

Medical News

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Outbreaks of Community-Associated Methicillin-Resistant *Staphylococcus aureus* Skin Infections

Methicillin-resistant *Staphylococcus aureus* (MRSA) has commonly occurred in healthcare settings; however, recent investigations of community-associated MRSA (CA-MRSA) have identified infection in various settings, including correctional facilities, athletic teams, and others. During 2002, the Los Angeles County Department of Health Services (LACDHS) investigated three community outbreaks of skin infections associated with MRSA.

In September 2002, LACDHS investigated cases of MRSA infection in two athletes on the same team who were hospitalized with MRSA within the same week. No additional cases of MRSA have been identified. The source of MRSA infection for these patients has not been determined.

On November 22, 2002, physicians from two large infectious disease clinical practices notified LACDHS of MRSA skin infections among men who have sex with men (MSM). LACDHS has increased surveillance in selected clinics serving MSM and has begun a study of risk factors for infection among this population.

In February 2003, LACDHS investigated an outbreak in the Los Angeles County Jail, in which 928 inmates had MRSA wound infections diagnosed in 2002. Patients were reported as having spider bites but subsequently were found to be infected with MRSA. Review of the medical charts of 39 of the 66 inmates hospitalized with these infections indicated that all initially had skin infections, but 10 later had invasive disease, including bacteremia, endocarditis, or osteomyelitis. The Los Angeles County Jail is the largest jail system in the United States; 165,000 individuals are incarcerated in the jail each year. LACDHS issued recommendations for the diagnosis and treatment of skin infections in the jail and is working with the Los Angeles County Sheriff's Department to review policies and procedures on laundry, showers, environmental cleaning, skin care, and control of person-to-person transmission.

In each of these outbreaks, antimicrobial susceptibility patterns from MRSA isolates of these patients have been similar, including resistance to fluoroquinolones. Molecular analysis by pulsed-field gel electrophoresis (PFGE) of iso-

lates performed at the Los Angeles County Public Health Laboratory has identified a predominant strain common to all of these outbreaks. The PFGE pattern of the predominant strain also is consistent with PFGE patterns that the Centers for Disease Control and Prevention has identified in community outbreaks from other parts of the United States.

Healthcare providers should be aware that MRSA is a documented cause of community-associated skin and soft tissue infections. Local treatment and incision and drainage remain first-line therapies for soft tissue infections. Clinicians who suspect MRSA skin and soft tissue infections should consider microbiologic culture of wounds and appropriate antimicrobial therapy. Skin infections might be prevented by keeping cuts and abrasions clean by washing with soap and water. Previous investigations of MRSA infection clusters in community settings have identified MRSA transmission through sharing common objects (eg, athletic equipment, towels, benches, and personal items) contaminated with MRSA. To prevent MRSA infections from spreading in healthcare settings, healthcare providers should use standard precautions and appropriate hand hygiene between treatment of patients, clean surfaces of examination rooms with commercial disinfectant or diluted bleach (1 tablespoon of bleach in 1 quart of water), and carefully dispose of dressings and other materials that come into contact with pus, nasal discharge, blood, and urine.¹

These outbreaks reflect the importance of CA-MRSA infections. In collaboration with state health departments, the Centers for Disease Control and Prevention is conducting active, population-based surveillance for CA-MRSA in selected regions of the United States to help characterize the incidence of and risk factors for MRSA in the community.

REFERENCE

- Centers for Disease Control and Prevention. Guideline for hand hygiene in health-care settings: recommendations of the Healthcare Infection Control Practices Advisory Committee and the HICPAC/SHEA/APIC/IDSA Hand Hygiene Task Force. *MMWR* 2002;51(RR16):1-44.

FROM: Centers for Disease Control and Prevention. Public health dispatch: outbreaks of community-associated methicillin-resistant *Staphylococcus aureus* skin infections—Los Angeles County, California, 2002–2003. *MMWR* 2003; 52(05):88.