

# Statewide Taskforce for Antimicrobial Resistance (STAR) Advisory Committee

#### **Agenda**



History, goals and objectives



Membership housekeeping



Epidemiology update

National, regional and local CPO

National, regional and local CPO: from TN, PA, WA, OR

Admission screening



Lab update

Lab capacity

Whole genome sequencing and cefiderocol resistance (as time allows)



Funding update

#### **Introductions**

- Name, organization and title
- In the chat:
  - the greatest challenge facing your organization/community as related to CPOs and *C. auris* right now?





# STAR History, Goals, and Objectives

## Statewide Taskforce for Antimicrobial Resistance (STAR)



**History** 

Public health academic partnership Initiated September 2012



Goals

Detect and contain high-priority antimicrobial resistant pathogens

#### **STAR**

# Objectives



Monitor Oregon antimicrobial resistant (AR) organism epidemiology and assess needs for prevention and response



Coordinate statewide education about carbapenem-resistant and other AR organisms

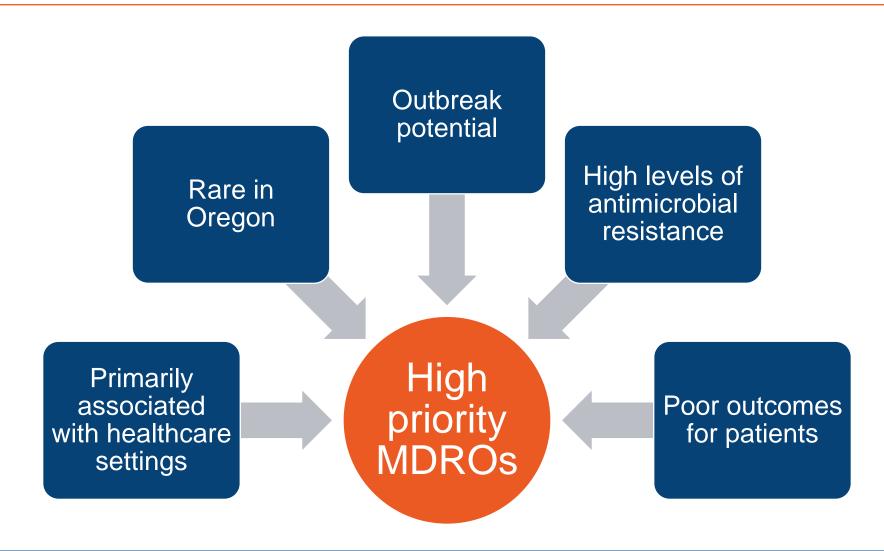


Develop laboratory capacity and promote consistent laboratory practices for the rapid detection of carbapenemase-producing and other AR organisms



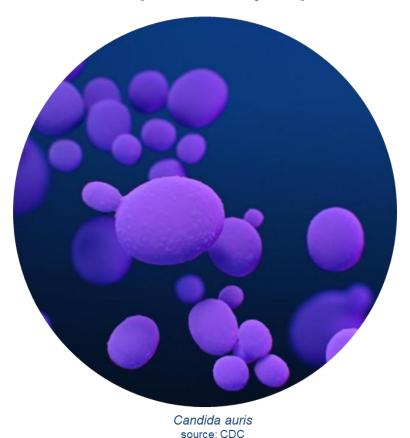
Provide outbreak assistance

#### STAR focuses on emerging pathogen threats



#### STAR focuses on emerging pathogen threats

#### Candida (Candidozyma) auris



#### **Carbapenemase producing organisms (CPOs)**



Carbapenem-resistant Klebsiella pneumoniae



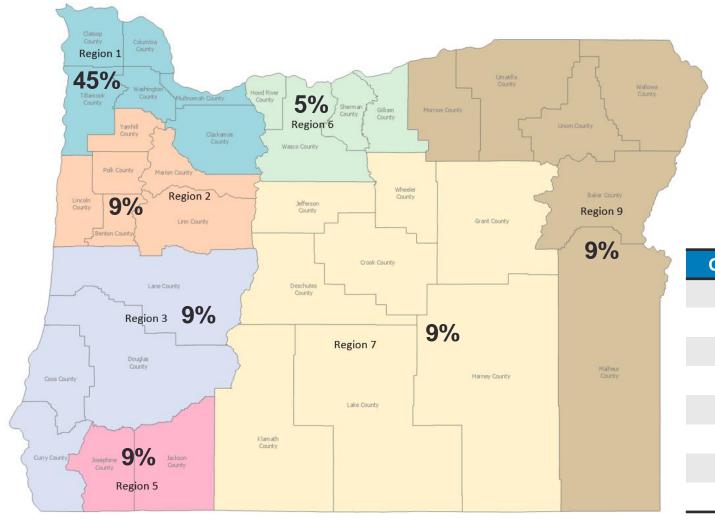
# STAR Housekeeping & Membership

#### **STAR Advisory Committee Membership**

- Minimum advisory committee commitment:
  - 1-2 annual meetings (virtual)
  - 2 years of participation
  - Contributions to resources, guidance documents, etc. as needed and available
  - Smaller group of OHA staff and consultants meets monthly to carry out this work
- 2027 = renewal year

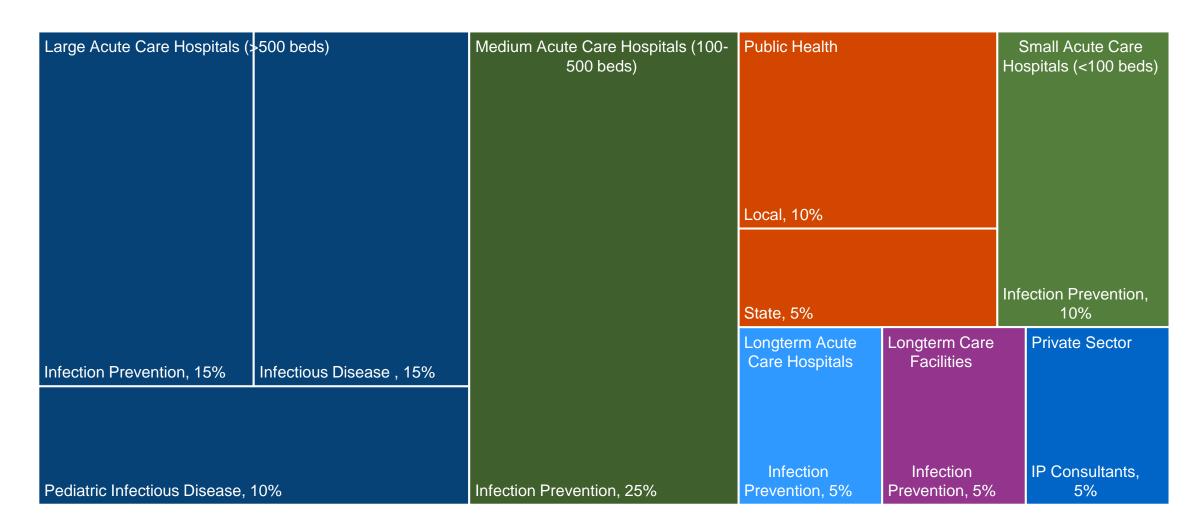


#### **Current STAR Advisory Committee Members**



OR Region	% Members
Region 1	45%
Region 2	9%
Region 3	9%
Region 5	9%
Region 6	5%
Region 7	9%
Region 9	9%
Statewide	5%

