
Date: October 4, 2016
To: Alberta Clinical Microbiology Laboratories
From: Provincial Laboratory for Public Health (ProvLab)
Re: Global Emergence of *Candida auris* Infections

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Key Message

The Centers for Disease Control and Prevention (CDC) and Public Health Agency of Canada (PHAC) have recently released alerts regarding the global emergence of a multidrug resistant yeast, *Candida auris*, which causes invasive healthcare-associated infections with high mortality¹. To date, cases in at least 9 countries have been documented with one case recorded in Canada.

From a diagnostic perspective, identification of *C. auris* is challenging:

- Conventional laboratory identification methods (Vitek 2, API 20C) can misidentify *C. auris* as *Candida haemulonii*, *Candida famata*, *Candida sake*, *Rhodoturula glutinis* or *Saccharomyces cerevisiae*.
- On Candida CHROMagar, *C. auris* isolates will produce a pale mauve or pink colour while other chromogenic media produce variable results.
- Identification by MALDI-TOF MS is instrument dependent: the Bruker MS can identify *C. auris* while the VITEK MS does not produce an identification result.
- Confident identification of *C. auris* can only be achieved by sequencing of the ITS or D1-D2 ribosomal subunit.

Susceptibility testing of *C. auris* generally shows resistance to fluconazole with variable susceptibility to other antifungal drugs. Isolates of *C. auris* resistant to all three antifungal classes have been isolated making treatment options limited.

Action Required

We ask laboratories to be on the alert for yeast isolates from sterile sites identifying as *Candida haemulonii*, *Candida famata*, *Candida sake*, *Rhodoturula glutinis* or *Saccharomyces cerevisiae*, that do not display the typical morphological characteristics of these organisms.

Any suspicious isolates can be forwarded to ProvLab for further confirmation.

Inquiries and feedback may be directed to:

Dr. Tanis Dingle, Program Leader, Medical Mycology, ProvLab at tanis.dingle@ahs.ca or by phone at 780-407-2767.

This bulletin has been reviewed and approved by:

Dr. Graham Tipples, Medical / Scientific Director, Provincial Laboratory for Public Health (ProvLab)

References

¹ <http://www.cdc.gov/fungal/diseases/candidiasis/candida-auris-alert.html>