

# Screen for targeted MDROs and *C. auris* at your facility.



**Screening is an important tool to prevent the spread of multidrug-resistant organisms (MDROs).**

**MDROs are germs that are resistant to antimicrobial medications.**

- Centers for Disease Control and Prevention (CDC) estimates 50% of nursing home residents have MDROs.
- Residents with an MDRO can:
  - Develop serious infections.
  - Remain infected for a long time.
  - Spread MDROs to others.
- Workers can spread MDROs through contaminated hands and clothing.
- People with complex medical needs with wounds or indwelling devices are at higher risk of infection.

## **When you should screen**

Drug resistant germs are dangerous because they are hard to treat. Certain germs are highly resistant (even to carbapenem antibiotics) and are a significant public health concern.

If a person with one of these germs is identified at your facility, we recommend key [infection prevention practices](#). The Health Department will work with you to screen other residents.

## **Organisms that require screening**

- Bacteria that produce an enzyme that breaks down carbapenem antibiotics—also called carbapenemase producing organisms (CPOs)—like:
  - Carbapenem-resistant Enterobacterales (*Escherichia*, *Klebsiella*, and *Enterobacter*).
  - *Pseudomonas*.
  - *Acinetobacter*.
- Enzymes:
  - KPC.
  - NDM.
  - VIM.
  - IMP.
  - OXA-48.
- *Candida auris* (*C. auris*), a fungus that is often drug resistant.

## **How you'll know a resident has one of these organisms**

For a newly identified case, the Health Department will contact you if your facility:

- Admitted a person who the Health Department is tracking.
- Submitted a culture to Public Health Lab that came back positive for an above organism or enzyme.
  - Healthcare facilities (like hospitals, nursing homes, and associated labs) have specific reporting requirements for submitting isolates to Public Health Lab. See [reporting and surveillance guidelines](#).

For an already known case, another facility may notify you of the resident's MDRO history. Or the Health Department may call to confirm the resident's MDRO status and that your facility is taking appropriate precautions.

Ensure that your facility has a process for communicating important MDRO information at transfer. Consider incorporating an [interfacility infection prevention and safety form](#) into your transfer process.

# Screen for targeted MDROs and *C. auris* at your facility.



## Who you should screen

The Health Department will help you decide the best approach to screening. In most situations, you will screen residents who:

- Shared a bathroom with a case.
- Are currently in the same area a case was (e.g., hallway, wing, unit).
- Spent time in the same area as a case.
- Are in the same area a case was and are at risk (e.g., bedbound, require high level of care, have wounds or indwelling devices, or are on mechanical ventilation).

## Obtaining consent

People identified for screening should consent in advance. If necessary, consent may be provided by an identified power of attorney (POA). Verbal consent is adequate unless your facility requires signed consent.

Use sample verbal consent scripts for MDRO and *C. auris* screening to educate the person being screened or their POA. Include why you are conducting screening, how the swab is collected, and what a positive test would mean.

## Screening procedure

The Health Department will support you with the screening process.

- Carbapenemase producing organism (CPO) screening uses a rectal swab.
- *C. auris* fungal screening uses a skin swab.

Screening materials, shipping, and specimen testing are free of charge. The Health Department and Washington State Department of Health (DOH) will help coordinate logistics.

Each sample must have a requisition form with the person's name and date of birth. Work with the Health Department to generate these forms. We will discuss the Electronic Test Ordering and Reporting (ETOR) system where you can make these forms yourself and get test results.

- CPO screening:
  - Red-top rectal swab.
  - Two swabs are attached to the red cap. Use both swabs simultaneously when collecting the specimen.
  - CPO rectal swabs do not need to be shipped cold.
- *C. auris* screening:
  - White-top skin swab. Swab the axillae (armpits) and the groin (where the leg meets the body).
    - One swab is attached to the white cap.
    - *C. auris* skin swabs must be shipped cold. The test kits come with blue gel ice packs that should be placed in the freezer for at least 24 hours before being shipped with the specimens.
    - *C. auris* specimens can be held in the refrigerator after collection if they cannot be shipped immediately. They are viable for testing for a total of 9 days from collection.
      - FedEx labels are overnight shipping. Plan to collect and ship specimens accordingly.



