



# Hospital transmitted *Candida auris* infections confirmed in the US

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An invasive fungus that is often resistant to antifungal agents and associated with high mortality was being transmitted in US health facilities, the US Centers for Disease Control and Prevention (CDC) said in a report released on 4 November.<sup>1</sup>

The fungus, *Candida auris*, was first described in Japan in 2009.<sup>2</sup> Since then it has been reported in several other countries, including Colombia, India, Israel, Kenya, Kuwait, Pakistan, South Africa, South Korea, Venezuela, and the UK. To determine whether *C auris* was present in the US the CDC issued a clinical alert in June calling for all cases of the fungus to be reported to the agency.<sup>3</sup>

*C auris* can be difficult to identify, with identification requiring highly specialized laboratory methods. As a result, it is often misidentified as other yeasts, the report said.

The report described the first seven cases of *C auris* infection identified in the US. The cases occurred between May 2013 and August 2016 in four states: Illinois, Maryland, New Jersey, and New York. Recent travel outside the US was reported in only one case.

All the patients had serious underlying medical conditions, including hematologic malignancies, bone marrow transplantation, and conditions needing corticosteroid treatment.

Five of seven reported isolates were either misidentified initially or not identified beyond *Candida* species. Five of seven isolates were resistant to fluconazole; one was resistant to amphotericin B; and another was resistant to echinocandins.

Four of the seven patients died, although it is not clear if the deaths were because of *C auris* infection or their underlying conditions, the report said.

Although transmission in healthcare settings was not definitively documented, genetic testing found that the isolates from patients admitted to the same hospitals were nearly identical. In addition, in some patients skin and other body sites were found to be colonized months after their initial infection. Surfaces in their healthcare facilities were also contaminated, suggesting that transmission within a healthcare setting was possible, the report said.

To reduce the risk of transmission, the CDC recommended that health personnel in acute care settings use the agencies standard and contact precautions protocols<sup>4</sup> when patients are colonized or infected with *C auris*. "Facilities and laboratories should continue to report cases and forward isolates of *C haemulonii* and *Candida* species that are not identified further after using common identification methods to state or local health authorities and CDC, who can provide consultation about the need for additional interventions to prevent transmission," the report said.

- 1 Vallabhaneni S, Kallen A, Tsay S, et al. Investigation of the first seven reported cases of candida auris, a globally emerging invasive, multidrug-resistant fungus: United States, May 2013-August 2016. *MMWR Morb Mortal Wkly Rep* 2016. doi:10.15585/mmwr.mm6544e1.
- 2 Satoh K, Makimura K, Hasumi Y, Nishiyama Y, Uchida K, Yamaguchi H. *Candida auris* sp. nov., a novel ascomycetous yeast isolated from the external ear canal of an inpatient in a Japanese hospital. *Microbiol Immunol* 2009;53:41-4. doi:10.1111/j.1348-0421.2008.00083.x. pmid:19161556.
- 3 Centers for Disease Control. Clinical alert to US healthcare facilities June 2016: global emergence of invasive infections caused by the multidrug resistant yeast *Candida auris*. 2016. [www.cdc.gov/fungal/diseases/candidiasis/candida-auris-alert.html](http://www.cdc.gov/fungal/diseases/candidiasis/candida-auris-alert.html).
- 4 Centres for Disease Control. 2007 guideline for isolation precautions: preventing transmission of infectious agents in healthcare settings. 2007. [www.cdc.gov/hicpac/pdf/isolation/Isolation2007.pdf](http://www.cdc.gov/hicpac/pdf/isolation/Isolation2007.pdf).

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