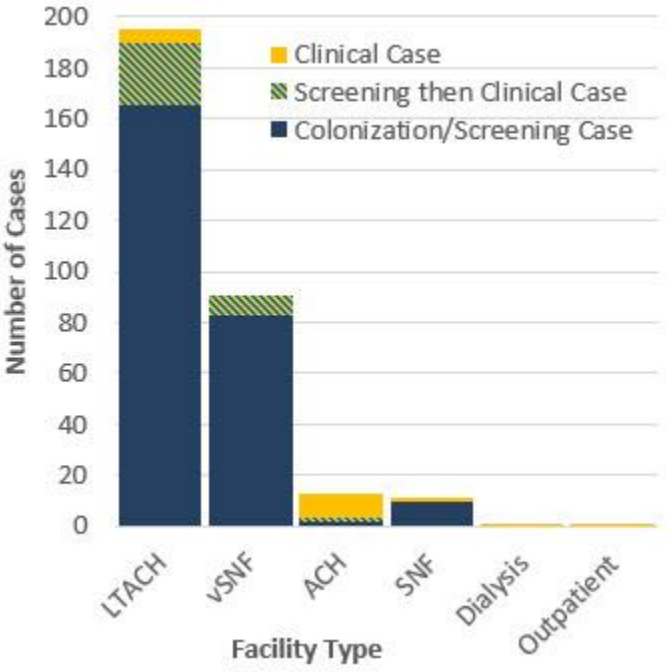
California Department of Public Health
Candida auris
Quicksheet – Interim

CDPH recommends a coordinated approach among healthcare facilities and public health to contain *Candida auris* (*C. auris*) in California. Local health departments (LHD) should be aware of *C. auris* incidence in healthcare facilities and communities in their regions, understand prevention measures, and provide guidance to healthcare facilities when responding to *C. auris* reports.

Background and Epidemiology

- *C. auris* is an emerging, often multidrug-resistant fungus. Some are resistant to all three available classes of antifungals.
- *C. auris* was first identified in 2009 in Japan, and has since been reported from over 35 countries, including the United States.[1]
- In California as in the U.S., *C. auris* has mainly been identified among patients with exposure to ventilator units at skilled nursing facilities (vSNF) and long-term acute care hospitals (LTACH).[2]

C. auris Cases in California by Specimen Collection Facility and Case Type through June, 2020 (N=312)



- Other risk factors include presence of indwelling medical devices, recent surgery, diabetes, recent antimicrobial use, and overnight healthcare exposure in a country with documented *C. auris* transmission.[1]
- *C. auris* can cause serious infections, including in blood and wounds. Mortality rates for invasive infections are as high as 60%.[1]
  - In California, the reported 90-day mortality rate among *C. auris* cases through June, 2020 ranged from 21% among colonization/screening cases (specimens from swabs) to 35% among clinical cases (specimens obtained during the course of patient care).
- Standard laboratory methods can misidentify *C. auris* as other yeasts (especially *C. haemulonii*).
  - The Centers for Disease Control and Prevention (CDC) provide guidance for when to suspect *C. auris.*[3]
- *C. auris* can persist in the healthcare environment for weeks, where it can spread through contact with contaminated surfaces or equipment. Person-to-person spread can also occur; infected and colonized patients can serve as sources of transmission.
- Identifying and containing *C. auris* is a **public health priority**. Early detection, infection control, and interfacility communication can limit the spread of *C. auris*.[2]

[1] CDC *C. auris* General Information (https://www.cdc.gov/fungal/candida-auris/candida-auris-qanda.html)

[2] Karmarkar E, O'Donnell K, Prestel C, et al. Regional Assessment and Containment of *Candida auris* Transmission in Post-Acute Care Settings – Orange County, California, 2019. Paper presented at: IDWeek 2019; October 3, 2019; Washington, DC.

[3] CDC Identification of *C. auris* (https://www.cdc.gov/fungal/candida-auris/recommendations.html#suspect)

For more information or consultation, contact HAIProgram@cdph.ca.gov or call 510-412-6060.

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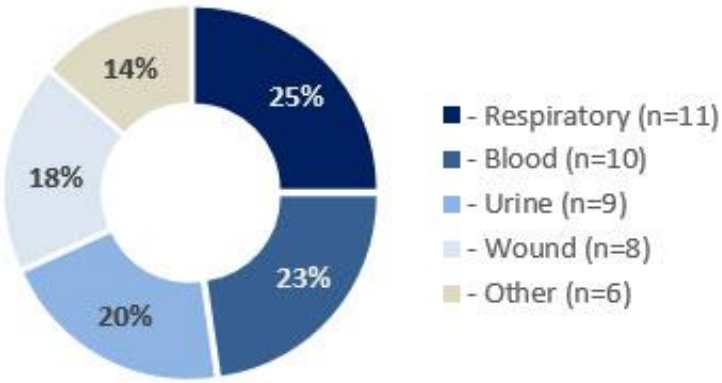
***C. auris* Clinical Isolates by Specimen Type (n=44)**



