

MONTHLY *C. AURIS* UPDATE #4

LOS ANGELES COUNTY DEPARTMENT OF PUBLIC HEALTH
4/30/21

HIGHLIGHTED IN THIS ISSUE

Seeking *C. auris* through passive surveillance
New lab offering PCR-based screening services

SUMMARY

Multiple healthcare facilities (HCFs) in Southern California are experiencing *Candida auris* (*C. auris*) activity. We are providing this brief monthly update to inform you of:

- 1) *C. auris* case counts and
- 2) tips to assist clinical laboratories in addressing *C. auris*.

Please note this information is meant for internal use only.

KEY RESOURCES

- [CDC *C. auris* website](#)
 - [LACDPH *C. auris* website](#)
- Laboratory Identification and Testing resources can be found under the “Resources” Section on the LACDPH *C. auris* website. Please click the link above to access all prior monthly updates. Many suggestions in this issue are related to clinical laboratory procedures that were covered in detail in prior issues.

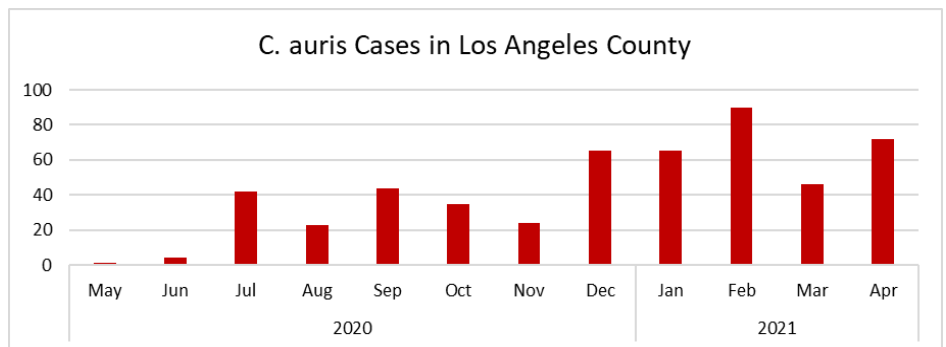
LOCAL CASE DATA

HCF Type	Screening*	Clinical [^]	Total
General Acute Care Hospital	34	18	52
Long Term Acute Care Hospital	361	53	415
Skilled Nursing Facility	38	6	44
Other	1	0	1
Total	434	77	511

Note that cases are counted by facility at time of collection.

* Swab collected for the purpose of screening for *C. auris* colonization.

[^] Specimen collected for diagnostic purposes; these aren't included in screening counts.



CURRENT GUIDANCE & RECOMMENDATIONS

As LAC continues to see transmission of *C. auris* across all types of HCFs, it is important for labs to have the following measures in place:

1. A reliable method to [identify *C. auris*](#). Species identification can be problematic, especially with phenotypic methods.
2. A strategy for increased species identification of *Candida* from all or at minimum, high risk patients. A relationship with Infection Preventionists (IPs) to identify high risk patients is essential. Note: Urine isolates may be of highest yield.
3. *C. auris* admission screening tests for high-risk patients in-house or as a send out. **Note:** California Department of Public Health has updated their criteria per a California Health Alert Network [\(CAHAN\) released on 3/8/21](#).

Laboratories that serve high risk HCFs, such as long-term acute care hospitals (LTACHs) and subacute units of skilled nursing facilities (SNFs) should pay particular attention to these recommendations.

QUESTIONS? CONTACT THE LACDPH HEALTHCARE OUTREACH UNIT AT HAI@PH.LACOUNTY.GOV OR 213-240-7941

SEEKING OUT *C. AURIS* THROUGH PASSIVE SURVEILLANCE

In 2019, a telephone survey of 40 clinical laboratories revealed that 100% can reliably identify *C. auris* in-house. All identify yeast isolates from sterile sites to species level, however, fewer than half identify yeast isolates from non-sterile sites without specific MD request (30% for urine, 43% for wounds, 35% for sputum). Due to the increasing prevalence of *C. auris* in the region, LAC LACDPH is suggesting that clinical laboratories consider implementing a passive surveillance protocol to maximize detection of patients harboring *C. auris*.

PASSIVE SURVEILLANCE, EXPLAINED

What is passive surveillance? Passive surveillance is the regular reporting of diseases and conditions to public health to determine local disease epidemiology. Public health must rely on clinical laboratories and healthcare providers (including clinicians and infection preventionists) to both detect and accurately report cases in a timely manner. Epidemiologists and IPs regularly use laboratory data to identify potential disease clusters that prompt additional investigations to prevent further spread of disease.

