

California Department of Public Health

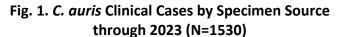
Candida auris Quicksheet

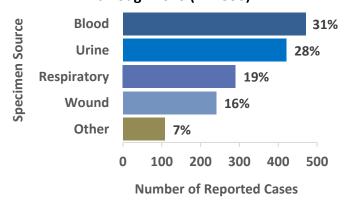


The CDPH Healthcare-Associated Infections (HAI) Program created the *C. auris* Quicksheet to provide guidance to local health departments (LHDs) responding to *C. auris* cases at **all levels** of local *C. auris* endemicity. This Quicksheet is designed to be used alongside the CDPH Regional *C. auris* Prevention and Response Strategy¹ ("Response Phases" document), which provides additional infection prevention and control (IPC) and screening recommendations that change based on local or regional *C. auris* epidemiology. **Implementing some practices** (e.g., cohorting) in this guidance can be challenging or not feasible in some healthcare facilities, but this should not preclude facilities from accepting and caring for patients and residents with *C. auris*.

Background and Epidemiology

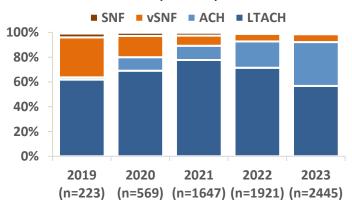
- C. auris was first identified in 2009 and is an emerging, often multidrug-resistant yeast. Rarely, C. auris strains are resistant to echinocandins (the first-line treatment for C. auris bloodstream infections), or all three available classes of antifungals (pan-resistant).²
- C. auris colonizes the skin and other body sites and can cause serious infections, including bloodstream infections. In a Los Angeles County study, crude 30-day mortality was 26% in cases with sterile site specimens (including blood) vs. 20% in cases with non-sterile site specimens.³
- In California, most *C. auris* cases were identified through colonization testing (e.g., axilla/groin swabs); 13% of colonized cases subsequently had clinical cases. About 30% of *C. auris* clinical cases were from blood specimens; however, the majority were identified from non-sterile sites (Fig. 1).





¹ <u>CDPH *C. auris* Response Phases</u> (PDF) (www.cdph.ca.gov/Programs/CHCQ/HAI/CDPH%20Document% 20Library/Cauris_Phases.pdf)

Fig. 2. *C. auris* Cases by Facility Type, 2019–2023 (N=6805)



- Risk factors include presence of indwelling medical devices and broad-spectrum antibiotic or antifungal use.²
- In California, *C. auris* has been identified primarily among patients in long-term acute care hospitals (LTACHs)⁴ and is increasingly being identified in ACHs, likely a result of wider admission screening (Fig. 2). The remaining cases have mainly been identified in ventilator-equipped skilled nursing facilities (vSNFs).
- *C. auris* can spread patient-to-patient via transient contamination of the hands or clothing of healthcare personnel (HCP), or via contaminated equipment or the healthcare environment, where *C. auris* can persist for weeks.
- Early detection, IPC, and interfacility communication can limit the spread of *C. auris*.²

² <u>CDC About *C. auris*</u> (www.cdc.gov/candida-auris/about/index.html)

³ Oyong et al. 2023 (doi.org/10.1093/ofid/ofad500.2067)

⁴ <u>Karmarkar et al. 2021</u> (doi.org/10.7326/m21-2013)

C. auris Reporting and Laboratory Submission Requirements^{5,6,7}

- ✓ C. auris is reportable by healthcare providers and laboratories.
- ✓ Report unusual infectious disease occurrences and outbreaks to CDPH Licensing & Certification if in a licensed healthcare facility.
- ✓ Submit *C. auris* isolates identified in sterile site specimens to a public health laboratory.

C. auris Containment Recommendations

- 1. Surveillance
- a. Identification of C. auris from Clinical Isolates
- Ensure clinical labs can identify *C. auris*, ⁸ and if not, know when to suspect it, and send those isolates to public health for further testing.
- Identify all *Candida* isolated from normally sterile sites (e.g., blood) to the species level.
- For *Candida* isolated from non-sterile sites, consider species-level identification:
 - for monomicrobial cultures that grow Candida species only
 - when clinically indicated for patient care
 - when C. auris has been detected in the facility as part of prospective surveillance
 - at high-risk facilities (i.e., LTACH or vSNF) or ACH unit (e.g., ICU, burn, oncology)
 - for high-risk patients (see section 1b).
- C. auris testing is available at some local public health labs and the CDPH Microbial Diseases Laboratory (MDL).9
- Clinical labs immediately notify clinicians and infection prevention staff whenever *C. auris* is identified.

b. Enhanced Detection among High-Risk Populations

- For the following patients at risk of *C. auris* acquisition, healthcare facilities screen for *C. auris* and place on empiric Contact Precautions, or implement Enhanced Barrier Precautions (EBP)¹⁰ empirically in SNFs with no outbreak, pending the test result,¹¹ and ensure use of proper disinfectant¹²:
 - patients admitted to any LTACH or vSNF ventilator unit
 - patients admitted from any LTACH, vSNF ventilator unit, or other facility with known C. auris outbreak.
 - In ACHs, alternatively or additionally consider screening patients admitted to high-risk units (e.g., ICU).
 - high-risk contacts of a confirmed *C. auris* case, including roommates, those who shared a bathroom, those who occupy the same bedspace immediately after the index patient.¹³
 - Consider patients in the same unit or facility based on LHD phase¹ and facility type.
 - Consider screening patients not included above with other known risk factors such as patients:
 - with indwelling devices, particularly those who are mechanically ventilated or trached;
 - colonized or infected with a carbapenemaseproducing organism (CPO), especially those requiring high-level care (e.g., indwelling medical devices, mechanical ventilation); and
 - with healthcare exposure outside of California in the past 12 months (i.e., in other states or countries).
- See Response Phases guidance for additional screening considerations.¹

