Methicillin Resistant Staphylococcus Aureus (MRSA) Management and Control in Community Settings

Methicillin Resistant Staphylococcus Aureus or MRSA is a drug-resistant staphylococcus bacteria \((\text{Staph})\) that is resistant to many of the antibiotics normally used to treat \textit{Staph} infections.

MRSA can be found in schools, dormitories, homes, gyms, and wherever people congregate. It can invade the body through a wound, by skin contact with an infected person, or from contaminated surfaces. It can be found on towels, razor blades, countertops, toilet seats, computer keyboards, athletic equipment, bandages, used gauze dressings and even used bars of soap.

\textit{Staph} bacteria are the most common cause of skin infections. Like other forms of \textit{Staph}, MRSA is commonly present on the skin or in the noses and upper respiratory tracts of healthy, non-compromised people, without causing infections or illness. It can be carried in the armpit, groin or genital area. When these bacteria get into a break in the skin, they can cause a skin infection. To determine whether an infection is caused by \textit{Staph} or MRSA, a swab of drainage or pus from the wound is collected and sent for microbiological analysis.

The best way to prevent MRSA infection from spreading is frequent hand washing. Hand washing is the single most important activity in preventing the spread of infectious disease.

Community acquired (CA-MRSA) MRSA infects individuals as skin infections that look like pimples or boils and can be swollen, painful and have draining pus. The skin site can feel warm to the touch. These skin infections can often occur in healthy people. We at UMaine are most concerned with CA-MRSA, because the makeup of our population is comprised mainly of young and healthy adults and not immuno-suppressed individuals, as one would find in a health care setting.

MRSA contamination requires thorough cleaning and disinfection of surfaces, paying special attention to common-use areas where cross-contamination is most likely to occur.

\textbf{Affected Departments Include:}

- Property Management
- Facilities Management Custodial Services
- Facilities Management Minor Maintenance
- Recreation & Athletics

All surfaces and materials within the affected area should be cleaned and thoroughly disinfected, paying special attention to common use areas where MRSA can be easily spread through direct contact with others.
Areas for Special Attention Include:

- lockers, carts, storage bins, all touch points
- walls, shower stall floors, countertops, partitions
- door knobs, railings including handicap grab bars in restrooms, door handles
- light switches, sinks, toilets, spas and hot tubs
- weight machines, gym benches, barbells, stationary bicycles including seats and handle bar grips
- wrestling mats, contact sports & exercise balls, yoga mats, and other exercise equipment
- contact sports body armor, helmets
- drinking fountains, vending machines, tables, desks, chairs
- telephones, fax machines, copy machines, computers and keyboards
- washing machines
- Personal Protective Equipment (PPE)

Recommended Cleaning Methods and Training

Only use approved cleaning and disinfecting products approved by the UMaine Purchasing Department. Follow the instructions labeled on the cleaning product for the effective MRSA cleaning and disinfecting techniques. Each department manager or supervisor shall include proper cleaning techniques in the department/job specific training. All UMaine Departments shall follow Center for Disease (CDC) Guidelines.

At a minimum, the following general cleaning and disinfecting procedure should be followed.

It is imperative that the surfaces are pre-cleaned first, prior to the disinfecting process. Apply cleaning product to remove any bacterial biofilm, soil, detritus and debris from the surface. After the appropriate kill time of the cleaning product has been met, disinfect the area. Do not wipe or remove the applied disinfectant. Allow to dry.

Disposal of cleaning utensils and materials

Soiled cleaning materials, such as paper towels, cloths, sponges, mop heads and any other cleaning utensils used in the cleaning process should be placed in trash bags, sealed with duct tape and discarded in the regular trash. These waste materials are no longer infectious and red bags should not be used.

1 Special attention should be placed on disinfecting the foam rubber padding of sports gear since these are skin-contact areas where the spread of MRSA can occur.
2 Washing machines should be disinfected after laundering contaminated materials by spraying the tub, agitator, splash seal and surfaces.
3 All tools, equipment and PPE used in the cleanup of MRSA contaminated areas should be cleaned and disinfected prior to removal from the contaminated areas.
What to do if you have MRSA to prevent others from getting infected

You can prevent the spread of CA-MRSA infections by following the following steps:

1.) **Cover your wound.** Keep wounds covered with clean, dry bandages. Follow your health care provider’s instruction on proper care of the wound. Fluid from infected wounds may contain MRSA, so keeping the infection covered will help prevent the spread of infection. Used bandages must be contained in a plastic bag which is sealed with tape before placing in the trash.

2.) **Wash your hands.** You, your family, and others in close contact should wash their hands frequently with soap and warm water or use hand sanitizers that are effective on MRSA, especially after changing the bandage or touching the infected wound. Do not pick or remove formed scabs from the wounds as this is a highly probable route of cross-contamination.

3.) **Do not share personal items.** Avoid sharing personal items such as towels, washcloths, razors, or clothing that may have had contact with the infected wound or bandage. Wash soiled articles with hot water and detergent. Drying clothes in a hot dryer, rather than air-drying, also helps kill microorganisms in clothing and other personal laundry items.

4.) **Talk to your healthcare provider.** Tell any healthcare providers who treat you that you have or had a MRSA skin infection.

Reporting Confirmed Cases of MRSA

Physicians are required to report certain cases of MRSA to the Maine CDC. UMaine reports MRSA to the Maine CDC when cases appear to occur in a cluster. Community Based MRSA is considered to occur in a cluster when multiple cases are confirmed within close proximity, such as on the same floor of a particular dormitory (several days or weeks later). Please contact the Maine CDC, SEM or Cutler Health Center with any questions about reporting clusters of Community Based MRSA.

Suspected cases of MRSA should be reported to Cutler Health Center. Cutler Health Center will notify other affected departments (see page 1) to assist with cleaning requirements without disclosing identity or other confidential medical information. The medical provider will assist patients with proper wound cleaning and dressing techniques, provide needed medical advice, and will submit required case reports to the Maine CDC.

Personal Protection for Custodial, Maintenance and Repair Personnel

It is prudent to approach *any surface* as a potentially contaminated surface. It is therefore suggested that custodial, repair and maintenance staff wear surgical gloves, or at a minimum, work gloves, when conducting cleaning or repair and maintenance. In addition to gloves, proper hand washing techniques should be employed after each task and prior to eating or drinking.