DROP-CRE Advisory Committee
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ACUTE & COMMUNICABLE DISEASE PREVENTION (ACDP)
Public Health Division

Agenda

- **DROP-CRE history, objectives, and goals**
- **Epi update**
  - carbapenemase producing organisms (CPOs) and *Candida auris*
- **MDRO Testing Capacity**
- **Other updates**
  - New reportable organisms
  - New CRO toolkit
- ***Candida auris* prevention**
  - Admission screening
  - Discussion: what else should we be doing around *C. auris* prevention?
  - Discussion: how could incentives play a role in *C. auris* prevention?

Drug-Resistant Organism Prevention and Coordinated Regional Epidemiology Network (DROP-CRE)

History	- Public-health academic partnership - Initiated September 2012
Primary Objective	- Detect and contain high-impact antimicrobial resistant pathogens in Oregon - Including carbapenem-resistant Enterobacterales (CRE)

Drug-Resistant Organism Prevention and Coordinated Regional Epidemiology Network (DROP-CRE)

Goals	
	- Monitor Oregon antimicrobial resistant 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

Epi Update

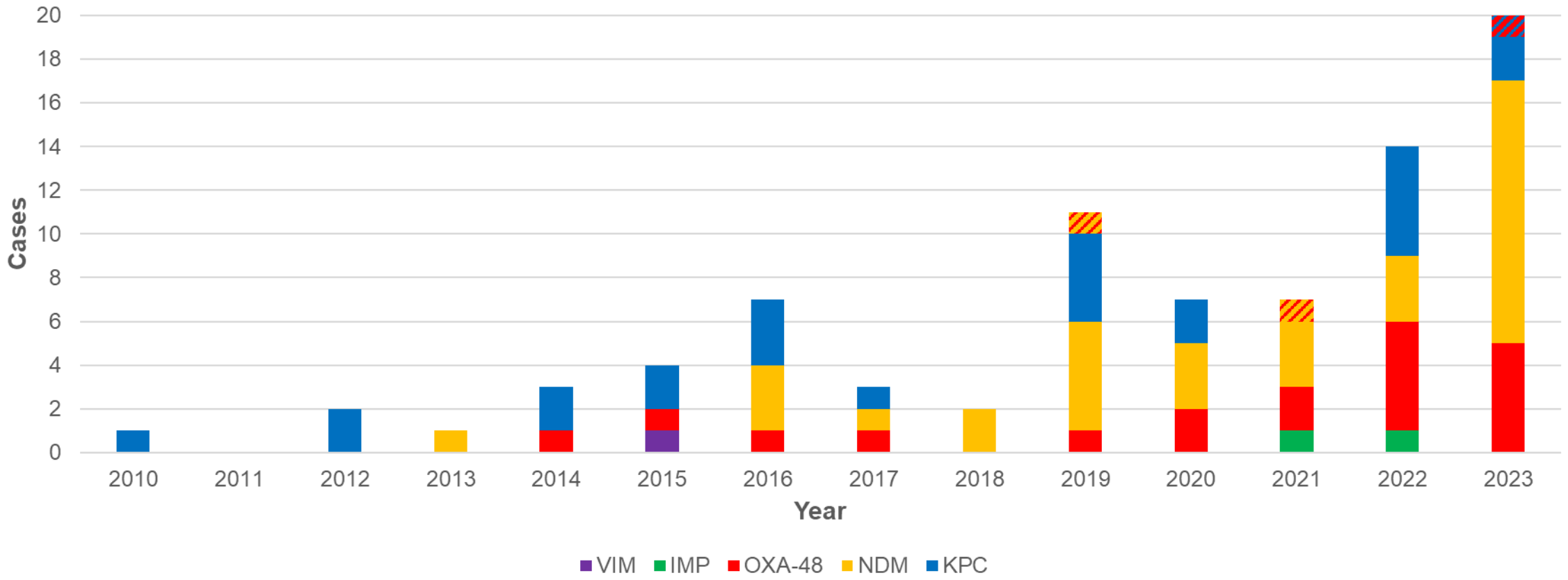
Targeted multidrug-resistant organisms (MDROs) in Oregon

