Transfer Packet
Patients With *Candida auris*

Florida Department of Health

Health Care-Associated Infection Prevention Program

HAI_Program@flhealth.gov

850-245-4401

Use this packet as a guide and resource when transferring and accepting new patients with confirmed or suspected *Candida auris* infection or colonization. This packet includes:

1. Inter-facility transfer information sheet
2. Infection control recommendations
3. Fact sheet on *C. auris*
4. Isolation signage
5. My Five Moments for Hand Hygiene
6. Personal protective equipment (PPE) guidance
7. Environmental cleaning guidance
8. Containment guidance
9. Screening guidance and duration of contact precautions
10. Additional infection control resources

Candida auris Transfer Information Sheet

Immediately place this patient on transmission based precautions.

Acute Care Settings: Contact Precautions only
Long-term Care Settings: Contact Precautions or Enhanced Barrier Precautions (EBP), depending on the situation (refer to page 5 for more information).

Patient name: _____ (Last, First)

Date of birth: _____ (MM/DD/YYYY)

Discharging facility: _____

Date completed: _____ (MM/DD/YYYY)

Reporter name: _____

Contact number: _____ (XXX-XXX-XXXX)

Specimen collection date: _____ (MM/DD/YYYY)

Specimen source: _____

This patient was identified with *C. auris*: (select one)

- ◯ Infection: Identification during clinical testing
  - ☐ This infection has been treated
  - ☐ Treatment is ongoing
- ◯ Colonization: Identification during surveillance testing

The case status is: (select one)

- ◯ Confirmed: *C. auris* was isolated from a body site
- ◯ Under investigation: Laboratory results are pending and *C. auris* is suspected

Notes: _____

_____

_____

_____

If you have additional questions, please contact the Florida Department of Health Health Care-Associated Infection Prevention Program at: (e) HAI_Program@FLHealth.gov (p) 850-245-4401

Prepared August 16, 2019

Candida auris Infection Control Recommendations

The Florida Department of Health and the Centers for Disease Control and Prevention (CDC) recommend:

Patient is immediately placed on the following transmission based precautions:
Acute care settings: Contact Precautions only
Long-term care settings: Contact Precautions or Enhanced Barrier Precautions, depending on the situation (refer to page 5 for more information).

Additional recommendations include:

- **Place patient in the following:**
  - Patients/residents on **Contact Precautions** should be placed in a **private room**. If a patient cannot be placed in a private room, ensure roommates or neighbors are low risk for developing infections (e.g., immunocompetent patients, have no or few indwelling devices).
  - Residents on **Enhanced Barrier Precautions** are not restricted to their rooms and do not require placement in a private room. Because Enhanced Barrier Precautions do not impose the same activity and room placement restrictions as Contact Precautions, they are intended to be a longer-term approach to managing individuals colonized with targeted pathogens.
  - For FAQ's please refer to: https://www.cdc.gov/hai/containment/faqs.html
- **Wear gown and gloves** when interacting with patient or in patient's environment.
- **Conduct diligent hand hygiene during and after contact with this patient.** Refer to "My 5 Moments for Hand Hygiene" from the World Health Organization on Page 7.
- **Use a List K Environmental Protection Agency (EPA)-registered hospital-grade disinfectant effective against *Clostridioides difficile* spores**: www.epa.gov/sites/production/files/2018-01/documents/2018.10.01.listk_.pdf.
  - **Clean patient room daily.** Ensure that high-touch surfaces such as bedrails and bedside tables are wiped daily.
  - **Disinfect all equipment that has been in contact with patient** (e.g., blood pressure cuffs, physical therapy equipment).
  - **Adhere to recommended contact time from disinfectant's manufacturer.**
- **Notify the Florida Department of Health at 850-245-4401 to report the patient's admission and discharge.**
  - If patient is being transferred out to another facility, complete Transfer Information Sheet in Page 2 and communicate these recommendations to the receiving facility.
  - In consultation with the Department of Health, periodic reassessments for the presence of *C. auris* colonization may be conducted to inform duration of infection control measures. Patient may be removed from contact precautions following a series of negative surveillance cultures.

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Prepared August 16, 2019

Guidance for Interfacility Transfer for Patients Colonized or Infected with *Candida auris (C. auris)*

Interfacility Transfer of Patients with *C. auris*

- **It is inappropriate to deny admission or refuse service to any individual who may be infected or colonized with methicillin-resistant *Staphylococcus aureus* (MRSA), vancomycin-resistant Enterococci (VRE), *Clostridioides difficile (C. diff)*, *Acinetobacter baumannii (A. baumannii)*, carbapenem-resistant Enterobacteriaceae (CRE), or any other drug resistant organism.[1]**
    - Policies to this effect are often based on misinformation about the organisms and may be discriminatory to the patient. Facilities should take steps to learn a patient's MDRO status and must be prepared to implement appropriate infection control measures when necessary.[1]
- **Access to health care must not be denied or limited by multidrug-resistant organism (MDRO) status.[1]**
- **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 colonization.[2]**
- **In most instances, facilities that care for patients with other MDROs or *C. diff* can also care for patients with *C. auris*.[2]**

Implementation of Transmission-Based Precautions (TBP)

Acute Care Settings: Contact precautions only[3]
Long-Term Care Settings: Contact precautions or Enhanced Barrier Precautions (EBP), depending on the situation (refer to page 5 for more information).[3]

CDC has additional information on EBP through FAQ and a free continuing education webinar.

[1]Florida Department of Health. (2017). Guidelines for Prevention and Control of Infections Due to Antibiotic-Resistant Organisms. Retrieved from FloridaHealth.gov/diseases-and-conditions/health-care-associated-infections/_documents/guidelines-for-prevention-and-control-mdro.pdf
[2]Centers for Disease Control and Prevention. (2020). Infection Prevention and Control for *Candida auris*. Retrieved from www.cdc.gov/fungal/candida-auris/c-auris-infection-control.html
[3]Centers for Disease Control and Prevention. (2019). Implementation of Personal Protective Equipment (PPE) in Nursing Homes to Prevent Spread of Novel or Targeted Multidrug-resistant Organisms (MDROs). Retrieved from www.cdc.gov/hai/containment/PPE-Nursing-Homes.html

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Prepared June 2020

Guidance for Interfacility Transfer for Patients Colonized or Infected with *Candida auris (C. auris)*

Implementation of Contact Precautions or Enhanced Barrier Precautions

Acute Care Settings: Contact precautions **only**[1]
Long-Term Care Settings: Contact precautions or Enhanced Barrier Precautions (EBP), **depending on the situation** (see below).[1]
CDC has additional information on EBP through FAQ and a free continuing education webinar.

	Contact Precautions	Enhanced Barrier Precautions (EBP)
Indications	All patients/residents infected or colonized with *C. auris* with presence of acute diarrhea, draining wounds or other sites of secretions or excretions that are unable to be covered or contained.[1,2] On units or in facilities where ongoing transmission is documented or suspected.[1,2]	All patients/residents with any of the following: • Infection or colonization with *C. auris* when Contact Precautions **do not** apply.[1,2] • Wounds and/or indwelling medical devices regardless of *C. auris* colonization status who reside on a unit or wing where a resident known to be infected or colonized *C. auris* resides.[1,2]
Personal Protective Equipment (PPE)	Gloves and gown are required prior to room entry.[1] • Put on before room entry, discard before room exit; change before caring for another resident.[1] • Face protection may also be needed if performing activity with risk of splash or spray.[1]	Gloves and gown are required prior to high-contact care activities.[1] **High-contact care activities include:** • Dressing • Bathing/showering • Transferring • Providing hygiene care • Changing linens • Changing briefs or assisting with toileting • Device care or use: central line, urinary catheter, feeding tube, tracheostomy/ventilator • Wound care: any skin opening requiring a dressing
Environmental Cleaning and Disinfection	Thorough daily and terminal cleaning and disinfection of patients'/residents' rooms and other areas where they receive care using an Environmental Protection Agency (EPA) registered disinfectant on List K.[2]	Thorough daily and terminal cleaning and disinfection of patients'/residents' rooms and other areas where they receive care using an Environmental Protection Agency (EPA) registered disinfectant on List K.[2]
Hand Hygiene	Alcohol-based hand rub (ABHR) is preferred unless hands are visibly soiled. If hands are visibly soiled, wash with soap and water.[2]	ABHR is preferred unless hands are visibly soiled. If hands are visibly soiled, wash with soap and water.[2]
Patient Room Placement	Patient should be placed on private room. If a patient cannot be placed in a private room, ensure roommates are low risk for developing infections.[2]	Residents on Enhanced Barrier Precautions are not restricted to their rooms and do not require placement in a private room.[2]

[1]Centers for Disease Control and Prevention. (2019). Implementation of Personal Protective Equipment (PPE) in Nursing Homes to Prevent Spread of Novel or Targeted Multidrug-resistant Organisms (MDROs). Retrieved from www.cdc.gov/hai/containment/PPE-Nursing-Homes.html
[2] Centers for Disease Control and Prevention. (2020). Infection Prevention and Control for *Candida auris*. Retrieved from www.cdc.gov/fungal/candida-auris/c-auris

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Candida auris: A drug-resistant yeast that spreads in healthcare facilities

A CDC message to infection preventionists

Candida auris is a yeast that causes serious infections. Infection preventionists, healthcare workers, and laboratory staff can all help stop it from spreading.

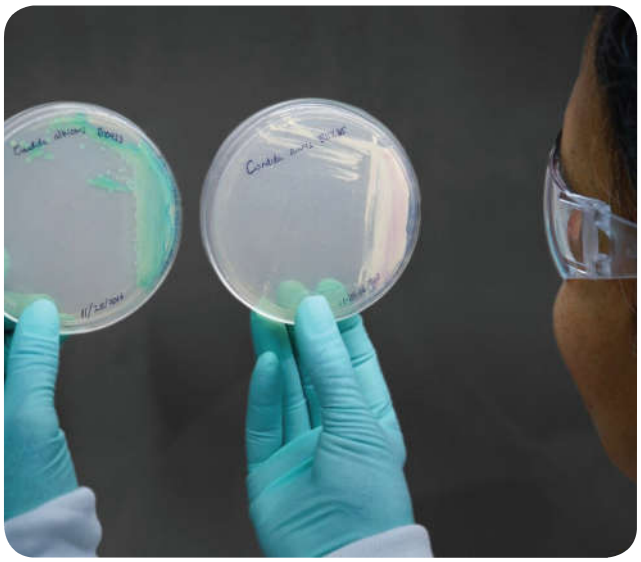
Why is *Candida auris* a problem?

