

Information for Facilities Considering Colonization Screening

Background

Candida auris (*C. auris*), considered by the CDC to be an urgent public health threat, is an emerging fungal pathogen that spreads in healthcare facilities and is often multidrug-resistant. Asymptomatic cases of *C. auris*, referred to as colonization or screening cases, represent the largest source of transmission. A clinical case of *C. auris* is when a patient presents with symptoms and has *C. auris* isolated from the infection site. A colonized patient can become a clinical case if they develop an active infection. Research shows that patients can remain colonized even once an active infection has resolved. The longest duration of colonization is still unknown due to the emergent status of this pathogen (CDC, 2023) however the CDC has identified patients who have remained colonized for more than two years. While duration of colonization is long-term, acquisition of *C. auris* can occur rapidly. One recent study found exposure to the organism for as little as four hours can lead to colonization in patients (Alfouzan et. al., 2022). Additional research suggests the potential for extended periods of colonization prior to a positive screening test, finding 41 and 61 days between *C. auris* exposure and detection in one patient (Alanio et. al., 2022). Further, individuals known to be colonized often have negative screening results despite testing positive again at a later point in time (Delaware DPH, 2022). Organism factors such as asymptomatic spread (Texas DSHS, 2023), extended periods of undetected colonization (Alanio et. al., 2022), and the requirement of special cleaners contribute to further spread across the nation (CDC, 2023).

Environmental Persistence of *Candida auris*

C. auris is shed off the patient's body into their immediate environment (Schelenz et. al., 2016). Testing suggests that *C. auris* can survive on surfaces for weeks. Specifically, *C. auris* is viable on plastic surfaces for at least 2 weeks (Welsh et al., 2017). Depending on surface type, *C. auris* can persist on moist surfaces up to 7 days (Piedrahita et al., 2017). Comparatively to other *Candida* species, *C. auris* is the most persistent in the nosocomial environment (Piedrahita et al., 2017). Most contaminated surfaces are the overbed table, bed handrail, and the TV remote/call button (Sansom et al., 2022). These surfaces act as a reservoir or point of transmission to colonize other patients (Schelenz et. al., 2016). CDC recommends daily cleaning and disinfection of patient rooms and terminal cleaning once they have been moved to break the transmission of *C. auris* within the facility. It is crucial to use appropriate disinfectants to impede transmission (use products as directed from [List P](#) or [List K](#) ensuring staff adherence to the listed contact time for each product). Early point prevalence testing of all patients or residents on the unit is essential to ensure that all patients or residents colonized with *C. auris* are rapidly recognized and placed on Contact Precautions (CDC, 2023). Point prevalence screenings can help differentiate ongoing transmission of *C. auris* within a facility (whether via environment or patient to patient) from *C. auris* being present on arrival. Recent investigations have found that within weeks of a clinical *C. auris* patient entering a facility, one-third to one-half of all patients on one unit can become colonized, especially in long-term care facilities (Texas DSHS, 2022). *C. auris* is considered a Tier 1 organism in Tennessee. A Tier 1 designation denotes the most urgent response level, characterized by robust response and containment efforts as outlined in CDC's [Interim Guidance for a Public Health Response to Contain Novel or Targeted Multidrug-resistant Organisms \(MDROs\)](#).

We appreciate your assistance in caring for patients and helping infection prevention efforts. Please contact us with additional questions by emailing HAI.health@tn.gov, or calling 615-741-7247.

