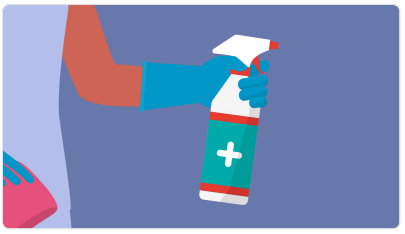
Infection Control Guidance: *Candida auris*

APR. 24, 2024

AT A GLANCE

Similar to other multidrug-resistant organisms (MDROs), *C. auris* spreads easily in healthcare settings and can cause outbreaks. *C. auris* can colonize patients for many months, persist on surfaces, and is not killed by some commonly used healthcare facility disinfectants. Hand hygiene, appropriate precautions, and environmental disinfection prevent and control outbreaks.



Summary of recommendations

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

- Hand hygiene.
- Setting-based precautions.
- Environmental disinfection with product effective against *C. auris.*
- Patient transfers that communicate patient's *C. auris* status.

In most instances, facilities equipped to care for patients with other multidrug-resistant organisms (MDROs) or *Clostridioides difficile* can also care for patients with *C. auris.*

Environmental disinfection

C. auris can persist on surfaces in healthcare settings. *C. auris* has been cultured from multiple locations in patient rooms. The fungus has been found on both high-touch surfaces, such as bedside tables and bedrails, and surfaces farther away from the patient, such as windowsills.

Surface Disinfectants

Several common hospital disinfectants are not effective against *C. auris.* Some products with *C. albicans* or fungicidal claims may not be effective against *C. auris.* Accumulating data indicate that products solely dependent on quaternary ammonia compounds (QACs) are **NOT** effective.

Products with EPA-registered claims for *C. auris* (List P)

CDC recommends using an Environmental Protection Agency (EPA)–registered hospital-grade disinfectant effective against *C. auris.* See EPA's List P for a current list of EPA-approved products for *C. auris.*

It is important to follow all manufacturer's directions for use, including applying the product for the correct contact time for all products.

"No-touch" devices

Research about disinfection effective against *C. auris* is ongoing. Data on "no-touch" devices, such as germicidal UV irradiation and vaporized hydrogen peroxide, are limited. The parameters required for effective disinfection are not yet well understood. These methods should only be used as a supplement to standard cleaning and disinfection methods.

Thorough routine and terminal discharge

Perform thorough routine (at least daily) and terminal cleaning and disinfection of patients' rooms and areas where patients receive care. Appropriately disinfect radiology, physical therapy, and other areas of the hospital patients may have visited.

Mobile and reusable equipment

Medical equipment that is shared between patients can spread *C. auris*. Clean and disinfect equipment after each use. Label disinfected equipment and separate it from dirty equipment.

Examples include:

- Glucometers
- Temperature probes
- Blood pressure cuffs
- Ultrasound machines
- Nursing carts
- Ventilators
- Physical therapy equipment

CDC and health department outbreak investigations have found that healthcare personnel are not always aware of ftheir responsibilities for cleaning mobile and shared equipment.

Responsibilities for cleaning all mobile and reusable equipment should be well-established. Healthcare personnel should be aware of which equipment they are responsible to clean and trained in disinfection methods.

Follow all manufacturer's directions for surface disinfectants while cleaning equipment.

Recommendation details

Expand All

Hand hygiene

When caring for patients with *C. auris*, healthcare providers should follow standard hand hygiene practices. Alcohol-based hand sanitizer is preferred for *C. auris* when hands are not visibly soiled. If hands are visibly soiled, wash with soap and water. Wearing gloves is not a substitute for hand hygiene.

Transmission-Based and Enhanced Barrier Precautions

The Transmission-Based Precautions and Enhanced Barrier Precautions for *C. auris* are similar to those used for other multidrug-resistant organisms (MDROs). In most instances, facilities equipped to care for patients with other MDROs or *Clostridioides difficile* can also care for patients with *C. auris.*

In acute care and long-term acute care hospitals, healthcare providers should use Contact Precautions. In nursing homes and skilled nursing facilities, healthcare providers should use either Contact Precautions or Enhanced Barrier Precautions (EBP), based on the situation and local or state jurisdiction recommendations.

