT YEAR

Measure of Intentions to Use Substances	Treatment Group	Control Group	Difference	p-value[a]	Percent Change[b]	Effect Size[c]
Sample 1: Participants in Covered Activities[d]						
Percentage of Students That Reported They "Probably Will" or "Definitely Will" Use the Following Within the Next Year:						
Any substance[e]	34.09	33.31	0.77	0.960	2.32	0.02
Any substance except alcohol and tobacco	8.01	7.93	0.08	0.999	1.00	0.01
Sample Size[f]	**1,349**	**1,096**				
Sample 2: Nonparticipants						
Percentage of Students That Reported They "Probably Will" or "Definitely Will" Use the Following Within the Next Year:						
Any substance[e]	33.58	32.81	0.77	0.937	2.33	0.02
Any substance except alcohol and tobacco	12.21	11.89	0.32	0.986	2.71	0.02
Sample Size[f]	**1,350**	**928**				
Sample 3: All Students						
Percentage of Students That Reported They "Probably Will" or "Definitely Will" Use the Following Within the Next Year:						
Any substance[e]	33.75	33.19	0.56	0.950	2.71	0.02
Any substance except alcohol and tobacco	10.00	9.77	0.23	0.988	2.33	0.02
Sample Size[f]	**2,699**	**2,024**				

Source: Student surveys administered by study team.

Note: For each outcome, the numbers reported in the columns labeled "Treatment Group" and "Control Group" are the average predicted outcomes for all students as if they were in the treatment and control groups, respectively. Specifically, two predicted outcomes are generated for every student using the student's actual characteristics and the coefficients from the impact regression. The first predicted value is calculated with the treatment variable set equal to 1 (the average outcome for the treatment group is the average of these predicted values). The second predicted value is calculated setting the treatment variable equal to zero (the average predicted outcome for the control group is the average of these predicted values). Differences in intended substance use between the treatment and control groups are regression adjusted for random assignment block indicator variables, baseline measures of the outcome variables, and additional covariates that were chosen to improve statistical precision (the method for selecting covariates is described in Appendix F). An indicator variable for 16-year old students was included as an additional covariate in the models for activity participants (Sample 1), since the analysis of baseline equivalence found a statistically significant treatment/control difference on that variable. The data are weighted to account for random assignment, sampling, consent, and nonresponse probabilities. The weights are scaled so that, conditional on random assignment probabilities, each school receives equal weight.

TABLE IV.5 *(continued)*

[a]The *p*-values reported in this table account for the clustering of students within schools and for multiple hypothesis testing (MHT) to control the probability of finding any falsely significant impacts (the family-wise error rate) at 5 percent. The adjustment for MHT is based on the multivariate t-distribution and takes into account correlations among test statistics. In this table, the adjustment is applied separately to each of the three samples and accounts for all tests presented within each sample, but does not account for tests presented across samples or in other tables in this report.

[b]Percent change is calculated as the difference between the treatment and control groups divided by the average predicted outcome for the control group.

[c]For dichotomous outcomes, the effect size is calculated using the Cox index, which equals the standardized log odds ratio between the treatment and control groups (Cox 1970).

[d]Participants in covered activities were identified by comparing student self-reported activity participation from the student survey with lists of covered activities obtained from each district. Students were classified as participants if there was an exact match between the activity listed on the student survey and the district-provided activity lists.

[e]The "Any Substance" category reflects students' intended use of the following substances: cigarettes, chewing tobacco, alcohol, marijuana, or any other illegal drug.

[f]The reported sample size is the number of students who completed a follow-up survey.

MRSDT = Mandatory-Random Student Drug Testing.

(see Table IV.6). As discussed in Chapter II, for the measure of perceived negative consequences, students were asked whether they agree or disagree with statements such as "Using illegal drugs leads to serious health problems" and "If I used drugs, I would get into trouble." For the measure of perceived positive consequences, the statements were different—for example, "Using illegal drugs or alcohol makes it easier to be part of a group" and "Using illegal drugs or drinking is cool." We found no evidence that MRSDT has unintended negative consequences on students' attitudes toward substance use.

For participation in covered activities, students in schools with MRSDT were no more or less likely to report participating than students in control schools, as shown in Table IV.7. Fifty-three percent of students in treatment schools reported participating in a covered activity during the 2007–2008 school year, compared with 54 percent of students in control schools (p-value = 0.66).

For students' connection to school, there was no statistically significant difference in average scores on the School Connectedness Scale between treatment and control groups, as shown in Table IV.8. As discussed in Chapter II, for this measure, students were asked whether they agree or disagree with statements such as "I feel like I belong at this school" and "Adults at this school listen to student concerns." We found no evidence that MRSDT has unintended negative consequences on students' attitudes toward school.

Finally, we also found no statistically significant impact on the number of disciplinary incidents reported by school officials, as shown in Table IV.9. The average number of reported expulsions per 1,000 students is lower in treatment schools (6.1) than control schools (9.7), but the difference is not significant. The average number of reported physical attacks or fights per 1,000 students is lower in treatment schools (16.7) than control schools (20.9), but the difference is not significant.

C. SENSITIVITY TESTING SUPPORTS MAIN IMPACT FINDINGS

The impact findings presented in this chapter are robust to changes in our analytic approach. As explained in more detail in Appendix G, for each outcome measure we conducted up to eight sensitivity tests, each a variation on our "benchmark" impact model. For covered-activity participants, the statistically significant impact on participants' past 30-day use of district-tested substances is robust to five of eight sensitivity tests (see Table G.1 in Appendix G). For nonparticipants, as in the benchmark model, we observe no significant impacts on retrospective substance use in any of the sensitivity tests (see Table G.2 in Appendix G). For the full sample of all students, the impact of MRSDT on past 30-day use of district-tested substances is not significant in the benchmark model, but it becomes significant in four of seven sensitivity tests (see Table G.3 in Appendix G). We found no significant impacts in any of the sensitivity tests for other outcome measures—intentions for future substance use, perceived consequences of substance use, participation in covered activities, school connectedness, and number of reported disciplinary incidents in schools (see Table G.4 through Table G.8 in Appendix G).

TABLE IV.6

IMPACTS OF MRSDT ON PERCEIVED CONSEQUENCES
OF SUBSTANCE USE

Measure of Perceived Consequences	Treatment Group	Control Group	Difference	p-value[a]	Effect Size[b]
Sample 1: Participants in Covered Activities[c]					
Mean Perceived Positive Consequences of Substance Use Scale[d]	2.11	2.03	0.08	0.467	0.08
Mean Perceived Negative Consequences of Substance Use Scale[e]	4.09	4.06	0.03	0.823	0.03
Sample Size[f]	**1,349**	**1,096**			
Sample 2: Nonparticipants					
Mean Perceived Positive Consequences of Substance Use Scale[d]	2.01	2.01	0.00	0.998	0.00
Mean Perceived Negative Consequences of Substance Use Scale[e]	4.02	3.95	0.07	0.304	0.07
Sample Size[f]	**1,350**	**928**			
Sample 3: All Students					
Mean Perceived Positive Consequences of Substance Use Scale[d]	2.06	2.02	0.04	0.690	0.04
Mean Perceived Negative Consequences of Substance Use Scale[e]	4.06	4.01	0.05	0.373	0.05
Sample Size[f]	**2,699**	**2,024**			

Source: Student surveys administered by study team.

Note: For each outcome, the numbers reported in the columns labeled "Treatment Group" and "Control Group" are the average predicted outcomes for all students as if they were in the treatment and control groups, respectively. Specifically, two predicted outcomes are generated for every student using the student's actual characteristics and the coefficients from the impact regression. The first predicted value is calculated with the treatment variable set equal to 1 (the average outcome for the treatment group is the average of these predicted values). The second predicted value is calculated setting the treatment variable equal to zero (the average predicted outcome for the control group is the average of these predicted values). Differences in scale scores between the treatment and control groups are regression adjusted for random assignment block indicator variables, baseline measures of the outcome variables, and additional covariates that were chosen to improve statistical precision (the method for selecting covariates is described in Appendix F). A variable indicating which students were 16 years old was also included as a covariate in impact models for activity participants (sample 1), since the analysis of baseline equivalence found a statistically significant treatment/control difference on that variable. The data are weighted to account for random assignment, sampling, consent, and nonresponse probabilities. The weights are scaled so that, conditional on random assignment probabilities, each school receives equal weight.

TABLE IV.6 *(continued)*

[a]The *p*-values reported in this table account for the clustering of students within schools and for multiple hypothesis testing (MHT) to control the probability of finding any falsely significant impacts (the family-wise error rate) at 5 percent. The adjustment for MHT is based on the multivariate t-distribution and takes into account correlations among test statistics. In this table, the adjustment is applied separately to each of the three samples and accounts for all tests presented within each sample, but does not account for tests presented across samples or in other tables in this report.

[b]The effect size is calculated by dividing the impact by the standard deviation of the control group.

[c]Participants in covered activities were identified by comparing student self-reported activity participation from the student survey with lists of covered activities obtained from each district. Students were classified as participants if there was an exact match between the activity listed on the student survey and the district-provided activity lists.

[d]The Perceived Positive Consequences of Substance Use Scale averages student responses to four items from the student survey: (16e) "Using illegal drugs or alcohol makes it easier to be part of a group," (16f) "Using illegal drugs or drinking is cool," (16g) "Using illegal drugs or drinking makes everything seem better," and (16h) "Using illegal drugs or drinking makes it easier to have a good time with friends." Responses are coded on a 5-point scale ranging from strongly disagree to strongly agree. Higher values on the scale indicate more positive attitudes toward substance use.

[e]The Perceived Negative Consequences of Substance Use Scale averages student responses to four items from the study survey: (16a) "Using illegal drugs leads to serious health problems," (16b) "Drinking alcohol leads to serious health problems, (16c) "If I used drugs, I would get into trouble," and (16d) "If I drank, I would get into trouble." Responses are coded on a 5-point scale ranging from strongly disagree to strongly agree. Higher values on the scale indicate more negative attitudes toward substance use.

[f]The reported sample size is the number of students who completed a follow-up survey.

MRSDT = Mandatory-Random Student Drug Testing.

TABLE IV.7

IMPACTS OF MRSDT ON EXTRACURRICULAR ACTIVITY PARTICIPATION

Activity Participation Measure	Treatment Group	Control Group	Difference	p-value[a]	Effect Size[b]
All Students					
Percentage of Students That Participated in a Covered Activity During 2007-2008 School Year[c]	52.87	53.54	-0.67	0.659	-0.02
Sample Size[d]	**2,699**	**2,024**			

Source: Student surveys administered by study team.

Note: For each outcome, the numbers reported in the columns labeled "Treatment Group" and "Control Group" are the average predicted outcomes for all students as if they were in the treatment and control groups, respectively. Specifically, two predicted outcomes are generated for every student using the student's actual characteristics and the coefficients from the impact regression. The first predicted value is calculated with the treatment variable set equal to 1 (the average outcome for the treatment group is the average of these predicted values). The second predicted value is calculated setting the treatment variable equal to zero (the average predicted outcome for the control group is the average of these predicted values). Differences in activity participation between the treatment and control groups are regression adjusted for random assignment block indicator variables, baseline measures of the outcome variables, and additional covariates that were chosen to improve statistical precision (the method for selecting covariates is described in Appendix F). The data are weighted to account for random assignment, sampling, consent, and nonresponse probabilities. The weights are scaled so that, conditional on random assignment probabilities, each school receives equal weight.

[a]The p-value presented in this table is *not* adjusted for multiple hypothesis testing.

[b]For dichotomous outcomes, the effect size is calculated using the Cox index, which equals the standardized log odds ratio between the treatment and control groups (Cox 1970).

[c]Participants in covered activities were identified by comparing student self-reported activity participation from the student survey with lists of covered activities obtained from each district. Students were classified as participants if there was an exact match between the activity listed on the student survey and the district-provided activity lists.

[d]The reported sample size is the number of students who completed a follow-up survey.

MRSDT = Mandatory-Random Student Drug Testing.

TABLE IV.8

IMPACTS OF MRSDT ON SCHOOL CONNECTEDNESS

School Connectedness Measure	Treatment Group	Control Group	Difference	*p*-value[a]	Effect Size[b]
Sample 1: Participants in Covered Activities[c]					
Mean School Connectedness Scale[d]	2.912	2.907	0.006	0.862	0.011
Sample Size[e]	**1,349**	**1,096**			
Sample 2: Nonparticipants					
Mean School Connectedness Scale[d]	2.802	2.797	0.005	0.902	0.01
Sample Size[e]	**1,350**	**928**			
Sample 3: All Students					
Mean School Connectedness Scale[d]	2.86	2.856	0.004	0.900	0.008
Sample Size[e]	**2,699**	**2,024**			

Source: Student surveys administered by study team.

Note: For each outcome, the numbers reported in the columns labeled "Treatment Group" and "Control Group" are the average predicted outcomes for all students as if they were in the treatment and control groups, respectively. Specifically, two predicted outcomes are generated for every student using the student's actual characteristics and the coefficients from the impact regression. The first predicted value is calculated with the treatment variable set equal to 1 (the average outcome for the treatment group is the average of these predicted values). The second predicted value is calculated setting the treatment variable equal to zero (the average predicted outcome for the control group is the average of these predicted values). Differences in scale scores between the treatment and control groups are regression adjusted for random assignment block indicator variables, baseline measures of the outcome variables, and additional covariates that were chosen to improve statistical precision (the method for selecting covariates is described in Appendix F). An indicator variable for 16-year old students was included as an additional covariate in the models for activity participants (Sample 1), since the analysis of baseline equivalence found a statistically significant treatment/control difference on that variable. The data are weighted to account for random assignment, sampling, consent, and nonresponse probabilities. The weights are scaled so that, conditional on random assignment probabilities, each school receives equal weight.

[a]The *p*-values presented in this table are *not* adjusted for multiple hypothesis testing.

[b]The effect size is calculated by dividing the impact by the standard deviation of the control group.

[c]Participants in covered activities were identified by comparing student self-reported activity participation from the student survey with lists of covered activities obtained from each district. Students were classified as participants if there was an exact match between the activity listed on the student survey and the district-provided activity lists.

[d]The School Connectedness Scale averages student responses to 16 items from the student survey (items 11a–p). For each item, students indicated on a 4-point scale whether they agreed or disagreed with statements such as (11b) "I feel like I belong at this school," (11d) "We do not waste time in my classes," (11f) "Adults at this school act on student concerns," and (11k) "I can be a success at this school." Higher values on the scale indicate greater connection to school.

[e]The reported sample size is the number of students who completed a follow-up survey.

MRSDT = Mandatory-Random Student Drug Testing.

TABLE IV.9

IMPACTS OF MRSDT ON DISCIPLINARY INCIDENTS IN STUDY SCHOOLS

Incident Measure	Treatment Group	Control Group	Difference	p-value[a]	Effect Size[b]
Number of the Following Incidents (per 1,000 Students) Reported by Schools During the 2007-2008 School Year:					
Expulsions	6.07	9.69	-3.61	0.636	-0.25
Distribution, possession, or use of illegal drugs	4.89	4.23	0.67	0.906	0.22
Distribution, possession, or use of alcohol	1.80	1.95	-0.15	1.000	-0.03
Physical attacks or fights	16.74	20.91	-4.17	0.805	-0.32
Sample Size[c]	**20**	**16**			

Source: Schoolwide records forms collected by study team.

Note: For each outcome, the numbers reported in the columns labeled "Treatment Group" and "Control Group" are the average predicted outcomes for all schools as if they were in the treatment and control groups, respectively. Specifically, two predicted outcomes are generated for every school using the school's actual characteristics and the coefficients from the impact regression. The first predicted value is calculated with the treatment variable set equal to 1 (the average outcome for the treatment group is the average of these predicted values). The second predicted value is calculated setting the treatment variable equal to zero (the average predicted outcome for the control group is the average of these predicted values). Differences in outcomes between the treatment and control groups are regression adjusted for random assignment block indicator variables, baseline measures of the outcome variables, and additional covariates that were chosen to improve statistical precision (the method for selecting covariates is described in Appendix F). The data are weighted so that, conditional on random assignment probabilities, each school receives equal weight.

[a]The p-values reported in this table account for multiple hypothesis testing (MHT) to control the probability of finding any falsely significant impacts (the family-wise error rate) at 5 percent. The adjustment for MHT is based on the multivariate t-distribution and takes into account correlations among test statistics. The adjustment accounts for the four tests presented in this table but not for tests presented in other tables in this report.

[b]The effect size is calculated by dividing the impact by the standard deviation of the control group.

[c]The reported sample size is the number of schools in the study.

MRSDT = Mandatory-Random Student Drug Testing.

V. EXPLORATORY IMPACT FINDINGS

A key question for future research and for school districts considering adopting MRSDT is whether the impact of MRSDT on retrospective substance use may differ according to how districts choose to implement the program. As discussed in Chapter III, districts face many decisions in implementing MRSDT programs, including the types of substances for which testing will be conducted, the frequency of testing, the number and proportion of students tested, and the strategies for making students aware of the program. All of these implementation decisions have the potential to influence program effectiveness. For example, one could hypothesize that impacts might be larger for programs that test for a larger number of substances, conduct testing more frequently, subject a larger number or higher proportion of students to testing, or have a higher level of student awareness of the testing program.

To help inform future program development and research, in this chapter we present exploratory analyses of the correlation between program impacts and implementation characteristics. The analysis was based on the 15 pairs or groups of similar schools identified as part of the study's approach to random assignment (described in Appendix A). Because random assignment was conducted separately within each group, it is possible to calculate for each group an estimate of the impact of MRSDT on student outcomes.[25] Information on program implementation can also be calculated separately for each group of schools, because each group has at least one treatment school that implemented MRSDT during the 2007–2008 school year. Results from these correlational analyses are based on a small sample size (15 groups of schools) and therefore should be interpreted with caution. In addition, they do not have a strictly causal interpretation, because variation in implementation characteristics is not randomly assigned and could be correlated with other unobserved characteristics of schools that might also be related to impacts.[26]

The impacts of MRSDT on retrospective, student-reported substance use ranged across the 15 groups of schools from –23 percentage points to +3 percentage points, as shown in Figure V.1. Impacts were negative for 13 of the 15 groups (indicating less substance use reported by the treatment group relative to the control group). We focused on impacts on past 30-day use of any tested substance for participants in covered activities, because that is the outcome measure for which statistically significant program impacts were found in main impact models (see Chapter IV). We cannot calculate tests of statistical significance for these impact estimates, because some of the 15 groups include only two schools, and variance calculations require at least three schools per group.

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[25] As an alternative approach, we also considered basing this analysis on impact estimates calculated separately for each of the seven grantee districts. However, we instead chose to focus on the 15 pairs or groups of schools used for random assignment because the larger number of units (15 random assignment groups versus 7 grantee districts) more than doubles the sample size for the analysis.

[26] For additional exploratory analyses, we also examined how the impacts of MRSDT might differ according to student characteristics, such as race, ethnicity, and gender. The results of these analyses are presented in Appendix I.

FIGURE V.1

IMPACTS OF MRSDT ON THE USE OF ANY DISTRICT-TESTED SUBSTANCE IN THE PAST 30 DAYS
FOR PARTICIPANTS IN COVERED ACTIVITIES, BY SCHOOL GROUP
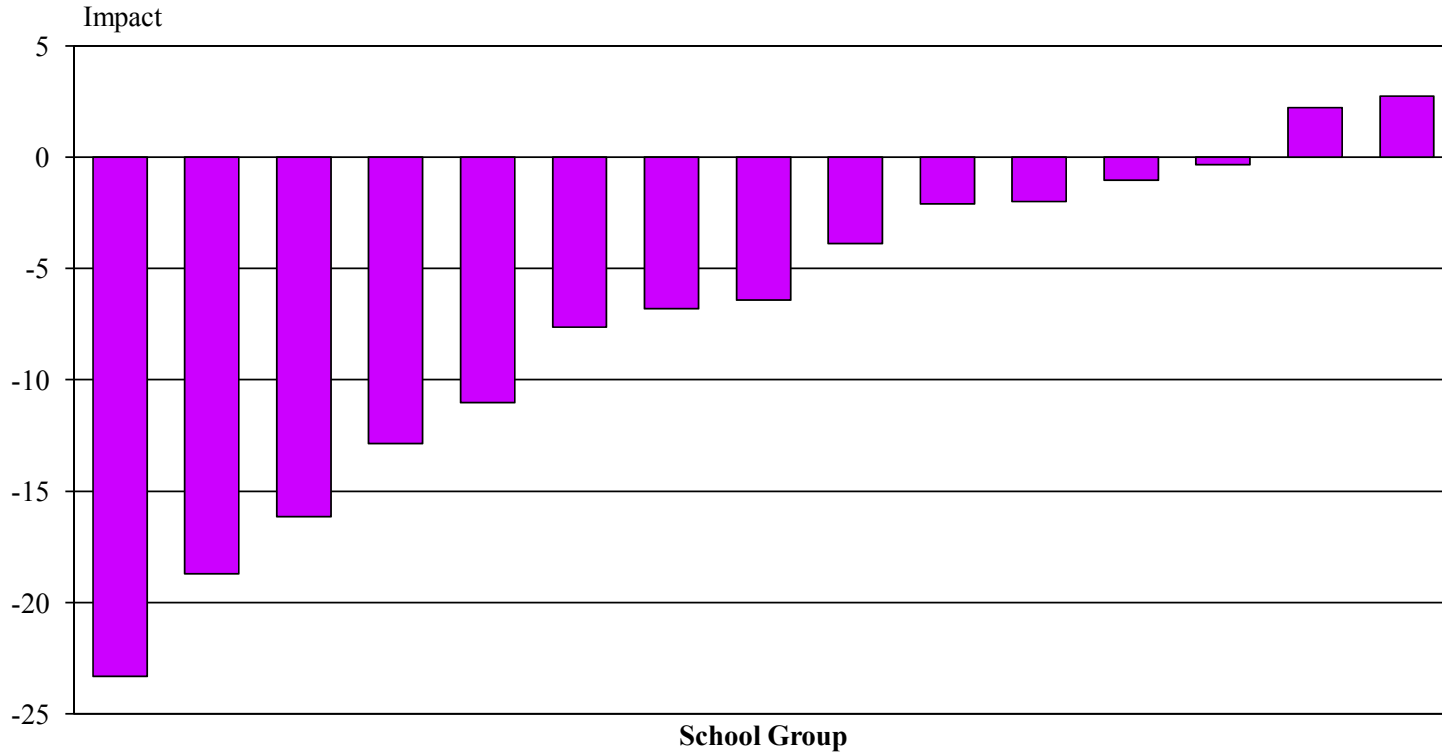
Source: Student surveys administered by study team.

Note: Each bar represents the impact for one of the 15 groups of schools in which random assignment was conducted. Impacts are regression adjusted for the baseline version of the outcome measure. A variable indicating which students were 16 years old was also included as a covariate, since there was a statistically significant treatment/control difference on that variable for participants in covered activities.

MRSDT = Mandatory-Random Student Drug Testing.

Testing for a larger number of substances was significantly correlated with lower substance use in treatment schools relative to control schools (see Figure V.2). As explained in more detail in Chapter II, the student survey included separate questions on students' use of 10 different substances, which were used to construct our composite measures of retrospective substance use. Two study districts tested for 8 of these 10 substances, one district tested for 6, and four districts tested for 4. The bivariate correlation between impacts and number of substances tested was negative and statistically significant ($r = -0.63$, p-value = 0.01).

However, the three districts that tested for the largest number of substances were also the only districts to test for alcohol or tobacco. For these three districts, the average impact was -11 percentage points, compared with an average impact of -2 percentage points for the four districts that did not test for alcohol or tobacco. A t-test of the difference in impacts between these two groups was statistically significant (p-value = 0.02). Because the districts that tested for a larger number of substances were also those districts that tested for alcohol or tobacco, it is not possible to determine which of the two factors is most responsible for the larger impacts observed in those districts.

Conducting testing more frequently was also correlated with lower substance use in treatment schools relative to control schools, but the correlation was not statistically significant (see Figure V.3). The average number of testing events per treatment school (drawn from the Drug Testing Collection Form completed by school staff) ranged across the 15 groups of schools from a low of 4 to a high of 37 events during the 2007–2008 school year. The bivariate correlation between frequency of testing and impacts on retrospective substance use was negative but not statistically significant ($r = -0.32$, p-value = 0.25).

There was no statistically significant association between program impacts and the number of drug tests conducted. Figure V.4 shows the correlation between impacts on retrospective substance use and the average number of drug tests conducted per testing event. This measure, based on data from the Drug Testing Collection Form, ranged from a low of 2.8 to a high of 63.7 tests conducted per event. To account for differences in student enrollment, we standardized the measure by the total student enrollment for all treatment schools. The correlation between number of tests conducted per event and program impacts was close to zero ($r = -0.01$) and was not significant (p-value = 0.96).

Measuring the number of drug tests a different way, Figure V.5 shows the correlation between program impacts and the number of tests conducted per 100 covered-activity participants.[27] The correlation between the number of tests conducted per 100 covered-activity participants and program impacts was negative but not statistically significant ($r = -0.22$, p-value = 0.42). If the analysis sample excludes the one group of schools that conducted more than 160 tests per 100 covered activity participants, the correlation in Figure V.5 becomes positive ($r = 0.34$) but is not significant (p-value = 0.24).

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[27] The number of covered activity participants was estimated by multiplying school enrollment by the proportion of students who indicated on the follow-up student survey that they had participated in a covered activity during the 2007–2008 school year.

There was no statistically significant association between program impacts on retrospective substance use and impacts on student awareness of MRSDT (see Figure V.6). To measure impacts on student awareness of MRSDT, we calculated for each group of schools the difference between the treatment and control schools in the percentage of students who reported on the follow-up student survey that they were aware that students in their schools could be randomly tested for drugs. The correlation between program impacts and this measure of student awareness was positive ($r = 0.27$), indicating that making students more aware of MRSDT was associated with *higher* substance use in treatment schools relative to control schools. However, the correlation was not significant (*p*-value = 0.32).

FIGURE V.2

RELATIONSHIP BETWEEN PROGRAM IMPACTS AND NUMBER OF SUBSTANCES TESTED
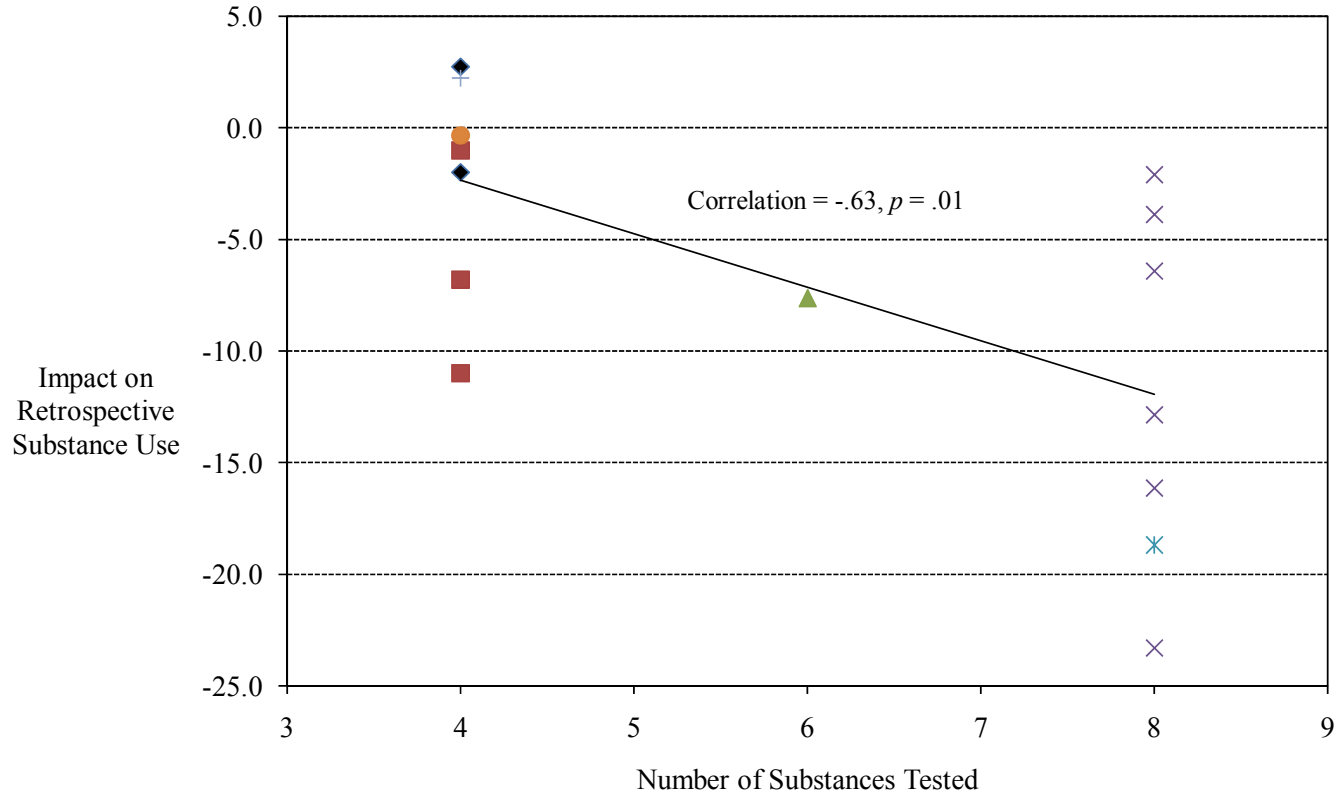
Source: Student surveys and drug testing records forms administered by study team.

Notes: Impacts are measured with respect to the use of any tested substance in the past 30 days by covered activity participants. Each symbol represents one of the 15 groups of schools in which random assignment was conducted. Groups with the same symbol are from the same district.

FIGURE V.3

RELATIONSHIP BETWEEN PROGRAM IMPACTS AND AVERAGE NUMBER
OF DRUG TESTING EVENTS
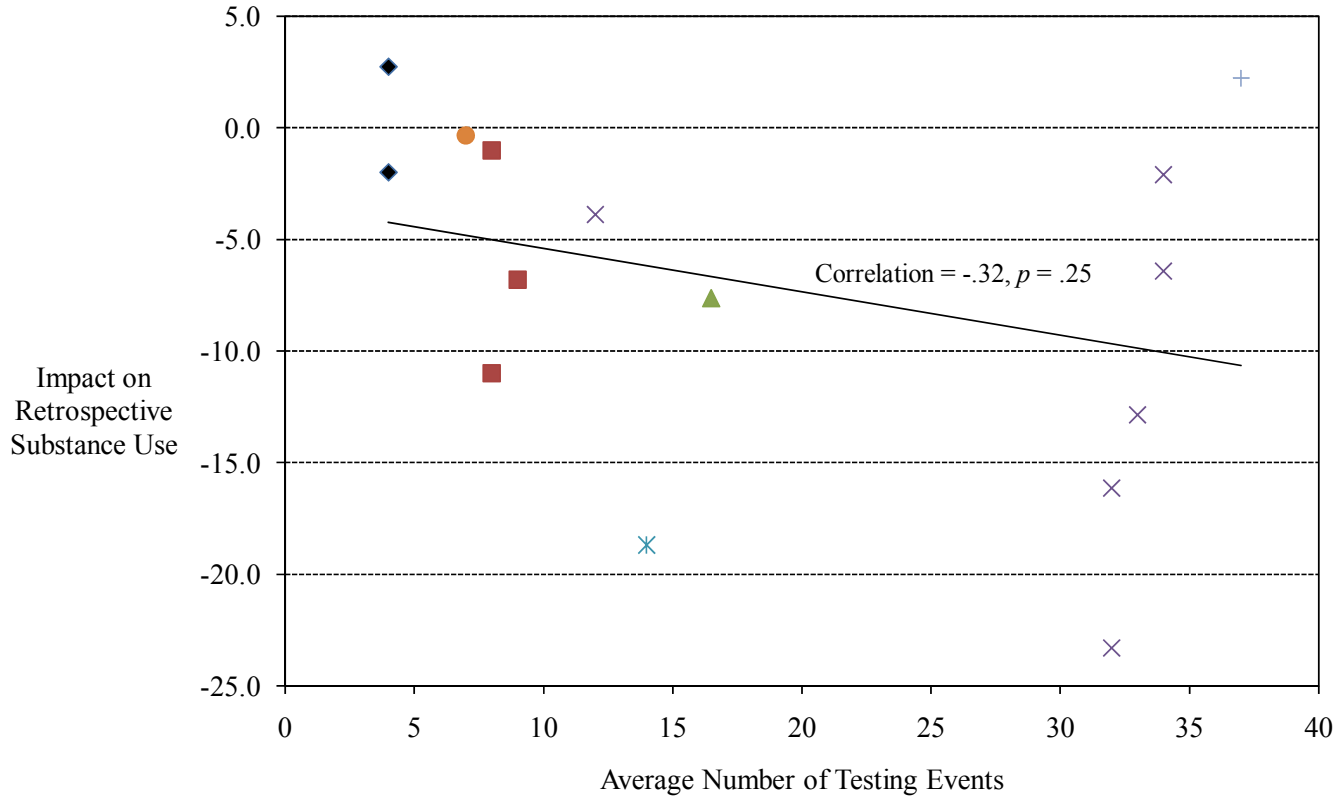
Source: Student surveys and drug testing records forms administered by study team.

Notes: Impacts are measured with respect to the use of any tested substance in the past 30 days by covered activity participants. Each symbol represents one of the 15 groups of schools in which random assignment was conducted. Blocks with the same symbol are from the same district.

FIGURE V.4

RELATIONSHIP BETWEEN PROGRAM IMPACTS AND AVERAGE NUMBER
OF DRUG TESTS CONDUCTED PER EVENT

Impact on
Retrospective
Substance Use

Correlation = -.01, p = .96

Average Number of Drug Tests Conducted Per Testing Event
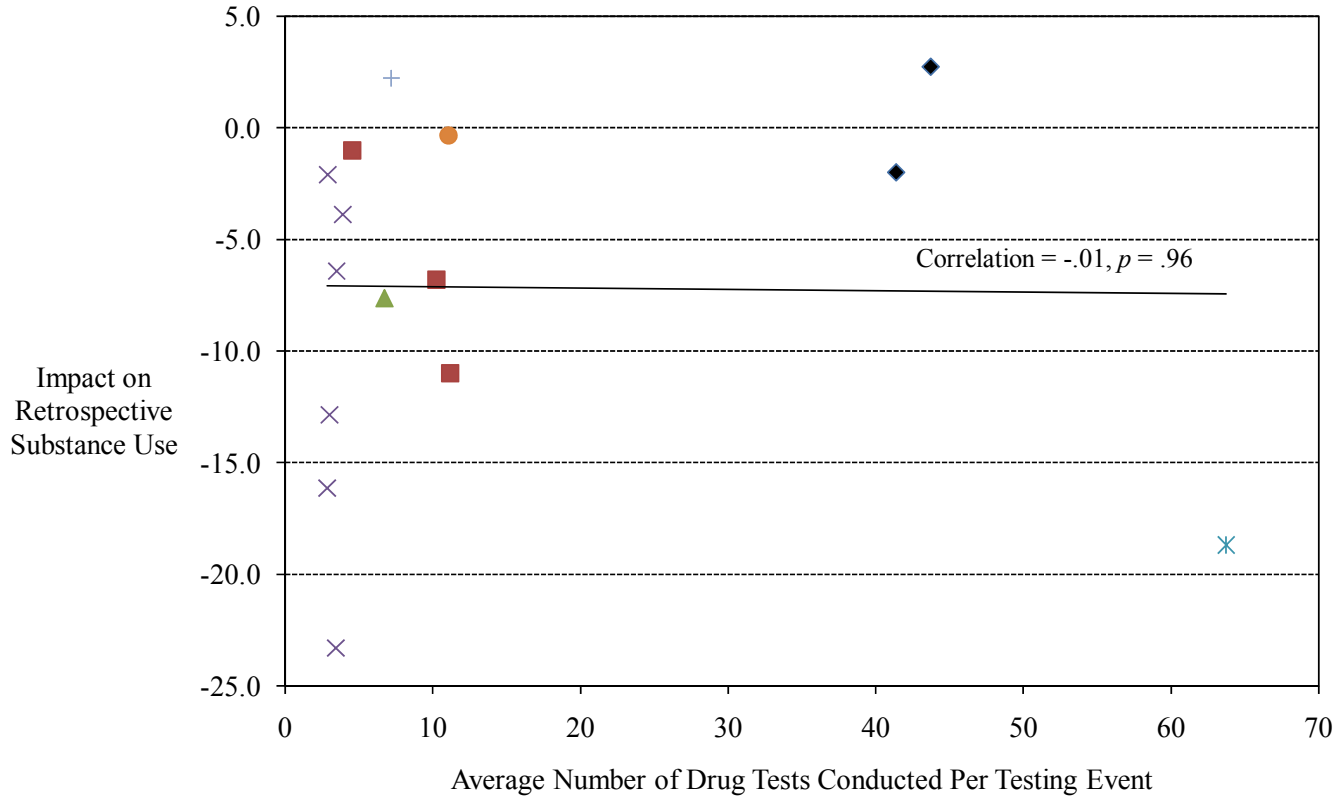
Source: Student surveys and drug testing records forms administered by study team.

Notes: Impacts are measured with respect to the use of any tested substance in the past 30 days by covered activity participants. Each symbol represents one of the 15 groups of schools in which random assignment was conducted. Blocks with the same symbol are from the same district.

FIGURE V.5

RELATIONSHIP BETWEEN PROGRAM IMPACTS AND AVERAGE NUMBER OF DRUG TESTS
CONDUCTED PER 100 COVERED ACTIVITY PARTICIPANTS
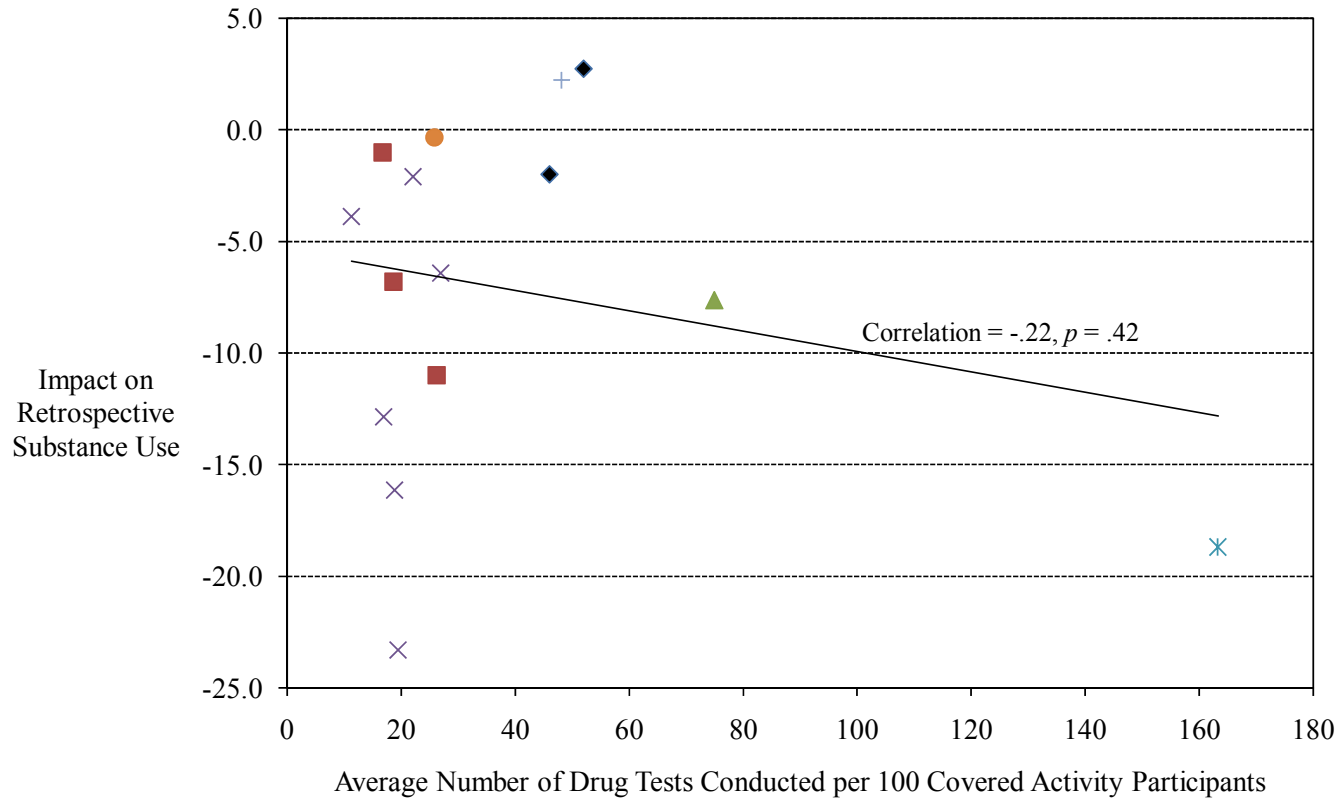
Source: Student surveys and drug testing records forms administered by study team.

Notes: Impacts are measured with respect to the use of any tested substance in the past 30 days by covered activity participants. Each symbol represents one of the 15 groups of schools in which random assignment was conducted. Blocks with the same symbol are from the same district.

FIGURE V.6

RELATIONSHIP BETWEEN PROGRAM IMPACTS AND STUDENT KNOWLEDGE OF MRSDT
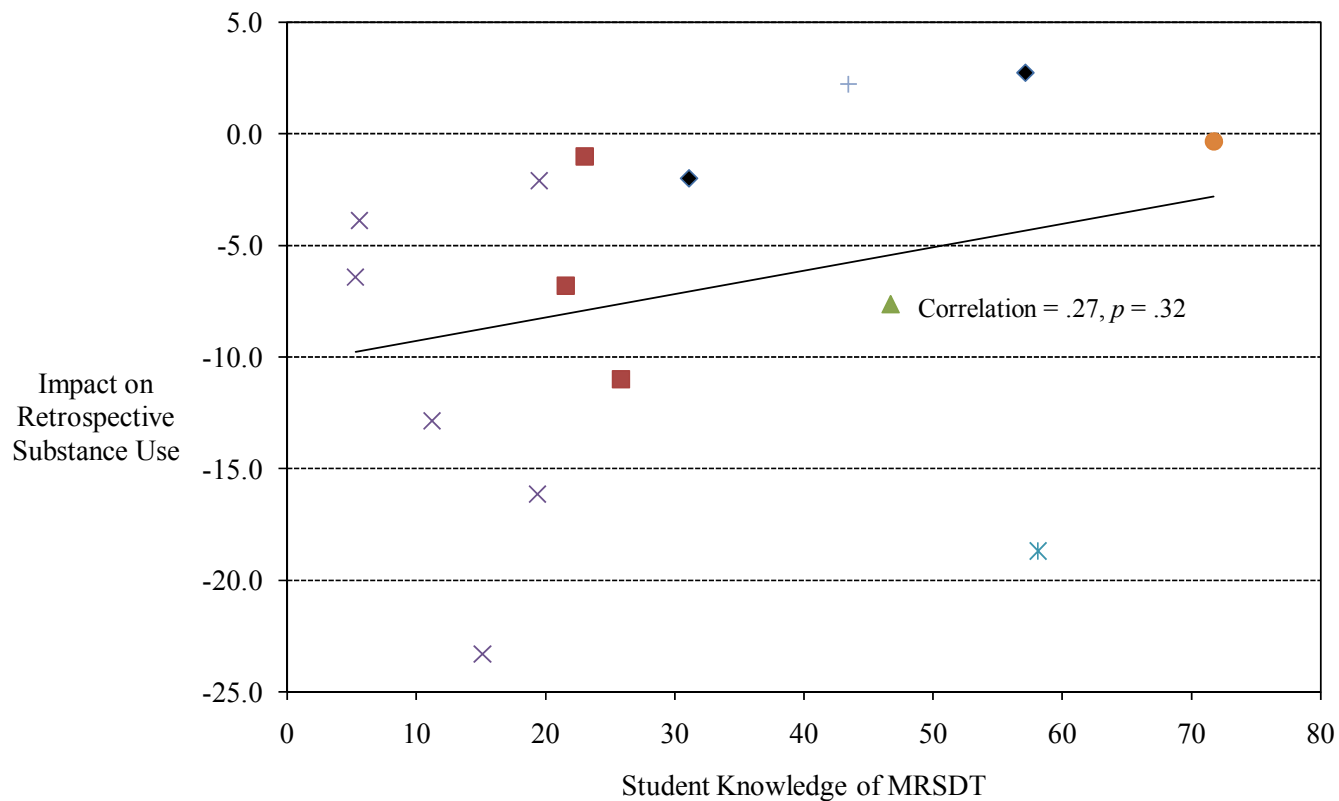
Source: Student surveys administered by study team.

