

INTRODUCTION

Candida auris (*C. auris*) is an emerging multidrug-resistant fungus that can cause invasive infections with high mortality and may be transmitted from one person to another in hospitals, long-term care nursing facilities, or other similar healthcare settings. Patients may be carriers of this fungus but never develop sickness or infection, which is referred to as colonization. In persons colonized with *C. auris*, it is possible to spread the fungus to other people directly from their bodies or through touching contaminated surfaces. It is important to detect those colonized by *C. auris* to prevent transmission and infection, enabling the healthcare facility to provide care to impacted individuals. The act of collecting patient samples to detect colonization in patients is called screening. Pennsylvania Department of Health, Bureau of Laboratories (BOL) has increased its testing capacity as part of CDC's Antimicrobial Resistance Laboratory Network (ARLN) to include testing of *C. auris* screening samples. This testing includes detection of *C. auris* using targeted gene amplification by polymerase chain reaction.

RECOMMENDED SPECIMEN TYPES

The skin (specifically axilla and groin) appears to be the highest-yield site to swab to identify patients colonized with *C. auris*, therefore, an axilla/groin specimen is the preferred choice for swab-based *C. auris* colonization screening.

An eSwab® (COPAN Catalog Number 480C, Becton Dickinson Catalog Number 220245, or equivalent non-cotton swab in liquid Amies media) will be provided by BOL to facilitate specimen collection from each individual by facility personnel. The eSwab® is a sterile single-use specimen collection pack comprised of a polypropylene screw-cap tube with internal conical shape filled with 1 mL of Liquid Amies Medium and one swab with flocced nylon fiber tip.

SPECIMEN COLLECTION INSTRUCTIONS

Maintain proper [infection prevention and control for *C. auris*](#) during and after specimen collection and ensure appropriate environmental disinfection. Reference the Bureau of Epidemiology's [Candida auris toolkit](#) for information on how to collect specimens, factsheets, and scripts for talking to residents and families.

AXILLA/GROIN

- ❖ Use only the eSwab® as indicated for specimen collection.
- ❖ Following the directions below, collect an axilla/groin specimen.

1. Open the swab package (Figure 1) by grasping the plastic at the opposite end from the soft tip. Leave the swab tip enclosed in the package to prevent contamination.
2. Carefully remove the tube from its packaging.
3. Pull the swab from its package, being careful not to touch the soft tip. Firmly rub the soft end of the collection swab on the axilla and groin as described below using the same swab. Reference Figure 2 for axilla (arrows 1 and 2) and groin (arrows 3 and 4) collection sites
 - Rub all 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).
 - 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).
4. 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 the specimen.
5. Snap off the end of the swab at the scored line by bending the plastic handle against the edge of the transport media container.
6. 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.
7. Write specimen information on the tube label or apply the patient identification label.
8. Place each specimen collection tube into an individual biohazard bag.
9. If submitting ≤ 20 specimens, include a completed individual BOL submission form in the front pouch of each respective biohazard bag. If submitting > 20 specimens, complete the *C. auris* Mass Testing Log in lieu of individual BOL submission forms.
10. Send or ship immediately to PA Department of Health Bureau of Laboratories.



Figure 1: eSwab®

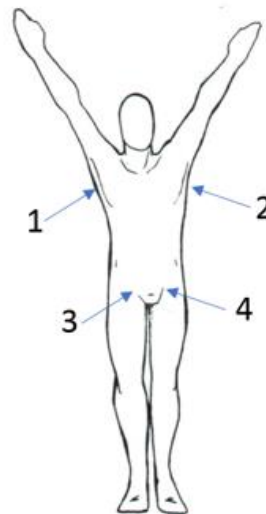


Figure 2: Specimen collection surfaces

SPECIMEN LABELING AND STORAGE

1. Legibly label the specimen container with the:
 - a. Patient's first and last name
 - b. A second unique identifier, usually date of birth (DOB) or medical record number, and
 - c. Specimen collection date.

Note: If identifiers fail to match on the specimens and accompanying paperwork, the specimen will be rejected. **All 3 items must be included.**
2. If specimens are unable to be shipped immediately, store specimens at 2 – 8°C until ready to ship. Specimens are shipped at ambient temperature as detailed in Specimen Packaging and Shipping section.

