Guidance for *Candida auris* Colonization Test
Sampling and Specimen Handling Methods

**Background**

*Candida auris* colonization testing is performed by molecular methods in order to rapidly and accurately detect the presence of *C. auris*. The Minnesota Department of Health Public Health Laboratory (MDH-PHL) performs a Real-Time PCR assay to detect *C. auris* from skin swabs collected using the eSwab™ collection system.

The turn-around time for PCR results is 2-4 business days. On an urgent basis, results can be returned within 24 hours of specimen receipt at MDH-PHL.

NOTE: Prior approval from AR Lab Network Central Region Lab is required before collection and shipping of specimens. arlnmn@state.mn.us

**Sample Collection**

Specimen collection and transport – *C. auris* colonization kit, provided by Minnesota Department of Health Public Health Laboratory (MDH PHL).

**Contents of the Kit:**

- Nylon-flocked swab (BD eSwab™ collection and transport system; Becton Dickinson and Company, Sparks, MD)
- One SafTPak (STP-210) box (pre-assembled so that “Biological Substance, Category B” signage is facing outward)
- One SafTPak (STP-710) white Tyvek® bag
- One SafTPak (STP-711) clear bag
- One absorbant pad
- Parafilm to seal cap to tube
- Shipping container
- MDH submission Form
- Guidance for *Candida auris* Colonization Test Sampling and Specimen Handling Methods packet (this document)

**Procedure for Collecting the Swab**

The skin (specifically axilla and groin) appears to be the highest yield site to swab for identification of persons colonized with *C. auris*. *C. auris* has also been isolated from swabs taken from the nares, oropharynx, external ear canal, vagina, and rectum. These sites can also be considered for sampling.

1. Before initiating collection, perform hand hygiene and wear appropriate personal protective equipment (PPE) as indicated by the patient or resident’s clinical care team (e.g., gloves, gown, mask).
2. Open the eSwab™ package by grasping the plastic at the opposite end from the soft tip. (See Appendix A for additional collection diagrams and instructions)

3. Carefully remove the tube from its packaging, leaving the swab tip enclosed in the package to prevent contamination.

4. Pull the swab from its package, being careful not to touch the soft tip. Firmly rub the soft end of the collection swab across the indicated site at least 3-5 times.
   a. Single swab axilla and groin composite collection method:
      i. 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).
      ii. With the same swab used on each 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).

5. 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 sample.
   **DO NOT REMOVE THE LIQUID IN THE TUBE**
   a. If an eSwab™ is accidentally spilled, please recollect the sample with a new eSwab™.
   b. Do not add liquid into the eSwab™ collection tube or attempt to retrieve spilled liquid.

6. Snap off the end of the swab at the marked line by bending the plastic handle against the edge of the transport media container.

7. Screw on the tube cap and seal with parafilm (included in supplies). The snapped end of the swab should slide into place in the center of the cap.

8. Apply patient/resident identification label or write specimen information on the tube.

9. Two forms of identification are needed on the specimen and the submission form (e.g., full name and date of birth)

10. Ship immediately to MDH-PHL, Central Region AR Lab Network laboratory.
    *If a delay in shipment cannot be prevented, store the swabs at 4°C or on ice until shipment. Specimens must be tested within 4 days of collection.

**Labeling**
Specimens must be clearly labeled with:
1. A minimum of 2 patient identifiers. Acceptable identifiers include:
   a. Patient’s full name
   b. Date of birth
   c. Medical record number
   d. Sample ID number
2. Date of specimen collection
3. Site of collection
Shipping

1. Place the eSwab™ tubes in the clear Saf-T-Pak bag (STP-711) along with the absorbent pads provided in the kit. Place one swab per bag. See photo

2. Fold tape closure over so that the white paper liner is visible and remove the liner to expose adhesive.
3. Gently lay tape over the bag opening and smooth with fingers to seal tightly.
4. Place clear Saf-T-Pak bag (STP-711) sealed with its contents into white Saf-T-Pak envelope (STP-710). See photo.

5. Fold tape closure over so that the white paper liner is visible and remove the liner to expose adhesive.
6. Gently lay tape over the bag opening and smooth with fingers to seal tightly.
7. Place white Saf-T-Pak (STP-710) envelope, sealed with its contents, into cardboard box (STP-210) – fits up to 10 swabs. Fold so that “Biological Substance, Category B” is outwardly showing. See photo below.

8. Place filled-out submission paperwork inside box, close flap, seal with tape, and ship by your lab’s courier, or if no courier, see Fed-Ex shipping instructions on next page.
ESwab is a liquid based multipurpose collection and transport system that maintains the viability of aerobic, anaerobic and fastidious bacteria for up to 48 hours. The ESwab system collects and releases more specimen, significantly improving patient test results and decreasing the need for repeat testing due to insufficient sample.

ESwab replaces multiple transport devices with just one system eliminating the need to stock multiple types of swabs.

ESWAB INSTRUCTIONS

ESWAB IS EASY TO USE:

- Perform hand hygiene and put on gloves if necessary.
- Perform positive patient identification.
- Open the peel pouch.
- Remove the swab.
- Collect the patient sample using the swab. Avoid touching the swab applicator below the pink molded breakpoint as this could lead to contamination and incorrect test results.
- Remove the screw cap from the tube and insert the swab all the way to the bottom of the tube.
- Holding the swab shaft close to the rim of the tube, and keeping the tube away from your face, break the applicator shaft at the pink breakpoint indication line.
- Screw the cap on tightly to prevent leakage.
- Dispose of the swab shaft in a regular trash receptacle.
- Apply patient identification label or write patient information on the tube label.
- Follow the standard operating procedures of transport and testing for your facility.
- Remove gloves if necessary and perform hand hygiene.

NOTE:

The ESwab Liquid Amies fluid maintains the viability of diverse bacteria. Do not send a dry ESwab as this will lead to unsatisfactory results.

If the tube spills its contents prior to inserting the swab, the liquid is non-toxic. Simply put the swab into another tube before sending it to the laboratory and discard the spilled tube.

If the tube spills after contamination, follow procedure for blood and body fluid clean up. Refer to your facility’s infection control manual for further direction.

If contaminated fluid splashes onto the personnel collecting the sample, treat as a blood and body fluid exposure. Refer to your facility’s infection control manual for further direction.