# Methicillin-Resistant Staphylococcus Aureus (MRSA)



# Practical Information for LTC and Retirement Homes



### What is MSSA versus MRSA?

**MSSA** or **Methicillin sensitive staphylococcus aureus** is the common type of Staphylococcus aureus that is often found on the skin and in the nose of healthy people. Infections caused by staphylococcus aureus are usually treated with penicillin type of antibiotics.

**MRSA** or **Methicillin resistant staphylococcus aureus** are strains of staphylococcus aureus bacteria that became difficult to treat with commonly used antibiotics (penicillin, methicillin, oxacilin, cloxacilin and other antibiotics). These resistant strains have been more often associated with health care settings, affecting people with chronic illnesses or those with weakened immune system.

MRSA infections still respond to certain antibiotics as prescribed by your health care provider.



### Are there different types of MRSA?

- MRSA was first reported a decade ago and caused infections that were related to the healthcare settings (HA-MRSA).
- Some MRSA strains developed the ability to cause infections in otherwise healthy people and to spread throughout the community settings (CA-MRSA).
- Health care professionals can differentiate between the hospital associated and the community associated strains.
- Many characteristics of MRSA are overlapping and some characteristics are common to all staphylococcus bacteria.

# What are the symptoms of a MRSA Infection?

- Symptoms are related to the type of infection and the body site affected by the MRSA infection from abscesses (boils) or open wounds to more serious infections affecting the lungs, bones, urinary tract, or the blood stream.
- CA-MRSA infections are often seen as skin and soft tissue infections, such as folliculitis and abscesses often thought to be "spider bites" that occur in otherwise healthy people.
- Bacteria can enter through skin cuts or scrapes into the blood stream and cause more serious illness.
- Serious MRSA pneumonia may develop as a complication during an influenza illness.
- You may have MRSA and not be affected; however you can still spread it to others who might become ill.

### How is MRSA spread?

- Like other strains of staphylococcus aureus, MRSA is more often spread **person to person by direct skin-to-skin contact** with a person who already has MRSA.
- An injury in the skin may allow bacteria that live on the skin to enter inside the body and cause an infection.
- All strains of MRSA can also be transmitted indirectly, through unwashed hands or through sharing contaminated clothing, towels, linen, sport-equipment etc.
- Very rarely, a person with a respiratory infection with MRSA can spread it through the air.
- Pets may become infected with MRSA similar to humans, but they do not have a major role in MRSA infection transmission.

# Who is at risk for becoming infected with HA-MRSA?

- Some individuals are at increased risk of acquiring MRSA infection in a health care setting because of their other medical condition (chronic skin conditions, obesity, diabetes, or weaker immune system).
- Persons with invasive medical devices, including tube feedings, are at increased risk for developing staphylococcal infections with health care associated MRSA.
- Other risk factors are associated with too often or inadequate use of antibiotics.

#### Who is at risk for CA-MRSA?

Risk factors for acquiring CA-MRSA are a little different from the risk factors for health care associated MRSA, although there are some overlaps.

Higher risk for getting CA-MRSA is related to practices that facilitate transmission of germs from one person to another such as:

- Close skin-to-skin contact with a person who has MRSA
- Crowded living conditions
- Poor hand hygiene
- Skipping showers before and after using public swimming pools or whirlpools
- Sharing personal items such as towels, linen, razors, or bar soap
- Improper wound care of skin cuts or open wounds that can allow harmful bacteria throughout the normal skin barrier
- Touching objects that are contaminated with MRSA such as used band aids.

# How long will MRSA survive on surfaces?

- MRSA can survive on some surfaces for a long time from hours to days or months, depending on the contaminated surface condition.
- MRSA is not naturally occurring in the environment.
- If surfaces are soiled with organic material, they may allow MRSA to survive for a long period of time. Porous surfaces that can not be properly cleaned and disinfected will allow MRSA survival longer than a smooth easily cleanable surface.