SPECIMEN SUBMISSION DOCUMENTS

1. For mass collection events (>20 specimens) use the *C. auris* Mass Testing Log:
 - a. Submitter must provide a point of contact, phone number, address, and FAX number to PA DOH BOE at RA-DHHAI@pa.gov for assignment of a FI# for outbreak events.
 - b. Complete the BOL *C. auris* Mass Testing Log including the applicable submitter information and the provided FI number.
 - c. Submit the completed spreadsheet in hard copy with the specimens and the electronic copy via e-mail to RA-DHBOL-EXT-CM-C-AU@pa.gov.
2. For small volume collection of specimens (≤20 specimens) use the BOL submission form:
 - a. Submitter to provide a point of contact, phone number, address, and FAX number to PA DOH BOE at RA-DHHAI@pa.gov along with type of screening event.
 - b. Complete **all** information on the [BOL submission form](#) and include an individual submission form with each specimen.

SPECIMEN PACKAGING AND SHIPPING

1. Transportation of collected specimens must comply with all applicable regulations for the transport of etiologic agents. Ensure that each specimen is placed in an individual biohazard bag. **Ship specimens as category B (affix UN3373 label using provided packaging materials) at ambient temperature.** [UN3373_fxcom.pdf \(fedex.com\)](#) provides additional instruction on how to package a shipment meeting these requirements.
2. Ship specimens as PRIORITY OVERNIGHT Monday through Thursday ONLY.
3. Reports will be sent to the submitting facility and Bureau of Epidemiology.
4. Use the Supply Order Form to order more packaging and shipping supplies.
5. Follow courier directions on the next page to obtain shipping labels and arrange specimen pick-up from FedEx.

This courier account is to be used for *Candida auris* specimens and isolates.

Courier Instructions:

- Go to [FedEx.com](https://www.fedex.com)
- Select Shipping drop down and select 'Create a Shipment'.
- Select the oval button "**FedEx Ship Manager Login with an Account**".
- In the Login area, enter the following information:
 - User ID*: **Fred102**
 - Password: **Shipping2**
 - Click the orange "**Login**" button**.
 - Click the orange "**Confirm**" button to confirm account is accurate.
- [Area 1] Enter the "From" shipping address by clicking on "Edit".
- [Area 2] Enter the "To" shipping information as:
PA Department of Health Bureau of Laboratories
110 Pickering Way
Exton, PA 19341
610-280-3464
- [Area 3] Complete the Package & Shipping Details:
 - Verify or change the ship date.
 - Enter the number of packages. If there is more than one package, indicate whether the packages are identical or not.
 - Enter total weight.
 - Priority Overnight is the only shipping option.
 - Choose package type (i.e., Box).
- [Area 4] Verify account number "**CDC_OID_NCEZID_ARLN-890**" is the account in the "Billing Details" box.
- Pickup/Drop-off Optional: Select the radio button to 'Schedule a pickup' and review accuracy of pickup address and package information. Edit as appropriate by clicking on "Edit".
- [Area 5] Click the "Ship" button.
- Check the box next to "Label" and then click on the "Print" button.
- Print the shipping label and attach it to the package and affix the UN 3373 label to the outside of the shipper for pickup.

*User ID is: 1 uppercase letter, 3 lowercase letters, and then 3 numbers.

** You may receive an error if you press Enter instead of clicking on the "Login" button. If you still experience login issues, clear your browser's cookies and/or turn pop-ups on.

Contact RA-DHBOL-EXT-CM-C-AU@pa.gov with questions.



Bureau of Laboratories

Candida auris Specimen Collection and Submission Guidelines

SUPPLY ORDER FORM
Candida auris Colonization Screening

Please e-mail this form to the Bureau of Laboratories
BOL-ADMIN@pa.gov

Table with 3 columns: Description, Quantity Requested, Quantity Sent. Rows include: Packaging and Shipping material (E-Swab, Biohazard bags), Shipping Box, UN 3373 label, and BOL Submission Form link.

Contact name and phone number: _____

Site Name: _____

Site Address: _____
(No PO Box #'s)

Submitted by: _____

Name: _____

Phone #: _____

E-Mail: _____

BOL Lab Use

Date Mailed: _____

Carrier: _____

Initials: _____