References

- Alanio, A., Snell, H. M., Cordier, C., Desnos-Olivier, M., Dellière, S., Aissaoui, N., Sturny-Leclère, A., Da Silva, E., Eblé, C., Rouveau, M., Thégat, M., Zebiche, W., Lafaurie, M., Denis, B., Touratier, S., Benyamina, M., Dudoignon, E., Hamane, S., Cuomo, C. A., & Dépret, F. (2022). First patient-to-patient Intrahospital transmission of clade I candida auris in France revealed after a two-month incubation period. *Microbiology Spectrum*, 10(5). <https://doi.org/10.1128/spectrum.01833-22>
- Alfouzan, W. A., Dhar, R., Alabbad, J., & Rabaan, A. A. (2022). Infection control measures against Candida auris in Healthcare Facilities. *Processes*, 10(8), 1625. <https://doi.org/10.3390/pr10081625>
- Candida auris (C. auris) infection. Candida auris (C. auris) Infection | Texas DSHS. (2023). Retrieved February 27, 2023, from <https://www.dshs.texas.gov/antibiotic-resistance-multidrug-resistant-organisms/candida-auris-c-auris-infection>
- Centers for Disease Control and Prevention. (2022, December 27). Candida auris. Centers for Disease Control and Prevention. Retrieved February 27, 2023, from <https://www.cdc.gov/fungal/candida-auris/index.html#:~:text=Candida%20auris%20is%20an%20emerging,used%20to%20treat%20Candida%20infections>
- Centers for Disease Control and Prevention. (2021, April 9). Healthcare Professionals FAQ. Centers for Disease Control and Prevention. Retrieved February 27, 2023, from <https://www.cdc.gov/fungal/candida-auris/c-auris-health-qa.html#:~:text=How%20long%20does%20C.,survive%20on%20surfaces%20for%20weeks>
- Centers for Disease Control and Prevention. (2023, January 17). Infection prevention and control for candida auris. Centers for Disease Control and Prevention. Retrieved February 27, 2023, from <https://www.cdc.gov/fungal/candida-auris/c-auris-infection-control.html>
- Delaware Division of Public Health. (2022, November 10). *Candida auris Public Health Advisory*. Candida auris - Delaware.gov. <https://dhss.delaware.gov/dph/php/files/HAN490.pdf>
- Piedrahita, C. T., Cadnum, J. L., Jencson, A. L., Shaikh, A. A., Ghannoum, M. A., & Donskey, C. J. (2017). Environmental Surfaces in Healthcare Facilities are a Potential Source for Transmission of Candida auris and Other Candida Species. *Infection Control & Hospital Epidemiology*, 38(9), 1107–1109. <https://doi.org/10.1017/ice.2017.127>
- Sansom, S., Gussin, G. M., Singh, R. D., Bell, P. B., Jinal, E. B., Makhija, Froilan, R., Saavedra, R., Pedroza, R., Thotapalli, C., Fukuda, C., Gough, E., Marron, S., Guzman, M. D. M. V., Shimabukuro, J. A., Mikhail, L., Black, S., Pacilli, M., Adil, H., ... Hayden, M. (2022). Multicenter evaluation of contamination of the healthcare environment near patients with Candida auris skin colonization. *Antimicrobial Stewardship & Healthcare Epidemiology*, 2(S1), s78–s79. <https://doi.org/10.1017/ash.2022.205>
- Schelenz, S., Hagen, F., Rhodes, J. L., Abdolrasouli, A., Chowdhary, A., Hall, A., Ryan, L., Shackleton, J., Trimlett, R., Meis, J. F., Armstrong-James, D., & Fisher, M. C. (2016). First hospital outbreak of the globally emerging Candida auris in a European hospital. *Antimicrobial Resistance and Infection Control*, 5, 35. <https://doi.org/10.1186/s13756-016-0132-5>
- Texas Department of State Health Services (DSHS) - Emerging and Acute Infectious Disease Unit. (2022, January). *Emerging and Acute Infectious Disease Guidelines (EAIDG)*. Investigation guidance. <https://www.dshs.texas.gov/sites/default/files/IDCU/investigation/electronic/EAIDG/2022/EAIDG-2022.pdf>
- US EPA, O. (2015, September 28). List K: Antimicrobial Products Registered with EPA for Claims Against Clostridium difficile Spores [Collections and Lists]. <https://www.epa.gov/pesticide-registration/list-k-antimicrobial-products-registered-epa-claims-against-clostridium>
- US EPA, O. (2020, October 28). List P: Antimicrobial Products Registered with EPA for Claims Against Candida Auris [Overviews and Factsheets]. <https://www.epa.gov/pesticide-registration/list-p-antimicrobial-products-registered-epa-claims-against-candida-auris>
- Welsh, R. M., Bentz, M. L., Shams, A., Houston, H., Lyons, A., Rose, L. J., & Litvintseva, A. P. (2017). Survival, Persistence, and Isolation of the Emerging Multidrug-Resistant Pathogenic Yeast Candida auris on a Plastic Health Care Surface. *Journal of Clinical Microbiology*, 55(10), 2996–3005. <https://doi.org/10.1128/JCM.00921-17>