#### **Current STAR Advisory Committee Members**





### Epi Update Candida (Candidozyma) auris

#### C. auris has spread quickly across the US

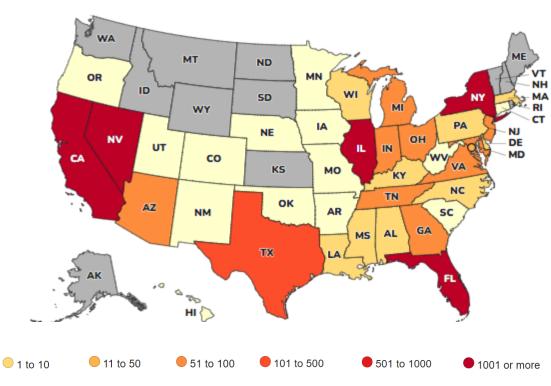
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First reported clinical cases of Candida auris in the United States, 2013 - 2016



■ 0 cases ■ 1-10 cases ■ 11-50 cases

Clinical cases of *Candida auris* reported in the United States, 2016 - 2023



#### C. auris has spread quickly across the US

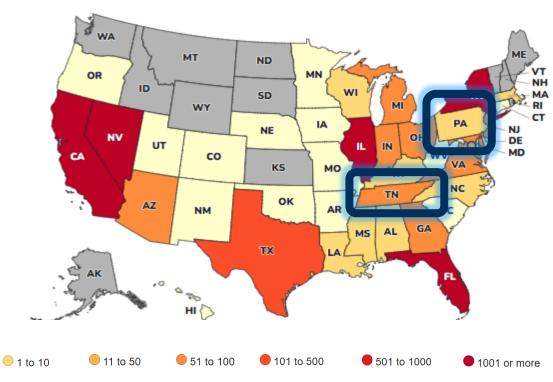
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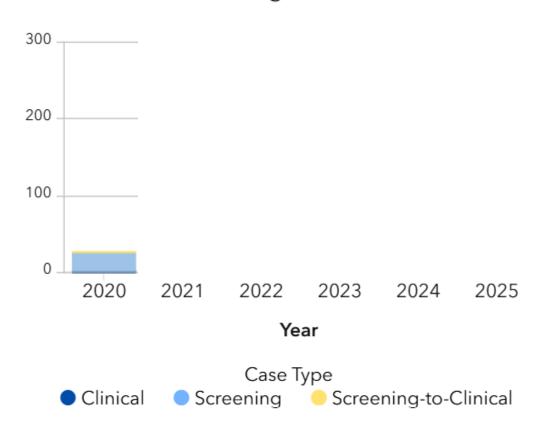
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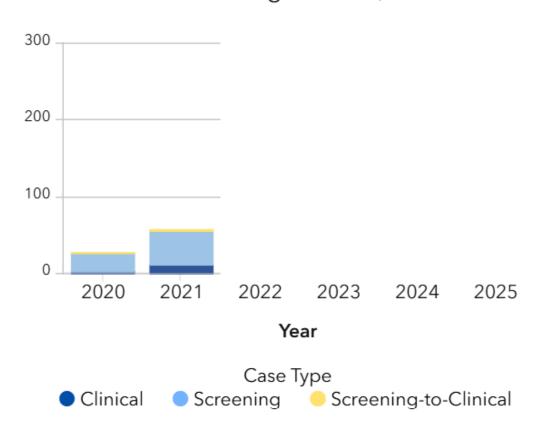
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Clinical cases of *Candida auris* reported in the United States, 2016 - 2023

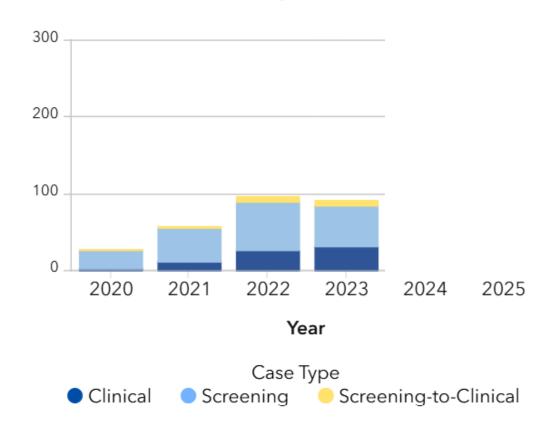




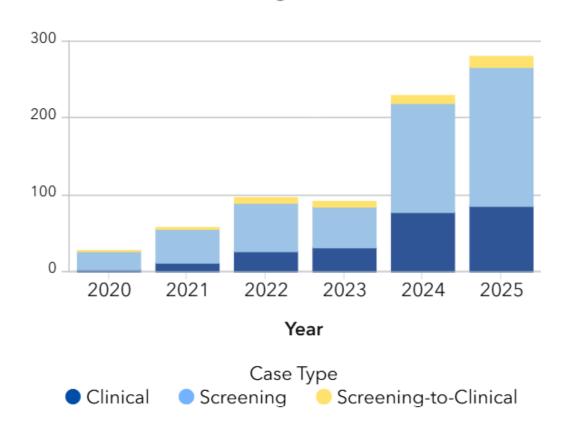






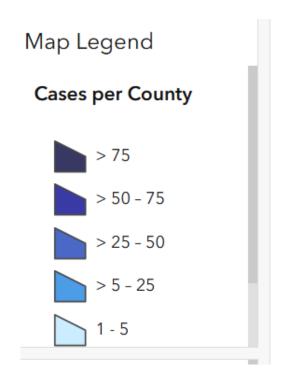




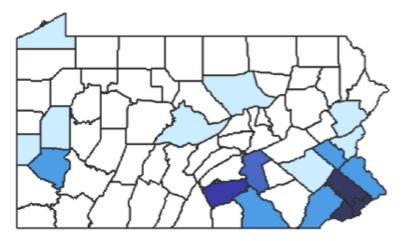




## Clinical and colonization cases of *C. auris* in Pennsylvania, 2020 - August 2025

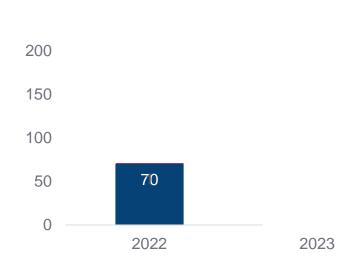


Clinical and Screening Cases by County of Healthcare Facility Where Identified, March 2020–August 2025, N=786



