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.

Significance

Since June 2016, when the CDC first issued a clinical alert on the multidrug-resistant yeast, Candida auris (C. auris), 523 clinical cases have been identified in 12 different U.S. states (as of mid-January 2019).

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 is difficult to identify *C. auris* with standard laboratory methods, and specialized laboratory methods are needed to accurately identify *C. auris*. Conventional laboratory techniques can 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.

Symptoms

C. auris is still rare in the United States. People who get 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 are fever and chills that don't improve after antibiotic treatment for a suspected bacterial infection. Only a laboratory test can diagnose *C. auris* infection.

Transmission

Patients who have been hospitalized in a healthcare facility a long time, have a central venous catheter, or other lines or tubes entering their body, or have previously received antibiotics or antifungal medications, appear to be at highest risk of infection with this yeast.

C. auris can spread in healthcare settings through contact with affected patients or contaminated environmental surfaces and equipment. Good hand hygiene and 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 post-acute care settings is as follows:

- Place patients with *C. auris* in a single-patient room and use standard and contact precautions
- Hand hygiene adherence
- Clean and disinfect 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.

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.*

Until further information is available for *C. auris,* CDC recommends use of an Environmental Protection Agency (EPA)-registered hospital-grade disinfectant effective against *Clostridioides difficile* spores (List K). It is important to follow all manufacturers' directions for use of the surface disinfectant, including applying the product for the correct contact time. When use of products on List K is not feasible, published research found that the Oxivir® Tb led to a substantial reduction (≥4 log reduction) of *C. auris* in laboratory testing (Cadnum et al., 2018; Rutala, et al., 2017):

Details on contact time and testing parameters are included in the references. This does not constitute an endorsement of a specific company or disinfectant. More research is needed to evaluate which disinfectants, including others not listed here, are effective against *C. auris*.

The reference provided by the CDC for Oxivir® Tb was tested at a contact time of 10 minutes. Diversey is currently undergoing GLP testing to prove Oxivir Tb is effective against *C. auris* at a significantly shorter contact time and will be submitting this data into the EPA to get this approved and added to the label. We have also tested and have approved Oxivir® 1 as effective against C. Auris by the EPA supporting a 1-minute kill claim for *C. auris*.

Products that are effective against *C. auris:*

Product	Oxivir®1 RTU / Wipes	Oxivir® Tb RTU / Wipes	Avert™ Sporicidal Disinfectant Cleaner/Wipes
Contact Time (Min)	1	10	1
			

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

https://www.cdc.gov/media/dpk/cdc-24-7/eis-conference/pdf/66th_2017_EIS_conf_book_FINAL2_508.pdf

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