Refer to the CDC Guidance on Enhanced Barrier Precautions PDF for more details about when Contact Precautions versus Enhanced Barrier Precautions would apply.

Considerations for patient room placement

Hospitals and nursing homes

Patients on Contact Precautions should be placed in a single-patient room whenever possible. In situations where limited single-rooms are available, prioritize placing patients with higher likelihood of transmission (such as those with uncontained secretions or excretions, diarrhea, and draining wounds).

Facilities can group *C. auris* patients together in a dedicated unit or part of a unit. This decreases movement of healthcare personnel and equipment to non-affected areas. Facilities could also consider dedicating healthcare personnel (e.g., nurses, nursing assistants) who provide regular care to these patients during a shift.

In nursing homes, facilities with the capacity may consider placing patients with *C. auris* in single-patient rooms. Healthcare providers can find recommendations about patient placement in nursing homes using Enhanced Barrier Precautions (EBP) in CDC's FAQs about Enhanced Barrier Precautions in Nursing Homes.

When single rooms are not available, facilities may choose to cohort patients with *C. auris* together in the same room. It is preferable to cohort patients with the same MDROs together. However, facilities may assign rooms based on single (or a limited number of) high-concern MDROs (e.g., *C. auris* or carbapenemase-producing Enterobacterales) without regard to co-colonizing organisms.

Reducing transmission in cohort settings

Facilities must implement strategies to help minimize transmission between roommates when patients are placed in shared rooms. The following strategies apply for all shared rooms, regardless of patient colonization or infection status:

- Maintain separation of at least 3 feet between beds.
- Use privacy curtains to limit direct contact.
- Clean and disinfect as if each bed area were a different room.
- Clean and disinfect any shared or reusable equipment.
- Change mopheads, cleaning cloths, and other cleaning equipment between bed areas.
- Clean and disinfect environmental surfaces on a more frequent schedule.
- Have healthcare personnel change personal protective equipment (if worn), including gloves.
- Perform hand hygiene before and after interaction with each roommate.

Benefits and drawbacks to patient cohorting

Before making decisions to cohort patients according to *C. auris* or other high-concern MDROs, consider the benefits and drawbacks. Ensure these practices are implemented without increasing the risk of pathogen spread in dedicated units or areas in a facility.

Benefits

Placing patients with *C. auris* or other high-concern MDROs in the same room, or in a dedicated unit, wing, or area (even if in single-patient rooms) with dedicated staff can help prevent the transfer of healthcare personnel and equipment between those colonized or infected with *C. auris* and those who are not.

This strategy may be best used for initial room assignments in facilities performing admission screening for select MDROs or for a single MDRO in facilities with an acute outbreak.

Drawbacks

Moving patients to the same room, unit, or areas based on MDROs increases patient movement, and in some circumstances, increases *C. auris* transmission. This risk increases if there are gaps in environmental cleaning.

Facilities choosing to implement this strategy should do so in a way that reduces overall exposures throughout the facility. This includes avoiding frequent room changes that lead to environmental contamination in more areas and more healthcare contacts that could be exposed.

Patient transfer

Notify the receiving facility or unit of the patients *C. auris* infection or colonization status when transferring a patient. This includes recommended Transmission-Based Precautions. An example of an infection control transfer form to aid this communication can be found at the top of the Healthcare-Associated Infections Prevention Toolkits web page.

Discharging patients

Decisions to discharge the patient from one level of care to another should be based on clinical criteria and the ability of the accepting facility to provide care—not on the presence or absence of infection or colonization.

Implementing the recommendations

Ensuring that all healthcare personnel adhere to infection control recommendations is critical to preventing transmission of *C. auris*, other MDROs, and communicable diseases. Consider taking the steps outlined below to enhance adherence.

