Health Advisory: Update to Healthcare Facilities Regarding Multidrug-Resistant Yeast *Candida auris* in New York State

Please distribute immediately to:

Infection Preventionists, Nursing Directors, Nursing Unit Managers, Medical Directors, Administrators, Hospital Epidemiologists, Directors of Environmental Services, Case Managers/Care Coordinators, Laboratory Directors, Dialysis Unit Directors, Infectious Disease Physicians, Critical Care Medicine Nurses and Physicians, Emergency Medicine Nurses and Physicians, Emergency Medical Services, Risk Managers and Pharmacy Directors

The purpose of this advisory is to update healthcare facilities regarding the emergence of the multidrug-resistant yeast *Candida auris* (*C. auris*) in New York State (NYS). This advisory includes updates to guidance for clinicians, laboratories, and infection control departments from the New York State Department of Health (NYSDOH) and the Centers for Disease Control and Prevention (CDC).

**Background**

As of December 13, 2017, 111 clinical cases from NYS facilities with cultures positive for *C. auris* have been identified and reported to NYSDOH. Additionally, 128 *C. auris* culture positive screening cases (asymptomatic contacts) have been reported. Four persons who were first identified by screening cultures and later developed clinical illness are counted as both clinical and screening cases, giving a total of 235 persons known to be affected. All but four clinical cases were identified in New York City (NYC). Of cases identified outside of NYC, two patients were diagnosed Rockland County, one in Westchester County and one in Monroe County. The patient diagnosed in Monroe County had previously been admitted to a NYC hospital that had reported cases of *C. auris*. A total of 104 facilities, including 41 hospitals, 61 long term care facilities, one long term acute care hospital, and one hospice have had at least one affected patient pass through in the 90 days before diagnosis, at diagnosis, or after diagnosis. Sixteen of the pass-through facilities are in Metropolitan area counties outside of NYC. Therefore, clinicians, infection control personnel, and clinical laboratory staff in these locations should remain especially vigilant in their efforts to identify patients with *C. auris* infection or colonization.

**New NYSDOH Resources**

NYSDOH has developed a series of slide sets for use by facilities to provide education about *C. auris* and infection prevention and control to key groups of healthcare personnel. Slides sets with focus for clinicians, laboratory personnel, environmental services workers, home health and hospice personnel, emergency medical services (EMS), and dialysis staff are available at: https://www.health.ny.gov/diseases/communicable/c_auris/providers/.
NYSDOH has developed guidance on the implementation of Contact Precautions in long-term care facilities with emphasis on Contact Precautions for residents with multidrug-resistant organisms (MDROs), including *C. auris*. The guidance addresses Contact Precautions signage in long-term care facilities and modification of Contact Precautions in long-term care facilities, available at [https://www.health.ny.gov/diseases/communicable/c_auris/docs/transmission_based_precautions.pdf](https://www.health.ny.gov/diseases/communicable/c_auris/docs/transmission_based_precautions.pdf).

**CDC Recommendations**

CDC issued a Clinical Update in September 2017: *C. auris Clinical Update - September 2017*, at [https://www.cdc.gov/fungal/diseases/candidiasis/c-auris-alert-09-17.html](https://www.cdc.gov/fungal/diseases/candidiasis/c-auris-alert-09-17.html). The clinical update includes important information for laboratorians, clinicians, infection prevention, and environmental services personnel. Key recommendations include the following:

**Laboratory testing of Candida isolates to determine the species**

- Laboratories should test all *Candida* isolates obtained from the bloodstream and other normally sterile, invasive body sites to determine the species.
- Laboratories should consider testing isolates from non-sterile, non-invasive sites to determine the *Candida* species in certain situations:
  - When clinically indicated for care of the patient,
  - When a case of *C. auris* infection or colonization has been identified in a facility or a unit, to detect other colonized patients. Species identification of isolates from non-sterile, non-invasive sites can be instituted on a temporary basis until there is reasonable evidence that there is no *C. auris* transmission.
  - When a patient has had an overnight stay in a healthcare facility outside the United States in the previous year in a country with documented *C. auris* transmission (currently India, Pakistan, South Africa and Venezuela).