- **It causes serious infections.** *C. auris* can cause bloodstream and other types of invasive infections, particularly in patients in hospitals and nursing homes who have multiple medical problems. More than 1 in 3 patients die within a month of *C. auris* infection.
- **It is often multidrug-resistant.** Antifungal medications commonly used to treat Candida infections often don't work for *C. auris*. Some *C. auris* isolates are resistant to all three major classes of antifungal medications.
- **It's becoming more common.** Although *C. auris* was just recognized in 2009, it has emerged quickly. Since then, it has been reported from over 20 countries, including the United States.
- **It's difficult to identify.** *C. auris* can be misidentified as other types of yeast unless specialized laboratory methods are used. Unrecognized *C. auris* can spread to other patients in a facility, causing an outbreak. Identifying *C. auris* is critical to knowing what steps to take to control it in a healthcare setting.
- **It can spread in healthcare facilities.** Just like other multidrug-resistant organisms such as CRE and MRSA, *C. auris* can be transmitted in healthcare settings and cause outbreaks. It can colonize patients for many months, persist in the environment, and withstand many routinely used disinfectants in healthcare facilities.

Early detection and infection control can limit the spread of *C. auris*

Prepare for *C. auris* in your facility

1. Work with your laboratory to ensure the yeast identification method used in your facility can identify *C. auris*. If it cannot, know when to suspect *C. auris* and send suspected isolates to your state or local public health department for further identification.
2. Begin surveillance. Establish a protocol with your laboratory so that your department is promptly informed when *C. auris* is suspected.
    i. If your laboratory is not equipped to identify *C. auris*, begin surveillance for organisms that commonly represent a *C. auris* misidentification. See www.cdc.gov/fungal/candida-auris for common misidentifications by yeast identification method.



CS293107-A Jun 14, 2018

U.S. Department of Health and Human Services
Centers for Disease Control and Prevention

3. Know which patients are at higher risk for *C. auris*. These include:
   i. Patients who have received healthcare in post-acute care facilities (e.g., nursing homes), especially those with ventilator units.
   ii. Patients with a recent history of receiving healthcare outside the United States in a country with known *C. auris* transmission (visit www.cdc.gov/fungal/candida-auris for a map of countries). These patients have a higher risk of *C. auris* infection or asymptomatic colonization.
4. Have a response plan. Discuss recommendations for infection prevention and control of *C. auris* with healthcare staff, including environmental services.

What should I do if there is *C. auris* in my facility?

1. Check the CDC website for the most up-to-date guidance on identifying and managing *C. auris*: www.cdc.gov/fungal/candida-auris.
2. Report possible or confirmed *C. auris* immediately to your public health department.
3. Ensure adherence to CDC recommendations for infection control, including:
   i. Place patients infected or colonized with *C. auris* in a single room on contact precautions
   ii. Assess and enhance gown and glove use
   iii. Reinforce hand hygiene
   iv. Coordinate with environmental services to ensure the patient care environment is cleaned with a disinfectant that is effective against *C. auris* (i.e., those effective against *Clostridium difficile*) by searching "List K" at www.epa.gov. Work with the environmental services team to monitor the cleaning process.
4. After consulting with public health personnel, screen contacts of case-patients to identify patients with *C. auris* colonization. Use the same infection control measures for patients found to be colonized.
5. When a patient is being transferred from your facility (e.g., to a nursing home or other hospital), clearly communicate the patient's *C. auris* status to receiving healthcare providers.

For more information, please contact the Centers for Disease Control and Prevention (CDC), National Center for Emerging and Zoonotic Infectious Diseases, Division of Foodborne, Waterborne, and Environmental Diseases.

1600 Clifton Road, NE, Mail Stop C-09, Atlanta, GA 30329-4018

Telephone: 800-CDC-INFO (232-4636) **E-mail:** candidaauris@cdc.gov **Web:** https://www.cdc.gov/fungal

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Accessible version: https://www.cdc.gov/fungal/candida-auris/fact-sheets/cdc-message-infection-experts.html

Contact Precautions

IN ADDITION TO STANDARD PRECAUTIONS

All family and visitors:

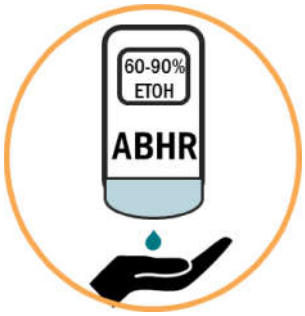
Please report to nurses station or see staff **BEFORE** entering room

***ANTES** de entrar los visitantes deben presentarse a la estación de enfermeras**

Everyone **MUST**:

Perform hand hygiene

With alcohol-based hand rub (ABHR) or soap and water before entering and exiting



Wear gown

Before entering and remove upon exiting

Wear gloves

Before entering and remove upon exiting

Todos **DEBEN**:

Realizar higiene de manos

Con un desinfectante para manos a base de alcohol (ABHR) o agua y jabón antes de entrar o salir

Usar bata

Antes de entrar y retirar al salir

Usar guantes

Antes de entrar y retirar al salir

Florida HEALTH

Version 1.0 | February, 2019

Enhanced Barrier Precautions

IN ADDITION TO STANDARD PRECAUTIONS

All family and visitors:

Please report to nurses station or see staff **BEFORE** entering room

***ANTES** de entrar los visitantes deben presentarse a la estación de enfermeras**

Everyone MUST:

Perform hand hygiene

With alcohol-based hand rub (ABHR) or soap and water before entering and exiting

Wear gown and gloves

For the following high-contact resident care activities:

- Dressing
- Bathing/showering
- Transferring
- Changing linens
- Providing hygiene
- Changing briefs/assisting with toileting
- Device care or use (central line, urinary catheter, feeding tube, tracheostomy)
- Wound care

Todos DEBEN:

Realizar higiene de manos

Con un desinfectante para manos a base de alcohol (ABHR) o agua y jabón antes de entrar o salir

Usar bata y guantes

Cuando este realizando cuidado de alto contacto, incluyendo las siguiente actividades:

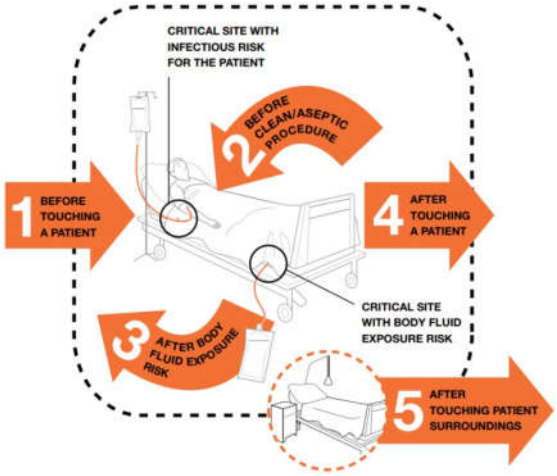
- Vestimiento
- Bañar/duchar
- Transferencia
- Cambio de ropa de cama
- Higiene
- Cambio de calsones/ayudar con labor de baño
- Cuidado o uso del dispositivo (linea central, cateter urinario, tubo de alimentacion, traquetomia)
- Cuido de heridas

Photos: thenounproject.com
Reference: cdc.gov/hai/containment/PPE-Nursing-Homes.html

Florida HEALTH

Version 1.0|February, 2020

My Five Moments for Hand Hygiene



OPPORTUNITY	INDICATION	EXAMPLE(S)
1. Before touching a patient	When? Clean hands before touching a patient when approaching him/her Why? To protect against harmful germs carried on hands	A health care personnel (HCP) or environmental services staff, etc. entering the room to provide patient care or clean patient room. Note: If the patient is on any type of transmission-based precaution (e.g., contact, airborne, droplet) this step should be performed before donning any PPE.
2. Before clean/aseptic procedure	When? Clean hands immediately before performing a clean/aseptic procedure Why? To protect against harmful germs, including the patient's own from entering his/her body	A HCP is already in the room and is preparing to conduct a procedure. For instance, cleaning a tracheostomy, proving urinary catheter care, entering a central venous catheter, etc.
3. After body fluid exposure risk	When? Clean hands immediately after an exposure risk to body fluids AND after glove removal (between tasks) Why? To protect oneself and the health care environment from harmful patient germs	A HCP is draining and measuring urine from the patient's urinary catheter bag and then proceeds to give the patient her/her medication.
4. After touching a patient	When? Clean hands after touching a patient and his/her immediate surroundings, when leaving the patient's side Why? To protect oneself and the health care environment from harmful patient germs	A HCP exiting a patient room after administering medication and moving the patient bedside table. Note: If the patient is on contact precautions for *Clostridioides difficile* the HCP MUST use soap and water as the method for hand hygiene.
5. After touching patient surroundings	When? Clean hands after touching any object or furniture in the patient's immediate surroundings, when leaving the room—even if the patient HAS NOT been touched Why? To protect oneself and the health care environment from harmful patient germs	A HCP exiting a patient room after silencing an alarm on the patient's IV pole. An environmental services employee completing a daily clean in a patient room. Note: If the patient is on contact precautions for *Clostridioides difficile* the HCP MUST use soap and water as the method for hand hygiene.

Source: World Health Organization. My 5 moments for hand hygiene. Geneva, Switzerland: World Health Organization. www.who.inf/infection-prevention/campaigns/clean-hands/5moments/en/

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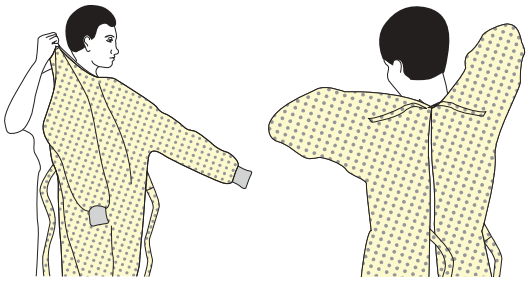
SEQUENCE FOR PUTTING ON PERSONAL PROTECTIVE EQUIPMENT (PPE)

The type of PPE used will vary based on the level of precautions required, such as standard and contact, droplet or airborne infection isolation precautions. The procedure for putting on and removing PPE should be tailored to the specific type of PPE.