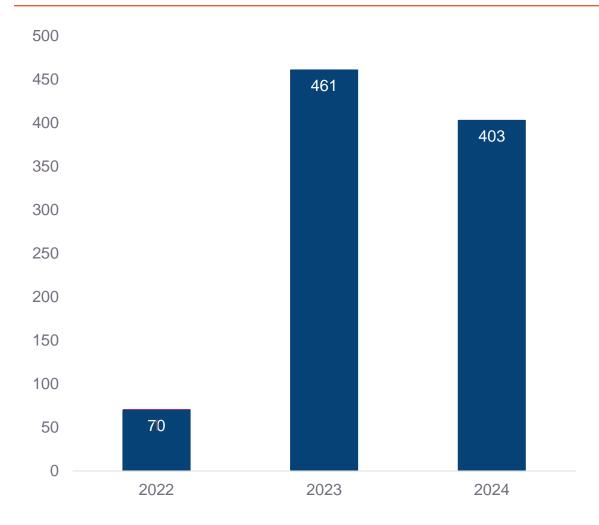
### TN went from index case in 2022 to 400+ cases/year

2024



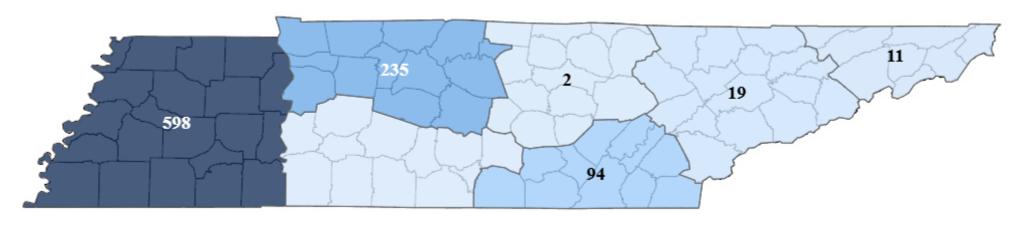


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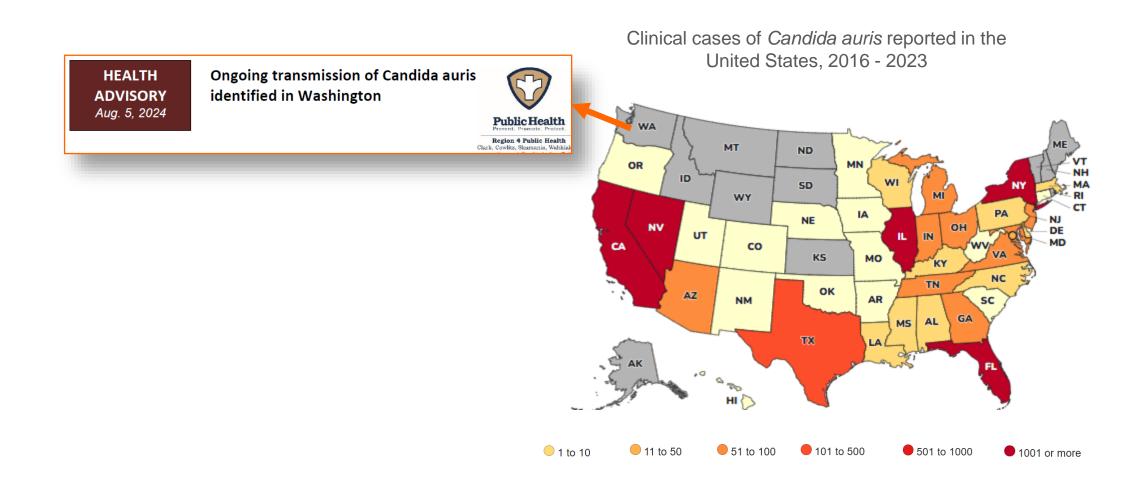


## Clinical and colonization cases of *C. auris* in Tennessee, 2022-2024



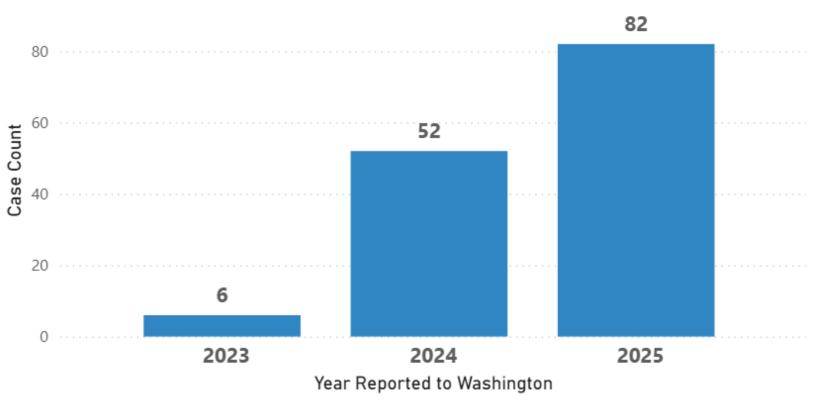
Clinical and colonization cases of *C. auris* in Tennessee, 2022-2024

