Chicago Department of Public Health

Health Alert

Communicable Disease Program

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 settings. 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). To date, local isolates remain susceptible to antifungals.

C. auris has been implicated in infections of the bloodstream, wounds, and otitis. 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, Rhodotula glutinis, or as non-typable beyond Candida spp. non-albicans. 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:

1. 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

   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.

2. 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: