MRSA (Methicillin-Resistant *Staphylococcus aureus*) Infections in the Workplace

What can an employer do to prevent the spread of "Staph" or MRSA at the workplace?

- Ensure the availability of adequate facilities and supplies that encourage workers to practice good hygiene.
- Ensure that routine housekeeping in the workplace is followed.
- Ensure that contaminated equipment and surfaces are cleaned with detergent-based cleaners or Environmental Protection Agency (EPA)-registered disinfectants.

If an employee has MRSA, can they go to work?

- Unless directed by a healthcare provider, workers with MRSA infections are not routinely excluded from going to work. Nevertheless, these decisions need to be made on a case-by-case basis.
- Exclusion from work should be reserved for those with wound drainage ("pus") that cannot be covered and contained with a clean, dry bandage and for those who cannot maintain good hygiene practices.
- Workers with active infections should be excluded from activities where skin-to-skin contact with the affected skin area is likely to occur until their infections are healed.

Can other employees get MRSA from someone at work?

- Yes, under certain circumstances. MRSA is transmitted most frequently by direct skin-to-skin contact or contact with shared items or surfaces that have come into contact with someone else's infection (e.g., towels, used bandages).
- MRSA skin infections can occur anywhere. However, some settings have factors that make it easier for MRSA to be transmitted. These factors include: crowds, frequent skin-to-skin contact, skin injuries (i.e., cuts or abrasions), contaminated items and surfaces, and poor hygiene.

  Many of these factors may exist in schools, dormitories, military barracks, households, correctional facilities, and daycare centers.

Background:

Staphylococcus aureus, often referred to simply as "Staph," is a type of bacteria commonly carried on the skin or in the nose of healthy people. Sometimes staph can cause an infection. Staph bacteria are one of the most common causes of skin infections in the United States. Most of these skin infections are minor (such as pustules and boils) and can be treated without antibiotics. However, staph bacteria also can cause serious infections (such as surgical wound infections, bloodstream infections, and pneumonia).

MRSA refers to types of staph that are resistant to a type of antibiotic called methicillin; it's often resistant to other antibiotics, as well. While 25-30 percent of the population is colonized with staph (meaning that bacteria are present, but not causing an infection with staph), approximately one percent are colonized with MRSA.

Staph infections, including MRSA, occur most frequently among persons in hospitals and healthcare facilities, such as nursing homes and dialysis centers, who have weakened immune systems. These healthcare-associated staph infections include surgical wound infections, urinary tract infections, bloodstream infections, and pneumonia.

Staph and MRSA can also cause illness in persons outside of hospitals and healthcare facilities. MRSA infections that are acquired by persons who within the past year **have not** been hospitalized or had a medical procedure (such as dialysis, surgery, catheters) are known as community-associated MRSA

infections. Staph or MRSA infections in the community are usually manifested as skin infections that look like pimples or boils and occur in otherwise healthy people.

Facts for the Workplace:

What should I do if I think I have a staph or MRSA infection?
See your healthcare provider and follow their advice about returning to work.

If I have a staph or MRSA skin infection, what can I do to prevent the spread of MRSA at work and at home?
You can prevent spreading staph or MRSA skin infections to others by following these steps:

1. **Cover your wound.** Keep areas of the skin affected by MRSA covered. Keep wounds that are draining or have pus covered with clean, dry bandages. Follow your healthcare provider's instructions on proper care of the wound. Pus from infected wounds can contain staph and MRSA, so keeping the infection covered will help prevent the spread to others. Bandages or tape can be discarded with the regular trash.
2. **Clean your hands.** You, your family and others in close contact should wash your hands frequently with soap and warm water or use an alcohol-based hand sanitizer, especially after changing the bandage or touching the infected wound.
3. **Do not share personal items.** Avoid sharing personal items such as clothing, personal protective equipment, razors, towels, uniforms, or washcloths that may have had contact with the infected wound or bandage.
4. **Talk to your doctor.** Tell any healthcare provider who treats you that you have or have had a staph or MRSA skin infection.