#### C. auris has spread quickly across the US



#### 140 cases of *C. auris* reported in Washington state

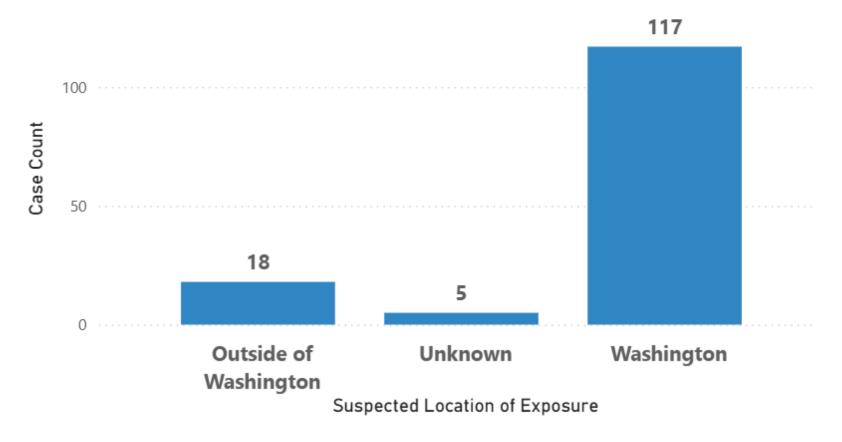
#### Candida auris cases reported to Washington state



This graph shows the number of positive *C. auris* cases reported to Washington. Surveillance for *C. auris* began in 2017. The first Washington case was detected in 2023. Data only shows one *C. auris* identification per case.

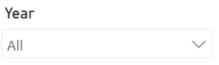
#### Ongoing local transmission in WA state

Suspected Location of Exposure for Candida auris cases in Washington State



This graph shows the total number of positive *C. auris* cases reported to Washington since 2023 and their suspected exposure location.

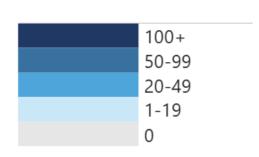
#### WA cases across 8 counties, no OR border counties



C. auris Cases in Washington State by County of Diagnosis



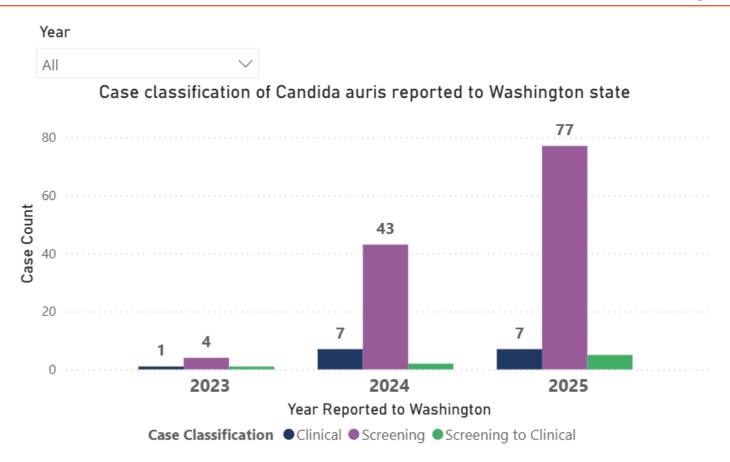






This map shows *C. auris* cases in Washington State since 2023. Data only shows one *C. auris* identification per case. Cases are displayed by county of collection facility at the time of diagnosis. If county of diagnosis is not in Washington, the county of residence is default.

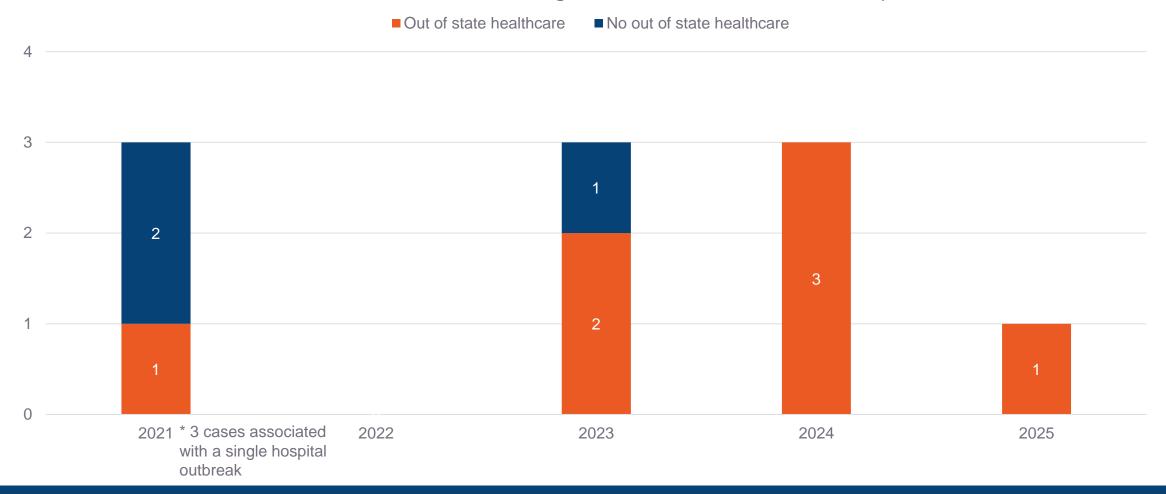
#### Most new WA C. auris cases identified by screening



This graph shows the number of positive *C. auris* cases reported to Washington since 2023. Cases can be classified as either screening or clinical. Screening cases that later tested positive on a clinical culture are shown as "screening to clinical". Data only shows one *C. auris* identification per case.

#### In Oregon, C. auris remains rare for now

Candida auris identified in Oregon residents, Dec 2021 – Sep 2025





- Only outbreak limited to 3 cases in 2021
- Aggressive testing in response to new cases has not yet identified transmission
  - Strong IPC practices
- Some facilities now using List P at baseline, or moving towards this



### Challenges based on recent *C. auris* epidemiology

Most newly identified *C. auris* cases have history of domestic healthcare outside Oregon

Admission screening of patients with domestic healthcare is more limited

Immunocompromised patients with chronic conditions present to ED frequently

→ Many opportunities for transmission

C. auris likely circulating at low levels in OR already

→ Many facilities do not routinely use list P products

#### **Discussion**



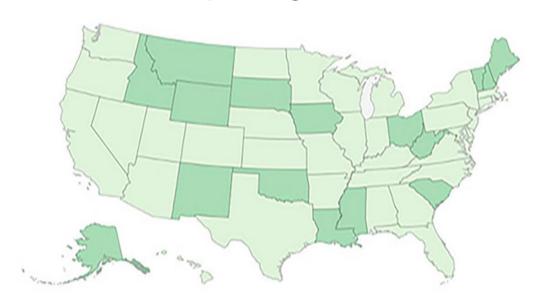
How can we maintain low *C. auris* prevalence?