Facility Actions

1. Routine Surveillance and Identification of *C. auris*

- Ensure clinical labs can identify *C. auris*.[3] If not, know when to suspect it, and send those isolates to public health for further testing.
- Identify all *Candida* isolates from normally sterile sites to the species level.
- For *Candida* isolated from non-sterile sites, consider species-level identification:
  - when clinically indicated for patient care
  - when *C. auris* has been detected in the facility as part of prospective surveillance for additional case detection
  - at high-risk facilities such as LTACH or vSNF
  - when a patient meets criteria for active surveillance (see below).
- *C. auris* testing is available at some local public health labs and the CDPH Microbial Diseases Laboratory (MDL).[4]
- Clinical labs immediately notify clinicians and infection prevention staff whenever *C. auris* is identified.

2. Active Surveillance

- Healthcare facilities screen for *C. auris* and implement preemptive Contact precautions, and ensure use of appropriate disinfectant for patients at risk for *C. auris*, including those:
  - who have received care at LTACH or vSNF
  - admitted from facilities known to have ongoing *C. auris* transmission
  - who are close healthcare contacts of a newly-identified *C. auris* case
  - colonized or infected with another multidrug-resistant organism (MDRO), especially carbapenemase-producing organisms
  - who had an overnight healthcare exposure outside the U.S. in the past 12 months, especially if in a country with documented *C. auris* cases.[5]

3. Investigation and Reporting

- A single, confirmed case of *C. auris* from any body site is cause for investigation and notification to public health.
- Report unusual infectious disease occurrences and outbreaks to public health under Title 17,[6] and CDPH Licensing & Certification if in licensed healthcare facility per All Facilities Letter 19-18.[7,8]

Public Health Response to *C. auris* Reports

1. Initial Response and Recommendations

LHD makes recommendations to the facility for information gathering, surveillance, and infection control measures.

- Collect relevant case information in line list format, including:
  - Previous/subsequent healthcare facilities
  - Dates of admission, discharge, initiation of Contact precautions
  - Locations (e.g., units, wings)
  - Indwelling devices/mechanical ventilation
  - Healthcare exposures outside the U.S. in the previous 12 months

[4] *C. auris* Testing at CDPH MDL: (https://www.cdph.ca.gov/Programs/CID/DCDC/Pages/TestOrderFungalIDYeastMALDI.aspx)

[5] LHD may choose to reduce or expand the time period for history of overnight healthcare exposure abroad depending on whether *C. auris* has previously been identified in the region, and as resources allow.

[6] CDPH Reportable Diseases and Conditions: (https://www.cdph.ca.gov/Programs/CID/DCDC/Pages/Reportable-Disease-and-Conditions.aspx)

[7] All Facilities Letter (PDF): (https://www.cdph.ca.gov/Programs/CHCQ/LCP/CDPH%20Document%20Library/AFL-19-18.pdf)

[8] Licensing and Certification District Offices Directory: (https://www.cdph.ca.gov/Programs/CHCQ/LCP/Pages/DistrictOffices.aspx)

- Recommend placing patient in a single-bed room on Contact precautions, and using an Environmental Protection Agency (EPA)-registered hospital-grade disinfectant effective against *C. auris* for daily and terminal cleaning and disinfection of patient care environment.[9]
- Ensure transferring facilities inform receiving facilities of patient's *C. auris* status and recommended infection control measures at time of transfer.

2. LHD consults with CDPH HAI Program to determine need for an on-site infection control assessment

3. Retrospective and Prospective Lab Surveillance

- Conduct retrospective surveillance to identify additional confirmed or suspected cases during the past six months, or as far back as 2015 in regions where *C. auris* has not previously been identified.
- Identify the species of all *Candida* isolates from any specimen source for at least three months, until there is no evidence of transmission.
- In high-risk facilities such as LTACH or vSNF, consider routinely identifying the species of non-sterile (i.e., urine, respiratory or both) in addition to sterile *Candida* isolates if not already done.

