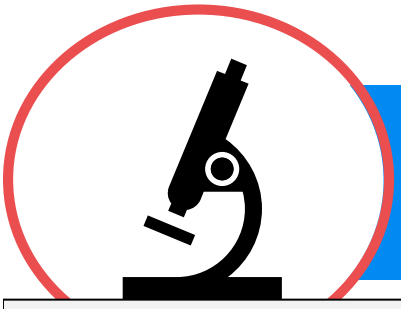

MONTHLY MDRO UPDATE #5

LOS ANGELES COUNTY DEPARTMENT OF PUBLIC HEALTH

6/7/21

HIGHLIGHTED IN THIS ISSUE

- MDROs
- *Candida auris* update

SUMMARY

MDROs continue to challenge healthcare providers and public health professionals around the globe. A particular concern are carbapenemase-producing organisms (CPO) which are typically resistant to many antimicrobial classes. In addition, carbapenemase genes can be readily transferred among bacteria. Clinical laboratories are instrumental in helping contain the spread of CPO.

KEY RESOURCES

LA County NMDRO Home Page

LA County Reportable Disease List

CDC HAI Lab Resources Home Page

2019 CDC Urgent Threats Report

MESSAGE FOR CLINICAL LABORATORIES

For the past four months, we have been sharing information about *Candida auris* in Los Angeles County (LAC) and how you, as our laboratory partner, can help us identify and report this organism. Your much appreciated assistance in using appropriate methods to identify *C. auris* and report it expediently has been essential for proper patient management at the local level and for public health containment efforts throughout LAC.

Beginning with this issue of our Newsletter, we are branching out and will focus on multidrug-resistant organisms (MDROs) in general and other MDROs in addition to *C. auris*. We will also provide information about new resources for antimicrobial susceptibility testing information that might be of value to clinical laboratories.

In the next issue, we will provide specific information about carbapenem-resistant *Acinetobacter baumannii* (CRAB). The California Department of Public Health (CDPH) recently reported the isolation of CRAB that produced the metallo-beta-lactamase, NDM, a very unusual finding.

We welcome feedback on this Newsletter, previous Newsletters or any other issue related to MDROs. (contact us at hai@ph.lacounty.org)

Previous Newsletters can be found by clicking the links below:

Issue	Featured Content
1 (link)	• Identifying and Reporting *C. auris* • Resources for testing for *C. auris*
2 (link)	• Antifungal susceptibility testing of *C auris* • Validating MALDI-TOF for *C auris*
3 (link)	• Case Study: A team approach to containing *C auris* • The Antibiotic Resistance Lab Network
4 (link)	• Passive surveillance systems for *C auris* • Updated resources for testing for *C. auris*
5	• Multi-Drug Resistant Organisms

MULTI-DRUG RESISTANT ORGANISMS

What is an MDRO?

- No universal comprehensive definition or single list of MDROs!
- Resistant to one key drug (e.g., MRSA, VRE)
- Resistant to one or more drugs from several drug classes

(usually defined in terms of acquired versus intrinsic resistance)

Why are MDROs important?

- Treatment options are limited
- MDRO infections are associated with increased lengths of stay, costs, and mortality
- MDROs present significant challenges for infection preventionists and public health professionals

Some Terms / Provisions Associated with MDROs

[1] **XDR** – extensively drug resistant: "not susceptible" to almost all classes but "S" to at least one drug class

[1,2] **PDR** – pan drug resistance: "Resistant" to ALL available drugs.

Not susceptible vs. resistant – not susceptible includes resistant, intermediate, and susceptible dose dependent interpretations

Novel MDROs – rare or uncommon to a region (e.g. in LAC, carbapenem-resistant *Pseudomonas aeruginosa* harboring a VIM carbapenemase gene)

[1] Magiorakos et al. 2012. Clin Microbiol Infect. 18(3):268-281. https://pubmed.ncbi.nlm.nih.gov/21793988/

[2] To help investigate and identify true PDR, laboratories may be asked to consider isolates "not susceptible" to all drugs on their routine testing panel as possible "PDR"; routine panels generally do not include all drugs targeted at highly resistant GNRs such as cefiderocol, colistin, eravacycline, omadacycline, newer beta-lactam combination agents, etc.

For additional information on MDRO definitions, identification methods, and how laboratories can support physicians and infection preventionists, an archived webinar can be accessed for On Demand viewing here.

ADDITIONAL RESOURCES FOR ANTIMICROBIAL SUSCEPTIBILITY TESTING

CLSI Spring 2021 News Update includes the following:

- Re-exploring the Intermediate interpretive category
- Case studies - resolving unusual AST results
- Imipenem-relebactam
- Aztreonam-avibactam

Upcoming Educational Programs:

***Candida auris* Testing Methods and Resources for Clinical Laboratories**

July 14, 2021 11:00 AM PST

We will notify you when registration opens!

AN UPDATE ON *CANDIDA AURIS* IN LA COUNTY

C. auris remains an emerging threat in LAC and continues to spread between healthcare facilities, due in part to improper inter-facility communication of an individual's *C. auris* status upon admission to a new healthcare facility. DPH continues to implement regional *C. auris* control strategies, which include the following:

- Encouraging facilities to facilitate *C. auris* screening of high-risk contacts (i.e., roommates or those admitted from facilities at high risk for *C. auris* transmission such as LTACHs).
- Providing laboratorians and healthcare providers with regular *C. auris* reports, which include updated guidance, resources, and FAQs surrounding *C. auris*.
- Collaborating with healthcare facilities and local health jurisdictions to control outbreaks.

All facilities should remain vigilant in the detection and containment of *C. auris* in a timely manner.

Cases in LAC May 2, 2020 to June 7, 2021

HCF Type	Screening*	Clinical^	Screening-to-Clinical†	Total
General Acute Care Hospital (GACH)	33	14	7	54
Long Term Acute Care Hospital (LTACH)	400	20	46	466
Skilled Nursing Facility (SNF)	39	0	6	45
Other	1	0	0	1
Total	473	34	59	566

Note that all cases are counted by facility type at time of first positive specimen collection.
** Swab collected for the purpose of screening for C. auris colonization.*
^ Specimen collected for clinical purposes.
† *Cases who were first identified via screening swab and later had one or more positive clinical specimen(s).*