Carbapenemase producing organisms (CPOs)

Carbapenem-resistant *Klebsiella pneumoniae*
source: CDC

- Carbapenemases most often found in *Enterobacterales, Acinetobacter,* and (more rarely) *Pseudomonas*
- Associated with increased morbidity and mortality
- Have caused large outbreaks and become endemic in other parts of the country and world
- Still rare in Oregon, but increasing

Carbapenemase-producing *Enterobacterales* identified by Oregon laboratories, 2010 - 2023



CRPA and CRA

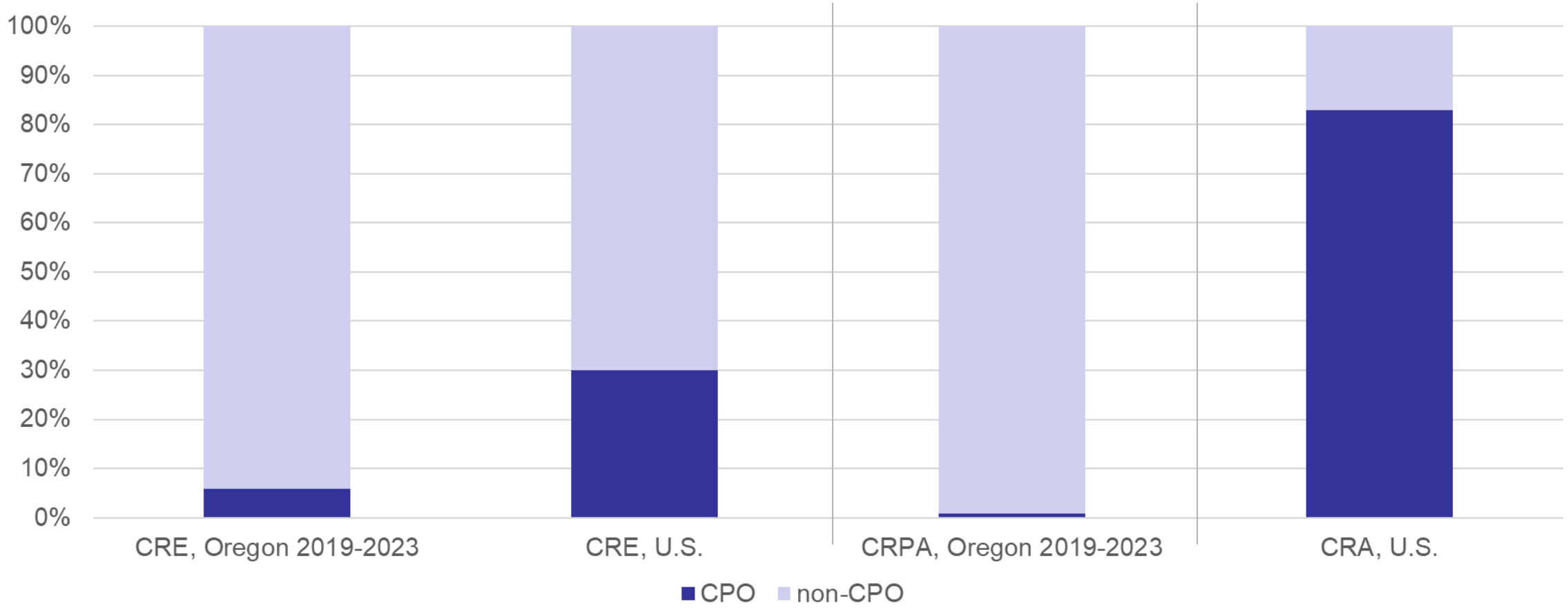
Carbapenem-resistant *Pseudomonas aeruginosa* (CRPA)