### Epi Update Carbapenemase Producing Organisms (CPOs)

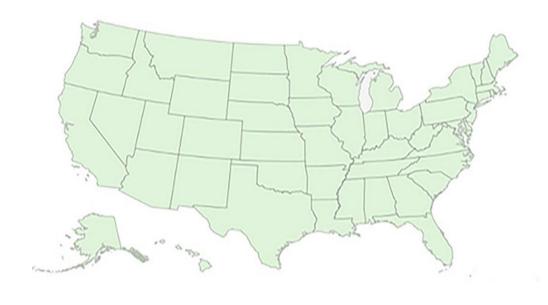
#### Historically, KPC has been most prevalent in US





Not reported

#### States reporting **KPC**, 2017



Reported

#### **National increase in CP-CRE**

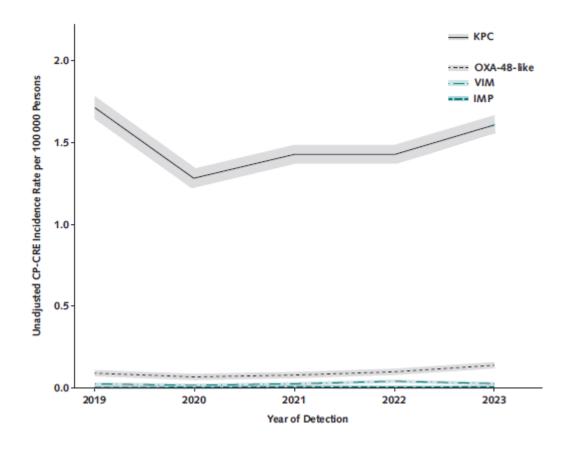


Figure. Unadjusted CP-CRE incidence rates per 100 000 persons across an open cohort of U.S. states with required CRE isolate submission, by carbapenemase gene (top) and by organism grouping and carbapenemase gene (bottom), 2019-2023.

#### National increase in CP-CRE due to NDM

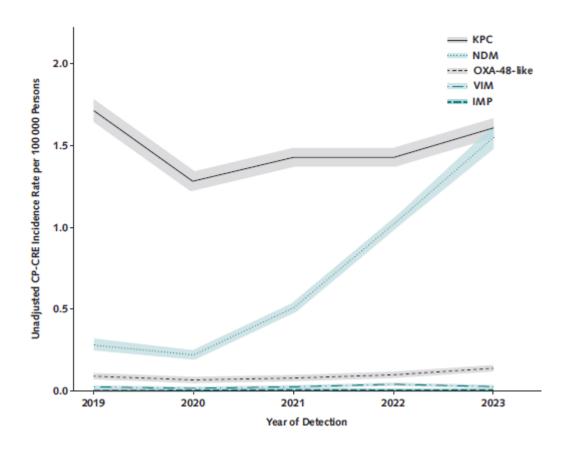
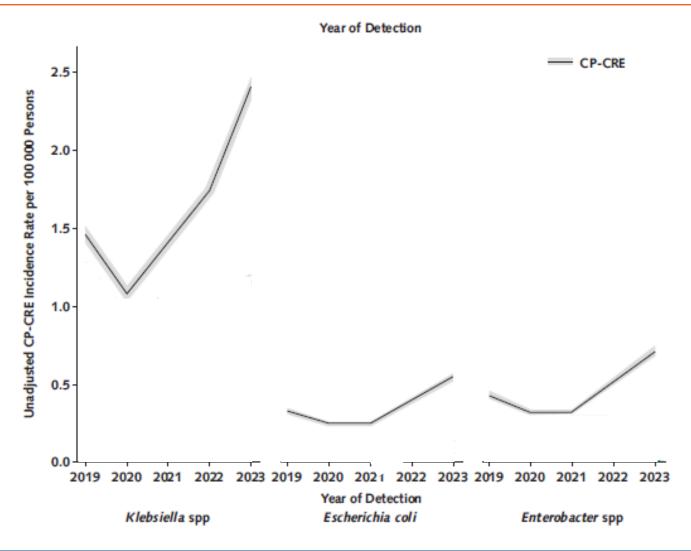
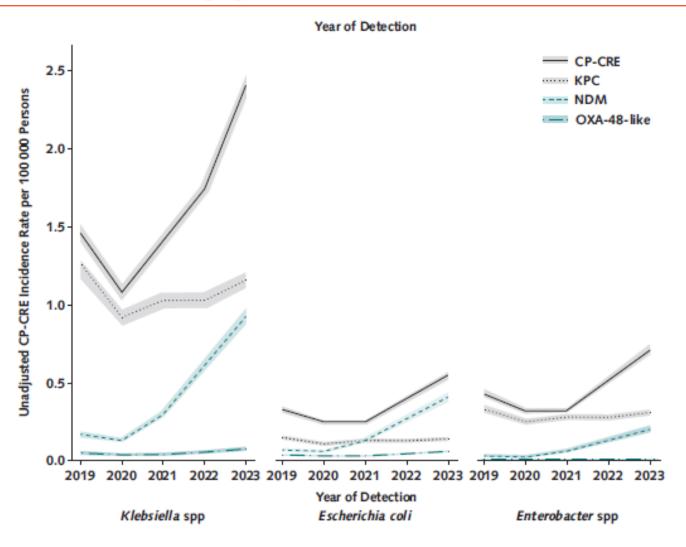


Figure. Unadjusted CP-CRE incidence rates per 100 000 persons across an open cohort of U.S. states with required CRE isolate submission, by carbapenemase gene (top) and by organism grouping and carbapenemase gene (bottom), 2019-2023.

## CP-CRE rose across organisms, esp. Klebsiella spp.



## 24% of Klebsiella spp. Isolates were NDM+ by 2023



## In OR: online dashboard to replace quarterly report

#### **Previous: PDF Quarterly Report**

#### **Now: Tableau Dashboard**

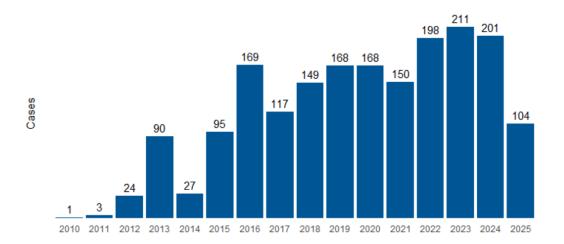
#### **Public Health Division**

Acute and Communicable Disease Prevention



## Laboratory-based surveillance for Carbapenem-resistant *Enterobacterales* (CRE)

Figure 1. CRE cases of infection or colonization in Oregon residents by year, Nov 2010 - Jun 2025





