



# The Antimicrobial Stewardship and Resistance Update

Quarterly newsletter providing updates on news, reports, research, policies, and events related to antimicrobial stewardship and resistance in California.

## RESOURCE ISSUE

This issue is focused on providing antimicrobial stewardship (AS) and antimicrobial resistance (AR) resources including laboratory updates, recent webinars, and current highlights.

## **CONTENTS**

- Page 2 NHSN AUR MODULE RESOURCES
  - **2** LEARN MORE ABOUT...
    - Diagnostic Stewardship Resources
    - Carbapenemase Testing
    - Candida auris Testing
  - 4 REGIONAL AND STATE TESTING RESOURCES
    - AR Lab Network
    - Microbial Diseases Laboratory
  - 5 LOCAL PUBLIC HEALTH LABORATORY RESOURCES
  - 6 UPDATED BREAKPOINT REQUIREMENTS RESOURCES

- 6 COMMERCIAL AND REFERENCE LAB TESTING RESOURCES
- 6 UPDATED CDPH PRIORITY AR PATHOGEN DOCUMENTS
- 6 ANTIMICROBIAL STEWARDSHIP RESOURCES
- 7 SPOTLIGHT ON...
  - Facilities Submitting Carbapenem-Resistant Isolates
  - ASP Honor Roll 2023 Gold Members
  - ASP Honor Roll Gold Member Community Engagement Highlights
- **9** UPCOMING & STAY CONNECTED



# National Health and Safety Network (NHSN) Antimicrobial Use and Resistance (AUR) Module Resources

The purpose of the <u>NHSN AUR Module</u> (www.cdc.gov/nhsn/pdfs/pscmanual/11pscaurcurrent.pdf) is to report and analyze AUR data to facilitate benchmarking, to inform interventions reduce antimicrobial-resistant (AR) infections through antimicrobial stewardship, and interrupt transmission of AR pathogens at individual facilities or facility networks. As of 2024, both the AU and AR options are required for acute care hospitals, with some exceptions.



- <u>CDC AUR Module Home Page</u> (www.cdc.gov/nhsn/psc/aur/index.html)
- <u>CDC AUR Training Modules</u> (www.cdc.gov/nhsn/training/patient-safetycomponent/aur.html)
- CDC AU Option Case Examples (www.cdc.gov/nhsn/au-case-examples/index.html)
- <u>CDC Patient Safety Analysis Quick Reference Guides</u> (www.cdc.gov/nhsn/ps-analysisresource s/reference-guides.html#accordion-1-collapse-5)

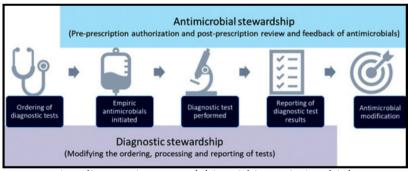


- CDC AU Vendor List (www.cdc.gov/nhsn/cdaportal/sds/au-vendor-list.html)
- <u>CDC AR Vendor List</u> (www.cdc.gov/nhsn/cdaportal/sds/ar-vendor-list.html)
- <u>CDC Centers for Medicare & Medicaid (CMS) Requirements</u> (www.cdc.gov/nhsn/cms/index.ht ml)

## Learn more about...

## Diagnostic stewardship

Diagnostic stewardship (DS) refers to optimizing the diagnostic process by ordering the right tests, for the right patient, at the right time, in order to provide the right treatment. DS can work alongside antimicrobial stewardship to support providers in leveraging diagnostic testing to optimize antimicrobial use and reduce antimicrobial resistance (www.ncb i.nlnm.nih.gov/pmc/articles/PMC9949764/#b7-dic-2022-9-5).



<u>Leveraging diagnostic stewardship within antimicrobial</u> <u>stewardship programs</u> (www.ncbi.nlm.nih.gov/pmc/articles/PMC9949764/#b7-dic-2022-9-5)

- <u>Principles of diagnostic stewardship: a practical guide from the Society for Healthcare Epidemiology of America Diagnostic Stewardship Task Force</u> (www.cambridge.org/core/journals/infection-control-and-hospital-epidemiology/article/principles-of-diagnostic-stewardship-a-practical-guide-from-the-society-for-healthcare-epidemiology-of-america-diagnostic-stewardship-taskforce/324C90B8F54885D28CC9218433 901E0A)
- Improving antimicrobial use through better diagnosis: the relationship between diagnostic stewardship and antimicrobial stewardship (www.cambridge.org/core/journals/infection-control-and-hospital-epidemiology/ article/improving-antimicrobial-use-through-better-diagnosis-the-relationship-between-diagnostic -stewardship-and-antimicrobial-stewardship/A02A97D1517AE6EF27448D7307EEC2E2)





