

# Candida auris

## **General Information**

*Candida auris* (*C. auris*) is an emerging multidrug-resistant (MDR) fungus that has caused severe illness in hospitalized patients in several countries. In some cases, this yeast can enter the bloodstream and spread throughout the body causing serious invasive infections which are associated with high mortality rates.

This yeast is often multidrug resistant, meaning that it does not respond to antifungal drugs commonly used to treat Candida infections. A strain that is resistant to all antifungal agents has recently been detected in the USA (July 2021).

### **Significance**

The CDC first issued a clinical alert on the multidrug-resistant yeast, *Candida auris* (*C. auris*) in June 2016. In 2018, *C. auris* was made a notifiable disease and 948 clinical cases have been identified in 18 different U.S. states (as of <u>April 30, 2021</u>)

It has caused outbreaks in healthcare settings, and appears to be able to persist on surfaces and spread between patients in healthcare facilities, unlike other Candida species. For this reason, it is important to quickly identify *C. auris* in a hospitalized patient so that healthcare facilities can take special precautions to stop its spread.

It was difficult to identify *C. auris* with standard laboratory methods, and specialized laboratory methods were needed to accurately identify *C. auris*. Conventional laboratory techniques could lead to misidentification and inappropriate management, making it difficult to control the spread of *C. auris* in healthcare settings. Because of these factors, CDC is alerting U.S. healthcare facilities to be on the lookout for *C. auris* in their patients. Any Candida species isolated from sterile body sites should be identified to the species level. For non-sterile body sites, the isolate should be identified to the species level if there is concern of transmission within the healthcare



setting, or if the patient has had an overnight stay in an overseas hospital within the last year.

#### **Symptoms**

*C. auris* is still rare in the United States. People prone to infection include those who have been in a healthcare facility for a long time (hospital, long-term care), have a central venous catheter or other tubes or lines entering the body, or have had antibiotics or antifungal agents recently. Patients with invasive Candida infections are often already sick from other medical conditions, so it can be difficult to know if they have a *C. auris* infection. The most common symptoms of invasive Candida infection a suspected bacterial infection. Only a laboratory test can diagnose *C. auris* infection.

### **Transmission**

*C. auris* can spread in healthcare settings through contact with infected or colonized patients or contaminated environmental surfaces and equipment. Good hand hygiene and environmental cleaning in healthcare facilities is important because *C. auris* can live on surfaces for several weeks.

#### **Control Measures**

Infection control measures for *C. auris* in acute care hospitals and high acuity postacute care settings is as follows:

- Place patients with *C. auris* in a single-patient room and use standard and contact precautions
- Good hand hygiene adherence is very important
- Clean and disinfect the patient care environment and reusable equipment (daily and terminal cleaning) with recommended products (see below).
- Inter-facility communication about patient's *C. auris* status when transferring between healthcare facilities



- Screen contacts of newly identified case patients to identify *C. auris* colonization.
- Conduct surveillance for new cases to detect ongoing transmission.

Screening of roommates of patients newly detected to have *C. auris* is recommended, by use of a bilateral axilla and groin swab. The laboratory may need to send the specimen to a reference lab to ensure proper identification of any isolate.

### **Cleaning and Disinfection**

Thorough daily and terminal cleaning and disinfection of patients' rooms and cleaning and disinfection of areas outside of their rooms where they receive care (e.g., radiology, physical therapy) is necessary. Shared equipment (e.g., ventilators, physical therapy equipment) should also be cleaned and disinfected before being used by another patient.

*C. auris* can persist on surfaces in healthcare environments. *C. auris* has been cultured from multiple locations in patient rooms, including both high touch surfaces, such as bedside tables and bedrails, and locations further away from the patient, such as windowsills. *C. auris* has also been identified on mobile equipment, such as glucometers, temperature probes, blood pressure cuffs, ultrasound machines, nursing carts, and crash carts. Meticulous cleaning and disinfection of both patient rooms and mobile equipment is necessary to reduce the risk of transmission.

Quaternary ammonium compounds (QACs) that are routinely used for disinfection may not be effective against *C. auris.* 

CDC recommends use of an Environmental Protection Agency (EPA)-registered hospital-grade disinfectant effective against *C. auris*, (<u>List P</u>). If List P disinfectants are not available, use a disinfectant effective against *Clostridioides difficile* spores (<u>List K</u>). It is important to follow all manufacturers' directions for use of the surface disinfectant, including applying the product for the correct contact time.



## Products that are effective against C. auris:

Product	Oxivir® TB RTU / Wipes	Oxivir®1 RTU / Wipes	Avert™ Sporicidal Disinfectant Cleaner/Wipes	Titan™ Tabs	MoonBeam <sup>™</sup> 3
Contact Time (Min)	3 Min / 5 Min C. auris	1	4	4	3
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Product	Avert™ Disinfectant Cleaner	Titan™ Tabs	Rescue <sup>®</sup> (Liquid, Gel & Wipes)	MoonBeam®3 UV Disinfection	
Contact Time (Min)	1	4	10	3	
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NOTE: Oxivir® Tb and 1 have been tested against C. auris and are on list P. The other products are effective against C. diff spores.

## References

https://www.cdc.gov/fungal/candida-auris/c-auris-infection-control.html#disinfection

https://www.cdc.gov/fungal/diseases/candidiasis/candida-auris.html

https://www.cdc.gov/fungal/diseases/candidiasis/recommendations.html

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