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Carbapenemase-Producing Organisms

arbapenem-Resistant Enterobacterales

apenem-Resistant Acinetobacter

#### Carbapenemase-Producing Organisms (CPO)

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# Carbapenemase Type identified by Oregon laboratories by Year¹ CPO is not endemic in Oregon, but cases are increasing. The most commonly identified carbapenemase in recent years has been NDM. Use the filter below to filter organism type: carbapenem-resistant Enterobacterales (CRE), carbapenem-resistant Acinetobacter (CRA), carbapenem-resistant Pseudomonas aeruginosa (CRPA CRA became reportable in 2023 and CRPA is not mandatory to report. View by CPO Type [(AII)] Carbapenemase Type

## In OR: online dashboard to replace quarterly report

#### **Previous: PDF Quarterly Report**

#### **Now: Tableau Dashboard**

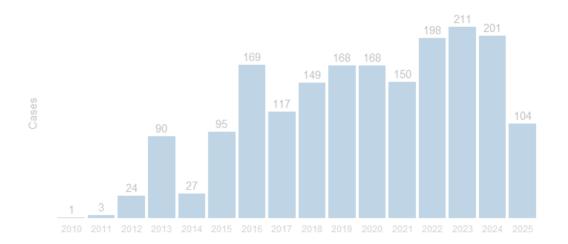
**Public Health Division** 

Acute and Communicable Disease Prevention



## Laboratory-based surveillance for Carbapenem-resistant *Enterobacterales* (CRE)

Figure 1. CRE cases of infection or colonization in Oregon residents by year, Nov 2010 - Jun 2025





### Multidrug-Resistant Organism (MDRO) Dashboard

November 2010 – September 2025

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Carbapenemase-Producing Organisms

Carbapenem-Resistant Enterobacterales

Carbapenem-Resistant Acinetobacter

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#### More About CPOs

#### Carbapenemase Type identified by Oregon laboratories by Year<sup>1</sup>

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## Oregon interactive dashboard provides more data

#### **Previous: PDF Quarterly Report**

#### **Now: Tableau Dashboard**

#### **CRE**

- · case count by year and carbapenemase production
- · organism and site of culture
- · case count by age group and sex

#### CRE

- · case count by year and carbapenemase production
- case count and rate by Oregon county
- · organism and site of culture
- case count by age group and sex

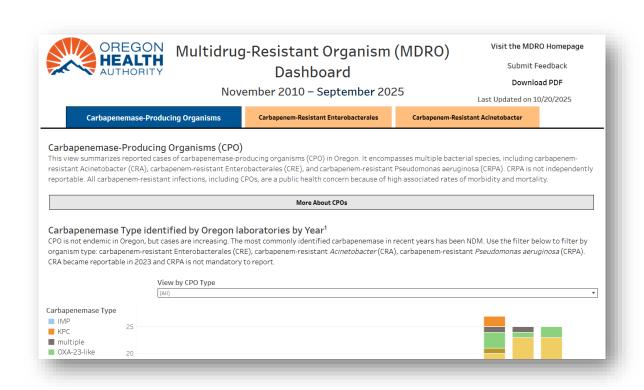
#### CR Acinetobacter spp (CRA)

- case count by year and carbapenemase production
- · organism and site of culture
- · case count by age group and sex

#### **CPO**

- · carbapenemase type by year
- clinical and colonization case counts by year
- case count and rate by Oregon county
- carbapenemase type by organism
- · organism and site of culture
- · case count by age group and sex
- + ability to filter by Oregon county and region across visualizations

### Walkthrough of new CRO dashboard



https://tinyurl.com/cpodashboard



## Multidrug-Resistant Organism (MDRO) Dashboard

November 2010 – September 2025

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**Carbapenemase-Producing Organisms** 

Carbapenem-Resistant Enterobacterales

Carbapenem-Resistant Acinetobacter

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#### Close CPOs Text

#### About CPOs



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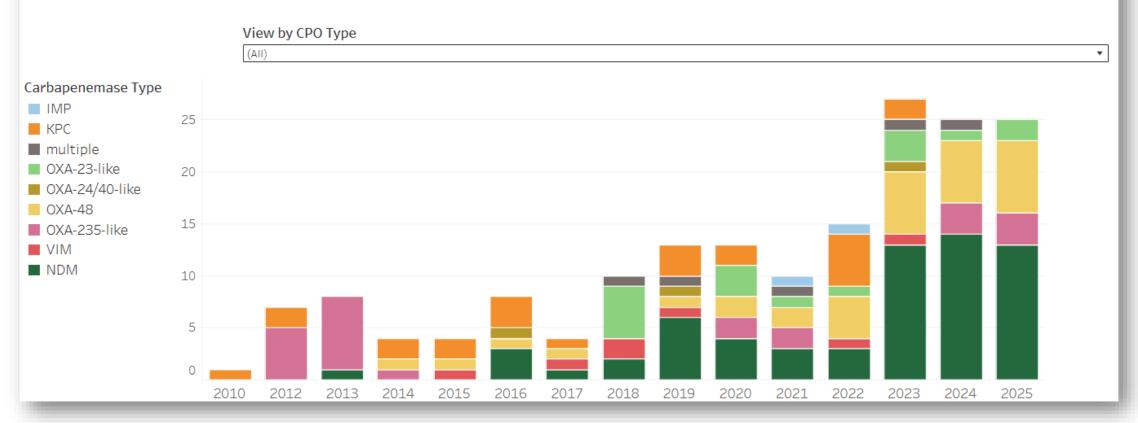
Close CPOs Text

