



**NL Health  
Services**

Infection Prevention and  
Control

## FACT SHEET

# Antibiotic Resistant Organisms (AROs)

**HAND HYGIENE:  
THE BEST  
WAY TO PREVENT  
INFECTION**

## What are Antibiotic Resistant Organisms (AROs)?

Antibiotic resistant organisms (AROs) are bacteria and other micro-organisms that have developed a resistance to antimicrobial drugs. Antimicrobial resistance occurs when germs develop the ability to defeat the drugs designed to kill them. Antimicrobial resistance can affect individuals at any stage of life in any country. Antimicrobial resistance occurs naturally, but misuse or overuse of antibiotics in humans and animals can accelerate the process.

### Who is at risk of AROs?

- Individuals who are seriously ill.
- Individuals who have been hospitalized for a long period of time.
- Individuals who have taken many antibiotics.

### How are AROs spread?

Resistant germs can spread between people, animals, and the environment and can be found in healthcare facilities, in your community, in water and soil, in the food supply, and while travelling. AROs can be spread on individuals' hands, equipment, or surfaces that have not been appropriately cleaned.

### How to prevent the spread of AROs

- Only use antibiotics when prescribed. Do not demand antibiotics if your health care provider says they are not required.
- Never share or use leftover antibiotics.
- Preventing infections by regularly washing your hands, preparing food hygienically, avoiding close contact with individuals who are sick, practicing safe sex, and keeping your vaccinations up to date.
- You can reduce the spread at home with frequent handwashing and not sharing personal items with family members such as towels, washcloths, and razors.

### Category of AROs:

- Infection: a micro-organism is present in/on the body, has invaded tissue, caused tissue changes, and normally caused signs and symptoms of disease.
- Colonization: a micro-organism is living in/on your body, but you are not sick.

### What to expect while in hospital with an ARO:

- You will be placed on Contact Precautions upon admission to the hospital and a sign will be posted on your room door.
- You may be required to stay in your room.
- Ensure you wash your hands before leaving your room, after using the toilet, blowing or touching your nose, and before you eat.
- Do not visit other inpatient units.
- Do not visit the unit kitchen area.

- Staff and visitors will wear a gown and gloves when providing direct care.
- All staff and visitors must wash their hands when they enter and leave your room.
- Items brought into your room must stay in the room.
- A note will be made on your electronic chart that you require contact precautions upon admission to the hospital in the future.
- Environmental Services staff will clean the room daily.

### Information for visitors:

- Check with the nurse before entering the room.
- Clean your hands when you enter and leave the room.
- Follow the directions on the signs posted on your door.
- Check with staff before bringing any items, including food, in or out of the room.
- Ask staff to retrieve items from the kitchen and utility rooms for you.
- Wear a gown and gloves if assisting with direct care.
- Always remove gown and gloves before leaving the room.
- If visiting more than one client/resident, schedule the visit with the client/resident on precautions for last.

### Types of AROs:

#### Methicillin-Resistant Staphylococcus Aureus (MRSA)

Staphylococcus aureus (staph) is a bacterium commonly found on the skin and in the noses of healthy individuals. Staph bacteria have developed a resistance to most antibiotics that are used to kill it, including an antibiotic called Methicillin. Often, MRSA lives on the body without causing infection and does not require treatment.

#### Vancomycin-Resistant Enterococci (VRE)

Enterococcus is a germ that lives in the bowel of most individuals. Vancomycin resistant enterococci is this germ that has developed a resistance to the antibiotic Vancomycin. The enterococcus germ can sometimes cause infection, but most individuals who acquire VRE only carry it in their bowel and never become sick. In some cases, however, VRE can cause serious infections such as urinary tract infections, wound infections, or blood infections which require special antibiotics to treat.

#### Carbapenemase-Producing Organisms (CPO)

Carbapenems are a class of beta-lactam antibiotics, a broad-spectrum antibiotic used to treat severe infections. All bacteria (germs) have the potential to become resistant to carbapenems. Resistance occurs when the bacteria no longer respond to the carbapenem antibiotics which are designed to kill them.

#### Candida Auris (C. Auris)

Candida Auris is a fungus that can cause healthcare-associated invasive infections and outbreaks. It is often resistant to multiple antifungal drugs and can be challenging to identify in laboratory tests.