Notes: Impacts are measured with respect to the use of any tested substance in the past 30 days by covered activity participants. Student knowledge of MRSDT is measured as the difference between the treatment and control schools in the percentage of covered activity participants who were aware that student activity participants in their schools could be randomly tested for drugs. Each symbol represents one of the 15 groups of schools in which random assignment was conducted. Blocks with the same symbol are from the same district.

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APPENDIX A

RANDOM ASSIGNMENT

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Random assignment was conducted to ensure that the estimated impacts of MRSDT could be attributed to MRSDT and not other factors. Schools—not students—were randomly assigned because MRSDT programs are implemented schoolwide, with expectations of spillover effects to students not directly covered by the MRSDT program. Schools that were assigned to the control group were required to delay their implementation of MRSDT until after the study's follow-up student survey was administered in spring 2008.

Random assignment was conducted within blocks of schools in order to improve statistical precision and reduce the probability of a large random mismatch between the treatment and control groups. Blocks were formed by first grouping schools according to grantee district. Within-district blocks were then formed in three of the seven study districts. In two districts, blocks consisted of pairs of schools formed by matching. Greevy et al. (2004) suggest matching procedures to improve precision and avoid the probability of a "bad draw" when randomly assigning subjects to treatment and control groups. The study team matched schools within districts using the Mahalanobis distance between schools. The Mahalanobis distance between two schools with respect to their observed characteristics is expressed as, $\sqrt{(X_1 - X_2)^T \Sigma^{-1} (X_1 - X_2)}$ where X_1 and X_2 are the characteristics of schools 1 and 2 and Σ is the covariance matrix of these characteristics for all schools in the study. Schools were matched based on the following characteristics: racial composition, math and reading proficiency, Title I status, percentage of students eligible for free or reduced-price lunch, and school size. In a third district, four of the seven schools had previously implemented a student drug testing program, so blocks were formed to divide these schools evenly between the treatment and control groups. No within-district blocking was used in the four smallest study districts, which each had fewer than four schools. In blocks with an odd number of schools, one more school was assigned to the treatment group than to the control group (this difference in assignment probabilities is accounted for by the weights described in Appendix F).

APPENDIX B

OBTAINING PARENTAL CONSENT

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After selecting the baseline sample in early 2007, the study team began the process of obtaining active parental consent for all sampled students. As a first step in the process, materials requesting parental consent (a letter describing the study, a consent form, and a business return envelope) were mailed to all parents of sampled students. After the consent materials were distributed, the study team took additional steps to improve consent rates before the baseline survey. These steps included calling parents, sending reminder postcards, making announcements over the schools' public-address systems, using the school auto-dialing system to make reminder calls to parents, having school staff speak with students and make announcements at meetings, having blank consent forms available at the school, and redistributing the consent materials. In addition, study team staff were sent on-site to help encourage return of consent forms, including visits to school cafeterias, sporting events, and Parent-Teacher Association meetings. As an incentive to encourage families to return signed consent forms promptly, families that provided a signed consent form to the study team received one ticket to a local movie theater, regardless of whether the consent was affirmative—allowing the student to participate—or negative. Similar procedures were followed after the second round of sampling in fall 2007.

Additional strategies were used to maximize rates of active parental consent after the baseline survey in spring 2007 and before the follow-up survey in spring 2008. The study team worked individually with each district to identify methods that would work best in that district to provide consent materials to parents and to follow up with the parents. The sampling strategy was revised during the second round of sampling in fall 2007, so that consent materials for students being added to the sample were sent at the beginning of the school year in "back to school" information packets.

Table B.1 shows the final consent rates achieved by the time of the spring 2008 follow-up survey. Among the 8,898 sampled students still enrolled at a study school in spring 2008, 6,491 (73 percent) returned a consent form prior to the follow-up survey, and consent was provided for 5,232 students (59 percent). Among these students, the difference in affirmative consent rates between the treatment and control groups (56.5 percent versus 62.0 percent) is not statistically significant.

Table B.2 shows comparable information for the seven "external" schools selected for the nonexperimental analysis of potential contamination of the control group (described in more detail in Appendix D). Among the 1,356 sampled students still enrolled at one of the external schools in spring 2008, 938 (69 percent) returned a consent form prior to the follow-up survey, and consent was provided for 741 students (55 percent).

TABLE B.1

CONSENT RATES BY TREATMENT STATUS

	All Students	Treatment	Control	T/C Difference	*p*-value
Number of Students:					
(1) Sampled for study	10,983	6,396	4,587	NA	NA
(2) who returned consent form	7,191	4,035	3,156	NA	NA
(3) who granted consent	5,748	3,246	2,502	NA	NA
(4) Still in study at follow up	8,898	5,217	3,681	NA	NA
(5) who returned consent form	6,491	3,632	2,859	NA	NA
(6) who granted consent	5,232	2,948	2,284	NA	NA
Consent Rates Among Students:					
Sampled for study					
Returned consent form [(2)/(1)]	65.5	63.1	68.8	-5.7	.14
Consent granted [(3)/(1)]	52.3	50.8	54.5	-3.7	.29
Still in study at follow up					
Returned consent form [(5)/(4)]	72.9	69.6	77.7	-8.1	.06
Consent granted [(6)/(4)]	58.8	56.5	62.0	-5.5	.15

Source: Student rosters and consent forms collected by the study team.

Note: Statistical significance of the difference between the treatment and control groups in consent rates accounts for clustering of students within schools. These differences are unweighted and are not regression adjusted for other covariates.

NA = not applicable.

TABLE B.2

CONSENT RATES FOR STUDENTS IN EXTERNAL SCHOOLS

	Students in External Schools
Number of Students:	
(1) Sampled for study	1,548
(2) who returned consent form	1,036
(3) who granted consent	815
(4) Still in study at follow up	1,356
(5) who returned consent form	938
(6) who granted consent	741
Consent Rates Among Students:	
Sampled for study	
Returned consent form [(2)/(1)]	52.6
Consent granted [(3)/(1)]	43.1
Still in study at follow up	
Returned consent form [(5)/(4)]	69.2
Consent granted [(6)/(4)]	54.6

Source: Student rosters and consent forms collected by the study team.

B.5

APPENDIX C

SAMPLE SIZES AND RESPONSE ANALYSIS

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This appendix presents detailed information on the study's sample sizes and response rates, as well as results from a series of analyses the study team conducted to examine the issue of nonresponse on the student survey. The first section of the appendix provides information on the study's sample sizes and response rates. The second section summarizes the analyses of student survey nonresponse.

A. SAMPLE SIZES

As described in more detail in Chapter II, the study team sought a representative sample of students enrolled at each of the 36 study schools at follow-up in spring 2008. Figure C.1 shows the flow of students through the study. Of the 10,983 students sampled for the study, 8,898 (81 percent) were still enrolled in a study school at the time of the follow-up survey in spring 2008. As discussed earlier in Appendix B, consent forms were returned by 6,491 (73 percent) of these students, and consent was granted for 5,232 (59 percent). Of the students for whom consent was granted, a total of 4,723 (90 percent) completed the follow-up survey.

Sample sizes and response rates for the student survey are reported separately by treatment status in Table C.1. As noted above, 4,723 students completed a follow-up survey in spring 2008, representing 53 percent of all sampled students still enrolled in study schools at follow-up and 90 percent of students who provided affirmative consent. Out of the total of 8,898 sampled students still enrolled in study schools in spring 2008, the difference in response rates to the follow-up survey between the treatment and control groups (51.7 percent versus 55.0 percent) is not statistically significant. Out of the total of 5,232 students who provided affirmative consent, the response rate to the follow-up survey is significantly higher for the treatment group than for the control group (91.6 percent versus 88.6 percent). Baseline data are available for 2,311 of the students who completed a follow-up survey (48.9 percent). The difference in baseline response rates between the treatment and control groups (51.5 percent versus 45.6 percent) is not significant.

Response rates for the school-level data collection instruments were generally 100 percent (see Table C.2), with two exceptions: (1) one treatment school did not respond to the spring 2007 baseline schoolwide records collection form, and (2) one treatment school did not complete the school staff interview in spring 2008.

Table C.3 provides survey response rates for the seven "external" schools selected for the nonexperimental analysis of potential control group contamination (described in more detail in Appendix D). Among these seven schools, 667 students completed a follow-up survey in spring 2008, representing 49 percent of all sampled students still enrolled in these schools at follow-up and 90 percent of these students who provided consent.

B. RESPONSE ANALYSIS

Students who completed the follow-up survey may differ from nonrespondents in ways related to student outcomes. This could lead to biased impact estimates if there are differences between the treatment and control groups in either the overall rate of nonresponse or the composition of survey respondents. In addition, the impact of MRSDT may differ for

FIGURE C.1

FLOW OF STUDENTS THROUGH STUDY

Total Number of Students Sampled:
(n = 10,983)
- Treatment schools (*n = 6,396*)
- Control schools (*n = 4,587*)

Enrolled in Study School in Spring 2008:
(n = 8,898)
- Treatment schools (*n = 5,217*)
- Control schools (*n = 3,681*)

Left Study School Before Spring 2008:
(n = 2,085)
- Treatment schools (*n = 1,179*)
- Control schools (*n = 906*)

Returned Consent Form Before Follow-Up Survey:
(n = 6,491)
- Treatment schools (*n = 3,632*)
- Control schools (*n = 2,859*)

Did Not Return Consent Form Before Follow-Up Survey:
(n = 2,407)
- Treatment schools (*n = 1,585*)
- Control schools (*n = 822*)

Consent Granted:
(n = 5,232)
- Treatment schools (*n = 2,948*)
- Control schools (*n = 2,284*)

Consent Declined:
(n = 1,259)
- Treatment schools (*n = 684*)
- Control schools (*n = 575*)

Completed Spring 2008 Follow-Up Survey:
(n = 4,723)
- Treatment schools (*n = 2,699*)
- Control schools (*n = 2,024*)

Did Not Complete Follow-Up Survey:
(n = 509)
- Treatment schools (*n = 249*)
- Control schools (*n = 260*)

TABLE C.1

STUDENT RESPONSE RATES
BY TREATMENT STATUS

	All Students	Treatment	Control	T/C Difference	*p*-value
Number of Students:					
(1) Sampled for study	10,983	6,396	4,587	NA	NA
(2) who consented	5,748	3,246	2,502	NA	NA
(3) Still in study at follow up	8,898	5,217	3,681	NA	NA
(4) who consented	5,232	2,948	2,284	NA	NA
(5) Completed a baseline survey	2,858	1,685	1,173	NA	NA
(6) Completed a follow-up survey	4,723	2,699	2,024	NA	NA
(7) Completed both baseline and follow-up surveys	2,311	1,389	922	NA	NA
Response Rates Among Students:					
Baseline Survey					
Sampled for study [(5)/(1)]	26.0	26.3	25.6	0.8	.77
who consented [(5)/(2)]	49.7	51.9	46.9	5.0	.27
who completed a follow-up survey [(7)/(6)]	48.9	51.5	45.6	5.9	.22
Follow-Up Survey					
Sampled for study [(6)/(1)]	43.0	42.2	44.1	-1.9	.54
who consented [(6)/(2)]	82.2	83.1	80.9	2.3	.07
Still in study at follow up [(6)/(3)]	53.1	51.7	55.0	-3.3	.37
who consented [(6)/(4)]	90.3	91.6	88.6	2.9*	.03

Source: Student rosters, consent forms, and student surveys collected by the study team.

Note: Statistical significance of the difference between the treatment and control groups in consent and response rates accounts for clustering of students within schools. These differences are unweighted and are not regression adjusted for other covariates.

*Significantly different from zero at the .05 level, two-tailed test.

NA = not applicable.

TABLE C.2

RESPONSE RATES FOR SCHOOL- AND DISTRICT-LEVEL INSTRUMENTS,
BY TREATMENT STATUS

Instrument	Districts ($n = 7$)	All Schools ($n = 36$)	Treatment Schools ($n = 20$)	Control Schools ($n = 16$)
		Response Rates (Percentage)		
Student Rosters				
Baseline sampling	NA	100	100	100
Second sampling	NA	100	100	100
Follow-up survey	NA	100	100	100
Schoolwide Records Collection Form				
Baseline	NA	97	95	100
Follow up	NA	100	100	100
Drug Testing Collection Form	NA	NA	100	NA
School Staff Interviews	NA	97	95	100
District Staff Interviews	100	NA	NA	NA

Source: Data collection instruments administered by study team.

NA = not applicable.

TABLE C.3

RESPONSE RATES FOR STUDENTS IN EXTERNAL SCHOOLS

	Students in External Schools
Number of Students:	
(1) Sampled for study	1,548
(2) who consented	815
(3) Still in study at follow up	1,356
(4) who consented	741
(5) Completed a baseline survey	484
(6) Completed a follow-up survey	667
(7) Completed both baseline and follow-up surveys	393
Response Rates Among Students:	
Baseline Survey	
Sampled for study [(5)/(1)]	31.3
who consented [(5)/(2)]	59.4
who completed a follow-up survey [(7)/(6)]	58.9
Follow-Up Survey	
Sampled for study [(6)/(1)]	42.7
who consented [(6)/(2)]	81.8
Still in study at follow up [(6)/(3)]	49.2
who consented [(6)/(4)]	90.0

Source: Student rosters, consent forms, and student surveys collected by the study team.

respondents and nonrespondents—meaning that the impacts presented in this report (for respondents) may not be representative of impacts for the full student sample.

The study team addressed these concerns in four ways:

1. ***Tests for Treatment/Control Differences in Nonresponse.*** As discussed earlier in this appendix, we found no statistically significant difference in response rates between the treatment and control groups among the 8,898 sampled students still enrolled in study schools in spring 2008 (see Table C.1). This suggests that the impact estimates presented in this report are not biased by differences in overall rates of nonresponse between the treatment and control groups.

2. ***Tests for Treatment/Control Differences in the Composition of Respondents.*** To test for differences in the treatment and control groups' composition of student respondents, we compared students in our analysis sample on both demographic characteristics (age, gender, race, Hispanic ethnicity) and baseline measures of key outcome variables (including retrospective substance use). This analysis, presented in Chapter II (see Table II.11), showed no statistically significant differences between the treatment and control groups on any of these characteristics.

3. ***Comparison of Study Sample to Overall Student Sample.*** To examine whether the respondents in our analysis sample were representative of all students sampled for the study, we compared—for each grantee district—the gender distribution of the analysis sample with the gender distribution of the district's overall student body as reported by school officials on the spring 2008 schoolwide records collection form. We focused on gender because this was the only demographic characteristic for which we had comparable information for both the analysis sample and the overall student body. This analysis showed that in three of the seven study districts—and in the full sample across all seven districts—the percentage of females in the analysis sample was significantly higher than the reported percentage of females in the overall student body (results not shown to protect study participant confidentiality).

4. ***Use of Nonresponse Weights.*** As discussed later in Appendix F, the weights constructed for the student-level impact models include an adjustment for nonresponse in order to account for any difference in nonresponse rates across schools. In the five grantee districts for which gender was reported on the student rosters used for sampling, the nonresponse weights adjust for the fact that females were more likely than males to be represented in the study sample.

APPENDIX D

DIAGNOSTIC ANALYSES

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As described in Chapter II, we designed this study recognizing four important challenges that needed to be addressed in order to produce rigorous findings. The first challenge is that the MRSDT intervention could affect which students participate in activities subject to random drug testing—complicating our efforts to estimate impacts on the substance use of covered-activity participants. The second challenge is that the intervention could affect student mobility out of study districts, which would confound impacts on substance use with impacts on mobility. The third challenge is that students might not honestly report their substance use. The fourth challenge is that control group students might be "contaminated" (by becoming aware of the MRSDT program), which could heighten or attenuate our estimated impacts of the MRSDT program.

To address these challenges, four diagnostic analyses were performed prior to conducting the main impact analysis. The results of these diagnostic analyses, described in this appendix, were then used to determine the final modeling approach.

A. IMPACTS ON PARTICIPATION IN COVERED ACTIVITIES

The key student sample of interest when estimating impacts of MRSDT is the group of students who participate in activities covered by their district's testing policy, because these are the students who are most directly targeted by the intervention. However, one potential challenge when estimating impacts for this group is the possibility that the intervention affects student participation in covered activities—either by increasing or reducing the number of students who participate in activities, or by changing the types of students who participate. Failing to account for such impacts on participation could result in misleading estimates of the impacts of MRSDT on students who participate in covered activities.

To address this concern, we estimated impacts on the following:

- *Rate of participation in covered activities,* to determine whether MRSDT affected the overall level of participation in these activities.

- *Composition of covered-activity participants,* to determine whether MRSDT affected the types of students who participate.

- *Substance use among the subgroup of nonparticipants,* which might increase if substance users stop participating in covered activities and become nonparticipants.

We found only 1 out of 34 statistically significant impacts of MRSDT on measures spanning these three areas.[28] In particular, we found:

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[28] All of the impact findings discussed in this appendix account for the clustering of students within schools, are weighted using the benchmark weighting approach (see Appendix F), and are regression-adjusted for random assignment block indicator variables and the baseline version of the outcome measure (when applicable).

- No statistically significant difference in covered-activity participation rates between students in treatment schools and students in control schools (see Table IV.7).

- One significant difference between treatment and control schools in the composition of participants in covered activities: a difference of 3.5 points in the percentage of 16-year-olds in each group (see Table II.9).[29]

- No significant difference in rates of retrospective substance use between treatment and control schools for the subgroup of nonparticipants (see Table IV.3).

In Appendix G, we further address this issue by investigating whether impacts on covered activity participants would differ if we used a measure of activity participation that could not have been affected by the intervention.

B. IMPACTS ON MOBILITY OUT OF THE SCHOOL DISTRICT

Because the study design did not call for follow-up surveys with students who moved out of their school district during the evaluation period (see Chapter II), differences in out-of-district mobility between treatment and control schools was a challenge for the study design.[30] For example, if substance users in treatment schools moved out of the school district to avoid random drug testing, data from the follow-up survey could show a statistically significant difference in substance use between treatment and control schools that would be due to student mobility rather than to an impact of MRSDT on students' substance use.

To investigate this issue, we used data from the school rosters collected from each school to estimate impacts on the percentage of students who moved out of the school district before the follow-up survey. This analysis was based on the students sampled for the baseline survey in spring 2007, regardless of whether the students completed the follow-up survey. Findings indicate that 11.7 percent of sampled students from treatment schools moved out of the district before the follow-up survey, compared with 13.0 percent of sampled students from control schools. The difference was not statistically significant (*p*-value = 0.18).

C. IMPACT ON HONESTY OF SELF-REPORTED DATA

As discussed earlier in Chapter II, estimates of impacts on student outcomes presented in this report are based on students' self-reported data. One limitation of such data is the possibility that students in treatment schools may have been less honest in responding to student surveys, especially to questions on substance use, if they believed there might be negative consequences of being caught using drugs. This could result in lower self-reported substance use among treatment school students absent any impact of MRSDT on actual student substance use. In a random assignment impact evaluation of MRSDT, the main concern is not the general type of

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[29] Finding one statistically significant difference out of 27 characteristics represents 3.7 percent, which is within the 5 percent of findings we would expect to be statistically significant by chance.

[30] For information on student mobility between treatment and control schools, see Appendix F.

underreporting that may equally affect students in both the treatment and control schools, but rather differential underreporting that disproportionately affects students in the treatment schools.

To address this potential limitation, we estimated impacts on the following student outcomes:

- **Self-Reported Honesty.** The student survey included an item asking students how honest they were in completing the survey. If students in treatment schools were as likely as control school students to respond honestly to the student survey, there should be no statistically significant impact of MRSDT on responses to this question. Self-reported honesty, however, may itself be subject to bias, so we also estimated program impacts on patterns of missing data and inconsistent reporting, as explained in the next two bullet points.

- **Missing Data on Retrospective Substance Use Items.** Data from the follow-up student survey were used to determine both the percentage of students with missing data on at least one of the retrospective substance use items and the average number of retrospective substance use items with missing data. If MRSDT sensitized students in the treatment group to possible negative consequences associated with substance use, we might expect the treatment schools to show higher rates of missing data or a higher average number of missing items, as students in these schools might skip questions to conceal their substance use.

- **Inconsistent Reporting of Lifetime Substance Use.** Data from the baseline and follow-up surveys were used to determine the percentage of students reporting both (1) any lifetime substance use at baseline and (2) no lifetime substance use (or a missing value) on the same measure at follow-up. If MRSDT sensitized students in the treatment group to possible negative consequences associated with substance use, we might expect the treatment schools to show higher rates of inconsistent reporting.

These analyses showed no statistically significant impact of MRSDT on self-reported honesty, patterns of missing data on the retrospective substance use items, or inconsistent reporting of lifetime substance use. For self-reported honesty, 86 percent of students in the treatment schools reported being "very honest" in completing the survey, compared with 87 percent of students in the control schools. This difference is not significant (p-value = 0.54). Results from an ordered logistic regression model showed similar results when using the full five-category self-reported honesty variable as the outcome measure (odds ratio for the treatment status indicator = 0.97, p-value = 0.67).

For the missing-data analysis, 13 percent of students in the treatment schools had at least one missing item among the past 30-day retrospective substance use items, compared with 14 percent of students in the control schools (p-value = 0.48). The average number of missing items is 0.31 for students in the treatment schools, compared with 0.35 for students in control schools (p-value = 0.38).

For the measure of inconsistent reporting, 2.7 percent of students in the treatment schools retracted their reported substance use on the follow-up survey, compared with 3.0 percent of students in the control schools. This difference was not statistically significant (p-value = 0.69).

D.   EXAMINING THE POTENTIAL FOR CONTROL GROUP CONTAMINATION

As a part of the OSDFS grant requirements, schools assigned to the control group were instructed not to announce, promote, or implement MRSDT until after the study's spring 2008 follow-up survey was administered. The study team confirmed that none of the control schools implemented MRSDT during the evaluation period. However, it is possible that, through school board or community meetings, the grant application process, or the implementation of MRSDT in the districts' treatment schools, students in control schools may have become aware of the testing program and either reduced (or increased) their substance use in advance of the future implementation of MRSDT in their schools. Such contamination effects could attenuate (or increase) our estimated impacts of MRSDT.

To address this concern, the study team recruited an "external" sample of seven high schools—one per grantee—to serve as a nonexperimental comparison group not subject to potential contamination effects. The study team first calculated the Mahalanobis distance (based on school enrollment, racial composition, and math and reading proficiency rates) between schools in the control group and all other high schools in the same states (but not in the same school districts). We then proceeded to recruit schools, starting with those that were most similar to study schools. Schools that had a drug testing program in place (or were planning to implement a drug testing program in the near future) were not eligible for inclusion in the comparison group. The study team administered both the spring 2007 baseline survey and spring 2008 follow-up survey in the seven external schools using the same procedures used to survey students in the treatment and control schools. Consent and response rates for the external school surveys are provided in Appendix B (Table B.2) and Appendix C (Table C.3). Data from the spring 2007 baseline survey confirm that the matching procedure used to select the external schools yielded a student sample similar to the study's experimental control group on all baseline outcome measures (Table D.1). In particular, we found no statistically significant differences between students in the external schools and those in the control schools on baseline measures of retrospective substance use, intention to use substances, activity participation, perceived consequences of substance use, or connection to school. The samples were also similar at baseline with respect to age, gender, and grade level. However, the groups were significantly different in Hispanic ethnicity and race.

To examine the potential for control group contamination, we conducted a nonexperimental regression analysis comparing changes in rates of self-reported substance use from baseline to follow-up between students in external schools (who were not subject to contamination) and students in the control schools (for whom contamination was a potential concern). A statistically significant difference between groups would provide suggestive evidence of contamination effects among students in the control schools.

BASELINE EQUIVALENCE FOR STUDENTS IN CONTROL AND EXTERNAL SCHOOLS

Measure	Control Group	External Group	Difference	p-value
Demographic Characteristics				
Age				
13-14	4.9	6.8	1.9	.26
15	20.0	19.6	0.4	.90
16	30.2	33.2	-3.0	.20
17	28.8	27.5	1.3	.58
18	16.1	12.9	3.2	.13
Female	52.4	55.2	-2.8	.22
Grade Level				
9th	46.7	51.7	-5.0	.32
10th	30.2	28.0	2.2	.56
11th	23.1	20.2	2.9	.13
Hispanic	12.8	5.0	7.8[*]	.02
Race				
American Indian/Alaska Native	2.8	3.2	-0.4	.83
Asian	0.9	0.9	0.0	.95
Black/African American	23.4	7.0	16.4[*]	.03
White	67.3	85.5	-18.2	.05
Other	5.6	3.5	2.1	.29
Baseline Versions of Outcome Measures[a]				
Use of the Following in the Past Six Months:				
Any substance	49.1	48.9	0.2	.93
Any substance except alcohol and tobacco	18.5	16.2	2.3	.50
Any substance tested by the district's MRSDT program	29.2	28.3	0.9	.93
Use of the Following in the Past 30 Days:				
Any substance	31.4	33.6	-2.3	.35
Any substance except alcohol and tobacco	11.7	8.8	2.9	.29
Any substance tested by the district's MRSDT program	16.9	17.3	-0.4	.96
"Probably Will" or "Definitely Will" Use the Following Within the Next Year:				
Any substance	29.1	27.8	1.3	.70
Any substance except alcohol and tobacco	8.7	6.8	1.9	.37
Participated in a Covered Activity During the 2006-2007 School Year	53.7	38.4	15.3	.10
Mean Perceived Positive Consequences of Substance Use Scale Score	2.04	2.03	0.01	.91
Mean Perceived Negative Consequences of Substance Use Scale Score	4.12	4.12	0.00	.99
Mean School Connectedness Scale Score	2.92	2.97	-0.05	.54
Sample Size[b]	**2,024**	**667**		

TABLE D.1 *(continued)*

Source: Student surveys administered by study team.

[a]Limited to students who completed both the baseline and follow-up surveys; see Table II.9 for a detailed description of each measure.

[b]The reported sample size is the number of students who completed a follow-up survey.

[*]Statistically different from zero at the .05 level, two-tailed test.

MRSDT = Mandatory-Random Student Drug Testing.

However, in these analyses we found that changes in rates of self-reported substance use were similar between the two groups (Table D.2). For example, from baseline to follow-up, rates of self-reported substance use increased in both the control schools and external schools by six percentage points for the measure of "any substance," three percentage points for the measure of "any substance excluding alcohol and tobacco," and five percentage points for the measure of "any tested substance." None of the differences were statistically significant. Results of this analysis must be interpreted with some caution, because its design has less validity than an experiment. However, the similarity of changes in rates of substance use between the external school sample and control school sample suggests that any awareness of MRSDT among students in the control group did not affect their rates of substance use and therefore that contamination of the control group is not a major concern.

TABLE D.2

CHANGE IN SELF-REPORTED SUBSTANCE USE FROM BASELINE TO FOLLOW-UP AMONG
STUDENTS IN CONTROL AND EXTERNAL SCHOOLS

Substance Use Measure	Control Group	External Group	Difference	p-value
Change in Percentage of Students That Reported Using the Following in the Last Six Months:				
Any substance[a]	5.86	6.18	-0.32	.82
Any substance except alcohol and tobacco	2.72	3.41	-0.69	.97
Any substance tested by the district's MRSDT program[b]	4.78	5.24	-0.49	.71
Change in Percentage of Students That Reported Using the Following in the Last 30 Days:				
Any substance[a]	7.16	3.89	3.27	.11
Any substance except alcohol and tobacco	3.02	3.98	-0.96	.69
Any substance tested by the district's MRSDT program[b]	6.74	4.94	1.80	.37
Sample Size[c]	**922**	**393**		

Source: Student surveys administered by study team.

Note: For each outcome, the numbers reported in the columns labeled "Control Group" and "External Group" indicate the difference from baseline to follow up in the percentage of students reporting any use. These differences are not weighted or regression adjusted for other covariates.

[a]The "Any Substance" category reflects students' reported use of the following substances: cigarettes, chewing tobacco, alcohol, marijuana, cocaine, steroids or other muscle-building drugs, glue or other inhalants, narcotic drugs such as heroin or codeine, amphetamines or methamphetamines without a prescription, and any other illegal drug.

[b]This category reflects the substances tested by each participating district as part of its MRSDT program. The tested substances vary *across* districts but are the same *within* each district.

[c]The reported sample size is the number of students who completed both the baseline and follow-up surveys.

MRSDT = Mandatory-Random Student Drug Testing.

APPENDIX E

OUTCOME MEASURES

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This appendix presents details on the measures of retrospective substance use, perceived consequences of substance use, and school connectedness. First, we describe the procedures used to construct the retrospective substance use measures. Then, we present details on the scales used to measure students' perceived consequences of substance use and connection to school.

A. RETROSPECTIVE SUBSTANCE USE

As described in Chapter II, our impact analysis focused on three key measures of retrospective substance use:

1. Use of any substance

2. Use of any substance excluding alcohol and tobacco

3. Use of any substance tested under a district's drug testing policy

In the impact analyses presented in Chapter IV, we focused on binary measures of substance use rather than on frequency of use, because the stated goal of the intervention is to reduce the prevalence of substance use—not only the frequency of use. Appendix H presents additional exploratory analyses of program impacts on the frequency of substance use for each of the 10 types of substances in the survey.

To construct these binary outcome measures, we first converted the categorical frequency of use variables in the student survey (items 12a to 12j) into binary indicator variables coded *1* for students who reported any level of use, *0* for students who reported no use, and *missing* for students who did not respond to the item.

After converting the frequency of use measures into binary variables, we then checked responses to each substance use item for "incomplete" or "inconsistent" reporting across the 30-day, 6-month, and lifetime measures of use. By "incomplete" reporting, we mean that the student did not provide an answer to at least one of the 30-day, 6-month, or lifetime measures. By "inconsistent" reporting, we mean that the respondent gave contradictory responses (for example, reporting "YES" on the 30-day measure but "NO" on the 6-month measure). We make this distinction because not all incomplete responses are necessarily inconsistent, and vice versa, as explained in more detail below.

For each of the 10 individual substance use items, we categorized each student's pattern of responses to the 30-day, 6-month, and lifetime use measures into one of three groups:

1. *Complete and Consistent Responses.* This category includes students who gave a "YES" or "NO" response to all three items (30-day, 6-month, and lifetime) with no inconsistencies across items. Examples in this category include students who responded "YES" to all three items or "NO" to all three items. This group accounts for 85 percent of student responses on these binary substance use variables.

2. ***Incomplete but Consistent Responses.*** This category includes students who did not complete all three items but had no logical inconsistencies among the responses provided. Most of the observations in this category were students who responded "NO" to the lifetime measure but did not respond to either the 6-month or 30-day measures. This group accounts for another 15 percent of student responses.

3. ***Inconsistent Responses.*** This category includes students who gave answers that were contradictory across one or more items. The most common pattern in this group is a "YES" on the 30-day and lifetime measures but a "NO" on the 6-month measure. This category accounts for 0.19 percent of student responses on these binary substance use variables.

Table E.1 describes the data-editing rules we used to handle each of the 27 different response patterns. For the "consistent and complete" responses, no changes to the data were needed. For the "incomplete but consistent" responses, we followed a set of four rules to replace missing values only when they could be logically determined from other known responses:

- ***Rule 1.*** If the lifetime measure was marked as "NO" and the 6-month and 30-day measures consisted of either missing data or a combination of missing data and "NO" responses, we coded all three items as "NO." This rule is identical to the nonuse rule followed in the Monitoring the Future survey (Fendrich and Johnson 2001).

- ***Rule 2.*** If the 6-month measure was marked as "NO" and the 30-day measure was missing, we converted the 30-day measure to "NO." This rule is consistent with Rule 1 as applied to the 6-month and 30-day measures.

- ***Rule 3.*** If the 30-day measure was marked as "YES" and the 6-month and lifetime measures consisted of either missing data or a combination of missing data and "YES" responses, we coded all three items as "YES." This rule is parallel to Rule 1 but in the opposite direction (converting a missing response to "YES" instead of "NO").

- ***Rule 4.*** If the 6-month measure was marked as "YES" and the lifetime measure was missing, we converted the lifetime measure to "YES." This rule is consistent with Rule 3 as applied to the 6-month and lifetime measures.

For "inconsistent" responses, we followed a fifth decision rule:

- ***Rule 5.*** If responses were inconsistent across the 30-day, 6-month, and lifetime measures, we could not know for certain which responses were accurate, so all three items were set to "missing." This rule is consistent with the approach used in the Monitoring the Future survey (Fendrich and Johnson 2001). In addition, by setting these items to "missing" values, they became subject to the sensitivity tests we conducted when combining individual substance use items into composite outcome measures, as explained in Appendix G.

TABLE E.1

DECISION RULES FOR HANDLING INCOMPLETE AND INCONSISTENT RESPONSES

Lifetime	6 Month	30 Day	Number of Cases	Percentage of Cases	Rule	Data Cleaning Steps
Consistent and Complete Responses						
NO	NO	NO	32,101	67.97		No change needed.
YES	YES	YES	3,169	6.71		No change needed.
YES	NO	NO	2,849	6.03		No change needed.
YES	YES	NO	1,805	3.82		No change needed.
Incomplete but Consistent Responses						
NO	Missing	Missing	5,412	11.46	Rule 1	Changed 6-month and 30-day responses to "NO."
Missing	Missing	Missing	710	1.50		No change. Cannot logically determine missing values.
YES	Missing	Missing	560	1.19		No change. Cannot logically determine missing values.
Missing	Missing	YES	192	0.41	Rule 3	Changed 6-month and lifetime responses to "YES."
Missing	YES	Missing	151	0.32	Rule 4	Changed lifetime measure to "YES."
NO	NO	Missing	40	0.08	Rule 1	Changed 30-day response to "NO."
YES	YES	Missing	37	0.08		No change. Cannot logically determine missing value.
Missing	Missing	NO	27	0.06		No change. Cannot logically determine missing values.
Missing	NO	NO	23	0.05		No change. Cannot logically determine missing value.
Missing	NO	Missing	16	0.03	Rule 2	Changed 30-day response to "NO."
Missing	YES	YES	14	0.03	Rule 3	Changed lifetime response to "YES."
YES	Missing	YES	12	0.03	Rule 3	Changed 6-month response to "YES."
NO	Missing	NO	11	0.02	Rule 1	Changed 6-month response to "NO."
Missing	YES	NO	4	0.01	Rule 4	Changed lifetime measure to "YES."
YES	Missing	NO	4	0.01		No change. Cannot logically determine missing value.
YES	NO	Missing	4	0.01	Rule 2	Changed 30-day response to "NO."
Inconsistent Responses						
YES	NO	YES	37	0.08	Rule 5	Set all items to missing.
NO	YES	NO	22	0.05	Rule 5	Set all items to missing.
NO	NO	YES	14	0.03	Rule 5	Set all items to missing.
NO	YES	YES	13	0.03	Rule 5	Set all items to missing.
NO	Missing	YES	—[a]	0.00	Rule 5	Set all items to missing.
Missing	NO	YES	—[a]	0.00	Rule 5	Set all items to missing.
NO	YES	Missing	—[a]	0.00	Rule 5	Set all items to missing.

[a]Value suppressed to protect student confidentiality.

The final step in constructing the retrospective substance use measures involved combining the cleaned individual substance use items into composite outcome measures. In creating composites from individual substance use items, we followed the same procedures used by the Monitoring the Future survey (Fendrich and Johnson 2001):

- Students who responded "YES" to using any substance included in the composite were coded as "YES" on the composite (regardless of whether the other items in the composite were "YES," "NO," or "missing").

- Students who responded "NO" to using *all* of the substances included in the composite were coded as "NO" on the composite.

- Students with a combination of "NO" responses and missing data were coded as "missing" on the composite, because it is impossible to determine whether the missing items indicated use or nonuse.

This approach for constructing the composite outcome variables served as the basis for the main impact models presented in Chapter IV. We also followed this approach for our exploratory analyses of *individual* substance use items presented in Appendix H (that is, we coded respondents as "YES," "NO," or "missing" on each individual item). For a sensitivity test, we also estimated impacts after treating all missing values on the substance use composites as either "YES" or "NO" responses. The results of these analyses, shown in Appendix G, were consistent with our main impact findings.

B. SCALE SCORES

Continuous scale scores were constructed for three outcome measures: (1) the Perceived Positive Consequences of Substance Use Scale, (2) the Perceived Negative Consequences of Substance Use Scale, and (3) the School Connectedness Scale.

The Perceived Positive Consequences of Substance Use Scale was used by Goldberg et al. (2003) and averages the following four items from the student survey:

1. (16e) Using illegal drugs or alcohol makes it easier to be part of a group.

2. (16f) Using illegal drugs or drinking is cool.

3. (16g) Using illegal drugs or drinking makes everything seem better.

4. (16h) Using illegal drugs or drinking makes it easier to have a good time with friends.

Responses to each item were coded on a five-point scale ranging from "strongly disagree" to "strongly agree." High values indicate greater perceived positive consequences of substance use. Students missing two or more items were coded as "missing" on the composite. The scale's alpha coefficient for the follow-up survey was 0.85.

The Perceived Negative Consequences of Substance Use Scale averages the following four items from the student survey:

1. Using illegal drugs leads to serious health problems (16a).

2. Drinking alcohol leads to serious health problems (16b).

3. If I used drugs, I would get into trouble (16c).

4. If I drank, I would get into trouble (16d).

Responses to each item were coded on a five-point scale ranging from "strongly disagree" to "strongly agree." High values indicate greater perceived negative consequences of substance use. Students missing two or more items were coded as "missing" on the composite. The scale's alpha coefficient for the follow-up survey was 0.85.

The School Connectedness Scale was developed by Brown and Evans (2002) and averages sixteen items from the student survey:

1. When students have an emergency someone is there to help (11a).

2. I feel like I belong at this school (11b).

3. The principal at this school asks students about their ideas (11c).

4. We do not waste time in my classes (11d).

5. I can be myself at this school (11e).

6. Adults at this school listen to student concerns (11f).

7. Adults at this school act on student concerns (11g).

8. It pays to follow the rules at my school (11h).

9. I have many opportunities to make decisions at my school (11i).

10. Students of all racial and ethnic groups are respected at my school (11j).

11. I can be a success at this school (11k).

12. I can reach my goals through this school (11l).

13. The rules at my school are fair (11m).

14. I have friends at this school (11n).

15. I am comfortable talking with adults at this school about problems (11o).

16. My schoolwork helps with things that I do outside of school (11p).

Responses were coded on a four-point scale ranging from "strongly agree" to "strongly disagree." Higher values on the scale indicate greater connection to school. Students missing four or more items were coded as "missing" on the composite. The scale's alpha coefficient for the follow-up survey was 0.89.

APPENDIX F

ESTIMATING IMPACTS

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This appendix presents key details of the study's benchmark approach to comparing treatment and control schools. As explained earlier in Chapter II, the benchmark approach reflects decisions the study team made regarding the methodological approaches that were determined to be most appropriate for this study. This appendix begins with a summary of our approach for addressing student mobility between treatment and control schools. This is followed by descriptions of the student and school characteristics that were included as baseline covariates, the weights that were applied to the data, and our approach to adjusting for multiple hypothesis testing.[31]

A. STUDENT MOBILITY BETWEEN TREATMENT AND CONTROL SCHOOLS

For our benchmark model, we calculated impacts by comparing the follow-up outcomes for students in the treatment and control groups according to the schools they attended at the time of sampling. This approach yields intent-to-treat (ITT) impacts—that is, the impact of having been enrolled in a school that was randomly assigned to treatment or control status. We did not adjust for the proportion of students who switched from treatment to control schools (or vice versa) during the evaluation period, because this type of mobility was uncommon among the students in our sample. Specifically, of the 4,723 students included in our analysis sample, less than 1 percent switched from a treatment school to a control school ($N = 22$) or from a control school to a treatment school ($N = 23$).

B. BASELINE COVARIATES

Every impact regression included random assignment block indicator variables and the baseline measure of the outcome variable as covariates.[32] In models for the subgroup of students who participated in an activity covered by their district's MRSDT program, an indicator variable for 16-year-old students was included as an additional covariate, since the analysis of baseline equivalence found a statistically significant difference between treatment and control schools on that variable (as shown in Chapter II).

One reason for including covariates in an impact regression is to improve the precision of the impact estimator in comparison to a model without covariates. To achieve this goal, the study team used a data-driven approach to select—from both the student survey and the spring 2007 schoolwide records collection form—additional covariates that minimized the variance of the impact estimates. Specifically, the study team used a stepwise procedure to select, for each outcome model, the covariates that reduced the average standard error of 30 randomly generated "fake" treatment variables.[33] The variables with the greatest ability to improve precision were

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[31] The benchmark regression model used to estimate impacts is presented in Chapter II.

[32] For students with missing data on the baseline measure of the outcome variable, missing values were imputed to the mean of the variable for students with non-missing data, and a missing value flag indicator variable was included in the impact regression. The same approach was used to handle missing data for any other baseline covariates added to the models.

[33] We chose covariates to minimize the variance of randomly generated "fake" treatment variables (that is, variables indicating that a school is in a fictitious treatment group) rather than the study's actual treatment variable

added to the model using a stopping rule. The stopping rule was to add variables until the benefit of reducing the standard error was outweighed by the loss in degrees of freedom.

Table F.1 lists the variables that were considered in the data-driven approach to covariate selection. The study team compiled this list by reviewing the research literature on adolescent drug use and identifying the risk factors for it (for example, Finn 2004, 2006; Kandel 1991; O'Malley et al. 2006; Schulenberg et al. 1994; Skager and Fisher 1989). We also included on this list any other measures from the student survey and schoolwide records collection form that might be correlated with known risk factors.

In many cases, this algorithm did not identify any additional covariates—and when it did, the additional covariates did not affect the statistical significance of the impacts. Of the 38 impact regressions run for the main impact analysis (see Chapter IV), 13 included additional covariates selected by this algorithm. We found that inclusion of these additional covariates in our impact models did not affect the statistical significance of any of the findings (see Appendix G).

C. WEIGHTING

The impact analyses were weighted to account for differences across schools in random assignment, sampling, consent, and nonresponse probabilities. The weights ensure that the impacts estimated are representative of all students in the seven grantee districts, not just the students sampled. The weights were also rescaled so that, apart from random assignment probabilities, each school contributes equally to the impact estimate (for the benchmark approach) or in proportion to its student enrollment (for the sensitivity analysis). In particular, the weights include adjustments for the following:

- ***Random Assignment Probabilities.*** The probability of random assignment to the treatment or control group varies across districts. For example, in districts with seven schools, schools had a 4 in 7 chance of being randomly assigned to the treatment group and a 3 in 7 chance of being randomly assigned to the control group. By contrast, in districts with two schools, schools had an even chance of being randomly assigned to either the treatment or the control group. To account for these differences, we weighted schools by the inverse of the probability of random assignment to either the treatment or the control group.

- ***Sampling Probabilities.*** To account for differences in sampling rates across schools, we weighted students by the inverse of the probability of being selected for the sample. We calculated this adjustment separately by school and grade level, since random sampling was conducted separately by school and grade. In five of the seven grantee districts, where gender was reported on the student rosters and was used for

(continued)

to ensure that if these covariates artificially (due to some spurious relationship) reduced the standard error of one of the fake treatment variables, they would not artificially reduce the standard error of the actual treatment variable.