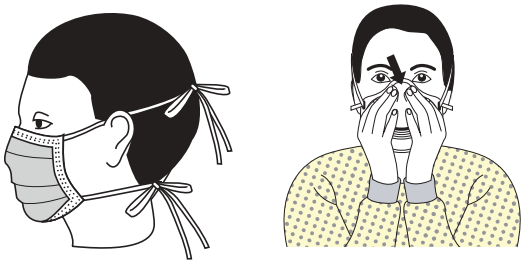
1. GOWN

- Fully cover torso from neck to knees, arms to end of wrists, and wrap around the back
- Fasten in back of neck and waist



2. MASK OR RESPIRATOR

- Secure ties or elastic bands at middle of head and neck
- Fit flexible band to nose bridge
- Fit snug to face and below chin
- Fit-check respirator

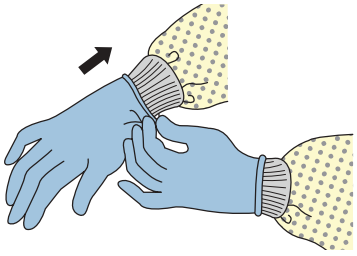


3. GOGGLES OR FACE SHIELD

- Place over face and eyes and adjust to fit

4. GLOVES

- Extend to cover wrist of isolation gown



USE SAFE WORK PRACTICES TO PROTECT YOURSELF AND LIMIT THE SPREAD OF CONTAMINATION

- Keep hands away from face
- Limit surfaces touched
- Change gloves when torn or heavily contaminated
- Perform hand hygiene

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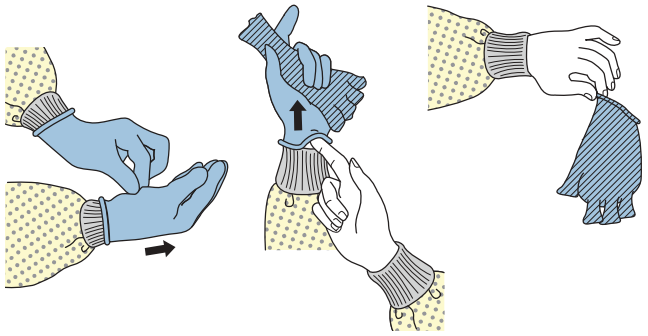
HOW TO SAFELY REMOVE PERSONAL PROTECTIVE EQUIPMENT (PPE) EXAMPLE 1

There are a variety of ways to safely remove PPE without contaminating your clothing, skin, or mucous membranes with potentially infectious materials. Here is one example. **Remove all PPE before exiting the patient room** except a respirator, if worn. Remove the respirator **after** leaving the patient room and closing the door. Remove PPE in the following sequence:

1. GLOVES

- Outside of gloves are contaminated!
- If your hands get contaminated during glove removal, immediately wash your hands or use an alcohol-based hand sanitizer
- Using a gloved hand, grasp the palm area of the other gloved hand and peel off first glove
- Hold removed glove in gloved hand
- Slide fingers of ungloved hand under remaining glove at wrist and peel off second glove over first glove
- Discard gloves in a waste container

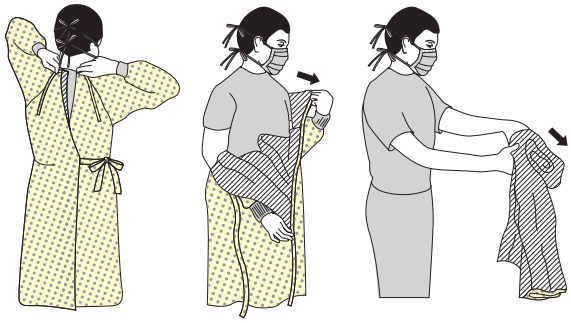


2. GOGGLES OR FACE SHIELD

- Outside of goggles or face shield are contaminated!
- If your hands get contaminated during goggle or face shield removal, immediately wash your hands or use an alcohol-based hand sanitizer
- Remove goggles or face shield from the back by lifting head band or ear pieces
- If the item is reusable, place in designated receptacle for reprocessing. Otherwise, discard in a waste container

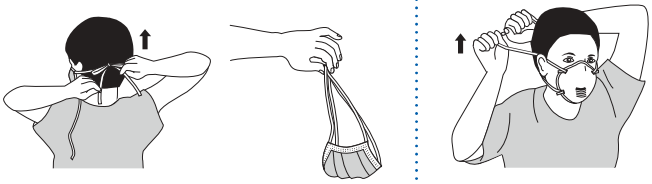
3. GOWN

- Gown front and sleeves are contaminated!
- If your hands get contaminated during gown removal, immediately wash your hands or use an alcohol-based hand sanitizer
- Unfasten gown ties, taking care that sleeves don't contact your body when reaching for ties
- Pull gown away from neck and shoulders, touching inside of gown only
- Turn gown inside out
- Fold or roll into a bundle and discard in a waste container

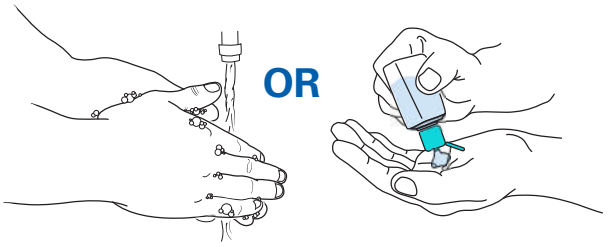


4. MASK OR RESPIRATOR

- Front of mask/respirator is contaminated — DO NOT TOUCH!
- If your hands get contaminated during mask/respirator removal, immediately wash your hands or use an alcohol-based hand sanitizer
- Grasp bottom ties or elastics of the mask/respirator, then the ones at the top, and remove without touching the front
- Discard in a waste container



5. WASH HANDS OR USE AN ALCOHOL-BASED HAND SANITIZER IMMEDIATELY AFTER REMOVING ALL PPE



PERFORM HAND HYGIENE BETWEEN STEPS IF HANDS BECOME CONTAMINATED AND IMMEDIATELY AFTER REMOVING ALL PPE

CS250672-E

Environmental Services (EVS) Education:

MULTIDRUG-RESISTANT ORGANISMS (MDROS)

Why is it important to combat MDROs?

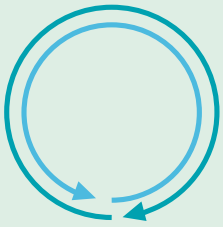
MDROs can survive on surfaces for hours to months if those surfaces are not properly cleaned and disinfected.

Creating policies and procedures to ensure a systematic approach

- Increase the frequency of cleaning, particularly for high-touch surfaces (e.g., bedrails, overbed table).
- Use single-use disposable noncritical equipment or dedicate equipment to one patient.
- Re-educate EVS staff on cleaning specific for MDROs.
- Audit adherence of cleaning to the facility's environmental cleaning policies.
- Consider designating specific EVS staff to the affected patient care unit.

Before cleaning, perform hand hygiene and don gloves. Change gloves throughout the task and perform hand hygiene in-between. EVS staff should don additional PPE based on Patient isolation status.

The clean should start from one point in the room and move in a clockwise or counter clockwise motion to ensure no items in the rooms are missed.

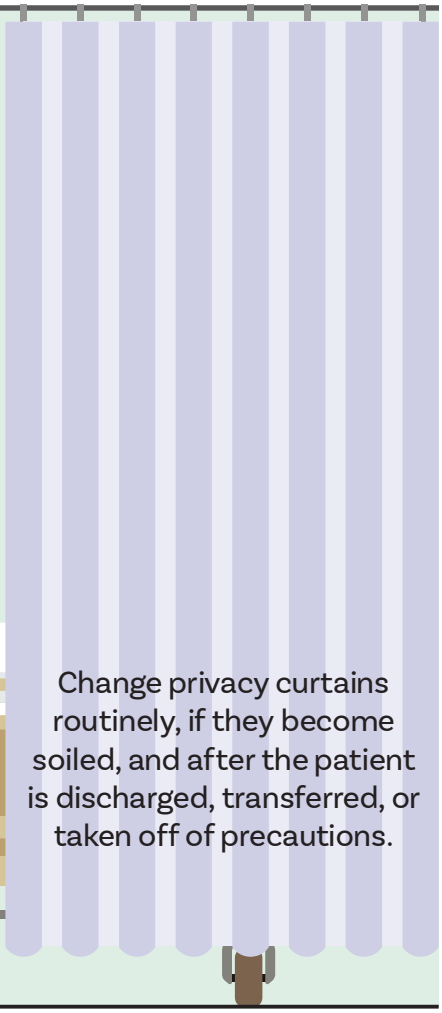


Clean from the least soiled to most soiled and from physically high to physically low areas. End around the patient bed.

Use an Environmental Protection Agency (EPA) registered disinfectant to clean floors in critical areas such as isolation rooms.

Adhere to the contact time of each disinfectant to ensure the product is given enough time to adequately disinfect the surface being treated.

Change privacy curtains routinely, if they become soiled, and after the patient is discharged, transferred, or taken off of precautions.



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Florida HEALTH

EVS Cleaning Checklist

1. HEALTH CARE ZONE

- ☐ Door knobs
- ☐ Light switches
- ☐ Window sills
- ☐ Sharps container
- ☐ Soap dispenser
- ☐ Paper towel dispenser
- ☐ Counter surface area
- ☐ Handwashing sink in patient room
- ☐ Faucet appliance/handles
- ☐ Sink perimeter/surface area
- ☐ Inside sink basin
- ☐ Patient closet
- ☐ Stationary computer designated in patient room
- ☐ Visitor chair or couch

2. PATIENT ZONE

- ☐ Bed controls
- ☐ Bed-side railings
- ☐ Bedside table
- ☐ Bedside commode
- ☐ Blood pressure cuff
- ☐ Call light/television control
- ☐ IV pole
- ☐ Monitoring equipment
- ☐ Telephone

3. BATHROOM

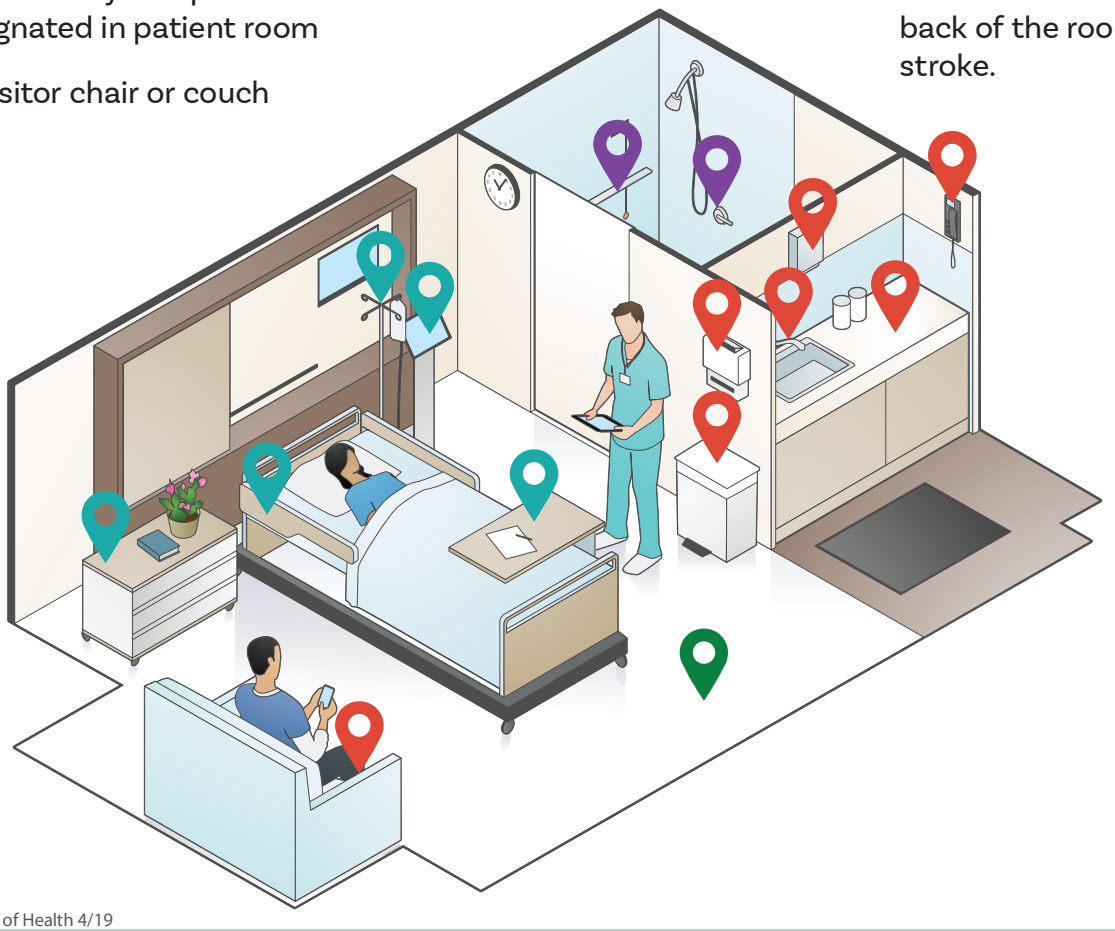
SINK ZONE

- ☐ Mirror
- ☐ Paper towel dispenser
- ☐ Soap dispenser
- ☐ Light switches
- ☐ Door knob
- ☐ Sink perimeter
- ☐ Sink basin
- ☐ Stop with drain and discard cleaning cloth

- ☐ **SHOWER ZONE**
- ☐ **TOILET ZONE**

4. FLOORS

- ☐ Clean floors last. Start in the back of the room using the “S” stroke.