(www.cdph.ca.gov/Programs/CID/DCDC/Pages/Reportable Disease-and-Conditions.aspx)

⁷ CDPH All Facilities Letter 23-08

(www.cdph.ca.gov/Programs/CHCQ/LCP/Pages/AFL-23-08.aspx)

⁸ <u>CDC Identification of *C. auris*</u> (www.cdc.gov/candida-auris/hcp/laboratories/identification-of-c-auris.html)

9 CDPH MDL Submission Instructions and Forms
(www.cdph.ca.gov/Programs/CID/DCDC/Pages/M

(www.cdph.ca.gov/Programs/CID/DCDC/Pages/MDLSubmission InstructionsandForms.aspx)

(www.cdc.gov/candida-auris/hcp/infection-control/index.html)

13 CDPH Screening Decision Tree (PDF)

(www.cdph.ca.gov/Programs/CHCQ/HAI/CDPH%20Document% 20Library/Tier2_Pathogen_Screening_Decision_Tree.pdf)

⁵ <u>CDPH *C. auris* Reporting FAQ (PDF)</u> (www.cdph.ca.gov/Programs/CHCQ/HAI/CDPH%20Document%20Library/CaurisReportingFAQ.pdf)

⁶ <u>CDPH Reportable Diseases and Conditions</u> (www.cdph.ca.gov/Programs/CID/DCDC/Pages/Reportable-

¹⁰ <u>CDC Enhanced Barrier Precautions</u> (www.cdc.gov/long-term-care-facilities/hcp/prevent-mdro/ppe.html)

^{11 &}lt;u>CDC Preventing MDROs: FAQs</u> (www.cdc.gov/healthcare-associated-infections/php/preventing-mdros/preventing-mdros-faqs.html)

¹² CDC *C. auris* Environmental Disinfection

2. Investigation

 A single, confirmed case of *C. auris* from any specimen source is cause for investigation and notification to public health in Phase 1 jurisdictions. LHD staff in Phase 2-4 jurisdictions may provide specific recommendations for individual case investigation and notification.¹

3. Initial Response and Recommendations

- LHD ensures the following information is complete in the case report:
 - Patient name, date of birth, race, ethnicity, gender, collection facility, collection facility type, date of collection, specimen source
- Phase 1 and 2 LHDs¹ collect additional epidemiological information for all healthcare exposures from at least 30 days prior to specimen collection (using CalREDIE or line list as relevant):
 - Dates of admission, discharge, initiation of Contact Precautions or EBP (if SNF)
 - Previous, subsequent healthcare exposure
 - Locations (e.g., units, rooms)
 - Additionally collect information about healthcare exposures outside California or the U.S. in the previous 12 months
- In hospitals, implement Contact Precautions and place the patient in a single-bed room. In SNFs, implement EBP if no outbreak; if no single-bed room is available, cohort with another resident colonized with *C. auris*, whenever possible.¹⁴
- Use an Environmental Protection Agency (EPA)registered hospital-grade List P disinfectant
 effective against C. auris (List K or bleach, if not
 accessible) for daily and terminal cleaning and
 disinfection of patient care environment and
 reusable medical equipment.¹¹
- Inform receiving facilities of patient's *C. auris* status at time of transfer (see section 5).

4. Additional IPC Recommendations Room Placement Considerations

 Facilities with multiple patients with *C. auris* may create cohorts within rooms or in the same geographic area of the facility. Factor in other

- communicable disease status (e.g., CPO) when creating cohorts, whenever possible.¹³
- In multi-bed rooms, treat each bed space as a separate room, even when patients are cohorted.
 HCP must change gown and gloves and perform hand hygiene between contact with patients in the same room.

Hand Hygiene

 Follow and audit hand hygiene practices, including the use of alcohol-based hand sanitizer as the preferred method for cleaning hands if not visibly soiled; if 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; patients may only leave room when medically necessary.
- Continue Contact Precautions for the duration of admission in hospitals, including LTACHs.
- In SNFs, implement Contact Precautions during a
 C. auris outbreak until containment can be
 demonstrated; in the absence of an outbreak,
 implement EBP consisting of gown and glove use
 during high-contact care activities. Residents may
 leave their room if they can be maintained in
 hygienic condition and don clean clothing. 15
- Do not perform repeated cultures or screening to demonstrate *C. auris* "clearance" for purposes of discontinuing Transmission-based Precautions, as patients may remain colonized for many months or years, possibly indefinitely.¹¹

Dedicated Equipment and Staff

- Dedicate patient care equipment as much as possible to patients with *C. auris*, and consider using single-use, disposable devices.
- In facilities with *C. auris* cohorts, dedicate primary HCP (e.g., nursing) to care only for patients with *C. auris*, whenever feasible.
- Consider providing physical therapy or other ancillary care for patients with *C. auris* in their room or scheduling at the end of the day.

