

Health Alert

New Outbreak and Containment of *Candida auris* in PA Healthcare Facilities

August 18, 2020

SUMMARY POINTS

- In March 2020, the first case of *Candida auris* was detected in a Pennsylvania resident with a history of healthcare exposures in another state. Public health containment measures and investigation did not identify further transmission.
- In June 2020, a second clinical case of *C. auris* was detected in Pennsylvania. An ongoing investigation has recently identified more than ten cases of *C. auris* colonization in two healthcare facilities in southeastern Pennsylvania, including a long-term acute care hospital (LTACH) and a skilled nursing facility (SNF), raising concerns about undetected *C. auris* transmission in healthcare facilities in southeastern Pennsylvania.
- Controlling the spread of multi-drug resistant organisms (MDROs), including *C. auris* is still of utmost importance during the COVID-19 pandemic. The Pennsylvania Department of Health (DOH) and the Philadelphia Department of Public Health (PDPH) are jointly providing guidance to request that:
 - Healthcare facilities develop and maintain *C. auris* action plans to assure measures are in place should a patient with *C. auris* be detected in, or transferred to, the facility;
 - Healthcare providers maintain vigilance for clinical illness that could be consistent with *C. auris*;
 - Healthcare facilities deliver education to staff and providers about *C. auris* and the infection prevention and control measures necessary to contain it;
 - Environmental health practices are reviewed for effectiveness against *C. auris*;
 - Laboratories implement methods to detect *C. auris* as outlined in this HAN.
- **Suspected or confirmed cases of *C. auris* identified in Pennsylvania should be reported promptly to PDPH at 215-685-6748 or DOH by calling 1-877-PA-HEALTH, or your local health department.**

The Pennsylvania Department of Health (DOH) and the Philadelphia Department of Public Health (PDPH) are jointly releasing the following guidance in response to the first cases of *Candida auris* detected in Pennsylvania. Cases were detected in healthcare facilities in Delaware and Philadelphia Counties. **DOH is alerting healthcare facilities, providers and laboratories to have heightened awareness for *C. auris* in patients and to take action to contain the spread.**

In March 2020, the first confirmed case of *C. auris* in Pennsylvania was detected in a patient admitted to a Philadelphia short-term acute care hospital with a history of healthcare exposures in another state. In June 2020, a second clinical case of *C. auris* was detected in a Delaware County short-term acute care hospital. Case investigation revealed the patient had a complex medical history with multiple admissions to healthcare facilities in Southeastern Pennsylvania.

In response to this case, a [Tier 2 containment strategy](#) was implemented according to the Centers for Disease Control and Prevention (CDC) guidelines and in consultation with CDC. A multi-jurisdictional public health investigation is ongoing. Thus far, state and local public health have facilitated the collection of 200 screening specimens to detect *C. auris* colonization in 120 patients admitted to five different healthcare facilities. These facilities are located in Chester, Delaware, Montgomery, and Philadelphia counties. **Over ten cases of *C. auris* colonization have been identified in patients in 2 healthcare facilities in Delaware and Philadelphia counties**, including a long-term acute care hospital (LTACH) and a skilled nursing facility (SNF). The investigation into these cases of *C. auris* is ongoing. Thus far, no clear epidemiologic links have been found to indicate that transmission is limited to select facilities. ***It is possible that *C. auris* spread in southeastern PA may be occurring undetected in healthcare facilities of all types.*** This HAN provides recommendations for southeastern PA healthcare facilities, providers, and laboratories on a regional approach to containment of *C. auris*.

Controlling the spread of multi-drug resistant organisms (MDROs) is still of the utmost importance during the COVID-19 pandemic. Due to our proximity to other [states](#) significantly impacted by *C. auris*, the identification of cases is not unexpected. This organism of concern has been gaining awareness since 2017, when [PA-HAN-387](#) was issued to encourage healthcare settings to review CDC guidance on identification, treatment and infection prevention and control measures for *C. auris*.