Recommendations for MDRO Containment by Tier

Descriptions	Resistance Mechanisms and Organisms		
	Tier 1 **Never or very rarely identified in the United States; pan-resistant organisms with the potential for wider spread in a region**	**Tier 2** Not regularly found in a region	**Tier 3** **Regularly found in a region but not endemic**
Health Care Investigation			
Review the patient's health care exposures prior to and after the positive culture	Always	Always	Always
Contact Investigation[1]			
Screening of health care facility roommates	Always	Always	Always
Broader screening of health care contacts[2]	Always[3]	Somemes[4]	Sometimes
Prospective lab surveillance[5]	Always	Always	Always
Retrospective lab surveillance[6]	Always	Always	Sometimes
Household contact screening	Sometimes	Rarely	Rarely
Environmental sampling	Sometimes	Rarely	Rarely
Health care personnel screening	Sometimes	Rarely	Rarely
Evaluate potential spread to facilities that regularly share patients with the index facility[7]	Sometimes	Sometimes	Rarely
Infection Control Measures			
Prompt notification of health care providers and patients	Always	Always	Always
Implementation of appropriate transmission-based precautions	Always	Always	Always
Clear communication of patient MDRO status with transferring facilities	Always	Always	Always
site infection control assessment with observations of practice (i.e. Infection Control Assessment and Response (ICAR))	Always	Always	Sometimes

[1] For Tier 1 and 2 organisms/mechanisms, health care exposures and contacts over the preceding 30 days should be investigated unless information is available about the time the organism was most likely acquired. This includes any health care facility where the patient had an overnight stay during that time period. In some investigations, outpatient facilities and emergency departments might also be included. For Tier 3 organisms, investigation of health care exposures and health care contacts is generally limited to the current and sometimes prior admission.

[2] This may include targeted screening of contacts at highest risk for acquisition or unit point prevalence surveys.

[3] If the MDRO is a novel organism for which data on the frequency and modes of transmission are not known, or if the index patient was not on contact precautions during their entire stay in a health care facility, then additional screening (beyond roommates) is recommended. Broader screening, including patients on the same ward as the index patient or patients who shared health care personnel, might be particularly important for detecting novel MDROs when data on the frequency and modes of transmission are lacking.

[4] If the index patient was not on contact precautions during their entire stay in a health care facility, then broader screening (beyond roommates) is recommended. Screening can initially be limited to the contacts at highest risk for acquisition, such as those still admitted who overlapped on the same ward as the index patient and who have a risk factor for MDRO acquisition (e.g., bedbound, high levels of care, receipt of antibiotics, or mechanical ventilation). Alternatively, facilities may choose to screen entire units using point prevalence surveys.

[5] Prospective surveillance of clinical cultures should be conducted for three months after the last identified case.

[6] Conduct a laboratory lookback covering at least six months prior to identification of index case.

[7] A public health investigation should also be initiated at health care facilities known to regularly share patients with health care facilities where transmission has occurred, such as post-acute care facilities. At a minimum, this should include notification of the facility and a request to retrospectively and prospectively evaluate clinical cultures for the phenotype of interest. This could also include admission screening of patients at the facility (e.g., transfers from the index facility) or point prevalence surveys of high-risk patients or units.

Reference: CDC, Interim Guidance for a Public Health Response to Contain Novel or Targeted Multidrug-resistant Organisms

If you have additional questions, please contact the Florida Department of Health, Health Care-Associated Infection Prevention Program at:
(e) HAI_Program@flhealth.gov (p) 850-245-4401

Colonization Screening and Isolation Guidance for Multidrug-Resistant Organisms (MDROs) in Acute Care Settings

Organism	Contact Precautions Discontinuation Criteria	Comments
***Candida auris* (*C. auris*)**	• The Centers for Disease Control and Prevention (CDC) currently recommends continuing contact precautions (CP) for the entire duration of the patient's stay in the facility.[3] • CDC does not recommend routine reassessments for *C. auris* colonization.[3] • Reassessment of colonization may be considered in consultation with the Florida Department of Health. • Reassessment should not performed for 3 months after last positive result for *C. auris*.[3]	Evidence suggests that patients remain colonized for many months, perhaps indefinitely even after acute infection (if present) has been treated and resolved.[3]

Multidrug - Resistant *Enterobacteriaceae* (MDR-E) and Carbapenemase Producing Organisms (CPOs)	• At least 6 months have elapsed since last positive culture, and:
	  • **Two (2)** consecutive negative swab samples, at least one week apart.[1]*
	  • No evidence of ongoing transmission or draining wounds that cannot be contained by dressings.[2]
		Maintain CP for duration of index hospital stay.[1] Certain extensively drug-resistant *Enterobacteriaceae* have no or limited treatment options, which makes the impact of even a single transmission event significant.[1]

Vancomycin-Resistant Enterococci (VRE)	• **Three (3)** consecutive negative cultures, at least one week apart.[1]* • No evidence of ongoing transmission or draining wounds that cannot be contained by dressings.[2]	Hospitals should consider extending CP for patients who are highly immunosuppressed, receiving broad spectrum systemic antimicrobial therapy without VRE activity, receiving care in high-risk units (e.g., burn units, etc.), or receiving care at institutions with high rates of VRE infection.[1]
Methicillin-Resistant *Staphylococcus aureus* (MRSA)	• **Three (3)** consecutive negative screening cultures, at least one week apart.[1]* • No evidence of ongoing transmission or draining wounds that cannot be contained by dressings.[2]	Evidence indicates that most patients will remain negative for MRSA colonization if they have 3 consecutive negative weekly surveillance cultures.[1]
***Clostridioides difficile* (*C. diff*)**	• At least **48 hours** after care and resolution of diarrhea.[1]*	Hospitals should consider extending CP through the duration of hospitalization if they have elevated rates of *C. diff* in their facility.[1]

*No indication of **clinical infection** that is currently producing symptoms and/or **broad-spectrum antibiotic use** that may select for this organism

[1]Banach, D.B., et al. (2018). Duration of contact precautions for acute-care settings. www.shea-online.org/index.php/journal-news/website-highlights/560-shea-expert-guidance-duration-of-contact-precautions-for-acute-care-settings

[2]Centers for Disease Control and Prevention. (2007). Type and Duration of Precautions Recommended for Selected Infections and Conditions. www.cdc.gov/infectioncontrol/guidelines/isolation/appendix/type-duration-precautions.html

[3]Centers for Disease Control and Prevention. (2020). Infection and Prevention Control for Candida auris. www.cdc.gov/fungal/candida-auris/c-auris-infection-control.html

If you have additional questions, please contact the Florida Department of Health Health Care-Associated Infection Prevention Program at: (e) HAI_Program@FLHealth.gov (p) 850-245-4401

Prepared February 2020

Florida HEALTH

Colonization Screening and Isolation Guidance for Multidrug-Resistant Organisms (MDROs) in Long-Term Care Settings

Organism	Contact Precautions Discontinuation Criteria	Comments
Candida auris **(*C. auris*)**	• The Centers for Disease Control and Prevention (CDC) currently recommends continuing contact precautions (CP) or enhanced barrier precautions (EBP), depending on the situation, for the entire duration of the patient's stay in the facility. • CDC does not recommend routine reassessments for *C. auris* colonization. • Reassessment of colonization may be considered in consultation with the Florida Department of Health. • Reassessment should not be performed for 3 months after last positive result for *C. auris*.[3]	Evidence suggests that patients remain colonized for many months, perhaps indefinitely even after acute infection (if present) has been treated and resolves.[2]
Multidrug-Resistant *Enterobacteriaceae* (MDR-E) and Carbapenemase–Producing Organisms (CPOs)	When there is **no** evidence of: • Ongoing transmission, • Acute diarrhea, or • Draining wounds or other sites of secretions/ excretions that are unable to be covered or contained.[5,6]	For ill residents (e.g., dependent on health care personnel for health care and activities of daily living, ventilator-dependent, etc.) and for residents whose infected secretions or drainage cannot be contained, use CP or EBP, depending on the situation, in addition to standard precautions.[4]
Vancomycin-Resistant Enterococci (VRE)	When there is **no** evidence of: • Ongoing transmission, or • Draining wounds or other sites of secretions/ excretions that are unable to be covered or contained.[5,6]	For ill residents (e.g., dependent on health care personnel for health care and activities of daily living, ventilator-dependent, etc.) and for residents whose infected secretions or drainage cannot be contained, use CP or EBP, depending on the situation, in addition to standard precautions.[4]
Methicillin-Resistant *Staphylococcus aureus* (MRSA)	When there is **no** evidence of: • Ongoing transmission, or • Draining wounds or other sites of secretions/ excretions that are unable to be covered or contained.[5,6]	For ill residents (e.g., dependent on health care personnel for health care and activities of daily living, ventilator-dependent, etc.) and for residents whose infected secretions or drainage cannot be contained, use CP or EBP, depending on the situation, in addition to standard precautions.[4]
Clostridioides difficile **(*C. diff*)**	• 48 hours after resolution of diarrhea.[1,3]	The presence of acute diarrhea due to *C. diff* infections can increase the risk of transmission due to health care personnel hand contamination.[1,3] Place residents with suspected *C. diff* and more than three (3) diarrheal stools in presumptive CP while awaiting test results.[1,3]

[1]*Clostridium difficile* Infection and Pseudomembranous Colitis. APIC Text, text.apic.org/toc/healthcare-associated-pathogens-and-diseases/clostridium-difficile-infection-and-pseudomembranous-colitis
[2]Infection Prevention and Control for *Candida auris* | *Candida auris* | Fungal Diseases | CDC, Centers for Disease Control and Prevention, www.cdc.gov/fungal/candida-auris/c-auris-infection-control.html
[3]Long-Term Care. APIC text, text.apic.org/toc/infection-prevention-for-practice-settings-and-service-specific-patient-care-areas/long-term-care
[4] Multidrug-resistant Organisms (MDRO) Management |Summary of Recommendations| LTCF| www.cdc.gov/infectioncontrol/guidelines/mdro/index.html
[5]Smith, Philip W, et al. "SHEA/APIC Guidelines: Infection Prevention and Control in the Long-Term Care Facility, July 2008. Infection Control and Hospital Epidemiology, U.S. National Library of Medicine, Sept. 2008, ncbi.nlm.nih.gov/pmc/articles/PMC3319407/
[6]Type and Duration of Precautions Recommended for Selected Infections and Conditions |Multidrug-resistant organisms (MDROs) Infection or Colonization| CDC, Centers for Disease Control and Prevention, www.cdc.gov/infectioncontrol/guidelines/isolation/appendix/type-duration-precautions.html

If you have additional questions, please contact the Florida Department of Health
Health Care-Associated Infection Prevention Program at (e) HAI_Program@FLHealth.gov
(p) 850-245-4401

Prepared February 2020

Florida HEALTH

Point-Prevalence Screening for *Candida auris*

What is a point-prevalence screening (PPS)?

