

# Colonization Screening Toolkit for Antimicrobial- Resistant Organisms

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**pennsylvania**

DEPARTMENT OF HEALTH  
BUREAU OF EPIDEMIOLOGY

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*Please note that page numbers are not included throughout the toolkit because individual documents are designed to be distributed or used together or as stand-alone resources. Please use your pdf viewing software to find documents by page number.*

# Introduction

Thank you for your cooperation with the investigation of antimicrobial-resistant organisms in your healthcare facility. **Containment of resistant organisms such as carbapenemase-producing organisms (CPO) is a national problem and requires health care facilities and public health agencies to work together to prevent transmission.**

You are receiving this toolkit and the materials needed to conduct colonization screening for novel and high-concern organisms. These may include carbapenemase-producing carbapenem-resistant Enterobacteriaceae (CP-CRE), *Candida auris*, or others.

Along with the toolkit, you should also receive:

- Cepheid dual-swab collection devices
- A self-adhesive shipping label envelope pouch
- Copies of educational handouts for patients/residents and families

Please:

- Keep the box the materials were shipped in and all contents—these will be needed later
- Follow instructions for specimen collection
- Do not use a different collection device than what is provided—these are specific swabs
- Notify your local health department point of contact as soon as collection is complete, or if you have any questions. Specimens will be shipped by FedEx to the regional laboratory with guidance from the health department. Note that this process *differs* from your typical shipment of specimens to the state public health laboratory, also known as the PA Bureau of Laboratories.

Thank you in advance for the time and effort you put into this response. We appreciate your commitment to containment of novel and high-risk drug-resistant organisms and your dedication to the well-being of your patients/residents. If you have any questions, please do not hesitate to reach out to your local health department point of contact or call 1-877-PA-HEALTH.

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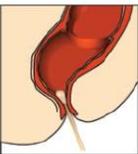
## **Guidelines for Facilities: Collection of Peri-Rectal Colonization Specimens for Carbapenemase Testing**

**Note:** Colonization screening requires pre-approval and coordination with the Pennsylvania Department of Health (DOH) or the local health department. Call 1-877-PA-HEALTH if you do not know your local health department point-of-contact.

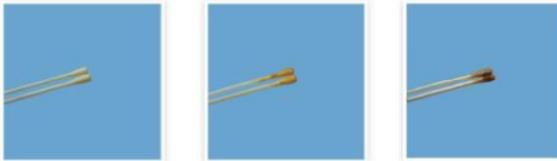
### **Collection process:**

1. Obtain pre-approval and guidance from DOH or the local health department.
2. Provide the following information to your health department point of contact for all persons who will be screened:
  - a. Patient/Resident Name
  - b. Date of Birth
  - c. Ordering Physician from Facility (usually the Medical Director)
    - i. First name
    - ii. Last name
    - iii. Credentials (e.g. DO, MD)
    - iv. Home address (if not a resident of the facility)
  - d. Full name and Address of the Facility
  - e. Facility point of contact name, phone number, and email address
3. Specimen collection kits will be shipped to you from the Bureau of Laboratories with instructions. The box will also include a self-adhesive shipping label envelope pouch. Keep the box that the kits arrive in. This box and label pouch will be used to package and ship collected specimens.
4. Explain the collection process to patients/residents and/or their caregivers. Although written consent is not necessary, patient or caregiver *verbal agreement* is needed. The screening process is a vital step in protecting the health of Pennsylvanians and all patients/residents should be strongly encouraged to participate. Materials to help communicate with patients and their families are available within this Colonization Screening Toolkit.
5. Collect specimens using the Cepheid dual-swab collection devices provided by the Bureau of Laboratories. Do not use any other swab type; these cannot be tested. **Be sure to label the swab with patient name, date of birth and collection date.** Follow the instructions below:

### Rectal Swab Collection Instructions for CRE colonization screening

- 1   
Use Cepheid Collection Device #900-0370 to collect rectal swab specimen.
- 2   
Carefully insert both swab tips approximately 1 cm beyond the anal sphincter and rotate gently.
- 3   
Place the swabs back into the original tube and seal it with a piece of Parafilm.
- 4   
Swabs in transport tube can be stored at 15-28°C for up to 5 days. Label the specimen tube with Patient name, date of birth and date of collection.
- 5   
Place one transport tube into biohazard bag containing absorbent paper. Make sure the bag is fully sealed.
- 6   
Place the completed test request form into the outer pocket of the bag containing the corresponding specimen.

#### Examples of Acceptable swabs for CRE colonization testing



#### Unacceptable - Too much specimen



**Note:** Do not apply lubricant to the swabs as it can cause specimens to be rejected.

6. **STORAGE:** Specimens should be stored at room temperature but are only good for five days after collection. Please plan to ship specimens the same day as collection.
7. **NOTIFICATION:** Once specimen collection is complete, notify your health department point of contact. A test request form (aka laboratory order slip) will be created for each specimen collected. The health department will also create a FedEx shipping label. These will be sent to you via secure email. Print one copy of each.
8. **PACKAGING:** Package each swab as described in step five. Be sure the test request form matches the name, date of birth, and date of collection on the swab label.

Place packaged bags into box that was sent from BOL, or another suitable box. Secure the box with packing tape. Attach the self-adhesive shipping label envelope pouch to the outside of the box according to instructions. Insert the shipping label provided by the health department into the pouch and secure.

9. **SHIPPING:** Package pick up will be arranged by the health department for overnight delivery to the Regional Antimicrobial Resistance (AR) Lab. In some cases, a health department representative will take the box to a FedEx location. In others, a FedEx representative will pick up the package at your reception area per a scheduled pick up. Please notify your health department point of contact if FedEx does not arrive for a scheduled pick up.
10. Results are typically available within four to five business days after the specimens have been delivered to the Regional AR Lab. Results will be shared with you by your health department point of contact via fax, secure email or phone. Further instructions will be provided based on the results.