F.4

TABLE F.1

POTENTIAL BASELINE COVARIATES FOR IMPACT MODELS

Student-Level Substance Use	Student Characteristics	School Characteristics
Measures of 30-day, 6-month, and lifetime use of: • Alcohol • Tobacco • Marijuana • Steroids • Other drugs • Any substance covered by the district's testing policy • Any substance	• Gender • Age • Grade level • Ethnicity • Race • Language spoken at home • Highest grade level student expects to complete • Academic grades in prior year (self-reported) • Covered activity participation in 2005–2006, 2006–2007, and plans for 2007–2008 as of baseline (19 sports, 11 nonsports)[a]	• School type (regular, alternative, etc.) • Student enrollment • Racial/ethnic composition • Percentage of students approved for free or reduced-price lunch • Percentage of students classified as English language learners • Percentage of students with an Individual Education Plan • Types of existing substance use prevention programs

Note: The study team also considered as covariates school-level variables formed by averaging the student-level data listed in this table.

[a]Activity participation information for students who did not complete a baseline survey was based on retrospective questions asked on the follow-up survey and covers only activity participation during the 2006–2007 school year.

sampling, the sampling weights were also calculated separately for males and females (within each school and grade level).

- *Consent Rates.* To account for differences in consent rates across schools, we weighted students by the inverse of the probability of consenting for the study, among those students sampled. We calculated this adjustment separately by school and grade level, as well as by gender in the five grantee districts where gender was reported on the school rosters.

- *Nonresponse Rates.* To account for any differences in survey nonresponse rates across schools, we weighted students by the inverse of the probability of responding to the follow-up survey, among those students who consented to the study. We calculated this adjustment separately by school and grade level, as well as by gender in the five grantee districts where gender was reported on the school rosters.

- *Rescaling Factors.* We scaled the final student weights so that, within each district, the sum of the weights across students in the treatment schools equals the sum of the weights across students in the control schools. This rescaling ensured that treatment status is not correlated with district effects. For our benchmark impact models, the weights were also rescaled so that, apart from random assignment probabilities, each school contributes equally to the impact estimates, regardless of enrollment. We view this approach of weighting schools equally as consistent with the study's school-level random assignment design and with the fact that we are evaluating a schoolwide intervention. This adjustment ensures that schools with a larger number of students do not contribute disproportionately to the impact estimates. With this adjustment, each district is weighted by the number of high schools in the district.

D. MULTIPLE HYPOTHESIS TESTING

The study team calculated the statistical significance of impacts using a strategy designed to control the probability of falsely concluding that MRSDT has impacts on outcomes of interest and for student subgroups of interest. This strategy involves adjusting for the number of outcomes examined when calculating the statistical significance of impacts. For example, if we were to look at 20 impacts, 1 of them might appear statistically significant by chance (when controlling the probability of a type I error at a rate of 5 percent for each impact). If we were to conclude that MRSDT is effective if *any* of those 20 impacts are significant, then the probability of falsely concluding that MRSDT is effective would be greater than 5 percent. In particular, if the 20 impacts are statistically independent, then the probability of falsely detecting at least one impact is 0.64.[34] To reduce that probability to the usual 0.05, we would need to conduct each individual test using a much more stringent level of statistical significance. Specifically, we would need to declare individual impacts significant only if the *p*-value is less than 0.0025.[35] Such a stringent standard of significance would make it difficult to detect effects, but in most

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[34] Because $1 - (1 - 0.05)^{20} = 0.64$.

[35] Because $1 - (1 - 0.0025)^{20} \leq 0.05$.

cases we are not looking at 20 impacts to answer a given research question. Instead, we group impacts into "domains" that correspond to specific questions of interest.

Below, we describe how the impacts of MRSDT are grouped into domains and how we control the probability of reaching false conclusions given the number of tests being conducted within a domain. We also present *p*-values for our main impact tables that adjust for our approach to multiple hypothesis testing (MHT) and on which the study's main findings are based.

1. Impact Domains

Impacts are grouped into domains based on the study's research questions and the logic model of MRSDT. The domains are structured by two main dimensions: (1) the six groups of outcome measures and (2) the three distinct student groups of primary interest to the evaluation—covered-activity participants, nonparticipants, and the full sample of all students. Domains are formed through the intersection of these two dimensions. The domains include tests directly related to the study's research questions and are based on impacts estimated using the study's "benchmark" analytic approach. The number of tests conducted in each domain is reported in Table F.2 (each cell of the table represents a domain). Statistical tests were conducted within each domain, adjusting *p*-values for the total number of tests conducted within each domain.

2. Controlling the Probability of Reaching False Conclusions

Within each domain described above, we adjusted the *p*-values of every test in order to control the familywise error rate (FWER) at 5 percent. The FWER is the probability of falsely rejecting the null hypothesis of zero impact for at least one of the tests conducted within a domain. Stated differently, we adjusted *p*-values so that the probability of drawing a false conclusion about the effect of MRSDT in any given domain is no greater than 5 percent (per standards set by the U.S. Department of Education's Institute of Education Sciences).

The statistical procedure we used to adjust *p*-values is based on the multivariate t-distribution and takes into account correlations among test statistics (Hothorn et al. 2008), which we expect given the likely correlation of our outcome measures within each domain. Accounting for correlations among test statistics can improve statistical power relative to methods that treat all tests as independent. This approach can be viewed as a generalization of the adjustments recommended by Dunnett (in which multiple treatment groups are compared to a single control group) and Tukey (in which all pairwise comparisons are made among multiple groups). Hochberg and Tamhane (1987) describe these and other common MHT procedures.

Tables IV.1 through IV.9 in Chapter IV present our main impact tables with *p*-values adjusted for our approach to MHT. However, for readers who are interested in one particular test or who wish to apply an alternative MHT adjustment, Tables F.3 through F.9 present our main impact tables with *unadjusted* p-values that do *not* account for MHT. These tables do not report impacts for the two outcome measures with only one test per domain—participation in covered activities and school connectedness—because the *p*-values for these outcomes are unaffected by our MHT procedures.

TABLE F.2

NUMBER OF IMPACTS IN EACH DOMAIN

	Student Sample		
Outcome	Participants in Covered Activities	Nonparticipants	All Students
Retrospective Substance Use	6	6	6
Intention to Use Substances	2	2	2
Perceived Consequences of Substance Use	2	2	2
Participation in Extracurricular Activities	NA	NA	1
School Connectedness	1	1	1
Disciplinary Incidents (school-level)	NA	NA	4

NA = not applicable.

TABLE F.3

IMPACTS OF MRSDT ON RETROSPECTIVE SUBSTANCE USE
FOR PARTICIPANTS IN COVERED ACTIVITIES

Substance Use Measure	Treatment Group	Control Group	Difference	p-value[a]	Percentage Change[b]	Effect Size[c]
Percentage of Students That Reported Using the Following in the Last Six Months:						
Any substance[d]	49.96	54.91	-4.95	0.086	-9.02	-0.12
Any substance except alcohol and tobacco	16.83	19.31	-2.48	0.293	-12.87	-0.10
Any substance tested by the district's MRSDT program[e]	26.88	32.16	-5.28[†]	0.045	-16.41	-0.15
Percentage of Students That Reported Using the Following in the Last 30 Days:						
Any substance[d]	32.74	38.50	-5.75[†]	0.039	-14.94	-0.15
Any substance except alcohol and tobacco	10.16	12.69	-2.53	0.211	-19.93	-0.15
Any substance tested by the district's MRSDT program[e]	16.47	21.92	-5.46[†]	0.012	-24.89	-0.21
Sample Size[f]	**1,349**	**1,096**				

Source: Student surveys administered by study team.

Note: For each outcome, the numbers reported in the columns labeled "Treatment Group" and "Control Group" are the average predicted outcomes for all students as if they were in the treatment and control groups, respectively. Specifically, two predicted outcomes are generated for every student using the student's actual characteristics and the coefficients from the impact regression. The first predicted value is calculated with the treatment variable set equal to 1 (the average outcome for the treatment group is the average of these predicted values). The second predicted value is calculated setting the treatment variable equal to zero (the average predicted outcome for the control group is the average of these predicted values). Differences in substance use between the treatment and control groups are regression adjusted for random assignment block indicator variables, baseline measures of the outcome variables, and additional covariates that were chosen to improve statistical precision (the method for selecting covariates is described in Appendix F). A variable indicating which students were 16 years old was also included as a covariate in impact models for activity participants, since the analysis of baseline equivalence found a statistically significant treatment/control difference on that variable. The data are weighted to account for random assignment, sampling, consent, and nonresponse probabilities. The weights are scaled so that, conditional on random assignment probabilities, each school receives equal weight.

[a]The p-values presented in this table are *not* adjusted for multiple hypothesis testing.

[b]Percentage change is calculated as the difference between the treatment and control groups divided by the average predicted outcome for the control group.

[c]For dichotomous outcomes, the effect size is calculated using the Cox index, which equals the standardized log odds ratio between the treatment and control groups (Cox 1970).

[d]The "Any Substance" category reflects students' reported use of the following substances: cigarettes, chewing tobacco, alcohol, marijuana, cocaine, steroids or other muscle-building drugs, glue or other inhalants, narcotic drugs such as heroin or codeine, amphetamines or methamphetamines without a prescription, and any other illegal drug.

[e]This category reflects the substances tested by each participating district as part of its MRSDT program. The tested substances vary *across* districts but are the same *within* each district.

[f]The reported sample size is the number of activity participants who completed a follow-up survey.

[†]Significantly different from zero at the .05 level, two-tailed test.

MRSDT = Mandatory-Random Student Drug Testing.

IMPACTS OF MRSDT ON RETROSPECTIVE SUBSTANCE USE
FOR PAST 30-DAY PARTICIPANTS IN COVERED ACTIVITIES

Substance Use Measure	Treatment Group	Control Group	Difference	p-value[a]	Percentage Change[b]	Effect Size[c]
Percentage of Students That Reported Using the Following in the Last Six Months:						
Any substance[d]	50.19	54.84	-4.66	.143	-8.50	-0.11
Any substance except alcohol and tobacco	16.59	19.68	-3.10	.250	-15.73	-0.13
Any substance tested by the district's MRSDT program[e]	27.75	33.06	-5.31	.068	-16.06	-0.15
Percentage of Students That Reported Using the Following in the Last 30 Days:						
Any substance[d]	33.01	38.70	-5.69	.098	-14.70	-0.15
Any substance except alcohol and tobacco	10.12	12.92	-2.80	.217	-21.66	-0.17
Any substance tested by the district's MRSDT program[e]	16.92	22.90	-5.99[†]	.014	-26.14	-0.23
Sample Size[f]	**1,158**	**959**				

Source: Student surveys administered by study team.

Note: For each outcome, the numbers reported in the columns labeled "Treatment Group" and "Control Group" are the average predicted outcomes for all students as if they were in the treatment and control groups, respectively. Specifically, two predicted outcomes are generated for every student using the student's actual characteristics and the coefficients from the impact regression. The first predicted value is calculated with the treatment variable set equal to 1 (the average outcome for the treatment group is the average of these predicted values). The second predicted value is calculated setting the treatment variable equal to zero (the average predicted outcome for the control group is the average of these predicted values). Differences in substance use between the treatment and control groups are regression adjusted for random assignment block indicator variables, baseline measures of the outcome variables, and additional covariates that were chosen to improve statistical precision (the method for selecting covariates is described in Appendix F). A variable indicating which students were 16 years old was also included as a covariate in impact models for activity participants, since the analysis of baseline equivalence found a statistically significant treatment/control difference on that variable. The data are weighted to account for random assignment, sampling, consent, and nonresponse probabilities. The weights are scaled so that, conditional on random assignment probabilities, each school receives equal weight.

[a]The p-values presented in this table are *not* adjusted for multiple hypothesis testing.

[b]Percent change is calculated as the difference between the treatment and control groups divided by the average predicted outcome for the control group.

[c]For dichotomous outcomes, the effect size is calculated using the Cox index, which equals the standardized log odds ratio between the treatment and control groups (Cox 1970).

[d]The "Any Substance" category reflects students' reported use of the following substances: cigarettes, chewing tobacco, alcohol, marijuana, cocaine, steroids or other muscle-building drugs, glue or other inhalants, narcotic drugs such as heroin or codeine, amphetamines or methamphetamines without a prescription, and any other illegal drug.

[e]This category reflects the substances tested by each participating district as part of its MRSDT program. The tested substances vary *across* districts but are the same *within* each district.

TABLE F.4 *(continued)*

[f]The reported sample size is the number of activity participants who completed a follow-up survey.

[†]Significantly different from zero at the .05 level, two-tailed test.

MRSDT = Mandatory-Random Student Drug Testing.

TABLE F.5

IMPACTS OF MRSDT ON RETROSPECTIVE SUBSTANCE USE
FOR NONPARTICIPANTS

Substance Use Measure	Treatment Group	Control Group	Difference	p-value[a]	Percentage Change[b]	Effect Size[c]
Percentage of Students That Reported Using the Following in the Last Six Months:						
Any substance[d]	52.61	49.72	2.90	0.429	5.82	0.07
Any substance except alcohol and tobacco	22.11	21.89	0.23	0.928	1.05	0.01
Any substance tested by the district's MRSDT program[e]	33.43	32.55	0.89	0.678	2.72	0.02
Percentage of Students That Reported Using the Following in the Last 30 Days:						
Any substance[d]	36.04	35.70	0.34	0.915	0.96	0.01
Any substance except alcohol and tobacco	15.03	16.52	-1.49	0.515	-9.04	-0.07
Any substance tested by the district's MRSDT program[e]	20.37	22.94	-2.57	0.204	-11.20	-0.09
Sample Size[f]	**1,350**	**928**				

Source: Student surveys administered by study team.

Note: For each outcome, the numbers reported in the columns labeled "Treatment Group" and "Control Group" are the average predicted outcomes for all students as if they were in the treatment and control groups, respectively. Specifically, two predicted outcomes are generated for every student using the student's actual characteristics and the coefficients from the impact regression. The first predicted value is calculated with the treatment variable set equal to 1 (the average outcome for the treatment group is the average of these predicted values). The second predicted value is calculated setting the treatment variable equal to zero (the average predicted outcome for the control group is the average of these predicted values). Differences in substance use between the treatment and control groups are regression adjusted for random assignment block indicator variables, baseline measures of the outcome variables, and additional covariates that were chosen to improve statistical precision (the method for selecting covariates is described in Appendix F). The data are weighted to account for random assignment, sampling, consent, and nonresponse probabilities. The weights are scaled so that, conditional on random assignment probabilities, each school receives equal weight.

[a]The p-values presented in this table are *not* adjusted for multiple hypothesis testing.

[b]Percentage change is calculated as the difference between the treatment and control groups divided by the average predicted outcome for the control group.

[c]For dichotomous outcomes, the effect size is calculated using the Cox index, which equals the standardized log odds ratio between the treatment and control groups (Cox 1970).

[d]The "Any Substance" category reflects students' reported use of the following substances: cigarettes, chewing tobacco, alcohol, marijuana, cocaine, steroids or other muscle-building drugs, glue or other inhalants, narcotic drugs such as heroin or codeine, amphetamines or methamphetamines without a prescription, and any other illegal drug.

[e]This category reflects the substances tested by each participating district as part of its MRSDT program. The tested substances vary *across* districts but are the same *within* each district.

[f]The reported sample size is the number of nonparticipants who completed a follow-up survey.

MRSDT = Mandatory-Random Student Drug Testing.

TABLE F.6

IMPACTS OF MRSDT ON RETROSPECTIVE SUBSTANCE USE
FOR ALL STUDENTS

Substance Use Measure	Treatment Group	Control Group	Difference	p-value[a]	Percentage Change[b]	Effect Size[c]
Percentage of Students That Reported Using the Following in the Last Six Months:						
Any substance[d]	51.18	52.66	-1.48	0.535	-2.81	-0.04
Any substance except alcohol and tobacco	19.30	20.56	-1.26	0.538	-6.14	-0.05
Any substance tested by the district's MRSDT program[e]	29.94	32.46	-2.52	0.192	-7.76	-0.07
Percentage of Students That Reported Using the Following in the Last 30 Days:						
Any substance[d]	34.32	37.28	-2.96	0.178	-7.93	-0.08
Any substance except alcohol and tobacco	12.48	14.45	-1.97	0.201	-13.64	-0.10
Any substance tested by the district's MRSDT program[e]	18.31	22.49	-4.19[†]	0.016	-18.61	-0.16
Sample Size[f]	**2,699**	**2,024**				

Source: Student surveys administered by study team.

Note: For each outcome, the numbers reported in the columns labeled "Treatment Group" and "Control Group" are the average predicted outcomes for all students as if they were in the treatment and control groups, respectively. Specifically, two predicted outcomes are generated for every student using the student's actual characteristics and the coefficients from the impact regression. The first predicted value is calculated with the treatment variable set equal to 1 (the average outcome for the treatment group is the average of these predicted values). The second predicted value is calculated setting the treatment variable equal to zero (the average predicted outcome for the control group is the average of these predicted values). Differences in substance use between the treatment and control groups are regression adjusted for random assignment block indicator variables, baseline measures of the outcome variables, and additional covariates that were chosen to improve statistical precision (the method for selecting covariates is described in Appendix F). The data are weighted to account for random assignment, sampling, consent, and nonresponse probabilities. The weights are scaled so that, conditional on random assignment probabilities, each school receives equal weight.

[a]The p-values presented in this table are *not* adjusted for multiple hypothesis testing.

[b]Percentage change is calculated as the difference between the treatment and control groups divided by the average predicted outcome for the control group.

[c]For dichotomous outcomes, the effect size is calculated using the Cox index, which equals the standardized log odds ratio between the treatment and control groups (Cox 1970).

[d]The "Any Substance" category reflects students' reported use of the following substances: cigarettes, chewing tobacco, alcohol, marijuana, cocaine, steroids or other muscle-building drugs, glue or other inhalants, narcotic drugs such as heroin or codeine, amphetamines or methamphetamines without a prescription, and any other illegal drug.

[e]This category reflects the substances tested by each participating district as part of its MRSDT program. The tested substances vary *across* districts but are the same *within* each district.

[f]The reported sample size is the number of students who completed a follow-up survey.

[†]Significantly different at the .05 level, two-tailed test.

MRSDT = Mandatory-Random Student Drug Testing.

TABLE F.7

IMPACTS OF MRSDT ON STUDENTS' INTENTIONS TO USE SUBSTANCES
WITHIN THE NEXT YEAR

Measure of Intentions to Use Substances	Treatment Group	Control Group	Difference	p-value[a]	Percentage Change[b]	Effect Size[c]
Sample 1: Participants in Covered Activities[d]						
Percentage of Students That Reported They "Probably Will" or "Definitely Will" Use the Following Within the Next Year:						
Any substance[e]	34.09	33.31	0.77	0.811	2.32	0.02
Any substance except alcohol and tobacco	8.01	7.93	0.08	0.964	1.00	0.01
Sample Size[f]	**1,349**	**1,096**				
Sample 2: Nonparticipants						
Percentage of Students That Reported They "Probably Will" or "Definitely Will" Use the Following Within the Next Year:						
Any substance[e]	33.58	32.81	0.77	0.791	2.33	0.02
Any substance except alcohol and tobacco	12.21	11.89	0.32	0.901	2.71	0.02
Sample Size[f]	**1,350**	**928**				
Sample 3: All Students						
Percentage of Students That Reported They "Probably Will" or "Definitely Will" Use the Following Within the Next Year:						
Any substance[e]	33.75	33.19	0.56	0.796	2.71	0.02
Any substance except alcohol and tobacco	10.00	9.77	0.23	0.903	2.33	0.02
Sample Size[f]	**2,699**	**2,024**				

Source: Student surveys administered by study team.

Note: For each outcome, the numbers reported in the columns labeled "Treatment Group" and "Control Group" are the average predicted outcomes for all students as if they were in the treatment and control groups, respectively. Specifically, two predicted outcomes are generated for every student using the student's actual characteristics and the coefficients from the impact regression. The first predicted value is calculated with the treatment variable set equal to 1 (the average outcome for the treatment group is the average of these predicted values). The second predicted value is calculated setting the treatment variable equal to zero (the average predicted outcome for the control group is the average of these predicted values). Differences in intended substance use between the treatment and control groups are regression adjusted for random assignment block indicator variables, baseline measures of the outcome variables, and additional covariates that were chosen to improve statistical precision (the method for selecting covariates is described in Appendix F). An indicator variable for 16-year old students was included as an additional covariate in the models for activity participants, since the analysis of baseline equivalence found a statistically significant treatment/control difference on that variable. The data are weighted to account for random assignment, sampling, consent, and nonresponse probabilities. The weights are scaled so that, conditional on random assignment probabilities, each school receives equal weight.

[a]The *p*-values presented in this table are *not* adjusted for multiple hypothesis testing.

[b]Percentage change is calculated as the difference between the treatment and control groups divided by the average predicted outcome for the control group.

[c]For dichotomous outcomes, the effect size is calculated using the Cox index, which equals the standardized log odds ratio between the treatment and control groups (Cox 1970).

[d]Participants in covered activities were identified by comparing student self-reported activity participation from the student survey with lists of covered activities obtained from each district. Students were classified as participants if there was an exact match between the activity listed on the student survey and the district-provided activity lists.

[e]The "Any Substance" category reflects students' intended use of the following substances: cigarettes, chewing tobacco, alcohol, marijuana, or any other illegal drug.

[f]The reported sample size is the number of students who completed a follow-up survey.

MRSDT = Mandatory-Random Student Drug Testing.

TABLE F.8

IMPACTS OF MRSDT ON PERCEIVED CONSEQUENCES
OF SUBSTANCE USE

Measure of Perceived Consequences	Treatment Group	Control Group	Difference	p-value[a]	Effect Size[b]
Sample 1: Participants in Covered Activities[c]					
Mean Perceived Positive Consequences of Substance Use Scale[d]	2.11	2.03	0.08	0.283	0.08
Mean Perceived Negative Consequences of Substance Use Scale[e]	4.09	4.06	0.03	0.593	0.03
Sample Size[f]	**1,349**	**1,096**			
Sample 2: Nonparticipants					
Mean Perceived Positive Consequences of Substance Use Scale[d]	2.01	2.01	0.00	0.963	0.00
Mean Perceived Negative Consequences of Substance Use Scale[e]	4.02	3.95	0.07	0.177	0.07
Sample Size[f]	**1,350**	**928**			
Sample 3: All Students					
Mean Perceived Positive Consequences of Substance Use Scale[d]	2.06	2.02	0.04	0.466	0.04
Mean Perceived Negative Consequences of Substance Use Scale[e]	4.06	4.01	0.05	0.224	0.05
Sample Size[f]	**2,699**	**2,024**			

Source: Student surveys administered by study team.

Note: For each outcome, the numbers reported in the columns labeled "Treatment Group" and "Control Group" are the average predicted outcomes for all students as if they were in the treatment and control groups, respectively. Specifically, two predicted outcomes are generated for every student using the student's actual characteristics and the coefficients from the impact regression. The first predicted value is calculated with the treatment variable set equal to 1 (the average outcome for the treatment group is the average of these predicted values). The second predicted value is calculated setting the treatment variable equal to zero (the average predicted outcome for the control group is the average of these predicted values). Differences in scale scores between the treatment and control groups are regression adjusted for random assignment block indicator variables, baseline measures of the outcome variables, and additional covariates that were chosen to improve statistical precision (the method for selecting covariates is described in Appendix F). A variable indicating which students were 16 years old was also included as a covariate in impact models for activity participants (sample 1), since the analysis of baseline equivalence found a statistically significant treatment/control difference on that variable. The data are weighted to account for random assignment, sampling, consent, and nonresponse probabilities. The weights are scaled so that, conditional on random assignment probabilities, each school receives equal weight.

[a]The *p*-values presented in this table are *not* adjusted for multiple hypothesis testing.

[b]The effect size is calculated by dividing the impact by the standard deviation of the control group.

[c]Participants in covered activities were identified by comparing student self-reported activity participation from the student survey with lists of covered activities obtained from each district. Students were classified as participants if there was an exact match between the activity listed on the student survey and the district-provided activity lists.

[d]The Perceived Positive Consequences of Substance Use Scale averages student responses to four items from the student survey: (16e) "Using illegal drugs or alcohol makes it easier to be part of a group," (16f) "Using illegal drugs or drinking is cool," (16g) "Using illegal drugs or drinking makes everything seem better," and (16h) "Using illegal drugs or drinking makes it easier to have a good time with friends." Responses are coded on a 5-point scale ranging from strongly disagree to strongly agree. Higher values on the scale indicate more positive attitudes toward substance use.

[e]The Perceived Negative Consequences of Substance Use Scale averages student responses to four items from the study survey: (16a) "Using illegal drugs leads to serious health problems," (16b) "Drinking alcohol leads to serious health problems, (16c) "If I used drugs, I would get into trouble," and (16d) "If I drank, I would get into trouble." Responses are coded on a 5-point scale ranging from strongly disagree to strongly agree. Higher values on the scale indicate more negative attitudes toward substance use.

[f]The reported sample size is the number of students who completed a follow-up survey.

MRSDT = Mandatory-Random Student Drug Testing.

TABLE F.9

IMPACTS OF MRSDT ON DISCIPLINARY INCIDENTS IN STUDY SCHOOLS

Incident Measure	Treatment Group	Control Group	Difference	*p*-value[a]	Effect Size[b]
Number of the Following Incidents (per 1,000 Students) Reported by Schools During the 2007-2008 School Year:					
Expulsions	6.07	9.69	-3.61	0.239	-0.25
Distribution, possession, or use of illegal drugs	4.89	4.23	0.67	0.468	0.22
Distribution, possession, or use of alcohol	1.80	1.95	-0.15	0.913	-0.03
Physical attacks or fights	16.74	20.91	-4.17	0.356	-0.32
Sample Size[c]	**20**	**16**			

Source: Schoolwide records forms collected by study team.

Note: For each outcome, the numbers reported in the columns labeled "Treatment Group" and "Control Group" are the average predicted outcomes for all schools as if they were in the treatment and control groups, respectively. Specifically, two predicted outcomes are generated for every school using the school's actual characteristics and the coefficients from the impact regression. The first predicted value is calculated with the treatment variable set equal to 1 (the average outcome for the treatment group is the average of these predicted values). The second predicted value is calculated setting the treatment variable equal to zero (the average predicted outcome for the control group is the average of these predicted values). Differences in outcomes between the treatment and control groups are regression adjusted for random assignment block indicator variables, baseline measures of the outcome variables, and additional covariates that were chosen to improve statistical precision (the method for selecting covariates is described in Appendix F). The data are weighted so that, conditional on random assignment probabilities, each school receives equal weight.

[a]The *p*-values presented in this table are *not* adjusted for multiple hypothesis testing.

[b]The effect size is calculated by dividing the impact by the standard deviation of the control group.

[c]The reported sample size is the number of schools in the study.

MRSDT = Mandatory-Random Student Drug Testing.

APPENDIX G

ASSESSING THE ROBUSTNESS OF THE IMPACTS

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The benchmark approach to estimating impacts involved a variety of methodological choices that could potentially influence the study's findings. To assess the robustness of the study's findings to these choices, we conducted several sensitivity analyses. To facilitate comparisons between the impacts from these different sensitivity tests, we report the results of these analyses in Table G.1 through Table G.8, showing impacts from the benchmark model alongside impacts from each of the sensitivity analyses. Note that some table cells are empty because some sensitivity analyses are not applicable for some impacts (for example, imputation of missing substance use data is not relevant to calculating impacts on outcomes other than substance use).

Overall, we find that the study's findings are robust to changes in the benchmark model specification. Below, we describe each sensitivity analysis and present findings from each analysis.

A. ALTERNATIVE WEIGHT

The benchmark weight gives each school equal weight in the analysis (conditional on random assignment probabilities). This is interpreted as providing impacts on student substance use at the average school in the study. An alternative approach is to weight schools according to their size. In that case, the impact is interpreted as providing evidence of the effect of MRSDT on the substance use of the average student in the study. If impacts vary across different types of schools, these two weighting approaches could yield different answers.

Weighting schools by size changes the statistical significance for 1 out of 34 impacts (see Table G.1 through Table G.7). The impact on past 30-day use of district-tested substances for the full sample of all students becomes statistically significant (see Table G.3). The impact changes from –4.19 to –4.98, and the adjusted *p*-value (not shown in Table G.3) is reduced from 0.054 to 0.016.

B. DROP SCHOOLS WITH PRIOR DRUG TESTING EXPERIENCE

As described in Appendix A, one of the random assignment blocks consisted of four schools that had previously implemented student drug testing. That past experience could have affected students' perceptions of whether they might be tested for substance use, leading to attenuated impacts for this block. To assess whether this might be the case, we calculated impacts after dropping this block.

Dropping this block changes the statistical significance of 1 of 38 impacts (see Table G.1 through Table G.8). The impact on past 30-day use of district-tested substances for the full sample of all students becomes statistically significant (see Table G.3). The impact changes from –4.19 to –4.98, and the adjusted *p*-value (not shown in Table G.3) is reduced from 0.054 to 0.038.

TABLE G.1

SENSITIVITY OF IMPACTS ON RETROSPECTIVE SUBSTANCE USE OUTCOMES
FOR PARTICIPANTS IN COVERED ACTIVITIES

Substance Use Measure	Benchmark	(1) Alternative Weight	(2) Drop Schools with Prior Drug Testing Experience	(3) Imputing Missings to Zero	(4) Imputing Missings to One	(5) Likely Participants	(6) Students Sampled Prior to Random Assignment	(7) Covariates (7a) Block Dummies Only	(7b) Baseline Outcome Measure
Percentage of Students That Reported Using the Following in the Last Six Months:									
Any substance[a]	-4.95	-5.42	-5.57	-3.82	-5.49	-4.00	-4.67	-4.49	-3.85
Any substance except alcohol and tobacco	-2.48	-3.29	-2.58	-2.37	-1.72	-2.32	-1.01	-2.66	-2.49
Any substance tested by the district's MRSDT program[b]	-5.28	-6.53	-5.92	-4.26	-5.75	-5.06	-4.33	-5.53	-5.30
Percentage of Students That Reported Using the Following in the Last 30 Days:									
Any substance[a]	-5.75	-5.34	-4.61	-5.07	-5.79	-4.36	-4.32	-4.83	-5.17
Any substance except alcohol and tobacco	-2.53	-2.91	-2.46	-2.36	-1.75	-3.69	-1.95	-2.84	-2.52
Any substance tested by the district's MRSDT program[b]	-5.46*	-6.74*	-6.17*	-4.73	-5.59	-6.00*	-4.46	-5.28*	-5.41*
Sample Size[c]	**2,445**	**2,445**	**2,145**	**2,445**	**2,445**	**2,450**	**1,994**	**2,445**	**2,445**

Source: Student surveys administered by study team.

Note: For each column, an impact is reported corresponding to the indicated sensitivity analysis. An asterisk indicates impacts that are statistically significant. The column labeled "Benchmark" shows the impacts from the benchmark analytic approach presented earlier in the report. The numbered columns show how the impacts vary as the benchmark approach is changed in specific ways. Specifically:

(1) replaces the benchmark weight (which, conditional on random assignment probabilities, weights schools equally) with a weight that gives schools with larger enrollments more weight in the analysis.

(2) drops random assignment block with four schools that had previous drug testing program.

(3) imputes missing responses to student drug use questions to "not used."

(4) imputes missing responses to student drug use questions to "used."

(5) calculates impacts for "likely" participants in covered activities instead of actual participants, according to students' predicted probability of activity participation. The predicted probability of participation is based on past activity participation, which could not have been affected by MRSDT. Students with a predicted probability greater than the actual participation rate are coded as "likely participants."

(6) includes only students who were sampled prior to random assignment (most of whom are in grades 10-12 at follow-up).

(7a) drops all covariates except indicator variables for random assignment blocks.

(7b) drops all covariates except indicator variables for random assignment blocks and baseline version of outcome measure.

[a]The "Any Substance" category reflects students' reported use of the following substances: cigarettes, chewing tobacco, alcohol, marijuana, cocaine, steroids or other muscle-building drugs, glue or other inhalants, narcotic drugs such as heroin or codeine, amphetamines or methamphetamines without a prescription, and any other illegal drug.

[b]This category reflects the substances tested by each participating district as part of its MRSDT program. The tested substances vary *across* districts, but *within* each district the tested substances are the same.

[c]The reported sample size is the number of covered-activity participants who completed a follow-up survey.

*Significantly different from zero at the .05 level, two-tailed test.

MRSDT = Mandatory-Random Student Drug Testing.

TABLE G.2

SENSITIVITY OF IMPACTS ON RETROSPECTIVE SUBSTANCE USE OUTCOMES
FOR NONPARTICIPANTS

Substance Use Measure	Benchmark	(1) Alternative Weight	(2) Drop Schools with Prior Drug Testing Experience	(3) Imputing Missings to Zero	(4) Imputing Missings to One	(5) Likely Nonparticipants	(6) Students Sampled Prior to Random Assignment	(7) Covariates (7a) Block Dummies Only	(7b) Baseline Outcome Measure
Percentage of Students That Reported Using the Following in the Last Six Months:									
Any substance[a]	2.90	3.87	2.86	3.83	2.48	1.70	2.96	1.94	2.11
Any substance except alcohol and tobacco	0.23	-0.58	-0.85	-0.10	0.53	0.01	2.09	-0.32	0.23
Any substance tested by the district's MRSDT program[b]	0.89	0.34	0.21	0.87	1.21	0.29	1.26	0.61	0.89
Percentage of Students That Reported Using the Following in the Last 30 Days:									
Any substance[a]	0.34	-0.13	-0.66	1.08	-0.19	-0.71	2.19	-1.06	-1.02
Any substance except alcohol and tobacco	-1.49	-3.24	-2.74	-1.76	-0.57	-0.06	-0.46	-1.83	-1.49
Any substance tested by the district's MRSDT program[b]	-2.57	-3.27	-3.60	-2.57	-1.55	-2.01	-2.61	-2.46	-2.57
Sample Size[c]	**2,278**	**2,278**	**2,155**	**2,278**	**2,278**	**2,273**	**1,887**	**2,278**	**2,278**

Source: Student surveys administered by study team.

Note: For each column, an impact is reported corresponding to the indicated sensitivity analysis. An asterisk indicates impacts that are statistically significant. The column labeled "Benchmark" shows the impacts from the benchmark analytic approach presented earlier in the report. The numbered columns show how the impacts vary as the benchmark approach is changed in specific ways. Specifically:

(1)   replaces the benchmark weight (which, conditional on random assignment probabilities, weights schools equally) with a weight that gives schools with larger enrollments more weight in the analysis.

(2)   drops random assignment block with four schools that had previous drug testing program.

(3)   imputes missing responses to student drug use questions to "not used."

(4)   imputes missing responses to student drug use questions to "used."

(5)   calculates impacts for "likely" nonparticipants instead of actual nonparticipants, according to students' predicted probability of participating in a covered activity. The predicted probability of participation is based on past activity participation, which could not have been affected by MRSDT. Students with a predicted probability less than the actual participation rate are coded as "likely nonparticipants."

(6)   includes only students who were sampled prior to random assignment (most of whom are in grades 10-12 at follow-up).

(7a)   drops all covariates except indicator variables for random assignment blocks.

(7b)   drops all covariates except indicator variables for random assignment blocks and baseline version of outcome measure.

TABLE G.2 *(continued)*

[a]The "Any Substance" category reflects students' reported use of the following substances: cigarettes, chewing tobacco, alcohol, marijuana, cocaine, steroids or other muscle-building drugs, glue or other inhalants, narcotic drugs such as heroin or codeine, amphetamines or methamphetamines without a prescription, and any other illegal drug.

[b]This category reflects the substances tested by each participating district as part of its MRSDT program. The tested substances vary *across* districts, but *within* each district the tested substances are the same.

[c]The reported sample size is the number of students not participating in covered activities who completed a follow-up survey.

MRSDT = Mandatory-Random Student Drug Testing.

SENSITIVITY OF IMPACTS ON RETROSPECTIVE SUBSTANCE USE OUTCOMES FOR ALL STUDENTS

Substance Use Measure	Benchmark	(1) Alternative Weight	(2) Drop Schools with Prior Drug Testing Experience	(3) Imputing Missings to Zero	(4) Imputing Missings to One	(5) Likely Participants and Nonparticipants	(6) Students Sampled Prior to Random Assignment	(7) Covariates (7a) Block Dummies Only	(7b) Baseline Outcome Measure
Percentage of Students That Reported Using the Following in the Last Six Months:									
Any substance[a]	-1.48	-0.90	-1.52	-0.50	-1.91	NA	-1.40	-1.72	-1.24
Any substance except alcohol and tobacco	-1.26	-1.88	-1.77	-1.38	-0.71	NA	0.47	-1.65	-1.26
Any substance tested by the district's MRSDT program[b]	-2.52	-3.15	-3.02	-2.03	-2.53	NA	-1.76	-2.84	-2.52
Percentage of Students That Reported Using the Following in the Last 30 Days:									
Any substance[a]	-2.96	-2.72	-2.65	-2.29	-3.21	NA	-1.44	-3.22	-3.29
Any substance except alcohol and tobacco	-1.97	-2.95	-2.49	-1.99	-1.13	NA	-1.12	-2.35	-1.97
Any substance tested by the district's MRSDT program[b]	-4.19	-4.98*	-4.98*	-3.80	-3.77	NA	-3.77	-4.19*	-4.19*
Sample Size[c]	**4,723**	**4,723**	**4,300**	**4,723**	**4,723**	**NA**	**3,881**	**4,723**	**4,723**

Source: Student surveys administered by study team.

Note: For each column, an impact is reported corresponding to the indicated sensitivity analysis. An asterisk indicates impacts that are statistically significant. The column labeled "Benchmark" shows the impacts from the benchmark analytic approach presented earlier in the report. The numbered columns show how the impacts vary as the benchmark approach is changed in specific ways. Specifically:

(1) replaces the benchmark weight (which, conditional on random assignment probabilities, weights schools equally) with a weight that gives schools with larger enrollments more weight in the analysis.

(2) drops random assignment block with four schools that had previous drug testing program.

(3) imputes missing responses to student drug use questions to "not used."

(4) imputes missing responses to student drug use questions to "used."

(5) calculates impacts for "likely" participants in covered activities and "likely" nonparticipants instead of actual participants and nonparticipants, according to students' predicted probability of activity participation. The predicted probability of participation is based on past participation, which could not have been affected by MRSDT. Students with a predicted probability greater than the actual participation rate are coded as "likely participants." All other students are coded as "likely nonparticipants."

(6) includes only students who were sampled prior to random assignment (most of whom are in grades 10-12 at follow-up).

(7a) drops all covariates except indicator variables for random assignment blocks.

(7b) drops all covariates except indicator variables for random assignment blocks and baseline version of outcome measure.

[a]The "Any Substance" category reflects students' reported use of the following substances: cigarettes, chewing tobacco, alcohol, marijuana, cocaine, steroids or other muscle-building drugs, glue or other inhalants, narcotic drugs such as heroin or codeine, amphetamines or methamphetamines without a prescription, and any other illegal drug.

[b]This category reflects the substances tested by each participating district as part of its MRSDT program. The tested substances vary *across* districts, but *within* each district the tested substances are the same.

[c]The reported sample size is the number of students who completed a follow-up survey.

*Significantly different from zero at the .05 level, two-tailed test.

MRSDT = Mandatory-Random Student Drug Testing.

NA = not applicable.

SENSITIVITY OF IMPACTS ON STUDENTS' INTENTIONS TO USE SUBSTANCES
WITHIN THE NEXT YEAR

G.10

Measure of Intentions to Use Substances	Benchmark	(1) Alternative Weight	(2) Drop Schools with Prior Drug Testing Experience	(3) Imputing Missings to Zero	(4) Imputing Missings to One	(5) Likely Participants and Nonparticipants	(6) Students Sampled Prior to Random Assignment	(7) Covariates	
								(7a) Block Dummies Only	(7b) Baseline Outcome Measure
Sample 1: Participants in Covered Activities[a]									
Percentage of Students That Reported They "Probably Will" or "Definitely Will" Use the Following Within the Next Year:									
Any substance[b]	0.77	1.96	2.82	1.00	-0.10	1.97	1.31	-0.12	-0.20
Any substance except alcohol and tobacco	0.08	0.36	-0.43	0.15	-0.35	0.73	1.13	-0.35	0.03
Sample Size[c]	**2,445**	**2,445**	**2,145**	**2,445**	**2,445**	**2,450**	**1,994**	**2,445**	**2,445**
Sample 2: Nonparticipants									
Percentage of Students That Reported They "Probably Will" or "Definitely Will" Use the Following Within the Next Year:									
Any substance[b]	0.77	-0.20	0.26	0.69	0.42	-0.46	0.56	-1.15	-0.68
Any substance except alcohol and tobacco	0.32	-0.31	-0.46	0.28	0.06	-0.30	0.25	-0.25	0.32
Sample Size[c]	**2,278**	**2,278**	**2,155**	**2,278**	**2,278**	**2,273**	**1,887**	**2,278**	**2,278**
Sample 3: All Students									
Percentage of Students That Reported They "Probably Will" or "Definitely Will" Use the Following Within the Next Year:									
Any substance[b]	0.56	0.75	1.33	0.69	-0.09	NA	0.79	-0.82	-0.62
Any substance except alcohol and tobacco	0.23	0.10	-0.39	0.24	-0.16	NA	0.79	-0.26	0.23
Sample Size[c]	**4,723**	**4,723**	**4,300**	**4,723**	**4,723**	**NA**	**3,881**	**4,723**	**4,723**

Source: Student surveys administered by study team.

Note: For each column, an impact is reported corresponding to the indicated sensitivity analysis. An asterisk indicates impacts that are statistically significant. The column labeled "Benchmark" shows the impacts from the benchmark analytic approach presented earlier in the report. The numbered columns show how the impacts vary as the benchmark approach is changed in specific ways. Specifically:

    (1) replaces the benchmark weight (which, conditional on random assignment probabilities, weights schools equally) with a weight that gives schools with larger enrollments more weight in the analysis.

    (2) drops random assignment block with four schools that had previous drug testing program.

    (3) imputes missing responses to student drug use questions to "not used."

    (4) imputes missing responses to student drug use questions to "used."

    (5) calculates impacts for "likely" participants in covered activities and "likely" nonparticipants instead of actual participants and nonparticipants, according to students' predicted probability of activity participation. The predicted probability of participation is based on past participation, which could not have been affected by MRSDT. Students with a predicted probability greater than the actual participation rate are coded as "likely participants." All other students are coded as "likely nonparticipants."

    (6) includes only students who were sampled prior to random assignment (most of whom are in grades 10-12 at follow-up).

    (7a) drops all covariates except indicator variables for random assignment blocks.

    (7b) drops all covariates except indicator variables for random assignment blocks and baseline version of outcome measure.

[a]Participants in covered activities were identified by comparing student self-reported activity participation from the student survey with lists of covered activities obtained from each district. Students were classified as participants if there was an exact match between the activity listed on the student survey and the district-provided activity lists.

[b]The "Any Substance" category reflects students' intended use of the following substances: cigarettes, chewing tobacco, alcohol, marijuana, or any other illegal drug.

[d]The reported sample size is the number of students who completed a follow-up survey.

MRSDT = Mandatory-Random Student Drug Testing.

NA = not applicable.

TABLE G.5

SENSITIVITY OF IMPACTS ON PERCEIVED CONSEQUENCES OF DRUG USE

Measure of Perceived Consequences	Benchmark	(1) Alternative Weight	(2) Drop Schools with Prior Drug Testing Experience	(3) Imputing Missings to Zero	(4) Imputing Missings to One	(5) Likely Participants and Nonparticipants	(6) Students Sampled Prior to Random Assignment	(7) Covariates	
								(7a) Block Dummies Only	(7b) Baseline Outcome Measure
Sample 1: Participants in Covered Activities[a]									
Mean Perceived Positive Consequences of Drug Use Scale[b]	0.08	0.05	0.06	NA	NA	0.09	0.09	0.07	0.08
Mean Perceived Negative Consequences of Drug Use Scale[c]	0.03	0.01	0.02	NA	NA	0.04	0.00	0.02	0.03
Sample Size[d]	**2,445**	**2,445**	**2,145**	**NA**	**NA**	**2,450**	**1,994**	**2,445**	**2,445**
Sample 2: Nonparticipants									
Mean Perceived Positive Consequences of Drug Use Scale[b]	0.00	0.02	-0.01	NA	NA	-0.01	0.07	-0.01	0.00
Mean Perceived Negative Consequences of Drug Use Scale[c]	0.07	0.07	0.08	NA	NA	0.05	0.06	0.08	0.07
Sample Size[d]	**2,278**	**2,278**	**2,155**	**NA**	**NA**	**2,273**	**1,887**	**2,278**	**2,278**
Sample 3: All Students									
Mean Perceived Positive Consequences of Drug Use Scale[b]	0.04	0.03	0.02	NA	NA	NA	0.08	0.03	0.04
Mean Perceived Negative Consequences of Drug Use Scale[c]	0.05	0.04	0.05	NA	NA	NA	0.03	0.06	0.05
Sample Size[d]	**4,723**	**4,723**	**4,300**	**NA**	**NA**	**NA**	**3,881**	**4,723**	**4,723**

Source: Student surveys administered by study team.