#### Can MRSA be treated?

- MRSA infections can be treated with antibiotics (other than penicillin type) that are still effective against MRSA.
- Treatment of skin and soft tissue infections include incision and drainage with or without antibiotics.

### Do people die from MRSA?

- On rare occasions a MRSA infection can result in life threatening illness or death from complications.
- Most cases are successfully treated. The effectiveness of treatment is greater if MRSA is detected early.

### Are MRSA numbers increasing?

- In November 2008, Ontario reported an increase of MRSA cases over a three-year period. Some of these cases were ill with MRSA infections, and some were MRSA carriers (they only carried the MRSA on their skin or in their nose, without showing symptoms).
- Health care professionals are working hard to fight all health care associated infections.
- Starting on December 31, 2008 hospitals are required to publicly report MRSA rates along with other patient safety indicators.

### How can I prevent becoming infected with MRSA?

There is no effective vaccine against MRSA available at this time.

It is important to practice good hygiene step by step:

#### 1. Wash your hands

Use soap and water or use alcohol-based hand rub for at least 15 seconds.

Wash hands after touching any skin lesion, wound drainage either yours or others, or potentially contaminated environmental surface.

# When do I need to wash my hands?

- After using the washroom
- After coughing or sneezing
- Before and after preparing food
- Before eating and drinking
- Before and after caring for your wound
- Whenever your hands become soiled or contaminated.



#### 2. Treat and cover open wounds

Any cut, abrasion, or skin lesion may be a point of entry for bacteria, including MRSA.

Cleanse wounds, treat with an anti-infective solution or ointment, and cover with a band aid. Keep them clean and covered until they have healed.

#### 3. Seek health care advice

Consult your health care provider for any redness or swollen active wound, and for suspicion of a skin infection. Early diagnosis helps you to receive effective treatment.

#### 4. Shower after each sport activity

Shower with soap and water after sport events and close contact with athletic team to avoid the spread of CA-MRSA.

#### 5. Never share personal items

Towels, sport uniform, razors, clothing etc, should not be shared with others.

Exclude athletes from joining your team where there is open wound or drainage that can not be contained with a water proof band aid.

#### 6. Thoroughly clean gear and equipment

Commonly used surfaces – sport mats, shared equipment, benches must be washed before and after use.

Non-washable items such as head gear must be wiped after each use with a disinfectant.

# If I have MRSA, what can I do to protect others from getting infected?

- Seek medical advice and appropriate treatment for your infection.
- Keep your wounds clean and covered until they have healed completely.
- Discard your used band aid and used skin care materials properly, so no other person can accidentally touch them.

- If your doctor prescribed antibiotics, take it until you have finished the entire prescribed dose. Never share antibiotics with another person.
- Wash your hands frequently. Use alcohol based hand rub to disinfect your hands if hands are not visibly soiled.
- Do not share personal items such as used towels, razors, and clothing, bar soap, cosmetics, and lotions.
- If you have wounds that can not be covered with a waterproof band aid, or if the wound drainage can not be contained, do not go to swimming pools, public fitness clubs, saunas, and do not participate in team sports.

# If I have MRSA, is my family at risk of getting infected?

- For casual household contact and if you have good hygiene practices, to protect others, your family is not at great risk of getting MRSA.
- Maintain a clean environment, and focus cleaning on frequently touched surfaces.
- Disinfect surfaces after cleaning with a product that destroys microorganisms. (E.g. use one tablespoon of household bleach in a quart of water solution to disinfect washroom surfaces).
- Wash your dishes and do laundry just like the rest of your household members. You may want to use hot air cycle for drying.
- No special cleaning of furniture is needed.
- Use barriers between your skin and shared equipment such as sitting on a clean towel if you are using a common benches or the same toilet seat.
- The best prevention that can stop the spread of infection is hand washing.
- A member of your family who helps with your personal care, similar to your health care provider, needs to perform good hand hygiene and follow precautions, such as wearing clean and disposable gloves and a long sleeved gown, especially if they can touch your open wound.



For more information, please contact

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