A PPS is a surveillance method that involves swabbing the axillary/groin to test for *Candida auris*.[1] A PPS is performed after a patient/resident within a facility is identified as being colonized or infected with *C. auris* to determine if other patients/residents are colonized.

Who should be screened?

The extent of screening is dependent on several factors including, but not limited to, the organism, length of contact precautions, and use of shared spaces. Best practice is to aim for a 100% collection rate to ensure silent acquisition is not occurring in the facility. The Health Care-Associated Infection (HAI) Prevention Program can help you determine who should be screened.[2,3]

Do patients/residents need to provide consent?

Yes. As with other laboratory specimens, all patients/residents will need to provide consent or assent. Please note that this is a public health response to a serious infection and public health concern, not a research study. Per the Centers for Medicare and Medicaid Services, verbal consent is required for this type of response. The HAI Prevention Program can provide you with a template consent form and script if your policies require written consent.

How are PPS specimens collected?

C. auris is commonly found on the skin and in noninvasive body sites. You will need to designate a staff member or resource to collect the specimens. The Antibiotic Resistance Laboratory Network (ARLN) in Tennessee will provide cotton tip swabs, shipping containers, and free FedEx shipping for axillary/groin specimen collection.[4]

How long will it take to receive results?

You will receive preliminary laboratory results within 7–14 days after screening. The ARLN will fax you the final results.

What happens if positive results are identified?

If a positive result is identified, place the patient/resident in a single room. If a single room is not available, cohort patients/residents with the same multidrug-resistant organism. Place the patient/resident on contact precautions and notify and train their clinical care team, including housekeepers, on the containment of this organism.[5] Use an Environmental Protection Agency-registered hospital-grade disinfectant from *List K: Antimicrobial Products Effective Against Clostridium difficile Spores* to clean positive patient/resident rooms.[6]

How many PPS rounds will be conducted?

Initially, one PPS will be conducted. If the initial PPS identifies additional cases, then PPS rounds will typically be conducted bi-weekly until two consecutive rounds of PPS have resulted in no new positives. If there was extensive transmission, two additional monthly PPS will be conducted to ensure organism transmission was halted.

Resources

1. Florida Health *C. auris* Fact Sheet
2. Florida Health *C. auris* Update: Information for Clinicians and Laboratorians
3. Centers for Disease Control and Prevention Interim Guidance for a Public Health Response to Contain Novel or Targeted Multidrug-Resistant Organisms
4. Florida Health Specimen Collection and Shipping Procedures
5. CDC webpage about *C. auris* (www.cdc.gov/fungal/candida-auris/index.html)
6. List K: EPA's Registered Antimicrobial Products Effective Against *Clostridium difficile* Spores (www.epa.gov/pesticide-registration/list-k-epas-registered-antimicrobial-products-effective-against-clostridium)

If you have additional questions, please contact the Florida Department of Health Health Care-Associated Infection Prevention Program at: (e) HAI_Program@flhealth.gov (p) 850-245-4401

Prepared June 11, 2019

Candida auris:
A drug-resistant germ that spreads in healthcare facilities

Candida auris (also called *C. auris)* is a fungus that causes serious infections. Patients with *C. auris* infection, their family members and other close contacts, public health officials, laboratory staff, and healthcare workers can all help stop it from spreading.

Why is *Candida auris* a problem?

It causes serious infections. *C. auris* can cause bloodstream infections and even death, particularly in hospital and nursing home patients with serious medical problems. More than 1 in 3 patients with invasive *C. auris* infection (for example, an infection that affects the blood, heart, or brain) die.

It's often resistant to medicines. Antifungal medicines commonly used to treat *Candida* infections often don't work for *Candida auris*. Some *C. auris* infections have been resistant to all three types of antifungal medicines.

It's becoming more common. Although *C. auris* was just discovered in 2009, it has spread quickly and caused infections in more than a dozen countries.

It's difficult to identify. *C. auris* can be misidentified as other types of fungi unless specialized laboratory technology is used. This misidentification might lead to a patient getting the wrong treatment.

It can spread in hospitals and nursing homes. *C. auris* has caused outbreaks in healthcare facilities and can spread through contact with affected patients and contaminated surfaces or equipment. Good hand hygiene and cleaning in healthcare facilities is important because *C. auris* can live on surfaces for several weeks.

How do I know if I have a *Candida auris* infection?

C. auris is still rare in the United States. People who get invasive *Candida* infections are often already sick from other medical conditions, so it can be difficult to know if you have a *C. auris* infection. The most common symptoms of invasive *Candida* infection are fever and chills that don't improve after antibiotic treatment for a suspected bacterial infection. Only a laboratory test can diagnose *C. auris* infection. Talk to your healthcare provider if you believe you have a fungal or healthcare-associated infection.

Most people who get serious *Candida* infections are already sick from other medical conditions.

Centers for Disease Control and Prevention
National Center for Emerging and Zoonotic Infectious Diseases

CS279813

Stopping the spread of *Candida auris*

CDC is working with public health partners, healthcare workers, and laboratories to stop the spread of *C. auris* in healthcare settings. Here's how CDC is asking everyone to help:

Family members and other close contacts of patients with *C. auris*

- Clean your hands with hand sanitizer or soap and water before and after touching a patient with *C. auris* or equipment in his or her room.
- Remind healthcare workers to clean their hands.

Laboratory staff, healthcare workers, and public health officials

- Know when to suspect *C. auris* and how to properly identify it.
- Report cases quickly to public health departments.
- For healthcare workers, clean hands correctly and use precautions like wearing gowns and gloves to prevent spread.
- Clean patient rooms thoroughly with a disinfectant that works against *C. auris*.
- Investigate *C. auris* cases quickly and determine additional ways to prevent spread.
- Check the CDC website for the most up-to-date guidance on identifying and managing *C. auris*: https://www.cdc.gov/fungal/diseases/candidiasis/recommendations.html.

Scientists are still learning about *Candida auris*

CDC and public health partners are working hard to better understand *C. auris* and answer the following questions so that we can continue to help protect people from this serious infection:

- Why is *C. auris* resistant to antifungal medicines?
- Why did *C. auris* start causing infections in recent years?
- Where did *C. auris* originally come from, and why has it appeared in many regions of the world at the same time?

What is CDC doing?

CDC is collaborating closely with partners to better respond, contain spread, and prevent future infections by:

- Advising healthcare workers and infection control staff on ways to stop the spread of *C. auris* and continually updating this guidance as we learn more about the infection.
- Working with state and local health agencies, healthcare facilities, and clinical microbiology laboratories to ensure that laboratories are using proper methods to detect *C. auris*.
- Testing *C. auris* strains to monitor for resistance to antifungal medicines.
- Examining the DNA of *C. auris* strains using whole genome sequencing to better understand how this germ is spreading in the United States and around the world.
- Working with public health partners in the United States and internationally to learn more about how *C. auris* spreads in healthcare facilities and to eliminate it from those facilities.

For more information:
Centers for Disease Control and Prevention (CDC),
National Center for Emerging and Zoonotic Infectious Diseases
Division of Foodborne, Waterborne, and Environmental Diseases
Telephone 800-CDC-INFO (232-4636) Web http://www.cdc.gov/fungal

Candida auris:
Un microbio resistente a los fármacos que se propaga en los establecimientos de atención médica

La *Candida auris* (también llamada *C. auris*) es un hongo que causa infecciones graves. Los pacientes con la infección por *C. auris*, sus familiares y otras personas cercanas, los funcionarios de salud pública, el personal de laboratorios y los trabajadores de atención médica pueden ayudar a detener su propagación.

¿Por qué es un problema la *Candida auris*?

Causa infecciones graves. La *Candida auris* puede causar infecciones del torrente sanguíneo e incluso la muerte, especialmente en pacientes con problemas médicos graves que están hospitalizados o en hogares de ancianos de ancianos. Más de 1 de cada 3 pacientes con una infección invasiva por *C. auris* muere (por ejemplo, una infección que afecta la sangre, el corazón o el cerebro).

Es a menudo resistente a los fármacos. Los medicamentos antimicóticos comúnmente usados para tratar las infecciones por especies del género *Candida* muchas veces no son eficaces contra la *Candida auris*. Algunas infecciones por *C. auris* han sido resistentes a los tres tipos de medicamentos antimicóticos disponibles.

Está haciéndose más común. Aunque la *C. auris* fue descrita por primera vez en el año 2009, se ha propagado rápidamente y ha causado infecciones en más de una docena de países.

Es difícil de identificar. La *Candida auris* puede ser identificada erróneamente como otros tipos de hongos, a no ser que se use tecnología de laboratorio especializada. Esta identificación errónea puede llevar a que el paciente reciba un tratamiento equivocado.

Puede propagarse en hospitales y hogares de ancianos. La *C. auris* ha causado brotes en establecimientos de atención médica y puede propagarse a través del contacto con pacientes afectados y superficies o equipamiento contaminados. La buena higiene de manos y la limpieza ambiental en los establecimientos de atención médica son importantes porque la *C. auris* puede sobrevivir en las superficies durante varias semanas.

¿Cómo sé si tengo una infección por *Candida auris*?

La *C. auris* todavía es poco común en los Estados Unidos. Las personas que contraen infecciones invasivas por *Candida* generalmente ya están enfermas por otras afecciones, lo que dificulta saber si tienen una infección por *C. auris*. Los síntomas más comunes de una infección invasiva por especies del género *Candida* son: fiebre y escalofríos que no mejoran después de un tratamiento con antibióticos administrado por una presunta infección bacteriana. Solo mediante una prueba de laboratorio se puede diagnosticar una infección por *C. auris*. Consulte a su proveedor de atención médica si cree que tiene una infección micótica o asociada a la atención médica.

La mayoría de las personas que contraen infecciones graves por *Candida* ya están enfermas por otras afecciones.

Centers for Disease Control and Prevention
National Center for Emerging and Zoonotic Infectious Diseases

CS289718 MLS 280581

Cómo detener la propagación de la *Candida auris*

Los CDC están trabajando en conjunto con las autoridades de salud pública, trabajadores de atención médica y laboratorios clínicos para detener la propagación de la *C. auris* en entornos de atención médica. Los CDC están solicitando a todas las personas que ayuden de la siguiente manera:

Familiares y otras personas cercanas a los pacientes con *C. auris*

- Límpiense las manos con agua y jabón o desinfectantes, antes y después de tocar a un paciente con *C. auris* o el equipamiento que haya en su habitación.
- Recuérdenles a los trabajadores de atención médica que se limpien las manos.