¹⁴ <u>CDPH Cohorting Guidance</u> (PDF) (www.cdph.ca.gov/Programs/ CHCQ/HAI/CDPH%20Document%20Library/MDROCohorting.pdf)

¹⁵ CDPH EBP: Additional Considerations for CA SNFs (PDF) (www.cdph.ca.gov/Programs/CHCQ/HAI/CDPH%20Document%2 OLibrary/EBP_AdditionalConsiderationsForCA_SNF.pdf)

Environmental Cleaning and Disinfection

- Conduct and audit daily and terminal cleaning and disinfection of patient care environment including high-touch surfaces, and non-dedicated equipment after use, with a List P disinfectant effective against C. auris (List K or bleach, if not accessible).
- During an outbreak or when transmission is difficult to control, consider double terminal cleaning in rooms with patients with *C. auris* or on affected units, i.e., perform two rounds of terminal cleaning and disinfection, with a fluorescent marker audit after each.

Adherence Monitoring and Feedback

- Conduct regular adherence monitoring to evaluate implementation of IPC measures using standardized tools and provide feedback to HCP and facility leadership.¹⁶
- During an outbreak, increase the frequency of adherence monitoring and feedback (e.g., weekly).

Onsite IPC Assessment

 LHDs can recommend an onsite IPC assessment in response to a *C. auris* case or outbreak; CDPH HAI Program may be consulted as needed.

5. Communication and Follow-up

- When transferring a patient with *C. auris* to another healthcare facility, communicate the patient's *C. auris* status to the receiving facility at time of transfer.¹⁷
- When receiving transferred patients, facilities should actively seek information on multidrugresistant organism status.
- Facilities with *C. auris* outbreaks must inform facilities to which they transfer patients. Receiving facilities should screen such patients for *C. auris* and place them on empiric Contact Precautions or implement EBP empirically in SNFs pending the test result.
- If a patient tests positive for *C. auris* on admission, notify transferring facility of *C. auris* status. The transferring facility should also conduct a contact investigation or point prevalence survey (PPS).

- LHDs may request to be notified when healthcare facilities transfer patients with *C. auris*.
- Flag the medical record of patients with *C. auris* to ensure IPC measures are implemented upon readmission. Do not rescreen patients who have previously tested positive for *C. auris*.
- Provide education materials to patients, their families, and HCP as needed.¹⁸
 - A template letter is available that healthcare facilities can provide to patients when they discharge home.
- 6. Considerations for Other Healthcare Settings (e.g., dialysis, outpatient, home health)¹⁹
- IPC practices for *C. auris* are similar across other healthcare settings. Ensure:
 - hand hygiene before and after entering the patient's room and providing care.
 - implementation of Contact Precautions, or EBP for inpatient settings.
 - scheduling the patient to receive care at the end of the day, whenever possible.
 - environmental cleaning and disinfection of the patient's care environment and any reusable medical equipment with a disinfectant effective against *C. auris*.
 - the patient's C. auris status is communicated if the patient needs to be transferred to a healthcare facility.
- Healthcare settings within correctional facilities should generally follow the recommended IPC practices for the type of healthcare provided.
 Specific IPC measures are generally not indicated for non-healthcare settings in correctional facilities.
- LHDs can consider adapting many of these practices to non-healthcare congregate residential settings (e.g., implementation of EBP in assisted living facilities, group or board and care homes).
- In any of these settings, screening contacts may be indicated in certain circumstances.
- LHD may consult with HAI Program for additional guidance.

(www.cdph.ca.gov/Programs/CHCQ/HAI/Pages/MonitoringAdhe renceToHCPracticesThatPreventInfection.aspx)

¹⁶ CDPH Adherence Monitoring

¹⁷ CDPH Interfacility Transfer Communication (www.cdph.ca.gov /Programs/CHCQ/HAI/Pages/InterfacilityCommunication.aspx)

 ¹⁸ CDPH C. auris for Patients and their Families
 (www.cdph.ca.gov/Programs/CHCQ/HAI/Pages/Candidaauris_InfoForPatientsAndFamilies.aspx)
 ¹⁹ CDC IPC for C. auris (www.cdc.gov/candidaauris/hcp/infection-control/index.html)

Regional Candida auris Prevention and Response Strategy

Introduction

Local health jurisdictions (LHJs) can use this Regional *Candida auris* Prevention and Response Strategy ("Response Phases") document to guide prevention, response, and mitigation activities, and recommendations that depend on local or regional *C. auris* epidemiology. The "Response Phases" document is designed to complement the *C. auris* Quicksheet²⁰ which provides response recommendations that LHJs would implement at all levels of *C. auris* endemicity. The recommendations described in this document are the minimum set of prevention and response activities and does not preclude LHJs from providing more stringent recommendations to their healthcare facilities.

The "Response Phases" recommendations are intended to prioritize those with the highest public health impact for a given level of endemicity:

- For non-endemic *C. auris* LHJs (Phase 2), *C. auris* screening considerations prioritize the highest yield activities while allowing flexibility for LHJs to be more stringent.
- In long-term acute care hospitals (LTACHs) where *C. auris* has become endemic (Phase 4), we include considerations for prioritizing intensified efforts to prevent adverse clinical outcomes (e.g., central line-associated bloodstream infections) with reduced emphasis on routine point prevalence surveys (PPS).

Definitions

Screening refers to the collection of (typically) axilla/groin swabs to test for colonization in individuals exposed to or at risk of acquiring *C. auris*.

