

## What is MRSA?

*Staphylococcus aureus* or “staph” is a bacterium that lives (colonizes) on the skin and in the nose of about 1/3 of the population. Staph colonization does not usually cause an infection unless it enters the body through a cut, scratch, or other open wound in the skin. Once infecting the bloodstream, strains of the bacteria can become resistant to beta-lactam antibiotic treatment – the treatment commonly used to treat Staph infections. The resistant bacteria are called Methicillin-resistant *Staphylococcus aureus* (MRSA).

MRSA is commonly associated with hospital settings (called health-care associated MRSA or HA-MRSA). However, if an MRSA infection occurs in someone who has not been hospitalized or has not had a recent medical procedure, it is called community-associated MRSA (CA-MRSA).

- [Public Health Agency of Canada MRSA Fact Sheet](#)
- [Winnipeg Regional Health Authority MRSA Fact Sheet](#)

## What are signs and symptoms of CA-MRSA?

Community-associated MRSA infections usually look like pimples, boils, or spider bites on the skin. The affected area may be swollen, red, painful, and/or have pus or drainage. If left untreated, CA-MRSA infections can sometimes cause life-threatening infections in the bloodstream, bones, or lungs (e.g., pneumonia).

- [Public Health Agency of Canada MRSA Fact Sheet](#)

## How does CA-MRSA spread?

CA-MRSA spreads through direct skin-to-skin contact with an infected person or animal, or through contact with contaminated objects (e.g., bedsheets, clothes, towels, sports equipment, utensils, medical equipment, etc.). If treatment is delayed, the risk of spreading the infection to others increases. Carriers of Staph bacteria, including MRSA, may not show any symptoms, but they can still spread it to others who can become sick.

- [Public Health Agency of Canada MRSA Fact Sheet](#)

## Who gets MRSA?

CA-MRSA infections can affect people of all ages and genders. However, people who live in crowded settings and/or share contaminated items are at higher risk for CA-MRSA infection. This includes:

- People experiencing homelessness
- Incarcerated individuals
- Shelter residents

- People with histories of illicit drug use
- Veterinarians, farm workers, and livestock workers
- Athletes
- Members of the military
- [Public Health Agency of Canada MRSA Fact Sheet](#)
- For more information, see the study by Gilbert et al. (2006): <https://doi.org/10.1503/cmaj.051565>

## Why are prisons and shelters high-risk areas for CA-MRSA?

Closed community settings, such as correctional facilities (prisons, jails) and shelters, can increase the risk of CA-MRSA infections among residents because of crowdedness, lack of hygiene, and frequent use of the facilities.

- For more information, see the study by Mitevska et al. (2021): <https://doi.org/10.3390/pathogens10040393>

## How is a CA-MRSA infection screened and treated?

If a CA-MRSA infection is suspected, it is recommended to seek advice from a health care provider or doctor. A sample from the affected area will be taken to diagnose a CA-MRSA infection.

If CA-MRSA is detected, a doctor or nurse may use antibiotics other than methicillin or drain the wound of pus with a needle or syringe.

- [Public Health Agency of Canada MRSA Fact Sheet](#)

## What is happening with MRSA in Canada?

The number of CA-MRSA bloodstream infections in Canada has been increasing steadily since 2015. Between 2016 and 2020, there was a 75% rise in CA-MRSA cases, attributing to a 33% rise in overall MRSA cases (including community- and hospital-acquired cases).

- [Canadian Antimicrobial Resistance Surveillance System \(CARSS\) Report, 2020](#)

## What is happening with MRSA in Canadian prisons and homeless shelters?

Research on MRSA infections in Canadian prisons and homeless shelters is limited. One [2007 study](#) examined three inner-city homeless shelters in Ottawa, Ontario and calculated that 4.5% of shelter residents were carrying the MRSA bacterium. Another [Canadian study](#), published in 2006, looked at the proportion of a specific strain of MRSA (USA300) among 271 participants from homeless shelters, correctional facilities, needle exchange and detoxification programs, and an inner-city medical clinic in Calgary,

Alberta. The study found that 5.5% of participants were either colonized or infected with the MRSA strain.

To read the full studies, visit:

- Szakacs et al. (2007): <https://doi.org/10.1155/2007/264257>
- Gilbert et al. (2006): <https://doi.org/10.1503/cmaj.051565>

## **What can I do to prevent and/or control CA-MRSA infections?**

To reduce the risk of developing a CA-MRSA infection, practice good hygiene and keep wounds clean and bandaged. MRSA can also survive on contaminated objects for hours, sometimes weeks. So, it is important to avoid sharing personal items (e.g., towels, soaps, razors, etc.), discard contaminated waste (e.g., bandages), and regularly wash objects that come in contact with the skin (e.g., bedsheets, towels, clothes, etc.).

- [Public Health Agency of Canada MRSA Fact Sheet](#)

### ***CA-MRSA in correctional facilities and shelters***

A [2006 Canadian study](#) provided 3 recommendations to prevent and control CA-MRSA infections in correctional facilities and shelters:

1. Restrict opportunities for occupants with uncovered skin lesions and poor hygiene to expose other people to the infection.
2. Consider how shelter (beds, rooms) is assigned to reduce the risk of having one person infect others.
3. Educate staff on the ways to reduce the risk of MRSA infections.

To read the full study, visit: <https://doi.org/10.1155/2006/402361>