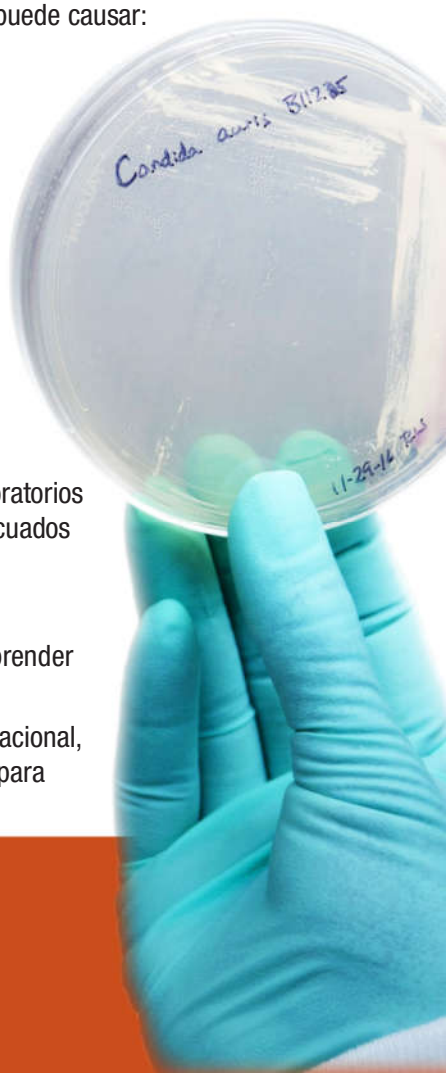
Personal de laboratorio, trabajadores de atención médica y funcionarios de salud pública

- Sepan cuándo sospechar de la existencia de *C. auris* y cómo identificarla de manera adecuada.
- Notifiquen los casos rápidamente a los departamentos de salud pública.
- Si son trabajadores de salud pública, límpiense las manos correctamente y hagan uso de elementos de protección como batas y guantes para prevenir la propagación.
- Limpien las habitaciones de los pacientes a fondo y con un desinfectante que actúe contra la *C. auris*.
- Investiguen rápidamente los casos de *C. auris* y determinen otras maneras de prevenir la propagación.
- Hagan clic aquí para obtener las directrices más actualizadas sobre cómo identificar y manejar la *C. auris*.

Los científicos todavía están aprendiendo sobre la *Candida auris*

Los CDC y sus colaboradores están trabajando arduamente para comprender mejor la *C. auris* y responder las siguientes preguntas, para poder continuar ayudando a proteger a las personas de la infección grave que esta puede causar:

- ¿Por qué es la *C. auris* resistente a los medicamentos antimicóticos?
- ¿Por qué comenzó la *C. auris* a causar infecciones en años recientes?
- ¿De dónde provino originalmente la *C. auris* y por qué ha aparecido en muchas regiones del mundo al mismo tiempo?



¿Qué están haciendo los CDC?

Los CDC están colaborando estrechamente con múltiples colaboradores para responder mejor, contener la propagación y prevenir futuras infecciones, al hacer lo siguiente:

- Asesorar a los trabajadores de la atención médica y al personal de control de infecciones sobre las formas de detener la propagación de la *C. auris*, y actualizar constantemente estas directrices a medida que aprendamos más sobre la infección y el microorganismo.
- Trabajar con agencias de salud a nivel estatal y local, establecimientos de atención médica y laboratorios clínicos de microbiología, con el fin de garantizar que los laboratorios estén usando métodos adecuados para detectar la *C. auris*.
- Monitorear la resistencia de la *C. auris* a los medicamentos antimicóticos.
- Analizar el ADN de cepas de *C. auris* mediante la secuenciación del genoma completo, para comprender mejor cómo este microbio se está propagando en los Estados Unidos y el resto del mundo.
- Trabajar de manera conjunta con agencias de salud pública en los Estados Unidos y a nivel internacional, para aprender más sobre cómo se propaga la *C. auris* en establecimientos de atención médica y para eliminarla de esas instalaciones.

Más información:

Centros para el Control y la Prevención de Enfermedades (CDC)
Centro Nacional de Enfermedades Infecciosas Emergentes y Zoonóticas (NCEZID)
División de Enfermedades Transmitidas por los Alimentos, el Agua y el Medioambiente (DFWED)
Teléfono: 800-CDC-INFO (232-4636) Sitio web: https://www.cdc.gov/fungal/candida-auris

Accessible version: https://www.cdc.gov/fungal/candida-auris/es/c-auris-drug-resistant.html

Candida auris Colonization

Information for Patients

Candida auris (also called *C. auris*) is a fungus that can cause serious infections. *C. auris* can spread from one patient to another in hospitals and nursing homes. Patients can carry *C. auris* somewhere on their body, even if it is not making them sick. This is called colonization. When people in hospitals and nursing homes are colonized, *C. auris* can spread from their bodies and can get on other people or nearby objects, allowing the fungus to spread to people around them.

CDC recommends testing patients who may have come in contact with *C. auris* to see if they are carrying the fungus. This allows healthcare providers to know who is carrying the fungus and take steps to prevent it from spreading to other people.

What does it mean to be colonized?

Colonization, or being colonized with *C. auris*, means that a person has the fungus somewhere on their body but does not have an infection or symptoms of infection. A simple test can be done to see who is colonized with *C. auris*. People who are colonized with *C. auris* may not know and can pass the fungus to another person. People colonized with *C. auris* might later get sick from this fungus, so healthcare providers should consider taking extra steps to prevent infection.

In order to reduce spread to other patients, healthcare providers should use precautions when caring for patients with *C. auris*, which may include:

- Placing the patient in a room without a roommate.
- Having healthcare staff or other caregivers wear gowns and gloves during patient care.
- Cleaning the room with different products than usual.
- Having family members and healthcare staff clean their hands thoroughly after visiting the patient. The patient may also be encouraged to wash their hands often.
- Performing another test later to see if the fungus is still there.

What can I do to help keep *C. auris* from spreading?

Patients and family members should clean their hands thoroughly before and after touching each other or the area around the patient, particularly when leaving a patient's room.

Although the risk of *C. auris* infection in otherwise healthy people is low, patients and their family members should continue practicing good hand hygiene when returning home. If family members are caring for patients with *C. auris*, they should consider wearing disposable gloves when providing certain types of care like changing the dressing on wounds and helping the patient bathe.

If you are colonized with *C. auris*, tell your healthcare providers when visiting healthcare offices and when admitted to hospitals and nursing homes.

U.S. Department of Health and Human Services
Centers for Disease Control and Prevention

Want to learn more?

www.cdc.gov/fungal/candida-auris

CS293107-B Nov 19, 2018

Colonización por *Candida auris*

Información para Pacientes

La *Candida auris* (también llamada *C. auris*) es un hongo que puede causar infecciones graves. La *C. auris* puede propagarse de un paciente a otro en hospitales y hogares de ancianos. Los pacientes pueden portar la *C. auris* en algún lugar del cuerpo, incluso sin que los enferme. A esto se lo llama colonización. Cuando las personas que están en hospitales u hogares de ancianos son colonizadas, la *C. auris* puede propagarse desde sus cuerpos y puede pasar a otras personas u objetos cercanos. Esto le permite al hongo propagarse a las personas que estén a su alrededor.

Los CDC recomiendan hacerles pruebas de detección a los pacientes que pudieron haber tenido contacto con la *C. auris* para ver si son portadores del hongo. Esto les permite a los proveedores de atención médica saber quién es portador del hongo y tomar medidas para prevenir su propagación a otras personas.

¿Qué significa estar colonizado?

Colonización, o estar colonizado por *C. auris*, significa que una persona tiene el hongo en alguna parte de su cuerpo, pero no tiene una infección o los síntomas de una infección. Se puede hacer una prueba simple para ver quién está colonizado por *C. auris*. Las personas que están colonizadas por *C. auris* podrían no saberlo y pasarle el hongo a otra persona. Las personas colonizadas por *C. auris* podrían enfermarse después debido a este hongo. Por esta razón, los proveedores de atención médica deberían considerar la posibilidad de tomar medidas adicionales para prevenir infecciones.

Para reducir la propagación a otros pacientes, los proveedores de atención médica que atiendan a pacientes con C. auris deberían usar medidas de precaución, las cuales incluyen:

- Ubicar al paciente en una habitación individual.
- Hacer que el personal de atención médica u otros cuidadores usen batas y guantes durante la atención del paciente.
- Limpiar la habitación con diferentes productos que no sean los habituales.
- Hacer que los familiares y el personal de atención médica se laven bien las manos después de visitar al paciente. También se podría alentar al paciente para que se lave las manos con frecuencia.
- Hacer otra prueba después para ver si el hongo todavía está allí.

¿Qué puedo hacer para ayudar a prevenir la propagación de la *C. auris*?

Los pacientes y sus familiares deberían lavarse bien las manos antes y después de tocarse entre sí o de tocar las áreas que están alrededor del paciente, especialmente al irse de su habitación.

Si bien el riesgo de infección por *C. auris* en personas sanas es bajo, los pacientes y sus familiares deberían continuar practicando buenas medidas de higiene de las manos al regresar a casa. Si miembros de la familia están cuidando a los pacientes con *C. auris*, ellos deberían considerar la posibilidad de usar guantes desechables al suministrar ciertos tipos de cuidados, como al cambiar vendajes de heridas y ayudar a los pacientes a bañarse.

Si usted está colonizado por *C. auris*, avíseles a sus proveedores de atención médica cuando vaya a sus consultorios y si es internado en un hospital u hogar de ancianos.

U.S. Department of Health and Human Services
Centers for Disease Control and Prevention

¿Desea saber más?

www.cdc.gov/fungal/candida-auris

CS294830-B Dec 03, 2018

Accessible version: https://www.cdc.gov/fungal/candida-auris/es/fact-sheets/c-auris-colonization.html

Candida auris Testing

Information for Patients

Candida auris (also called *C. auris*) is a fungus that can cause serious infections. *C. auris* can spread from one patient to another in hospitals and nursing homes. Patients can carry *C. auris* somewhere on their body, even if it is not making them sick. This is called colonization. When people in hospitals and nursing homes are colonized, *C. auris* can spread from their bodies and can get on other people or nearby objects, allowing the fungus to spread to people around them. CDC recommends testing patients who may have come in contact with *C. auris* to see if they are carrying this fungus. This allows healthcare providers to know who is carrying the fungus and take steps to prevent it from spreading to other people.

Why am I being tested for *C. auris*?

You may have come in contact with *C. auris* while you were in this or another healthcare facility.

To keep the fungus from spreading, we are testing patients to see if they are now carrying the fungus. You may be carrying it on your skin without having an infection or symptoms of an infection. This is called colonization.

Fortunately, most people who carry *C. auris* do not get sick from it.

Getting tested for *C. auris* helps our healthcare facility and the health department prevent the fungus from spreading in the facility and in the community.

