



Candida auris (C.auris) is a fungus from the same group of germs that cause thrush (Candida albicans) or serious blood stream infections in immune-compromised patients (C. glabrata, C. parapsilosis, C. krusei and C. tropicalis).

However, unlike most of the other candida species which live in the gastrointestinal tract, this fungus is also commonly found living on the skin.

It is also much more resistant than other fungi to commonly used treatments and over 90% of C.auris cases to date have been resistant to Fluconazole, the standard treatment for Candida infections.

Multi-resistant C.auris has only emerged relatively recently; it was first identified in Japan and South Korea in 2009 but had spread to six continents by 2017.

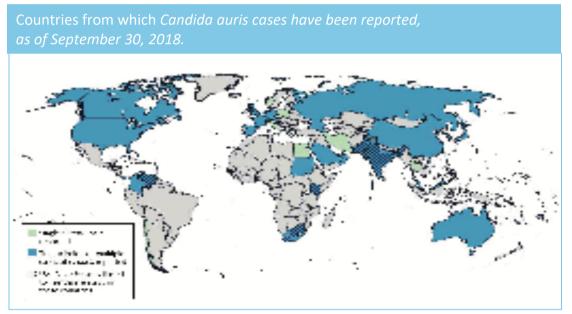


Fig 1. Worldwide distribution of reported C.auris cases (CDC, October 2018)

C.auris is of particular interest to clinicians, infectious disease experts and infection prevention and control (IPC) professionals due to the following characteristics of the fungus:

- It is a pathogen it causes disease
- It is of risk to all types of patients
- It is highly virulent
- It is often mis-classified in laboratory diagnostic tests and so is missed
- There are few treatment options
- · It spreads easily in the environment
- It is resilient to environmental disinfection
- · It has been responsible for healthcare outbreaks

Chowdhary A et al. PLoS Pathog. 2017 May 18;13(5):e1006290

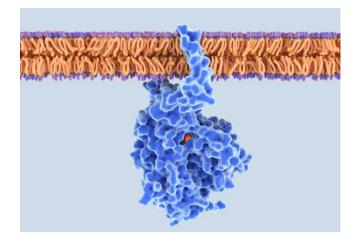
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Healthcare facility Outbreaks

As with many other antimicrobial resistant pathogens, C. auris has been implicated in many hospital outbreaks around the world. A large outbreak lasting over 12 months between 2015 and 2016 in a London cardiothoracic intensive care unit resulted in 50 cases. Contact with an environment contaminated with C. auris was found to be a significant source of infection with the fungus. Among the surfaces found to be contaminated were the floor, dressing trollies, equipment monitors and keypads, and windowsills.



Infection prevention and control measures

C.auris cases should be taken very seriously in all healthcare facilities and strict measures put in place to prevent spread to other patients.

These measures are similar to other important IPC practices for multidrug resistant organisms and include the following key actions:

- 1. Notify local IPC and infectious diseases experts
- 2. Place patient in single room with contact precautions in addition to routine practices
- 3. In case of symptomatic disease, begin treatment, preferably with guidance from an infectious disease specialist (treatment of asymptomatic colonization is not recommended)
- 4. Start contact tracing and screening to determine any local transmission
- 5. Focus on environmental disinfection

Disinfection of a contaminated environment

As previously noted, removing C.auris from the environment is a challenge due to the ease which it appears to spread in the environment and its resistance to many common cleaning agents. The environment can remain contaminated for weeks with the pathogen. Subsequently many national and international guidelines for the management of these infections, advise daily and terminal or discharge cleaning with a strong environmental disinfectant such as a sporicidal disinfectant.³

As with all environmental disinfection options, success will be easier if the area is regularly cleaned so that surface biofilm is not allowed to build up.

Summary

Multi-drug resistant Candida auris is an important emerging pathogen which demands attention and action when identified in the healthcare setting. As well as implementing common IPC measures used for multi-drug resistant organisms, disinfection of a potentially contaminated environment must be a priority. Always follow local and national guidelines for managing this pathogen.⁴

References;

Schelenz, Silke, et al. "First hospital outbreak of the globally emerging Candida auris in a European hospital." Antimicrobial Resistance & Infection Control 5.1 (2016): 35. https://aricjournal.biomedcentral.com/articles/10.1186/s13756-016-0132-5 Schwartz, Smith & TC Dingle. "Something wicked this way comes: What health care providers need to know about Candida auris". Can Commun Dis Rep (2018);44(11):271–6. https://doi. org/10.14745/ccdr.v44i11a014

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