#### About CPOs

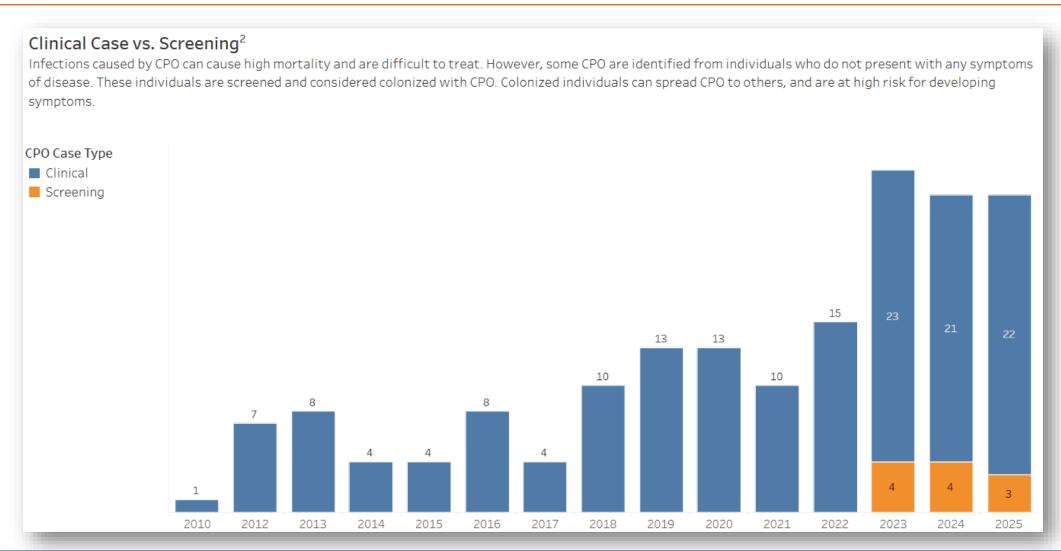
## Dashboard: carbapenemase type by year

#### Carbapenemase Type identified by Oregon laboratories by Year<sup>1</sup>

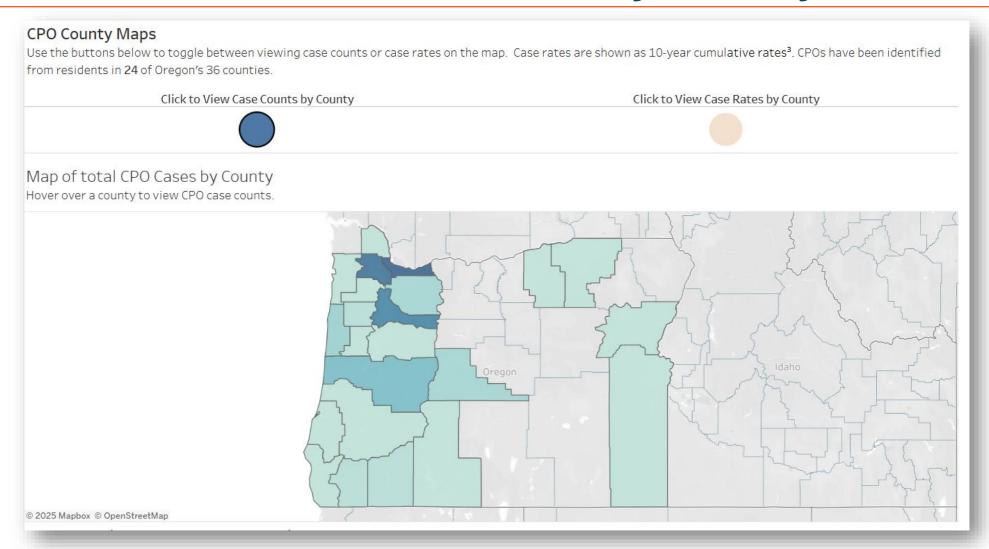
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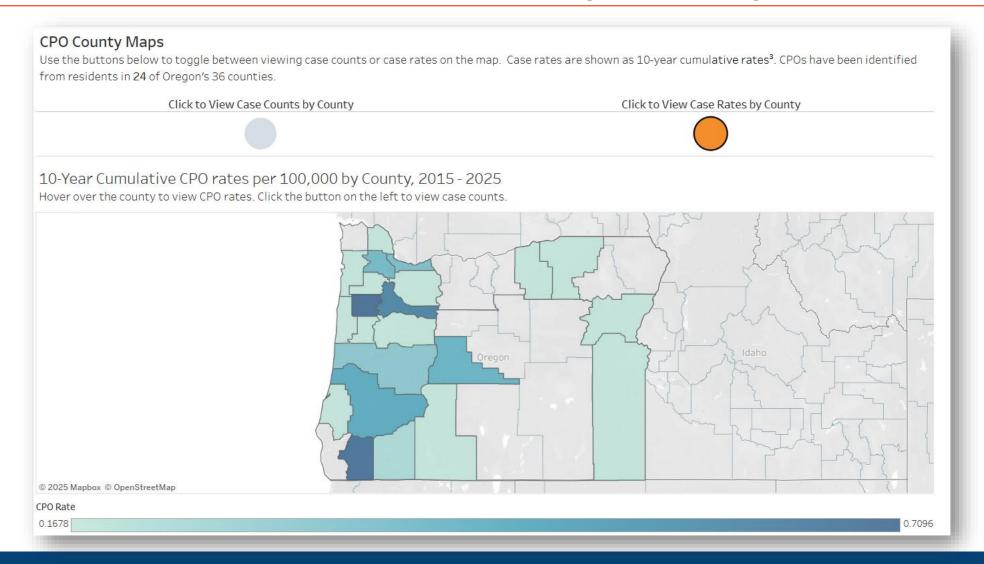
## Dashboard: clinical vs screening cases by year



### Dashboard: CPO case counts by county



## Dashboard: CPO case rates by county





## Multidrug-Resistant Organism (MDRO) Dashboard

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#### **Close CPOs Text**

#### About CPOs



## High-priority MDROs Admission Screening

## Oregon has interim admission screening guidance

PUBLIC HEALTH DIVISION
Acute & Communicable Disease Prevention (ACDP)



## Candida auris and Carbapenemase-Producing Organism (CPO) Interim Admission Screening Recommendations

The Oregon Health Authority (OHA) has new interim recommendations for admission screening to identify patients colonized with *Candida auris* and carbapenemase-producing organisms (CPOs).

## Oregon interim admission screening guidance

#### OHA C. auris and CPO Interim Admission Screening Recommendations

OHA recommends that Oregon hospitals, long-term acute care hospitals (LTACHs), and ventilator-capable skilled nursing facilities (vSNFs) test selected patients for *C. auris* and CPO colonization using one of the following strategies.