#### In case you missed it...



The CDPH HAI Program and Microbial Diseases Laboratory webinar on carbapenemase-producing organism (CPO) testing capacity and epidemiology

See the <u>Webinar Slides</u> (www.cdph.ca.gov/Programs/CHCQ/HAI/CDPH%20Document%20Library/CPO\_CDPH\_LabAndEpiUpdates\_051424.pdf) and <u>Recording</u> (www.youtube.com/watch?v=j3UVed1Rh24)

## Carbapenemase testing

- The Role of Carbapenemase Testing in Clinical Practice
   Webinar Slides (www.cdph.ca.gov/Programs/CHCQ/HAI/CDPH %20Document%20Library/CPO\_Clinical\_Practice\_120622.pdf)
   and Recording (www.youtube.com/watch?v=AF9CSzPT6L0)
- Testing for Carbapenemase Production Among Carbapenem-Resistant Organisms: When and How? Webinar Slides
   (www.cdph.ca.gov/Programs/CHCQ/HAI/ CDPH%20Document% 20Library/CPO\_webinar\_102722.pdf) and Recording (www.yout ube.com/watch?v=I6LPBB9EQ8c)

### <u>Carbapenem-resistant</u> <u>Organism Primer Tests for</u> <u>Carbapenemases</u>

(www.cdph.ca.gov/Program/C
HCQ/HAI/CDPH%20Document
%20Library/CRO\_PrimerTests\_
for\_ Carbapenemases.pdf)

• <u>Algorithm for Prioritizing Carbapenemase Testing</u> of carbapenem-resistant Enterobacterales (CRE), Pseudomonas aeruginosa (CRPA) and Acinetobacter baumannii (CRAB) isolates (www.cdph.ca.gov/Progra ms/CHCQ/HAI/CDPH%20Document%20Library/CPTestingPrioritizationAlgorithm.pdf)

## Candida auris testing

- Finding C. auris in California Clinical Laboratories: Strategies That Work for Us! Webinar Slides

  (www.cdph.ca.gov/Programs/CH CQ/HAI/CDPH%20Document%20Library/CDPH\_HAIProgram\_LAPH\_C-aurisWebinar\_051922\_ADA.pdf) and Recording (www.youtube.com/watchv=B5U7hTbqB0U)
- Admission Screening for C. auris in Acute Care Hospitals Webinar Slides (www.cdph.ca.gov/Programs/C HCQ/HAI/CDPH%20Document%20Library/C\_auris\_AdmissionScreening\_in\_CA\_ACHs\_webinar\_012324.pd f) and Recording (www.youtube.com/watchv=XrbrYGidFoc)

## Your state and regional public health laboratories work to:



Detect resistant species and new threats



Perform susceptibility testing to track resistance



Help respond to outbreaks

<u>Test to Prevent the Spread of Emerging Carbapenem Resistance</u> (www.cdc.gov/antimicrobial-resistance-laboratory-networks/media/pdfs/CRE-lab-test-508.pdf)



## **Regional and State Public Health Lab Testing Resources**

Contact the HAI Program at <u>HAIProgram@cdph.ca.gov</u> or California AR Lab Program at <u>CARL@cdph.ca.gov</u> for more information or to start using the following regional and state testing services.

Test Description	Regional AR Lab Network	Microbial Diseases Laboratory (MDL)
Carbapenemase Testing		
CPO colonization testing	<b>/</b>	<b>~</b>
Species, mechanism ID (CRE, CRPA, CRAB)	<b>✓</b>	<b>✓</b>
OXA variants: 23-, 24/40-, 58-, 235-like (CRAB only)	<b>/</b>	×
Candida Testing		
Species ID (non-albicans Candida)	<b>/</b>	<b>/</b>
C. auris colonization testing	<b>✓</b>	<b>✓</b>
Antimicrobial Susceptibility Testing (AST)		
Bacterial isolates (CRE, CRPA, CRAB)	<b>✓</b>	<b>/</b>
Non-albicans Candida isolates	<b>✓</b>	×
Expanded AST (CRE only)	<b>/</b>	×
Whole Genome Sequencing		
CRE, CRPA, CRAB	<b>/</b>	<b>✓</b>
C. auris	<b>✓</b>	×

