

# Candida auris Outbreak on an Ontario Intensive Care Unit (ICU)

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## Background

- Candida auris is an emerging yeast
- Often multi-drug resistant, with some strains described as resistant to all available classes of antifungals.
- It survives well in the environment
- Responsible for outbreaks in healthcare settings.
- The CDC has declared it an emerging global threat.

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### Interventions

- All ICU patients were placed on Contact Precautions.
- Enhanced environmental cleaning with hydrogen peroxide was initiated.
- Point prevalence (PP) screen for *C. auris* was conducted on September 7, 2022.
- Bilateral axilla and groin swabs were collected on all patients admitted to the ICU up until August 31, 2022.
- Hospitalized roommates identified during patient tracing within the last (3) months were included.
- Validated screening method was not available at THP microbiology laboratory, specimens were tested in parallel by an external reference laboratory.
- Second case was identified from a patient with prolonged ICU stay.
- Both patients were never in close proximity to one another.
- A potential epidemiologic link was identified, both patients received intermittent hemodialysis same portable unit.
  - Outbreak on ICU was declared on September 20th, 2022.
    - Follow-up PP testing was conducted weekly for (3) consecutive weeks.
    - Nasal and rectal swabs were added to the screening.
- Sodium hypochlorite replaced hydrogen peroxide for daily cleans of ICU.



### Results

- All subsequent PP results were negative
- No additional cases of *C. auris* identified.
- All environmental swabs were negative.
- Outbreak was declared over on October 7<sup>th</sup>, 2022 following (3) negative PP screens.
- Contact Precautions and enhanced cleaning with sodium hypochlorite were discontinued.
- Further *C. auris* PP screens were conducted on the ICU every (4) weeks for an additional (3) months – post outbreak declaration over.

### Lessons Learned

- The need to create *C. auris* screening policy that includes a readily available validated screening method.
- Determining the most sensitive body sites for screening.
- The importance of multidisciplinary collaboration and clear communication during an outbreak.

### Issue

- On December 5, 2021 a patient was admitted to Trillium Health Partners (THP) hospital ICU with disseminated tuberculosis.
- They immigrated to Canada from the Philippines in 1989 and last visited in 2016.
- Their prolonged ICU stay was complicated by stroke with poor neurological recovery, renal failure requiring intermittent hemodialysis, and recurrent bacterial infections requiring extensive antimicrobial treatment.
- On September 1, 2022, a blood culture returned positive for *C. auris*.