C. AURIS BACKGROUND

C. auris is an emerging fungus that presents a serious global health threat. **CDC, DOH and PDPH are concerned about *C. auris* for three reasons:**

- It is often multidrug-resistant, meaning that it is resistant to multiple antifungal drugs commonly used to treat *Candida* infections, resulting in significant morbidity and mortality in affected patients.
- It is difficult to identify with standard laboratory methods, and it can be misidentified in labs without specific technology. Misidentification may lead to inappropriate management.
- It has caused outbreaks in healthcare settings. For this reason, it is important to quickly identify *C. auris* so that healthcare facilities can take special precautions to stop its spread.

C. auris infection has been identified in many sites including bloodstream, urine, respiratory tract, wounds, and external ear canal. Based on information from a limited number of patients, CDC reports that 30–60% of people with *C. auris* infections have died. Many of these people had other serious illnesses that also increased their risk of death.

C. auris can colonize patients for many months (even after treatment), persist in the environment, and survive many disinfectants routinely used in healthcare facilities.

Risk Factors

Persons who have recently spent time in hospitals and nursing homes and have invasive devices (e.g. mechanical ventilation or tracheostomy, feeding tubes and central venous catheters) seem to be at highest risk for *C. auris* infection. Like other types of *Candida* infections, risk factors include recent surgery, diabetes, broad-spectrum antibiotic and antifungal use. Infections have been found in patients of all ages.

Routine travel to countries with documented *C. auris* infections is not likely to increase the chance of someone getting sick from *C. auris*. Persons who travel to these countries to seek medical care or who are hospitalized there for a long time may have an increased risk for *C. auris* infection or colonization.

Transmission

C. auris can spread in health care settings through contact with contaminated environmental surfaces or equipment or from person to person. Transmission is not thought to occur via persistent colonization of healthcare workers.

Diagnosis

Laboratory diagnosis of clinical infection is made through routine cultures. However, *C. auris* can be misidentified as several different organisms, particularly *Candida haemulonii*, when using traditional phenotypic methods for yeast identification. The CDC algorithm to identify *C. auris* based on phenotypic laboratory method and initial species identification is available here: <https://www.cdc.gov/fungal/candida-auris/recommendations.html>

For more information, please see the [Recommendations for Laboratorians and Health Professionals](#).

INFECTION PREVENTION AND CONTROL FOR *C. AURIS*

The primary infection control measures for prevention of *C. auris* transmission in healthcare settings are:

- Adherence to [hand hygiene](#). Alcohol-based hand rub (ABHR) is effective against *C. auris* and is the preferred method for routine hand hygiene.

- Appropriate use of transmission-based precautions. Patients colonized or infected with *C. auris* in hospitals and nursing homes should be managed using [contact precautions](#).
- Cleaning and disinfecting the patient care environment (thorough daily and terminal cleaning) and reusable equipment with an [EPA-registered disinfectant](#) with a claim against *C. auris*.
- Inter-facility communication about patient's *C. auris* status when a patient is transferred to another healthcare facility.
- Screening contacts of newly identified case patients to identify *C. auris* colonization.
- Laboratory surveillance of clinical specimens to detect additional cases.

Additional information can be obtained on the CDC [Infection Prevention and Control for *Candida auris*](#) page.

Colonization Screening

All healthcare facilities and providers in southeastern Pennsylvania should consider screening the following patients at high risk for *C. auris*:

- Healthcare contacts of those with newly identified *C. auris* infection or colonization;
- Patients infected or colonized with carbapenemase-producing carbapenem-resistant Enterobacteriaceae (CP-CRE); co-colonization of *C. auris* with these organisms has been observed;
- Patients who are on a mechanical ventilator or have a tracheostomy and reside in or are transferred from an LTACH or a SNF with the capability to care for residents on ventilators;
- Patients who had an overnight stay in a healthcare facility outside the United States within the last year.

