

# Multidrug-Resistant Organism Colonization Screening

## Frequently Asked Questions for Health Care Facilities

Targeted multidrug-resistant organisms (MDROs), such as carbapenemase-producing organisms and *Candida auris*, are found and transmitted almost exclusively within health care settings. Targeted MDROs can live and thrive in the environment for long periods of time. The organisms can unintentionally get transferred to other patients or residents through exposure to contaminated shared medical equipment (such as vital signs equipment), hands of staff, shared spaces (such as procedural room or tub room), and other high-touch surfaces.

Rapidly identifying individuals infected or colonized with targeted MDROs, following appropriate precautions and isolation guidelines, and clearly communicating when individuals are transferred between health care facilities are all key strategies for preventing the spread of MDROs.

### Background and purpose

#### What does it mean to be infected or colonized with an MDRO?

A person who is infected with an MDRO has the organism in or on their body and it is causing symptoms or illness. People can also be colonized with an MDRO. A person who is colonized with an MDRO carries the organism in or on their body, often for very long periods of time, without symptoms. People who are colonized with an MDRO can spread the organism to surfaces in their environment and to other people. An individual who is colonized with an MDRO can also become infected later with the organism.

#### What is colonization screening?

Colonization screening, also known as point prevalence screening, refers to the process of testing or screening someone for the presence of a specific MDRO.

### Screening

#### When is colonization screening recommended?

A facility may conduct colonization screening when they identify a patient or resident who is infected or colonized with a targeted MDRO to determine if others in the facility are also colonized with it.

Colonization screening may be recommended if a patient or resident who is infected or colonized with an MDRO was not placed in proper precautions from time of admission.

Performing colonization screening **may not** be necessary if a patient or resident was already known to be infected or colonized with a targeted MDRO and proper precautions were in place from the time of admission and throughout the care encounter.

## Which patients or residents should be screened?

Since patients or residents who are colonized with an MDRO do not generally have any symptoms, screening is often the only way to determine whether “silent transmission” is occurring in the facility.

There are several factors used to determine who should be screened including:

- The type of MDRO.
- Whether appropriate precautions were consistently used.
- Whether proper cleaning and disinfection practices were followed.
- Whether spaces or staff are shared between patients or residents.

Depending on such factors and the location of the positive patient or resident, screening may be recommended at the unit or facility-level.

Multiple rounds of screening may be necessary to determine the extent of the outbreak and to know when the outbreak has been contained. The [Wisconsin Healthcare-Associated Infections \(HAI\) Prevention Program](#) can assist in determine the scope of screening.

## Specimen collection

## Do patients or residents need to agree to the screening? Does our facility need to document that consent has been obtained?

Participating in colonization screening is voluntary and patients or residents can choose to decline testing. Patients, residents, or their powers of attorney must provide consent prior to screening. View the [patient, resident, and family colonization screening factsheet](#) for a sample consent document.

## How are colonization screening specimens collected?

The method for collecting the specimen for colonization screening depends on the type of MDRO. Bilateral armpit and groin swabs are often used as a collection site. For some organisms, a rectal swab may be recommended. The facility will need to designate staff to collect the specimens, fill out the accompanying paperwork, and prepare the specimens for shipping to the Wisconsin State Laboratory of Hygiene (WSLH).

## How long will it take to receive results?

Result processing time depends on the MDRO, but most results are available within a week of obtaining the specimen.

## Are there cost to the facility for supplies or shipping?

WSLH will provide the swabs, shipping containers, and free FedEx® shipping for specimens.

## Infection prevention and control

### What infection prevention and control measures should be implemented?

Decisions about infection prevention and control measures should not be delayed while awaiting colonization screening results.

- Implement proper precautions as soon as a patient or resident is identified as being colonized or infected with an MDRO. Depending on the situation, empiric precautions may be recommended while awaiting pending results.
- Staff should perform hand hygiene throughout and at the end of their shift.
- Use disinfectants to clean shared medical equipment and the patient's or resident's environment that effectively kill the organism(s) of concern. Increased frequency of cleaning may be warranted. For colonized or infected individuals, use disposable or dedicated medical equipment, if possible.
- Communicate the patient's or resident's MDRO status and history to both internal and external care providers.
- In general, staff should use caution when handling their used scrubs and work shoes, regardless of whether they are working with a patient or resident who is infected or colonized with a targeted MDRO.

**The HAI Prevention Program has prevention and control guides for various settings:**

- [Recommendations for the Prevention and Control of Targeted MDROs in Wisconsin Nursing Homes](#)
- [Recommendations for the Prevention and Control of Targeted MDROs for Assisted Living Facilities](#)
- [Guidelines for Prevention and Control of MDROs for Health Care Settings](#)

### Can we get more infection control information and assistance?

The HAI Prevention Program has resources to help support health care facilities in their prevention and response efforts to disrupt the spread of MDROs. Contact the HAI Prevention Program at [dhswhaipreventionprogram@dhs.wisconsin.gov](mailto:dhswhaipreventionprogram@dhs.wisconsin.gov). For additional information and resources on MDROs visit [www.dhs.wisconsin.gov/hai/reportable-mdro.htm](http://www.dhs.wisconsin.gov/hai/reportable-mdro.htm).

### **Should staff be worried about being infected or colonized with an MDRO?**

Your risk of being infected or colonized with an MDRO after caring for a patient or resident who is infected or colonized is very low if you adhered to standard precautions during care encounters.

MDRO transmission is usually the result of prolonged, direct contact with an infected or colonized patient or resident and/or their environment and the presence of additional risk factors.

### **Should I be tested for the MDRO?**

The CDC (Centers for Disease Control and Prevention) does not typically recommend that staff be tested for targeted MDROs due to their low risk for becoming infected or colonized. Risk for MDRO transmission from a patient or resident can be minimized by following standard and (where indicated) transmission-based precautions or enhanced barrier precautions.

In rare instances, colonization screening may be recommended if there is epidemiological evidence that suggests a staff person could be infected or colonized with a targeted MDRO.

Staff screening decisions should be made on a case-by-case basis. The employer should collaborate with the staff person, their medical provider, and the organization's occupational health department to make such decisions. Special consideration should be given to how an infected or colonized staff person will be managed (such as work restrictions, or rescreening).

### **Why are neighboring patients or residents being tested, but not staff?**

Neighboring patients or residents likely have risk factors that place them at a greater risk of becoming infected or colonized with an MDRO such as:

- Underlying medical conditions
- Current and/or prolonged antibiotic use
- Indwelling medical devices and/or lines
- Presence or history of wounds
- History of frequent or prolonged hospitalizations and frequent surgeries or procedures
- History of residing in congregate living settings

Staff typically do not have such risk factors and utilize additional infection prevention measures (such as standard precautions) that significantly lowers their risk of acquiring a communicable disease.