Individuals at high risk of *C. auris* acquisition include those:

- who are close healthcare contacts of a confirmed *C. auris* case, including roommates, those who shared a bathroom, those who occupy the same bedspace immediately after the index patient, and patients or residents on the same unit or in the same facility;
- mechanically ventilated or trached admitted to LTACHs or ventilator (subacute) units of skilled nursing facilities (vSNFs);
- admitted from facilities with known C. auris transmission;
- colonized or infected with a carbapenemase-producing organism (CPO), especially those requiring high-level care (e.g., indwelling medical devices, mechanical ventilation); and
- with international healthcare exposure in the last 12 months, especially those colonized or infected with a CPO.

Facilities at high risk of *C. auris* introduction and spread include:

- LTACHs
- vSNFs (particularly ventilator units)
- Acute care hospital (ACH) high-acuity units, e.g., intensive care, step-down, burn, and oncology units

All Phases and Facilities

- 1. See C. auris Quicksheet for response recommendations across all phases and facilities.²⁰
- 2. All confirmed C. auris cases must be reported to public health.²¹
- 3. Ensure laboratories can correctly identify *C. auris*,²² and healthcare facilities have access to routine *C. auris* screening resources outside of public health (e.g., polymerase chain reaction (PCR) testing through a clinical or commercial lab).²³
 - There are a growing number of labs with PCR testing capacity.²³ Public health can continue to engage new labs, including reference labs serving high-risk individuals to bring on *C. auris* screening testing.
 - PCR is preferred over culture-based testing due to the shorter turn-around-time which can enable more prompt response to cases.
 - Prioritize engaging facilities admitting high-risk individuals; identify successful or innovative strategies to engage facilities (especially SNFs, vSNFs) to use these resources.
- 4. Promote antimicrobial stewardship (AS) in all healthcare facilities.
 - Ensure appropriate use of broad-spectrum antibiotics and antifungals; e.g., do not treat organisms isolated from non-sterile sites without evidence of infection.
 - Engage facility leadership on implementation of core elements, including:
 - who is responsible for AS in the facility;
 - how the facility is tracking or monitoring antimicrobial use, and for which antimicrobials; and
 - whether the facility has a process for reassessing the indication and duration for antimicrobial prescriptions.
 - Encourage participation in CDPH AS initiatives, ²⁴ including the AS Program Honor Roll and multidrug-resistant organism (MDRO) prevention collaboratives. ²⁵
- 5. Ensure facility-wide implementation of Enhanced Barrier Precautions (EBP) in SNFs. *C. auris* is included in the CDC list of targeted MDROs for which EBP are indicated, in addition to indwelling devices and unhealed wounds.²⁶ In units where *C. auris* transmission has been identified, recommend placing residents known to be *C. auris*-positive on Contact Precautions until containment can be demonstrated; refer to EBP: Additional Considerations for California SNFs for guidance on transitioning from Contact Precautions to EBP.²⁷ LHJs may adapt EBP principles in non-healthcare congregate residential settings (e.g., assisted living facilities, group home, board and care) for known *C. auris*-positive individuals.
- 6. Recommend use of a List P disinfectant²⁸ (List K disinfectant or bleach, if not accessible) based on response phase (for a summary, see Table 2).

Table 2. Recommendations for List P Disinfectant²⁸ Use by Healthcare Facility Type and Response Phase

This table summarizes recommendations for use of a List P disinfectant (List K disinfectant or bleach, if not accessible) in healthcare settings depending on the *C. auris* Response Phase a healthcare facility or LHJ is experiencing. In general, as *C. auris* endemicity increases, the recommendations for use of a List P disinfectant become stronger both within a healthcare facility and across facility types. In facilities or units where a List P disinfectant is not indicated, ensure the use of an Environmental Protection Agency (EPA)-registered hospital-grade disinfectant according to label instructions for facility-wide daily and terminal cleaning and disinfection. As a reminder, List P disinfectants are effective against *C. auris* as well as other MDROs including carbapenemase-producing organisms.

	ACH	LTACH	SNF	vSNF
Phase 1: No C. auris cases	Per routine facility protocol		Per routine facility protocol	Use List P disinfectant in vent unit. Consider using List P disinfectant facility-wide.
Phase 2: Newly identified <i>C. auris</i> cases	In affected unit(s) (with cases or where transmission is suspected)	Facility-wide	For a single C. auris case: in affected resident's room When C. auris transmission is suspected or confirmed: in affected unit(s)	Facility-wide
Phase 3: Ongoing local transmission	In affected and high-acuity* units. Consider using List P disinfectant facility-wide.		In affected unit(s)	, , , , , , , , , , , , , , , , , , , ,
Phase 4: Ongoing regional transmission	Facility-wide		Facility-wide	

^{*} Including, but not limited to, intensive care, step-down, burn, and oncology units.

Phase 1. No C. auris cases in LHJ: Prevention

1. Engage LTACHs to:

- a. conduct proactive initial and follow-up onsite infection prevention and control (IPC) assessments, education, and outreach in coordination with the HAI Program;
- b. conduct proactive baseline PPS and consider 3-6 monthly proactive PPS;
- c. conduct admission screening;
- d. use List P agent²⁸ (List K or bleach if not accessible) for facility-wide daily and terminal cleaning and disinfection; and
- e. ensure clinical lab performs species identification of *Candida* isolates from normally sterile and non-sterile sites or enrolls in the Antimicrobial Resistance (AR) Lab Network Targeted Surveillance Program.²⁹

2. Engage vSNFs to:

- a. conduct proactive initial and follow-up onsite IPC assessments, education, and outreach in coordination with the HAI Program;
- b. conduct proactive baseline PPS in vent unit and consider 6-12 monthly proactive PPS; and
- c. use List P agent²⁸ (List K or bleach if not accessible) for daily and terminal cleaning and disinfection in vent unit, and consider using the disinfectant facility-wide for additional prevention.
- d. consider screening testing in addition to ensuring EBP are implemented for residents admitted to the vent unit from LTACHs or other facilities with known *C. auris* transmission.