- <u>MDL Submission Forms and Instructions (www.cdph.ca.gov/Programs/CID/DCDC/Pages/MDLSubmissionInstructionsandForms.aspx)</u>
- MDL Expanded Carbapenemase Testing Services FAQs (www.cdph.ca.gov/Programs/CID/DCDC/Pages/MDL ExpandedCarbapenemase-Testing-Services-FAQs.aspx)
- <u>MDL CPO Colonization Testing Announcement</u> (www.cdph.ca.gov/Programs/CID/DCDC/Pages/MDL\_Carba penemase-Producing-\_Organism-(CPO)\_Colonization\_Testing\_Announcement.aspx)
- MDL Candida auris Colonization Screening Announcement (www.cdph.ca.gov/Programs/CID/DCDC/Pages/ MDL-Candida-auris-Colonization-Screening-Announcement.aspx)
- AR Lab Network Expanded AST for Hard-to-Treat Infection (ExAST) (www.cdc.gov/antimicrobial-resistance-laboratory-networks/media/pdfs/drug-susceptibility-tests-P)



## **Local Public Health Lab Testing Resources**



A number of local public health laboratories have added carbapenemase and *C. auris* testing services to expand detection of AR pathogens of concern, funded by a CDC grant administered through CDPH MDL. Contact your <u>local public health lab</u> to find out more (www.caphld.org).

County	CPO Colonization Testing	Carbapenemase Isolate Testing	C. auris Colonization Testing	<i>Candida</i> Isolate Testing
Alameda	Coming Soon	<b>/</b>	<b>&gt;</b>	<b>/</b>
Contra Costa	<b>&gt;</b>	×	×	×
Monterey	Coming Soon	Coming Soon	Coming Soon	Coming Soon
Los Angeles	<b>\</b>	<b>/</b>	Coming Soon	<b>/</b>
Napa-Solano-Yolo- Marin-Mendocino	<b>\</b>	<b>\</b>	Coming Soon	×
Orange	×	<b>/</b>	<b>&gt;</b>	<b>✓</b>
Riverside	Coming Soon	Coming Soon	Coming Soon	Coming Soon
San Bernardino	<b>/</b>	<b>/</b>	<b>/</b>	<b>/</b>
San Diego	Coming Soon	<b>/</b>	<b>&gt;</b>	Coming Soon
San Francisco	<b>/</b>	<b>/</b>	×	×
San Joaquin	<b>\</b>	<b>/</b>	Coming Soon	×
San Luis Obispo	<b>/</b>	<b>-</b>	×	×
Santa Clara	<b>-</b>	<b>-</b>	Coming Soon	×
Tulare	×	<b>/</b>	Coming Soon	×



## Stay current on breakpoint requirements for AST

Effective January 2024, clinical laboratories performing AST will be required to use breakpoints currently recognized by the Clinical and Laboratory Standards Institute (CLSI) or US Food and Drug Administration (FDA).

- <u>Clinical & Laboratory Standards Institute 2023 Breakpoint Implementation Toolkit</u> (clsi.org/meetings/ast/b reakpoints-in-use-toolkit/)
- Maintaining Current Breakpoints for AST (info.cap.org/ antimicrobial-susce ptibility-testing/)
- CLSI: Free Microbiology, Method Evaluation, COVID-19 Resources (clsi.org/all-free-resources/)

## **Commercial and Reference Lab Testing Resources**

Visit the webpages below for other laboratory resources for carbapenemase and *C. auris* testing:

- <u>Laboratories with Carbapenemase Testing</u> (publichealth.lacounty.gov/acd/docs/LaboratorieswithCPOScre ening.)
- Laboratories with C. auris Testing Capacity (publichealth.lacounty.gov/acd/docs/List\_C.aurisLabs.pdf)



## **CDPH** *Priority AR Pathogens*

CDPH has recently updated several priority AR pathogen prevention and response guidance documents, with more to come:

- <u>AR Pathogen Tiers</u> (www.cdph.ca.gov/Programs/CHCQ/HAI/CDPH%20Document%20Library/AR PathogenTiers.pdf)
- <u>C. auris Regional Prevention and Response "Phases" Strategy</u> (PDF)(www.cdph.ca.gov/Programs/CHC Q/HAI/CDPH%20Document%20Library/Cauris\_Phases.pdf)
- <u>C. auris Quicksheet</u> (www.cdph.ca.gov/Programs/CHCQ/HAI/CDPH%20Document%20Library/Ca urisQuicksheet.pdf)
- <u>C. auris</u> and <u>CPO Screening Decision Tree</u> (www.cdph.ca.gov/Programs/CHCQ/HAI/CDPH%20Do cument%20Library/Tier2\_Pathogen\_Screening\_Decision\_Tree.pdf)
- Consolidated CPO Quicksheet and CPO Response "Phases" Guidance (coming soon)

## **Antimicrobial Stewardship Resources**

#### CDC

- Core Elements of AS (www.cdc.gov/antibiotic-use/hcp/core-elements/index.html)
- Assessment Tool (www.cdc.gov/antibiotic-use/media/pdfs/assessment-tool-P.pdf)

#### **Joint Commission**

• <u>Joint Commission AS Resources</u> (www.jointcommission.org/resources/patient-safety-topics/infection-pre vention-and-control/antibiotic-stewardship/)

#### Association for Professionals in Infection Control and Epidemiology (APIC)

<u>APIC Stewardship Resources for Infection Preventionists</u> (apic.org/resources/topic-specific-infection-prevention/antimicrobial-stewardship/)





• Agency for Healthcare Quality and Research AS Toolkits (www.ahrq.gov/antibiotic-use/index.html)

#### **Joint Task Force**

• <u>Joint Task Force on AS</u> (www.idsociety.org/clinical-practice/anti microbial-stewardship2/antimicrobial-ste wardship/)

#### **CDPH**

- <u>CDPH AS Resources</u> (www.cdph.ca.gov/Programs/CHCQ/HAI/Pages/AAResources.aspx)
- <u>CDPH Toolkit for Implementing CDC NHSN AUR Module</u> (www.cdph.ca.gov/Programs/CHCQ/HAI/Pages/NH SN\_AUR\_OptionImplementationToolkit.aspx)
- <u>Five Ds in AS</u> (www.cdph.ca.gov/Programs/CHCQ/HAI/CDPH%20Document%20Library/AntimicrobialStewa rdship\_Five\_Ds\_Updated\_ADA.pdf

## **Spotlight On...**

# Facilities sending isolates to public health for carbapenemase testing

The CDPH HAI Program appreciates all facilities that conduct or send isolates for carbapenemase testing. We would like to recognize hospital systems that have sent more than 50 isolates to public health in the past year:



- Orange County Global Medical Center
- Loma Linda University Health
- San Antonio Regional Hospital
- ScionHealth

- Scripps Health
- St. Joseph's Medical Center Stockton
- University of California (Davis, Irvine, San Diego)

## CDPH AS Program (ASP) Honor Roll gold designations



In each newsletter, we will spotlight some gold status <u>ASP Honor Roll members</u> (www.cd ph.ca.gov/Programs/CHCQ/HAI/Pages/HonorRollMembers.aspx). This quarter, we would like to highlight facilities from our 2023 Honor Roll enrollment periods when 18 facilities received gold designations. All 18 facilities were also renewal applicants. Each exemplified community engagement in different areas, and some in multiple areas.

#### **Mentoring or Supporting Less Resourced Facilities**

- Community Hospital of San Bernardino
- Hoag Memorial Hospital Presbyterian
- Kaiser Foundation Hospital South Sacramento
- Kaiser Foundation Hospital Woodland Hills
- Kindred Hospital Baldwin Park
- Kindred Hospital Triad
- Los Alamitos Medical Center
- San Antonio Regional Hospital
- Sharp Chula Vista Medical Center
- Sharp Memorial Hospital and Mary Birch



### CDPH ASP Honor Roll Map

(www.cdph.ca.gov/Pr ograms/CHCQ/HAI/Pa ges/HonorRoll\_Intera ctiveMap.aspx)



## **Collaborations to Improve Antimicrobial Stewardship**

- Lucile Salter Packard Children's Hospital Stanford
- Marian Regional Medical Center
- Palomar Medical Center Poway
- Stanford Health Care
- VA Greater Los Angeles Healthcare System

## **Direct Engagement with Outpatient Partners** in the Community

- Children's Hospital Los Angeles
- Riverside University Health System Medical Center
- San Antonio Regional Hospital

Not sure when your CDPH HAI

ASP Honor Roll designation
expires? Check the CDPH HAI

ASP Honor Roll Map for your
facility's expiration date!