Expand All

Educating healthcare personnel

- Provide education on *C. auris* and the importance of appropriate precautions.
- In addition to educating healthcare providers who have direct contact with patients, educate personnel involved in environmental services, activity programs, and dietary services, and other healthcare personnel without routine direct patient contact.
- Follow-up education may be needed to reinforce concepts and to account for healthcare personnel changes and guidance updates.

Supplies

- Ensure that adequate supplies are available to implement and maintain appropriate infection control measures.
- This includes alcohol-based hand sanitizer, gowns and gloves, and cleaning and disinfection agents.

Perform infection control audits

- Monitor for adherence to appropriate infection control practices by performing audits.
- Provide feedback on hand hygiene practices, donning and doffing of gowns and gloves, and environmental cleaning and disinfection.
- Consider increasing the number of audits performed on units with *C. auris* cases.

Communicate *C. auris* infections to other healthcare staff

- Ensure that an appropriate sign is present on the patient's door to alert healthcare personnel and visitors of recommended precautions.
- Flag the patient's record to alert healthcare personnel to institute recommended infection control measures in case of readmission.

Setting-specific considerations

C. auris infection control in dialysis facilities

The following is interim guidance for patients with *C. auris* who require dialysis care. Further updates will be provided as additional information becomes available.

In addition to following Standard Precautions and infection control practices routinely recommended for the care of all hemodialysis patients, facilities and healthcare personnel at dialysis centers should follow the guidance outlined below.

Inform and educate

Inform and educate appropriate personnel about the presence of a patient with *C. auris* and the need for specific infection control measures.

Practice good hand hygiene

Use alcohol-based hand sanitizer as the preferred method for **cleaning hands** when they are not visibly soiled. If hands are visibly soiled, wash with soap and water. Wearing gloves is not a substitute for hand hygiene.

Wear gowns and gloves

Wear gowns and gloves using proper donning and doffing techniques when caring for patients with *C. auris* or touching items at the dialysis station. Remove gowns and gloves, dispose of them carefully, and perform hand hygiene when leaving the patient's station.

Minimize exposure to other patients by dialyzing the patient at a station with as few adjacent stations as possible (e.g., at the end or corner of the unit), and consider dialyzing the patient on the last shift of the day.

Clean and disinfect equipment

Properly **clean and disinfect reusable equipment** brought to the dialysis station after each use.

Thoroughly clean and disinfect the dialysis station (e.g., chairs, side tables, machines) between patients by using products approved for use against *C. auris* (see above for more information about these disinfectant products and List P).

Communicate *C. auris* infection status

If the patient is transferred to another healthcare facility, **inform the receiving facility** of the patient's *C. auris* status. Communication tools can be found in Healthcare-Associated Infections Prevention Toolkits.

C. auris infection control in outpatient settings

In addition to following Standard Precautions and infection control practices routinely recommended for care of all patients in outpatient settings, facilities and healthcare personnel should follow the guidance outlined below.

Inform and educate

Inform and educate appropriate healthcare personnel about the presence of a patient with *C. auris* and the need for infection control measures outlined below.

Practice good hand hygiene

Use alcohol-based hand sanitizer as the preferred method for **cleaning hands** when they are not visibly soiled. If hands are visibly soiled, wash with soap and water. Wearing gloves is not a substitute for hand hygiene. As always, perform hand hygiene when entering and leaving the patient's room.

Wear gowns and gloves

Wear **gown and gloves** using proper donning and doffing techniques if extensive patient contact is anticipated or contact with infected areas is planned (e.g., debridement or dressing of colonized or infected wound). Remove gowns and gloves, dispose of them carefully, and perform hand hygiene when leaving the patient's room.

Clean and disinfect equipment

Thoroughly **clean and disinfect** the areas in the facility the patient came into contact with (e.g., chairs, exam tables) by using products with EPA-registered claims for *C. auris* (List P).