**Monitoring for treatment failure**

- Patients with *C. auris* infection should be closely monitored for treatment failure, as indicated by persistently positive clinical cultures (i.e., >5 days).

**Screening contacts of patients with newly identified C. auris infection or colonization**:

- As part of the investigation of a patient with newly identified *C. auris* infection or colonization, patient close contacts in hospitals and nursing homes should be screened to detect *C. auris* colonization and to determine if transmission in the facility could have occurred. Facilities should contact the NYSDOH Regional Epidemiologist for assistance in determining a *C. auris* screening plan. At the direction of regional epidemiologists, NYSDOH Wadsworth Center Mycology Laboratory will provide supplies and shipping as well as process primary samples from both patient and environment.

**Cleaning and disinfecting environmental surfaces**

- Rooms of patients with *C. auris* should be cleaned and disinfected (daily and terminal) with an Environmental Protection Agency (EPA)-registered disinfectant effective against *Clostridium difficile* spores. Additionally, see recommendations specific to New York State healthcare facilities below.

**NYSDOH Recommendations**

In addition to the CDC recommendations above, NYSDOH makes the following recommendations for New York State healthcare facilities:
Laboratory testing of isolates to determine the species

- Laboratory personnel, healthcare providers, and infection control staff should review and follow CDC recommendations for laboratory testing of Candida isolates to determine the species. Recommendations are summarized in this advisory (above) and are available at: https://www.cdc.gov/fungal/diseases/candidiasis/c-auris-alert-09-17.html. In particular, facilities affected by C. auris should carefully consider the CDC recommendations about speciation of Candida isolates from non-sterile, non-invasive sites and develop an implementation plan that is feasible for the facility.

- Clinical laboratories in NYS should consider adding capacity to identify C. auris. Recommendations for identification are available from the CDC: https://www.cdc.gov/fungal/diseases/candidiasis/recommendations.html#identify.

- Clinical laboratories should also consider adding capacity to perform polymerase chain reaction (PCR) testing to detect C. auris from primary specimens collected for surveillance. PCR testing can be used as a rapid detection method to identify colonized patients and guide infection control practice. Protocols for conducting C. auris PCR testing are available from the NYS Wadsworth Center Mycology Laboratory upon request.

Patient transport within a facility

- When a patient is on Contact Precautions for C. auris and requires transport within the facility, it is preferred that the patient be transported on a clean stretcher or wheelchair, with clean linens, for movement through the facility. The patient’s bed and any supplies or equipment not needed during transport should remain in the isolation room whenever possible. Personal protective equipment (PPE) such as gowns and gloves should be removed and disposed of and hand hygiene performed before transport. During transport, PPE should be used by transport staff as needed according to Standard Precautions and facility policy. Transport stretchers and wheelchairs should be cleaned and disinfected with an Environmental Protection Agency (EPA)-registered hospital-grade disinfectant effective against Clostridium difficile spores and according to the manufacturer’s instructions when the transport is complete and before using the equipment on another patient.

- If a patient is unable to be transported on a stretcher or wheelchair, and transport in the patient’s isolation room bed is necessary, common sense strategies to reduce the risk of contamination outside the room should be used. For example, ensure bedrails and head and foot boards are disinfected with an EPA-registered hospital-grade disinfectant effective against Clostridium difficile spores, and ensure the patient is covered with clean linen whenever possible. In these situations, use of gowns and gloves by staff who are involved with the transport and who have hands-on contact with the patient or the patient’s equipment during transport may help to reduce contamination of transporters’ clothes and hands. Facilities should define in their internal policies the circumstances when PPE should be used during transport within the facility of patients on Contact Precautions for MDROs such as C. auris. Contamination of high touch surfaces such as door handles, automatic door buttons, and elevator buttons should be avoided and might require assistance from accompanying personnel who do not touch the patient, bed, or equipment. When used, transport staff should put on clean PPE at the start of the transport when leaving the patient’s room and should remove and discard PPE correctly and perform hand hygiene when the transport is complete and before leaving the transport destination.

