

City of Chicago Rahm Emanuel, Mayor

Communicable Disease Program

Chicago Department of Public Julie Morita, MD

C. auris detected in Chicago healthcare facilities

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- To: Infection Control Professionals, Infectious Disease Physicians, Emergency Departments, Laboratories, and Health Care Providers and Clinics, including Obstetrician-Gynecologists, Pediatricians, Family Medicine, Advanced Practice Nurses (Certified Nurse Midwives)
- From:Janna Kerins, DVM, Epidemic Intelligence Service Officer, Communicable Disease Program
Sarah Kemble MD and Stephanie Black MD, MSc, Communicable Disease ProgramSubject:Emerging fungal organism, C. auris, detected in Chicago healthcare facilities

The Chicago Department of Public Health (CDPH) has received reports of two cases of *Candida auris* within the past several months. *C. auris* is an emerging yeast organism with potential to cause outbreaks in healthcare settings.¹ 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). These reports in Chicago are the first time that this organism has been identified in healthcare facilities in the region. Point prevalence studies are underway. <u>To date, local isolates remain susceptible to antifungals.</u>

Risk factors for *C. auris* infection are similar to other Candida species and include: diabetes mellitus, recent surgery, recent antibiotic use, and the presence of central venous catheters. *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, and likely can contaminate the environment resulting in opportunities for spread within healthcare facilities.

In the microbiology laboratory, *C. auris* may be misidentified using common methods such as the Vitek 2 or analytical profile index (API) strips, typically as *C. haemulonii*. Diagnosis currently requires either molecular sequencing of the D1-D2 region of 28S rDNA or use of matrix-assisted laser desorption/ionization-time of flight (MALDI-TOF).

Currently, CDPH recommends the following:²

- 1. <u>Reporting</u>: Any patients culturing positive for *C. auris* should be reported to CDPH to Dr. Stephanie Black at 312-746-6034 or Dr. Sarah Kemble at 312-746-6088.
- <u>Testing</u>: Diagnosis should be made using MALDI-TOF or molecular sequencing. Isolates that are identified as either *C. haemulonii* or Candida spp. not able to be further identified should be forwarded to CDC through the Illinois Department of Public Health (IDPH) laboratory for further testing. Please contact CDPH in advance of submitting specimens to the IDPH laboratory.
- 3. <u>Infection Control</u>: Standard and Contact precautions should be used with any patients either suspected of, or testing positive for *C. auris*.
- 4. <u>Disinfection</u>: Current recommendations are to clean the environment both daily and terminally with a hospitalgrade EPA- registered disinfectant with a fungal claim. This may include both sodium hypochlorite and quaternary ammonium compounds.

Reference: 1. <u>http://www.cdc.gov/fungal/diseases/candidiasis/candida-auris-alert.html</u> 2. <u>https://www.cdc.gov/media/pdf/releases/2016/p1104-candida-auris-mm6544e1-ebook.pdf</u>

Chicago Department of Public Health