C. auris Health Alert

- First issued jointly by PADOH and PDPH on Aug 18, 2020

- C. auris identified in southeastern PA and Philadelphia

- Cases identified in three different healthcare setting types from two counties

https://hip.phila.gov/HealthAlerts/SignUpHealthAlerts
https://han.pa.gov/
Updated Joint *C. auris* Health Alert
Issued May 28, 2021

46 cases of *C. auris* colonization and infection identified from 11 different healthcare facilities (ACHs, LTACHs and SNFs) in 4 different counties.
Candida Infections

• Genus Candida- more than 500 species, more than 20 species that can cause human infections

• Yeasts generally reside in the gut and on the skin of healthy people, as well as on mucous membranes

Colonization

- Weakened Immune system
- Diabetes
- Use of antibiotics

Candida overgrowth (candidiasis or invasive infection)

Life threatening invasive disease

Overall mortality rate with invasive candidiasis is ~30%
Candida Infections

95% of Candida infections in the U.S. are caused by 5 species:

- *C. albicans*, *C. glabrata*, *C. parapsilosis*, *C. tropicalis*, and *C. krusei*
- *C. albicans* is the most common cause of candidiasis
- Can be a cause of healthcare associated infections (HAIs)
Candida auris (C. auris)

Emerging yeast:
- First described in 2009 when isolated from a patient with an ear infection in Japan
- Invasive disease in Korea in 2011
- Identified in U.S. in 2016
- Reasons for rapid emergence are unknown
- Nationally notifiable in 2019, 20 states by 2020
- Largest number of cases in NY, Illinois and California
  - As of June 2019- NY reported 801 patients with either colonization or infection
  - 3 patients reported in 2019 with pan-resistant C. auris
C. auris Global Epidemiology

Countries from which C. auris cases have been reported, February 15, 2021

Countries from which Candida auris cases have been reported, as of February 15, 2021
This map is no longer being updated given how widespread C. auris has become.
C. auris U.S. Epidemiology

Reported clinical cases of *Candida auris*, 2018

Reported clinical cases of *Candida auris*, April 1, 2020-March 31, 2021

718 clinical cases
1789 colonization cases as of 3/31/2021
C. auris as an HAI

- Patients can be colonized or infected
- Colonization persists for long time
- Invasive infection has high mortality- approx. 57%
- Often multi-drug resistant
- Delays in laboratory diagnosis- misidentification by detection systems
  - Requires MALDI-TOF
  - PCR
- Healthcare environment quickly becomes contaminated
  Contact transmission between patients, staff and environment → Outbreaks

Risk of transmission increases with length of stay
Transmission has occurred during exposure periods as short as four hours!
\textbf{C. auris Colonization}

Patients are often colonized indefinitely

- Persistent, for many months
- No currently known decolonization strategies
- Patients can be intermittently positive on colonization screening
- CDC updating recommendations to not repeat testing to establish clearance of \textit{C. auris}

The percentage of patients who are colonized with \textit{C. auris} that will go on to develop invasive infection is not known
C. *aurantis* Infection Prevention

Colonized and/or infected patients should be put in contact precautions!
Alcohol-based hand rub (ABHR) is effective against *C. auris* and is the preferred method for routine hand hygiene.
C. auris Environmental Contamination

- C. auris persists in the environment
  - Can survive over a month
  - Some common disinfectants (quarternary ammonia compounds) do not work
  - 15 products have EPA claims for efficacy against C. auris (List P)
  - If not available should use products effective against C. difficile (List K)
  - Note that many products with label claims against COVID-19 are not effective against C. auris

Important to focus on high touch items in patient care areas
**C. auris Screening**

**Recommendations for screening**

- Healthcare contacts
- Healthcare abroad in past year

PDPH is available to perform on-site Infection Control Assessments
C. auris Regional Infection Prevention

- Maintain excellent communication regarding C. auris colonization/infection status with referring facilities and Philadelphia Department of Public Health (PDPH)
  - Utilize the PDPH transfer form
  - Note status in electronic medical record
  - Verbal communication upon transfer

- See PDPH Health Information Portal C. auris toolkit page for more information (hip.phila.gov)
  - Transfer form
  - Reporting form
  - C. auris resources