Properly **clean and disinfect reusable equipment** (e.g., blood pressure cuffs) used in the care of the patient after each use.

Communicate *C. auris* infection status

If the patient needs to be admitted or referred to another facility, **inform the receiving facility** of the patient's *C. auris* status.

C. auris infection control in home healthcare settings

In addition to following Standard Precautions and infection control practices routinely recommended in home healthcare settings, personnel should follow the guidance outlined below.

Plan ahead

If possible, schedule patients with *C. auris* as the **last visit of the day**.

Practice good hand hygiene

Use alcohol-based hand sanitizer as the preferred method for **cleaning hands** when they are not visibly soiled. If hands are visibly soiled, wash with soap and water. Wearing gloves is not a substitute for hand hygiene. As always, perform hand hygiene when entering and leaving the patient care area.

Wear gowns and gloves

Wear **gown and gloves** using proper donning and doffing techniques when entering the area of the house where providing patient care. Remove gowns and gloves and dispose of them carefully when leaving the area.

Clean and disinfect equipment

Properly clean any **reusable equipment** (e.g., blood pressure cuffs) brought to the home after each use.

Communicate *C. auris* status

If the patient needs to be admitted or referred to another facility, **inform the receiving facility** of the patient's *C. auris* status.

C. auris infection control for home and family members

The risk of *C. auris* infection for otherwise healthy household members, even those with extensive contact with the patient, is believed to be low. Nearly all cases of *C. auris* colonization detected to date have been associated with admission to a healthcare facility.

Household members should practice good hand hygiene (i.e., use of alcohol-based hand sanitizers or frequent handwashing with soap and water). Household members could consider wearing disposable gloves while providing high-touch care to a person with *C. auris*, such as changing the dressing on an infected wound, and perform hand hygiene after glove removal.

Communicate *C. auris* infections with healthcare providers

Although the risk of *C. auris* colonization among healthy household members is thought to be very low, household members who require admission to a healthcare facility can inform healthcare providers that they live with someone colonized with *C. auris* so that colonization testing can be considered.

Additional information

Duration of precautions

Patients in healthcare facilities often remain colonized with *C. auris* for many months, perhaps indefinitely, even after an acute infection (if present) has been treated and resolves. CDC recommends continuing Contact Precautions or Enhanced Barrier Precautions, depending on the healthcare setting, for the entire duration of all inpatient healthcare stays. This includes patients in long-term healthcare facilities.

Surveillance has identified patients that remained colonized for longer than 4 years and it is likely that colonization may even persist longer. Repeat colonization swabs may alternate between detecting and not detecting *C. auris.* A considerable number of patients have had a positive *C. auris* specimen after multiple negative swabs.

Reassessment of colonization

CDC does not recommend routine reassessments for *C. auris* colonization. Long-term follow-up of colonized patients in healthcare facilities, especially those patients who continue to require complex medical care, such as ventilator support, suggests colonization persists for a prolonged period of time.

In a publication by Pacilli et al. (Clin Infect Dis 2020), among patients who had a positive *C. auris* screening result followed by one or more negative screening results, more than 50% had a subsequent positive screening result. Additional information is being collected to understand

the duration of colonization and the role of colonization in spread of *C. auris*.

The decision to discharge a patient from one level of care to another should be based on clinical criteria and the ability of the accepting facility to provide care—not on the presence or absence of infection or colonization.

Reducing or eliminating *C. auris* colonization (decolonization)

At this time, no specific intervention is known to reduce or eliminate *C. auris* colonization. Laboratory evidence suggests that high levels of chlorhexidine are active against *C. auris*. However, the effects of chlorhexidine on reducing *C. auris* skin burden or infection have not been systematically assessed. *C. auris* outbreaks and transmission have been observed in facilities routinely using chlorhexidine bathing.

SOURCES

CONTENT SOURCE:
National Center for Emerging and Zoonotic Infectious Diseases (NCEZID)

SOURCES

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