Downloaded from https://academic.oup.com/ije/article/44/suppl_1/i154/2573211 by guest on 20 August 2022

neonatal screening. We aim to determine the prevalence and mortality of adults with CHD.

METHODS: We combined National Vital Statistics System data on cause-specific mortality from 1968 to 2010 and National Health Information Survey data on CHD prevalence from 1997 to 2011 using a novel statistical model to determine the prevalence of moderate to severe CHD as a function of age, sex, and year. We used parametric bootstrap resampling of the input data to generate 95% uncertainty intervals (UI). We multiplied the appropriate population estimates and the estimated prevalence to produce estimates of the size of the CHD-prevalent population by age, sex, and year.

RESULTS: The birth prevalence of moderate and severe CHD in 2010 for males was 3.2 per 1,000 (95% UI 2.9-3.5), and for females was 3.0 per 1,000 (95% UI 2.4-3.5). From 1968 to 2010, mortality declined 72% (for all ages), from 5.1–1.4 per 100 000 person-years (PY); among zero to 51-week olds, the decline was from 176 to 51 per 100,000 PY. The estimated number of adults (age 20 to 64 years) with moderate or severe CHD in 1968 was 110,000 (95% UI 65,000–140,000). By 2010, there was an increase by a factor of 2.5 (95% UI 2.3–2.9), to 270,000 (95% UI 190,000–330,000). In 2010, there were 130,000 (95% UI 84,000–160,000) reproductive age females (age 15–49 years) with moderate or severe CHD in the United States.

CONCLUSIONS: We present a novel method to determine mortality attributable to CHDs over time. We found decreased mortality in infants and subsequent increased prevalence of adults with CHDs, many who are in need of subspecialty providers with experience in this field. Women of reproductive age are a substantial proportion of this population.

Poster Number: M136 Abstract #: 2411

Trends in Prevalence and Mortality of Adult

Congenital Heart Disease in the United States
from 1968 to 2010.

C. P. Benziger, MD, A. D. Flaxman, PhD, A. D. Bertozzi-Villa, BA and K. Stout, MD

University of Washington, Seattle, WA

INTRODUCTION: Mortality for children with congenital heart disease (CHD) has declined with improved surgical techniques and