Healthcare facilities and providers should contact their local health department or DOH to discuss public health resources for screening before proceeding independently. Public health laboratory resources are available to perform colonization screening using a validated method of detection for composite axillary/groin swabs.

CONTAINMENT RESPONSE FOR *C. AURIS*

A single case of *C. auris* (infection or colonization) requires a robust containment response. Be aware that as part of the current outbreak investigation, local and state public health departments may be conducting outreach to healthcare facilities and clinical laboratories with epidemiologic links to case patients or healthcare facilities with cases of *C. auris*.

Healthcare Facilities and Providers

For all healthcare facilities and providers in the southeastern region of PA, DOH and PDPH jointly request that facilities strongly consider implementation of the following containment measures:

- Develop and maintain *C. auris* action plans to assure measures are in place should a patient with *C. auris* be detected in, or transferred to, the facility;
- Maintain vigilance for clinical illness that could be consistent with *C. auris*; patients at higher risk include:
 - Patients who have received healthcare in post-acute care facilities (e.g., nursing homes), especially those with ventilator units.
 - Patients recently hospitalized outside the United States, especially in countries with known *C. auris* cases (visit the [CDC's map](#)), and patients infected or colonized with carbapenemase-producing bacteria.
- Evaluate surveillance protocols with the laboratory to ensure prompt notification to the infection prevention and control program when *C. auris* is suspected;
- Deliver education to staff and providers about *C. auris* and the infection prevention and control measures necessary to contain it. Resources are available on [CDC's *C. auris* infection prevention and control page](#);
 - Educational in-services must include an emphasis on [hand hygiene](#). Alcohol-based hand sanitizer is effective against *C. auris* and is the preferred method for cleaning hands when they are not visibly soiled. If hands are visibly soiled, wash with soap and water.

- Review environmental health practices for effectiveness against *C. auris*. Use of an [EPA-registered hospital-grade disinfectant with a claim against *C. auris*](#) is critical as *C. auris* can persist on surfaces in healthcare settings.
- Increase audits for hand hygiene, personal protective equipment (PPE) and environmental cleaning on units where patients with *C. auris* are located. Consider re-educating healthcare personnel through an in-service or retraining, especially if audits demonstrate low adherence to recommended infection prevention and control practices.

Due to the ongoing COVID-19 response, healthcare facilities should assess how [contingency and crisis capacity standards](#) for PPE impact the containment of MDROs. For patients infected or colonized with organisms listed as urgent and serious threats on [CDC's 2019 Antibiotic Resistance Threats report](#), we strongly recommended the use of conventional capacity standards for PPE.

Clinical Laboratories

Clinical laboratories processing specimens from residents receiving healthcare in southeastern PA should implement methods to detect *C. auris* as outlined below:

- Use the CDC [Candida auris laboratory resource](#) and [algorithm](#) to identify *C. auris* based on the available phenotypic laboratory method and initial species identification;
- If your laboratory does not have methodologies required to speciate *C. auris*, talk with your health department to evaluate the utility of forwarding isolates suspicious for *C. auris* for further testing at commercial or public health laboratories that can perform *C. auris* identification. Please do not forward isolates to the public health laboratories without health department approval.
- **Report suspected or confirmed cases of *C. auris* to PDPH at 215-685-6748 or DOH by calling 1-877-PA-HEALTH, or your local health department;**
- If possible, perform speciation for all yeast identified from an inpatient of healthcare facility (acute care hospital, LTACH, or SNF), including from both normally sterile and nonsterile body sites. This activity may be particularly useful in the 3 months following the release of this alert, as we seek understanding of the local epidemiology surrounding *C. auris*.

Reporting

Healthcare facilities, providers and laboratories with suspected or confirmed cases of *C. auris* (infection or colonization), should report them to PDPH at 215-685-6748 or DOH by calling 1-877-PA-HEALTH, or your local health department. *C. auris* became nationally notifiable in 2018.