3. Engage ACHs to:

- ensure clinical lab performs species identification of Candida isolates from sterile sites, and consider species identification in non-sterile sites or enrolls in the AR Lab Network Targeted Surveillance Program²⁸; and
- b. consider screening testing and placing on empiric Contact Precautions (see CDC guidance for additional recommendations³⁰) patients admitted to high-risk units, or with indwelling devices or mechanically ventilated from SNFs, in addition to high-risk patients.
- 4. Engage all ACHs, SNFs, LTACHs in routine (e.g., monthly) calls.
 - a. Conduct education and outreach (may coordinate with HAI Program).
 - b. Promote interfacility communication.
 - c. Pair ACH infection preventionist (IP) (mentors) with SNF IPs in patient referral networks.
 - d. Encourage participation in CDPH MDRO prevention collaborative(s) as relevant.²⁵
- 5. Follow up on all discharges from known outbreak facilities (intra- and inter-LHJ).
 - a. Screen and place on empiric Contact Precautions, or implement EBP empirically in SNFs in coordination with the HAI Program.
- 6. Consider combining *C. auris* and **carbapenemase-producing organism (CPO) prevention activities**³¹ when feasible, including recommendations to:
 - a. in LTACHs, conduct admission screening and proactive baseline and follow-up CPO PPS facility-wide;
 - b. in vSNF vent units, conduct proactive baseline and follow-up CPO PPS; and

c. in ACHs, conduct CPO screening testing for patients admitted to high-risk units, or with indwelling devices or mechanically ventilated from SNFs, in addition to high-risk patients. See CDC guidance for additional recommendations on use of empiric Contact Precautions.³⁰

Phase 2. Newly identified case(s) in LHJ: Aggressive Containment + Prevention

For Phase 2 responses, an outbreak is defined as:

- 1. 1+ newly identified case during PPS in response to a known case **OR**
- 2. 2+ cases identified within 4 weeks of each other in the same unit or epidemiologically linked*

A. Single case investigation

- 1. If the LHJ is responding to a single *C. auris* case (see screening decision tree on page 11):
 - a. In LTACHs and vSNFs
 - i. Conduct a PPS facility-wide in LTACHs or in vSNF vent units.
 - If initial PPS is negative, repeat PPS after two weeks. If the second PPS is negative, continue preventive PPS in vSNFs (6-monthly) and LTACHs (3-monthly).
 - If initial or repeat PPS is positive, see section B below.
 - b. In ACHs and SNFs
 - i. Screen high-risk healthcare contacts, regardless of whether the index patient was being managed with Contact Precautions, or EBP in SNFs or vSNFs.
 - ii. In high-risk ACH units consider conducting a PPS.
 - If initial PPS is negative, discontinue PPS.
 - If initial PPS is positive, see section B below.
 - c. If additional *C. auris* screening or clinical cases are identified, see section B below.
- 2. Conduct initial IPC assessment, education, and outreach; coordinate with HAI Program as relevant.
- 3. Recommend use of List P agent²⁸ (List K or bleach if not accessible) for daily and terminal cleaning and disinfection: facility-wide in vSNFs and LTACHs; affected unit(s) in ACHs; and affected resident's room in SNFs. Consider expanding to high-acuity units or facility-wide in ACHs as resources allow.
- 4. Conduct retrospective and prospective lab surveillance.
 - a. Conduct microbiologic record review to identify any *C. auris* cases that might have been unrecognized during the past 3 months.
 - b. Identify the species of all *Candida* isolates from any specimen source for at least 3 months after the initial positive *C. auris* isolate was identified.

B. Two or more cases or transmission is suspected

1. If transmission is suspected or ongoing in a healthcare facility (see screening decision tree on page 11):

^{*} Epidemiologically linked includes having previous admission at the same healthcare facility (in last year), **OR** common primary or consultative service, healthcare personnel, bathroom, procedure, or device. This outbreak facility definition excludes 2+ cases tested within 24 hours from time of admission, and not epi-linked to any other cases at the facility.

- a. Conduct a PPS. If LTACH, conduct PPS facility-wide; if vSNF, in vent unit; if ACH or SNF, in the affected unit(s).
- b. Once the healthcare facility has 2 consecutively negative PPS at 2-week intervals **AND** no new clinical cases during the PPS screening window:
 - i. In ACHs and SNFs, discontinue biweekly PPS.
 - ii. In LTACHs and vSNFs, reduce PPS frequency to monthly for 3 months; if negative, move to 3-monthly if LTACH, and 6-monthly if vSNF.
 - iii. If low-level transmission continues in LTACH or vSNF, see Phase 3.
- 2. For patients or residents discharged prior to PPS, at the receiving facility, implement empiric Contact Precautions, or implement EBP empirically in SNFs or vSNFs for transfers with unknown or negative *C. auris* status, including communication to outside LHJ.
 - a. Refer to Phase 2 screening decision tree (on page 11) for discharge screening and tracking considerations.
- 3. Continue follow-up IPC assessments at outbreak facility and retrospective and prospective surveillance (see A4 above).
- 4. Recommend use of List P agent²⁸ (List K or bleach if not accessible) for daily and terminal cleaning and disinfection: facility-wide in vSNFs and LTACHs; affected unit(s) in ACHs and SNFs. Consider expanding to high-acuity units or facility-wide in ACHs as resources allow.
- 5. Consider disseminating weekly outbreak facility list to all healthcare facility IPs intrajurisdictionally, and inter-jurisdictionally as applicable.
- 6. Facilities alert LHJ when transferring patients with *C. auris*.
 - a. LHJ follows up on all positive *C. auris* transfer patients to ensure implementation of appropriate Transmission-based Precautions and IPC measures.