Note: For each column, an impact is reported corresponding to the indicated sensitivity analysis. An asterisk indicates impacts that are statistically significant. The column labeled "Benchmark" shows the impacts from the benchmark analytic approach presented earlier in the report. The numbered columns show how the impacts vary as the benchmark approach is changed in specific ways. Specifically:

(1) replaces the benchmark weight (which, conditional on random assignment probabilities, weights schools equally) with a weight that gives schools with larger enrollments more weight in the analysis.

(2) drops random assignment block with four schools that had previous drug testing program.

(3) imputes missing responses to student drug use questions to "not used."

(4) imputes missing responses to student drug use questions to "used."

(5) calculates impacts for "likely" participants in covered activities and "likely" nonparticipants instead of actual participants and nonparticipants, according to students' predicted probability of activity participation. The predicted probability of participation is based on past participation, which could not have been affected by MRSDT. Students with a predicted probability greater than the actual participation rate are coded as "likely participants." All other students are coded as "likely nonparticipants."

(6) includes only students who were sampled prior to random assignment (most of whom are in grades 10-12 at follow-up).

(7a) drops all covariates except indicator variables for random assignment blocks.

(7b) drops all covariates except indicator variables for random assignment blocks and baseline version of outcome measure.

[a]Participants in covered activities were identified by comparing student self-reported activity participation from the student survey with lists of covered activities obtained from each district. Students were classified as participants if there was an exact match between the activity listed on the student survey and the district-provided activity lists.

[b]The Perceived Positive Consequences of Substance Use Scale averages student responses to four items from the student survey: (16e) "Using illegal drugs or alcohol makes it easier to be part of a group," (16f) "Using illegal drugs or drinking is cool," (16g) "Using illegal drugs or drinking makes everything seem better," and (16h) "Using illegal drugs or drinking makes it easier to have a good time with friends." Responses are coded on a 5-point scale ranging from strongly disagree to strongly agree. Higher values on the scale indicate more positive attitudes toward substance use.

[c]The Perceived Negative Consequences of Substance Use Scale averages student responses to four items from the study survey: (16a) "Using illegal drugs leads to serious health problems," (16b) "Drinking alcohol leads to serious health problems, (16c) "If I used drugs, I would get into trouble," and (16d) "If I drank, I would get into trouble." Responses are coded on a 5-point scale ranging from strongly disagree to strongly agree. Higher values on the scale indicate more negative attitudes toward substance use.

[d]The reported sample size is the number of students who completed a follow-up survey.

MRSDT = Mandatory-Random Student Drug Testing.

NA = not applicable.

TABLE G.6

SENSITIVITY OF IMPACTS ON EXTRACURRICULAR ACTIVITY PARTICIPATION

								(7) Covariates	
			(2)	(3)	(4)	(5)	(6)		
			Drop Schools			Likely	Students		
			with Prior	Imputing	Imputing	Participants	Sampled	(7a)	(7b)
		(1)	Drug Testing	Missings	Missings	and	Prior to	Block	Baseline
		Alternative	Experience	to Zero	to One	Nonparticipants	Random	Dummies	Outcome
Activity Participation Measure	Benchmark	Weight					Assignment	Only	Measure
Percentage of Students That Participated in a Covered Activity During 2007-2008 School Year[a]	-0.67	-0.55	-1.50	NA	NA	NA	0.37	-2.93	-0.67
Sample Size[b]	**4,723**	**4,723**	**4,300**	**NA**	**NA**	**NA**	**3,881**	**4,723**	**4,723**

Source: Student surveys administered by study team.

Note: For each column, an impact is reported corresponding to the indicated sensitivity analysis. An asterisk indicates impacts that are statistically significant. The column labeled "Benchmark" shows the impacts from the benchmark analytic approach presented earlier in the report. The numbered columns show how the impacts vary as the benchmark approach is changed in specific ways. Specifically:
(1)   replaces the benchmark weight (which, conditional on random assignment probabilities, weights schools equally) with a weight that gives schools with larger enrollments more weight in the analysis.
(2)   drops random assignment block with four schools that had previous drug testing program.
(3)   imputes missing responses to student drug use questions to "not used."
(4)   imputes missing responses to student drug use questions to "used."
(5)   calculates impacts for "likely" participants in covered activities and "likely" nonparticipants instead of actual participants and nonparticipants, according to students' predicted probability of activity participation. The predicted probability of participation is based on past participation, which could not have been affected by MRSDT. Students with a predicted probability greater than the actual participation rate are coded as "likely participants." All other students are coded as "likely nonparticipants."
(6)   includes only students who were sampled prior to random assignment (most of whom are in grades 10-12 at follow-up).
(7a)   drops all covariates except indicator variables for random assignment blocks.
(7b)   drops all covariates except indicator variables for random assignment blocks and baseline version of outcome measure.

[a]Participants in covered activities were identified by comparing student self-reported activity participation from the student survey with lists of covered activities obtained from each district. Students were classified as participants if there was an exact match between the activity listed on the student survey and the district-provided activity lists.

[b]The reported sample size is the number of students who completed a follow-up survey.

MRSDT = Mandatory-Random Student Drug Testing.

NA = not applicable.

TABLE G.7

SENSITIVITY OF IMPACTS ON SCHOOL CONNECTEDNESS

School Connectedness Measure	Benchmark	(1) Alternative Weight	(2) Drop Schools with Prior Drug Testing Experience	(3) Imputing Missings to Zero	(4) Imputing Missings to One	(5) Likely Participants and Nonparticipants	(6) Students Sampled Prior to Random Assignment	(7) Covariates (7a) Block Dummies Only	(7b) Baseline Outcome Measure
Sample 1: Participants in Covered Activities[a]									
Mean School Connectedness Scale[b]	0.006	0.009	0.021	NA	NA	0.018	-0.025	-0.003	0.006
Sample Size[c]	**2,445**	**2,445**	**2,145**	**NA**	**NA**	**2,450**	**1,994**	**2,445**	**2,445**
Sample 2: Nonparticipants									
Mean School Connectedness Scale[b]	0.005	0.006	0.016	NA	NA	-0.010	0.012	0.000	0.005
Sample Size[c]	**2,278**	**2,278**	**2,155**	**NA**	**NA**	**2,273**	**1,887**	**2,278**	**2,278**
Sample 3: All Students									
Mean School Connectedness Scale[b]	0.004	0.006	0.016	NA	NA	NA	-0.011	-0.002	0.004
Sample Size[c]	**4,723**	**4,723**	**4,300**	**NA**	**NA**	**NA**	**3,881**	**4,723**	**4,723**

Source: Student surveys administered by study team.

Note: For each column, an impact is reported corresponding to the indicated sensitivity analysis. An asterisk indicates impacts that are statistically significant. The column labeled "Benchmark" shows the impacts from the benchmark analytic approach presented earlier in the report. The numbered columns show how the impacts vary as the benchmark approach is changed in specific ways. Specifically:

(1)   replaces the benchmark weight (which, conditional on random assignment probabilities, weights schools equally) with a weight that gives schools with larger enrollments more weight in the analysis.
(2)   drops random assignment block with four schools that had previous drug testing program.
(3)   imputes missing responses to student drug use questions to "not used."
(4)   imputes missing responses to student drug use questions to "used."
(5)   calculates impacts for "likely" participants in covered activities and "likely" nonparticipants instead of actual participants and nonparticipants, according to students' predicted probability of activity participation. The predicted probability of participation is based on past participation, which could not have been affected by MRSDT. Students with a predicted probability greater than the actual participation rate are coded as "likely participants." All other students are coded as "likely nonparticipants."
(6)   includes only students who were sampled prior to random assignment (most of whom are in grades 10-12 at follow-up).
(7a)   drops all covariates except indicator variables for random assignment blocks.
(7b)   drops all covariates except indicator variables for random assignment blocks and baseline version of outcome measure.

[a]Participants in covered activities were identified by comparing student self-reported activity participation from the student survey with lists of covered activities obtained from each district. Students were classified as participants if there was an exact match between the activity listed on the student survey and the district-provided activity lists.

[b]The School Connectedness Scale averages student responses to 16 items from the student survey (items 11a–p). For each item, students indicated on a 4-point scale whether they agreed or disagreed with statements such as (11b) "I feel like I belong at this school," (11d) "We do not waste time in my classes," (11f) "Adults at this school act on student concerns," and (11k) "I can be a success at this school." Higher values on the scale indicate greater connection to school.

[c]The reported sample size is the number of students who completed a follow-up survey.

MRSDT = Mandatory-Random Student Drug Testing.

NA = not applicable.

SENSITIVITY OF IMPACTS ON DISCIPLINARY INCIDENTS
IN STUDY SCHOOLS

Incident Measure	Benchmark	(1) Alternative Weight	(2) Drop Schools with Prior Drug Testing Experience	(3) Imputing Missings to Zero	(4) Imputing Missings to One	(5) Likely Participants and Nonparticipants	(6) Students Sampled Prior to Random Assignment	(7) Covariates	
								(7a) Block Dummies Only	(7b) Baseline Outcome Measure
Number of the Following Incidents (per 1,000 Students) Reported by Schools During the 2007-2008 School Year:									
Expulsions	-3.61	NA	-8.56	NA	NA	NA	NA	-6.98	-7.47
Distribution, possession, or use of illegal drugs	0.67	NA	0.43	NA	NA	NA	NA	1.04	0.32
Distribution, possession, or use of alcohol	-0.15	NA	0.73	NA	NA	NA	NA	0.33	0.33
Physical attacks or fights	-4.17	NA	-5.25	NA	NA	NA	NA	-2.37	-2.67
Sample Size[a]	**36**	**NA**	**32**	**NA**	**NA**	**NA**	**NA**	**36**	**36**

Source: Schoolwide records forms administered by study team.

Note: For each column, an impact is reported corresponding to the indicated sensitivity analysis. An asterisk indicates impacts that are statistically significant. The column labeled "benchmark" shows the impacts from the benchmark analytic approach presented earlier in the report. The numbered columns show how the impacts vary as the benchmark approach is changed in specific ways. Specifically:
(1) replaces the benchmark weight (which, conditional on random assignment probabilities, weights schools equally) with a weight that gives schools with larger enrollments more weight in the analysis.
(2) drops random assignment block with four schools that had previous drug testing program.
(3) imputes missing responses to student drug use questions to "not used."
(4) imputes missing responses to student drug use questions to "used."
(5) calculates impacts for "likely" participants in covered activities and "likely" nonparticipants instead of actual participants and nonparticipants, according to students' predicted probability of activity participation. The predicted probability of participation is based on past participation, which could not have been affected by MRSDT. Students with a predicted probability greater than the actual participation rate are coded as "likely participants." All other students are coded as "likely nonparticipants."
(6) includes only students who were sampled prior to random assignment (most of whom are in grades 10-12 at follow-up).
(7a) drops all covariates except indicator variables for random assignment blocks.
(7b) drops all covariates except indicator variables for random assignment blocks and baseline version of outcome measure.

[a]The reported sample size is the number of schools.

MRSDT = Mandatory-Random Student Drug Testing.

NA = not applicable.

C. IMPUTE MISSING VALUES ON SUBSTANCE USE MEASURES

As described in Chapter II, retrospective substance use was measured with three composite variables constructed from the 10 individual substance use items on the student survey. In constructing these outcomes, we coded students as "missing" on the composite if they either did not respond to any of the individual substance use items or had a combination of missing and negative responses to the individual substance use items (because with such a combination, we cannot determine whether the student should be coded as "used" or "not used" on the composite outcome). Although no significant differences in missing rates between the treatment and control groups were found (see Appendix D), for a sensitivity test, we assessed whether impacts were robust to imputing all missing values on the substance use composites to indicate either of the following:

- *That the Missing Substance Was Used.* This approach yields an upper-bound estimate of the rate at which students used substances.

- *That the Missing Substance Was Not Used.* This approach yields a lower-bound estimate of the rate at which students used substances.

Imputing the missing substance to "used" changes the statistical significance of 1 of 24 impacts (see Table G.1 through Table G.4). The impact on past 30-day use of any district-tested substance for participants in covered activities loses statistical significance (see Table G.1). The impact changes from –5.46 to –4.73, and the adjusted *p*-value (not shown in Table G.1) increases from 0.045 to 0.059.

Imputing the missing substance to "not used" changes the statistical significance of 1 of 24 impacts (see Table G.1 through Table G.4). The impact on past 30-day use of district-tested substances for participants in covered activities loses statistical significance (see Table G.1). The impact changes from –5.46 to –5.59, and the adjusted *p*-value (not shown in Table G.1) increases from 0.045 to 0.069.

D. ESTIMATE IMPACTS ON LIKELY PARTICIPANTS

As a sensitivity test of the impacts on outcomes for actual covered-activity participants, the study team calculated impacts on students who were predicted to participate in covered extracurricular activities based on past participation in these activities. While covered-activity participation rates, as well as the characteristics of covered-activity participants, were found to be similar in treatment and control schools (see Appendix D), it is possible that MRSDT affected the composition of covered-activity participants in the treatment group in unobserved ways. If this happened, then impacts on the substance use of actual covered-activity participants could be misleading, because those impacts could reflect not changes in substance use, but rather changes in the proportion of substance users who participate in covered activities. Since past activity participation could not have been affected by the intervention, calculating impacts on likely participants instead of actual participants provides an unbiased estimate of the impact of MRSDT on students who were likely to have participated in covered activities in the absence of the intervention.

The study team identified likely participants using a two-step procedure. First, using students in the external school sample (described in Chapter II), we estimated a logistic regression in which baseline participation in activities and other student characteristics were used to predict covered-activity participation at follow-up. Second, we used the parameter estimates from this model and the actual baseline characteristics of students in the treatment and control groups to predict the probability of covered-activity participation for students in the treatment and control groups. Students were coded as "likely participants" if their predicted probability of participating was greater than the proportion of students who actually participated. Diagnostic analysis shows 80 percent concordance between actual covered-activity participation and predicted covered-activity participation status in the control group and 77 percent concordance in the treatment group. Eighty percent concordance means that for 80 percent of students, their actual participation status was the same as their predicted participation status.

Calculating impacts on likely participants instead of actual participants does not change the statistical significance of any of 22 impacts (see Table G.1 through Table G.5 as well as Table G.7).

E.   DROP STUDENTS SAMPLED AFTER RANDOM ASSIGNMENT

As described in Chapter II, a second round of sampling occurred in fall 2007, when the study team selected a random sample of 9th graders (as of the 2007–2008 school year) who were new to the study schools. Dropping these students from the analysis reduces both statistical power and the study's ability to generalize impacts to all students enrolled in grades 9 through 12 at the time of the follow-up survey. However, because these students started high school after random assignment, it is possible that MRSDT affected their choice of school to attend, which could bias estimates of the impact of MRSDT on retrospective substance use and other student outcomes.

Calculating impacts only for students sampled prior to random assignment changes the statistical significance of 1 of 34 outcomes (see Table G.1 through Table G.7). The impact on past 30-day use of any district-tested substance for participants in covered activities loses statistical significance (see Table G.1). The impact changes from –5.46 to –4.46, and the adjusted *p*-value (not shown in Table G.1) is increased from 0.045 to 0.286. Because we would expect to lose statistical precision when dropping a large number of students from the analysis sample, we do not believe this undermines the finding that MRSDT had an impact on students' use of district-tested substances in the past 30 days.

F.   ADJUST THE COVARIATES INCLUDED IN REGRESSION MODELS

Three types of covariates are included in the impact regression models: (1) random assignment block indicator variables, (2) the baseline measure of the outcome variables, and (3) additional covariates selected to increase statistical precision in specific cases (described in Appendix F). We examined the sensitivity of impacts to removing the second and third categories of variables. We always included the blocking variables in order to accurately reflect the design of the study and the reduction in degrees of freedom associated with blocking.

Calculating impacts adjusting only for blocking variables changes the statistical significance of 1 of 38 impacts (see Table G.1 through Table G.8). The impact on past 30-day use of any district-tested substance for the full sample of all students becomes statistically significant (see Table G.3). The impact remains –4.19, but the adjusted *p*-value (not shown in Table G.3) is reduced from 0.054 to 0.04.

Calculating impacts adjusting for blocking variables and the baseline measure of the outcome variables changes the statistical significance of 1 of 38 impacts (see Table G.1 through Table G.8). The impact on past 30-day use of district-tested substances for the full sample of all students becomes statistically significant (see Table G.3). The impact remains –4.19, but the adjusted *p*-value (not shown in Table G.3) is reduced from 0.054 to 0.033.

APPENDIX H

IMPACTS ON INDIVIDUAL SUBSTANCES

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Impacts on the use and frequency of 10 individual substances are included in this appendix and shown in Table H.1. Impacts on individual substances are presented because some readers may be interested only in impacts on specific substances. Because of this, the statistical significance of these impacts is *not* adjusted for multiple hypothesis testing. The specific substances examined match the 10 substance types included on the student survey: alcohol, cigarettes, chewing tobacco, marijuana, cocaine, steroids, inhalants, narcotics, amphetamines, and "any other illegal drug." The statistical models used to estimate impacts are the same as those used for the main impacts presented in Chapter IV, except that adjustments are not made for multiple hypothesis testing. For the measures of frequency of use, we converted the categorical items from the student survey into continuous variables by assigning the mid-point of each response category—for example, the category for "1-2" uses was coded as 1.5. (The category for "40 or more uses" was top-coded at 50.) As described in Chapter II, the smallest program impacts the study can detect with high probability range from 7.2 percentage points for outcomes with 30 percent prevalence to 1.2 percentage points for outcomes with 2 percent prevalence. Therefore, for low prevalence outcomes (such as steroids), we can only detect a statistically significant program impact if prevalence rates are cut in half.

One of the 120 impacts presented in Table H.1 is statistically significant. Among students who did not participate in covered activities, there is a significant 1.2 percentage point impact on the prevalence of cocaine use in the past 6 months. There were no significant impacts on the frequency of use of any of the substances. Because statistical significance was not adjusted for multiple hypothesis testing, the probability of finding at least one impact due to random chance among the 120 presented in Table H.1 was 99.8 percent (assuming independent tests). Findings were similar when we limited the sample of covered-activity participants to only those students who participated in a covered activity the month before the spring 2008 follow-up survey.

TABLE H.1

IMPACTS OF MRSDT ON USE OF INDIVIDUAL SUBSTANCES

Substance	Percentage of Students That Reported Using Substance in the Past:				Number of Occasions Student Reported Using Substance in the Past:			
	Six Months		30 Days		Six Months		30 Days	
	Control Group Mean	Impact	Control Group Mean	Impact	Control Group Mean	Impact	Control Group Mean	Impact
Sample 1: Participants in Covered Activities[a]								
Cigarettes	22.6	-1.4	15.5	-2.0	4.3	-0.2	3.1	-0.5
Chewing tobacco	12.0	-0.8	9.1	-1.4	2.8	-0.3	2.5	-0.5
Alcohol	46.4	-1.6	28.4	-3.6	4.7	0.1	2.2	0.0
Marijuana	14.6	-2.2	9.7	-2.6	2.0	-0.5	1.1	-0.1
Cocaine	1.7	0.3	1.1	0.3	0.4	-0.2	0.4	-0.1
Steroids[b]	2.8	-0.3	1.9	-0.3	0.6	-0.2	0.4	-0.1
Inhalants[c]	3.0	1.5	1.6	0.9	0.2	0.1	0.2	0.1
Narcotics[d]	3.2	0.5	2.3	0.2	0.5	0.0	0.4	-0.1
Amphetamines[e]	3.5	1.2	1.9	1.2	0.4	0.2	0.3	0.2
Any other illegal drug	2.9	1.1	1.9	0.6	0.4	0.2	0.3	0.2
Sample Size[f]		**2,445**		**2,445**		**2,445**		**2,445**
Sample 2: Nonparticipants								
Cigarettes	25.7	0.4	17.2	1.4	5.3	0.8	3.9	0.6
Chewing tobacco	7.5	0.6	5.4	0.6	1.5	0.1	1.4	0.1
Alcohol	42.2	2.4	25.6	-1.2	4.5	0.1	2.3	-0.4
Marijuana	17.3	1.3	11.1	2.4	3.0	0.1	2.2	-0.2
Cocaine	1.7	1.2*	1.4	0.5	0.4	0.1	0.3	0.1
Steroids[b]	1.4	0.3	1.5	-0.3	0.4	-0.1	0.3	0.0
Inhalants[c]	3.4	1.3	2.0	0.3	0.3	0.3	0.2	0.3
Narcotics[d]	2.9	1.0	1.8	0.6	0.5	-0.1	0.4	0.0
Amphetamines[e]	4.2	1.2	2.3	0.6	0.5	0.2	0.3	0.1
Any other illegal drug	5.3	0.5	3.4	0.5	0.8	-0.1	0.7	-0.1
Sample Size[f]		**2,278**		**2,278**		**2,278**		**2,278**
Sample 3: All Students								
Cigarettes	24.0	-0.4	16.3	-0.4	4.8	0.2	3.5	0.0
Chewing tobacco	9.9	-0.3	7.5	-0.5	2.2	-0.1	2.0	-0.3
Alcohol	44.6	0.1	27.3	-2.8	4.7	0.1	2.3	-0.2
Marijuana	16.0	-0.7	10.4	-0.5	2.5	-0.2	1.6	-0.1
Cocaine	1.7	0.7	1.3	0.4	0.4	-0.1	0.4	0.0
Steroids[b]	2.2	0.0	1.7	-0.3	0.5	-0.2	0.4	-0.1
Inhalants[c]	3.3	1.3	1.8	0.6	0.2	0.2	0.2	0.2
Narcotics[d]	3.1	0.7	2.1	0.4	0.5	0.0	0.4	0.0
Amphetamines[e]	3.9	1.1	2.1	1.0	0.4	0.2	0.3	0.2
Any other illegal drug	4.0	0.8	2.7	0.5	0.6	0.1	0.5	0.0
Sample Size[f]		**4,723**		**4,723**		**4,723**		**4,723**

Source: Student surveys administered by study team.

Note: The numbers reported in the column labeled "Control Group Mean" are the average predicted outcomes for all students as if they were in the control group. Specifically, a predicted value is generated for every student using the student's actual characteristics, the coefficients from the impact regression, and the treatment variable set equal to zero. The average predicted outcome for the control group is the average of these predicted values. Impacts for each substance use item are regression adjusted for random assignment block indicator variables, baseline measures of the outcome variable, and additional covariates that were chosen to improve statistical precision (the method for selecting covariates is described in Appendix F). A variable indicating which students were 16 years old was also included as a covariate in impact models for activity participants (sample 1), since the analysis of baseline equivalence found a statistically significant treatment/control difference on that variable. Statistical significance tests are adjusted to account for clustering of students within schools. The data are weighted to account for random assignment, sampling, consent, and nonresponse probabilities. The weights are scaled so that, conditional on random assignment probabilities, each school receives equal weight.

[a]Participants in covered activities were identified by comparing student self-reported activity participation from the student survey with lists of covered activities obtained from each district. Students were classified as participants if there was an exact match between the activity listed on the student survey and the district-provided activity lists.

[b]This category includes use of steroids or other muscle-building drugs such as androstenedione or human growth hormone without a doctor's prescription.

[c]This category includes sniffing glue, breathing the contents of aerosol spray cans, or inhaling any other gases or sprays.

[d]This category includes the use of narcotic drugs such as heroin, methadone, opium, codeine, or Demerol without a doctor's prescription.

[e]This category includes the use of amphetamines, methamphetamines, or Ritalin without a prescription.

[f]The reported sample size is the number of students who completed a follow-up survey.

*Significantly different from zero at the .05 level, two-tailed test.

MRSDT = Mandatory-Random Student Drug Testing.

APPENDIX I

IMPACTS ON STUDENT SUBGROUPS

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As explained in Chapter V, in addition to examining how the impacts of MRSDT may differ according to program implementation characteristics, we also examined whether impacts differ according to student characteristics. Specifically, we calculated impacts separately for subgroups defined by the following student characteristics:

- Gender

- Race (black or white)

- Hispanic ethnicity

- Grade level

- Self-reported academic grades

These subgroups were defined based on characteristics of students that have been shown to be correlated with substance use in prior research (Bachman et al. 2008, Johnston et al. 2008) and are therefore of interest because the impacts of MRSDT might vary across these subgroups. Information on gender, race, Hispanic ethnicity, and grade level is available for all students in the analysis sample; analyses of self-reported academic grades are limited to students with baseline data.

We also estimated impacts separately for subgroups defined by student self-reported baseline substance use and student knowledge of MRSDT at baseline. Impacts may differ according to students' baseline substance use if drug testing has a different effect on students who have never used substances (that is, preventing them from using for the first time) than on current or former substance users (that is, reducing the prevalence of substance use). As explained in Chapter III, impacts may also differ according to student knowledge of MRSDT at baseline, because impacts could be attenuated for students who thought they were already subject to testing. These two subgroup analyses are limited to students with baseline data.

Student subgroup impacts were estimated using the same methodological approach as the main impacts. So that the statistical significance standards used in the subgroup analyses are comparable to the main impact analysis, adjustments for multiple hypothesis testing were made within each subgroup analysis but not across subgroup analyses. All of these student subgroup impacts have a causal interpretation, because the subgroups are defined by characteristics that were measured on the baseline survey (administered prior to random assignment) or that were measured on the follow-up survey but could not have been affected by random assignment. Specifically, self-reported grades, awareness of MRSDT, and lifetime substance use were all measured using the baseline survey. Gender, race, Hispanic ethnicity, and grade level were all measured on the follow-up survey but could not have been affected by random assignment.

We found no statistically significant impact of MRSDT for any subgroup on any outcome measure (see Table I.1 through Table I.26). Of the 596 tests conducted, none of the impacts is significant. We also found no significant difference in impacts between any of the subgroups.

If we do not adjust for multiple hypothesis testing, two of the 596 subgroup impacts are statistically significant: (1) the impact of -12.336 percentage points on past 30-day use of any district-tested substance for covered-activity participants who reported no lifetime use of any district-tested substance at baseline (see Table I.2), and (2) the impact of -7.865 percentage points on the use of any district-tested substance for the full sample of all students who reported some lifetime use of any substance at baseline (see Table I.8). Without the adjustment for multiple hypothesis testing, there is also a statistically significant difference in impacts of 0.150 points on the School Connectedness Scale between nonparticipants who reported no lifetime use and those who reported some lifetime use (see Table I.24).

Finally, we also conducted one nonexperimental subgroup analysis that does not have a causal interpretation. This analysis examined whether impacts are larger for students who indicated on the follow-up survey that they or someone they knew had been tested for drugs in the past six months. The motivation for this analysis is that the deterrent effects of MRSDT might be stronger for these students than for students who did not know anyone who had been tested. Impacts for this analysis do not have a causal interpretation because the subgroups are defined by characteristics that were measured on the follow-up survey and that were likely affected by random assignment. The results of this analysis (not shown) found no statistically significant impact of MRSDT on retrospective substance use for either subgroup.

TABLE I.1

IMPACTS OF MRSDT ON RETROSPECTIVE SUBSTANCE USE FOR PARTICIPANTS IN COVERED ACTIVITIES,
BY GENDER, RACE, AND ETHNICITY

Substance Use Measure	Gender (Pane 1)			Race (Pane 2)			Ethnicity (Pane 3)		
	Impact for Males	Impact for Females	Difference	Impact for Whites	Impact for Blacks	Difference	Impact for Hispanics	Impact for Non-Hispanics	Difference
Percentage of Students That Reported Using the Following in the Last Six Months:									
Any substance[a]	-3.699	-6.305	2.607	-3.571	-3.578	0.007	-10.791	-3.947	-6.844
Any substance except alcohol and tobacco	-0.165	-4.424	4.258	-1.893	-0.080	-1.813	-3.755	-2.145	-1.610
Any substance tested by the district's MRSDT program[b]	-5.056	-5.475	0.420	-3.894	-4.125	0.231	-7.385	-4.966	-2.419
Percentage of Students That Reported Using the Following in the Last 30 Days:									
Any substance[a]	-3.362	-8.043	4.680	-6.508	-3.831	-2.677	-6.473	-5.423	-1.050
Any substance except alcohol and tobacco	-1.491	-3.305	1.814	-2.785	-2.261	-0.524	-2.971	-2.394	-0.577
Any substance tested by the district's MRSDT program[b]	-4.828	-5.994	1.166	-4.443	-6.377	1.934	-7.881	-5.057	-2.824
Sample Size[c]	**1,176**	**1,269**		**1,629**	**489**		**291**	**2,148**	

Source: Student surveys administered by study team.

Note: Impacts for each subgroup are regression adjusted for random assignment block indicator variables, baseline measures of the outcome variables, and additional covariates that were chosen to improve statistical precision (the method for selecting covariates is described in Appendix F). An indicator variable for 16-year old students was included as an additional covariate in the models, since the analysis of baseline equivalence found a statistically significant treatment/control difference on that variable. The columns labeled "Difference" show the difference in impacts between two subgroups. Statistical significance tests are adjusted to account for clustering of students within schools and for multiple hypothesis testing (MHT) in order to control for the probability of finding any falsely significant impacts (the family-wise error rate) at 5 percent. The adjustment for MHT is based on the multivariate t-distribution and takes into account correlations among test statistics. This adjustment is applied separately to panes 1, 2, and 3 and accounts for all tests presented within each pane. The adjustment does not take into account statistical tests presented across multiple panes or in other tables in this report. The data are weighted to account for random assignment, sampling, consent, and nonresponse probabilities. The weights are scaled so that, conditional on random assignment probabilities, each school receives equal weight.

I.5

TABLE I.1 *(continued)*

[a]The "Any Substance" category reflects students' reported use of the following substances: cigarettes, chewing tobacco, alcohol, marijuana, cocaine, steroids or other muscle-building drugs, glue or other inhalants, narcotic drugs such as heroin or codeine, amphetamines or methamphetamines without a prescription, and any other illegal drug.

[b]This category reflects the substances tested by each participating district as part of its MRSDT program. The tested substances vary *across* districts but are the same *within* each district.

[c]The reported sample size is the number of students who completed a follow-up survey.

MRSDT = Mandatory-Random Student Drug Testing.

TABLE I.2

IMPACTS OF MRSDT ON RETROSPECTIVE SUBSTANCE USE FOR PARTICIPANTS IN COVERED ACTIVITIES,
BY BASELINE SUBSTANCE USE

	Baseline Substance Use								
	Lifetime Use of Any Substance[a] (Pane 1)			Lifetime Use of Any Substance Except Alcohol and Tobacco (Pane 2)			Lifetime Use of Any Substance Tested by the District's MRSDT Policy[b] (Pane 3)		
	Impact for Students with:			Impact for Students with:			Impact for Students with:		
Follow-Up Substance Use Measure	Any Use	No Use	Difference	Any Use	No Use	Difference	Any Use	No Use	Difference
Percentage of Students That Reported Using the Following in the Last Six Months:									
Any substance[a]	-6.244	-5.480	-0.765	-6.110	-5.151	-0.959	-9.495	-4.741	-4.754
Any substance except alcohol and tobacco	-3.804	-0.862	-2.942	-0.683	-4.492	3.809	-5.400	-2.136	-3.264
Any substance tested by the district's MRSDT program[b]	-3.990	-0.922	-3.068	-1.409	-4.201	2.792	-3.813	-2.938	-0.875
Percentage of Students That Reported Using the Following in the Last 30 Days:									
Any substance[a]	-8.235	-5.459	-2.776	-6.716	-7.058	0.342	-10.033	-6.385	-3.648
Any substance except alcohol and tobacco	-4.640	-1.829	-2.810	-6.494	-3.048	-3.446	-6.625	-2.539	-4.087
Any substance tested by the district's MRSDT program[b]	-9.305	-4.256	-5.048	-9.601	-7.450	-2.151	-12.336	-4.663	-7.673
Sample Size[c]	**763**	**429**		**315**	**871**		**446**	**746**	

Source: Student surveys administered by study team.

Note: Impacts for each subgroup are regression adjusted for random assignment block indicator variables, baseline measures of the outcome variables, and additional covariates that were chosen to improve statistical precision (the method for selecting covariates is described in Appendix F). An indicator variable for 16-year old students was included as an additional covariate in the models, since the analysis of baseline equivalence found a statistically significant treatment/control difference on that variable. The columns labeled "Difference" show the difference in impacts between two subgroups. Statistical significance tests are adjusted to account for clustering of students within schools and for multiple hypothesis testing (MHT) in order to control for the probability of finding any falsely significant impacts (the family-wise error rate) at 5 percent. The adjustment for MHT is based on the multivariate t-distribution and takes into account correlations among test statistics. This adjustment is applied separately to panes 1, 2, and 3 and accounts for all tests presented within each pane. The adjustment does not take into account statistical tests presented across multiple panes or in other tables in this report. The data are weighted to account for random

I.7

TABLE I.2 *(continued)*

assignment, sampling, consent, and nonresponse probabilities. The weights are scaled so that, conditional on random assignment probabilities, each school receives equal weight.

[a]The "Any Substance" category reflects students' reported use of the following substances: cigarettes, chewing tobacco, alcohol, marijuana, cocaine, steroids or other muscle-building drugs, glue or other inhalants, narcotic drugs such as heroin or codeine, amphetamines or methamphetamines without a prescription, and any other illegal drug.

[b]This category reflects the substances tested by each participating district as part of their MRSDT program. The tested substances vary *across* districts but are the same *within* each district.

[c]The reported sample size is the number of activity participants who completed both the baseline and follow-up surveys.

MRSDT = Mandatory-Random Student Drug Testing.

TABLE I.3

IMPACTS OF MRSDT ON RETROSPECTIVE SUBSTANCE USE FOR PARTICIPANTS IN COVERED ACTIVITIES,
BY GRADE LEVEL

Substance Use Measure	Impacts for:				Difference in Impacts Between:					
	9th Graders	10th Graders	11th Graders	12th Graders	9th and 10th Graders	9th and 11th Graders	9th and 12th Graders	10th and 11th Graders	10th and 12th Graders	11th and 12th Graders
Percentage of Students That Reported Using the Following in the Last Six Months:										
Any substance[a]	-4.597	-10.822	-0.626	-2.576	6.225	-3.971	-2.021	-10.196	-8.246	1.950
Any substance except alcohol and tobacco	-4.398	-2.471	-4.695	3.013	-1.927	0.297	-7.412	2.224	-5.484	-7.709
Any substance tested by the district's MRSDT program[b]	-6.015	-7.188	-3.261	-3.157	1.173	-2.753	-2.858	-3.927	-4.031	-0.104
Percentage of Students That Reported Using the Following in the Last 30 Days:										
Any substance[a]	-8.521	-8.578	-4.222	-0.399	0.057	-4.299	-8.122	-4.356	-8.179	-3.823
Any substance except alcohol and tobacco	-2.387	-4.265	-3.516	1.181	1.878	1.129	-3.568	-0.749	-5.446	-4.696
Any substance tested by the district's MRSDT program[b]	-6.410	-9.666	-2.750	-1.324	3.256	-3.660	-5.086	-6.916	-8.342	-1.426
Sample Size[c]	**415**	**735**	**708**	**587**						

Source: Student surveys administered by study team.

Note: Grade level is measured at time of the follow-up survey. Impacts for each subgroup are regression adjusted for random assignment block indicator variables, baseline measures of the outcome variables, and additional covariates that were chosen to improve statistical precision (the method for selecting covariates is described in Appendix F). A variable indicating which students were 16 years old was also included as a covariate in impact models for activity participants, since the analysis of baseline equivalence found a statistically significant treatment/control difference on that variable. The columns labeled "Difference" show the difference in impacts between two subgroups. Statistical significance tests are adjusted to account for clustering of students within schools and for multiple hypothesis testing (MHT) in order to control for the probability of finding any falsely significant impacts (the family-wise error rate) at 5 percent. The adjustment for MHT is based on the multivariate t-distribution and takes into account correlations among test statistics. This adjustment accounts for all tests presented in this table but not for tests presented in other tables of this report. The data are weighted to account for random assignment, sampling, consent, and nonresponse probabilities. The weights are scaled so that, conditional on random assignment probabilities, each school receives equal weight.

[a]The "Any Substance" category reflects students' reported use of the following substances: cigarettes, chewing tobacco, alcohol, marijuana, cocaine, steroids or other muscle-building drugs, glue or other inhalants, narcotic drugs such as heroin or codeine, amphetamines or methamphetamines without a prescription, and any other illegal drug.

TABLE I.3 *(continued)*

[b]This category reflects the substances tested by each participating district as part of its MRSDT program. The tested substances vary *across* districts but are the same *within* each district.

[c]The reported sample size is the number of activity participants who completed a follow-up survey.

MRSDT = Mandatory-Random Student Drug Testing.

TABLE I.4

IMPACTS OF MRSDT ON RETROSPECTIVE SUBSTANCE USE FOR NONPARTICIPANTS,
BY GENDER, RACE, AND ETHNICITY

Substance Use Measure	Gender (Pane 1)			Race (Pane 2)			Ethnicity (Pane 3)		
	Impact for Males	Impact for Females	Difference	Impact for Whites	Impact for Blacks	Difference	Impact for Hispanics	Impact for Non-Hispanics	Difference
Percentage of Students That Reported Using the Following in the Last Six Months:									
Any substance[a]	2.755	2.913	-0.157	0.944	-1.461	2.405	9.505	1.500	8.005
Any substance except alcohol and tobacco	0.566	-0.053	0.619	1.569	-6.078	7.647	-0.173	0.193	-0.367
Any substance tested by the district's MRSDT program[b]	1.248	0.551	0.697	0.566	-6.119	6.684	7.891	-0.472	8.363
Percentage of Students That Reported Using the Following in the Last 30 Days:									
Any substance[a]	1.054	-0.153	1.207	-0.662	0.782	-1.444	-1.673	0.345	-2.018
Any substance except alcohol and tobacco	-1.515	-1.460	-0.055	-0.291	-4.905	4.614	-3.614	-1.216	-2.397
Any substance tested by the district's MRSDT program[b]	-3.751	-1.474	-2.277	-3.878	-2.683	-1.195	-1.638	-2.878	1.240
Sample Size[c]	**1,008**	**1,270**		**1,537**	**400**		**357**	**1,903**	

Source: Student surveys administered by study team.

Note: Impacts for each subgroup are regression adjusted for random assignment block indicator variables, baseline measures of the outcome variables, and additional covariates that were chosen to improve statistical precision (the method for selecting covariates is described in Appendix F). The columns labeled "Difference" show the difference in impacts between two subgroups. Statistical significance tests are adjusted to account for clustering of students within schools and for multiple hypothesis testing (MHT) in order to control for the probability of finding any falsely significant impacts (the family-wise error rate) at 5 percent. The adjustment for MHT is based on the multivariate t-distribution and takes into account correlations among test statistics. This adjustment is applied separately to panes 1, 2, and 3 and accounts for all tests presented within each pane. The adjustment does not take into account statistical tests presented across multiple panes or in other tables in this report. The data are weighted to account for random assignment, sampling, consent, and nonresponse probabilities. The weights are scaled so that, conditional on random assignment probabilities, each school receives equal weight.

TABLE I.4 *(continued)*

[a]The "Any Substance" category reflects students' reported use of the following substances: cigarettes, chewing tobacco, alcohol, marijuana, cocaine, steroids or other muscle-building drugs, glue or other inhalants, narcotic drugs such as heroin or codeine, amphetamines or methamphetamines without a prescription, and any other illegal drug.

[b]This category reflects the substances tested by each participating district as part of its MRSDT program. The tested substances vary *across* districts but are the same *within* each district.

[c]The reported sample size is the number of nonparticipants who completed a follow-up survey.

MRSDT = Mandatory-Random Student Drug Testing.

TABLE I.5

IMPACTS OF MRSDT ON RETROSPECTIVE SUBSTANCE USE FOR NONPARTICIPANTS,
BY BASELINE SUBSTANCE USE

	Baseline Substance Use								
	Lifetime Use of Any Substance[a] (Pane 1)			Lifetime Use of Any Substance Except Alcohol and Tobacco (Pane 2)			Lifetime Use of Any Substance Tested by the District's MRSDT Policy[b] (Pane 3)		
	Impact for Students with:			Impact for Students with:			Impact for Students with:		
Follow-Up Substance Use Measure	Any Use	No Use	Difference	Any Use	No Use	Difference	Any Use	No Use	Difference
Percentage of Students That Reported Using the Following in the Last Six Months:									
Any substance[a]	1.482	1.252	0.229	-0.496	1.975	-2.471	0.150	1.481	-1.330
Any substance except alcohol and tobacco	1.959	-0.763	2.721	2.066	1.817	0.249	0.297	1.376	-1.079
Any substance tested by the district's MRSDT program[b]	-1.276	-2.056	0.780	-1.400	-0.134	-1.266	-2.156	-1.093	-1.063
Percentage of Students That Reported Using the Following in the Last 30 Days:									
Any substance[a]	0.784	-0.975	1.759	-0.012	0.857	-0.869	-0.921	-0.362	-0.559
Any substance except alcohol and tobacco	-0.526	-1.455	0.929	2.104	-0.530	2.634	0.793	-2.006	2.798
Any substance tested by the district's MRSDT program[b]	-6.173	-0.044	-6.130	-3.658	-2.274	-1.384	-6.999	-2.178	-4.822
Sample Size[c]	**714**	**347**		**344**	**710**		**480**	**581**	

Source: Student surveys administered by study team.

Note: Impacts for each subgroup are regression adjusted for random assignment block indicator variables, baseline measures of the outcome variables, and additional covariates that were chosen to improve statistical precision (the method for selecting covariates is described in Appendix F). The columns labeled "Difference" show the difference in impacts between two subgroups. Statistical significance tests are adjusted to account for clustering of students within schools and for multiple hypothesis testing (MHT) in order to control for the probability of finding any falsely significant impacts (the family-wise error rate) at 5 percent. The adjustment for MHT is based on the multivariate t-distribution and takes into account correlations among test statistics. This adjustment is applied separately to panes 1, 2, and 3 and accounts for all tests presented within each pane. The adjustment does not take into account statistical tests presented across multiple panes or in other tables in this report. The data are weighted to account for random assignment, sampling, consent, and nonresponse probabilities. The weights are scaled so that, conditional on random assignment probabilities, each school receives equal weight.

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TABLE I.5 *(continued)*

[a]The "Any Substance" category reflects students' reported use of the following substances: cigarettes, chewing tobacco, alcohol, marijuana, cocaine, steroids or other muscle-building drugs, glue or other inhalants, narcotic drugs such as heroin or codeine, amphetamines or methamphetamines without a prescription, and any other illegal drug.

[b]This category reflects the substances tested by each participating district as part of their MRSDT program. The tested substances vary *across* districts but are the same *within* each district.

[c]The reported sample size is the number of nonparticipants who completed both the baseline and follow-up surveys.

MRSDT = Mandatory-Random Student Drug Testing.