# West AR Lab Network Regional Laboratory: Guidance for CRE Colonization Testing

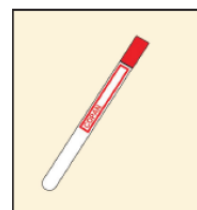
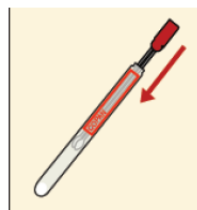
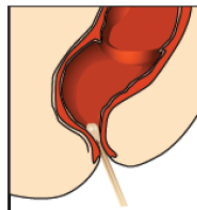
## SAMPLE COLLECTION and SHIPMENT

### Equipment and Materials

- Collection kits provided upon request. Please email the West AR Lab Network Regional Lab at **ARLN@doh.wa.gov**.
  - \*Specimens must arrive at the West AR Lab Network Regional Lab Monday-Friday by 12pm and within 5 days of collection.\*
- Shipping Materials
  - o Category B Rated Cardboard Box
  - o Clear, sealable biohazard specimen transport bag with absorbent paper inside
  - o 95 kPa compliant biohazard specimen transport bag
  - o Contents sheet in sealable, plastic bag
  - o **(Optional)** Frozen Cold Packs (not dry ice) may be used if samples shipped with other sample types (*Candida auris*) requiring cold shipment conditions
- Specimen Collection
  - o Transystem Liquid Stuart dual plastic applicators rayon tipped (Copan Italia SPA, Brescia, Italy)

### Procedure for Rectal Swab Collection

1. Before beginning, perform hand hygiene and wear appropriate personal protective equipment (PPE) as indicated by the patient's clinical care team (e.g., gloves, gown, mask).
2. Instructions for swabs are printed on packaging along with descriptive diagrams, please follow these closely.
3. Open the swab package at the point marked "Peel Here".
4. Remove white cap from transport tube and discard.
5. Pull the swab from its package, being careful not to touch the soft tip. Discard the packaging.
6. Collect specimen by carefully inserting both swab tips **approximately 1 cm beyond the anal sphincter and rotate gently, 2-3 times.**
  - a. Please reference the diagrams below to ensure proper collection.



Acceptable

Unacceptable



7. Place applicator swab in transport tube. Replace the **red cap** firmly.
8. Use Parafilm provided in the kit to **seal the top of the tube**. Peel wax paper backing from Parafilm, lightly stretch and firmly wrap strip around the top where the red cap meets the tube. Do not use tape to seal the tube.

9. Write specimen information including **two patient identifiers** on the tube label or apply a patient identification label.
10. **Follow the shipping instructions on the following page. Ship immediately to the West AR Lab Network Regional Lab.**

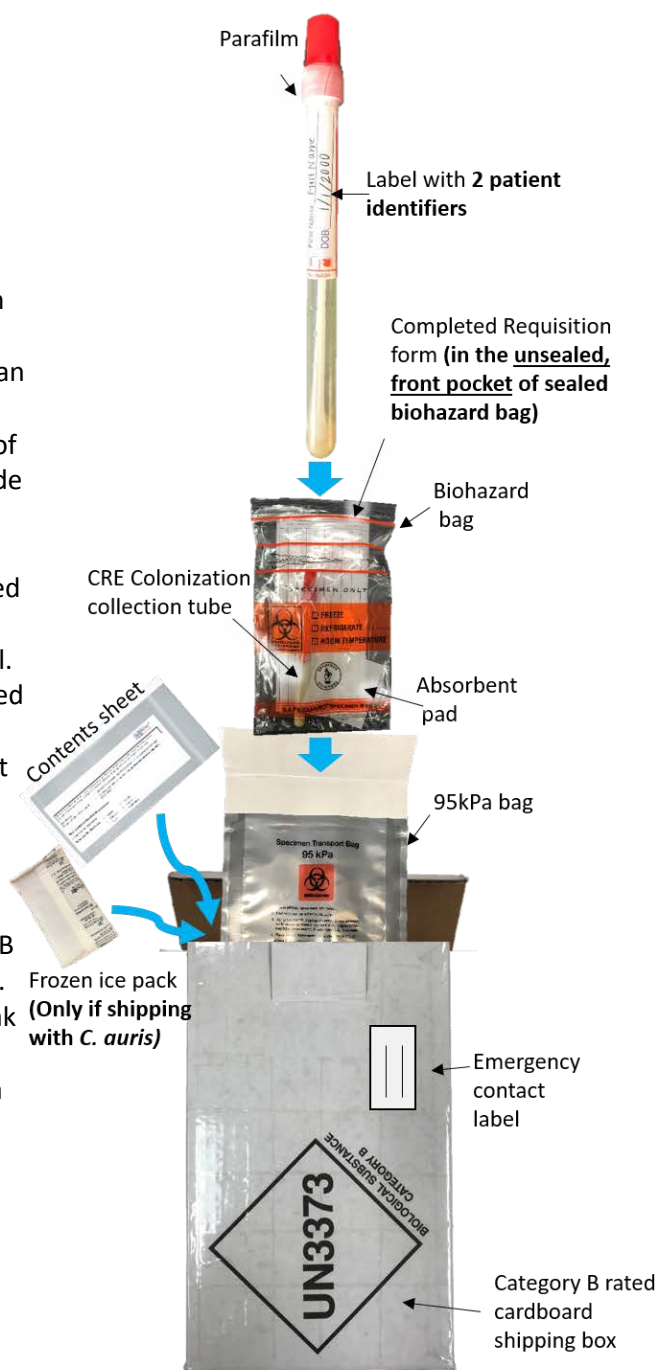
**\*If a delay in shipment cannot be prevented, store the swabs at 4°C until shipment.\***

