Procedure for collection of patient swabs for Candida auris

PURPOSE

C. auris is an emerging multidrug-resistant fungal pathogen that can cause invasive infections with high mortality and has been transmitted in healthcare settings. Identifying persons colonized with *C. auris* is a key step in containing the spread of *C. auris*. This document outlines the procedure for collection of swabs from patients to assess for *C. auris* colonization.

EQUIPMENT AND MATERIALS NEEDED

- Culture collection and transport system
 - e.g., rayon tip swabs (Fisherfinest Amies Charcoal bacteriology culture collection and transport system; Fisher healthcare, Ontario, Canada) or nylon-flocked swab (BD ESwab collection and transport system; Becton Dickinson and Company, Sparks, MD)

PROCEDURE FOR COLLECTING THE SWAB

The skin (specifically axilla and groin) appears to be the highest yield sites to swab to identify patients 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 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. Open the swab package by grasping the plastic at the opposite end from the soft tip.
- **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 cross the indicated site at least 3-5 times.

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 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).
- 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 your sample.
- **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. You may need to adjust it until the snapped end of the swab slides into place in the center of the cap.
- **8.** Write specimen information on the tube label or apply patient identification label.
- 9. Send or ship immediately to a testing laboratory.*If a delay in shipment cannot be prevented, store the swabs at 4°C or on ice until shipment.

SAFETY CONSIDERATIONS

C. auris can survive for weeks on plastic surfaces, has reduced susceptibility to quaternary ammonia disinfectants, and can colonize skin of healthy individuals. Therefore, strict BSL2 laboratory safety precautions must be followed, when working with this organism. Specifically, it is recommended that cultures are processed within BSL2 biosafety cabinet, gloves and lab coats are required, and strong hand hygiene is enforced. The use of disinfectants with sporicidal claim, such as freshly made 10% bleach, are recommended for decontaminations after working with *C. auris* cultures.

DISCLAIMER

This test has not been cleared or approved by the FDA. The performance characteristics have been established by CDC Mycotic Diseases Laboratory.