C. Ongoing prevention activities

- 1. Engage high-risk facilities without cases, if not already done.
 - a. Prioritize LTACHs, and vSNFs by interconnectedness to *C. auris* outbreak facilities (HAI Program can support identification).
 - Conduct proactive PPS facility-wide in LTACHs and vent unit in vSNFs. If PPS negative, consider 3-6 monthly proactive PPS in LTACHs, 6-12 monthly proactive PPS in vSNF vent units.
 - ii. Conduct proactive onsite IPC assessments, education, and outreach in coordination with the HAI Program.
 - b. Identify other facilities (ACHs, SNFs) with highest volume of patient sharing with facilities with cases.
 - i. Prioritize for education and outreach.
 - ii. Prepare SNFs to identify and care for *C. auris*-exposed or -positive individuals, prioritizing them for initial and follow-up onsite IPC assessments.
 - iii. Encourage ACHs to implement admission screening, in addition to performing species identification of *Candida* isolates.
 - c. In vSNFs, consider routinely identifying the species of *Candida* isolates in non-sterile (e.g., from urine, respiratory, wound) in addition to sterile specimens or enroll in the AR Lab Network Targeted Surveillance Program if not already done.²⁹

Screening Decision Tree for Local Health Departments (LHDs) Conducting Phase 2 Responses^a

NO

(No transmission suspected, and patient or resident admitted to an acute care hospital (ACH) or skilled nursing facility (SNF))^c

For all ACH units and SNFs, screen high-risk contacts.

If high-risk contacts were discharged to another healthcare facility, screen there.

 Consider notifying the patient or resident, and flagging their chart for screening and empiric Contact Precautions or implementation of Enhanced Barrier Precautions (EBP) empirically if SNF upon readmission within 6 months.

In **ACH units with increased risk of transmission** (e.g., ICU, burn, oncology), consider broader screening such as point prevalence survey (PPS). e

New Tier 2 pathogen becase identified

Transmission suspected or ongoing in the healthcare facility, regardless of facility type OR

Patient or resident admitted to long-term acute care hospital (LTACH) or ventilator unit in skilled nursing facility (vSNF)

YES

Conduct or continue PPS in the affected unit(s)

- If LTACH, conduct PPS facility-wide; if vSNF, PPS in vent unit; if ACH or SNF, PPS in the affected unit(s).
- Continue PPS every 2 weeks until 2 consecutive rounds are negative and no new clinical cases. After this:
 - For ACH and SNF, discontinue biweekly PPS.
 - For LTACH and vSNF, reduce PPS frequency to monthly for 3 months;
 if negative, move to quarterly PPS if LTACH, and biannual if vSNF.

For patients or residents discharged prior to PPS:

 For all patients in LTACH and residents on affected vSNF unit/other geographic location, and only high-risk contacts in ACH and SNF, if discharged before PPS, flag the chart for screening, and empiric Contact Precautions or implementation of EBP empirically if SNF/vSNF upon readmission within 6 months. If discharged to another healthcare facility, screen there.

Notes

- **High-risk contact** is defined as a roommate (including patients in the same open bay unit); patient/resident who shared a bathroom with the index patient/resident; or patient/resident occupying the same bed space immediately following the index patient/resident.
- LHD can **consider screening additional contacts who do not meet high-risk criteria**. Prioritize contacts discharged to higher acuity settings (e.g., LTACH, vSNF vent unit, ACH).^g
- If a contact (high-risk or otherwise) is **discharged home**, screening at home is not recommended.
- In some situations, broader screening may not be indicated.

^aPlease see <u>Candida auris</u> (PDF) (www.cdph.ca.gov/Programs/CHCQ/HAI/CDPH%20Document%20Library/Cauris_Phases.pdf) or <u>Carbapenemase-producing Organism</u> (PDF) (www.cdph.ca.gov/Programs/CHCQ/HAI/CDPH%20Document%20Library/CPO_Phases.pdf) Prevention and Response Strategy document to identify your LHD's phase for relevant Tier 2 antimicrobial-resistant (AR) pathogen prevention and response Strategy document to identify your LHD's phase for relevant Tier 2 antimicrobial-resistant (AR) pathogen prevention and response activities.

Tier 2 AR pathogens (PDF) (www.cdph.ca.gov/Programs/CHCQ/HAI/CDPH%20Document%20Library/ARPathogenTiers.pdf) are those not commonly detected in California (although epidemiology can vary by region within California), for example: *Candida auris*, non-KPC-producing Enterobacterales, carbapenemase-producing *Pseudomonas* species (spp.) and *Acinetobacter* spp. (excluding OXA-23-, OXA-24/40-, and OXA-58-like carbapenemases).

In addition to ACHs and SNFs, this could apply to other congregate care settings including but not limited to assisted living facilities, group homes, and board & care facilities, prioritizing residents with risk factors for AR pathogen acquisition or transmission (e.g., presence of indwelling device or unhealed wound, total dependence on others for assistance with activities of daily living, or frequent healthcare exposure).

d High-risk contacts should be screened regardless of whether the index patient or resident was being managed with Contact Precautions, or Enhanced Barrier Precautions in SNFs and regardless of the amount of time they overlapped with the index patient or resident.