Perform colonization testing on patients with the following exposures in the past 12 months:

#### Strategy #1

- spent the night in a healthcare facility (hospital or long-term care) outside
   Oregon (including outside the United States), or
- outpatient surgery outside the United States and Canada, or
- hemodialysis outside the United States and Canada

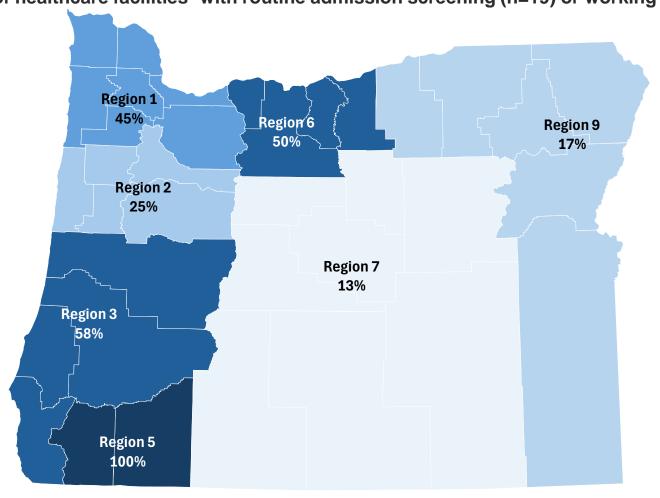
Designed to capture the highest number of cases while balancing simplicity and specificity. Ideal when pairing C. auris and CPO admission screening.

## 19 Oregon facilities testing on admission

Facility 11	Year Started	Organisms Screened
Salem Hospital	2023	C. auris, CPO
Asante Rogue Regional Medical Center	2024	C. auris, CPO
Asante Three Rivers Medical Center	2024	C. auris, CPO
Providence Oregon (8 facilities)	2024	C. auris, CPO
Portland VA Medical Center	2024	C. auris, CPO
PeaceHealth - Cottage Grove	2024	C. auris, CPO
PeaceHealth - Peace Harbor	2024	C. auris, CPO
PeaceHealth - Riverbend	2024	C. auris, CPO
McKenzie-Willamette Medical Center	2025	C. auris, CPO
Vibra Speciality Hospital of Oregon	2025	C. auris, CPO

## Routine admission screening at 19 of 65 facilities\*

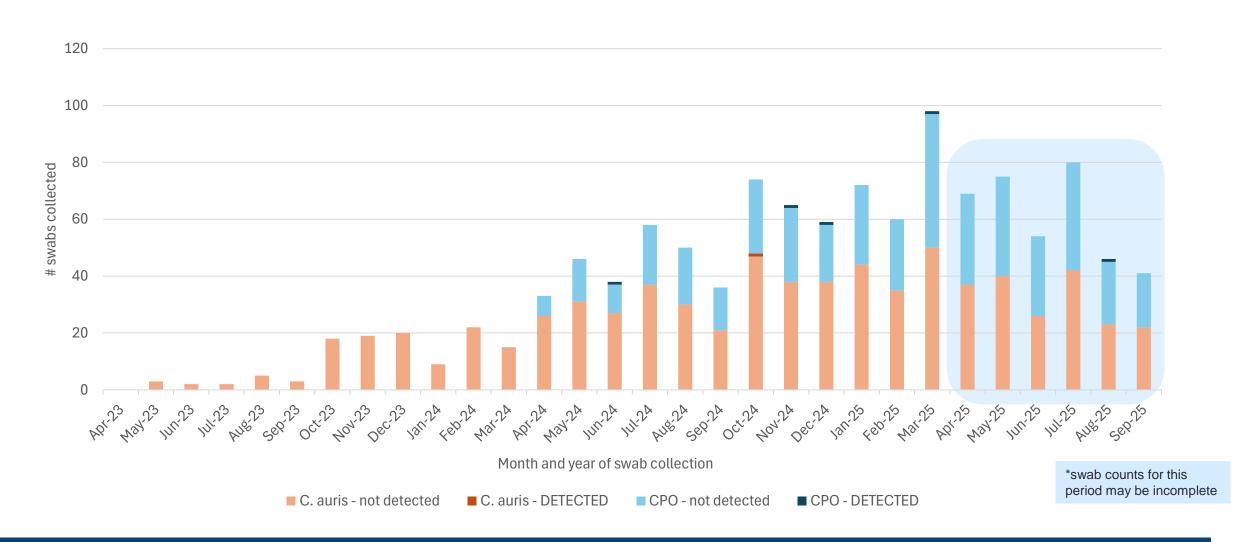
Percent of healthcare facilities\* with routine admission screening (n=19) or working towards it (n=6)



\* Acute care hospitals, longterm acute care hospitals, and ventilator capable skilled nursing facilities

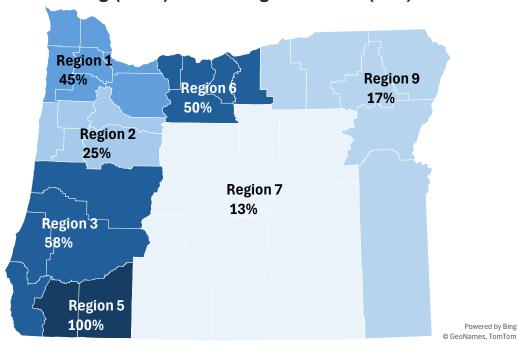
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### 6 cases identified via admission screening



### **Discussion**

Percent of healthcare facilities\* with routine admission screening (n=19) or working towards it (n=6)



## For facilities with admission screening, how is it going?

- Pros and cons
- Labs you are using for testing
- Changes and adjustments you've made over time



## High-priority MDROs Lab Capacity Update

## Update on public health lab capacity



OSPHL new methods, faster results



OSPHL now providing CPO responsive + admission testing



ARLN regional reprioritization of resources, no anticipated impact to OR testing

### Multiple methods for carbapenemase identification

#### **Phenotypic**

mCIM / eCIM

CarbaNP

**CBD Pheonix CPO Detect** 

#### Genotypic

Carba-R

CARBA-5

OpGen Acuitas AMR Gene Panel

Biofire BCID2 Panel

Luminex VERIGENE



Example of a CARBA-5 genotypic test

## 12 clinical labs report carbapenemase testing ability

Nucleic Acid Testing (NAT) based detections from blood culture (e.g., Verigene, Biofire) Carba-R PCR

Other methods (CARBA-5, mCIM, etc.)

### **Discussion**



Pros and cons of doing carbapenemase testing at the clinical lab vs public health lab?



# High-priority MDROs Funding Update

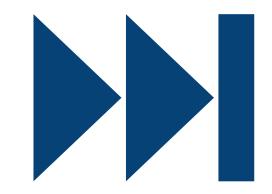
### **Discussion**



How are federal or state-level changes impacting your work on AMR organisms?

Is there a gap that OHA can fill?

## Closing



Is there anything else you would like to see from this taskforce over the next 12 months?

## Thank you

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Public Health Division

Acute & Communicable Disease Prevention Section (ACDP)

Healthcare-Associated Infections (HAI) Program

General mailbox: hai@odhsoha.oregon.gov