## Patient and Family Education:

# Screening Tests

## What is a screening test and why is it being done?

A screening test is used to see if patients have a certain germ. In this case, a patient with a multidrug-resistant organism (MDRO) was found in your region. An MDRO is a germ that might be difficult to kill with standard antibiotics. Your health department has requested screening of patients at a facility where you currently are or have recently been treated. This is to make sure the germ has not spread.

## How is the screening test taken?

A rectal swab is used for the screening test. The patient's clinical care team will tell the patient the steps before collecting the screening test.

## Will it hurt?

No, it is a painless and non-invasive test. A person from the patient's clinical care team will collect the test.

## When will the test results come back?

The results are typically available two-three days after the swab is received by the laboratory.

## What happens if the test result is positive?

If the patient has an MDRO, medical staff will let them know and may need to change their medical treatment. To stop the spread to others, the patient will be put on contact precautions, and healthcare workers will wear gloves and gowns to provide routine care.

## How long will the patient have an MDRO?

It is not known how long patients will have an MDRO. Be sure to tell medical staff that the patient has a history of an MDRO each time he or she goes to a healthcare facility.

If you have questions, please contact your local health department by calling 1-877-PA-HEALTH

Updated August 2019

Patient and Family Education:

# Multidrug-Resistant Organisms (MDRO)

## What is an MDRO?

A germ that is not killed by the drugs meant to treat them

## How do MDROs spread?



Hands of health care workers, visitors, or family members



Body fluids – drainage from wounds, urine, stool, saliva, blood



Dirty objects or surfaces – bed rails, bedside tables, medical equipment

## How can the spread of MDROs be prevented?

Washing hands after touching body fluids or dirty surfaces



OR



Use hand sanitizer (ABHR) and rub hands together until dry

1. Wet hands

2. Apply soap

3. Press firmly and rub hands for 20 seconds

4. Rinse

5. Use towel to dry hands and turn off water

## Stopping the spread of germs



Patients may be placed on contact precautions to control the spread of germs.

Medical staff will advise if a patient is on any type of precautions and visitors may be asked to take special precautions according to facility policy.

## Cleaning the environment



Keep the patient's room and everything around the patient clean and tidy.

Facility cleaning staff will clean the patient's room daily using an approved product.

If you have questions, please contact your local health department by calling 1-877-PA-HEALTH

Updated June 2019

# Guidelines for Facilities: Obtaining patient agreement for colonization screening

For facilities conducting colonization screening as part of a public health response to a novel or high-concern antimicrobial-resistant organism (ARO)

**Prepare:** Make sure you understand why screening is being recommended

Patients/residents respond best to requests for colonization screening when the nurses and doctors caring for them also feel it is valuable. Your health department point of contact will provide guidance to explain the public health concern surrounding certain antimicrobial-resistant organisms. If you have any questions, please reach out.

**Educate:** Discuss the situation. Patients/residents respond favorably to transparency

Patient handouts are available in the Colonization Screening Toolkit developed by the department (July 2019). There are also more detailed CRE Fact sheets available for staff, residents and families on the [department's website](#). Share what your facility is doing to ensure patient safety and reduce the risk of healthcare-associated infections.

**Describe:** Give details of the process to the patient/resident or family

See the attached *Example Script for Colonization Screening* for carbapenemase-producing organisms. Other scripts may be available from the department for screening of other organisms.

**Confirm:** Ask if the resident/patient has any questions and agrees to specimen collection

Colonization screening is part of an active public health response. This activity is not research and should not be referred to as a study. Refer to and follow your facility's policy and regulatory requirements for medical care.

Patients/residents have the right to refuse, as they do with any care, but should be encouraged to participate. If desired, the attached *Example Script for Colonization Screening* document can be used to document that the screening was discussed with the patient/resident and their response.

# Example Script for Colonization Screening: Carbapenemase-producing organisms

Hi, my name is [insert name] and I work for [insert organization]. I'm here to talk to you about a screening the [insert healthcare facility e.g., hospital or nursing home] is doing to check for rare bacteria. Recently, we identified a rare bacteria in a patient who was cared for at this facility. The bacteria is called carbapenem-resistant Enterobacteriaceae, or "CRE" for short. This bacteria can be very resistant to some important antibiotics. This means that it may be hard for your doctor to treat an infection with this bacteria.

We are screening patients for this bacteria because some people can carry it in their gut without even knowing it, and they can unintentionally spread it to others.

It is unlikely that you carry this bacteria, and fortunately, most people who do carry it never get sick from it. To make sure this bacteria has not spread, the health department would like us to screen people to make sure they don't have it.

If you agree to be screened, the process is very simple and takes just a few seconds. We would need to swab inside your rectum. To do that, we would gently insert just the tip of a soft swab, which looks like a Q-tip, about 1 centimeter into your rectum, gently rotate it, and then remove it. The process is not painful and there shouldn't be any side effects. If you're not comfortable with us doing this, you can use the swab yourself to gently wipe a few times around your anus. The downside to swabbing yourself is that it may decrease our ability to find the bacteria.

The swab will be sent to a lab to test for the bacteria, which will take a few days. If they find the bacteria, someone will contact you to discuss what to do. The results of the test will be kept confidential to the extent allowed by law.

Providing a swab is completely voluntary and you do not have to participate.

Do you have any questions? [pause for questions]

Is it OK if we collect the swab?

Agree       Decline

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Signature of screener

[Please leave a copy of the FAQ's with the patient or resident]

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Date