^e LHD can consider PPS in ACH units with increased risk of transmission in situations including, but not limited to, healthcare settings with high-acuity patients with longer lengths of stay (e.g., 1 week); or if it will take time to identify high-risk contacts or if most high-risk contacts have been discharged from a unit/healthcare facility. This generally excludes the emergency department.

The highest yield is likely to be the patient exposed to Tier 2 pathogen contamination following a single terminal cleaning. Subsequent patients occupying the same bed space, including current occupant(s) may be considered for screening if feasible.

^g Considerations for pursuing screening of additional contacts who do not meet high-risk criteria can include, but are not limited to, contacts who shared a common primary or consultative service, healthcare personnel, procedure, or device; or contacts who have risk factors for AR pathogen acquisition (e.g., presence of indwelling device or unhealed wound, total dependence on others for assistance with activities of daily living receive high-level care).

In some situations, broader screening may not be recommended by public health. For example, if the index patient's length of stay was very short (e.g., <24 hours), screening may not be indicated. During a response to a single case in an ACH unit with a short average length of stay where patients are ambulatory and not mechanically ventilated, broader screening could be limited to situations where the index patient is currently admitted or recently discharged (<7 days prior). See CDC Containment Strategy (www.cdc.gov/hai/mdro-guides/containment-strategy.html).

Phase 3. Ongoing transmission in at least one high-risk facility for > 6 months in LHJ: Mitigation

1. Routine PPS

- a. For LTACHs, continue monthly PPS; if <2 cases per PPS for 3 consecutive months, decrease to 3-monthly PPS.
- b. For vSNFs, continue monthly PPS; if <2 cases per PPS for 3 consecutive months, decrease to 3-6 monthly PPS depending on *C. auris*-positive resident burden.

2. Admission screening

- a. For LTACHs, continue admission screening and empiric Contact Precautions.
- b. For vSNF vent units, consider admission screening and rescreen residents if readmitted after >24 hours hospital admission; ensure implementation of EBP facility-wide.
- c. For ACHs, consider admission screening for high-risk patients, if not already done.
- 3. Recommend use of List P agent²⁸ (List K or bleach if not accessible) for daily and terminal cleaning and disinfection: facility-wide in vSNFs and LTACHs; affected unit(s) in SNFs; and affected and high-acuity units in ACHs. Consider facility-wide in ACHs as resources allow.
- 4. Transition from LHJ- to facility-led discharge screening and notification for *C. auris*-exposed and -positive individuals; LHJ continues notifying outside LHJ(s) of interjurisdictional transfer cases.
- 5. Ensure all clinical labs perform species identification of *Candida* isolates from normally sterile and non-sterile sites, or enroll in the AR Lab Network Targeted Surveillance Program.²⁹
- 6. Implement **Phase 2** activities if:
 - a. C. auris case(s) identified in previously naïve facility;
 - b. new outbreak (higher-than-expected number of cases) in a non-naïve facility; or
 - c. *C. auris* case identified with unusual resistance pattern, strain, or other epi (e.g., echinocandin- or pan-resistant, Clade I, II, IV, V, or transfer from out-of-state or abroad).
- 7. Engage facilities to mitigate morbidity and mortality from invasive *C. auris* infection (particularly bloodstream).
 - a. Prioritize individuals with lines, tubes, or drains, particularly central venous catheters (CVC).
 - i. Focus on appropriate use and care of medical devices, especially CVC insertion and maintenance practices.
 - ii. Incorporate central line-associated bloodstream infection (CLABSI) prevention and guidance³² in LTACHs and vSNF vent units during public health onsite IPC assessments.
 - b. There are no specific recommendations for *C. auris* decolonization.

Phase 4. Ongoing transmission in at least one high-risk facility for >1 year in LHJ, and some surrounding LHJs with highly-connected patient sharing networks: Maintenance

Considerations for LTACHs

In individual LTACHs where *C. auris* has become endemic despite 1+ year of public health support to mitigate transmission, LHJ can consider shifting prioritization to intensified efforts at preventing adverse clinical outcomes. This shift would occur with continued broad IPC measures but reduced emphasis on PPS. Specifically, these LTACHs should:

- 1. Intensify measures to prevent invasive *C. auris* infections (e.g., implementing adherence monitoring of central line insertion and maintenance practices to prevent CLABSI)
- 2. Conduct ongoing surveillance of clinical isolates to identify *C. auris* strains that are unusual in California or more resistant (e.g., non-Clade III *C. auris* isolates, isolates with echinocandin resistance, or pan-resistant strains)
- 3. Identify and respond to clusters of invasive *C. auris* disease (e.g., by conducting a PPS)
- 4. Reinforce broad IPC measures including adherence monitoring and feedback of hand hygiene and personal protective equipment (PPE) practices, and environmental cleaning and disinfection.
- 5. Continue to do admission screening + empiric Contact Precautions for all new and readmissions to the LTACH.

Considerations for ACHs, vSNFs, and SNFs

Continue efforts to prevent introduction and contain spread of *C. auris* in other facilities including those in the same patient sharing network of endemic LTACHs.