TABLE I.6

IMPACTS OF MRSDT ON RETROSPECTIVE SUBSTANCE USE FOR NONPARTICIPANTS,
BY GRADE LEVEL

Substance Use Measure	Impacts for:				Difference in Impacts Between:					
	9th Graders	10th Graders	11th Graders	12th Graders	9th and 10th Graders	9th and 11th Graders	9th and 12th Graders	10th and 11th Graders	10th and 12th Graders	11th and 12th Graders
Percentage of Students That Reported Using the Following in the Last Six Months:										
Any substance[a]	2.147	5.387	6.311	-2.024	-3.240	-4.163	4.171	-0.924	7.410	8.334
Any substance except alcohol and tobacco	-4.034	-0.871	7.065	-0.073	-3.162	-11.098	-3.960	-7.936	-0.798	7.138
Any substance tested by the district's MRSDT program[b]	-0.924	0.498	6.338	-2.181	-1.422	-7.263	1.257	-5.841	2.679	8.520
Percentage of Students That Reported Using the Following in the Last 30 Days:										
Any substance[a]	-2.223	-0.415	3.166	2.015	-1.808	-5.390	-4.238	-3.582	-2.430	1.152
Any substance except alcohol and tobacco	-3.100	-4.912	4.355	-1.115	1.812	-7.455	-1.985	-9.267	-3.797	5.470
Any substance tested by the district's MRSDT program[b]	-1.376	-6.937	0.277	-1.861	5.561	-1.653	0.484	-7.214	-5.077	2.138
Sample Size[c]	**392**	**707**	**618**	**561**						

Source: Student surveys administered by study team.

Note: Grade level is measured at time of the follow-up survey. Impacts for each subgroup are regression adjusted for random assignment block indicator variables, baseline measures of the outcome variables, and additional covariates that were chosen to improve statistical precision (the method for selecting covariates is described in Appendix F). The columns labeled "Difference" show the difference in impacts between two subgroups. Statistical significance tests are adjusted to account for clustering of students within schools and for multiple hypothesis testing (MHT) in order to control for the probability of finding any falsely significant impacts (the family-wise error rate) at 5 percent. The adjustment for MHT is based on the multivariate t-distribution and takes into account correlations among test statistics. This adjustment accounts for all tests presented in this table but not for tests presented in other tables of this report. The data are weighted to account for random assignment, sampling, consent, and nonresponse probabilities. The weights are scaled so that, conditional on random assignment probabilities, each school receives equal weight.

[a]The "Any Substance" category reflects students' reported use of the following substances: cigarettes, chewing tobacco, alcohol, marijuana, cocaine, steroids or other muscle-building drugs, glue or other inhalants, narcotic drugs such as heroin or codeine, amphetamines or methamphetamines without a prescription, and any other illegal drug.

TABLE I.6 *(continued)*

[b]This category reflects the substances tested by each participating district as part of its MRSDT program. The tested substances vary *across* districts but are the same *within* each district.

[c]The reported sample size is the number of nonparticipants who completed a follow-up survey.

MRSDT = Mandatory-Random Student Drug Testing.

TABLE I.7

IMPACTS OF MRSDT ON RETROSPECTIVE SUBSTANCE USE FOR ALL STUDENTS,
BY GENDER, RACE, AND ETHNICITY

Substance Use Measure	Gender (Pane 1)			Race (Pane 2)			Ethnicity (Pane 3)		
	Impact for Males	Impact for Females	Difference	Impact for Whites	Impact for Blacks	Difference	Impact for Hispanics	Impact for Non-Hispanics	Difference
Percentage of Students That Reported Using the Following in the Last Six Months:									
Any substance[a]	-1.359	-1.579	0.220	-1.596	-2.608	1.013	0.066	-1.619	1.685
Any substance except alcohol and tobacco	-0.016	-2.289	2.273	-0.265	-2.589	2.323	-2.116	-1.093	-1.024
Any substance tested by the district's MRSDT program[b]	-2.486	-2.543	0.057	-1.875	-4.773	2.898	0.723	-3.047	3.769
Percentage of Students That Reported Using the Following in the Last 30 Days:									
Any substance[a]	-1.567	-4.127	2.560	-3.809	-1.564	-2.245	-4.217	-2.797	-1.421
Any substance except alcohol and tobacco	-1.429	-2.368	0.938	-1.599	-3.269	1.671	-3.411	-1.758	-1.653
Any substance tested by the district's MRSDT program[b]	-4.446	-3.887	-0.559	-4.210	-4.466	0.256	-4.683	-4.133	-0.550
Sample Size[c]	**2,184**	**2,539**		**3,166**	**889**		**648**	**4,051**	

Source: Student surveys administered by study team.

Note: Impacts for each subgroup are regression adjusted for random assignment block indicator variables, baseline measures of the outcome variables, and additional covariates that were chosen to improve statistical precision (the method for selecting covariates is described in Appendix F). The columns labeled "Difference" show the difference in impacts between two subgroups. Statistical significance tests are adjusted to account for clustering of students within schools and for multiple hypothesis testing (MHT) in order to control for the probability of finding any falsely significant impacts (the family-wise error rate) at 5 percent. The adjustment for MHT is based on the multivariate t-distribution and takes into account correlations among test statistics. This adjustment is applied separately to panes 1, 2, and 3 and accounts for all tests presented within each pane. The adjustment does not take into account statistical tests presented across multiple panes or in other tables in this report. The data are weighted to account for random assignment, sampling, consent, and nonresponse probabilities. The weights are scaled so that, conditional on random assignment probabilities, each school receives equal weight.

TABLE I.7 *(continued)*

[a]The "Any Substance" category reflects students' reported use of the following substances: cigarettes, chewing tobacco, alcohol, marijuana, cocaine, steroids or other muscle-building drugs, glue or other inhalants, narcotic drugs such as heroin or codeine, amphetamines or methamphetamines without a prescription, and any other illegal drug.

[b]This category reflects the substances tested by each participating district as part of its MRSDT program. The tested substances vary *across* districts but are the same *within* each district.

[c]The reported sample size is the number of students who completed a follow-up survey.

MRSDT = Mandatory-Random Student Drug Testing.

TABLE I.8

IMPACTS OF MRSDT ON RETROSPECTIVE SUBSTANCE USE FOR ALL STUDENTS,
BY BASELINE SUBSTANCE USE

	Baseline Substance Use								
	Lifetime Use of Any Substance[a] (Pane 1)			Lifetime Use of Any Substance Except Alcohol and Tobacco (Pane 2)			Lifetime Use of Any Substance Tested by the District's MRSDT Policy[b] (Pane 3)		
	Impact for Students with:			Impact for Students with:			Impact for Students with:		
Follow-Up Substance Use Measure	Any Use	No Use	Difference	Any Use	No Use	Difference	Any Use	No Use	Difference
Percentage of Students That Reported Using the Following in the Last Six Months:									
Any substance[a]	-3.284	-2.714	-0.569	-3.110	-2.555	-0.555	-6.193	-2.088	-4.106
Any substance except alcohol and tobacco	-1.266	-0.900	-0.366	0.136	-1.778	1.914	-3.316	-0.643	-2.673
Any substance tested by the district's MRSDT program[b]	-2.769	-1.707	-1.061	-0.634	-2.912	2.278	-3.460	-2.213	-1.247
Percentage of Students That Reported Using the Following in the Last 30 Days:									
Any substance[a]	-4.352	-3.557	-0.795	-3.175	-3.935	0.760	-6.402	-3.752	-2.650
Any substance except alcohol and tobacco	-2.778	-1.714	-1.064	-2.772	-1.953	-0.819	-3.406	-2.429	-0.977
Any substance tested by the district's MRSDT program[b]	-7.865	-2.570	-5.296	-6.169	-5.331	-0.838	-9.909	-3.732	-6.177
Sample Size[c]	**1,477**	**776**		**659**	**1,581**		**926**	**1,327**	

Source: Student surveys administered by study team.

Note: Impacts for each subgroup are regression adjusted for random assignment block indicator variables, baseline measures of the outcome variables, and additional covariates that were chosen to improve statistical precision (the method for selecting covariates is described in Appendix F). The columns labeled "Difference" show the difference in impacts between two subgroups. Statistical significance tests are adjusted to account for clustering of students within schools and for multiple hypothesis testing (MHT) in order to control for the probability of finding any falsely significant impacts (the family-wise error rate) at 5 percent. The adjustment for MHT is based on the multivariate t-distribution and takes into account correlations among test statistics. This adjustment is applied separately to panes 1, 2, and 3 and accounts for all tests presented within each pane. The adjustment does not take into account statistical tests presented across multiple panes or in other tables in this report. The data are weighted to account for random assignment, sampling, consent, and nonresponse probabilities. The weights are scaled so that, conditional on random assignment probabilities, each school receives equal weight.

TABLE I.8 *(continued)*

[a]The "Any Substance" category reflects students' reported use of the following substances: cigarettes, chewing tobacco, alcohol, marijuana, cocaine, steroids or other muscle-building drugs, glue or other inhalants, narcotic drugs such as heroin or codeine, amphetamines or methamphetamines without a prescription, and any other illegal drug.

[b]This category reflects the substances tested by each participating district as part of their MRSDT program. The tested substances vary *across* districts but are the same *within* each district.

[c]The reported sample size is the number of students who completed both the baseline and follow-up surveys.

MRSDT = Mandatory-Random Student Drug Testing.

TABLE I.9

IMPACTS OF MRSDT ON RETROSPECTIVE SUBSTANCE USE FOR ALL STUDENTS,
BY GRADE LEVEL

Substance Use Measure	Impacts for:				Difference in Impacts Between:					
	9th Graders	10th Graders	11th Graders	12th Graders	9th and 10th Graders	9th and 11th Graders	9th and 12th Graders	10th and 11th Graders	10th and 12th Graders	11th and 12th Graders
Percentage of Students That Reported Using the Following in the Last Six Months:										
Any substance[a]	-1.371	-3.283	2.017	-2.516	1.912	-3.388	1.145	-5.300	-0.767	4.533
Any substance except alcohol and tobacco	-4.200	-1.762	0.548	1.394	-2.438	-4.748	-5.594	-2.311	-3.156	-0.846
Any substance tested by the district's MRSDT program[b]	-3.604	-3.588	0.658	-2.700	-0.016	-4.262	-0.904	-4.247	-0.889	3.358
Percentage of Students That Reported Using the Following in the Last 30 Days:										
Any substance[a]	-5.164	-4.826	-1.049	0.555	-0.338	-4.115	-5.719	-3.776	-5.381	-1.605
Any substance except alcohol and tobacco	-2.650	-4.375	0.101	-0.012	1.725	-2.751	-2.638	-4.476	-4.363	0.113
Any substance tested by the district's MRSDT program[b]	-3.872	-8.396	-1.668	-1.667	4.524	-2.204	-2.204	-6.729	-6.729	0.000
Sample Size[c]	**807**	**1,442**	**1,326**	**1,148**						

Source: Student surveys administered by study team.

Note: Grade level is measured at time of the follow-up survey. Impacts for each subgroup are regression adjusted for random assignment block indicator variables, baseline measures of the outcome variables, and additional covariates that were chosen to improve statistical precision (the method for selecting covariates is described in Appendix F). The columns labeled "Difference" show the difference in impacts between two subgroups. Statistical significance tests are adjusted to account for clustering of students within schools and for multiple hypothesis testing (MHT) in order to control for the probability of finding any falsely significant impacts (the family-wise error rate) at 5 percent. The adjustment for MHT is based on the multivariate t-distribution and takes into account correlations among test statistics. This adjustment accounts for all tests presented in this table but not for tests presented in other tables of this report. The data are weighted to account for random assignment, sampling, consent, and nonresponse probabilities. The weights are scaled so that, conditional on random assignment probabilities, each school receives equal weight.

[a]The "Any Substance" category reflects students' reported use of the following substances: cigarettes, chewing tobacco, alcohol, marijuana, cocaine, steroids or other muscle-building drugs, glue or other inhalants, narcotic drugs such as heroin or codeine, amphetamines or methamphetamines without a prescription, and any other illegal drug.

TABLE I.9 *(continued)*

[b]This category reflects the substances tested by each participating district as part of its MRSDT program. The tested substances vary *across* districts but are the same *within* each district.

[c]The reported sample size is the number of students who completed a follow-up survey.

MRSDT = Mandatory-Random Student Drug Testing.

TABLE I.10

IMPACTS OF MRSDT ON RETROSPECTIVE SUBSTANCE USE FOR ALL STUDENTS, BY SELF-REPORTED
ACADEMIC GRADES AND STUDENT KNOWLEDGE OF MRSDT

| | Self-Reported Academic Grades (Pane 1) | | | Student Knowledge of MRSDT[a] (Pane 2) | | | | | |
| | Impact for Students Receiving: | | | Impact for Students Who: | | | Difference in Impacts Between: | | |
Substance Use Measure	Mostly As or Bs	Mostly Cs or Below	Difference	Thought Testing Existed (Group 1)	Did Not Think Testing Existed (Group 2)	Were Unsure if Testing Existed (Group 3)	Groups 1 and 2	Groups 1 and 3	Groups 2 and 3
Percentage of Students That Reported Using the Following in the Last Six Months:									
Any substance[b]	-3.225	0.287	-3.512	-3.034	-5.767	-0.162	2.733	-2.871	-5.605
Any substance except alcohol and tobacco	-2.469	4.528	-6.997	-0.495	1.853	-1.586	-2.348	1.091	3.439
Any substance tested by the district's MRSDT program[c]	-2.409	0.581	-2.990	-2.190	-2.732	-0.690	0.543	-1.499	-2.042
Percentage of Students That Reported Using the Following in the Last 30 Days:									
Any substance[b]	-4.842	3.354	-8.196	-4.889	-4.993	-0.990	0.104	-3.899	-4.002
Any substance except alcohol and tobacco	-1.062	-5.448	4.386	-2.968	-0.132	-0.878	-2.836	-2.090	0.747
Any substance tested by the district's MRSDT program[c]	-5.365	-4.102	-1.263	-6.553	-5.019	-4.025	-1.534	-2.528	-0.994
Sample Size[d]	**1,782**	**497**		**969**	**420**	**890**			

Source: Student surveys administered by study team.

Note: Impacts for each subgroup are regression adjusted for random assignment block indicator variables, baseline measures of the outcome variables, and additional covariates that were chosen to improve statistical precision (the method for selecting covariates is described in Appendix F). The columns labeled "Difference" show the difference in impacts between two subgroups. Statistical significance tests are adjusted to account for clustering of students within schools and for multiple hypothesis testing (MHT) in order to control for the probability of finding any falsely significant impacts (the family-wise error rate) at 5 percent. The adjustment for MHT is based on the multivariate t-distribution and takes into account correlations among test statistics. This adjustment is applied separately to panes 1 and 2 and accounts for all tests presented within each pane. The adjustment does not take into account statistical

TABLE I.10 *(continued)*

tests presented across multiple panes or in other tables in this report. The data are weighted to account for random assignment, sampling, consent, and nonresponse probabilities. The weights are scaled so that, conditional on random assignment probabilities, each school receives equal weight.

[a]Student knowledge of MRSDT is measured on the basis of responses to the following true/false question (17e) from the baseline student survey: "At my school students who participate in some sports or other activities may be randomly tested for drugs." Students were instructed to select one of the following response categories: "true" (group 1), "false" (group 2), or "don't know" (group 3).

[b]The "Any Substance" category reflects students' reported use of the following substances: cigarettes, chewing tobacco, alcohol, marijuana, cocaine, steroids or other muscle-building drugs, glue or other inhalants, narcotic drugs such as heroin or codeine, amphetamines or methamphetamines without a prescription, and any other illegal drug.

[c]This category reflects the substances tested by each participating district as part of its MRSDT program. The tested substances vary *across* districts but are the same *within* each district.

[d]The reported sample size is the number of students who completed both the baseline and follow-up surveys.

MRSDT = Mandatory-Random Student Drug Testing.

TABLE I.11

IMPACTS OF MRSDT ON STUDENTS' INTENTIONS TO USE SUBSTANCES WITHIN THE NEXT YEAR,
BY GENDER, RACE, AND ETHNICITY

Measure of Intentions	Gender (Pane 1)			Race (Pane 2)			Ethnicity (Pane 3)		
	Impact for Males	Impact for Females	Difference	Impact for Whites	Impact for Blacks	Difference	Impact for Hispanics	Impact for Non-Hispanics	Difference
Sample 1: Participants in Covered Activities[a]									
Percentage of Students That Reported They "Probably Will" or "Definitely Will" Use the Following Within the Next Year:									
Any substance[b]	2.587	-0.910	3.497	0.140	1.872	-1.732	6.933	0.152	6.781
Any substance except alcohol and tobacco	-0.661	0.837	-1.497	-0.039	0.939	-0.979	0.683	0.156	0.528
Sample Size[c]	**1,176**	**1,269**		**1,629**	**489**		**291**	**2,148**	
Sample 2: Nonparticipants									
Percentage of Students That Reported They "Probably Will" or "Definitely Will" Use the Following Within the Next Year:									
Any substance[b]	-0.166	1.635	-1.801	2.587	-4.507	7.094	-3.115	1.265	-4.379
Any substance except alcohol and tobacco	-0.826	1.351	-2.176	1.567	-2.695	4.262	1.828	-0.125	1.952
Sample Size[c]	**1,008**	**1,270**		**1,537**	**400**		**357**	**1,903**	

TABLE I.11 *(continued)*

Measure of Intentions	Gender (Pane 1)			Race (Pane 2)			Ethnicity (Pane 3)		
	Impact for Males	Impact for Females	Difference	Impact for Whites	Impact for Blacks	Difference	Impact for Hispanics	Impact for Non-Hispanics	Difference
Sample 3: All Students									
Percentage of Students That Reported They "Probably Will" or "Definitely Will" Use the Following Within the Next Year:									
Any substance[b]	1.044	0.169	0.875	1.146	-1.155	2.301	0.800	0.476	0.324
Any substance except alcohol and tobacco	-0.632	1.067	-1.699	0.772	-0.785	1.557	1.409	0.060	1.349
Sample Size[c]	**2,184**	**2,539**		**3,166**	**889**		**648**	**4,051**	

Source: Student surveys administered by study team.

Note: Impacts for each subgroup are regression adjusted for random assignment block indicator variables, baseline measures of the outcome variables, and additional covariates that were chosen to improve statistical precision (the method for selecting covariates is described in Appendix F). An indicator variable for 16-year old students was included as an additional covariate in the models for activity participants, since the analysis of baseline equivalence found a statistically significant treatment/control difference on that variable. The columns labeled "Difference" show the difference in impacts between two subgroups. Statistical significance tests are adjusted to account for clustering of students within schools and for multiple hypothesis testing (MHT) in order to control for the probability of finding any falsely significant impacts (the family-wise error rate) at 5 percent. The adjustment for MHT is based on the multivariate t-distribution and takes into account correlations among test statistics. This adjustment is applied separately to each sample in panes 1, 2, and 3 and accounts for all tests presented within each pane-sample combination. The adjustment does not take into account statistical tests presented across multiple panes, across multiple samples or in other tables in this report. The data are weighted to account for random assignment, sampling, consent, and nonresponse probabilities. The weights are scaled so that, conditional on random assignment probabilities, each school receives equal weight.

[a]Participants in covered activities were identified by comparing student self-reported activity participation from the student survey with lists of covered activities obtained from each district. Students were classified as participants if there was an exact match between the activity listed on the student survey and the district-provided activity lists.

[b]The "Any Substance" category reflects students' intended use of the following substances: cigarettes, chewing tobacco, alcohol, marijuana, or any other illegal drug.

[c]The reported sample size is the number of students who completed a follow-up survey.

MRSDT = Mandatory-Random Student Drug Testing.

TABLE I.12

IMPACTS OF MRSDT ON STUDENTS' INTENTIONS TO USE SUBSTANCES WITHIN THE NEXT YEAR,
BY BASELINE SUBSTANCE USE

	Baseline Substance Use								
	Lifetime Use of Any Substance[a] (Pane 1)			Lifetime Use of Any Substance Except Alcohol and Tobacco (Pane 2)			Lifetime Use of Any Substance Tested by the District's MRSDT Policy[b] (Pane 3)		
	Impact for Students with:			Impact for Students with:			Impact for Students with:		
Measure of Intentions	Any Use	No Use	Difference	Any Use	No Use	Difference	Any Use	No Use	Difference
Sample 1: Participants in Covered Activities[c]									
Percentage of Students That Reported They "Probably Will" or "Definitely Will" Use the Following Within the Next Year:									
Any substance[d]	-5.403	0.013	-5.416	-3.918	-3.686	-0.232	-10.199	-0.288	-9.911
Any substance except alcohol and tobacco	0.632	0.589	0.043	4.994	-0.522	5.516	-0.835	1.399	-2.234
Sample Size[e]	**763**	**429**		**315**	**871**		**446**	**746**	
Sample 2: Nonparticipants									
Percentage of Students That Reported They "Probably Will" or "Definitely Will" Use the Following Within the Next Year:									
Any substance[d]	0.813	2.917	-2.104	-2.544	2.975	-5.518	-2.033	2.594	-4.627
Any substance except alcohol and tobacco	-0.250	1.626	-1.876	-3.180	1.707	-4.887	-2.799	2.060	-4.859
Sample Size[e]	**714**	**347**		**344**	**710**		**480**	**581**	
Sample 3: All Students									
Percentage of Students That Reported They "Probably Will" or "Definitely Will" Use the Following Within the Next Year:									
Any substance[d]	-2.544	1.113	-3.657	-3.223	-0.742	-2.481	-6.141	0.803	-6.943
Any substance except alcohol and tobacco	-0.096	0.971	-1.067	0.229	0.361	-0.132	-2.257	1.545	-3.802
Sample Size[e]	**1,477**	**776**		**659**	**1,581**		**926**	**1,327**	

TABLE I.12 *(continued)*

Source: Student surveys administered by study team.

Note: Impacts for each subgroup are regression adjusted for random assignment block indicator variables, baseline measures of the outcome variables, and additional covariates that were chosen to improve statistical precision (the method for selecting covariates is described in Appendix F). An indicator variable for 16-year old students was included as an additional covariate in the models for activity participants, since the analysis of baseline equivalence found a statistically significant treatment/control difference on that variable. The columns labeled "Difference" show the difference in impacts between two subgroups. Statistical significance tests are adjusted to account for clustering of students within schools and for multiple hypothesis testing (MHT) in order to control for the probability of finding any falsely significant impacts (the family-wise error rate) at 5 percent. The adjustment for MHT is based on the multivariate t-distribution and takes into account correlations among test statistics. This adjustment is applied separately to each sample in panes 1, 2, and 3 and accounts for all tests presented within each pane-sample combination. The adjustment does not take into account statistical tests presented across multiple panes, across multiple samples or in other tables in this report. The data are weighted to account for random assignment, sampling, consent, and nonresponse probabilities. The weights are scaled so that, conditional on random assignment probabilities, each school receives equal weight.

[a]This category reflects students' reported use of the following substances: cigarettes, chewing tobacco, alcohol, marijuana, cocaine, steroids or other muscle-building drugs, glue or other inhalants, narcotic drugs such as heroin or codeine, amphetamines or methamphetamines without a prescription, and any other illegal drug.

[b]This category reflects the substances tested by each participating district as part of its MRSDT program. The tested substances vary *across* districts but are the same *within* each district.

[c]Participants in covered activities were identified by comparing student self-reported activity participation from the student survey with lists of covered activities obtained from each district. Students were classified as participants if there was an exact match between the activity listed on the student survey and the district-provided activity lists.

[d]This category reflects students' intended use of the following substances: cigarettes, chewing tobacco, alcohol, marijuana, or any other illegal drug.

[e]The reported sample size is the number of students who completed both the baseline and follow-up surveys.

MRSDT = Mandatory-Random Student Drug Testing.

TABLE I.13

IMPACTS OF MRSDT ON STUDENTS' INTENTIONS TO USE SUBSTANCES WITHIN THE NEXT YEAR,
BY GRADE LEVEL

Measure of Intentions	Impacts for:				Difference in Impacts Between:					
	9th Graders	10th Graders	11th Graders	12th Graders	9th and 10th Graders	9th and 11th Graders	9th and 12th Graders	10th and 11th Graders	10th and 12th Graders	11th and 12th Graders
Sample 1: Participants in Covered Activities[a]										
Percentage of Students That Reported They "Probably Will" or "Definitely Will" Use the Following Within the Next Year:										
Any substance[b]	0.753	-3.633	-1.731	5.783	4.386	2.484	-5.030	-1.902	-9.416	-7.514
Any substance except alcohol and tobacco	-1.777	-2.201	1.203	1.868	0.424	-2.979	-3.645	-3.404	-4.069	-0.666
Sample Size[c]	**415**	**735**	**708**	**587**						
Sample 2: Nonparticipants										
Percentage of Students That Reported They "Probably Will" or "Definitely Will" Use the Following Within the Next Year:										
Any substance[b]	-1.387	-3.650	1.720	1.520	2.264	-3.107	-2.906	-5.370	-5.170	0.200
Any substance except alcohol and tobacco	-0.189	-0.850	1.806	-1.013	0.661	-1.995	0.824	-2.656	0.163	2.819
Sample Size[c]	**392**	**707**	**618**	**561**						
Sample 3: All Students										
Percentage of Students That Reported They "Probably Will" or "Definitely Will" Use the Following Within the Next Year:										
Any substance[b]	-0.401	-3.803	-0.144	3.575	3.402	-0.257	-3.976	-3.658	-7.377	-3.719
Any substance except alcohol and tobacco	-1.000	-1.307	1.756	0.383	0.307	-2.755	-1.383	-3.062	-1.690	1.373
Sample Size[c]	**807**	**1,442**	**1,326**	**1,148**						

Source: Student surveys administered by study team.

Note: Grade level is measured at time of the follow-up survey. Impacts for each subgroup are regression adjusted for random assignment block indicator variables, baseline measures of the outcome variables, and additional covariates that were chosen to improve statistical precision (the method for selecting covariates is described in Appendix F). A variable indicating which students were 16 years old was also included as a covariate in impact models for activity participants

TABLE I.13 *(continued)*

(sample 1), since the analysis of baseline equivalence found a statistically significant treatment/control difference on that variable. The columns labeled "Difference" show the difference in impacts between two subgroups. Statistical significance tests are adjusted to account for clustering of students within schools and for multiple hypothesis testing (MHT) in order to control for the probability of finding any falsely significant impacts (the family-wise error rate) at 5 percent. The adjustment for MHT is based on the multivariate t-distribution and takes into account correlations among test statistics. This adjustment accounts for all tests presented within each sample. The adjustment does not take into account statistical tests presented across multiple samples or in other tables in this report. The data are weighted to account for random assignment, sampling, consent, and nonresponse probabilities. The weights are scaled so that, conditional on random assignment probabilities, each school receives equal weight.

[a] Participants in covered activities were identified by comparing student self-reported activity participation from the student survey with lists of covered activities obtained from each district. Students were classified as participants if there was an exact match between the activity listed on the student survey and the district-provided activity lists.

[b] The "Any Substance" category reflects students' intended use of the following substances: cigarettes, chewing tobacco, alcohol, marijuana, or any other illegal drug.

[c] The reported sample size is the number of students who completed a follow-up survey.

MRSDT = Mandatory-Random Student Drug Testing.

TABLE I.14

IMPACTS OF MRSDT ON STUDENTS' INTENTIONS TO USE SUBSTANCES WITHIN THE NEXT YEAR,
BY SELF-REPORTED ACADEMIC GRADES AND STUDENT KNOWLEDGE OF MRSDT

| | Self-Reported Academic Grades (Pane 1) | | | Student Knowledge of MRSDT[a] (Pane 2) | | | | | |
| | Impact for Students Receiving: | | | Impact for Students Who: | | | Difference in Impacts Between: | | |
Measure of Intentions	Mostly As or Bs	Mostly Cs or Below	Difference	Thought Testing Existed (Group 1)	Did Not Think Testing Existed (Group 2)	Were Unsure if Testing Existed (Group 3)	Groups 1 and 2	Groups 1 and 3	Groups 2 and 3
All Students									
Percentage of Students That Reported They "Probably Will" or "Definitely Will" Use the Following Within the Next Year:									
Any substance[b]	-2.657	3.201	-5.858	0.572	-7.733	-0.090	8.306	0.662	-7.644
Any substance except alcohol and tobacco	0.193	1.779	-1.586	0.806	3.341	-0.771	-2.536	1.576	4.112
Sample Size[c]	**1,782**	**497**		**969**	**420**	**890**			

Source: Student surveys administered by study team.

Note: Impacts for each subgroup are regression adjusted for random assignment block indicator variables, baseline measures of the outcome variables, and additional covariates that were chosen to improve statistical precision (the method for selecting covariates is described in Appendix F). The columns labeled "Difference" show the difference in impacts between two subgroups. Statistical significance tests are adjusted to account for clustering of students within schools and for multiple hypothesis testing (MHT) in order to control for the probability of finding any falsely significant impacts (the family-wise error rate) at 5 percent. The adjustment for MHT is based on the multivariate t-distribution and takes into account correlations among test statistics. This adjustment is applied separately to panes 1 and 2 and accounts for all tests presented within each pane. The adjustment does not take into account statistical tests presented across multiple panes or in other tables in this report. The data are weighted to account for random assignment, sampling, consent, and nonresponse probabilities. The weights are scaled so that, conditional on random assignment probabilities, each school receives equal weight.

[a]Student knowledge of MRSDT is measured on the basis of responses to the following true/false question (17e) from the baseline student survey: "At my school students who participate in some sports or other activities may be randomly tested for drugs." Students were instructed to select one of the following response categories: "true" (group 1), "false" (group 2), or "don't know" (group 3).

[b]The "Any Substance" category reflects students' intended use of the following substances: cigarettes, chewing tobacco, alcohol, marijuana, or any other illegal drug.

[c]The reported sample size is the number of students who completed both the baseline and follow-up surveys.

MRSDT = Mandatory-Random Student Drug Testing.

TABLE I.15

IMPACTS OF MRSDT ON PERCEIVED CONSEQUENCES OF SUBSTANCE USE,
BY GENDER, RACE, AND ETHNICITY

Measure of Perceived Consequences	Gender (Pane 1)			Race (Pane 2)			Ethnicity (Pane 3)		
	Impact for Males	Impact for Females	Difference	Impact for Whites	Impact for Blacks	Difference	Impact for Hispanics	Impact for Non-Hispanics	Difference
Sample 1: Participants in Covered Activities[a]									
Mean Perceived Positive Consequences of Substance Use Scale[b]	0.147	0.027	0.120	0.126	0.003	0.123	-0.140	0.116	-0.256
Mean Perceived Negative Consequences of Substance Use Scale[c]	0.020	0.038	-0.018	0.033	0.032	0.001	-0.026	0.039	-0.065
Sample Size[d]	**1,176**	**1,269**		**1,629**	**489**		**291**	**2,148**	
Sample 2: Nonparticipants									
Mean Perceived Positive Consequences of Substance Use Scale[b]	0.067	-0.051	0.119	0.076	-0.160	0.236	0.160	-0.019	0.179
Mean Perceived Negative Consequences of Substance Use Scale[c]	0.090	0.045	0.045	0.032	0.146	-0.114	0.137	0.057	0.081
Sample Size[d]	**1,008**	**1,270**		**1,537**	**400**		**357**	**1,903**	
Sample 3: All Students									
Mean Perceived Positive Consequences of Substance Use Scale[b]	0.102	-0.016	0.118	0.098	-0.086	0.185	0.013	0.049	-0.036
Mean Perceived Negative Consequences of Substance Use Scale[c]	0.056	0.042	0.014	0.034	0.091	-0.057	0.061	0.050	0.012
Sample Size[d]	**2,184**	**2,539**		**3,166**	**889**		**648**	**4,051**	

TABLE I.15 *(continued)*

Source: Student surveys administered by study team.

Note: Impacts for each subgroup are regression adjusted for random assignment block indicator variables, baseline measures of the outcome variables, and additional covariates that were chosen to improve statistical precision (the method for selecting covariates is described in Appendix F). An indicator variable for 16-year old students was included as an additional covariate in the models for activity participants, since the analysis of baseline equivalence found a statistically significant treatment/control difference on that variable. The columns labeled "Difference" show the difference in impacts between two subgroups. Statistical significance tests are adjusted to account for clustering of students within schools and for multiple hypothesis testing (MHT) in order to control for the probability of finding any falsely significant impacts (the family-wise error rate) at 5 percent. The adjustment for MHT is based on the multivariate t-distribution and takes into account correlations among test statistics. This adjustment is applied separately to each sample in panes 1, 2, and 3 and accounts for all tests presented within each pane-sample combination. The adjustment does not take into account statistical tests presented across multiple panes, across multiple samples or in other tables in this report. The data are weighted to account for random assignment, sampling, consent, and nonresponse probabilities. The weights are scaled so that, conditional on random assignment probabilities, each school receives equal weight.

[a]Participants covered activities were identified by comparing student self-reported activity participation from the student survey with lists of covered activities obtained from each district. Students were classified as participants if there was an exact match between the activity listed on the student survey and the district-provided activity lists.

[b]The Perceived Positive Consequences of Substance Use Scale averages student responses to four items from the student survey: (16e) "Using illegal drugs or alcohol makes it easier to be part of a group," (16f) "Using illegal drugs or drinking is cool," (16g) "Using illegal drugs or drinking makes everything seem better," and (16h) "Using illegal drugs or drinking makes it easier to have a good time with friends." Responses are coded on a 5-point scale ranging from strongly disagree to strongly agree. Higher values on the scale indicate more positive attitudes toward substance use.

[c]The Perceived Negative Consequences of Substance Use Scale averages student responses to four items from the study survey: (16a) "Using illegal drugs leads to serious health problems," (16b) "Drinking alcohol leads to serious health problems, (16c) "If I used drugs, I would get into trouble," and (16d) "If I drank, I would get into trouble." Responses are coded on a 5-point scale ranging from strongly disagree to strongly agree. Higher values on the scale indicate more negative attitudes toward substance use.

[d]The reported sample size is the number of students who completed a follow-up survey.

MRSDT = Mandatory-Random Student Drug Testing.

TABLE I.16

IMPACTS OF MRSDT ON PERCEIVED CONSEQUENCES OF SUBSTANCE USE,
BY BASELINE SUBSTANCE USE

	Baseline Substance Use								
	Lifetime Use of Any Substance[a] (Pane 1)			Lifetime Use of Any Substance Except Alcohol and Tobacco (Pane 2)			Lifetime Use of Any Substance Tested by the District's MRSDT Policy[b] (Pane 3)		
	Impact for Students with:			Impact for Students with:			Impact for Students with:		
Measure of Perceived Consequences	Any Use	No Use	Difference	Any Use	No Use	Difference	Any Use	No Use	Difference
Sample 1: Participants in Covered Activities[c]									
Mean Perceived Positive Consequences of Substance Use Scale[d]	0.025	0.021	0.004	0.110	-0.050	0.160	0.064	-0.035	0.099
Mean Perceived Negative Consequences of Substance Use Scale[e]	0.007	-0.018	0.025	-0.050	0.037	-0.087	-0.029	0.034	-0.063
Sample Size[f]	**763**	**429**		**315**	**871**		**446**	**746**	
Sample 2: Nonparticipants									
Mean Perceived Positive Consequences of Substance Use Scale[d]	0.068	-0.007	0.075	-0.116	0.135	-0.251	-0.081	0.114	-0.195
Mean Perceived Negative Consequences of Substance Use Scale[e]	0.069	-0.045	0.114	0.203	-0.057	0.261	0.149	-0.042	0.191
Sample Size[f]	**714**	**347**		**344**	**710**		**480**	**581**	
Sample 3: All Students									
Mean Perceived Positive Consequences of Substance Use Scale[d]	0.043	0.005	0.038	0.000	0.032	-0.032	-0.008	0.032	-0.039
Mean Perceived Negative Consequences of Substance Use Scale[e]	0.038	-0.021	0.059	0.069	0.004	0.066	0.063	0.006	0.057
Sample Size[f]	**1,477**	**776**		**659**	**1,581**		**926**	**1,327**	

TABLE I.16 *(continued)*

Source: Student surveys administered by study team.

Note: Impacts for each subgroup are regression adjusted for random assignment block indicator variables, baseline measures of the outcome variables, and additional covariates that were chosen to improve statistical precision (the method for selecting covariates is described in Appendix F). An indicator variable for 16-year old students was included as an additional covariate in the models for activity participants, since the analysis of baseline equivalence found a statistically significant treatment/control difference on that variable. The columns labeled "Difference" show the difference in impacts between two subgroups. Statistical significance tests are adjusted to account for clustering of students within schools and for multiple hypothesis testing (MHT) in order to control for the probability of finding any falsely significant impacts (the family-wise error rate) at 5 percent. The adjustment for MHT is based on the multivariate t-distribution and takes into account correlations among test statistics. This adjustment is applied separately to each sample in panes 1, 2, and 3 and accounts for all tests presented within each pane-sample combination. The adjustment does not take into account statistical tests presented across multiple panes, across multiple samples or in other tables in this report. The data are weighted to account for random assignment, sampling, consent, and nonresponse probabilities. The weights are scaled so that, conditional on random assignment probabilities, each school receives equal weight.

[a]The "Any Substance" category reflects students' reported use of the following substances: cigarettes, chewing tobacco, alcohol, marijuana, cocaine, steroids or other muscle-building drugs, glue or other inhalants, narcotic drugs such as heroin or codeine, amphetamines or methamphetamines without a prescription, and any other illegal drug.

[b]This category reflects the substances tested by each participating district as part of its MRSDT program. The tested substances vary *across* districts but are the same *within* each district.

[c]Participants in covered activities were identified by comparing student self-reported activity participation from the student survey with lists of covered activities obtained from each district. Students were classified as participants if there was an exact match between the activity listed on the student survey and the district-provided activity lists.

[d]The Perceived Positive Consequences of Substance Use Scale averages student responses to four items from the student survey: (16e) "Using illegal drugs or alcohol makes it easier to be part of a group," (16f) "Using illegal drugs or drinking is cool," (16g) "Using illegal drugs or drinking makes everything seem better," and (16h) "Using illegal drugs or drinking makes it easier to have a good time with friends." Responses are coded on a 5-point scale ranging from strongly disagree to strongly agree. Higher values on the scale indicate more positive attitudes toward substance use.

[e]The Perceived Negative Consequences of Substance Use Scale averages student responses to four items from the study survey: (16a) "Using illegal drugs leads to serious health problems," (16b) "Drinking alcohol leads to serious health problems, (16c) "If I used drugs, I would get into trouble," and (16d) "If I drank, I would get into trouble." Responses are coded on a 5-point scale ranging from strongly disagree to strongly agree. Higher values on the scale indicate more negative attitudes toward substance use.

[f]The reported sample size is the number of students who completed both the baseline and follow-up surveys.

MRSDT = Mandatory-Random Student Drug Testing.

TABLE I.17

IMPACTS OF MRSDT ON PERCEIVED CONSEQUENCES OF SUBSTANCE USE, BY GRADE LEVEL

Measure of Perceived Consequences	Impacts for:				Difference in Impacts Between:					
	9th Graders	10th Graders	11th Graders	12th Graders	9th and 10th Graders	9th and 11th Graders	9th and 12th Graders	10th and 11th Graders	10th and 12th Graders	11th and 12th Graders
Sample 1: Participants in Covered Activities[a]										
Mean Perceived Positive Consequences of Substance Use Scale[b]	0.033	-0.051	0.104	0.279	0.084	-0.071	-0.246	-0.155	-0.330	-0.175
Mean Perceived Negative Consequences of Substance Use Scale[c]	0.120	0.154	-0.030	-0.156	-0.034	0.150	0.276	0.184	0.311	0.126
Sample Size[d]	**415**	**735**	**708**	**587**						
Sample 2: Nonparticipants										
Mean Perceived Positive Consequences of Substance Use Scale[b]	-0.143	0.088	0.068	0.013	-0.232	-0.211	-0.156	0.020	0.076	0.056
Mean Perceived Negative Consequences of Substance Use Scale[c]	0.101	0.075	0.010	0.076	0.025	0.090	0.025	0.065	-0.001	-0.065
Sample Size[d]	**392**	**707**	**618**	**561**						
Sample 3: All Students										
Mean Perceived Positive Consequences of Substance Use Scale[b]	-0.056	0.007	0.087	0.150	-0.063	-0.143	-0.206	-0.081	-0.143	-0.063
Mean Perceived Negative Consequences of Substance Use Scale[c]	0.111	0.118	-0.018	-0.039	-0.007	0.129	0.150	0.136	0.157	0.021
Sample Size[d]	**807**	**1,442**	**1,326**	**1,148**						

Source: Student surveys administered by study team.

Note: Grade level is measured at time of the follow-up survey. Impacts for each subgroup are regression adjusted for random assignment block indicator variables, baseline measures of the outcome variables, and additional covariates that were chosen to improve statistical precision (the method for selecting covariates is described in Appendix F). A variable indicating which students were 16 years old was also included as a covariate in impact models for activity participants (sample 1), since the analysis of baseline equivalence found a statistically significant treatment/control difference on that variable. The columns labeled

TABLE I.17 *(continued)*

"Difference" show the difference in impacts between two subgroups. Statistical significance tests are adjusted to account for clustering of students within schools and for multiple hypothesis testing (MHT) in order to control for the probability of finding any falsely significant impacts (the family-wise error rate) at 5 percent. The adjustment for MHT is based on the multivariate t-distribution and takes into account correlations among test statistics. This adjustment accounts for all tests presented within each sample. The adjustment does not take into account statistical tests presented across multiple samples or in other tables in this report. The data are weighted to account for random assignment, sampling, consent, and nonresponse probabilities. The weights are scaled so that, conditional on random assignment probabilities, each school receives equal weight.

[a]Participants covered activities were identified by comparing student self-reported activity participation from the student survey with lists of covered activities obtained from each district. Students were classified as participants if there was an exact match between the activity listed on the student survey and the district-provided activity lists.

[b]The Perceived Positive Consequences of Substance Use Scale averages student responses to four items from the student survey: (16e) "Using illegal drugs or alcohol makes it easier to be part of a group," (16f) "Using illegal drugs or drinking is cool," (16g) "Using illegal drugs or drinking makes everything seem better," and (16h) "Using illegal drugs or drinking makes it easier to have a good time with friends." Responses are coded on a 5-point scale ranging from strongly disagree to strongly agree. Higher values on the scale indicate more positive attitudes toward substance use.

[c]The Perceived Negative Consequences of Substance Use Scale averages student responses to four items from the study survey: (16a) "Using illegal drugs leads to serious health problems," (16b) "Drinking alcohol leads to serious health problems, (16c) "If I used drugs, I would get into trouble," and (16d) "If I drank, I would get into trouble." Responses are coded on a 5-point scale ranging from strongly disagree to strongly agree. Higher values on the scale indicate more negative attitudes toward substance use.

[d]The reported sample size is the number of students who completed a follow-up survey.

MRSDT = Mandatory-Random Student Drug Testing.

TABLE I.18

IMPACTS OF MRSDT ON PERCEIVED CONSEQUENCES OF SUBSTANCE USE, BY SELF-REPORTED ACADEMIC GRADES
AND STUDENT KNOWLEDGE OF MRSDT

| Measure of Perceived Consequences | Self-Reported Academic Grades (Pane 1) | | | Student Knowledge of MRSDT[a] (Pane 2) | | | | | |
| | Impact for Students Receiving: | | | Impact for Students Who: | | | Difference in Impacts Between: | | |
	Mostly As or Bs	Mostly Cs or Below	Difference	Thought Testing Existed (Group 1)	Did Not Think Testing Existed (Group 2)	Were Unsure if Testing Existed (Group 3)	Groups 1 and 2	Groups 1 and 3	Groups 2 and 3
All Students									
Mean Perceived Positive Consequences of Substance Use Scale[b]	-0.016	0.157	-0.173	-0.026	0.143	0.021	-0.170	-0.048	0.122
Mean Perceived Negative Consequences of Substance Use Scale[c]	0.012	0.069	-0.057	0.007	0.098	-0.020	-0.090	0.028	0.118
Sample Size[d]	**1,782**	**497**		**969**	**420**	**890**			

Source: Student surveys administered by study team.

Note: Impacts for each subgroup are regression adjusted for random assignment block indicator variables, baseline measures of the outcome variables, and additional covariates that were chosen to improve statistical precision (the method for selecting covariates is described in Appendix F). The columns labeled "Difference" show the difference in impacts between two subgroups. Statistical significance tests are adjusted to account for clustering of students within schools and for multiple hypothesis testing (MHT) in order to control for the probability of finding any falsely significant impacts (the family-wise error rate) at 5 percent. The adjustment for MHT is based on the multivariate t-distribution and takes into account correlations among test statistics. This adjustment is applied separately to panes 1 and 2 and accounts for all tests presented within each pane. The adjustment does not take into account statistical tests presented across multiple panes or in other tables in this report. The data are weighted to account for random assignment, sampling, consent, and nonresponse probabilities. The weights are scaled so that, conditional on random assignment probabilities, each school receives equal weight.

