



Health Alert



City of Chicago
Rahm Emanuel, Mayor

Communicable Disease Program

Chicago Department of Public Health
Julie Morita, MD, Commissioner

Date: January 13, 2017
To: Clinical Laboratories, Infection Control Professionals, Infectious Disease Physicians, Long-Term Care Facilities, Local Health Departments
From: Janna Kerins, VMD, Epidemic Intelligence Service Officer, Communicable Disease Program
 Massimo Pacilli, MS, Sarah Kemble, MD and Stephanie Black, MD, MSc, Communicable Disease Program
Subject: Laboratory Surveillance and Reporting of Suspected *Candida auris* Isolates

The Chicago Department of Public Health (CDPH) received reports of five related cases of *Candida auris* from August-December 2016. A sixth case unrelated to the initial cluster has now been identified. CDPH is seeking to expand case finding to better understand local epidemiology and significance of this organism. *C. auris* is an emerging yeast organism with the potential to cause outbreaks in healthcare settings¹. In some of these outbreaks, it has been associated with high levels of mortality and resistance to all three major classes of antifungals (echinocandins, azoles, and polyenes)¹. To date, local isolates remain susceptible to antifungals.

C. auris has been implicated in infections of the bloodstream, wounds, and otitis¹. It also appears to colonize the skin, urinary tract, and respiratory tract for months after an initial infection. Transmission appears to occur within healthcare facilities; both direct patient-to-patient spread and environmental contamination are possible.

Commercially available biochemical-based tests, including API strips and VITEK-2, used in many U.S. laboratories to identify fungi, cannot differentiate *C. auris* from related species. **As a result, clinical laboratories may misidentify *C. auris* as *C. haemulonii*, *C. famata*, *C. sake*, *Saccharomyces cerevisiae*, *Rhodotoula glutinis*, or as non-typable beyond *Candida* spp. non-*albicans***². Diagnostic devices employing matrix-assisted laser desorption/ionization-time of flight (MALDI-TOF) can differentiate *C. auris*, but not all devices currently include *C. auris* in their reference database to allow for detection. Molecular methods based on sequencing of the D1-D2 region of 28S rDNA can also identify *C. auris*.

CDPH currently recommends the following:

- Retrospective Microbiology Review:** Laboratories should review their lab information systems from January 1, 2013 to present for isolates identified as *C. auris* or follows:
 - *C. haemulonii*
 - *C. famata*
 - *C. sake*
 - Non-typable beyond *Candida* spp. non-*albicans*
 - *Saccharomyces cerevisiae*
 - *Rhodotorula glutinis*

Please notify CDPH if any isolates are identified as described above by contacting either Janna Kerins (312-746-6219, Janna.Kerins@cityofchicago.org) or Massimo Pacilli (312-746-6225, Massimo.Pacilli@cityofchicago.org). CDPH will facilitate submission of available isolates to CDC via the Illinois Department of Public Health laboratory for further characterization.
- Reporting:** Prospectively, any suspected or confirmed *C. auris* isolates should be reported to CDPH. Reports containing personally identifiable information may be faxed to our secure fax line, 312-746-6388 (Attn: Janna Kerins).

References:

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