- 1. Facilities perform screening testing in response to an increase in cases until 2 consecutive PPS at least 2 weeks apart result in ≤2 cases or the facility's baseline PPS percent positivity.
 - a. Once achieved in vSNFs, reduce PPS frequency to monthly for 3 months; if vSNF continues to maintain ≤2 cases or baseline PPS percent positivity, move to 6-monthly.
- 2. Perform admission screening + EBP (if SNF or vSNF) and Standard Precautions (if ACH)*:
 - a. in vSNF vent units, of all new and re-admissions (after >24 hours hospital admission);
 - b. in ACHs, of high-risk new and re-admissions; and
 - c. in SNFs, of high-risk residents as resources allow.

Considerations for all healthcare facilities

- 1. Facilities are responsible for knowing baseline *C. auris* prevalence or incidence, conducting ongoing surveillance for sterile and non-sterile site isolates, investigating and reporting to public health when a new outbreak is identified, and conducting PPS. Examples of new outbreaks can include:
 - a. evidence of *C. auris* transmission in a previously naïve facility;
 - b. cluster of cases in a distinct patient or resident population or unit;
 - c. increase of cases above baseline occurring in a non-naïve facility;
 - d. increase in clinical cases (e.g., bloodstream) detected within a facility.
- 2. For facilities identifying single *C. auris* cases in the absence of ongoing transmission, screen high-risk healthcare contacts.
 - a. Consider broader screening if there is evidence of a new outbreak (see 1a.-d. above).
- 3. Public health may provide assistance depending on size and scope of the outbreak, as resources allow.
- 4. LHJ may conduct or recommend routine IPC assessments or PPS.
- 5. Use of List P agent²⁸ (List K or bleach if not accessible) for daily and terminal cleaning and disinfection facility-wide in SNFs, vSNFs, LTACHs, and ACHs.
- 6. Facilities are responsible for all interfacility communication.

^{*} Implement Contact Precautions if there is suspected or confirmed transmission in the unit or facility.

7. LHJ supports strong IPC and AS practices in all facilities, and continues engaging facilities to mitigate morbidity and mortality from invasive *C. auris* infection (particularly bloodstream).

References

- 20. CDPH C. auris Quicksheet (PDF)
 - (www.cdph.ca.gov/Programs/CHCQ/HAI/CDPH%20Document%20Library/CaurisQuicksheet.pdf)
- 21. <u>CDPH C. auris Reporting FAQ</u> (PDF) (www.cdph.ca.gov/Programs/CHCQ/HAI/CDPH% 20Document%20Library/CaurisReportingFAQ.pdf)
- 22. <u>CDC Identification of *C. auris*</u> (www.cdc.gov/candida-auris/hcp/laboratories/identification-of-c-auris.html)
- 23. <u>LACDPH List of Laboratories with *C. auris* Testing Capacity (PDF)</u> (publichealth.lacounty.gov/acd/docs/List_C.aurisLabs.pdf)
- 24. CDPH AS website
 - (www.cdph.ca.gov/Programs/CHCQ/HAI/Pages/AntimicrobialStewardshipLandingPage.aspx)
- 25. <u>CDPH MDRO Prevention Collaboratives website</u> (www.cdph.ca.gov/Programs/CHCQ/HAI/Pages/Regional_AR_Collaboratives.aspx)
- 26. <u>CDC Enhanced Barrier Precautions (EBP) website</u> (www.cdc.gov/long-term-care-facilities/hcp/prevent-mdro/ppe.html)
- CDPH EBP: Additional Considerations for California SNFs (PDF)
 (www.cdph.ca.gov/Programs/CHCQ/HAI/CDPH%20Document%20Library/EBP_AdditionalConsider ationsForCA SNF.pdf)
- 28. <u>EPA List P Agents with Claims against *C. auris* (www.epa.gov/pesticide-registration/list-p-antimicrobial-products-registered-epa-claims-against-candida-auris)</u>
- 29. <u>AR Lab Network Targeted Surveillance Program</u> (PDF) (www.cdph.ca.gov/Programs/CHCQ/HAI/CDPH Document Library/CDPH_ARLN_TargetedSurveillanceDescription.pdf)
- 30. <u>CDC Preventing MDROs: FAQs</u> (www.cdc.gov/healthcare-associated-infections/php/preventing-mdros/preventing-mdros-faqs.html)
- 31. <u>CDPH Carbapenem-resistant and Carbapenemase-producing Organisms website</u> (www.cdph.ca.gov/Programs/CHCQ/HAI/Pages/CRE_InfectionPreventionStrategies.aspx)
- 32. <u>Society for Healthcare Epidemiology of America (SHEA) Strategies to Prevent CLABSI in Acute Care Hospitals: 2022 Update (www.cambridge.org/core/journals/infection-control-and-hospital-epidemiology/article/strategies-to-prevent-central-lineassociated-bloodstream-infections-in-acutecare-hospitals-2022-update/01DC7C8BBEA1F496BC20C6E0EF634E3D)</u>

Additional Resources

- <u>CDPH C. auris website</u> (www.cdph.ca.gov/Programs/CHCQ/HAI/Pages/Candida-auris.aspx)
- <u>CDPH C. auris Screening Decision Tree</u> (PDF) (www.cdph.ca.gov/Programs/CHCQ/HAI/ CDPH%20Document%20Library/Tier2 Pathogen Screening Decision Tree.pdf)
- <u>Los Angeles County C. auris Mitigation Strategy</u> (PDF)
 (publichealth.lacounty.gov/acd/docs/MitigatingSpreadofC.aurisLAC.pdf)
- <u>CDC MDRO Containment Guidelines</u> (www.cdc.gov/healthcare-associated-infections/php/ preventing-mdros/mdro-containment-strategy.html)