

# **MONTHLY MDRO UPDATE #7**

LOS ANGELES COUNTY DEPARTMENT OF PUBLIC HEALTH 7/30/21

# **HIGHLIGHTED IN THIS ISSUE**

- Change in Newsletter frequency
- Candida auris update (pg. 2)

#### **SUMMARY**

Candida auris in clinical specimens collected in Los Angeles County previously had a uniform antifungal susceptibility profile, but the first local isolate with additional resistance has been identified. We highlight the need to perform AFST and offer support options for labs unable to perform it independently.

#### **KEY RESOURCES**

LA County NMDRO Home Page

LA County Reportable Disease List

CDC HAI Lab Resources Home Page

2019 CDC Urgent Threats Report

Note: When calling 213-240-7941 to report MDROs (which is currently routed to a COVID-19 Call Center), please state that you are calling to report an MDRO to the Acute Communicable Disease Control Program.

## MESSAGE FOR CLINICAL LABORATORIES

In this short issue of our Newsletter, we are sharing a brief but important *Candida auris* update and announcing that this newsletter will be shifting from monthly to quarterly. While we still intend to share updated *C. auris* data on a monthly basis, the decreased frequency will allow us to present key Multi-Drug Resistant Organism (MDRO) information in better depth.

We welcome feedback on this Newsletter, previous Newsletters or any other issue related to MDROs (mail <a href="mailto:hai@ph.lacounty.org">hai@ph.lacounty.org</a>).

Previous Newsletters can be found by clicking the links below:

Issue	Featured Content		
1	• Identifying and Reporting C. auris		
(link)	• Resources for testing for <i>C. auris</i>		
2	Antifungal susceptibility testing of <i>C auris</i>		
(link)	<ul> <li>Validating MALDI-TOF for C auris</li> </ul>		
3	• Case Study: A team approach to containing <i>C auris</i>		
(link)	The Antibiotic Resistance Lab Network		
4	• Passive surveillance systems for <i>C auris</i>		
(link)	• Updated resources for testing for <i>C. auris</i>		
5	Multi-Drug Resistant Organisms		
(link)			
6	Carbapenem-resistant A baumanii (CRAB)		
(link)	NDM-CRAB outbreak in Northern California		
7	• C. auris update		
	Change in Newletter frequency		

## **CANDIDA AURIS UPDATE**

#### ANTIFUNGAL SUSCEPTIBILITY PROFILES FOR C. AURIS IN LAC

In the <u>February 2021 issue of this Newsletter</u>, we reported that all 38 *C. auris* clinical isolates from LAC tested to date had the same susceptibility profile as listed below (left) when interpreted by applying the <u>CDC suggested breakpoints</u>. Recently, an isolate from LAC with a different profile was reported:

All 38 <i>C. auris</i> Clinical Isolates Reported in February 2021 Issue	Recent Clinical Isol from LAC	ate	
Amphotericin <sup>1</sup>	S	Amphotericin <sup>1</sup>	S
Fluconazole <sup>2</sup>	R	Fluconazole <sup>2</sup>	R
Anidulafungin <sup>3</sup>	S	Anidulafungin <sup>3</sup>	R
Caspofungin <sup>3</sup>		Caspofungin <sup>3</sup>	R
Micafungin <sup>3</sup>	S	Micafungin <sup>3</sup>	R

*Note:* <sup>1</sup>Polyene; <sup>2</sup>Azole; <sup>3</sup>Echinocandin

Because *C. auris* has an unpredictable susceptibility profile and can be highly resistant, routine antifungal susceptibility testing should be performed for isolates confirmed or suspected of causing infection either in house or as a send out. The Antibiotic Resistance Laboratory Network (ARLN) offers testing free of charge. Please contact LACDPH (hai@ph.lacounty.gov) to coordinate submission to ARLN if your lab needs assistance conducting antifungal susceptibility testing for *C. auris*.