- For all patient transports within a facility:
  o Ensure that the transport destination is informed that the patient is being transported and is on Contact Precautions for C. auris.
  o Ensure that the patient performs hand hygiene, whenever possible.
o Ensure that the patient wears clean clothes or a hospital gown and is covered with a clean sheet.
o Ensure that wound dressings (if present) are dry and intact and that any drainage or secretions and infected or colonized areas of the patient’s body are contained and covered, to the extent possible.
o Staff at the destination should implement Contact Precautions appropriate for the setting during tests, treatments, and procedures, including performing hand hygiene and donning clean PPE.
o Environmental surfaces at the destination should be cleaned with an EPA-registered hospital-grade disinfectant effective against *Clostridium difficile* spores after the patient leaves and before another patient enters the area.

**Patient transfer between healthcare facilities**

- When patients/residents are transferred between healthcare facilities, receiving facilities should be given notification of the recommended infection control precautions for patients with *C. auris* infection or colonization. Facilities should include the *C. auris* diagnosis and infection prevention and control measures prominently in the patient discharge or transfer documentation. Use of an infection control transfer form may help facilitate communication. An example of a transfer form is available at: https://www.cdc.gov/hai/pdfs/toolkits/infectioncontroltransferformexample2.pdf.
- Failure of a transferring facility to effectively communicate a patient’s diagnosis of *C. auris* infection or colonization to the receiving facility at the time of transfer is considered a serious infection control breach and may result in regulatory action. Communication failures have resulted in delays in the implementation of Contact Precautions and other control measures and are suspected to have contributed to transmission. Facilities are urged to evaluate their systems for communicating critical infection control information at transfer, particularly when transfer occurs outside of normal business hours (e.g., evening and night shifts, weekends or holidays).
- The NYSDOH regional epidemiologist should be notified before a patient with *C. auris* colonization or infection is transferred to another healthcare facility, whenever possible.
- When EMS transporting agencies are used for transport of patients/residents with *C. auris* infection or colonization to other healthcare facilities, the transferring facility should inform EMS of the recommended infection control precautions.
- EMS transporting agencies should enforce their written policies for infection control practice and for cleaning and decontamination of authorized EMS response vehicles and equipment. Recommended infection control practices for the transport of patients with *C. auris* infection or colonization include hand hygiene, PPE use, and proper cleaning and disinfection of equipment and patient care areas as outlined in the educational slide set ‘Infection Prevention and Control for EMS’ available at: https://www.health.ny.gov/diseases/communicable/c_auris/providers/.

**Use of an EPA-registered hospital-grade disinfectant effective against Clostridium difficile spores**

- *C. auris* can persist on surfaces in healthcare environments for weeks. An EPA-registered hospital-grade disinfectant effective against *Clostridium difficile* spores is recommended for surface disinfection. Surface disinfectants should be used according to the manufacturer’s directions including ensuring the correct contact time.
- Thorough daily and terminal cleaning and disinfection of patients’ rooms and areas outside of their rooms where they receive care is important. Reusable non-critical equipment should be dedicated to patients on *C. auris* Contact Precautions whenever possible. Shared equipment should be cleaned and disinfected routinely and before use by another patient.
• If needed, facilities should contact the equipment manufacturer (e.g., manufacturer of ventilators, ultrasound equipment or other equipment as needed) to identify an acceptable and effective product for cleaning and disinfecting equipment used for patients with \textit{C. auris} infection or colonization. If the manufacturer cannot recommend a product that is an EPA-registered hospital-grade disinfectant effective against \textit{Clostridium difficile} spores for a specific piece of equipment, a disinfectant that contains a quaternary ammonium and alcohol that is pre-mixed by the manufacturer could be considered as an alternative. Ensure staff are educated about the correct equipment cleaning procedures.

