

METHICILLIN-RESISTANT STAPHYLOCOCCUS AUREUS (MRSA)

Fact Sheet for Health Care Providers

WHAT IS MRSA?

Staphylococcus aureus is a bacterium that periodically lives on the skin and mucous membranes of healthy people. Occasionally *S. aureus* can cause an infection. When *S. aureus* develops resistance to the beta lactam class of antibiotics, it is called methicillin-resistant *Staphylococcus aureus*, or MRSA.

HOW IS MRSA SPREAD?

MRSA is spread from one person to another by contact, usually on the hands of caregivers. MRSA can be present on the caregiver's hands either from touching contaminated material excreted by the infected person or from touching articles contaminated by the skin of a person with MRSA, such as towels, sheets, and wound dressings. MRSA can survive well on hands and can survive for weeks on inanimate objects such as door handles, bedrails, patient charts, pagers and stethoscopes.

COLONIZATION AND INFECTION

Colonization occurs when bacteria are present on or in the body without causing illness. MRSA can colonize the nose, skin and moist areas of the body.

Infection occurs when bacteria get past the person's normal defenses and cause disease (e.g. skin bacteria getting into the bloodstream via an intravenous catheter). Infections with MRSA may be minor, such as pimples and boils, but serious infections may also occur, such as surgical wound infections and pneumonia.

RISK FACTORS FOR MRSA INFECTION

MRSA infection usually develops in hospitalized clients/patients/residents who are elderly or very sick (weakened immune systems). Other factors that increase the risk for acquiring MRSA infection include:

- Being colonized with MRSA
- Recent hospitalization in health care facilities outside of Canada
- Previous hospitalization or transfer between health care facilities
- Presence of an indwelling device (e.g. catheter)

GOOD HAND HYGIENE PRACTICES

Remind all staff and visitors to practice good hand hygiene before and after client/patient/resident contact/care. Health care staff should review the correct method of hand hygiene, as well as demonstrate the proper donning/removal of personal protective equipment (PPE) to clients/patients/residents, families and visitors.

Good hand hygiene practices refer to the use of waterless alcohol hand rub or soap and running water for at least 15 seconds.

Hand hygiene should occur:

- Before and after each client/patient/resident contact
- Before performing invasive procedures
- Before preparing, handling, serving or eating food
- After care involving the body fluids of a client/ patient/resident and before moving to another activity
- Before putting on and after taking off gloves and PPE
- After personal body functions (e.g. blowing one's nose)
- Whenever there is doubt about the necessity for doing so
- When hands accidentally come into contact with secretions, excretions, blood and body fluids
- After contact with items in the client/patient/resident's environment

PREVENTION & CONTROL OF MRSA

1. Admission screening for MRSA must be completed:
 - Check for previous history of MRSA or high risk for MRSA using an admission screening tool.
 - If the client/patient/resident has previously had contact with an MRSA case, screening specimens must be obtained.
 - If the client/patient/resident is considered to be at risk for MRSA based on the results of the screening tool, screening specimens must be obtained.
2. If the client/patient/resident is known to have had MRSA in the past, **Additional Precautions** must be initiated:
 - Hand hygiene as described in Routine Practices
 - Appropriate client/patient/resident placement
 - Gloves for entering the patient's room or bed space in acute care, or for direct care of residents in long term care
 - Long-sleeved gown for entering the patient's room or bed space in acute care, or for direct care of residents in long term care if contamination is likely
 - A surgical mask may be worn if desired
 - Dedicated equipment or adequate cleaning and disinfecting of shared equipment, including transport equipment
 - Daily cleaning of all touched surfaces in the room
3. Notify the Infection Prevention and Control Professional or delegate to discuss the infection control management of client/patient/resident activities.
4. Precautions are **not** to be discontinued until reviewed by Infection Prevention & Control.
5. Additional surveillance specimens for colonization or client/patient/resident contact(s) may be required, as directed by Infection Prevention and Control.

FAMILY & VISITORS

All families/visitors must practice good hand hygiene before and after leaving the client/patient/resident room.

Families/visitors who provide direct care must wear the same PPE as staff. “Direct care” is defined as providing hands-on care, such as bathing, washing, turning the client/patient/resident, changing clothes/diapers, dressing changes, care of open wounds/lesions, toileting. Feeding or pushing a wheelchair is not classified as direct care.

Written information should be available for clients/patients/residents that explains the precautions required.

REFERENCE

For more information on good hand hygiene practices, visit Ontario’s website www.justcleanyourhands.ca.