Why is *C. auris* concerning?

- It can cause serious infections.
- It is often resistant to medicines, making it difficult to treat.
- It is becoming more common.
- It is difficult to identify by routine lab tests.
- It can spread in hospitals and nursing homes.

What should I expect if I get tested?

1. The nurse or doctor will wipe or rub a cotton swab on the skin near your armpits and the area where your leg joins your body (groin). The test is not painful.
2. The swab will be sent to a lab, and in 1 to 2 weeks, the lab will tell your doctor the results.
3. If the test shows you are carrying the fungus, then your nurse or doctor will talk to you about the results and what to do next.

You can choose not to be tested. Talk to your nurse or doctor if you have questions or concerns about testing.

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Want to learn more?

www.cdc.gov/fungal/candida-auris

CS293107-A Jun 06, 2018

Accessible version: https://www.cdc.gov/fungal/candida-auris/fact-sheets/c-auris-esting.html

Pruebas de detección de la *Candida auris*

Información para Pacientes

La *Candida auris* (también llamada *C. auris*) es un hongo que puede causar infecciones graves. La *C. auris* puede propagarse de un paciente a otro en hospitales y hogares de ancianos. Los pacientes pueden portar la *C. auris* en algún lugar del cuerpo, incluso sin que los enferme. A esto se lo llama colonización. Cuando las personas que están en hospitales u hogares de ancianos son colonizadas, la *C. auris* puede propagarse desde sus cuerpos y puede pasar a otras personas u objetos cercanos. Esto le permite al hongo propagarse a las personas que estén a su alrededor.

Los CDC recomiendan hacerles pruebas de detección a los pacientes que pudieron haber tenido contacto con la *C. auris* para ver si son portadores del hongo. Esto les permite a los proveedores de atención médica saber quién es portador del hongo y tomar medidas para prevenir su propagación a otras personas.

¿Por qué me están haciendo una prueba de detección de la *C. auris*?

Es posible que usted haya tenido contacto con la *C. auris* mientras estaba en este o en otro establecimiento de atención médica.

Para evitar la propagación, estamos haciendo pruebas de detección a los pacientes para ver si en estos momentos son portadores del hongo. Usted podría llevarlo en su piel sin tener una infección o los síntomas de una infección. A esto se lo llama colonización.

Afortunadamente, la mayoría de las personas que son portadoras de la *C. auris* no se enferman por su causa.

El hecho de que se haga la prueba de detección de la *C. auris* ayuda a nuestro establecimiento y al departamento de salud a prevenir la propagación de este hongo aquí y en la comunidad.

¿Por qué la *C. auris* causa preocupación?

- Puede causar infecciones graves.
- Con frecuencia es resistente a los medicamentos, lo cual dificulta su tratamiento.
- Se está volviendo más común.
- Es difícil identificarla con las pruebas de laboratorio habituales.
- Puede propagarse en hospitales y hogares de ancianos.

¿Qué debo esperar si me hacen la prueba de detección?

1. La enfermera o el médico le pasará o frotará un palillo con algodón en la punta sobre la piel que se encuentra cerca de las axilas y en el área donde las piernas se unen al cuerpo (ingle). La prueba no es dolorosa.
2. El palillo será enviado a un laboratorio, y en una o dos semanas su médico recibirá los resultados.
3. Si la prueba muestra que usted es portador del hongo, la enfermera o el médico le hablarán sobre los resultados y lo que deberá hacer a continuación.

Usted puede decidir no hacerse la prueba. Hable con la enfermera o el médico si tiene preguntas o inquietudes sobre las pruebas de detección.

U.S. Department of Health and Human Services
Centers for Disease Control and Prevention

¿Desea saber más?

www.cdc.gov/fungal/candida-auris

CS294830-A Dec 03, 2018

Accessible version: https://www.cdc.gov/fungal/candida-auris/es/fact-sheets/c-auris-testing.html

Candida auris: A drug-resistant yeast that spreads in healthcare facilities

A CDC message to laboratory staff

Candida auris is a yeast that causes serious infections. Laboratory staff, healthcare workers, and infection preventionists can all help stop it from spreading.

Why is *Candida auris* a problem?

- **It causes serious infections.** *C. auris* can cause bloodstream and other types of invasive infections, particularly in patients in hospitals and nursing homes who have multiple medical problems. More than 1 in 3 patients die within a month of *C. auris* infection.
- **It is often multidrug-resistant.** Antifungal medications commonly used to treat *Candida* infections often don't work for *C. auris*. Some *C. auris* isolates are resistant to all three major classes of antifungal medications.
- **It's becoming more common.** Although *C. auris* was just recognized in 2009, it has emerged quickly. Since then, it has been reported from over 20 countries, including the United States.
- **It's difficult to identify.** *C. auris* can be misidentified as other types of yeast unless specialized laboratory methods are used. Unrecognized *C. auris* can spread to other patients in a facility, causing an outbreak. Identifying *C. auris* is critical to knowing what steps to take to control it in a healthcare setting.
- **It can spread in healthcare facilities.** Just like other multidrug-resistant organisms such as CRE and MRSA, *C. auris* can be transmitted in healthcare settings and cause outbreaks. It can colonize patients for many months, persist in the environment, and withstand many routinely used disinfectants in healthcare facilities.

Early detection can help limit spread of C. auris

Prepare for *C. auris* identification

- Some phenotypic methods for yeast identification can misidentify *C. auris* as a number of different organisms.
  - » *C. auris* is most often misidentified as *Candida haemulonii*, another rare yeast, but misidentifications are specific to each yeast identification method.
  - » Know whether the yeast identification method used in your laboratory misidentifies *C. auris* and, if so, what the possible misidentifications are. See www.cdc.gov/fungal/candida-auris for common misidentifications by yeast identification method.
  - » Misidentification can lead to inappropriate patient treatment and delay implementation of appropriate infection control precautions.
- There are no phenotypic characteristics that can easily distinguish *C. auris* from other *Candida* species.
- The most reliable way to identify *C. auris* is matrix-assisted laser desorption/ionization time-of-flight mass spectrometry (MALDI-TOF MS).
  - » If you have a MALDI-TOF MS, ensure *C. auris* is included in the database.
- Molecular methods based on DNA sequencing can also identify *C. auris*. Sequencing of the D1-D2 region of the 28s ribosomal DNA (rDNA) or internal transcribed spacer (ITS) region of rDNA are accepted methods.

CS293657-B Jun 04, 2018

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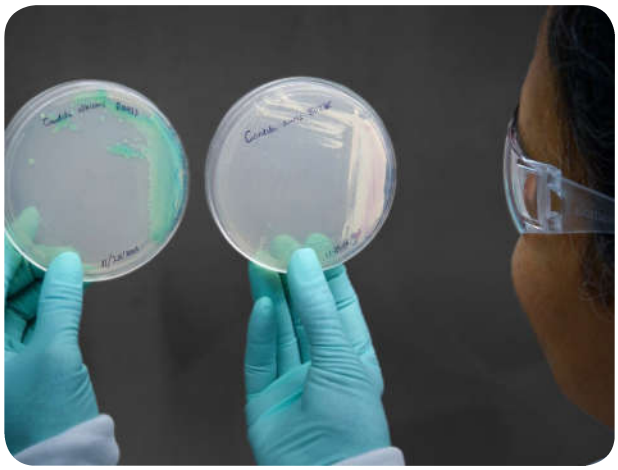
Centers for Disease Control and Prevention

- Validate your instrument to confirm it can identify *C. auris*. If needed, use isolates from wwwn.cdc.gov/ARIsolateBank/.
- Work with your facility's infection preventionist to set up a plan for informing their department about possible or confirmed *C. auris* and subsequent notification of public health authorities.
- Work with your state and local public health department for further characterization of these isolates. The health department will determine whether additional outreach to the Antibiotic Resistance Laboratory Network or CDC is needed.

What should I do if *C. auris* is confirmed?

- Report possible or confirmed *C. auris* cases immediately to your facility's infection prevention and control department and follow your facility's process for reporting to public health.
- Conduct antifungal susceptibility testing.
- Look for other cases of *C. auris* in your facility:
  - » Review microbiology records back to 2015 if possible to find potentially missed cases.
  - » Begin surveillance for *C. auris* from clinical specimens to identify new cases.
    - ◊ *C. auris* is found in many body sites and fluids, including blood, urine, respiratory, and abdominal specimens.
    - ◊ Consider identifying the species of *Candida* isolates from both sterile and non-sterile sites, even if this is not routine practice at your facility. Continue this surveillance for at least one month or until there is no evidence of transmission.



More guidance on when to suspect *C. auris*, how to correctly identify *C. auris*, and suggested antifungal drug minimum inhibitory concentration (MIC) cutoff values are available on CDC's webpage, Recommendations for Identification of *C. auris*: https://www.cdc.gov/fungal/candida-auris.

For more information, please contact the Centers for Disease Control and Prevention (CDC), National Center for Emerging and Zoonotic Infectious Diseases, Division of Foodborne, Waterborne, and Environmental Diseases.

1600 Clifton Road, NE, Mail Stop C-09, Atlanta, GA 30329-4018

Telephone: 800-CDC-INFO (232-4636) **E-mail:** candidaauris@cdc.gov **Web:** https://www.cdc.gov/fungal

CS293657-B Jun 04, 2018

La *Candida auris*: Un hongo resistente a los fármacos que se propaga en los centros de atención médica

Un mensaje de los CDC para el personal de laboratorios

La *Candida auris* es un hongo que causa infecciones graves. El personal de laboratorio, los trabajadores de atención médica y los expertos en prevención de infecciones pueden ayudar a detener su propagación.

¿Por qué es la *Candida auris* un problema?

- **Causa infecciones graves.** La *C. auris* puede causar infecciones invasivas sanguíneas y de otros tipos, especialmente en los pacientes con problemas médicos múltiples que están internados en hospitales y hogares de ancianos. Más de 1 de cada 3 pacientes mueren dentro del mes de contraer la infección por *C. auris*.

- **Con frecuencia, es multirresistente.** Los medicamentos antimicóticos que comúnmente se usan para tratar las infecciones por *Candida* muchas veces no tienen efecto en la *C. auris*. Algunas cepas aisladas de *C. auris* son resistentes a las tres clases principales de fármacos antimicóticos.

- **Se está volviendo más común.** Si bien recién se la reconoció en el 2009, la *C. auris* ha surgido rápidamente. Desde entonces, se han reportado casos en más de 20 países, inclusive los Estados Unidos.

- **Es difícil de identificar.** La *C. auris* puede ser identificada de un modo erróneo como otros tipos de hongos, a no ser que se usen métodos especializados de laboratorio. La *C. auris* no reconocida puede propagarse a otros pacientes en un establecimiento y causar un brote. Es imprescindible que se la identifique para saber qué medidas tomar para controlarla en los entornos de atención médica.

- **Se puede propagar en los centros de atención médica.** Como ocurre con otros organismos multirresistentes, como las Enterobacteriaceae resistentes a los carbapenémicos y los *Staphylococcus aureus* resistentes a la meticilina, la *C. auris* puede ser transmitida en los entornos de atención médica y causar brotes. Puede colonizarse en pacientes por muchos meses, perdurar en el ambiente y resistir muchos de los desinfectantes que habitualmente se usan en los centros de atención médica.