(www.cdph.ca.gov/Programs/CH
CQ/HAI/Pages/HonorRoll\_Intera

ctiveMap.aspx)

## **Gold community engagement highlights**

We would like to highlight creative and innovative submissions to *Part III: Demonstration of Outcomes* and *Part IV: Community Engagement* submissions from the CDPH HAI ASP Honor Roll. Each of the facilities featured below renewed their Gold status in September 2023.



#### Children's Hospital Los Angeles

Children's Hospital Los Angeles provides stewardship support to trainees and providers at local outpatient pediatric clinics. Through the partnership, they provide support for common infection syndromes, including optimal dosing and duration of antimicrobial agents, to improve antibiotic use for children's care in Southern California.

## **Hoag Memorial Hospital Presbyterian**



Hoag Memorial Hospital Presbyterian supports six local skilled nursing facilities (SNFs) with whom they regularly share patients. They offer microbiology specimen processing and availability of their stewardship co-chair to discuss antimicrobial use during patient transfers. They also generate antibiograms for the SNFs with updated treatment guidelines for common infections.

#### **San Mateo Medical Center**



San Mateo Medical Center meets quarterly with SNFs in their community to provide AS tools and resources, including support for implementation of infection prevention and control precautions. They have also developed a joint surveillance system for reviewing appropriateness of antimicrobial prescribing in partnership with the local SNF they support.

#### **Stanford Health Care**



Stanford Health Care has developed a regional ASP collaborative with local facilities to share strategies, foster research collaboration, and provide additional support. They have also developed innovative community-acquired pneumonia tracking, and patient satisfaction surveys on receipt of antibiotics during COVID-19-related visits.



## **Upcoming**



#### **CDPH ASP Honor Roll**

- Deadline: September 1, 2024; as a reminder, designations are for 3 years.
- Visit the <u>ASP Honor Roll webpage</u> (www.cdph.ca.gov/Programs/CHCQ/HAI/Pages/Honor\_Roll. aspx) for more information about application requirements.



#### **Acute Care Hospital (ACH) IPC Online Training:**

- Every Tuesday at 10 AM; <u>ACH IPC online course registration link</u> (reg.learningstream.com/vie w/view\_month.aspxas= 76&wp=908&aid=HAIP)
- Weekly Office Hour Zoom Webinar (us06web.zoom.us/j/82184471305)



#### **Local Health Department IP Education & Support Forum**

- Every 3rd Thursday at 2 PM
- Registration Link (reg.learningstream.com/view/view\_month.aspx?as=76&wp=443&aid=HAIP)



#### **Enhanced Barrier Precautions (EBP)**

• In light of the new <u>CMS EBP requirement</u> (PDF) (www.cms.gov/files/document/qso-24-08-nh.pdf), CDPH is retiring its Enhanced Standard Precautions guidance document and adopting CDC's EBP guidance and terminology. See <u>CDC's EBP implementation</u> for more info (www.cdc.gov/long-term-care-facilities/hcp/prevent-mdro/ppe.html?CDC\_AAref\_Val=https://www.cdc.gov/hai/containment/PPE-Nursing-Homes.html).



## Stay Connected with CDPH

#### **CDPH HAI Websites**

Visit the CDPH webpages for more information and resources.

- CDPH <u>HAI Program</u> Page (www.cdph.ca.gov/Programs/CHCQ/HAI/Pages/HAI/ProgramHome.aspx)
- CDPH <u>Antimicrobial Stewardship</u> Page (www.cdph.ca.gov/Programs/CHCQ/HAI/Pages/AntimicrobialSt ewardshipLandingPage.aspx)
- CDPH <u>Antimicrobial Resistance</u> Page (www.cdph.ca.gov/Programs/CHCQ/HAI/Pages/AntimicrobialResistanceLandingPage.aspx)

### **CDPH HAI Newsletters**

Subscribe to our <u>HAI Program quarterly newsletters</u> (cdph-marketing.powerappsportals.com/HAI/HAI-Reg istration/) to receive updates on our initiatives and education opportunities.

#### **CDPH Listserv**

To stay connected with all things AS at CDPH, join the <u>California Antimicrobial Stewardship Collaborative Network (ASCN)</u> (www.cdph.ca.gov/Programs/CHCQ/HAI/Pages/ASCN.aspx).



#### **HAI Program LinkedIn**

(www.linkedin.com/in/hai-healthcare-associated-infections-program-7ba7ab178)

HAIProgram@cdph.ca.gov