

# Interim Infection Prevention and Control Guidance for Candida Auris (*C. Auris*) for Health Care Settings

# Contents

Introduction	3
Background	
Transmission	
Clinical presentation	
Infection prevention and control recommendations in health-care settings	
Case management	
Exposure and Contact Management	
Notification	
Surveillance	5
References	5

### Introduction

### **Background**

Candida auris (C. auris) is an emerging multi-drug resistant fungus that has caused increasing numbers of outbreaks and invasive infections that are associated with high mortality (>40%) in health care facilities across multiple countries<sup>1–3</sup>. C. auris can be resistant to one or three main available classes of antifungal treatments (e.g., azoles such as fluconazole, polyenes such as amphotericin B, and echinocandins). Additionally, the organism can survive for long-periods of time on environmental surfaces and fomites and can be resistant to some common hospital-grade disinfectants, such as quaternary ammonium compounds<sup>2</sup>. C. auris can live on the skin and mucous membranes of people who are colonized with it, and yet they can remain asymptomatic. Patients are at risk of acquiring C. auris if they have been hospitalized in other countries or have been in a health care facility experiencing transmission events/outbreaks. Infections with significant morbidity and mortality are more likely to occur in patients with pre-disposing risk factors such as having central venous catheters or other invasive lines/devices, receiving intensive care, treatment with broad-spectrum antibiotics or antifungals, and being immune compromised<sup>1,2</sup>.

### **Transmission**

C. auris has the potential for transmission within health care facilities, including acute and long-term care facilities by causing healthcare-associated infections, including invasive infections with significant morbidity and mortality. Both the patient and the patient's environment can be colonized with C. auris, which can persist in the environment. Although cleaning and disinfection can remove C. auris, care must be taken to select disinfectants that are effective against the organism. Transmission from patients or the environment can potentially cause outbreaks that can be disruptive and challenging to manage. Therefore, awareness of C. auris and the recommended measures to recognize and prevent transmission are needed to address this emerging concern within health-care settings.

### **Clinical presentation**

*C. auris* infection is associated with a wide range of clinical presentations, with nonspecific symptoms that vary depending on the location and severity of infection. It can cause invasive infections with significant morbidity and mortality, particularly among hospitalized patients who are immunocompromised or receiving intensive care<sup>4–6</sup>. The infections can be difficult to diagnose, and when diagnosed can be difficult to treat due to the limited treatment options.

For more information on clinical presentation and complications refer to information for health-care providers from <a href="Public Health Agency of Canada">Public Health Agency of Canada</a> and <a href="US Centres for Disease Control">US Centres for Disease Control</a> (CDC).

# Infection prevention and control recommendations in health-care settings

### **Case management**

Early identification, adherence to routine infection prevention and control (IPC) practices, and implementation of additional measures are critical to prevent transmission of C. auris within health-care facilities. In addition to organizational IPC policy and procedures, the following are recommended for patient's suspected or confirmed to have C. auris<sup>1,7</sup>:

- o Consult with medical microbiologist for specimen collection and testing.
- Follow routine practices, including hand hygiene with alcohol-based hand rub or plain soap and water.
- o Implement **contact precautions** including wearing gloves and long-sleeve protective gowns. Use additional PPE based on point-of-care risk assessment.
- Place patient in a single occupancy room with a dedicated bathroom. If a dedicated bathroom is not available, provide a dedicated commode or urinal.
- Use single use and disposable, where possible, or dedicate patient care equipment and supplies to the
  patient as much as possible. If shared patient care equipment is used, it must be cleaned and disinfected
  after patient use.
- Use a disinfectant with a Health Canada issued drug identification number (DIN) and an efficacy claim against *C. auris* (e.g., accelerated hydrogen peroxide, 1,000 ppm chlorine or sodium hypochlorite), for environmental and non-critical equipment cleaning and disinfection.
- Perform twice daily environmental cleaning and disinfection with a focus on high-touch surfaces.

## **Exposure and Contact Management**

- o Consult with institutional IPC teams (where available) or Public Health for further recommendations on the follow-up and management of patient contacts in health-care facilities.
- Follow additional measures recommended by IPC and/or Public Health, which may include contact tracing, point prevalence testing, environmental sampling, IPC compliance monitoring, and enhanced unit cleaning and disinfection.
- o For health-care worker exposures and contact management, consult with the <u>Provincial Workplace</u> <u>Health Contact Centre</u> (for health authority operated settings) and Public Health.

### **Notification**

 Notify institutional IPC team and Public Health. C. auris is a reportable communicable disease under the Public Health Act<sup>8</sup>.

### Surveillance

### Coming soon!

### **Additional Resources**

- BC Centre for Disease Control
- Public Health Agency of Canada. <u>Notice: Candida auris interim recommendations for infection</u> <u>prevention and control - Canada.ca</u> (December 2021)
- U.S. Centre for Disease Control and Prevention (CDC)
  - o Candida auris (C. auris)
  - o Preventing the Spread of C. auris
  - o CDC Infection Prevention and Control for Candida auris

### References

- 1. Chen J, Tian S, Han X, et al. Is the superbug fungus really so scary? A systematic review and meta-analysis of global epidemiology and mortality of Candida auris. *BMC Infect Dis*. 2020;20:827. doi:10.1186/s12879-020-05543-0
- Cadnum JL, Shaikh AA, Piedrahita CT, et al. Effectiveness of Disinfectants Against Candida auris and Other Candida Species. *Infection Control & Hospital Epidemiology*. 2017;38(10):1240-1243. doi:10.1017/ice.2017.162
- US Centre for Disease Control. Infection Control Guidance: Candida auris. <em>Candida auris (C. auris)</em>. Published May 16, 2024. Accessed June 5, 2024. https://www.cdc.gov/candida-auris/hcp/infection-control/index.html
- Sekyere JO. Candida auris: A systematic review and meta-analysis of current updates on an emerging multidrug-resistant pathogen. *MicrobiologyOpen*. 2018;7(4):e00578. doi:https://doi.org/10.1002%2Fmbo3.578
- 5. Sekyere JO. Candida auris: A systematic review and meta-analysis of current updates on an emerging multidrug-resistant pathogen. *MicrobiologyOpen*. 2019;8(8). doi:10.1002/mbo3.901
- Vinayagamoorthy K, Pentapati KC, Prakash H. Prevalence, risk factors, treatment and outcome of multidrug resistance Candida auris infections in Coronavirus disease (COVID-19) patients: A systematic review. *Mycoses*. 2022;65(6):613-624. doi:10.1111/myc.13447
- 7. Public Health Agency of Canada. Candida auris interim recommendations for infection prevention and control. Published September 29, 2022. Accessed June 5, 2024. https://www.canada.ca/en/public-health/services/infectious-diseases/nosocomial-occupational-infections/notice-candida-auris-interim-recommendations-infection-prevention-control.html

C Auris: Infection Prevention and Control Information for Health Care Workers
8. Government of British Columbia. Reporting Information Affecting Public Health Regulation. Accessed June 26, 2024. https://www.bclaws.gov.bc.ca/civix/document/id/lc/statreg/167_2018#Schedule