Nebraska Department of Health and Human Services

Health Alert Network

ALERT

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Candida auris in Nebraska

Candida auris is an emerging antimicrobial-resistant yeast that was first identified in 2009 in Asia and began spreading in the United States in 2015. It can cause severe infections and spreads easily between hospitalized patients and nursing home residents. *C. auris* is often multidrug-resistant and some strains are resistant to all three major classes of antifungal medications. In 2019, CDC declared *C. auris* as one of the urgent (highest level) antibiotic resistance threats in the United States. It is still rare in the US, but cases have been increasing nationwide with 8,131 *C. auris* cases (clinical and screening cases) detected in the US in 2022 as compared to 323 in 2018. Nebraska is considered a low incidence state and transmission of *C. auris* was not detected before this year. However, to-date, 5 cases (clinical and screening cases) of *C. auris* have been identified in Nebraska in 2024. Therefore, it is important for all healthcare personnel in Nebraska to be aware of transmission dynamics, risk factors, diagnostic challenges, and treatment recommendations for *C. auris*.

***Candida auris* transmission and clinical risk factors:** *C. auris* can spread easily in healthcare facilities through contact with contaminated surfaces (e.g., bedrails, bedside tables), shared mobile medical equipment (e.g., glucometers, ultrasound machines) or the hands or clothing of healthcare personnel. It can also persist on patients and surfaces for long periods of time and since many commonly used hospital grade disinfectants are not effective against it, *C. auris* can spread easily among patients and cause outbreaks in healthcare settings. However, most people who get *C. auris* infections already have underlying clinical risk factors such as weakened immune system, being on mechanical ventilation, presence of indwelling medical devices, receiving complex or high acuity medical care, frequent or long-healthcare stays and/or colonization or infection with other multidrug resistant organisms. Healthy people usually do not get *C. auris* infections.

Epidemiological risk factors and risk mitigation strategies: Patients who have received healthcare outside the US or within the US in parts of country with high burden of *C. auris* are at higher risk for *C. auris* colonization and/or infection. Similarly, patients with current or previous healthcare encounters at any facility in the US with currently suspected or confirmed *C. auris* transmission will also be at higher risk for colonization and/or infection with *C. auris*, especially those with underlying clinical risk factors described above. Therefore, all healthcare facilities in Nebraska must remain vigilant for the following high-risk indicators for *C. auris* patients:

- History of an overnight stay in a healthcare facility outside of the United States within the previous 12 months, **OR**
- History of ambulatory surgery or hemodialysis performed outside of the United States within the previous 12 months, **OR**
- History of an overnight stay within the previous 12 months in a hospital or skilled nursing facility in any of the states with high burden of *C. auris* such as California, Nevada, Texas, Illinois, Florida, New York, New Jersey. (For most up to date information on states with high *C. auris* burden refer to the CDC *C. auris* tracking data) **OR**
- Patients that are a roommate or close contact to a known *C. auris* positive patient in a healthcare setting, **OR**
- Patients from healthcare facilities with high prevalence or ongoing transmission of *C. auris*.

Upon identification of any of the epidemiological risk factors, healthcare facilities can mitigate risk of *C. auris* transmission with following considerations:

- Using the appropriate level of transmission-based precautions, (usually contact precautions for hospitals and enhanced barrier precautions for the nursing homes in most situation) while *C. auris* colonization and/or infection is being ruled out **AND**

- Conducting admission screening (bilateral axilla and groin swab) for *C. auris* when patients (especially those with clinical risk factors) are identified to have any of the epidemiological risk factors, **AND**
- Conducting a widespread (point prevalence) screening based on intra-facility risk, if *C. auris* is detected, **AND**
- Ensuring disinfectants used by environmental services personnel are effective against *C. auris* (by checking they are listed on the EPA List P of disinfectants).
    - If a List P disinfectant is not immediately available, use disinfectants found on EPA List K.

It should be noted that the decisions regarding admission or discharge of a patient should be based on clinical criteria and the ability of the facility to provide care – not on the presence or absence of infection or colonization with *C. auris*. When transferring a patient with *C. auris* colonization or infection to another healthcare facility or to another unit within a facility, notify the receiving facility or unit of the patient's *C. auris* infection or colonization status, including recommended transmission-based precautions. Healthcare facilities in Nebraska can reach out to Nebraska DHHS healthcare-associated infections and antimicrobial resistance (HAI/AR) program if they need assistance with admission or point prevalence screening. Furthermore, facilities can also request free assessment of their infection prevention and control strategies from Nebraska Infection Control Assessment and Promotion program (ICAP) to make sure their protocols are in alignment with current recommendations.

Diagnostic Challenges and reporting requirements: It is important to note that *C. auris* can be misidentified as a number of different organisms when using traditional phenotypic methods for yeast identification such as VITEK 2 YST, API 20C, BD Phoenix yeast identification system, and MicroScan. Detailed algorithms for when to suspect *C. auris* based on identification methods are available at this link. An increase in infections due to unidentified *Candida species* in a patient care unit, including increases in isolation of *Candida* from urine specimens, should also prompt suspicion for *C. auris*. Additional information regarding identification of *C. auris* and diagnostic challenges can be found at this link.

All laboratory tests (both from clinical and screening specimens) that are positive for *C. auris* must be reported immediately to public health and specimens should be forwarded to Nebraska Public Health Laboratory (NPHL). Specimens should also be sent to NPHL for further testing if misidentification of *Candida species* is suspected or if laboratory does not have the ability to perform species identification on *Candida* isolates growing from a sterile body site. Furthermore, healthcare workers should also inform public health if they become aware of any patient with a positive *C. auris* clinical or screening test result performed outside of Nebraska.

***Candida auris* treatment:** In the United States, about 90% of *C. auris* isolates have been resistant to fluconazole, and about 30% have been resistant to amphotericin B. Most strains of *C. auris* in the US (>95%) have been susceptible to echinocandin although reports of echinocandin or pan-resistant cases are increasing. This organism appears to develop resistance quickly. Patients on antifungal treatment should be carefully monitored for clinical improvement. Consultation with an infectious disease specialist is highly recommended when caring for patients with *C. auris* infection. It is important to note that even after treatment for invasive infections, patients generally remain colonized with *C. auris* for long periods, and perhaps indefinitely. Therefore, all recommended infection control measures (including adherence to hand hygiene, appropriate use of transmission-based precautions, cleaning and disinfection, appropriate notification during transition of care, contact screening, and laboratory surveillance of clinical specimens to detect additional cases) should be followed during and after treatment for *C. auris* infection.

Treatment of *C. auris* identified from noninvasive sites (such as respiratory tract, urine, and skin colonization) when there is no evidence of infection is not recommended. Similar to recommendations for other *Candida species*, treatment is generally only indicated if clinical disease is present. However, infection control measures, as described above, should be used for all patients with *C. auris*, regardless of source of specimen. Many patients with *C. auris* infection or colonization have received broad-spectrum antibacterial and antifungal medications in the weeks before their first culture yielding *C. auris*. Assessing the appropriateness of antibiotics, especially antifungals, and discontinuing them when not needed may help prevent *C. auris* colonization and infection. Healthcare providers and facilities in Nebraska can also request a free assessment of antibiotic stewardship programs to help improve prescribing protocols from Nebraska Antimicrobial Stewardship Assessment and Promotion Program (ASAP).

For additional information on *Candida auris*, please visit Nebraska DHHS HAI/AR Program website.

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