A <u>recent CDC publication describing pan-resistant *C. auris* emphasizes the importance of AFST at the local level. For guidance on *C. auris* AFST testing, please see Issue #2 (February 2021) of the NMDRO Lab Newsletter.</u>

#### AMPHOTERICIN SUSCEPTIBILITY TESTING FOR C. AURIS

Susceptibility testing of yeasts is generally more complex than susceptibility testing of bacteria. Amphotericin is a particularly difficult agent to test and there may be subtle differences in MIC results (one or two dilutions) obtained from different test methods such as broth microdilution and gradient diffusion (Etest or Liofilchem). CDC provides guidance for interpretation of amphotericin MICs for *C. auris* with <2  $\mu$ g/ml as Susceptible and >=2  $\mu$ g/ml as Resistant. Consequently, it would not be uncommon for a single isolate to test Susceptible by one method and Resistant by another. At this time, it is not known which method produces the most clinically relevant results and would best serve as a "reference method". This observation is not new but of greater concern with the appearance of multidrug resistant yeast, such as *C. auris*. Both CDC and CLSI are investigating this matter.

Following discussions with the Antimicrobial Stewardship Team, laboratories may wish to add a report comment to amphotericin susceptibility test results such as "Results for amphotericin and *C. auris* may vary depending on the method used. Currently, it is not known which method(s) produces the most clinically relevant results and amphotericin results should be interpreted with caution."

#### **REMINDER:**

If you were unable to attend the *Candida auris - Testing Methods and Resources for Clinical Laboratories* webinar, a recording is available On Demand. To view the archived webinar, please register at the <u>Registration Link.</u> The webinar will be available until **July 16, 2022.** Contact Marisa Barley (<u>marisa.barley@aphl.org</u>) with any registration questions.

## C AURIS BY THE NUMBERS

HCF Type	Screening*	S-t-C <sup>^</sup>	Clinical <sup>†</sup>	Total
LTACH	497	63	25	585
SNF	41	6	0	47
GACH	36	8	18	62
Other	1	0	0	1
Total	575	77	43	695



Note that all cases are counted by facility type at time of first positive specimen collection.

## CANDIDA AURIS LAB LIST UPDATE

Reference Lab	Screening Method*	Test (Order Code)	Contact
ARUP	Fungal	Fungal culture, yeast (0060149)	www.aruplab.com
	Culture	<ul> <li>Yeast ID - MALDI Bruker; sequencing if no ID (0060163)</li> </ul>	1-800-522-2787
Genetic	PCR	Candida auris surveillance (RT-PCR)  (07404)	www.gtilaboratories.com
Technological Innovations		(87481)	
LabCorp	Fungal	• Fungal culture, yeast (182776)	www.labcorp.com
	Culture	Yeast ID – MALDI Vitek MS;	
		sequencing if no ID (182212)	
Mayo	PCR	Candida auris surveillance (PCR)	www.mayocliniclabs.com
		(CAURS 607883)	800-533-1710
		<ul> <li>Yeast ID – MALDI Bruker; sequencing if no ID (FUNID 8223)</li> </ul>	
Premier Lab	PCR	Candida auris surveillance (PCR)	www.premierlabsolutions.com
Solutions		(6146)	602-441-2808
Quest	Fungal	Fungal culture, yeast (20541)	www.questdiagnostics.com
	Culture	Yeast ID - MALDI Vitek MS or	866-697-8378
		Bruker; sequencing if no ID (39507)	
Soft Cell Labs,	NAAT,	Candida auris RT-PCR 15002	POC: Lisa Justesen ( <u>lisa@softcellbio.com</u> )
Inc.	qPCR		435-628-2215 ; <u>www.softcelllabs.com</u>

<sup>\*</sup>for fungal culture, indicate "Rule out *Candida auris*" | Please note that this list is not an endorsement from LACDPH, and the information provided here is self-reported. We encourage HCFs to utilize these resources when on-site testing is not possible.

<sup>\*</sup> Swab collected for the purpose of screening for C. auris colonization.

<sup>^</sup> Screening-to-clinical: cases who were first identified via screening swab and later had one or more positive clinical specimen(s).

**<sup>†</sup>** Specimen collected for clinical purposes.