[a]Student knowledge of MRSDT is measured on the basis of responses to the following true/false question (17e) from the baseline student survey: "At my school students who participate in some sports or other activities may be randomly tested for drugs." Students were instructed to select one of the following response categories: "true" (group 1), "false" (group 2), or "don't know" (group 3).

[b]The Perceived Positive Consequences of Substance Use Scale averages student responses to four items from the student survey: (16e) "Using illegal drugs or alcohol makes it easier to be part of a group," (16f) "Using illegal drugs or drinking is cool," (16g) "Using illegal drugs or drinking makes everything seem better," and (16h)

TABLE I.18 *(continued)*

"Using illegal drugs or drinking makes it easier to have a good time with friends." Responses are coded on a 5-point scale ranging from strongly disagree to strongly agree. Higher values on the scale indicate more positive attitudes toward substance use.

[c]The Perceived Negative Consequences of Substance Use Scale averages student responses to four items from the study survey: (16a) "Using illegal drugs leads to serious health problems," (16b) "Drinking alcohol leads to serious health problems, (16c) "If I used drugs, I would get into trouble," and (16d) "If I drank, I would get into trouble." Responses are coded on a 5-point scale ranging from strongly disagree to strongly agree. Higher values on the scale indicate more negative attitudes toward substance use.

[d]The reported sample size is the number of students who completed both the baseline and follow-up surveys.

MRSDT = Mandatory-Random Student Drug Testing.

TABLE I.19

IMPACTS OF MRSDT ON EXTRACURRICULAR ACTIVITY PARTICIPATION, BY GENDER, RACE, AND ETHNICITY

Activity Participation Measure	Gender (Pane 1)			Race (Pane 2)			Ethnicity (Pane 3)		
	Impact for Males	Impact for Females	Difference	Impact for Whites	Impact for Blacks	Difference	Impact for Hispanics	Impact for Non-Hispanics	Difference
All Students									
Percentage of Students That Participated in a Covered Activity During 2007-2008 School Year[a]	0.228	-1.503	1.731	-1.111	-0.614	-0.497	0.333	-0.972	1.305
Sample Size[b]	**2,184**	**2,539**		**3,166**	**889**		**648**	**4,051**	

Source: Student surveys administered by study team.

Note: Impacts for each subgroup are regression adjusted for random assignment block indicator variables, baseline measures of the outcome variables, and additional covariates that were chosen to improve statistical precision (the method for selecting covariates is described in Appendix E). The columns labeled "Difference" show the difference in impacts between two subgroups. Statistical significance tests are adjusted to account for clustering of students within schools and for multiple hypothesis testing (MHT) in order to control for the probability of finding any falsely significant impacts (the family-wise error rate) at 5 percent. The adjustment for MHT is based on the multivariate t-distribution and takes into account correlations among test statistics. This adjustment is applied separately to panes 1, 2, and 3 and accounts for all tests presented within each pane. The adjustment does not take into account statistical tests presented across multiple panes or in other tables in this report. The data are weighted to account for random assignment, sampling, consent, and nonresponse probabilities. The weights are scaled so that, conditional on random assignment probabilities, each school receives equal weight.

[a]Participants in covered activities were identified by comparing student self-reported activity participation from the student survey with lists of covered activities obtained from each district. Students were classified as participants if there was an exact match between the activity listed on the student survey and the district-provided activity lists.

[b]The reported sample size is the number of students who completed a follow-up survey.

MRSDT = Mandatory-Random Student Drug Testing.

TABLE I.20

IMPACTS OF MRSDT ON EXTRACURRICULAR ACTIVITY PARTICIPATION,
BY BASELINE SUBSTANCE USE

	Baseline Substance Use								
	Lifetime Use of Any Substance[a] (Pane 1)			Lifetime Use of Any Substance Except Alcohol and Tobacco (Pane 2)			Lifetime Use of Any Substance Tested by the District's MRSDT Policy[b] (Pane 3)		
	Impact for Students with:			Impact for Students with:			Impact for Students with:		
Follow-Up Substance Use Measure	Any Use	No Use	Difference	Any Use	No Use	Difference	Any Use	No Use	Difference
All Students									
Percentage of Students that Participated in a Covered Activity During 2007-2008 School Year[c]	0.334	3.998	-3.664	3.328	1.274	2.054	-1.008	3.958	-4.966
Sample Size[d]	**1,477**	**776**		**659**	**1,581**		**926**	**1,327**	

Source: Student surveys administered by study team.

Note: Impacts for each subgroup are regression adjusted for random assignment block indicator variables, baseline measures of the outcome variables, and additional covariates that were chosen to improve statistical precision (the method for selecting covariates is described in Appendix F). The columns labeled "Difference" show the difference in impacts between two subgroups. Statistical significance tests are adjusted to account for clustering of students within schools and for multiple hypothesis testing (MHT) in order to control for the probability of finding any falsely significant impacts (the family-wise error rate) at 5 percent. The adjustment for MHT is based on the multivariate t-distribution and takes into account correlations among test statistics. This adjustment is applied separately to panes 1, 2, and 3 and accounts for all tests presented within each pane. The adjustment does not take into account statistical tests presented across multiple panes or in other tables in this report. The data are weighted to account for random assignment, sampling, consent, and nonresponse probabilities. The weights are scaled so that, conditional on random assignment probabilities, each school receives equal weight.

[a]The "Any Substance" category reflects students' reported use of the following substances: cigarettes, chewing tobacco, alcohol, marijuana, cocaine, steroids or other muscle-building drugs, glue or other inhalants, narcotic drugs such as heroin or codeine, amphetamines or methamphetamines without a prescription, and any other illegal drug.

[b]This category reflects the substances tested by each participating district as part of its MRSDT program. The tested substances vary *across* districts but are the same *within* each district.

[c]Participants in covered activities were identified by comparing student self-reported activity participation from the student survey with lists of covered activities obtained from each district. Students were classified as activity participants if there was an exact match between the activity listed on the student survey and the district-provided activity lists.

[d]The reported sample size is the number of students who completed both the baseline and follow-up surveys.

MRSDT = Mandatory-Random Student Drug Testing.

TABLE I.21

IMPACTS OF MRSDT ON EXTRACURRICULAR ACTIVITY PARTICIPATION, BY GRADE LEVEL

Measure of Activity Participation	Impacts for:				Difference in Impacts Between:					
	9th Graders	10th Graders	11th Graders	12th Graders	9th and 10th Graders	9th and 11th Graders	9th and 12th Graders	10th and 11th Graders	10th and 12th Graders	11th and 12th Graders
All Students										
Percentage of Students That Participated in a Covered Activity During 2007-2008 School Year[a]	-3.133	-0.201	-0.842	2.072	-2.932	-2.291	-5.206	0.641	-2.273	-2.915
Sample Size[b]	**807**	**1,442**	**1,326**	**1,148**						

Source: Student surveys administered by study team.

Note: Grade level is measured at time of the follow-up survey. Impacts for each subgroup are regression adjusted for random assignment block indicator variables, baseline measures of the outcome variables, and additional covariates that were chosen to improve statistical precision (the method for selecting covariates is described in Appendix F). The columns labeled "Difference" show the difference in impacts between two subgroups. Statistical significance tests are adjusted to account for clustering of students within schools and for multiple hypothesis testing (MHT) in order to control for the probability of finding any falsely significant impacts (the family-wise error rate) at 5 percent. The adjustment for MHT is based on the multivariate t-distribution and takes into account correlations among test statistics. This adjustment accounts for all tests presented in this table but not for tests presented in other tables of this report. The data are weighted to account for random assignment, sampling, consent, and nonresponse probabilities. The weights are scaled so that, conditional on random assignment probabilities, each school receives equal weight.

[a]Participants in covered activities were identified by comparing student self-reported activity participation from the student survey with lists of covered activities obtained from each district. Students were classified as participants if there was an exact match between the activity listed on the student survey and the district-provided activity lists.

[b]The reported sample size is the number of students who completed a follow-up survey.

MRSDT = Mandatory-Random Student Drug Testing.

TABLE I.22

IMPACTS OF MRSDT ON EXTRACURRICULAR ACTIVITY PARTICIPATION, BY SELF-REPORTED
ACADEMIC GRADES AND STUDENT KNOWLEDGE OF MRSDT

| Activity Participation Measure | Self-Reported Academic Grades (Pane 1) | | | Student Knowledge of MRSDT[a] (Pane 2) | | | | | |
| | Impact for Students Receiving: | | | Impact for Students Who: | | | Difference in Impacts Between: | | |
	Mostly As or Bs	Mostly Cs or Below	Difference	Thought Testing Existed (Group 1)	Did Not Think Testing Existed (Group 2)	Were Unsure if Testing Existed (Group 3)	Groups 1 and 2	Groups 1 and 3	Groups 2 and 3
All Students									
Percentage of Students That Participated in a Covered Activity During 2007-2008 School Year[b]	1.483	2.218	-0.735	3.706	5.538	-2.270	-1.833	5.976	7.808
Sample Size[c]	**1,782**	**497**		**969**	**420**	**890**			

Source: Student surveys administered by study team.

Note: Impacts for each subgroup are regression adjusted for random assignment block indicator variables, baseline measures of the outcome variables, and additional covariates that were chosen to improve statistical precision (the method for selecting covariates is described in Appendix F). The columns labeled "Difference" show the difference in impacts between two subgroups. Statistical significance tests are adjusted to account for clustering of students within schools and for multiple hypothesis testing (MHT) in order to control for the probability of finding any falsely significant impacts (the family-wise error rate) at 5 percent. The adjustment for MHT is based on the multivariate t-distribution and takes into account correlations among test statistics. This adjustment is applied separately to panes 1 and 2 and accounts for all tests presented within each pane. The adjustment does not take into account statistical tests presented across multiple panes or in other tables in this report. The data are weighted to account for random assignment, sampling, consent, and nonresponse probabilities. The weights are scaled so that, conditional on random assignment probabilities, each school receives equal weight.

[a]Student knowledge of MRSDT is measured on the basis of responses to the following true/false question (17e) from the baseline student survey: "At my school students who participate in some sports or other activities may be randomly tested for drugs." Students were instructed to select one of the following response categories: "true" (group 1), "false" (group 2), or "don't know" (group 3).

[b]Participants in covered activities were identified by comparing student self-reported activity participation from the student survey with lists of covered activities obtained from each district. Students were classified as participants if there was an exact match between the activity listed on the student survey and the district-provided activity lists.

[c]The reported sample size is the number of students who completed both the baseline and follow-up surveys.

MRSDT = Mandatory-Random Student Drug Testing.

TABLE I.23

IMPACTS OF MRSDT ON SCHOOL CONNECTEDNESS, BY GENDER, RACE, AND ETHNICITY

Measure of School Connectedness	Gender (Pane 1)			Race (Pane 2)			Ethnicity (Pane 3)		
	Impact for Males	Impact for Females	Difference	Impact for Whites	Impact for Blacks	Difference	Impact for Hispanics	Impact for Non-Hispanics	Difference
Sample 1: Participants in Covered Activities[a]									
Mean School Connectedness Scale[b]	0.007	0.004	0.003	-0.008	-0.009	0.001	0.007	0.007	0.000
Sample Size[c]	**1,176**	**1,269**		**1,629**	**489**		**291**	**2,148**	
Sample 2: Nonparticipants									
Mean School Connectedness Scale[b]	-0.030	0.036	-0.067	0.000	0.003	-0.003	0.004	0.005	-0.001
Sample Size[c]	**1,008**	**1,270**		**1,537**	**400**		**357**	**1,903**	
Sample 3: All Students									
Mean School Connectedness Scale[b]	-0.010	0.017	-0.026	-0.006	-0.006	0.001	0.004	0.005	-0.001
Sample Size[c]	**2,184**	**2,539**		**3,166**	**889**		**648**	**4,051**	

Source: Student surveys administered by study team.

Note: Impacts for each subgroup are regression adjusted for random assignment block indicator variables, baseline measures of the outcome variables, and additional covariates that were chosen to improve statistical precision (the method for selecting covariates is described in Appendix F). An indicator variable for 16-year old students was included as an additional covariate in the model for activity participants, since the analysis of baseline equivalence found a statistically significant treatment/control difference on that variable. The columns labeled "Difference" show the difference in impacts between two subgroups. Statistical significance tests are adjusted to account for clustering of students within schools and for multiple hypothesis testing (MHT) in order to control for the probability of finding any falsely significant impacts (the family-wise error rate) at 5 percent. The adjustment for MHT is based on the multivariate t-distribution and takes into account correlations among test statistics. This adjustment is applied separately to each sample in panes 1, 2, and 3 and accounts for all tests presented within each pane-sample combination. The adjustment does not take into account statistical tests presented across multiple panes, across multiple samples or in other tables in this report. The data are weighted to account for random assignment, sampling, consent, and nonresponse probabilities. The weights are scaled so that, conditional on random assignment probabilities, each school receives equal weight.

[a]Participants in covered activities were identified by comparing student self-reported activity participation from the student survey with lists of covered activities obtained from each district. Students were classified as participants if there was an exact match between the activity listed on the student survey and the district-provided activity lists.

TABLE I.23 *(continued)*

[b]The School Connectedness Scale averages student responses to 16 items from the student survey (items 11a–p). For each item, students indicated on a 4-point scale whether they agreed or disagreed with statements such as (11b) "I feel like I belong at this school," (11d) "We do not waste time in my classes," (11f) "Adults at this school act on student concerns," and (11k) "I can be a success at this school." Higher values on the scale indicate greater connection to school.

[c]The reported sample size is the number of students who completed a follow-up survey.

MRSDT = Mandatory-Random Student Drug Testing.

TABLE I.24

IMPACTS OF MRSDT ON SCHOOL CONNECTEDNESS,
BY BASELINE SUBSTANCE USE

	Baseline Substance Use								
	Lifetime Use of Any Substance[a] (Pane 1)			Lifetime Use of Any Substance Except Alcohol and Tobacco (Pane 2)			Lifetime Use of Any Substance Tested by the District's MRSDT Policy[b] (Pane 3)		
	Impact for Students with:			Impact for Students with:			Impact for Students with:		
Measure of School Connectedness	Any Use	No Use	Difference	Any Use	No Use	Difference	Any Use	No Use	Difference
Sample 1: Participants in Covered Activities[c]									
Mean School Connectedness Scale[d]	-0.046	0.008	-0.054	-0.036	-0.019	-0.017	-0.040	-0.011	-0.030
Sample Size[e]	**763**	**429**		**315**	**871**		**446**	**746**	
Sample 2: Nonparticipants									
Mean School Connectedness Scale[d]	0.020	-0.028	0.047	-0.040	-0.011	-0.030	0.098	-0.052	0.150
Sample Size[e]	**714**	**347**		**344**	**710**		**480**	**581**	
Sample 3: All Students									
Mean School Connectedness Scale[d]	-0.019	-0.011	-0.009	0.022	-0.025	0.047	0.021	-0.031	0.052
Sample Size[e]	**1,477**	**776**		**659**	**1,581**		**926**	**1,327**	

Source: Student surveys administered by study team.

Note: Impacts for each subgroup are regression adjusted for random assignment block indicator variables, baseline measures of the outcome variables, and additional covariates that were chosen to improve statistical precision (the method for selecting covariates is described in Appendix F). An indicator variable for 16-year old students was included as an additional covariate in the model for activity participants, since the analysis of baseline equivalence found a statistically significant treatment/control difference on that variable. The columns labeled "Difference" show the difference in impacts between two subgroups. Statistical significance tests are adjusted to account for clustering of students within schools and for multiple hypothesis testing (MHT) in order to control for the probability of finding any falsely significant impacts (the family-wise error rate) at 5 percent. The adjustment for MHT is based on the multivariate t-distribution and takes into account correlations among test statistics. This adjustment is applied separately to each sample in panes 1, 2, and 3 and accounts for all tests presented within each pane-sample combination. The adjustment does not take into account statistical tests presented across multiple panes, across multiple samples or in other tables in this report. The data are weighted to account for random assignment, sampling, consent, and nonresponse probabilities. The weights are scaled so that, conditional on random assignment probabilities, each school receives equal weight.

TABLE I.24 *(continued)*

[a]The "Any Substance" category reflects students' reported use of the following substances: cigarettes, chewing tobacco, alcohol, marijuana, cocaine, steroids or other muscle-building drugs, glue or other inhalants, narcotic drugs such as heroin or codeine, amphetamines or methamphetamines without a prescription, and any other illegal drug.

[b]This category reflects the substances tested by each participating district as part of its MRSDT program. The tested substances vary *across* districts but are the same *within* each district.

[c]Participants in covered activities were identified by comparing student self-reported activity participation from the student survey with lists of covered activities obtained from each district. Students were classified as participants if there was an exact match between the activity listed on the student survey and the district-provided activity lists.

[d]The School Connectedness Scale averages student responses to 16 items from the student survey (items 11a–p). For each item, students indicated on a 4-point scale whether they agreed or disagreed with statements such as (11b) "I feel like I belong at this school," (11d) "We do not waste time in my classes," (11f) "Adults at this school act on student concerns," and (11k) "I can be a success at this school." Higher values on the scale indicate greater connection to school.

[e]The reported sample size is the number of students who completed both the baseline and follow-up surveys.

MRSDT = Mandatory-Random Student Drug Testing.

TABLE I.25

IMPACTS OF MRSDT ON SCHOOL CONNECTEDNESS, BY GRADE LEVEL

Measure of School Connectedness	Impacts for:				Difference in Impacts Between:					
	9th Graders	10th Graders	11th Graders	12th Graders	9th and 10th Graders	9th and 11th Graders	9th and 12th Graders	10th and 11th Graders	10th and 12th Graders	11th and 12th Graders
Sample 1: Participants in Covered Activities[a]										
Mean School Connectedness Scale[b]	0.101	0.019	-0.039	-0.086	0.082	0.140	0.188	0.058	0.105	0.048
Sample Size[c]	**415**	**735**	**708**	**587**						
Sample 2: Nonparticipants										
Mean School Connectedness Scale[b]	0.002	0.011	-0.006	0.022	-0.009	0.008	-0.020	0.017	-0.012	-0.028
Sample Size[c]	**392**	**707**	**618**	**561**						
Sample 3: All Students										
Mean School Connectedness Scale[b]	0.054	0.011	-0.032	-0.032	0.043	0.086	0.086	0.044	0.043	-0.001
Sample Size[c]	**807**	**1,442**	**1,326**	**1,148**						

Source: Student surveys administered by study team.

Note: Grade level is measured at time of the follow-up survey. Impacts for each subgroup are regression adjusted for random assignment block indicator variables, baseline measures of the outcome variables, and additional covariates that were chosen to improve statistical precision (the method for selecting covariates is described in Appendix F). A variable indicating which students were 16 years old was also included as a covariate in impact models for activity participants (sample 1), since the analysis of baseline equivalence found a statistically significant treatment/control difference on that variable. The columns labeled "Difference" show the difference in impacts between two subgroups. Statistical significance tests are adjusted to account for clustering of students within schools and for multiple hypothesis testing (MHT) in order to control for the probability of finding any falsely significant impacts (the family-wise error rate) at 5 percent. The adjustment for MHT is based on the multivariate t-distribution and takes into account correlations among test statistics. This adjustment accounts for all tests presented within each sample. The adjustment does not take into account statistical tests presented across multiple samples or in other tables in this report. The data are weighted to account for random assignment, sampling, consent, and nonresponse probabilities. The weights are scaled so that, conditional on random assignment probabilities, each school receives equal weight.

[a]Participants in covered activities were identified by comparing student self-reported activity participation from the student survey with lists of covered activities obtained from each district. Students were classified as participants if there was an exact match between the activity listed on the student survey and the district-provided activity lists.

TABLE I.25 *(continued)*

[b]The School Connectedness Scale averages student responses to 16 items from the student survey (items 11a–p). For each item, students indicated on a 4-point scale whether they agreed or disagreed with statements such as (11b) "I feel like I belong at this school," (11d) "We do not waste time in my classes," (11f) "Adults at this school act on student concerns," and (11k) "I can be a success at this school." Higher values on the scale indicate greater connection to school.

[c]The reported sample size is the number of students who completed a follow-up survey.

MRSDT = Mandatory-Random Student Drug Testing.

TABLE I.26

IMPACTS OF MRSDT ON SCHOOL CONNECTEDNESS, BY SELF-REPORTED ACADEMIC GRADES
AND STUDENT KNOWLEDGE OF MRSDT

| | Self-Reported Academic Grades (Pane 1) | | | Student Knowledge of MRSDT[a] (Pane 2) | | | | | |
| | Impact for Students Receiving: | | | Impact for Students Who: | | | Difference in Impacts Between: | | |
Measure of School Connectedness	Mostly As or Bs	Mostly Cs or Below	Difference	Thought Testing Existed (Group 1)	Did Not Think Testing Existed (Group 2)	Were Unsure if Testing Existed (Group 3)	Groups 1 and 2	Groups 1 and 3	Groups 2 and 3
All Students									
Mean School Connectedness Scale[b]	0.002	-0.053	0.055	-0.010	0.004	-0.028	-0.015	0.018	0.033
Sample Size[c]	**1,782**	**497**		**969**	**420**	**890**			

Source: Student surveys administered by study team.

Note: Impacts for each subgroup are regression adjusted for random assignment block indicator variables, baseline measures of the outcome variables, and additional covariates that were chosen to improve statistical precision (the method for selecting covariates is described in Appendix F). The columns labeled "Difference" show the difference in impacts between two subgroups. Statistical significance tests are adjusted to account for clustering of students within schools and for multiple hypothesis testing (MHT) in order to control for the probability of finding any falsely significant impacts (the family-wise error rate) at 5 percent. The adjustment for MHT is based on the multivariate t-distribution and takes into account correlations among test statistics. This adjustment is applied separately to panes 1 and 2 and accounts for all tests presented within each pane. The adjustment does not take into account statistical tests presented across multiple panes or in other tables in this report. The data are weighted to account for random assignment, sampling, consent, and nonresponse probabilities. The weights are scaled so that, conditional on random assignment probabilities, each school receives equal weight.

[a]Student knowledge of MRSDT is measured on the basis of responses to the following true/false question (17e) from the baseline student survey: "At my school students who participate in some sports or other activities may be randomly tested for drugs." Students were instructed to select one of the following response categories: "true" (group 1), "false" (group 2), or "don't know" (group 3).

[b]The School Connectedness Scale averages student responses to 16 items from the student survey (items 11a–p). For each item, students indicated on a 4-point scale whether they agreed or disagreed with statements such as (11b) "I feel like I belong at this school," (11d) "We do not waste time in my classes," (11f) "Adults at this school act on student concerns," and (11k) "I can be a success at this school." Higher values on the scale indicate greater connection to school.

[c]The reported sample size is the number of students who completed both the baseline and follow-up surveys.

MRSDT = Mandatory-Random Student Drug Testing.

APPENDIX J

STUDY INSTRUMENTS

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SCHOOL IDENTIFICATION

(ATTACH LABEL HERE)

School Name:_____

School Address:_____

_____

DRUG TESTING COLLECTION FORM

Name of person completing this form:

_____

Phone of person completing this form:

(__ __ __) __ __ __ - __ __ __ __

Email of person completing this form:

_____

Date of original test: _____ / _____ / _____
                        Month   Day   Year

Was any confirmatory testing needed? ☐ Yes   ☐ No

Date confirmatory testing occurred: _____ / _____ / _____
                                     Month   Day   Year

INSTRUCTIONS: Please complete one form on **each original test day** that drug-testing is conducted for this school. Answer each of the following questions for this testing date. Please record a number on each line. If none, please write "0"

---

1. On this testing date, how many students:
   Check that the numbers of students in lines b + c + d + e add up to the number of students recorded in line a.

   _____   _____   _____   _____   _____
   a. Were *scheduled*   b. Were *actually*   c. Refused to be   d. Were absent or   e. Not tested for other reasons
      to be tested?   tested?   tested?   not available?   (e.g., could not produce specimen)?

2. On this testing date, how many of the students **actually tested** were:
   Check that the numbers of males + females tested add up to the number of tested students recorded in question 1b above.

   _____   _____
   Male   Female

3. On this testing date, how many of the students **actually tested** were from each of the following grades:
   Check that the numbers of students in each grade add up to the number of tested students recorded in question 1b above.

   _____   _____   _____   _____
   Grade 9   Grade 10   Grade 11   Grade 12

4. On this testing date, how many of the students **actually tested** were eligible for testing due to participation in the following activities?
   Check that the numbers of students in the three activity types add up to the number of tested students recorded in question 1b above.

   _____   _____   _____
   Sports   Extracurricular activity   Both
                      other than sports

5. Where was drug-testing conducted on this date? *(Please check one)*

   ☐   At this school
   ☐   Off-site location ➡ *Please list:*_____ ➡ **(Skip to Q8, next page)**

6. Who conducted the drug tests at this school on this testing date? *(Please check all that apply)*

   ☐ Trained Faculty   ☐ Drug-Testing   ☐ School Nurse   ☐ Other *(Please list)*:   ☐ Not applicable
     Member   Program Contractor   _____

7. Was there a break in the **chain of custody procedure** (including specimen documentation) during drug-testing at this school on this date?

   ☐   Yes ➡ *Please specify:*_____   ☐ No   ☐ Not applicable

---

8. Please indicate which drugs were tested for on this testing date, and the method of testing used to test each drug.

| DRUG | TESTED | | METHOD OF TESTING — PLEASE CHECK THE METHOD(S) USED TO TEST EACH DRUG | | | | | | | TEST RESULTS | | |
	Yes	No	Urine	Oral Fluid	Breath Alcohol	Hair	Sweat Patch	Other	(List):	# Tested Positive	# Confirmatory Tests	# Positive Confirmatory Tests
Marijuana	☐	☐	☐	☐	☐	☐	☐	☐		____	____	____
Phencyclidine (PCP)	☐	☐	☐	☐	☐	☐	☐	☐		____	____	____
Opiates (Heroin, morphine, codeine)	☐	☐	☐	☐	☐	☐	☐	☐		____	____	____
Amphetamines/Methamphetamine	☐	☐	☐	☐	☐	☐	☐	☐		____	____	____
Cocaine	☐	☐	☐	☐	☐	☐	☐	☐		____	____	____
Synthetic Opiates (Oxycodone Methadone)	☐	☐	☐	☐	☐	☐	☐	☐		____	____	____
Steroids	☐	☐	☐	☐	☐	☐	☐	☐		____	____	____
Alcohol	☐	☐	☐	☐	☐	☐	☐	☐		____	____	____
Ecstasy/MDMA	☐	☐	☐	☐	☐	☐	☐	☐		____	____	____
GHB	☐	☐	☐	☐	☐	☐	☐	☐		____	____	____
LSD	☐	☐	☐	☐	☐	☐	☐	☐		____	____	____
Nicotine	☐	☐	☐	☐	☐	☐	☐	☐		____	____	____
Other (Please list)	☐	☐	☐	☐	☐	☐	☐	☐		____	____	____
_____	☐	☐	☐	☐	☐	☐	☐	☐		____	____	____
_____	☐	☐	☐	☐	☐	☐	☐	☐		____	____	____

Please answer the following questions about procedures for <u>positive tests</u> acquired on this testing date. *(Please check one for each)*

9. Were all positive tests verified through a **<u>Medical Review Officer</u>**? .... ☐ Yes   ☐ No   ☐ Not applicable

10. Were positive samples retained for future re-testing? .... ☐ Yes   ☐ No   ☐ Not applicable

Interviewer name: _____

School: _____
School Staff Person: _____
School Staff Person's Title: _____

SCHOOL BACKGROUND – SCHOOL-BASED SUBSTANCE ABUSE STRATEGIES

SCRIPT: The purpose of this call is to learn about all the substance use prevention or intervention strategies in place at your school from July 2007 through June 2008 (for treatment schools please add: and including your mandatory-random student drug testing program). NOTE: Please use text from consent script to enhance or augment this as necessary.

From July 2007 through June 2008, I would like to learn about substance abuse prevention curriculum or other strategies that have been used to date [or will be used through this June]. I would like to learn more about each of those strategies.

To make this process as clear and complete as possible, and be sure we cover everything, we have divided the possible programs here into four mutually exclusive categories:

Curriculum or student programs or activities during school hours—Classroom-based materials on substance abuse prevention related topics presented/taught to high school students. May include lectures, videos, pamphlets, and sometimes can be integrated into existing traditional lessons. May also include presentations or assemblies during school hours.
Student programs or activities occurring outside of regular school hours—Any activity that occurs outside of regular school hours that has a specific substance use prevention component such as a health fair.
Counseling and intervention for students—The involvement of school or community agency personnel/counselors/professionals or other mentoring of students by adults to prevent or stop drug use. Usually referred to when a student is suspected of drug use. Generally implies one-on-one attention given to an at-risk student.
Trainings for teachers or for parents—Session(s) to make teachers and/or parents proficient with specialized instruction, coaching, and practice, generally utilizing a training manual or instructional guide. Lessons and information provided to teachers or other adults to prepare them to participate or lead a drug prevention program in the school.

1. **Does your school currently use any substance use prevention or intervention strategies in any of the following categories? Check all that apply.**

○ Curriculum or student programs or activities during school hours — If yes, go to page 2, Question I. If no, go to page 6, Question II.

○ Student programs or activities occurring outside of regular school hours— If yes, go to page 6, Question II. If no, go to page 12, Question III.

○ Counseling and intervention for students— If yes, go to page 12, Question III. If no, go to page 16, Question IV.

○ Trainings— If yes, go to page 16, Question IV. If no, go to page 20, Question V.

○ Other _____– If yes. go to page 20, Question V. Question V is the final question.

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Describe and name (if possible) the specific drug prevention strategies currently in place at this school. Check all that apply.

I. CURRICULUM OR STUDENT PROGRAMS OR ACTIVITIES DURING SCHOOL HOURS:

Does your school provide curriculum or student programs or activities during school hours? Check all that apply.

○ Prevention curriculum or instruction for students —if yes, go to Question A below.

○ Student assemblies or presentations by speakers—if yes, go to page 4, Question B.

If no to all, this section of the questionnaire is complete.

A. Prevention Curriculum or Instruction for Students (e.g., Class Action, Drug Abuse Resistance Education, FreeWay, Keep a Clear Mind, Learning to be Drugfree, Life Skills Training, Lions-Quest Skills for Adolescence, Project ALERT, Project SUCCESS, Project Toward No Drug Abuse, Protecting You/Protecting Me, Setting Important Goals Now Against Life-Threatening Substances, Truth Squad)

- Name/type of curriculum: _____

- Who taught/provided curriculum (e.g., teacher, counselor, coach, police officer): _____

- Is attendance required?　○ Yes　　○ No

1. Do all students participate? If yes, check all grades that apply and indicate the amount of time exposed to this (e.g., 6 days). (If not, skip to question 2):

　　○ 9th Grade　　○ 10th Grade　　○ 11th Grade　　○ 12th Grade

9th Grade　____　　○ Minutes　○ Hours　○ Days　○ Weeks　○ Months　○ Years

　　　　　　○ Classes/Periods　○ Meetings/Sessions　○ Semesters　　○ Other _____
Convert to total number of hours: ____

10th Grade　____　　○ Minutes　○ Hours　○ Days　○ Weeks　○ Months　○ Years

　　　　　　○ Classes/Periods　○ Meetings/Sessions　○ Semesters　　○ Other _____
Convert to total number of hours: ____

11th Grade　____　　○ Minutes　○ Hours　○ Days　○ Weeks　○ Months　○ Years

　　　　　　○ Classes/Periods　○ Meetings/Sessions　○ Semesters　　○ Other _____
Convert to total number of hours: ____

12th Grade　____　　○ Minutes　○ Hours　○ Days　○ Weeks　○ Months　○ Years

　　　　　　○ Classes/Periods　○ Meetings/Sessions　○ Semesters　　○ Other _____
Convert to total number of hours: ____

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2. If a subset of students participates, please describe the group, check the grades that apply and indicate the amount of time exposed to this:

Subset of Students (describe, e.g., football players, health class, etc.)	9th Grade ○	10th Grade ○	11th Grade ○	12th Grade ○

9th Grade ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
Convert to total number of hours: ____

10th Grade ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
Convert to total number of hours: ____

11th Grade ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
Convert to total number of hours: ____

12th Grade ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
Convert to total number of hours: ____

Subset of Students (describe, e.g., football players, health class, etc.)	9th Grade ○	10th Grade ○	11th Grade ○	12th Grade ○

9th Grade ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
Convert to total number of hours: ____

10th Grade ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
Convert to total number of hours: ____

11th Grade ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
Convert to total number of hours: ____

12th Grade ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
Convert to total number of hours: ____

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B. Student Assemblies or Presentations by Speakers

- Topic of Student Assembly/Presentation: _____

- Who spoke at the assembly/presentation (e.g., teacher, counselor, coach, police officer): _____

- Is attendance required?   ○ Yes   ○ No

1. Do all students participate? If yes, check all grades that apply and indicate the amount of time exposed to this (e.g., 6 days). (If not, skip to question 2):

○ 9th Grade   ○ 10th Grade   ○ 11th Grade   ○ 12th Grade

9th Grade   ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
Convert to total number of hours: ____

10th Grade   ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
Convert to total number of hours: ____

11th Grade   ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
Convert to total number of hours: ____

12th Grade   ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
Convert to total number of hours: ____

For additional space, copy this page.

2. If a subset of students participates, please describe the group, check the grades that apply and indicate the amount of time exposed to this:

Subset of Students (describe, e.g., football players, health class, etc.)	**9th Grade** ○	**10th Grade** ○	**11th Grade** ○	**12th Grade** ○

9th Grade   ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
Convert to total number of hours: ____

10th Grade   ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
Convert to total number of hours: ____

11th Grade   ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
Convert to total number of hours: ____

12th Grade   ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
Convert to total number of hours: ____

Subset of Students (describe, e.g., football players, health class, etc.)	**9th Grade** ○	**10th Grade** ○	**11th Grade** ○	**12th Grade** ○

9th Grade   ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
Convert to total number of hours: ____

10th Grade   ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
Convert to total number of hours: ____

11th Grade   ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
Convert to total number of hours: ____

12th Grade   ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
Convert to total number of hours: ____

For additional space, copy this page.

II. STUDENT PROGRAMS OR ACTIVITIES OCCURING OUTSIDE OF REGULAR SCHOOL HOURS:

Does your school provide any of the following student activities outside of regular school hours? Check all that apply.

○   Recreational, enrichment, or leisure activities for students—if yes, go to Question A below.

○   Student assemblies—if yes, go to page 8, Question B.

○   Health Fairs, other type of student fairs, open houses including component(s) related to alcohol and/or drug use—if yes, go to page 10, Question C.

If no to both, skip to page 12, Question III.

A.   Recreational, Enrichment, or Leisure Activities for Students (e.g., Leadership Resiliency Program, Project Yes!)

- Name/Type of Activity: _____

- Who taught/provided the activity (e.g., teacher, counselor, coach, police officer): _____

- Is attendance required?   ○ Yes   ○ No

1. Do all students participate? If yes, check all grades that apply and indicate the amount of time exposed to this (e.g., 6 days). (If not, skip to question 2):

    ○ 9th Grade   ○ 10th Grade   ○ 11th Grade   ○ 12th Grade

9th Grade   ____   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

      ○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
Convert to total number of hours: ____

10th Grade   ____   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

      ○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
Convert to total number of hours: ____

11th Grade   ____   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

      ○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
Convert to total number of hours: ____

12th Grade   ____   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

      ○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
Convert to total number of hours: ____

For additional space, copy this page.

2. If a subset of students participates, please describe the group, check the grades that apply and indicate the amount of time exposed to this:

Subset of Students (describe, e.g., football players, health class, etc.)	9th Grade ○	10th Grade ○	11th Grade ○	12th Grade ○

9th Grade ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
Convert to total number of hours: ____

10th Grade ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
Convert to total number of hours: ____

11th Grade ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
Convert to total number of hours: ____

12th Grade ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
Convert to total number of hours: ____

Subset of Students (describe, e.g., football players, health class, etc.)	9th Grade ○	10th Grade ○	11th Grade ○	12th Grade ○

9th Grade ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
Convert to total number of hours: ____

10th Grade ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
Convert to total number of hours: ____

11th Grade ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
Convert to total number of hours: ____

12th Grade ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
Convert to total number of hours: ____
For additional space, copy this page.

B. Student Assemblies

- Topic of Student Assembly: _____

- Who spoke at the assembly (e.g., teacher, counselor, coach, police officer):
  _____

- Is attendance required?   ○ Yes   ○ No

1. Do all students participate? If yes, check all grades that apply and indicate the amount of time exposed to this (e.g., 6 days). (If not, skip to question 2):

    ○ 9th Grade   ○ 10th Grade   ○ 11th Grade   ○ 12th Grade

9th Grade   ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

                           ○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
                           Convert to total number of hours: ____

10th Grade   ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

                           ○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
                           Convert to total number of hours: ____

11th Grade   ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

                           ○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
                           Convert to total number of hours: ____

12th Grade   ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

                           ○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
                           Convert to total number of hours: ____

For additional space, copy this page.

2. If a subset of students participates, please describe the group, check the grades that apply and indicate the amount of time exposed to this:

Subset of Students (describe, e.g., football players, health class, etc.)	**9ᵗʰ Grade** ○	**10ᵗʰ Grade** ○	**11ᵗʰ Grade** ○	**12ᵗʰ Grade** ○

9ᵗʰ Grade ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
Convert to total number of hours: ____

10ᵗʰ Grade ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
Convert to total number of hours: ____

11ᵗʰ Grade ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
Convert to total number of hours: ____

12ᵗʰ Grade ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
Convert to total number of hours: ____

Subset of Students (describe, e.g., football players, health class, etc.)	**9ᵗʰ Grade** ○	**10ᵗʰ Grade** ○	**11ᵗʰ Grade** ○	**12ᵗʰ Grade** ○

9ᵗʰ Grade ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
Convert to total number of hours: ____

10ᵗʰ Grade ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
Convert to total number of hours: ____

11ᵗʰ Grade ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
Convert to total number of hours: ____

12ᵗʰ Grade ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
Convert to total number of hours: ____
For additional space, copy this page.

C. Health Fair, including component(s) related to alcohol and/or drug use

- Name of Health Fair: _____

- Who manages the health fair (e.g., teacher, counselor, coach, police officer):
_____

- Is attendance required?   ○ Yes   ○ No

1. Do all students participate? If yes, check all grades that apply indicate the amount of time exposed to this (e.g., 6 days). (If not, skip to question 2):

   ○ 9th Grade   ○ 10th Grade   ○ 11th Grade   ○ 12th Grade

9th Grade   ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

   ○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other   _____
   Convert to total number of hours: ____

10th Grade   ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

   ○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other   _____
   Convert to total number of hours: ____

11th Grade   ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

   ○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other   _____
   Convert to total number of hours: ____

12th Grade   ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

   ○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other   _____
   Convert to total number of hours: ____

For additional space, copy this page.

2. If a subset of students participates, please describe the group, check the grades that apply and indicate the amount of time exposed to this:

Subset of Students (describe, e.g., football players, health class, etc.)	9th Grade ○	10th Grade ○	11th Grade ○	12th Grade ○

9th Grade ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____

Convert to total number of hours: ____

10th Grade ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____

Convert to total number of hours: ____

11th Grade ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____

Convert to total number of hours: ____

12th Grade ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____

Convert to total number of hours: ____

Subset of Students (describe, e.g., football players, health class, etc.)	9th Grade ○	10th Grade ○	11th Grade ○	12th Grade ○

9th Grade ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____

Convert to total number of hours: ____

10th Grade ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____

Convert to total number of hours: ____

11th Grade ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____

Convert to total number of hours: ____

12th Grade ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____

Convert to total number of hours: ____

For additional space, copy this page.

III. COUNSELING AND INTERVENTION FOR STUDENTS:

Does your school provide either of the following types of counseling or intervention? Check all that apply.

○ Behavioral or behavior modification for students—If yes, go to Question A below.

○ Counseling, social work, psychological, or therapeutic activity for students—If yes, go to page 14, Question B.

If no to both, skip to page 16, Question IV.

A. Behavioral or Behavior Modification Intervention for **Students** (e.g., All Stars, Keepin' It R.E.A.L., Leadership Resiliency Program, Positive Action, Reconnecting Youth, Too Good for Drugs)

- Name/Type of Counseling or Intervention: _____

- Who taught/provided the counseling or intervention (e.g., teacher, counselor, nurse or other school health official, coach, police officer): _____

- Is attendance required?   ○ Yes   ○ No

1. Are all students eligible to participate? If yes, check all grades that apply and indicate the amount of time exposed to this (e.g., 6 days). (If not, skip to question 2):

   ○ 9th Grade   ○ 10th Grade   ○ 11th Grade   ○ 12th Grade

9th Grade   ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

   ○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
   Convert to total number of hours: ____

10th Grade   ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

   ○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
   Convert to total number of hours: ____

11th Grade   ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

   ○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
   Convert to total number of hours: ____

12th Grade   ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

   ○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
   Convert to total number of hours: ____

For additional space, copy this page.

2. If a subset of students participates, please describe the group, check the grades that apply and indicate the amount of time exposed to this:

Subset of Students (describe, e.g., football players, health class, etc.)	**9th Grade** ○	**10th Grade** ○	**11th Grade** ○	**12th Grade** ○

9th Grade ___ ○ Minutes ○ Hours ○ Days ○ Weeks ○ Months ○ Years

○ Classes/Periods ○ Meetings/Sessions ○ Semesters ○ Other _____
Convert to total number of hours: ____

10th Grade ___ ○ Minutes ○ Hours ○ Days ○ Weeks ○ Months ○ Years

○ Classes/Periods ○ Meetings/Sessions ○ Semesters ○ Other _____
Convert to total number of hours: ____

11th Grade ___ ○ Minutes ○ Hours ○ Days ○ Weeks ○ Months ○ Years

○ Classes/Periods ○ Meetings/Sessions ○ Semesters ○ Other _____
Convert to total number of hours: ____

12th Grade ___ ○ Minutes ○ Hours ○ Days ○ Weeks ○ Months ○ Years

○ Classes/Periods ○ Meetings/Sessions ○ Semesters ○ Other _____
Convert to total number of hours: ____

Subset of Students (describe, e.g., football players, health class, etc.)	**9th Grade** ○	**10th Grade** ○	**11th Grade** ○	**12th Grade** ○

9th Grade ___ ○ Minutes ○ Hours ○ Days ○ Weeks ○ Months ○ Years

○ Classes/Periods ○ Meetings/Sessions ○ Semesters ○ Other _____
Convert to total number of hours: ____

10th Grade ___ ○ Minutes ○ Hours ○ Days ○ Weeks ○ Months ○ Years

○ Classes/Periods ○ Meetings/Sessions ○ Semesters ○ Other _____
Convert to total number of hours: ____

11th Grade ___ ○ Minutes ○ Hours ○ Days ○ Weeks ○ Months ○ Years

○ Classes/Periods ○ Meetings/Sessions ○ Semesters ○ Other _____
Convert to total number of hours: ____

12th Grade ___ ○ Minutes ○ Hours ○ Days ○ Weeks ○ Months ○ Years

○ Classes/Periods ○ Meetings/Sessions ○ Semesters ○ Other _____
Convert to total number of hours: ____

For additional space, copy this page.

B. Counseling, Social Work, Psychological, or Therapeutic Activity for **Students** (e.g., CASASTART, Families and Schools Together, Family Skills Training for Parents and Children, Narconon)

- Name/Type of Counseling or Intervention: _____

- Who taught/provided the counseling or intervention (e.g., teacher, counselor, coach, police officer): _____

- Is attendance required?   ○ Yes   ○ No

1. Do all students participate? If yes, check all grades that apply and indicate the amount of time exposed to this (e.g., 6 days). (If not, skip to question 2):

    ○ 9th Grade   ○ 10th Grade   ○ 11th Grade   ○ 12th Grade

9th Grade   ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

                          ○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
                          Convert to total number of hours: ____

10th Grade   ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

                          ○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
                          Convert to total number of hours: ____

11th Grade   ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

                          ○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
                          Convert to total number of hours: ____

12th Grade   ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

                          ○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
                          Convert to total number of hours: ____

For additional space, copy this page.