La detección temprana y el control de infecciones pueden limitar la propagación de la *C. auris*

Esté preparado para identificar la *C. auris*

1. Algunos métodos fenotípicos para la identificación de hongos pueden confundir la *C. auris* con una cantidad de organismos diferentes.
   i. La *C. auris* comúnmente se identifica de manera errónea como *Candida haemulonii*, otro hongo raro, pero cuando esto ocurre, se debe específicamente al método de identificación de hongos utilizado.
   ii. Sepa si el método de identificación de hongos usado en su laboratorio no identifica correctamente la *C. auris*, y si ese es el caso, cuáles son las posibles identificaciones erróneas. Visite www.cdc.gov/fungal/candida-auris para ver las identificaciones erróneas comunes por método de identificación de hongos.
   iii. La identificación errónea puede conducir al tratamiento inadecuado del paciente y demorar la implementación de medidas de precaución para el control de infecciones.

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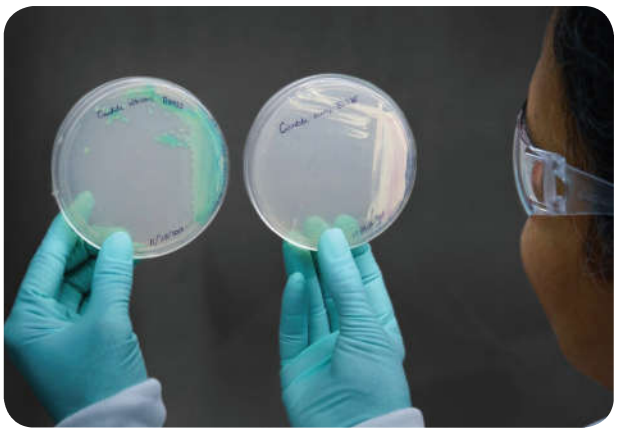
2. No hay características fenotípicas que puedan distinguir fácilmente a la *C. auris* de otras especies de *Candida*.
3. La forma más confiable de identificar la *C. auris* es la espectrometría de masas MALDI-TOF (desorción/ionización láser asistida por una matriz con detección de masas por tiempo de vuelo).
    i. Si tiene un espectrómetro de masas MALDI-TOF, asegúrese de que la *C. auris* esté incluida en la base de datos.
4. Los métodos moleculares basados en la secuenciación de ADN también pueden identificar la *C. auris*. La secuenciación de la región D1-D2 del ADN ribosómico 28S o de la región de los espaciadores transcritos internos del ADNr son métodos aceptados.
5. Valide su instrumento para confirmar que puede identificar la *C. auris*. Si es necesario, use cepas aisladas del wwwn.cdc.gov/ARIsolateBank/.
6. Trabaje junto al experto en prevención de infecciones de su establecimiento para organizar un plan para informar a su departamento sobre los casos posibles o confirmados de *C. auris* y la notificación subsiguiente a las autoridades de salud pública
7. Para caracterizar estas cepas aisladas con mayor precisión, trabaje con el departamento de salud pública estatal y local. El departamento de salud determinará si será necesario involucrar a la Red de Laboratorios de Detección de Resistencia a los Antibióticos o a los CDC.

¿Qué debo hacer si se confirma la presencia de *C. auris*?

1. Notifique inmediatamente los casos posibles o confirmados de *C. auris* al departamento de prevención y control de infecciones de su establecimiento y siga el proceso para notificar a salud pública.
2. Haga pruebas de susceptibilidad antimicótica.
3. Busque otros casos de *C. auris* en su establecimiento:
    i. Revise los registros de microbiología que se remonten al 2015, si es posible, para encontrar los casos que quizás no fueron detectados.
    ii. Comience la vigilancia para identificar los casos nuevos de *C. auris* en las muestras clínicas.
        a. La *C. auris* se encuentra en muchas partes del cuerpo y líquidos corporales, como las muestras de sangre, orina, respiratorias y abdominales.
        b. Considere identificar las especies de cepas aisladas de la *Candida* provenientes de sitios estériles y no estériles, aun si esto no es una práctica de rutina en su establecimiento. Continúe esta vigilancia por al menos un mes o hasta que no haya evidencia de transmisión



En la página web de los CDC, Recomendaciones para la identificación de la *C. auris*, https://www.cdc.gov/fungal/candida-auris, se puede obtener más información sobre cuándo debe sospecharse la presencia de *C. auris*, cómo identificarla correctamente y los valores de corte sugeridos para la concentración inhibidora mínima (MIC) de los fármacos antimicóticos.

Para obtener más información, comuníquese con la División de Enfermedades Transmitidas por los Alimentos, el Agua y el Medioambiente (DFWED) del Centro Nacional de Enfermedades Infecciosas Emergentes y Zoonóticas, que forma parte de los Centros para el Control y la Prevención de Enfermedades (CDC).

Teléfono: 800-CDC-INFO (232-4636) **Correo electrónico:** candidaauris@cdc.gov **Sitio Web:** https://www.cdc.gov/fungal

CS294830-D Dec 03, 2018

Accessible version: https://www.cdc.gov/fungal/candida-auris/es/fact-sheets/fact-sheet-lab-staff.html

La *Candida auris*: Un hongo resistente a los fármacos que se propaga en los centros de atención médica

Un mensaje de los CDC para los expertos en prevención de infecciones

La *Candida auris* es un hongo que causa infecciones graves. Los expertos en prevención de infecciones, los trabajadores de atención médica y el personal de laboratorio pueden ayudar a detener su propagación.

¿Por qué es la *Candida auris* un problema?

- **Causa infecciones graves.** La *C. auris* puede causar infecciones invasivas sanguíneas y de otros tipos, especialmente en los pacientes con problemas médicos múltiples que están internados en hospitales y hogares de ancianos. Más de 1 de cada 3 pacientes mueren dentro del mes de contraer la infección por *C. auris*.
- **Con frecuencia, es multirresistente.** Los medicamentos antimicóticos que comúnmente se usan para tratar las infecciones por *Candida* muchas veces no tienen efecto en la *C. auris*. Algunas cepas aisladas de *C. auris* son resistentes a las tres clases principales de fármacos antimicóticos.
- **Se está volviendo más común.** Si bien recién se la reconoció en el 2009, la *C. auris* ha surgido rápidamente. Desde entonces, se han reportado casos en más de 20 países, inclusive los Estados Unidos.
- **Es difícil de identificar.** La *C. auris* puede ser identificada de un modo erróneo como otros tipos de hongos, a no ser que se usen métodos especializados de laboratorio. La *C. auris* no reconocida puede propagarse a otros pacientes en un establecimiento y causar un brote. Es imprescindible que se la identifique para saber qué medidas tomar para controlarla en los entornos de atención médica.
- **Se puede propagar en los centros de atención médica.** Como ocurre con otros organismos multirresistentes, como las Enterobacteriaceae resistentes a los carbapenémicos y los *Staphylococcus aureus* resistentes a la meticilina, la *C. auris* puede ser transmitida en los entornos de atención médica y causar brotes. Puede colonizarse en pacientes por muchos meses, perdurar en el ambiente y resistir muchos de los desinfectantes que habitualmente se usan en los centros de atención médica.

La detección temprana y el control de infecciones pueden limitar la propagación de la *C. auris*

Prepárese para la presencia de *C. auris* en su establecimiento

1. Trabaje con su laboratorio para asegurarse de que el método de identificación de hongos usado en su establecimiento pueda identificar la *C. auris*. Si no puede, sepa cuándo debe sospechar un caso de *C. auris* y envíe las cepas aisladas a su departamento de salud estatal o local para que se realice una identificación más profunda.
2. Comience la vigilancia. Establezca un protocolo con su laboratorio para que su departamento sea informado inmediatamente cuando se sospeche un caso de *C. auris*.

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i. Si su laboratorio no está equipado para identificar la *C. auris*, comience la vigilancia dirigida a organismos que comúnmente llevan a una identificación errónea de este hongo. Visite www.cdc.gov/fungal/candida-auris para ver las identificaciones erróneas comunes por método de identificación de hongos.

3. Sepa cuáles pacientes corren un riesgo más alto de presentar *C. auris*. Entre estos se encuentran:
   i. Pacientes que han recibido atención médica en establecimientos de cuidados postagudos (p. ej., hogares de ancianos), especialmente aquellos con unidades de respiradores.
   ii. Pacientes que recientemente hayan recibido atención médica fuera de los Estados Unidos, en un país donde se sabe que hay transmisión de la *C. auris* (visite www.cdc.gov/fungal/candida-auris para ver un mapa de los países). Estos pacientes tienen un mayor riesgo de infección o de colonización asintomática por *C. auris*.
4. Tenga un plan de respuesta. Hable acerca de las recomendaciones para la prevención y el control de las infecciones por *C. auris* con el personal de atención médica, incluso con quienes trabajan en servicios ambientales.

¿Qué debo hacer en caso de que haya *C. auris* en mi establecimiento?

1. Vea en el sitio web de los CDC las directrices más actualizadas sobre cómo identificar y manejar la *C. auris:* www.cdc.gov/fungal/candida-auris.
2. Notifique inmediatamente los casos posibles o confirmados de *C. auris* a su departamento de salud pública.
3. Asegúrese de que se observen las recomendaciones de los CDC para el control de infecciones, que incluyen:
   i. Ubique a los pacientes infectados o colonizados por *C. auris* en una habitación individual bajo precauciones de contacto.
   ii. Evalúe y aumente el uso de batas y guantes.
   iii. Refuerce las medidas de higiene de las manos.
   iv. Coordine con el personal de servicios ambientales para garantizar que el entorno donde se atiende a los pacientes se limpie con un desinfectante que sea eficaz contra la *C. auris* (es decir, aquellos que son eficaces contra *Clostridium difficile*), al buscar en la "Lista K" en www.epa.gov). Trabaje con el equipo de servicios ambientales para monitorear el proceso de limpieza.
4. Luego de consultar al personal de salud pública, evalúe los contactos de pacientes- caso para identificar a pacientes con colonización por *C. auris*. Use las mismas medidas de control de infecciones para los pacientes que hayan sido colonizados.
5. Cuando se transfiera a un paciente desde su establecimiento (p. ej., a un hogar de ancianos u otro hospital), comunique claramente la situación del paciente con relación a la *C. auris* a los proveedores de atención médica que lo reciban.

Para obtener más información, comuníquese con la División de Enfermedades Transmitidas por los Alimentos, el Agua y el Medioambiente (DFWED) del Centro Nacional de Enfermedades Infecciosas Emergentes y Zoonóticas, que forma parte de los Centros para el Control y la Prevención de Enfermedades (CDC).

Teléfono: 800-CDC-INFO (232-4636) **Correo electrónico:** candidaauris@cdc.gov **Sitio Web:** https://www.cdc.gov/fungal

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Accessible version: https://www.cdc.gov/fungal/candida-auris/es/fact-sheets/cdc-message-infection-experts.html