**\*Patient swabs must be received for testing within 5 days of collection.\***

### Procedure for Shipping Patient Swabs

**\*Please reference the diagram on the right side of this page.\***

- **Primary Packaging:** The Transystem collection tube
  - **Secondary Packaging:** Sealable, clear, plastic biohazard specimen bag with absorbent paper within. Biohazard bag is then placed within a 95kPa compliant biohazard specimen transport bag.
  - **Outer Packaging:** Category B rated cardboard shipping box
1. Check to make sure each collection tube has been firmly sealed with Parafilm and appropriately labeled with 2 patient identifiers.
  2. Place one tube into each clear plastic biohazard specimen bag with an absorbent paper. Firmly seal the biohazard specimen bag.
  3. Place the completed requisition form in the unsealed, front pocket of the sealed biohazard bag. (Note: Do not include any paperwork inside the sealed portion of biohazard transport bags).
  4. Place the sealed biohazard bags in a 95kPa compliant biohazard specimen transport bag. (Note: Multiple biohazard bags can be placed within the 95kPa bag; do not overfill.) Firmly seal 95kPa bag.
  5. Complete the contents sheet and return it to the plastic bag and seal.
    - a. The contents sheet is half a page. Please complete all fields (test name, total number of specimens, collection facility name and collection facility state)
  6. **If you are only shipping CRE colonization screening isolates, skip to step 7. If shipping with other specimen types that require cold shipment (*Candida auris*), place frozen cold packs into the Category B compliant shipping box, followed by the filled and sealed 95kPa bag.**
    - a. Make sure frozen cold packs are properly sealed and will not leak and damage the shipping box.
    - b. If desired, frozen cold packs and samples can be placed inside a Styrofoam box within the cardboard box.
  7. Close shipping box and seal shut. Place shipping label and UN 3373 Biological Substance, Category B sticker on outside of box (if not present already).
  8. Attach the FedEx label to the outside of the box and complete the emergency contact sticker found on the outside of the shipping box.
  9. Ship immediately to the West AR Lab Network Regional Lab.



## Appendix V: *C. auris* screening collection and submission instructions



### West AR Lab Network Regional Laboratory: Guidance for *Candida auris* Colonization Testing SAMPLE COLLECTION and SHIPMENT

#### Equipment and Materials Needed

- Collection kits provided upon request. Please email the West AR Lab Network Regional Lab at [ARLN@doh.wa.gov](mailto:ARLN@doh.wa.gov).  
 \*Specimens must arrive at the West AR Lab Network Regional Lab Monday-Friday and within 96 hours of collection.\*
- Shipping Materials
  - Category B rated cardboard box
  - Clear, sealable biohazard specimen transport bag with absorbent paper inside
  - 95 kPa compliant biohazard specimen transport bag
  - Contents sheet in sealable, plastic bag
  - Frozen cold packs (not dry ice)
 \*Note: Upon receipt, immediately place cold packs into freezer and allow them to freeze overnight prior to shipment of specimen.\*
- Specimen Collection
  - Nylon-flocked swab (BD ESwab collection and transport system; Becton Dickinson and Company, Sparks, MD)

#### Procedure for Swab Collection

The skin, specifically the axilla and groin, appear to be the highest yield sites to swab to identify patients colonized with *C. auris*.

