

MRSA in the School Setting



Staphylococcus aureus, often refered to simply as "staph," is a bacteria commonly found on the skin and nares of healthy people. According to the Centers for Disease Control and Prevention, *S. aureus* colonizes the nostrils of approximately 30% of the

population without causing disease. When *S. aureus* gains entry into the body through a break in the skin, infection can occur. Approximately 1% of the population is colonized with community acquired methicillin-resistant *Staphylococcus aureus* (CA-MRSA). CA-MRSA is more aggressive than other types of staph and is also resistant to the antibiotic commonly used to treat staph infections, methicillin (a type of penicillin). CA-MRSA infections are becoming more common. With the beginning of a new school year upon us, please be aware that children, just like anyone else in the community, can become infected with this bacteria.

CA-MRSA, like all staph bacteria, are transmitted to people from infected skin lesions or colonized nasal discharge. Transmission occurs from one person to another via direct physical contact or indirectly through contaminated objects, such as towels, sheets, wound dressings, clothes, sports equipment or toys. During the warmer months, a commonly overlooked mode of infection involves self-innoculation (e.g., picking the nose, followed by scratching a mosquito bite). Many pediatricians recommend keeping nails short on younger, often less hygienic, patients to avoid this route of infection.

Infections caused by *S. aureus* are typically minor in healthy people, producing superficial skin lesions such as "pimples" or boils. These lesions occasionally become red, swollen and painful, forming abscesses or cellulitis. CA-MRSA is more likely to cause an infection and produces a more severe infection than other types of staph after gaining entry into the body. CA-MRSA skin infections are often mistaken for spider bites due to their acute onset, localization, and excruciating pain. Professional medical care may be required for proper treatment, including drainage of pus and possible oral or intravenous antibiotic therapy.

As CA-MRSA infections are becoming more common, awareness and prevention measures are even more important than they have been in the past. Please do your part to prevent the spread of CA-MRSA in your school system by ensuring the following guidelines are practiced. If you see a student with a suspicious lesion, advise him or her to seek professional medical treatment.

Guidelines to Prevent the Spread of Staph (including MRSA) in the School Setting:

- Students should avoid sharing personal items and skin care products such as clothing and balms or moisturizers.
- Keep hands clean by washing thoroughly with soap and water or using an alcohol-based hand sanitizer. Use the 15 second rule while washing hands, this is just enough time to sing the alphabet song. Ensure availability of adequate soap and hot water.
- Keep cuts and scrapes clean and covered with a bandage until healed.
- Avoid contact with other people's wounds or bandages, and wash hands immediately after changing a bandage.
- Seek medical attention if a wound does not heal properly or appears to be infected.
- Train athletes and coaches in first aid for wounds and recognition of wounds that are potentially infected.
- Students and teachers should be encouraged to report known or suspected MRSA infections to the school nurse.