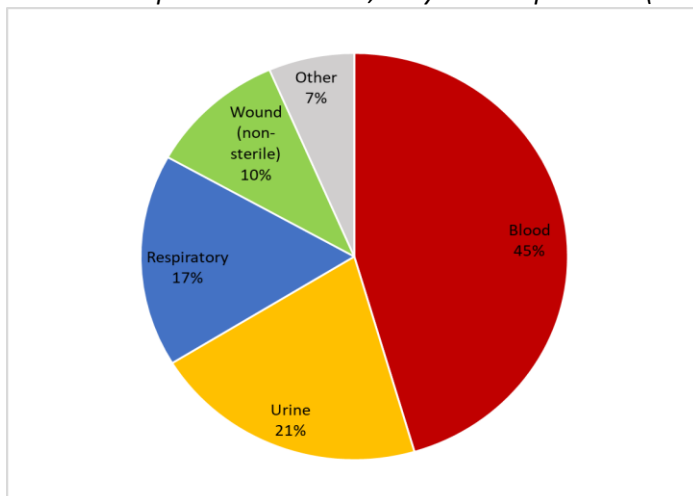
How does passive surveillance differ from active surveillance? Active surveillance is generally performed to find cases as part of confirmed or suspect outbreak investigations and is much more time- and resource-intensive than passive surveillance. For example, an active surveillance plan might include conducting point prevalence surveys of a unit.

Why perform passive surveillance? Passive surveillance is a practical approach that is often used to compliment active surveillance and allows public health to gain a better understanding of the burden of a disease over time. As more healthcare facilities detect and report organisms associated with a disease, public health can more accurately/reliably develop interventions that help protect the health and safety of residents in a jurisdiction.

How to perform passive surveillance for *C. auris*? Laboratorians and IPs should work together to devise a streamlined approach for detection and reporting of patients colonized or infected with *C. auris*. This may involve revising laboratory protocols and/or methods to detect *C. auris*, especially now when faced with this infectious disease threat in LAC.

C. AURIS FROM CLINICAL SPECIMENS SUBMITTED TO CLINICAL LABORATORIES IN LAC

First clinical specimen collected, May 2020–April 2021 (n=77)



Specimen Source	Total cases	Novel cases* N (%)
Blood	35	9 (26%)
Urine	16	6 (38%)
Respiratory	13	3 (23%)
Wound	8	5 (63%)
Other	5	5 (100%)
Total	77	28 (36%)

*case first identified from a clinical specimen (no prior positive surveillance swab)

Overall, among all 77 clinical specimens, 18% (n=14) were new cases detected by isolation and identification of *C. auris* from routine cultures from non-sterile sites. The remainder were from known *C. auris* patients.

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YEAST FROM NON-STERILE SOURCES - EXAMPLES OF CRITERIA USED TO CHOOSE ISOLATES FOR SPECIES LEVEL IDENTIFICATION

This includes 'rule out *C. auris*' as part of passive surveillance.

Criteria	Example		
	1	2	3
Which patients?	All Inpatient	High-risk* inpatients	All inpatient
Which specimen type?	Urine	Urine	All
Which yeast isolates?	Any unless specimen considered contaminated	Any unless specimen considered contaminated	Any previously reported as "yeast"

*high risk – see criteria below on this page.

COLONIZATION WITH *C. AURIS* VS INFECTION

Most cases of *C. auris* are in patients who just have colonization of the organism on the skin (90%) and have cultures who show up in the urine, sputum or wounds. These patients do not need, and do not benefit from treatment with, antifungal medications. In about 6% of patients, *C. auris* causes a true infection, mostly in the bloodstream. These infections are potentially life-threatening and should be treated. Because *C. auris* is typically resistant to fluconazole and can develop resistance to other agents, antifungal susceptibility testing (AST) should be performed to guide antifungal therapy. See [issue #2](#) for further AST information and guidance.

WHY IDENTIFYING COLONIZED PATIENTS IS IMPORTANT

C. auris is difficult to eradicate from the healthcare environment once it's introduced. This is particularly true in high-risk populations, such as patients in ICUs, long-term acute care hospitals, or skilled nursing facilities and patients being transferred among these facilities are a concern. It is not uncommon for a colonized individual to develop infection. Presently, approximately 6% of LAC *C. auris* cases develop *C. auris* bloodstream infections mostly occurring among individuals who were previously colonized.