• NYSDOH recommends that floors in rooms of patients with \textit{C. auris} and patient care areas where such patients have been present be disinfected with an EPA-registered hospital-grade disinfectant effective against \textit{Clostridium difficile} spores to help reduce contamination.

• Surface disinfection using an EPA-registered hospital-grade disinfectant effective against \textit{Clostridium difficile} spores should be considered in entire units or facilities in certain situations:
  - Following identification of a first case of \textit{C. auris} in a facility as a temporary measure to help eliminate environmental contamination,
  - In facilities that frequently house or admit patients with \textit{C. auris},
  - In facilities that have recent suspected transmission of \textit{C. auris},
  - In facilities that have documented contamination of the environment.

Healthcare facilities should review and implement all applicable recommendations from the CDC and the NYSDOH for \textit{C. auris} infection prevention and control. Healthcare facilities should monitor the CDC and the NYSDOH websites for new information and revisions to current recommendations.

References

NYSDOH

• Get the facts about Candida auris, NYSDOH
  https://www.health.ny.gov/diseases/communicable/c_auris/

• Health Advisory: Update to Healthcare Facilities regarding Multidrug-Resistant Yeast \textit{Candida auris} in New York State

• NYSDOH Health Advisory: Alert to New York State Clinical Laboratories Identification and Reporting of Suspected \textit{Candida auris} Isolates

• NYSDOH Health Advisory: Alert to New York State Healthcare Facilities regarding the Global Emergence of Invasive Infections Caused by the Multidrug-Resistant Yeast \textit{Candida auris}

CDC

• June 2016 CDC Clinical Alert regarding \textit{C. auris}
  https://www.cdc.gov/fungal/diseases/candidiasis/candida-auris-alert.html

• Candida auris: https://www.cdc.gov/fungal/diseases/candidiasis/candida-auris.html

• Laboratory identification of \textit{C. auris}:
  https://www.cdc.gov/fungal/diseases/candidiasis/recommendations.html

• Treatment guidelines: https://www.cdc.gov/fungal/diseases/candidiasis/c-auris-treatment.html

• Infection control, including infection control in various settings: https://www.cdc.gov/fungal/diseases/candidiasis/c-auris-infection-control.html

**Reporting**

*C. auris* is considered an emerging pathogen. As such, cases are reportable to NYSDOH or the local health department regardless of the setting in which they occur.

Cases of *C. auris* infection or colonization that occur in hospitals, nursing homes and other healthcare facilities licensed under Article 28 of the NYS Public Health Law should be reported to the NYSDOH regional epidemiologist or to the NYSDOH Bureau of Healthcare Associated Infections, Healthcare Epidemiology and Infection Control Program Central Office:

NYSDOH Regional and Central Office Contact Information:

Western Regional Office       (716) 847-4503
Central New York Regional Office      (315) 477-8165
Metropolitan Area Regional Office    (914) 654-7149
Capital District Regional Office    (518) 474-1142
Central Office                    (518) 474-1142

Reporting requirements and instructions for NYSDOH facilities licensed under Article 28 of the Public Health Law are available at:
http://www.health.ny.gov/professionals/diseases/reporting/communicable/infection/reporting.htm

Cases of *C. auris* infection or colonization that occur in settings other than healthcare facilities licensed under Article 28 of the NYS Public Health Law should be reported to the local health department where the patient resides:

http://www.nysacho.org/i4a/pages/index.cfm?pageid=3713
https://www.health.ny.gov/professionals/diseases/reporting/communicable/

General questions or comments about this advisory can be sent to icp@health.ny.gov.