1. Before beginning, perform hand hygiene and wear appropriate personal protective equipment (PPE) as indicated by the patient's clinical care team (e.g., gloves, gown, mask).
2. Instructions for sample collection are printed on packaging along with descriptive diagrams, please follow these closely.
3. Open the swab package by grasping the plastic at the opposite end from the soft tip.
4. Carefully remove the tube from its packaging, leaving the swab tip enclosed in the package to prevent contamination.
5. Pull the swab from its package, being careful not to touch the soft tip.
6. Single swab axilla and groin composite swab collection method:
  - a. Rub both sides of the swab tip over the left axilla skin surface and then the right, targeting the crease in the skin where the arm meets the body (i.e., swab both armpits, swiping back and forth ~5 times per armpit).
  - b. With the same swab used on the axilla, rub both sides of the swab tip over the left groin skin surface, targeting the inguinal crease in the skin where the leg meets the pelvic region and repeat with the right side (i.e., swab the skin of both hip creases, swiping back and forth ~5 times per hip crease).
7. Remove the cap from the swab collection tube, then place the soft end of the collection swab into the tube. Be careful to keep the cap from touching any materials that may contaminate your sample.
8. Snap off the end of the swab at the marked line by bending the plastic handle against the edge of the transport media container.
9. Screw on the tube cap. You may need to adjust it until the snapped end of the swab slides into place in the center of the cap.
10. Use Parafilm provided in the kit to seal the top of the tube. Peel wax paper backing from Parafilm, lightly stretch and firmly wrap strip around the top where the white cap meets the tube. Do not use tape to seal the tube.
11. Write specimen information including two patient identifiers on the tube label or apply patient identification label.
12. Follow the shipping instructions on the following page. Ship immediately to the West AR Lab Network Regional Lab with a frozen cold pack.

\*If a delay in shipment cannot be prevented, store the swabs at 4°C until shipment.\*

\*Patient swabs must be received for testing within 96 hours of collection\*



Please note, you should swab **both** sides of the axilla and **both** sides of the groin.

#### Procedure for Shipping Patient Swabs

**\*Please reference the diagram on the right side of this page\***

**Primary Packaging:** The ESwab collection tube

**Secondary Packaging:** Sealable, clear, plastic biohazard specimen bag with absorbent paper within. Biohazard bag is then placed within a 95kPa compliant biohazard specimen transport bag.

**Outer Packaging:** Category B rated cardboard shipping box

1. Check to make sure each ESwab has been firmly screwed closed, sealed with Parafilm and labeled with 2 patient identifiers.
2. Place one ESwab into each clear plastic biohazard specimen bag with an absorbent paper. Firmly seal the biohazard specimen bag.
3. Place the completed requisition form in the unsealed, front pocket of the sealed biohazard bag (Note: Do not include any paperwork within sealed portion of biohazard transport bags).
4. Place the sealed biohazard bag in the 95kPa compliant biohazard specimen transport bag. (Note: Multiple biohazard bags can be placed within the 95kPa bag; do not overfill.) Firmly seal 95kPa bag.
5. Complete the contents sheet and return it to the plastic bag and seal. Place the plastic bag between the 95kPa bag and the Category B rated cardboard shipping box.
  - a. The contents sheet is a half page. please complete all fields (test name, total number of specimens, collection facility name and collection facility state)
6. Place frozen cold packs into the Category B rated cardboard shipping box followed by filled 95kPa bags.
  - a. Make sure frozen cold packs are sealed and will not leak and damage the shipping box.
  - b. If desired, frozen cold packs and samples can be placed inside a Styrofoam box within the cardboard box.
7. Close shipping box and seal shut. Place shipping label and UN 3373 Biological Substance, Category B sticker on outside of box (if not present already).
8. Attach the FedEx return label to the outside of the shipping box and complete the emergency contact sticker found on the outside of the shipping box.
9. Ship immediately to the West AR Lab Network Regional Lab.



#### Disclaimer

This test has not been cleared or approved by the FDA. The performance characteristics have been established by the Washington State Public Health Lab Antibiotic Resistance Lab Network.