



CANDIDA AURIS (C. AURIS)

Agent information:

Candida auris (*C. auris*) is an emerging fungal infection that grows as a yeast and can cause serious infections, including bloodstream infections and wound infections. It was first discovered in 2009. *C. auris* can be difficult to control and treat, as it is often resistant to multiple drugs and can spread rapidly in health care facilities. There are two types: clinical (invasive) and colonized *C. auris*.

Clinical *C. auris*

- Clinical manifestation of *C. auris* infection depends upon the site of infection. Patients with *C. auris* bloodstream infection typically have sepsis and/or severe illness. Other invasive infections, such as intraabdominal candidiasis, and meningitis can also occur. *C. auris* has also been found to cause wound infections and otitis; and has been cultured from urine and respiratory specimens.

Colonized *C. auris*

- Generally, colonized *C. auris* are found in external, non-sterile sites. People are generally asymptomatic. People with colonized *C. auris* are susceptible to getting invasive *C. auris* infections, especially if they require various types of invasive lines and tubes (i.e., urinary catheters, central venous catheters, tracheostomy tubes, and gastrointestinal tubes). Other potential risks for invasive *C. auris* in colonized people include surgical procedures and the overuse or misuse of antibiotics or antifungals.

Transmission:

C. auris is spread via contact from person-to-person or through contact with contaminated surfaces or equipment. People most susceptible to contracting invasive *C. auris* have underlying conditions/diseases, are immunocompromised, had extended stays in a health care facility, are of advanced age, have any indwelling medical devices, and were treated with antibiotics for long periods.



Signs and symptoms:

C. auris is often found in people that already have an illness. Common symptoms of clinical *C. auris* are fevers and chills that continue after treatment with antibiotics for a suspected bacterial infection. Depending on the location of the *C. auris* infection, symptoms may differ. *C. auris* can cause infections in most places in the body, including in the bloodstream, ears, and wounds. Only a laboratory test can diagnose *C. auris* infection. It is often misidentified as another *Candida* species.

Protective measures:

Transmission-based precautions (TBP)

- TBP, the second tier of basic infection control, are to be used in addition to Standard Precautions. Since *C. auris* is spread via contact with contaminated objects and person-to-person, contact precautions should be initiated in acute care hospitals and long-term acute care hospitals. Enhanced Barrier Precautions (EBP) should be initiated in nursing homes, Skilled Nursing Facilities (SNF), ventilator skilled nursing facilities (vSNF), and prisons. EBP are generally initiated for patients colonized with *C. auris* or another multi-drug resistant organism (MDRO).

Contact Precautions

- Contact precautions are recommended in acute hospitals and long-term acute hospitals and are intended to prevent transmission of infectious agents, like MDROs, that are spread by direct or indirect contact with the patient or the patient's environment. Contact precautions require the use of gown and gloves on every entry into a resident's room.

Patient placement on Contact Precautions

- The patient on contact precautions is given dedicated equipment (e.g., stethoscope and blood pressure cuff) and placed in a private room. When private rooms are not available, some patients (e.g., patients with the same pathogen) may be cohorted, or grouped together. Patients on contact precautions should be restricted to their rooms except for medically necessary care and restricted from participation in group activities. When implemented, contact precautions should include a plan for discontinuation or de-escalation.



Enhanced Barrier Precautions (EBP)

- EBP are recommended for patients who are colonized with *C. auris* in nursing home settings. EBP are used in residents that have an indwelling catheter or open wound and who have a colonization status of a multi-drug resistant organism (MDRO). EBP includes all staff using gloves and gown with high contact care activities: bathing, dressing, showering, changing linens, changing briefs or toileting, any hygiene activities, device care or use (central line, urinary catheter, feeding tube, tracheostomy/ventilator), and wound care (changing a dressing on an open wound).

Resident placement on EBP

- Under EBP, residents can have a roommate and are able to leave their room and participate in group activities. If the resident on EBP has a roommate, follow these steps:
 - Maintain three-foot of distance with a privacy curtain separating the patients.
 - Clean and disinfect the bed and surrounding areas as if they were separate rooms.
 - Clean and always disinfect any shared or reusable equipment.
 - Change all cleaning equipment between bed spaces.
 - Change gown and gloves between patients.
 - Clean and disinfect on a more routine basis.

Duration of TBP:

To avoid transmission to other people and patients, the Centers for Disease Control and Prevention (CDC) recommends the duration of the transmission-based precautions continue during the length of their stay in any health care facility. This is because colonization can persist for years. In nursing facilities, enhanced barrier precautions can be used, allowing for roommates and for the resident to leave their room.



Disinfectants: *C. auris* can survive on surfaces for weeks. Clean and disinfect patients' room and areas of treatment at least daily. All surfaces and floors should be cleaned and disinfected. All equipment must be cleaned daily and after each use. Reusable equipment must be cleaned and disinfected prior to using on another patient.

According to the CDC, an Environmental Protection Agency (EPA)-registered hospital-grade disinfectant from List P is effective against *C. auris*. See the EPA's [List P](#) for a current list of EPA-approved products for *C. auris*.

Other measures to reduce the spread of *C. auris* include proper hand hygiene, communicating the infection or colonization upon transfer to another facility or to a different unit within the same facility, cleaning and disinfecting rooms properly, adherence to personal protective equipment (PPE) for contact or enhanced barrier precautions, placing transmission-based precaution signs on the entrance to the room, screening the contacts of the newly identified person, and laboratory surveillance.

Treatment: Clinical *C. auris* cases are treated with antifungal medications, such as echinocandins. Some strains are resistant to all three classes of antifungals, making those strains difficult to treat. Consulting an infection disease specialist is highly recommended for treatment plans. Refer to the CDC for specific treatment guidance. It is not recommended to treat colonized *C. auris* cases (i.e., respiratory tract, urine, and skin) with no infection or symptoms present.

Reporting: Any rare yeast lab samples should be sent to Delaware Public Health Laboratory. Follow the CDC guidelines for appropriate identification. Immediately report suspect and confirmed cases to the Division of Public Health, Office of Infectious Disease Epidemiology: 1-888-295-5156 (24/7 coverage).

Additional information: Visit the CDC website:
<https://www.cdc.gov/fungal/candida-auris/index.html>
<https://www.cdc.gov/hai/containment/PPE-Nursing-Homes.html>
<https://www.cdc.gov/fungal/candida-auris/c-auris-treatment.html>