4. Contact Investigation or Point Prevalence Survey

- In consultation with CDPH HAI Program, recommend *C. auris* colonization testing of close healthcare contacts not previously identified with *C. auris,* including those:
  - who shared a bathroom and roommates
  - who require high levels of care (e.g., ventilator-dependent) and overlapped on the same ward or unit as the index
  - with shared primary HCP, or exposed to the same device
  - residing on unit(s) where transmission is suspected (point prevalence survey (PPS))
- Facilities flag the medical record of patients identified as contacts, but who were discharged prior to screening; if discharged to another facility, consider screening contacts there.
- If one or more additional patients are identified with *C. auris*, conduct serial PPS at two-week intervals until two consecutive PPS are completely negative.
  - For patients testing negative during PPS and discharged to another facility, screen and place on preemptive Contact precautions at receiving facility.
- In long-term care facilities, consider following up with less frequent PPS if one or more *C. auris*-positive patients are in residence.
- *C. auris* colonization testing of axilla-groin swab specimens is available at no cost to facilities via the CDC Antibiotic Resistance Laboratory Network.[10]

5. Infection Control Recommendations for Facilities

Room Placement

- Place patients infected or colonized with *C. auris* in a single-bed room whenever possible, and implement Contact precautions.
- In facilities with multi-bed rooms, patients with *C. auris* may be placed in the same room. Ideally, only place patients co-colonized with other MDRO in multi-bed rooms with other patients co-colonized with the same MDRO.
- In multi-bed rooms, treat each bed space as a separate room. HCP must change gown and gloves and perform hand hygiene between contact with patients in the same room.

Hand Hygiene

- Follow and audit standard hand hygiene practices, including the use of alcohol-based hand sanitizer as the preferred method for cleaning hands if not visibly soiled. If hands are visibly soiled, wash with soap and water.

Transmission-based Precautions

- Contact precautions consist of HCP use of gowns and gloves upon entry to the patient room;

[9] CDC *C. auris* Environmental Disinfection: (https://www.cdc.gov/fungal/candida-auris/c-auris-infection-control.html#disinfection)

[10] CDC Screening for *C. auris* Colonization: (https://www.cdc.gov/fungal/candida-auris/c-auris-screening.html)

patients may only leave room when medically necessary.
- Continue Contact precautions for the duration of admission in acute care hospitals, including LTACH.
- In SNF, if there is no evidence of transmission, implement Enhanced Standard Precautions for residents with risk factors for transmission.[11]
- Do not perform repeated cultures or *C. auris* screening to demonstrate *C. auris* "clearance", as patients may remain colonized for many months, possibly indefinitely.

Dedicated Staff and Equipment
- Dedicate daily care equipment as much as possible, and consider using single-use, disposable, non-critical devices.

If multiple *C. auris*-infected or -colonized patients are present in a healthcare facility:
- Place them in rooms in the same geographic area of the facility whenever possible.
- Dedicate primary HCP (e.g., nursing) without responsibility to care for non-*C. auris* patients.
  - HCP who cannot be dedicated to *C. auris* patients should care for non-*C. auris* patients before *C. auris* patients, whenever feasible.

Environmental Cleaning
- Conduct and audit daily and terminal cleaning and disinfection of patient care environment including high-touch surfaces, and non-dedicated equipment after use, with an EPA-registered hospital-grade disinfectant effective against *C. auris*.[9]
- Consider extending use of appropriate disinfectant to entire unit or facility where patients with *C. auris* are located.

Adherence Monitoring
- Evaluate implementation of infection control measures using adherence monitoring tools and provide feedback to HCP.[12]

6. Communication and Follow-up for Facilities
- When transferring a *C. auris*-infected or -colonized patient to another healthcare facility, the transferring facility must communicate the patient's *C. auris* status, including recommended infection control measures to the receiving facility at time of transfer.[13]
- When receiving transferred patients, facilities may consider actively seeking information on MDRO status.
- Facilities with ongoing *C. auris* outbreaks should inform facilities to which they transfer patients. Receiving facilities may screen such patients for *C. auris* and place them on preemptive Contact precautions pending the test result.
  - LTACH or vSNF known to regularly share patients with the index facility may also consider admission screening of transfer patients, or PPS of high-risk patients or units.
- If patient has had previous healthcare exposure, and date of collection is within three days of admission, notify previous facility of *C. auris* status. The previous facility may also consider conducting a contact investigation or PPS.
- Facilities also alert LHD when transferring patients with *C. auris*.
- Flag the medical record of patients with *C. auris* to ensure infection control precautions are implemented upon readmission.
- Provide education materials to patients, their families, and HCP as needed.[14]

[11] CDPH Enhanced Standard Precautions for SNF (PDF): (https://www.cdph.ca.gov/Programs/CHCQ/LCP/CDPH%20Document%20Library/Enhanced-Standard-Precautions.pdf)

[12] CDPH Tools for Monitoring Adherence to Health Care Practices that Prevent Infection: (https://www.cdph.ca.gov/Programs/CHCQ/HAI/Pages/MonitoringAdherenceToHCPracticesThatPreventInfection.aspx)

[13] Infection Control Transfer Form (PDF): (https://www.cdph.ca.gov/Programs/CHCQ/HAI/CDPH%20Document%20Library/Interfacility%20Transfer%20Form%20061417.pdf)

[14] CDPH *C. auris* Website: (https://www.cdph.ca.gov/Programs/CHCQ/HAI/Pages/Candida-auris.aspx)