### **PRACTICE** | FIVE THINGS TO KNOW ABOUT ...

### **■** SEPSIS

## Candida auris

Ilan S. Schwartz MD PhD, Tanis C. Dingle PhD

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# **1** Candida auris is an emerging pathogen that has spread rapidly across the globe, including to Canada

Candida auris was first described in Japan in 2009, but infections have been reported from 32 countries on 5 continents (Figure 1).<sup>1</sup> Although the reasons are unclear, *C. auris* emerged in parallel on 3 continents, then spread to North America through travel.<sup>2</sup> In Canada, 19 cases of *C. auris* have been identified since 2012;<sup>3</sup> most patients had received health care abroad.



Figure 1: Countries reporting at least 1 case of Candida auris through Apr. 15, 2019.

## **2** Candida auris can spread efficiently between patients in health care facilities

Outbreaks of *C. auris* infections have occurred in hospitals and long-term care facilities.<sup>4</sup> *Candida auris* can colonize patient skin for months, and environmental contamination is difficult to eradicate.<sup>4</sup> Infected and colonized patients should be isolated with contact precautions in private rooms disinfected daily with sporicides like bleach.<sup>4</sup> Notification of infection control and public health is essential.<sup>4</sup>

- **3** Candida auris can cause invasive candidiasis in patients in hospital Candida auris is an opportunistic pathogen that can cause invasive candidiasis, including candidemia, in patients in hospital, with a high rate of death.<sup>4</sup> Risk factors for disease include intensive care, central lines, and antibiotic and antifungal exposure.<sup>5</sup>
- Antifungal resistance of *C. auris* presents therapeutic challenges
  Many *C. auris* isolates are resistant to antifungals. In most isolates, resistance is seen to fluconazole, in one-third to amphotericin B, and in about 5% to echinocandins. Very rarely, resistance occurs to all antifungal classes.<sup>2</sup> Echinocandins are appropriate for empiric therapy pending susceptibility testing.<sup>4</sup>
- Laboratory misidentification of *C. auris* can delay appropriate therapy and implementation of infection control precautions

  Certain biochemical and matrix-assisted laser desorption/ionization time of flight (MALDI-TOF) mass spectrometry identification systems cannot accurately identify *C. auris*; laboratories should refer suspicious isolates to reference laboratories when identification is necessary. Microbiologists should be consulted if unidentified or unusual *Candida* spp. are isolated from patients who have received health care abroad or are unresponsive to empiric antifungals.

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Affiliations: Division of Infectious Diseases, Department of Medicine (Schwartz); Division of Diagnostic and Applied Microbiology, Department of Laboratory Medicine and Pathology (Dingle), Faculty of Medicine and Dentistry, University of Alberta; Provincial Laboratory for Public Health (Dingle), Alberta Public Laboratories, Edmonton, Alta.

Correspondence to: Ilan Schwartz, ilan@ualberta.ca