2. If a subset of students participates, please describe the group, check the grades that apply and indicate the amount of time exposed to this:

Subset of Students (describe, e.g., football players, health class, etc.)	9th Grade ○	10th Grade ○	11th Grade ○	12th Grade ○

9th Grade ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____

Convert to total number of hours: ____

10th Grade ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____

Convert to total number of hours: ____

11th Grade ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____

Convert to total number of hours: ____

12th Grade ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____

Convert to total number of hours: ____

Subset of Students (describe, e.g., football players, health class, etc.)	9th Grade ○	10th Grade ○	11th Grade ○	12th Grade ○

9th Grade ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____

Convert to total number of hours: ____

10th Grade ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____

Convert to total number of hours: ____

11th Grade ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____

Convert to total number of hours: ____

12th Grade ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____

Convert to total number of hours: ____

For additional space, copy this page.

IV. TRAININGS FOR TEACHERS OR PARENTS:

Does your school provide any of the following types of training? Check all that apply.

○ Prevention/drug and alcohol trainings available to **teachers** —if yes, go to Question A below.

○ Prevention/drug and alcohol trainings available to **parents** —if yes, go to page 18, Question B.

If no to all, skip to page 20, Question V.

A. Prevention/Drug and Alcohol Trainings Available to **Teachers**

- Name/Type of Training: _____

- Who taught/provided training (e.g., teacher, counselor, coach, police officer):
   _____

- Is attendance required?   ○ Yes   ○ No

1. Do teachers of all students participate? If yes, check all grades that apply and indicate the amount of time exposed to this (e.g., 6 days). (If not, skip to question 2):

   ○ 9th Grade   ○ 10th Grade   ○ 11th Grade   ○ 12th Grade

9th Grade   ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

                    ○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
                    Convert to total number of hours: ____

10th Grade   ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

                    ○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
                    Convert to total number of hours: ____

11th Grade   ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

                    ○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
                    Convert to total number of hours: ____

12th Grade   ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

                    ○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
                    Convert to total number of hours: ____

For additional space, copy this page.

2. If teachers of a subset of students participate, please describe the group, check the grades that apply and indicate the amount of time exposed to this:

Subset of Students (describe, e.g., football players, health class, etc.)	9th Grade ○	10th Grade ○	11th Grade ○	12th Grade ○

9th Grade   ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
Convert to total number of hours: ____

10th Grade   ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
Convert to total number of hours: ____

11th Grade   ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
Convert to total number of hours: ____

12th Grade   ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
Convert to total number of hours: ____

Subset of Students (describe, e.g., football players, health class, etc.)	9th Grade ○	10th Grade ○	11th Grade ○	12th Grade ○

9th Grade   ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
Convert to total number of hours: ____

10th Grade   ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
Convert to total number of hours: ____

11th Grade   ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
Convert to total number of hours: ____

12th Grade   ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
Convert to total number of hours: ____

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B. Prevention/Drug and Alcohol Trainings Available to **Parents** (e.g., Families and Schools Together, Family Matters, Guiding Good Choices)

- Name/Type of Training: _____

- Who taught/provided training (e.g., teacher, counselor, coach, police officer):
  _____

- Is attendance required?   ○ Yes   ○ No

1. Do parents of all students participate? If yes, check all grades that apply and indicate the amount of time exposed to this (e.g., 6 days). (If not, skip to question 2):

   ○ 9th Grade   ○ 10th Grade   ○ 11th Grade   ○ 12th Grade

9th Grade   ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
Convert to total number of hours: ____

10th Grade   ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
Convert to total number of hours: ____

11th Grade   ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
Convert to total number of hours: ____

12th Grade   ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
Convert to total number of hours: ____

For additional space, copy this page.

2. If parents of a subset of students participate, please describe the group, check the grades that apply and indicate the amount of time exposed to this:

Subset of Students (describe, e.g., football players, health class, etc.)	9th Grade ○	10th Grade ○	11th Grade ○	12th Grade ○

9th Grade ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
Convert to total number of hours: ____

10th Grade ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
Convert to total number of hours: ____

11th Grade ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
Convert to total number of hours: ____

12th Grade ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
Convert to total number of hours: ____

Subset of Students (describe, e.g., football players, health class, etc.)	9th Grade ○	10th Grade ○	11th Grade ○	12th Grade ○

9th Grade ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
Convert to total number of hours: ____

10th Grade ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
Convert to total number of hours: ____

11th Grade ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
Convert to total number of hours: ____

12th Grade ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
Convert to total number of hours: ____

For additional space, copy this page.

V. OTHER:

A. Other Programs intended to prevent or reduce alcohol and/or drug use (e.g., Communities Mobilizing for Change on Alcohol)

- Name of Strategy: _____

- Who is responsible for this activity (e.g., teacher, counselor, coach, police officer): _____

- Is attendance required?   ○ Yes   ○ No

1. Do all students participate? If yes, check all grades that apply indicate the amount of time exposed to this (e.g., 6 days). (If not, skip to question 2):

   ○ 9th Grade   ○ 10th Grade   ○ 11th Grade   ○ 12th Grade

9th Grade   ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
Convert to total number of hours: ____

10th Grade   ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
Convert to total number of hours: ____

11th Grade   ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
Convert to total number of hours: ____

12th Grade   ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
Convert to total number of hours: ____

For additional space, copy this page.

2. If a subset of students participates, please describe the group, check the grades that apply and indicate the amount of time exposed to this:

Subset of Students (describe, e.g., football players, health class, etc.)	9th Grade ○	10th Grade ○	11th Grade ○	12th Grade ○

9th Grade ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
Convert to total number of hours: ____

10th Grade ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
Convert to total number of hours: ____

11th Grade ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
Convert to total number of hours: ____

12th Grade ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
Convert to total number of hours: ____

Subset of Students (describe, e.g., football players, health class, etc.)	9th Grade ○	10th Grade ○	11th Grade ○	12th Grade ○

9th Grade ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
Convert to total number of hours: ____

10th Grade ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
Convert to total number of hours: ____

11th Grade ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
Convert to total number of hours: ____

12th Grade ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
Convert to total number of hours: ____

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Notes:

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Interviewer name: _____

School: _____
School Staff Person: _____
School Staff Person's Title: _____

SCHOOL BACKGROUND – SCHOOL-BASED SUBSTANCE ABUSE STRATEGIES

SCRIPT**:** in this section we would like to discuss the policies in place at your school regarding MRSDT.

II. SCHOOL POLICY FOR SUSPICION OF STUDENT DRUG ACTIVITY

2. What is your school's policy for dealing with a student who is **suspected** of being under the influence of drugs or alcohol? Check all that apply:
    ○ Submit to screening/drug test
    ○ Inspect student's locker, vehicle, or backpack
    ○ Meet with school counselor
    ○ Meet with drug counselor
    ○ Meet with other school officials
    ○ Notify parents
    ○ Notify school police
    ○ Notify law enforcement
    ○ Other (please specify) _____

3. What is your school's policy for dealing with a student who is **found in possession** of drugs or alcohol? Check all that apply:
    ○ Suspension—If yes, for how long?
            Was this an in or out of school suspension?   ○ In   ○ Out
    ○ Expulsion
    ○ Treatment
    ○ Counseling
    ○ Inspect student's locker, vehicle, or backpack
    ○ Meet with school counselor
    ○ Meet with drug counselor
    ○ Meet with other school officials
    ○ Notify parents
    ○ Notify school police
    ○ Notify law enforcement
    ○ Other (please specify) _____

DOCUMENTATION REQUEST: School policy(ies) related to drug use prevention, use, or interception.

III. RANDOM STUDENT SELECTION AND DRUG-TEST PROCEDURES—CONTROL SCHOOLS ONLY

4. Are the students aware that the mandatory student drug testing program will be implemented?
   ○ Yes
   ○ No

   On a scale of one to five please indicate the students' awareness level. 1 = no (or very few) students are aware, 2 = a few of the students are aware, 3 = about half the students are aware, 4 = the majority of the students are aware, and 5 = all (or nearly all) students are aware.
   ○ 1   ○ 2   ○ 3   ○ 4   ○ 5

5. When did/will the students first become aware that the school is going to conduct mandatory-random student drug testing? Date _____

   How did/will the students become aware of the drug testing? Check all that apply:
   ○ Letter or E-mail to parent
           If yes, how many times did the school send out letters and or e-mails? ___
   ○ Letter or E-mail to student
           If yes, how many times did the school send out letters and or e-mails? ___
   ○ Announcement at student meeting (entire student body)
           If yes, how many times were announcements made? ___
   ○ Announcement at athletic meeting – prior to declaration as an athlete (e.g., first practice)
           If yes, how many times were announcements made? ___
   ○ Announcement at athletic meeting – after declaration as an athlete
           If yes, how many times were announcements made? ___
   ○ School newsletter
           If yes, how many times did it appear in the newsletter? ___
   ○ Announcement on school's Web page
           If yes, how many announcements appear on the Web page? ___
   ○ Announcement in school handbook
           If yes, how many times is it mentioned? ___
   ○ School PA
           If yes, how many times were announcements made? ___
   ○ Call to parent
           If yes, how many times were parents called? ___
   ○ Call to student
           If yes, how many times were students called? ___
   ○ Media release (newspaper, television, or radio)
           If yes, how many releases were done? ___
   ○ Announcement at public meeting (school board, PTA, etc.)
           If yes, how many times were announcements made? ___
   ○ Other (please specify) _____

DOCUMENTATION REQUEST: None

Notes:

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Interviewer name: _____

School: _____
School Staff Person: _____
School Staff Person's Title: _____

SCHOOL BACKGROUND – SCHOOL-BASED SUBSTANCE ABUSE STRATEGIES

SCRIPT: The purpose of this call is to learn about all the substance use prevention or intervention strategies in place at your school from July 2007 through June 2008 (for treatment schools please add: and including your mandatory-random student drug testing program). NOTE: Please use text from consent script to enhance or augment this as necessary.

From July 2007 through June 2008, I would like to learn about substance abuse prevention curriculum or other strategies that have been used to date [or will be used through this June]. I would like to learn more about each of those strategies.

To make this process as clear and complete as possible, and be sure we cover everything, we have divided the possible programs here into four mutually exclusive categories:

Curriculum or student programs or activities during school hours—Classroom-based materials on substance abuse prevention related topics presented/taught to high school students. May include lectures, videos, pamphlets, and sometimes can be integrated into existing traditional lessons. May also include presentations or assemblies during school hours.
Student programs or activities occurring outside of regular school hours—Any activity that occurs outside of regular school hours that has a specific substance use prevention component such as a health fair.
Counseling and intervention for students—The involvement of school or community agency personnel/counselors/professionals or other mentoring of students by adults to prevent or stop drug use. Usually referred to when a student is suspected of drug use. Generally implies one-on-one attention given to an at-risk student.
Trainings for teachers or for parents—Session(s) to make teachers and/or parents proficient with specialized instruction, coaching, and practice, generally utilizing a training manual or instructional guide. Lessons and information provided to teachers or other adults to prepare them to participate or lead a drug prevention program in the school.

1. **Does your school currently use any substance use prevention or intervention strategies in any of the following categories? Check all that apply.**

○ Curriculum or student programs or activities during school hours — If yes, go to page 2, Question I. If no, go to page 6, Question II.

○ Student programs or activities occurring outside of regular school hours— If yes, go to page 6, Question II. If no, go to page 12, Question III.

○ Counseling and intervention for students— If yes, go to page 12, Question III. If no, go to page 16, Question IV.

○ Trainings— If yes, go to page 16, Question IV. If no, go to page 20, Question V.

○ Other _____– If yes. go to page 20, Question V. Question V is the final question.

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Describe and name (if possible) the specific drug prevention strategies currently in place at this school. Check all that apply.

I. CURRICULUM OR STUDENT PROGRAMS OR ACTIVITIES DURING SCHOOL HOURS:

Does your school provide curriculum or student programs or activities during school hours? Check all that apply.

○ Prevention curriculum or instruction for students —if yes, go to Question A below.

○ Student assemblies or presentations by speakers—if yes, go to page 4, Question B.

If no to all, this section of the questionnaire is complete.

A. Prevention Curriculum or Instruction for Students (e.g., Class Action, Drug Abuse Resistance Education, FreeWay, Keep a Clear Mind, Learning to be Drugfree, Life Skills Training, Lions-Quest Skills for Adolescence, Project ALERT, Project SUCCESS, Project Toward No Drug Abuse, Protecting You/Protecting Me, Setting Important Goals Now Against Life-Threatening Substances, Truth Squad)

- Name/type of curriculum: _____

- Who taught/provided curriculum (e.g., teacher, counselor, coach, police officer): _____

- Is attendance required?   ○ Yes   ○ No

1. Do all students participate? If yes, check all grades that apply and indicate the amount of time exposed to this (e.g., 6 days). (If not, skip to question 2):

   ○ 9th Grade   ○ 10th Grade   ○ 11th Grade   ○ 12th Grade

9th Grade ____   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

       ○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
       Convert to total number of hours: ____

10th Grade ____   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

       ○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
       Convert to total number of hours: ____

11th Grade ____   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

       ○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
       Convert to total number of hours: ____

12th Grade ____   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

       ○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
       Convert to total number of hours: ____

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2. If a subset of students participates, please describe the group, check the grades that apply and indicate the amount of time exposed to this:

Subset of Students (describe, e.g., football players, health class, etc.)	9th Grade ○	10th Grade ○	11th Grade ○	12th Grade ○

9th Grade ___ ○ Minutes ○ Hours ○ Days ○ Weeks ○ Months ○ Years

○ Classes/Periods ○ Meetings/Sessions ○ Semesters ○ Other _____
Convert to total number of hours: ____

10th Grade ___ ○ Minutes ○ Hours ○ Days ○ Weeks ○ Months ○ Years

○ Classes/Periods ○ Meetings/Sessions ○ Semesters ○ Other _____
Convert to total number of hours: ____

11th Grade ___ ○ Minutes ○ Hours ○ Days ○ Weeks ○ Months ○ Years

○ Classes/Periods ○ Meetings/Sessions ○ Semesters ○ Other _____
Convert to total number of hours: ____

12th Grade ___ ○ Minutes ○ Hours ○ Days ○ Weeks ○ Months ○ Years

○ Classes/Periods ○ Meetings/Sessions ○ Semesters ○ Other _____
Convert to total number of hours: ____

Subset of Students (describe, e.g., football players, health class, etc.)	9th Grade ○	10th Grade ○	11th Grade ○	12th Grade ○

9th Grade ___ ○ Minutes ○ Hours ○ Days ○ Weeks ○ Months ○ Years

○ Classes/Periods ○ Meetings/Sessions ○ Semesters ○ Other _____
Convert to total number of hours: ____

10th Grade ___ ○ Minutes ○ Hours ○ Days ○ Weeks ○ Months ○ Years

○ Classes/Periods ○ Meetings/Sessions ○ Semesters ○ Other _____
Convert to total number of hours: ____

11th Grade ___ ○ Minutes ○ Hours ○ Days ○ Weeks ○ Months ○ Years

○ Classes/Periods ○ Meetings/Sessions ○ Semesters ○ Other _____
Convert to total number of hours: ____

12th Grade ___ ○ Minutes ○ Hours ○ Days ○ Weeks ○ Months ○ Years

○ Classes/Periods ○ Meetings/Sessions ○ Semesters ○ Other _____
Convert to total number of hours: ____

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B. Student Assemblies or Presentations by Speakers

- Topic of Student Assembly/Presentation: _____

- Who spoke at the assembly/presentation (e.g., teacher, counselor, coach, police officer): _____

- Is attendance required? ○ Yes   ○ No

1. Do all students participate? If yes, check all grades that apply and indicate the amount of time exposed to this (e.g., 6 days). (If not, skip to question 2):

○ 9th Grade   ○ 10th Grade   ○ 11th Grade   ○ 12th Grade

9th Grade   ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
Convert to total number of hours: ____

10th Grade   ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
Convert to total number of hours: ____

11th Grade   ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
Convert to total number of hours: ____

12th Grade   ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
Convert to total number of hours: ____

For additional space, copy this page.

2. If a subset of students participates, please describe the group, check the grades that apply and indicate the amount of time exposed to this:

Subset of Students (describe, e.g., football players, health class, etc.)	9th Grade ○	10th Grade ○	11th Grade ○	12th Grade ○

9th Grade ___ ○ Minutes ○ Hours ○ Days ○ Weeks ○ Months ○ Years
○ Classes/Periods ○ Meetings/Sessions ○ Semesters ○ Other _____
Convert to total number of hours: ____

10th Grade ___ ○ Minutes ○ Hours ○ Days ○ Weeks ○ Months ○ Years
○ Classes/Periods ○ Meetings/Sessions ○ Semesters ○ Other _____
Convert to total number of hours: ____

11th Grade ___ ○ Minutes ○ Hours ○ Days ○ Weeks ○ Months ○ Years
○ Classes/Periods ○ Meetings/Sessions ○ Semesters ○ Other _____
Convert to total number of hours: ____

12th Grade ___ ○ Minutes ○ Hours ○ Days ○ Weeks ○ Months ○ Years
○ Classes/Periods ○ Meetings/Sessions ○ Semesters ○ Other _____
Convert to total number of hours: ____

Subset of Students (describe, e.g., football players, health class, etc.)	9th Grade ○	10th Grade ○	11th Grade ○	12th Grade ○

9th Grade ___ ○ Minutes ○ Hours ○ Days ○ Weeks ○ Months ○ Years
○ Classes/Periods ○ Meetings/Sessions ○ Semesters ○ Other _____
Convert to total number of hours: ____

10th Grade ___ ○ Minutes ○ Hours ○ Days ○ Weeks ○ Months ○ Years
○ Classes/Periods ○ Meetings/Sessions ○ Semesters ○ Other _____
Convert to total number of hours: ____

11th Grade ___ ○ Minutes ○ Hours ○ Days ○ Weeks ○ Months ○ Years
○ Classes/Periods ○ Meetings/Sessions ○ Semesters ○ Other _____
Convert to total number of hours: ____

12th Grade ___ ○ Minutes ○ Hours ○ Days ○ Weeks ○ Months ○ Years
○ Classes/Periods ○ Meetings/Sessions ○ Semesters ○ Other _____
Convert to total number of hours: ____
For additional space, copy this page.

II. STUDENT PROGRAMS OR ACTIVITIES OCCURING OUTSIDE OF REGULAR SCHOOL HOURS:

Does your school provide any of the following student activities outside of regular school hours? Check all that apply.

○   Recreational, enrichment, or leisure activities for students—if yes, go to Question A below.

○   Student assemblies—if yes, go to page 8, Question B.

○   Health Fairs, other type of student fairs, open houses including component(s) related to alcohol and/or drug use—if yes, go to page 10, Question C.

If no to both, skip to page 12, Question III.

A. Recreational, Enrichment, or Leisure Activities for Students (e.g., Leadership Resiliency Program, Project Yes!)

- Name/Type of Activity: _____

- Who taught/provided the activity (e.g., teacher, counselor, coach, police officer): _____

- Is attendance required?   ○ Yes   ○ No

1. Do all students participate? If yes, check all grades that apply and indicate the amount of time exposed to this (e.g., 6 days). (If not, skip to question 2):

    ○ 9th Grade   ○ 10th Grade   ○ 11th Grade   ○ 12th Grade

9th Grade   ____   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

        ○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____

        Convert to total number of hours: ____

10th Grade   ____   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

        ○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____

        Convert to total number of hours: ____

11th Grade   ____   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

        ○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____

        Convert to total number of hours: ____

12th Grade   ____   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

        ○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____

        Convert to total number of hours: ____

For additional space, copy this page.

2. If a subset of students participates, please describe the group, check the grades that apply and indicate the amount of time exposed to this:

Subset of Students (describe, e.g., football players, health class, etc.)	9th Grade ○	10th Grade ○	11th Grade ○	12th Grade ○

9th Grade ___ ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
Convert to total number of hours: ____

10th Grade ___ ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
Convert to total number of hours: ____

11th Grade ___ ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
Convert to total number of hours: ____

12th Grade ___ ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
Convert to total number of hours: ____

Subset of Students (describe, e.g., football players, health class, etc.)	9th Grade ○	10th Grade ○	11th Grade ○	12th Grade ○

9th Grade ___ ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
Convert to total number of hours: ____

10th Grade ___ ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
Convert to total number of hours: ____

11th Grade ___ ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
Convert to total number of hours: ____

12th Grade ___ ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
Convert to total number of hours: ____

For additional space, copy this page.

B. Student Assemblies

- Topic of Student Assembly: _____

- Who spoke at the assembly (e.g., teacher, counselor, coach, police officer):
  _____

- Is attendance required?   ○ Yes   ○ No

1. Do all students participate? If yes, check all grades that apply and indicate the amount of time exposed to this (e.g., 6 days). (If not, skip to question 2):

    ○ 9th Grade   ○ 10th Grade   ○ 11th Grade   ○ 12th Grade

9th Grade   ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

                         ○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other   _____
                         Convert to total number of hours: ____

10th Grade   ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

                         ○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other   _____
                         Convert to total number of hours: ____

11th Grade   ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

                         ○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other   _____
                         Convert to total number of hours: ____

12th Grade   ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

                         ○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other   _____
                         Convert to total number of hours: ____

For additional space, copy this page.

2. If a subset of students participates, please describe the group, check the grades that apply and indicate the amount of time exposed to this:

Subset of Students (describe, e.g., football players, health class, etc.)	9th Grade ○	10th Grade ○	11th Grade ○	12th Grade ○

9th Grade ___
○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years
○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
Convert to total number of hours: ____

10th Grade ___
○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years
○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
Convert to total number of hours: ____

11th Grade ___
○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years
○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
Convert to total number of hours: ____

12th Grade ___
○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years
○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
Convert to total number of hours: ____

Subset of Students (describe, e.g., football players, health class, etc.)	9th Grade ○	10th Grade ○	11th Grade ○	12th Grade ○

9th Grade ___
○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years
○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
Convert to total number of hours: ____

10th Grade ___
○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years
○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
Convert to total number of hours: ____

11th Grade ___
○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years
○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
Convert to total number of hours: ____

12th Grade ___
○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years
○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
Convert to total number of hours: ____

For additional space, copy this page.

C. Health Fair, including component(s) related to alcohol and/or drug use

- Name of Health Fair: _____

- Who manages the health fair (e.g., teacher, counselor, coach, police officer):
  _____

- Is attendance required?   ○ Yes   ○ No

1. Do all students participate? If yes, check all grades that apply indicate the amount of time exposed to this (e.g., 6 days). (If not, skip to question 2):

   ○ 9th Grade   ○ 10th Grade   ○ 11th Grade   ○ 12th Grade

9th Grade   ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

                       ○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
                       Convert to total number of hours: ____

10th Grade   ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

                       ○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
                       Convert to total number of hours: ____

11th Grade   ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

                       ○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
                       Convert to total number of hours: ____

12th Grade   ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

                       ○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
                       Convert to total number of hours: ____

For additional space, copy this page.

2. If a subset of students participates, please describe the group, check the grades that apply and indicate the amount of time exposed to this:

Subset of Students (describe, e.g., football players, health class, etc.)	9th Grade ○	10th Grade ○	11th Grade ○	12th Grade ○

9th Grade   ___

    ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

    ○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____

Convert to total number of hours: ____

10th Grade   ___

    ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

    ○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____

Convert to total number of hours: ____

11th Grade   ___

    ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

    ○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____

Convert to total number of hours: ____

12th Grade   ___

    ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

    ○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____

Convert to total number of hours: ____

Subset of Students (describe, e.g., football players, health class, etc.)	9th Grade ○	10th Grade ○	11th Grade ○	12th Grade ○

9th Grade   ___

    ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

    ○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____

Convert to total number of hours: ____

10th Grade   ___

    ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

    ○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____

Convert to total number of hours: ____

11th Grade   ___

    ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

    ○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____

Convert to total number of hours: ____

12th Grade   ___

    ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

    ○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____

Convert to total number of hours: ____

For additional space, copy this page.

III. COUNSELING AND INTERVENTION FOR STUDENTS:

Does your school provide either of the following types of counseling or intervention? Check all that apply.

○ Behavioral or behavior modification for students—If yes, go to Question A below.

○ Counseling, social work, psychological, or therapeutic activity for students—If yes, go to page 14, Question B.

If no to both, skip to page 16, Question IV.

A. Behavioral or Behavior Modification Intervention for **Students** (e.g., All Stars, Keepin' It R.E.A.L., Leadership Resiliency Program, Positive Action, Reconnecting Youth, Too Good for Drugs)

- Name/Type of Counseling or Intervention: _____

- Who taught/provided the counseling or intervention (e.g., teacher, counselor, nurse or other school health official, coach, police officer): _____

- Is attendance required?   ○ Yes   ○ No

1. Are all students eligible to participate? If yes, check all grades that apply and indicate the amount of time exposed to this (e.g., 6 days). (If not, skip to question 2):

   ○ 9th Grade   ○ 10th Grade   ○ 11th Grade   ○ 12th Grade

9th Grade   ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
Convert to total number of hours: ____

10th Grade   ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
Convert to total number of hours: ____

11th Grade   ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
Convert to total number of hours: ____

12th Grade   ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
Convert to total number of hours: ____

For additional space, copy this page.

2. If a subset of students participates, please describe the group, check the grades that apply and indicate the amount of time exposed to this:

Subset of Students (describe, e.g., football players, health class, etc.)	9th Grade ○	10th Grade ○	11th Grade ○	12th Grade ○

9th Grade ___ ○ Minutes ○ Hours ○ Days ○ Weeks ○ Months ○ Years

○ Classes/Periods ○ Meetings/Sessions ○ Semesters ○ Other _____
Convert to total number of hours: ____

10th Grade ___ ○ Minutes ○ Hours ○ Days ○ Weeks ○ Months ○ Years

○ Classes/Periods ○ Meetings/Sessions ○ Semesters ○ Other _____
Convert to total number of hours: ____

11th Grade ___ ○ Minutes ○ Hours ○ Days ○ Weeks ○ Months ○ Years

○ Classes/Periods ○ Meetings/Sessions ○ Semesters ○ Other _____
Convert to total number of hours: ____

12th Grade ___ ○ Minutes ○ Hours ○ Days ○ Weeks ○ Months ○ Years

○ Classes/Periods ○ Meetings/Sessions ○ Semesters ○ Other _____
Convert to total number of hours: ____

Subset of Students (describe, e.g., football players, health class, etc.)	9th Grade ○	10th Grade ○	11th Grade ○	12th Grade ○

9th Grade ___ ○ Minutes ○ Hours ○ Days ○ Weeks ○ Months ○ Years

○ Classes/Periods ○ Meetings/Sessions ○ Semesters ○ Other _____
Convert to total number of hours: ____

10th Grade ___ ○ Minutes ○ Hours ○ Days ○ Weeks ○ Months ○ Years

○ Classes/Periods ○ Meetings/Sessions ○ Semesters ○ Other _____
Convert to total number of hours: ____

11th Grade ___ ○ Minutes ○ Hours ○ Days ○ Weeks ○ Months ○ Years

○ Classes/Periods ○ Meetings/Sessions ○ Semesters ○ Other _____
Convert to total number of hours: ____

12th Grade ___ ○ Minutes ○ Hours ○ Days ○ Weeks ○ Months ○ Years

○ Classes/Periods ○ Meetings/Sessions ○ Semesters ○ Other _____
Convert to total number of hours: ____
For additional space, copy this page.

B. Counseling, Social Work, Psychological, or Therapeutic Activity for **Students** (e.g., CASASTART, Families and Schools Together, Family Skills Training for Parents and Children, Narconon)

- Name/Type of Counseling or Intervention: _____

- Who taught/provided the counseling or intervention (e.g., teacher, counselor, coach, police officer): _____

- Is attendance required?   ○ Yes   ○ No

1. Do all students participate? If yes, check all grades that apply and indicate the amount of time exposed to this (e.g., 6 days). (If not, skip to question 2):

    ○ 9th Grade   ○ 10th Grade   ○ 11th Grade   ○ 12th Grade

9th Grade   ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

  ○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
  Convert to total number of hours: ____

10th Grade   ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

  ○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
  Convert to total number of hours: ____

11th Grade   ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

  ○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
  Convert to total number of hours: ____

12th Grade   ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

  ○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
  Convert to total number of hours: ____

For additional space, copy this page.

2. If a subset of students participates, please describe the group, check the grades that apply and indicate the amount of time exposed to this:

Subset of Students (describe, e.g., football players, health class, etc.)	9th Grade ○	10th Grade ○	11th Grade ○	12th Grade ○

9th Grade ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
Convert to total number of hours: ____

10th Grade ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
Convert to total number of hours: ____

11th Grade ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
Convert to total number of hours: ____

12th Grade ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
Convert to total number of hours: ____

Subset of Students (describe, e.g., football players, health class, etc.)	9th Grade ○	10th Grade ○	11th Grade ○	12th Grade ○

9th Grade ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
Convert to total number of hours: ____

10th Grade ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
Convert to total number of hours: ____

11th Grade ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
Convert to total number of hours: ____

12th Grade ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
Convert to total number of hours: ____
For additional space, copy this page.

IV. TRAININGS FOR TEACHERS OR PARENTS:

Does your school provide any of the following types of training? Check all that apply.

○ Prevention/drug and alcohol trainings available to **teachers** —if yes, go to Question A below.

○ Prevention/drug and alcohol trainings available to **parents** —if yes, go to page 18, Question B.

If no to all, skip to page 20, Question V.

A. Prevention/Drug and Alcohol Trainings Available to **Teachers**

- Name/Type of Training: _____

- Who taught/provided training (e.g., teacher, counselor, coach, police officer):
  _____

- Is attendance required?   ○ Yes   ○ No

1. Do teachers of all students participate? If yes, check all grades that apply and indicate the amount of time exposed to this (e.g., 6 days). (If not, skip to question 2):

    ○ 9th Grade   ○ 10th Grade   ○ 11th Grade   ○ 12th Grade

9th Grade   ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
Convert to total number of hours: ____

10th Grade   ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
Convert to total number of hours: ____

11th Grade   ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
Convert to total number of hours: ____

12th Grade   ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
Convert to total number of hours: ____

For additional space, copy this page.

2. If teachers of a subset of students participate, please describe the group, check the grades that apply and indicate the amount of time exposed to this:

Subset of Students (describe, e.g., football players, health class, etc.)	9th Grade ○	10th Grade ○	11th Grade ○	12th Grade ○

9th Grade   ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
Convert to total number of hours: ____

10th Grade   ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
Convert to total number of hours: ____

11th Grade   ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
Convert to total number of hours: ____

12th Grade   ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
Convert to total number of hours: ____

Subset of Students (describe, e.g., football players, health class, etc.)	9th Grade ○	10th Grade ○	11th Grade ○	12th Grade ○

9th Grade   ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
Convert to total number of hours: ____

10th Grade   ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
Convert to total number of hours: ____

11th Grade   ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
Convert to total number of hours: ____

12th Grade   ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
Convert to total number of hours: ____

For additional space, copy this page.

B. Prevention/Drug and Alcohol Trainings Available to **Parents** (e.g., Families and Schools Together, Family Matters, Guiding Good Choices)

- Name/Type of Training: _____

- Who taught/provided training (e.g., teacher, counselor, coach, police officer):
_____

- Is attendance required?   ○ Yes   ○ No

1. Do parents of all students participate? If yes, check all grades that apply and indicate the amount of time exposed to this (e.g., 6 days). (If not, skip to question 2):

   ○ 9th Grade   ○ 10th Grade   ○ 11th Grade   ○ 12th Grade

9th Grade   ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
Convert to total number of hours: ____

10th Grade   ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
Convert to total number of hours: ____

11th Grade   ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
Convert to total number of hours: ____

12th Grade   ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
Convert to total number of hours: ____

For additional space, copy this page.

2. If parents of a subset of students participate, please describe the group, check the grades that apply and indicate the amount of time exposed to this:

Subset of Students (describe, e.g., football players, health class, etc.)	9th Grade ○	10th Grade ○	11th Grade ○	12th Grade ○

9th Grade ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____

Convert to total number of hours: ____

10th Grade ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____

Convert to total number of hours: ____

11th Grade ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____

Convert to total number of hours: ____

12th Grade ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____

Convert to total number of hours: ____

Subset of Students (describe, e.g., football players, health class, etc.)	9th Grade ○	10th Grade ○	11th Grade ○	12th Grade ○

9th Grade ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____

Convert to total number of hours: ____

10th Grade ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____

Convert to total number of hours: ____

11th Grade ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____

Convert to total number of hours: ____

12th Grade ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____

Convert to total number of hours: ____

For additional space, copy this page.

V. OTHER:

A. Other Programs intended to prevent or reduce alcohol and/or drug use (e.g., Communities Mobilizing for Change on Alcohol)

- Name of Strategy: _____

- Who is responsible for this activity (e.g., teacher, counselor, coach, police officer): _____

- Is attendance required?   ○ Yes   ○ No

1. Do all students participate? If yes, check all grades that apply indicate the amount of time exposed to this (e.g., 6 days). (If not, skip to question 2):

    ○ 9th Grade   ○ 10th Grade   ○ 11th Grade   ○ 12th Grade

9th Grade   ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
Convert to total number of hours: ____

10th Grade   ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
Convert to total number of hours: ____

11th Grade   ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
Convert to total number of hours: ____

12th Grade   ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
Convert to total number of hours: ____

For additional space, copy this page.

2. If a subset of students participates, please describe the group, check the grades that apply and indicate the amount of time exposed to this:

Subset of Students (describe, e.g., football players, health class, etc.)	9th Grade ○	10th Grade ○	11th Grade ○	12th Grade ○

9th Grade ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
Convert to total number of hours: ____

10th Grade ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
Convert to total number of hours: ____

11th Grade ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
Convert to total number of hours: ____

12th Grade ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
Convert to total number of hours: ____

Subset of Students (describe, e.g., football players, health class, etc.)	9th Grade ○	10th Grade ○	11th Grade ○	12th Grade ○

9th Grade ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
Convert to total number of hours: ____

10th Grade ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
Convert to total number of hours: ____

11th Grade ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
Convert to total number of hours: ____

12th Grade ___   ○ Minutes   ○ Hours   ○ Days   ○ Weeks   ○ Months   ○ Years

○ Classes/Periods   ○ Meetings/Sessions   ○ Semesters   ○ Other _____
Convert to total number of hours: ____

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Notes:

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Interviewer name: _____

School: _____
School Staff Person: _____
School Staff Person's Title: _____

SCHOOL BACKGROUND – SCHOOL-BASED SUBSTANCE ABUSE STRATEGIES

SCRIPT: In this section we would like to discuss the policies in place at your school regarding MRSDT.

II. SCHOOL POLICY FOR SUSPICION OF STUDENT DRUG ACTIVITY

2. What is your school's policy for dealing with a student who is **suspected** of being under the influence of drugs or alcohol? Check all that apply:
    ○ Submit to screening/drug test
    ○ Inspect student's locker, vehicle, or backpack
    ○ Meet with school counselor
    ○ Meet with drug counselor
    ○ Meet with other school officials
    ○ Notify parents
    ○ Notify school police
    ○ Notify law enforcement
    ○ Other (please specify) _____

3. What is your school's policy for dealing with a student who is **found in possession** of drugs or alcohol? Check all that apply:
    ○ Suspension—If yes, for how long?
            Was this an in or out of school suspension?   ○ In   ○ Out
    ○ Expulsion
    ○ Treatment
    ○ Counseling
    ○ Inspect student's locker, vehicle, or backpack
    ○ Meet with school counselor
    ○ Meet with drug counselor
    ○ Meet with other school officials
    ○ Notify parents
    ○ Notify school police
    ○ Notify law enforcement
    ○ Other (please specify) _____

DOCUMENTATION REQUEST: School policy(ies) related to drug use prevention, use, or interception.

SCRIPT: In this section, we would like to discuss the procedures your school uses in its drug-testing program.

III. RANDOM STUDENT SELECTION AND DRUG-TEST PROCEDURES—TREATMENT SCHOOLS ONLY

4. What student selection method does your school employ for student drug testing? Check all that apply:
   - ○ Random such as a lottery, rotating, etc.
     - Please specify method: e.g., DOB, letter, etc. _____
   - ○ Reasonable Suspicion
   - ○ Other (please specify) _____

   How frequently does sampling occur?
   - ○ Once per year
   - ○ Once per semester
   - ○ Seasonal: Fall ___ Winter ___   Spring ___   Summer ___
   - ○ Just prior to testing
   - ○ Other (please specify) _____

   Does sampling occur with or without replacement?   ○ With replacement   ○ Without replacement

SCRIPT: In other words, if a given student is sampled in testing Event 1, does that affect the probability of being sampled in Event 2? We want to understand whether each student could be sampled once per year at most, or whether each student can be sampled multiple times per year. This question is not asking about replacement in the event that a sampled student is absent on the testing date, but instead about whether a student will be replaced in subsequent events if they have already been tested in Event 1.

   If a student tests positive, is he/she subject to further testing?   ○ Yes   ○ No

SCRIPT: In other words, if a student tests positive at testing Event 1, can he/she be tested in subsequent Events or is he/she taken out of the testing sample? This question is not asking about follow-up tests to confirm positive results.

   What consequences occur if a student refuses to be tested if he/she is selected? Check all that apply.
   - ○ Permanently suspended from the activity for the year
   - ○ Temporarily suspended from the activity—If yes, how long?
   - ○ Notify parents
   - ○ Other (please specify)_____

5. A. Are **sampling decisions** up to each school, or are the decisions made at the district level?
   - ○   School level   ○   District level

   B. Are **testing decisions** up to each school, or are the decisions made at the district level?
   - ○   School level   ○   District level

6. Describe your school's drug testing schedule. Check all that apply:
   - ○ Weekly
   - ○ Biweekly
   - ○ Monthly
   - ○ Quarterly
   - ○ Seasonal: Fall ___   Winter ___   Spring ___   Summer ___
   - ○ Other (please specify) _____

7. How does the school notify the student when he/she has been selected for a drug test? Response options:
   ○ In writing (letter to student or parent)
   ○ By telephone (call to student or parent)
   ○ By a school administrator or other school official
   ○ No pre-notification
   ○ Other (please specify) _____

8. Which of the following applies to the procedures your school uses for **collecting samples** at your school? Check all that apply:
   ○ Follow drug testing company's established procedures—If yes, skip to question 9
   ○ Follow procedures developed and approved by NIDA or SAMHSA
   ○ Provide training and instruction to collectors (when school employee collects sample)
   ○ Use tamper-proof sealing systems
   ○ Use unique identification numbers
   ○ Use labels
   ○ Use Special or designated shipping containers for transportation of sample
   ○ Execute consent forms to students to consent to random drug testing
   ○ Other (please specify) _____

9. Which of the following applies to the procedures your school uses for **handling and processing the samples** collected at your school? Check all that apply:
   ○ Follow drug testing company's established procedures—If yes, skip to question 10
   ○ Laboratory transmits results to drug coordinator or MRO via Fax, mail, or E-mail; MRO at school reviews lab-based test results
   ○ MRO communicates with lab if there is a question
   ○ MRO request second test, if applicable
   ○ (If positive test) MRO discusses results with student or parent
   ○ MRO informs appropriate school official of all results
   ○ Other (please specify) _____

10. Are the students aware that the mandatory-random student drug testing program exists?
    ○ Yes
    ○ No

   On a scale of one to five please indicate the students' awareness level. 1 = no (or very few) students are aware, 2 = a few of the students are aware, 3 = about half the students are aware, 4 = the majority of the students are aware, and 5 = all (or nearly all) students are aware.
      ○ 1   ○ 2   ○ 3   ○ 4   ○ 5

11. When did the students first become aware that the school would be conducting mandatory random student drug testing? Date ____/____/_____

    How did the students become aware of the drug testing? Check all that apply:
    ○ Letter or E-mail to parent
        If yes, how many times did the school send out letters and or e-mails? ___
    ○ Letter or E-mail to student
        If yes, how many times did the school send out letters and or e-mails?   ___
    ○ Announcement at student meeting (entire student body)
        If yes, how many times were announcements made?   ___
    ○ Announcement at athletic meeting – prior to declaration as an athlete (e.g., first practice)
        If yes, how many times were announcements made? ___
    ○ Announcement at athletic meeting – after declaration as an athlete
        If yes, how many times were announcements made?   ___
    ○ School newsletter
        If yes, how many times did it appear in the newsletter? ___
    ○ Announcement on school's Web page
        If yes, how many announcements appear on the Web page?   ___
    ○ Announcement in school handbook
        If yes, how many times is it mentioned?   ___
    ○ School PA
        If yes, how many times were announcements made? ___
    ○ Call to parent
        If yes, how many times were parents called? ___
    ○ Call to student
        If yes, how many times were students called? ___
    ○ Media release (newspaper, television, or radio)
        If yes, how many releases were done?   ___
    ○ Announcement at public meeting (school board, PTA, etc.)
        If yes, how many times were announcements made? ___
    ○ Other (please specify) _____

DOCUMENTATION REQUEST: Drug testing company's established procedures for collecting, handling, and processing samples.

Notes:

SCHOOL IDENTIFICATION

(ATTACH LABEL HERE)

School Name:_____

School Address:_____

_____

SCHOOLWIDE RECORDS COLLECTION FORM

OMB No.: **1850-0818**

Expiration Date: 08/31/2007

Name of person completing this form: _____

Phone of person completing this form: (__ __ __) __ __ __ - __ __ __ __

1. Please record today's date: |__|__| / |__|__| / |__|__|__|__|
                                    Month   Day   Year

2. Which of the following best describes this school?   **CHECK ONE RESPONSE**

    1 ☐   Regular public school

    2 ☐   Alternative public school

    3 ☐   Charter school

    4 ☐   Special Program Emphasis (for example, science/math school, talented/gifted school, etc.)

    5 ☐   Special Education (primarily serves students with disabilities)

    6 ☐   Other *(Please specify)* _____

3. How many teachers are employed at this school?.................................. _____ (Enter Number)

    Include all full and part-time regular classroom teachers, special area or resource teachers, long-term substitute teachers, and itinerant teachers. Do not include student teachers, teachers' aides, or short-term substitute teachers.

4. As of October 1, 2006, what was the total number of students enrolled in this school? .... _____ (Enter Number)

5. How many students were ABSENT on the most recent school day?........ _____ (Enter Number)

6. How many students were TARDY on the most recent school day? .... _____ (Enter Number)

7. What percentage of current students at this school are male? .... |__|__|__| (Enter Percent)

8. What percentage of current students at this school are Hispanic or Latino? |__|__|__| (Enter Percent)

9. What percentage of current students at this school are:

        American Indian/Alaska Native .... |__|__|__| (Enter Percent)

        Asian .... |__|__|__| (Enter Percent)

        Black or African American .... |__|__|__| (Enter Percent)

        Native Hawaiian or Other Pacific Islander .... |__|__|__| (Enter Percent)

        White .... |__|__|__| (Enter Percent)

10. What percentage of current students at this school fit the following criteria?

    10a. Are approved for free or reduced-price school meals?... |__|__|__| (Enter Percent)

    10b. Are limited English Proficient (LEP) or English Language Learners (ELL)?............................... |__|__|__| (Enter Percent)

    10c. What percentage of students have an Individual Education Plan (IEP) for students receiving special education services under the Individuals with Disabilities Education Act (IDEA) or a Services Agreement for students receiving services under Section 504 of the Rehabilitation Act of 1973?... |__|__|__| (Enter Percent)

Prepared by Mathematica Policy Research, Inc.

11. During THIS school year (2006-2007), has it been the practice of this school to do the following?

Source: Modified from
Principal Questionnaire, SAS
SURVEY 03-04, Q35

		CHECK "YES" OR "NO" ON EACH LINE	
		Yes	No
a.	Control access to school *buildings* during school hours (e.g., locked or monitored doors	1 ☐	0 ☐
b.	Control access to school *grounds* during school hours (e.g. locked or monitored gates)	1 ☐	0 ☐
c.	Require students to pass through metal detectors each day	1 ☐	0 ☐
d.	Perform random metal detector checks on students	1 ☐	0 ☐
e.	Require that all or most students stay on campus during lunch	1 ☐	0 ☐
f.	Require students to wear uniforms	1 ☐	0 ☐
g.	Enforce a strict dress code	1 ☐	0 ☐
h.	Require clear book bags or ban book bags on school grounds	1 ☐	0 ☐
i.	Require students to wear badges or picture IDs	1 ☐	0 ☐
j.	Use one or more security cameras to monitor the school	1 ☐	0 ☐
k.	Maintain a daily presence of police or security personnel	1 ☐	0 ☐

12. During THIS school year (2006-2007), how often has this school used random dog sniffs to check for drugs?

1 ☐ At least once a week

2 ☐ At least once a month

3 ☐ On occasion

4 ☐ Never → **GO TO 13**

12a. In how many instances were drugs or drug paraphernalia found during the most recent dog sniff?