SUMMARY - STRATEGIES FOR PASSIVE SURVEILLANCE FOR *C. AURIS*

Work with IPs to develop a plan, and identify yeast isolates to species level from:

- **High-yield non-sterile specimen sources**, such as urine
- **High-risk patients or units**, such as:
 - Persons being admitted from any long-term acute care hospital (LTACH)
 - Persons on a mechanical ventilator or with presence of tracheostomy
 - Persons who are colonized with rare [carbapenemase-producing organisms](#), such as non-KPC CRE
 - Persons who have had an overnight stay in a healthcare facility in a [country with widespread transmission or multiple cases of *C. auris*](#) in the past 12 months
 - Persons who have had an overnight stay in a healthcare facility in a [state with widespread transmission of *C. auris*](#) in the past 12 months

RESOURCES

CDC *C. auris* tracking: <https://www.cdc.gov/fungal/candida-auris/tracking-c-auris.html>

C. auris FAQ to aid Clinical Laboratorians: http://publichealth.lacounty.gov/acd/docs/C.auris_FAQs.pdf

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FREQUENTLY ASKED QUESTIONS

How can we test for *C. auris* colonization?

Patients are typically screened for *C. auris* colonization using a composite swab of the bilateral axilla and groin using a nylon-flocked or rayon tip swab. You can find more lab-related information regarding *C. auris* on our [FAQs to Aid Clinical Laboratorians at the Bench](#) or the [CDC Guidance for Detection of Colonization of *C. auris*](#).

What if we need to do a rule-out test for *C. auris* (clinical isolate)?

If you identify a [confirmed or presumptive *C. auris* organism](#), you may send the isolate to the LACDPH Public Health Lab for rule-out testing only. Please do not send isolates nor swabs to the LAC PHL without contacting the Healthcare Outreach unit first.

What can we do to prepare for *C. auris* in our facility?

LAC has found that early detection is key to stopping spread of *C. auris* – we highly recommend you work with your infection control department and facility leadership to set up *C. auris* colonization screening at your earliest convenience. In addition, species identification of all yeast isolates from high-risk patients should be considered.

I cannot test for *C. auris* on-site. What labs are currently testing for *C. auris*?

As of November 2020, all major reference laboratories have validated MALDI procedures to identify *C. auris* isolates. However, most have not yet implemented molecular assays for screening / surveillance swabs but will perform fungal culture on these specimens. As of March 2021, additional laboratories are offering PCR-based screening services. Please note this list is not an endorsement from LACDPH, and the information provided is self-reported.

Reference Lab	Screening Method*	Test (Order Code)
ARUP	Fungal culture	<ul style="list-style-type: none">Fungal culture, yeast (0060149)Yeast ID - MALDI Bruker; sequencing if no ID (0060163)
LabCorp	Fungal culture	<ul style="list-style-type: none">Fungal culture, yeast (182776)Yeast ID – MALDI Vitek MS; sequencing if no ID (182212)
Genetic Technological Innovations	PCR	<ul style="list-style-type: none"><i>Candida auris</i> surveillance (RT-PCR) (87481)
Mayo	PCR	<ul style="list-style-type: none"><i>Candida auris</i> surveillance (PCR) (CAURS 607883)Yeast ID – MALDI Bruker; sequencing if no ID (FUNID 8223)
Premier Lab Solutions	PCR	<ul style="list-style-type: none"><i>Candida auris</i> surveillance (PCR) (6146)
Quest	Fungal culture	<ul style="list-style-type: none">Fungal culture, yeast (20541)Yeast ID - MALDI Vitek MS or Bruker; sequencing if no ID (39507)

*for fungal culture, indicate “rule out *Candida auris*”

Additional testing, including PCR for screening swabs or full identification of yeast isolates may be available on special request. Please check with your reference lab sales representative.

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Do colonized patients require treatment?

Colonized individuals do not require treatment. If a patient develops a clinical infection, more guidance can be found on the [CDC website](#).

How often should patients be re-screened for *C. auris*?

Once a patient has tested positive for *C. auris*, transmission-based precautions should be continued on all subsequent admissions. There is no indication for repeat screening for *C. auris* since there are no criteria for clearance at this time.

Can patients be cleared of *C. auris*?

Studies have shown that patients colonized with *C. auris* rarely clear the organism. Thus, until further guidance from the CDC is received, patients will be considered to be positive for the duration of their admission. Swabs to test for clearance should not be collected. If a patient is accidentally re-swabbed and the result is negative, please disregard the result.

What is LACDPH doing to prevent further transmission of *C. auris*?

Since *C. auris* is a rare, emerging organism in LAC, LACDPH is taking many steps to prevent transmission of *C. auris*, including pre-emptive point prevalence surveys (PPS) of high-risk facilities, education, and on-site infection control assessments. We are working closely with Orange County Healthcare Agency (OCHCA), the California Department of Public Health (CDPH) and Centers for Disease Control and Prevention (CDC) to protect our patients and residents.