

CANDIDA AURIS (C. AURIS)

What is *Candida auris* (C. auris)?

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, in health care settings. 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. According to the Centers for Disease Control and Prevention (CDC), as of February of 2021, 47 countries have had a single case or outbreaks of C. auris infections.

There are two types of C. auris: Clinical C. auris and Colonized C. auris. Clinical C. auris is more likely to affect patients with weakened immune systems if they already have sepsis, severe illness, or other invasive infections. C. auris infection is most commonly found in bloodstream wound, urine and ears, but has also been found in the respiratory tract.

Patients with colonized C. auris means the yeast is living on the surface of the patient's skin and they generally do not have symptoms. It is mostly detected by screening individuals, usually by swabbing the underarms and groin. Patients are more 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 are surgical procedures and the overuse or misuse of antibiotics or antifungals.

Who is at risk for C. auris?

People most susceptible to contracting invasive C. auris are those who:

- Have underlying conditions and diseases such as diabetes, a weakened immune system, or other conditions
- Spent long periods of time in health care facilities (i.e., acute care hospitals, long term care facilities, and skilled nursing facilities settings)
- Are of advanced age
- Have any medical devices going into the body such as breathing tubes and catheters in vein or bladder
- Those who were treated with antibiotics or antifungals for long periods of time.

What are symptoms of C. auris?

Although C. auris is often found in people who 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.

How is *C. auris* diagnosed?

C. auris is diagnosed through laboratory testing from a culture of blood, other bodily fluids, or a screening swab. It is often misidentified as another *Candida* species. Any rare yeast lab samples should be sent to Delaware Public Health Laboratory (DPHL). Follow the CDC guidelines for appropriate identification.

How should *C. auris* be treated?

Clinical *C. auris* cases are treated with antifungal medications, such as echinocandins. Some strains of *C. auris* 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 (examples: respiratory tract, urine, and skin) with no infection/symptoms present.

How is *C. auris* spread?

C. auris is spread via contact from person-to-person or through contact with contaminated surfaces or equipment. Colonized or Clinical *C. auris* patients in acute care hospitals and long-term acute care hospitals should follow Contact Precautions. Long-term care facilities should follow Enhanced Barrier Precautions. (Health care providers: see the Delaware Division of Public Health's *C. auris* medical fact sheet), along with CDC recommendations.

Transmission-based precautions are intended to prevent transmission of infectious agents, like multi-drug resistant organisms (MDROs), that are spread by direct or indirect contact with the patient or the patient's environment. To avoid transmission to other people and patients, the CDC recommends that transmission-based precautions continue during the length of an individual's stay in any health care facility. This is because colonization can persist for years.

What are other infection prevention measures to control the spread of *C. auris*?

Other measures to reduce the spread of *C. auris* in health care settings 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.

What is the recommended disinfecting process for *C. auris*?

Clean and disinfect the patient's 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*.

What is the Division of Public Health doing about the spread of *C. auris*?

The Division of Public Health (DPH) is participating in Project Firstline, a nationwide initiative supported by the CDC, that provides infection prevention and control education to frontline health care workers. In collaboration with the CDC, DPH's Healthcare Associated Infections (HAI) Epidemiology team has conducted point prevalence surveys in several high-risk facilities to determine the prevalence of a specific disease/illness at a specific time. The goal for these surveys is to identify HAIs and MDROs and reduce transmission in health care facilities statewide.

DPH's HAI Epidemiology team has conducted infection control assessments and responses (ICARs) in health care facilities in Delaware. These ICARs include policy and procedures review for infection control and prevention, hand hygiene, PPE, environmental cleaning, and antibiotic stewardship, along with direct observations for onsite assessments. The facility receives verbal feedback at the assessment and a detailed written report about gaps in infection control which were in the policy/procedure review and based on direct onsite observations. The report also provides resources and guidance to correct the infection control gaps and provide educational resources for staff.

Resources:

Visit the CDC:

<https://www.cdc.gov/fungal/candida-auris/index.html>

<https://www.cdc.gov/infectioncontrol/projectfirstline/about.html>

<https://www.cdc.gov/hai/containment/PPE-Nursing-Homes.html>

<https://www.cdc.gov/fungal/candida-auris/c-auris-treatment.html>

<https://www.epa.gov/pesticide-registration/list-p-antimicrobial-products-registered-epa-claims-against-candida-auris>