If none, please write in "0."

_____ NUMBER OF INSTANCES

13. During THIS school year (2006-2007), how often has this school performed random sweeps for contraband (e.g., drugs or weapons), but *not including dog sniffs*?

1 ☐ At least once a week

2 ☐ At least once a month

3 ☐ On occasion

4 ☐ Never → **GO TO 14**

13a. If this school does perform random sweeps for contraband, in how many instances were contraband found during the most recent search?

If none, please write in "0."

	Number of Instances
a. Drugs and/or drug paraphernalia were found...............................	_____
b. Alcohol was found..	_____
c. Weapons were found..	_____
d. Total number of instances any contraband was found	_____

14. For each of the following time periods, how **many students** were expelled (i.e., removed or transferred for at least the remainder of the school year) from this school?

Source: Modified from Principal Questionnaire SAS SURVEY 03-04, Q33

If none, please write in "0."

Last School Year (2005-2006)	*Current School Year (2006-2007)*
_____	_____
NUMBER OF STUDENTS	*NUMBER OF STUDENTS*

15. For each of the following time periods, what was the **total number of** suspensions in this school? Please include in-school and out-of-school suspensions. Please count each individual suspension (e.g., if one student received 10 suspensions, all 10 would be included on this line).

Source: Modified from Principal Questionnaire SAS SURVEY

If none, please write in "0."

Last School Year (2005-2006)	*Current School Year (2006-2007)*
_____	_____
NUMBER OF SUSPENSIONS	*NUMBER OF SUSPENSIONS*

16. For each of the following time periods, please provide the **total number of incidents** this school recorded for each of the offenses listed below.

Source: Modified from School Survey on Crime & Safety Prevention 03-04, Q22

If none, please write in "0."

	Last School Year (2005-2006)	*Current School Year (2006-2007)*
a. Use/possession of a firearm/explosive device............	_____	_____
b. Use/possession of a weapon other than a firearm	_____	_____
c. Distribution, possession, or use of illegal drugs	_____	_____
d. Distribution, possession, or use of alcohol	_____	_____
e. Physical attacks or fights	_____	_____

17. During each of the following time periods, did this school have any formal programs **intended to prevent or reduce tobacco, alcohol and/or drug use** that included the following components for students?

	CHECK "YES" OR "NO" ON EACH LINE FOR EACH TIME PERIOD			
	Last School Year (2005-2006)		Current School Year (2006-2007)	
	Yes	No	Yes	No
a. Prevention curriculum, instruction, or training for students	1 ☐	0 ☐	1 ☐	0 ☐
b. Behavioral or behavior modification intervention for students	1 ☐	0 ☐	1 ☐	0 ☐
c. Counseling, social work, psychological, or therapeutic activity for students	1 ☐	0 ☐	1 ☐	0 ☐
d. Recreational, enrichment, or leisure activities for students	1 ☐	0 ☐	1 ☐	0 ☐
e. Hotline/tipline for students to report problems	1 ☐	0 ☐	1 ☐	0 ☐
f. Information line for students to obtain information about alcohol and/or drug use	1 ☐	0 ☐	1 ☐	0 ☐
g. Health fair, including component(s) related to alcohol and/or drug use	1 ☐	0 ☐	1 ☐	0 ☐
h. Student assemblies, speaking engagements	1 ☐	0 ☐	1 ☐	0 ☐
i. Alcohol and/or drug resource center	1 ☐	0 ☐	1 ☐	0 ☐
j. Brochures or posters	1 ☐	0 ☐	1 ☐	0 ☐
k. Other programs intended to prevent or reduce alcohol and/or drug use? *(Please list)* _____	1 ☐	0 ☐	1 ☐	0 ☐
_____	1 ☐	0 ☐	1 ☐	0 ☐

18. During each of the following time periods, which of the following trainings for classroom teachers or aides did this school or district provide?

	CHECK "YES" OR "NO" ON EACH LINE FOR EACH TIME PERIOD			
	Last School Year (2005-2006)		Current School Year (2006-2007)	
	Yes	No	Yes	No
a. School-wide discipline policies and practices related to alcohol and/or drug use	1 ☐	0 ☐	1 ☐	0 ☐
b. Recognizing signs of students using/abusing alcohol and/or drugs	1 ☐	0 ☐	1 ☐	0 ☐
c. Other programs? *(Please list)*				
_____	1 ☐	0 ☐	1 ☐	0 ☐
_____	1 ☐	0 ☐	1 ☐	0 ☐
_____	1 ☐	0 ☐	1 ☐	0 ☐

19. During each of the following time periods, how many students transferred to and from your school after the school year had started? Please report on the total mobility, not just transfers due to disciplinary actions.

(If a student transferred more than once in the school year, count each transfer separately. If no transfers, please record zero [0].)

	Last School Year (2005-2006)	Current School Year (2006-2007)
a. Total number of transfers *to* the school	_____	_____
b. Total number of transfers *from* the school	_____	_____

20. *The last question is about the most current average reading and math test scores for students in this school. For each grade and subject listed below please indicate:*

(1) whether students were tested, (2) date of test, (3) test name, (4) publisher name, (5) raw score, and (6) percentile.

	(1) Students tested?		(2) Date of Test		(3)	(4)	(5)	(6)
Grade	**Yes**	**No**	**Month**	**Year**	**Test Name**	**Publisher Name**	**Raw Score**	**Percentile**
a. 9th Grade								
Math...............	1 ☐	0 ☐	|__|__| Month	|__|__| Year	_____	_____	_____	|__|__|__|
Reading	1 ☐	0 ☐	|__|__| Month	|__|__| Year	_____	_____	_____	|__|__|__|
b. 10th Grade								
Math...............	1 ☐	0 ☐	|__|__| Month	|__|__| Year	_____	_____	_____	|__|__|__|
Reading	1 ☐	0 ☐	|__|__| Month	|__|__| Year	_____	_____	_____	|__|__|__|
c. 11th Grade								
Math...............	1 ☐	0 ☐	|__|__| Month	|__|__| Year	_____	_____	_____	|__|__|__|
Reading	1 ☐	0 ☐	|__|__| Month	|__|__| Year	_____	_____	_____	|__|__|__|
d. 12th Grade								
Math...............	1 ☐	0 ☐	|__|__| Month	|__|__| Year	_____	_____	_____	|__|__|__|
Reading	1 ☐	0 ☐	|__|__| Month	|__|__| Year	_____	_____	_____	|__|__|__|

SCHOOL IDENTIFICATION

(ATTACH LABEL HERE)

School Name: _____

School Address: _____

_____

SCHOOLWIDE RECORDS COLLECTION FORM

2008

OMB No. **1850-0818**

Expiration Date: 06/30/2010

Name of person completing this form: _____

Phone number of person completing this form: (__ __ __) __ __ __ - __ __ __ __

1. Please record today's date: |___|___| / |___|___| / |___|___|___|___|
   Month   Day   Year

2. Which of the following best describes this school? **Check one response.**
   - 1 ☐ Regular public school
   - 2 ☐ Alternative public school
   - 3 ☐ Charter school
   - 4 ☐ Special Program Emphasis (for example, science/math school, talented/gifted school, etc.)
   - 5 ☐ Special Education (primarily serves students with disabilities)
   - 6 ☐ Other *(Please specify)* _____

3. How many teachers are employed at this school?................................. _____ (Enter Number)

   Include all full and part-time regular classroom teachers, special area or resource teachers, long-term substitute teachers, and itinerant teachers. Do not include student teachers, teachers' aides, or short-term substitute teachers.

4. As of October 1, 2007, what was the total number of students enrolled in this school? .... _____ (Enter Number)

5. How many students were ABSENT on the most recent school day?........ _____ (Enter Number)

6. How many students were TARDY on the most recent school day? .... _____ (Enter Number)

7. What percentage of current students at this school are male? .... |__|__|__|.|__|__| (Enter Percent)

8. What percentage of current students at this school are Hispanic or Latino? |__|__|__|.|__|__| (Enter Percent)

9. What percentage of current students at this school are:

American Indian/Alaska Native..	|__|__|__|.|__|__|	(Enter Percent)
Asian	|__|__|__|.|__|__|	(Enter Percent)
Black or African American	|__|__|__|.|__|__|	(Enter Percent)
Native Hawaiian or Other Pacific Islander	|__|__|__|.|__|__|	(Enter Percent)
White	|__|__|__|.|__|__|	(Enter Percent)

10. What percentage of current students at this school fit the following criteria?

    10a. Are approved for free or reduced-price school meals?................... |__|__|__|.|__|__| (Enter Percent)

    10b. Are limited English Proficient (LEP) or English Language Learners (ELL)? .... |__|__|__|.|__|__| (Enter Percent)

    10c. What percentage of students have an Individual Education Plan (IEP) for students receiving special education services under the Individuals with Disabilities Education Act (IDEA) or a Services Agreement for students receiving services under Section 504 of the Rehabilitation Act of 1973?.. |__|__|__|.|__|__| (Enter Percent)

Prepared by Mathematica Policy Research, Inc.

11. During THIS school year (2007–2008), has it been the practice of this school to do the following?

		CHECK "YES" OR "NO" ON EACH LINE	
		Yes	No
a.	Control access to school *buildings* during school hours (e.g., locked or monitored doors	1 ☐	0 ☐
b.	Control access to school *grounds* during school hours (e.g. locked or monitored gates)	1 ☐	0 ☐
c.	Require students to pass through metal detectors each day..............	1 ☐	0 ☐
d.	Perform random metal detector checks on students	1 ☐	0 ☐
e.	Require that all or most students stay on campus during lunch	1 ☐	0 ☐
f.	Require students to wear uniforms..	1 ☐	0 ☐
g.	Enforce a strict dress code	1 ☐	0 ☐
h.	Require clear book bags or ban book bags on school grounds........	1 ☐	0 ☐
i.	Require students to wear badges or picture IDs..............................	1 ☐	0 ☐
j.	Use one or more security cameras to monitor the school	1 ☐	0 ☐
k.	Maintain a daily presence of police or security personnel	1 ☐	0 ☐

12. During THIS school year (2007–2008), how often has this school used random dog sniffs to check for drugs?

   1 ☐   At least once a week

   2 ☐   At least once a month

   3 ☐   On occasion

   4 ☐   Never ➔ **GO TO 13**

12a. In how many instances were drugs or drug paraphernalia found during the most recent dog sniff?

If none, please write in "0."

_____ NUMBER OF INSTANCES

13. During THIS school year (2007-2008), how often has this school performed random sweeps for contraband (e.g., drugs or weapons), but not including dog sniffs?

   1 ☐   At least once a week

   2 ☐   At least once a month

   3 ☐   On occasion

   4 ☐   Never ➔ **GO TO 14**

13a. If this school does perform random sweeps for contraband, in how many instances were contraband found during the most recent search?

If none, please write in "0."

		Number of Instances
a.	Drugs and/or drug paraphernalia were found....................	_____
b.	Alcohol was found...	_____
c.	Weapons were found...	_____
d.	Total number of instances any contraband was found.......	_____

14. For the following time period, how **many students** were expelled (i.e., removed or transferred for at least the remainder of the school year) from this school?

If none, please write in "0."

Current School Year (2007–2008)
_____
NUMBER OF STUDENTS

15. For the following time period, what was the **total number of** suspensions in this school? Please include in-school and out-of-school suspensions. Please count each individual suspension (e.g., if one student received 10 suspensions, all 10 would be included on this line).

If none, please write in "0."

Current School Year (2007–2008)
_____
NUMBER OF SUSPENSIONS

16. For the following time period, please provide the **total number of incidents** this school recorded for each of the offenses listed below.

If none, please write in "0."

		Current School Year (2007–2008)
a.	Use/possession of a firearm/explosive device	_____
b.	Use/possession of a weapon other than a firearm	_____
c.	Distribution, possession, or use of illegal drugs	_____
d.	Distribution, possession, or use of alcohol	_____
e.	Physical attacks or fights	_____

Prepared by Mathematica Policy Research, Inc.

17. During the following time period, did this school have any formal programs **intended to prevent or reduce tobacco, alcohol and/or drug use** that included the following components for students?

	CHECK "YES" OR "NO" ON EACH LINE	
	Current School Year (2007–2008)	
	Yes	**No**
a. Prevention curriculum, instruction, or training for students..........................	1 ☐	0 ☐
b. Behavioral or behavior modification intervention for students	1 ☐	0 ☐
c. Counseling, social work, psychological, or therapeutic activity for students...	1 ☐	0 ☐
d. Recreational, enrichment, or leisure activities for students	1 ☐	0 ☐
e. Hotline/tipline for students to report problems	1 ☐	0 ☐
f. Information line for students to obtain information about alcohol and/or drug use	1 ☐	0 ☐
g. Health fair, including component(s) related to alcohol and/or drug use	1 ☐	0 ☐
h. Student assemblies, speaking engagements	1 ☐	0 ☐
i. Alcohol and/or drug resource center…………………	1 ☐	0 ☐
j. Brochures or posters...	1 ☐	0 ☐
k. Other programs intended to prevent or reduce alcohol and/or drug use? *(Please list)*		
_____	1 ☐	0 ☐
_____	1 ☐	0 ☐

18. During the following time period, which of the following trainings for classroom teachers or aides did this school or district provide?

	CHECK "YES" OR "NO" ON EACH LINE	
	Current School Year (2007–2008)	
	Yes	**No**
a. School-wide discipline policies and practices related to alcohol and/or drug use	1 ☐	0 ☐
b. Recognizing signs of students using/abusing alcohol and/or drugs	1 ☐	0 ☐
c. Other programs? *(Please list)*...		
_____	1 ☐	0 ☐
_____	1 ☐	0 ☐
_____	1 ☐	0 ☐

19. During the following time period, how many students transferred to and from your school after the school year had started? Please report on the total mobility, not just transfers due to disciplinary actions.

(If a student transferred more than once in the school year, count each transfer separately. If no transfers, please record zero [0].)

	Current School Year (2007–2008)
a. Total number of transfers *to* the school	_____
b. Total number of transfers *from* the school	_____

> **OMB #: 1850-0818**
> **Expiration Date: 08/31/2007**

Health Behavior and School Experiences Survey

This survey asks for information about your participation in school activities
and your health knowledge, attitudes, and behaviors.
Please answer all of the questions honestly.

Health Behavior and School Experiences Survey

Thank you for taking the time to complete this survey. This survey is very important because it will help the U.S. Department of Education and schools understand student participation in school activities and attitudes toward school and substance use. The survey has questions about your school, your family, and your attitudes and experiences with alcohol and other drugs.

Your answers to all of the questions are and will be kept *confidential.* Neither school staff, your parents, nor anyone else outside the study team will see your answers to any questions on this form. *This survey is completely voluntary.* You may skip any question and you may stop at any time. *There will be no negative consequences related to your answers on this survey.* Some of the questions are personal and some students may find them upsetting. You will be given a list of numbers to call if you want to talk to someone about the survey or feelings it brings up. *Please read the instructions below before starting.*

Instructions—Please Follow Carefully

Please Answer the Questions Honestly and Return Your Completed Survey
to the Researcher Who Gave it to You.

► **DO NOT WRITE YOUR NAME ANYWHERE ON THIS SURVEY.**

► Use only a blue (preferred) or black pen.

► Mark only one circle for each question, unless the question says otherwise.

► Make your marks dark, like this: ●

     Incorrect way to fill in circles: ⊗

► If you fill in the wrong circle, go ahead and fill in the corrected (right) answer, and circle it.

     Example: Yes: ●   (No: ●)

   (In this example, "no" is the correct answer; the student accidentally filled out the "yes" circle).

► If you have a question about the survey as you are filling it out, please ask the researcher who is administering the survey.

Section 1: This section asks about you and your participation in school activities.

	12 or younger	13	14	15	16	17	18	19 or older
1. How old are you?	○	○	○	○	○	○	○	○

	Male	Female
2. Are you male or female?	○	○

	9	10	11	12
3. What grade are you in?	○	○	○	○

4. Are you Hispanic or Latino?

   a) Yes, I am Hispanic or Latino ○

   b) No, I am not Hispanic or Latino ○

	American Indian or Alaska Native	Asian	Black or African American	Native Hawaiian or Other Pacific Islander	White
5. Which of the following groups best describes you? Select one or more.	○	○	○	○	○

	English	Spanish	An Asian language	Other
6. What language is usually spoken in your home?	○	○	○	○

	Some high school credits	Complete high school	Some college credits	A college degree	Graduate or professional school after college
7. What is the highest level of schooling you think you will reach?	○	○	○	○	○

	Mostly As	Mostly Bs	Mostly Cs	Mostly Ds	Mostly Fs
8. Which category best describes your grades last year?	○	○	○	○	○

9. Some **school sports** are listed below. For each activity, mark the answer that describes your participation. Remember, this question is only about **school** sports. ***Mark all the circles that apply to you.***

	I participated **last school year** (2005–2006)	I have participated, am participating, or will participate **this school year** (2006–2007)	I plan to participate **next school year** (2007–2008)
a. Football	○	○	○
b. Volleyball	○	○	○
c. Cross country	○	○	○
d. Soccer	○	○	○
e. Basketball	○	○	○
f. Wrestling	○	○	○
g. Swimming or diving	○	○	○
h. Track and field	○	○	○
i. Tennis	○	○	○
j. Golf	○	○	○
k. Softball	○	○	○
l. Baseball	○	○	○
m. Gymnastics	○	○	○
n. Weightlifting	○	○	○
o. Field hockey	○	○	○
p. Lacrosse	○	○	○
q. Rowing	○	○	○
r. Squash	○	○	○
s. Other (write the name of any school sports you participate in that are not listed above).			
i) _____	○	○	○
ii) _____	○	○	○
iii) _____	○	○	○

If you did not participate in any school sports **last year (2005–5006)**, mark this circle. ○

If you are not participating in any school sports any time **this year (2006–2007)**, mark this circle. ○

If you do not plan to participate in any school sports **next year (2007–2008)**, mark this circle. ○

10. Listed below are some other **school activities** that are not sports. For each activity, mark the answer that describes your participation. Remember, this question is only about **school** activities. ***Mark all the circles that apply to you.***

		I participated **last** school year (2005–2006)	I have participated, am participating, or will participate **this school year** (2006–2007)	I plan to participate **next school year** (2007–2008)
a.	Drama	○	○	○
b.	Band	○	○	○
c.	Choir	○	○	○
d.	Cheerleading or rally	○	○	○
e.	Dance	○	○	○
f.	Drill	○	○	○
g.	Academic clubs (math team, debate, science bowl)	○	○	○
h.	Student Council/Government (class officer, peer counselor, task force member)	○	○	○
i.	Yearbook/Newspaper	○	○	○
j.	Vocational club	○	○	○
k.	Other clubs (Future Farmers of America, Future Business Leaders of America) or activities (write the names of the clubs or activities below)			
	i) _____	○	○	○
	ii) _____	○	○	○

If you did not participate in any non-sport school activities **last year (2005–5006)**, mark this circle. ○

If you are not participating in any non-sport school activities any time **this year (2006–2007)**, mark this circle. ○

If you do not plan to participate in any non-sport school activities **next year (2007–2008)**, mark this circle. ○

Section 2: This section asks about your school and how you feel about it.

11. Please indicate whether you agree with the following statements about you and your school.

		Strongly Agree	Agree	Disagree	Strongly Disagree
a.	When students have an emergency someone is there to help.	○	○	○	○
b.	I feel like I belong at this school.	○	○	○	○
c.	The principal at this school asks students about their ideas.	○	○	○	○
d.	We do not waste time in my classes.	○	○	○	○
e.	I can be myself at this school.	○	○	○	○
f.	Adults at this school listen to student concerns.	○	○	○	○
g.	Adults at this school act on student concerns.	○	○	○	○
h.	It pays to follow the rules at my school.	○	○	○	○
i.	I have many opportunities to make decisions at my school.	○	○	○	○
j.	Students of all racial and ethnic groups are respected at my school.	○	○	○	○
k.	I can be a success at this school.	○	○	○	○
l.	I can reach my goals through this school.	○	○	○	○
m.	The rules at my school are fair.	○	○	○	○
n.	I have friends at this school.	○	○	○	○
o.	I am comfortable talking with adults at this school about problems.	○	○	○	○
p.	My schoolwork helps with things that I do outside of school.	○	○	○	○
q.	I like being at this school.	○	○	○	○
r.	I feel safe at this school.	○	○	○	○

Section 3: This section asks about your use of and attitudes toward different types of drugs. Remember, your answers are confidential. *Mark only one circle per row.*

12. On how many occasions (if any) have you...

		0	1–2	3–5	6–9	10–19	20–39	40 or more
					Number of Occasions			
a. smoked cigarettes?	**In your lifetime?**	○	○	○	○	○	○	○
	In the last 6 months?	○	○	○	○	○	○	○
	In the last 30 days?	○	○	○	○	○	○	○
b. used chewing tobacco, snuff, or dip?	**In your lifetime?**	○	○	○	○	○	○	○
	In the last 6 months?	○	○	○	○	○	○	○
	In the last 30 days?	○	○	○	○	○	○	○
c. had a glass, can, or bottle of alcohol to drink (beer, wine, wine coolers, hard liquor)?	**In your lifetime?**	○	○	○	○	○	○	○
	In the last 6 months?	○	○	○	○	○	○	○
	In the last 30 days?	○	○	○	○	○	○	○
d. used marijuana (grass, pot) or hashish (hash, hash oil)?	**In your lifetime?**	○	○	○	○	○	○	○
	In the last 6 months?	○	○	○	○	○	○	○
	In the last 30 days?	○	○	○	○	○	○	○
e. used cocaine in any form (crack, rock, or powder)?	**In your lifetime?**	○	○	○	○	○	○	○
	In the last 6 months?	○	○	○	○	○	○	○
	In the last 30 days?	○	○	○	○	○	○	○
f. used steroids or other muscle-building drugs (muscle builders, androstenedione [andro], human growth hormone) illegally without a doctor's prescription?	**In your lifetime?**	○	○	○	○	○	○	○
	In the last 6 months?	○	○	○	○	○	○	○
	In the last 30 days?	○	○	○	○	○	○	○
g. sniffed glue, breathed the contents of aerosol spray cans, or inhaled any other gases or sprays to get high?	**In your lifetime?**	○	○	○	○	○	○	○
	In the last 6 months?	○	○	○	○	○	○	○
	In the last 30 days?	○	○	○	○	○	○	○
h. used narcotic drugs such as heroin, methadone, opium, codeine, or Demerol without a doctor's prescription?	**In your lifetime?**	○	○	○	○	○	○	○
	In the last 6 months?	○	○	○	○	○	○	○
	In the last 30 days?	○	○	○	○	○	○	○
i. used amphetamines, methamphetamines, or Ritalin without a prescription? (Also called uppers, ups, speed, bennies, dexies, ice, meth, or pep pills. These drugs are sometimes taken to help lose weight or to increase energy.)	**In your lifetime?**	○	○	○	○	○	○	○
	In the last 6 months?	○	○	○	○	○	○	○
	In the last 30 days?	○	○	○	○	○	○	○
j. used any other illegal drug?	**In your lifetime?**	○	○	○	○	○	○	○
	In the last 6 months?	○	○	○	○	○	○	○
	In the last 30 days?	○	○	○	○	○	○	○
k. been offered drugs or alcohol outside of school?	**In your lifetime?**	○	○	○	○	○	○	○
	In the last 6 months?	○	○	○	○	○	○	○
	In the last 30 days?	○	○	○	○	○	○	○
l. been offered drugs or alcohol at school?	**In your lifetime?**	○	○	○	○	○	○	○
	In the last 30 days?	○	○	○	○	○	○	○
	In your lifetime?	○	○	○	○	○	○	○

13. Think back to September 2006. During that month, how many times (if any) did you...

	0	1 or 2	3–5	6–9	10–19	20–39	40 or more
a. smoke cigarettes?	○	○	○	○	○	○	○
b. use chewing tobacco, snuff, or dip?	○	○	○	○	○	○	○
c. have a glass, can, or bottle of alcohol to drink (beer, wine, wine coolers, hard liquor)?	○	○	○	○	○	○	○
d. use marijuana (grass, pot) or hashish (hash, hash oil)?	○	○	○	○	○	○	○
e. not counting alcohol, tobacco, or marijuana, use another illegal drug?	○	○	○	○	○	○	○

14. Do you think you will use any of the substances listed below within the next year?

	Definitely Not	Probably Not	Maybe	Probably Will	Definitely Will
a. cigarettes?	○	○	○	○	○
b. chewing tobacco, snuff, or dip?	○	○	○	○	○
c. alcohol (beer, wine, wine coolers, hard liquor)?	○	○	○	○	○
d. marijuana (grass, pot) or hashish (hash, hash oil)?	○	○	○	○	○
e. an illegal drug other than alcohol, tobacco, or marijuana?	○	○	○	○	○

15. On how many occasions (if any) have you...		Number of Occasions						
		0	1–2	3–5	6–9	10–19	20–39	40 or more
a. been in a physical fight at school?	**In your lifetime?**	○	○	○	○	○	○	○
	In the last 6 months?	○	○	○	○	○	○	○
	In the last 30 days?	○	○	○	○	○	○	○
b. been in a physical fight outside of school?	**In your lifetime?**	○	○	○	○	○	○	○
	In the last 6 months?	○	○	○	○	○	○	○
	In the last 30 days?	○	○	○	○	○	○	○
c. carried a weapon such as a gun, knife, or club on school property?	**In your lifetime?**	○	○	○	○	○	○	○
	In the last 6 months?	○	○	○	○	○	○	○
	In the last 30 days?	○	○	○	○	○	○	○

16. Please indicate whether you agree or disagree with each statement.

		Strongly Disagree	Disagree	Don't Agree or Disagree	Agree	Strongly Agree
a.	Using illegal drugs leads to serious health problems.	○	○	○	○	○
b.	Drinking alcohol leads to serious health problems.	○	○	○	○	○
c.	If I used illegal drugs, I would get into trouble.	○	○	○	○	○
d.	If I drank, I would get into trouble.	○	○	○	○	○
e.	Using illegal drugs or alcohol makes it easier to be part of a group.	○	○	○	○	○
f.	Using illegal drugs or drinking is cool.	○	○	○	○	○
g.	Using illegal drugs or drinking makes everything seem better.	○	○	○	○	○
h.	Using illegal drugs or drinking makes it easier to have a good time with friends.	○	○	○	○	○
i.	If I were to be drug tested, I would try to beat the drug test.	○	○	○	○	○
j.	Drug testing is helpful to keep students healthy and off drugs.	○	○	○	○	○
k.	I have close friends who use illegal drugs.	○	○	○	○	○
l.	My friends would disapprove if I drank alcohol.	○	○	○	○	○
m.	My friends would disapprove if I used illegal drugs.	○	○	○	○	○

Section 4: This section asks about activities at your school.

17. Please indicate whether the following statements are true or false.

		True	False	Don't Know
a.	My school offers mentoring services.	○	○	○
b.	In the past 6 months I or someone I know participated in activities with a mentor.	○	○	○
c.	My school has clearly defined rules about alcohol, drugs, fighting, and weapon carrying.	○	○	○
d.	In the past 6 months I or someone I know got in trouble for violating my school's rules about alcohol, drugs, fighting, or weapon carrying.	○	○	○
e.	At my school students who participate in some sports or other activities may be randomly tested for drugs.	○	○	○
f.	My school plans to test students for drugs in the near future.	○	○	○
g.	In the past 6 months I could have been tested for drugs by my school.	○	○	○
h.	In the past 6 months I or someone I know was tested for drugs by my school.	○	○	○
i.	My school offers after-school or evening activities for students.	○	○	○
j.	In the past 6 months I or someone I know participated in my school's after-school or evening activities for students.	○	○	○
k.	My school has organizations that promote substance use prevention.	○	○	○
l.	In the past 6 months I or someone I know participated in my school's organizations that promote substance use prevention.	○	○	○

18. How honest were you in filling out this survey?

○ I was very honest.

○ I was honest pretty much of the time.

○ I was honest some of the time.

○ I was honest once in a while.

○ I was not honest at all.

Thank you! You have completed the survey. Please check to make sure your name does not appear on any page then place it in the envelope provided and turn it in.

If you need to talk to someone . . .

If the survey upset you for any reason, or if you just want to talk about a problem you or someone else about is having with alcohol or drugs, we suggest you do one of these things right away:

► Talk to an adult you trust in your family or community, such as your parents or religious leader.

► Talk to an adult you trust at school, such as a teacher, counselor, nurse, intervention specialist, or principal.

► Call one or more of the places listed below.

Name	Number	Spanish Speaking	Confidential	Cost
CSAT Alcohol/Drug Referral Line (National 24-hour Help Line)	(800) 662-4357	Yes	Yes	None
Care Crisis Response Services	(800) 584-3578	Tele-Interpreter Available	Yes	None
Girls' and Boys' Town (alcohol and other drugs) 24-Hour Hotline	(800) 448-3000	Yes	Yes	None

For questions about the survey: Eric Einspruch or Chandra Lewis, RMC Research Corporation, 800-788-1887.

For questions about your rights as a study participant: Human Subjects Research Review Committee in the Office of Research and Sponsored Projects, 111 Cramer Hall, Portland State University 503-725-4288.

OMB #: 1850-0818
Expiration Date:

Health Behavior and School Experiences Survey

**This survey asks for information about your participation in school activities and your health knowledge, attitudes, and behaviors.
Please answer all of the questions honestly.**

Health Behavior and School Experiences Survey

Thank you for taking the time to complete this survey. This survey is very important because it will help the U.S. Department of Education and schools understand student participation in school activities and attitudes toward school and substance use. The survey has questions about your school, your family, and your attitudes and experiences with alcohol and other drugs.

Your answers to all of the questions are and will be kept *confidential.* Neither school staff, your parents, nor anyone else outside the study team will see your answers to any questions on this form. *This survey is completely voluntary.* You may skip any question and you may stop at any time. *There will be no negative consequences related to your answers on this survey.* Some of the questions are personal and some students may find them upsetting. You will be given a list of numbers to call if you want to talk to someone about the survey or feelings it brings up. *Please read the instructions below before starting.*

Instructions—Please Follow Carefully

> **Please answer the questions honestly and return your completed survey to the researcher who gave it to you.**

► **DO NOT WRITE YOUR NAME ANYWHERE ON THIS SURVEY.**

► Use only a pencil.

► Mark only one circle for each question, unless the question says otherwise.

► Make your marks dark, like this: ●

  Incorrect way to fill in circles: ⊗

► If you fill in the wrong circle, go ahead and fill in the corrected (right) answer and **completely erase the wrong circle**.

► If you have a question about the survey as you are filling it out, please ask the researcher who is administering the survey.

Section 1: This section asks about you and your participation in school activities.

1. How old are you?
    - ○ 12 or younger
    - ○ 13
    - ○ 14
    - ○ 15
    - ○ 16
    - ○ 17
    - ○ 18
    - ○ 19 or older

2. Are you male or female?
    - ○ Male
    - ○ Female

3. What grade are you in?
    - ○ 9
    - ○ 10
    - ○ 11
    - ○ 12

4. Are you Hispanic or Latino?
    - ○ **Yes, I am** Hispanic or Latino
    - ○ **No, I am not** Hispanic or Latino

5. Which of the following groups best describes you? Select one or more.
    - ○ American Indian or Alaska Native
    - ○ Asian
    - ○ Black or African American
    - ○ Native Hawaiian or other Pacific Islander
    - ○ White

6. What language is usually spoken in your home?
    - ○ English
    - ○ Spanish
    - ○ An Asian language
    - ○ Other

7. What is the highest level of schooling that you think you will reach?
    - ○ Some high school credits
    - ○ Complete high school
    - ○ Some college credits
    - ○ A college degree
    - ○ Graduate or professional school after college

8. Which category best describes your grades last year?
    - ○ Mostly As
    - ○ Mostly Bs
    - ○ Mostly Cs
    - ○ Mostly Ds
    - ○ Mostly Fs

9.   Some **school sports** are listed below. For each activity, mark the answer that describes your participation. Remember, this question is only about **school sports**. Non-sport school activities such as band and cheerleading are listed on the next page. ***Mark all the circles that apply to you.***

		I participated **last school year** (2006–2007)	I have participated, am participating, or will participate **this school year** (2007–2008)	I plan to participate **next school year** (2008–2009)
a.	Football	○	○	○
b.	Volleyball	○	○	○
c.	Cross country	○	○	○
d.	Soccer	○	○	○
e.	Basketball	○	○	○
f.	Wrestling	○	○	○
g.	Swimming or diving	○	○	○
h.	Track and field	○	○	○
i.	Tennis	○	○	○
j.	Golf	○	○	○
k.	Softball	○	○	○
l.	Baseball	○	○	○
m.	Gymnastics	○	○	○
n.	Weightlifting	○	○	○
o.	Field hockey	○	○	○
p.	Lacrosse	○	○	○
q.	Rowing	○	○	○
r.	Squash	○	○	○
s.	Other (write the name of any school **sports** you participate in that are not listed above). Non-sport activities are listed on the following page.			
	i) _____	○	○	○
	ii) _____	○	○	○
	iii) _____	○	○	○

If you did not participate in any school sports **last year (2006–2007)**, mark this circle.   ○

If you are not participating in any school sports any time **this year (2007–2008)**, mark this circle.   ○

If you do not plan to participate in any school sports **next year (2008–2009)**, mark this circle.   ○

10. Listed below are some other **school activities** that are not sports. For each activity, mark the answer that describes your participation. Remember, this question is only about **school** activities. *Mark all the circles that apply to you.*

		I participated **last school year (2006–2007)**	I have participated, am participating, or will participate **this school year (2007–2008)**	I plan to participate **next school year (2008–2009)**
a.	Drama	○	○	○
b.	Band	○	○	○
c.	Choir	○	○	○
d.	Cheerleading or rally	○	○	○
e.	Dance	○	○	○
f.	Drill	○	○	○
g.	Academic clubs (math team, debate, science bowl)	○	○	○
h.	Student Council/Government (class officer, peer counselor, task force member)	○	○	○
i.	Yearbook/Newspaper	○	○	○
j.	Vocational club	○	○	○
k.	Other clubs (Future Farmers of America, Future Business Leaders of America) or activities (write the names of the clubs or activities below)			
	i) _____	○	○	○
	ii) _____	○	○	○
	iii) _____	○	○	○

If you did not participate in any non-sport school activities **last year (2006–2007)**, mark this circle. ○

If you are not participating in any non-sport school activities any time **this year (2007–2008)**, mark this circle. ○

If you do not plan to participate in any non-sport school activities **next year (2008–2009)**, mark this circle. ○

Section 2: This section asks about your school and how you feel about it.

Mark only one circle per row.

11. Please indicate whether you agree with the following statements about you and your school.	Strongly Agree	Agree	Disagree	Strongly Disagree
a. When students have an emergency someone is there to help.	○	○	○	○
b. I feel like I belong at this school.	○	○	○	○
c. The principal at this school asks students about their ideas.	○	○	○	○
d. We do not waste time in my classes.	○	○	○	○
e. I can be myself at this school.	○	○	○	○
f. Adults at this school listen to student concerns.	○	○	○	○
g. Adults at this school act on student concerns.	○	○	○	○
h. It pays to follow the rules at my school.	○	○	○	○
i. I have many opportunities to make decisions at my school.	○	○	○	○
j. Students of all racial and ethnic groups are respected at my school.	○	○	○	○
k. I can be a success at this school.	○	○	○	○
l. I can reach my goals through this school.	○	○	○	○
m. The rules at my school are fair.	○	○	○	○
n. I have friends at this school.	○	○	○	○
o. I am comfortable talking with adults at this school about problems.	○	○	○	○
p. My schoolwork helps with things that I do outside of school.	○	○	○	○
q. I like being at this school.	○	○	○	○
r. I feel safe at this school.	○	○	○	○

Section 3: This section asks about your use of and attitudes toward different types of drugs. Remember, your answers are confidential.

Mark only one circle per row.		Number of Occasions						
12. On how many occasions (if any) have you...		0	1–2	3–5	6–9	10–19	20–39	40 or more
a. smoked cigarettes?	**In your lifetime?**	○	○	○	○	○	○	○
	In the last 6 months?	○	○	○	○	○	○	○
	In the last 30 days?	○	○	○	○	○	○	○
b. used chewing tobacco, snuff, or dip?	**In your lifetime?**	○	○	○	○	○	○	○
	In the last 6 months?	○	○	○	○	○	○	○
	In the last 30 days?	○	○	○	○	○	○	○

Mark only one circle per row.		Number of Occasions						
12. On how many occasions (if any) have you...		0	1–2	3–5	6–9	10–19	20–39	40 or more
c. had a glass, can, or bottle of alcohol to drink (beer, wine, wine coolers, hard liquor)?	**In your lifetime?**	○	○	○	○	○	○	○
	In the last 6 months?	○	○	○	○	○	○	○
	In the last 30 days?	○	○	○	○	○	○	○
d. used marijuana (grass, pot) or hashish (hash, hash oil)?	**In your lifetime?**	○	○	○	○	○	○	○
	In the last 6 months?	○	○	○	○	○	○	○
	In the last 30 days?	○	○	○	○	○	○	○
e. used cocaine in any form (crack, rock, or powder)?	**In your lifetime?**	○	○	○	○	○	○	○
	In the last 6 months?	○	○	○	○	○	○	○
	In the last 30 days?	○	○	○	○	○	○	○
f. used steroids or other muscle-building drugs (muscle builders, human growth hormone, androstenedione [andro]) illegally without a doctor's prescription?	**In your lifetime?**	○	○	○	○	○	○	○
	In the last 6 months?	○	○	○	○	○	○	○
	In the last 30 days?	○	○	○	○	○	○	○
g. sniffed glue, breathed the contents of aerosol spray cans, or inhaled any other gases or sprays to get high?	**In your lifetime?**	○	○	○	○	○	○	○
	In the last 6 months?	○	○	○	○	○	○	○
	In the last 30 days?	○	○	○	○	○	○	○
h. used narcotic drugs such as heroin, methadone, opium, codeine, or Demerol without a doctor's prescription?	**In your lifetime?**	○	○	○	○	○	○	○
	In the last 6 months?	○	○	○	○	○	○	○
	In the last 30 days?	○	○	○	○	○	○	○
i. used amphetamines, Ritalin, or methamphetamines without a prescription? (Also called uppers, ups, speed, bennies, dexies, ice, meth, or pep pills. These drugs are sometimes taken to help lose weight or to increase energy.)	**In your lifetime?**	○	○	○	○	○	○	○
	In the last 6 months?	○	○	○	○	○	○	○
	In the last 30 days?	○	○	○	○	○	○	○
j. used any other illegal drug?	**In your lifetime?**	○	○	○	○	○	○	○
	In the last 6 months?	○	○	○	○	○	○	○
	In the last 30 days?	○	○	○	○	○	○	○
k. been offered drugs or alcohol outside of school?	**In your lifetime?**	○	○	○	○	○	○	○
	In the last 6 months?	○	○	○	○	○	○	○
	In the last 30 days?	○	○	○	○	○	○	○
l. been offered drugs or alcohol at school?	**In your lifetime?**	○	○	○	○	○	○	○
	In the last 6 months?	○	○	○	○	○	○	○
	In the last 30 days?	○	○	○	○	○	○	○

Mark only one circle per row.

13. Think back to September 2006. During that month, how many times (if any) did you...	0	1 or 2	3–5	6–9	10–19	20–39	40 or more
a. smoke cigarettes?	○	○	○	○	○	○	○
b. use chewing tobacco, snuff, or dip?	○	○	○	○	○	○	○
c. have a glass, can, or bottle of alcohol to drink (beer, wine, wine coolers, hard liquor)?	○	○	○	○	○	○	○
d. use marijuana (grass, pot) or hashish (hash, hash oil)?	○	○	○	○	○	○	○
e. not counting alcohol, tobacco, or marijuana, use another illegal drug?	○	○	○	○	○	○	○

Mark only one circle per row.

14. Do you think you will use any of the substances listed below within the next year?	Definitely Not	Probably Not	Maybe	Probably Will	Definitely Will
a. cigarettes?	○	○	○	○	○
b. chewing tobacco, snuff, or dip?	○	○	○	○	○
c. alcohol (beer, wine, wine coolers, hard liquor)?	○	○	○	○	○
d. marijuana (grass, pot) or hashish (hash, hash oil)?	○	○	○	○	○
e. an illegal drug other than alcohol, tobacco, or marijuana?	○	○	○	○	○

Mark only one circle per row.

15. On how many occasions (if any) have you . . .		Number of Occasions						
		0	1–2	3–5	6–9	10–19	20–39	40 or more
a. been in a physical fight at school?	**In your lifetime?**	○	○	○	○	○	○	○
	In the last 6 months?	○	○	○	○	○	○	○
	In the last 30 days?	○	○	○	○	○	○	○
b. been in a physical fight outside of school?	**In your lifetime?**	○	○	○	○	○	○	○
	In the last 6 months?	○	○	○	○	○	○	○
	In the last 30 days?	○	○	○	○	○	○	○
c. carried a weapon such as a gun, knife, or club on school property?	**In your lifetime?**	○	○	○	○	○	○	○
	In the last 6 months?	○	○	○	○	○	○	○
	In the last 30 days?	○	○	○	○	○	○	○

Mark only one circle per row.

16. Please indicate whether you agree or disagree with each statement.	Strongly Disagree	Disagree	Don't Agree or Disagree	Agree	Strongly Agree
a. Using illegal drugs leads to serious health problems.	○	○	○	○	○
b. Drinking alcohol leads to serious health problems.	○	○	○	○	○
c. If I used illegal drugs, I would get into trouble.	○	○	○	○	○
d. If I drank, I would get into trouble.	○	○	○	○	○
e. Using illegal drugs or alcohol makes it easier to be part of a group.	○	○	○	○	○
f. Using illegal drugs or drinking is cool.	○	○	○	○	○
g. Using illegal drugs or drinking makes everything seem better.	○	○	○	○	○
h. Using illegal drugs or drinking makes it easier to have a good time with friends.	○	○	○	○	○
i. If I were to be drug tested, I would try to beat the drug test.	○	○	○	○	○
j. Drug testing is helpful to keep students healthy and off drugs.	○	○	○	○	○
k. I have close friends who use illegal drugs.	○	○	○	○	○
l. My friends would disapprove if I drank alcohol.	○	○	○	○	○
m. My friends would disapprove if I used illegal drugs.	○	○	○	○	○

Section 4: This section asks about activities at your school.

Mark only one circle per row.

17. Please indicate whether the following statements are true or false.	True	False	Don't Know
a. My school offers mentoring services.	○	○	○
b. In the past 6 months I or someone I know participated in activities with a mentor.	○	○	○
c. My school has clearly defined rules about alcohol, drugs, fighting, and weapon carrying.	○	○	○
d. In the past 6 months I or someone I know got in trouble for violating my school's rules about alcohol, drugs, fighting, or weapon carrying.	○	○	○
e. At my school students who participate in some sports or other activities may be randomly tested for drugs.	○	○	○
f. My school plans to test students for drugs in the near future.	○	○	○
g. In the past 6 months I could have been tested for drugs by my school.	○	○	○
h. In the past 6 months I or someone I know was tested for drugs by my school.	○	○	○
i. My school offers after-school or evening activities for students.	○	○	○
j. In the past 6 months I or someone I know participated in my school's after-school or evening activities for students.	○	○	○
k. My school has organizations that promote substance use prevention.	○	○	○
l. In the past 6 months I or someone I know participated in my school's organizations that promote substance use prevention.	○	○	○

18. How honest were you in filling out this survey?

   ○ I was very honest.
   ○ I was honest pretty much of the time.
   ○ I was honest some of the time.
   ○ I was honest once in a while.
   ○ I was not honest at all.

Thank you! You have completed the survey.
Please check to make sure your name does not appear on any page
then place it in the envelope provided and turn it in.