What should I do if I suspect that my clothing, personal protective equipment, uniform, or workstation has become contaminated with MRSA?

Wash clothing, sheets, towels, and uniforms that become soiled with water and laundry detergent. Use a dryer to dry clothes completely. Drying clothes in a hot dryer, rather than air-drying, also helps kill bacteria in clothes.

Cleaning contaminated equipment and surfaces with detergent-based cleaners or EPA-registered disinfectants is effective at removing MRSA from the environment. Because cleaners and disinfectants can be irritating and exposure has been associated with health problems such as asthma, it is important to read the instruction labels on cleaners to make sure they are used safely and appropriately. Where disinfection is concerned, more is not necessarily better. Additional information on appropriate use of cleaners and disinfectants can be found in Hospitals for a Healthy Environment's (H2E) 10 Step Guide to Green Cleaning Implementation. Environmental cleaners and disinfectants should not be used to treat infections. The EPA provides a list of registered products effective against MRSA: http://epa.gov/oppad001/chemregindex.htm.

Other Facts about MRSA

Transmission and Risks:

Who gets Staph or MRSA infections?
Approximately 25-30 percent of the population is colonized (when bacteria are present, but not causing an infection) in the nose with staph bacteria. Staph infections, including MRSA, occur most frequently among persons in hospitals and healthcare facilities, such as nursing homes and dialysis centers, who have weakened immune systems. These healthcare-associated staph infections include surgical wound infections, urinary tract infections, bloodstream infections, and pneumonia.

How common are Staph and MRSA infections?
Staph bacteria are one of the most common causes of skin infection in the United States and are a common cause of pneumonia, surgical wound infections and bloodstream infections. The majority of MRSA infections occur among patients in hospitals or other healthcare settings; however, it is becoming more common in the community setting. Data from a prospective study in 2003 suggests that 12 percent of clinical MRSA infections are community-associated, but this varies by geographic region and population.

Signs and Symptoms:

What does a Staph or MRSA infection look like?
Staph bacteria, including MRSA, can cause skin infections that may look like a pimple or boil and can be red, swollen, painful, or have pus or other drainage. More serious infections may cause pneumonia, bloodstream infections or surgical wound infections.

Prevention:

How can I prevent Staph or MRSA skin infections?
Practice good hygiene:

- Keep your hands clean by washing thoroughly with soap and water or using an alcohol-based hand sanitizer.
- Keep cuts and scrapes clean and covered with a bandage until healed.
- Avoid contact with other people's wounds or bandages.
- Avoid sharing personal items such as uniforms and personal protective equipment.

Treatment:

Are Staph and MRSA infections treatable?

Yes. Many staph skin infections may be treated by draining the abscess or boil and may not require antibiotics. Drainage of skin boils or abscesses should only be done by a healthcare provider.

However, some staph and MRSA infections are treated with antibiotics. If you are given an antibiotic, take all of the doses, even if the infection is getting better, unless your doctor tells you to stop taking it. Do not share antibiotics with other people or save unfinished antibiotics to use at another time.

If after visiting your healthcare provider the infection is not getting better after a few days, contact them again. If other people you know or live with get the same infection tell them to visit their healthcare provider.

Adapted from the CDC; updated November 1, 2007.

Additional Resources:

U.S. Centers for Disease Control and Prevention (CDC): Information about Community-associated MRSA.

PubMed: A service of the National Library of Medicine and the National Institutes of Health
PubMed search for "Community-Associated MRSA Infections"
External link: http://www.ncbi.nlm.nih.gov/sites/entrez?Db=pubmed&Cmd=DetailsSearch&Term=((%22Staphylococcus+aureus%22%5BMesh%5D+AND+%22Methicillin+Resistance%22%5BMesh%5D)+OR+MRSA%5BAll+Fields%5D)+AND+%22Community-Acquired+Infections%22%5BMesh%5D

Questions and Answers about Methicillin-Resistant Staphylococcus aureus (MRSA) in Schools