

Overview of Community-Associated Methicillin-Resistant *Staphylococcus aureus* Illinois Department of Public Health

Overview

Staphylococcus aureus (Staph) is a type of bacteria found throughout our environment and commonly on the skin or in the nose of healthy people. It is reported that approximately 25 percent to 30 percent of the population is colonized (when bacteria are present but not causing an infection) with Staph in their nose. When Staph invades normal tissue, illnesses such as skin or wound infections, or more serious infections such as pneumonia or bloodstream infections, may be the result. Most bacterial infections, including Staph, are treated with an appropriate antibiotic. In the 1960s the antibiotic methicillin was commonly used to treat Staph infections, which led to the development of strains of Staph resistant to methicillin (MRSA).

Currently, MRSA is resistant to a group of antibiotics called beta-lactams. Beta-lactam antibiotics include methicillin, oxacillin, penicillin, and amoxicillin. Since 1996, some strains of Staph also have become resistant to other groups of antibiotic used most often to treat MRSA infections. All Staph infections, including MRSA, occur most often among persons in hospitals or other health care facilities.

Healthcare-Associated Methicillin Resistant *Staphylococcus aureus* (HA-MRSA) vs. Community-Associated Methicillin Resistant *Staphylococcus aureus* (CA-MRSA)

- HA-MRSA is an infection acquired by persons who have been hospitalized, in a long-term care facility or have a history of a medical procedure within the past year.
- CA-MRSA is an infection acquired by persons who have no recent association with a hospital or long-term care facility, no previous medical history of MRSA, no recent medical procedure such as dialysis or no history of a permanent indwelling medical device (catheter).

Transmission of CA-MRSA

- Direct skin-to-skin contact with someone with CA-MRSA, especially the hands
- Indirect contact with objects contaminated by someone with CA-MRSA

Factors Increasing Risk of CA-MRSA Infections

- Crowding – correctional facilities, homeless shelters
- Compromised skin (cuts, abrasions)
- Sharing of personal items (bath towels, razors)
- Close skin-to-skin contact
- Lack of cleanliness- poor personal hygiene practices

Groups at Increased Risk for Developing CA-MRSA

- Athletes who participate in contact sports
- Military recruits
- Inmates of correctional centers
- Intravenous drug users
- Children
- Men having sex with men
- Members of some races such as Pacific Islanders, Alaskan Natives and Native Americans

Prevention of CA-MRSA Infection

- Practice good personal hygiene
 - Frequent handwashing
 - Cover cuts/scrapes until healed
 - Avoid contact with other people's wounds or bandages
 - Avoid sharing personal items like brushes, towels or razors
- Cover wounds that are draining with clean dry bandage
- See health care provider about a non-healing wound