- Not reportable. Voluntary submission of isolates for CPO testing
- 498 isolates since 2019, <1% CPO

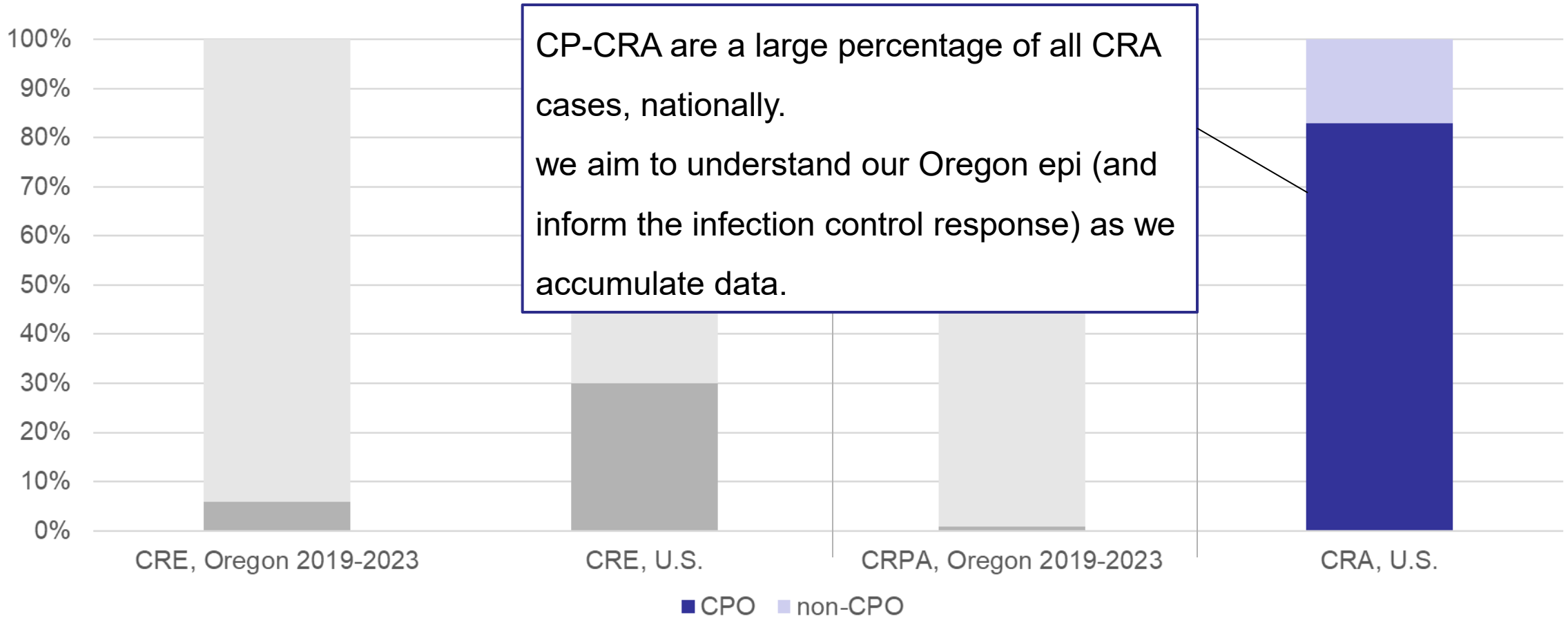
Carbapenem-resistant *Acinetobacter* (CRA)

- Newly reportable in October 2023
- Regional CR-*A. baumannii* surveillance in Portland area since 2011.
- Few CRA reported or submitted 2011-2022. Nine isolates per year on average.
- Most CRA carry a carbapenemase

CPO among CRE, CRPA, CRA



CPO among CRE, CRPA, CRA



CP-CRA are a large percentage of all CRA cases, nationally.

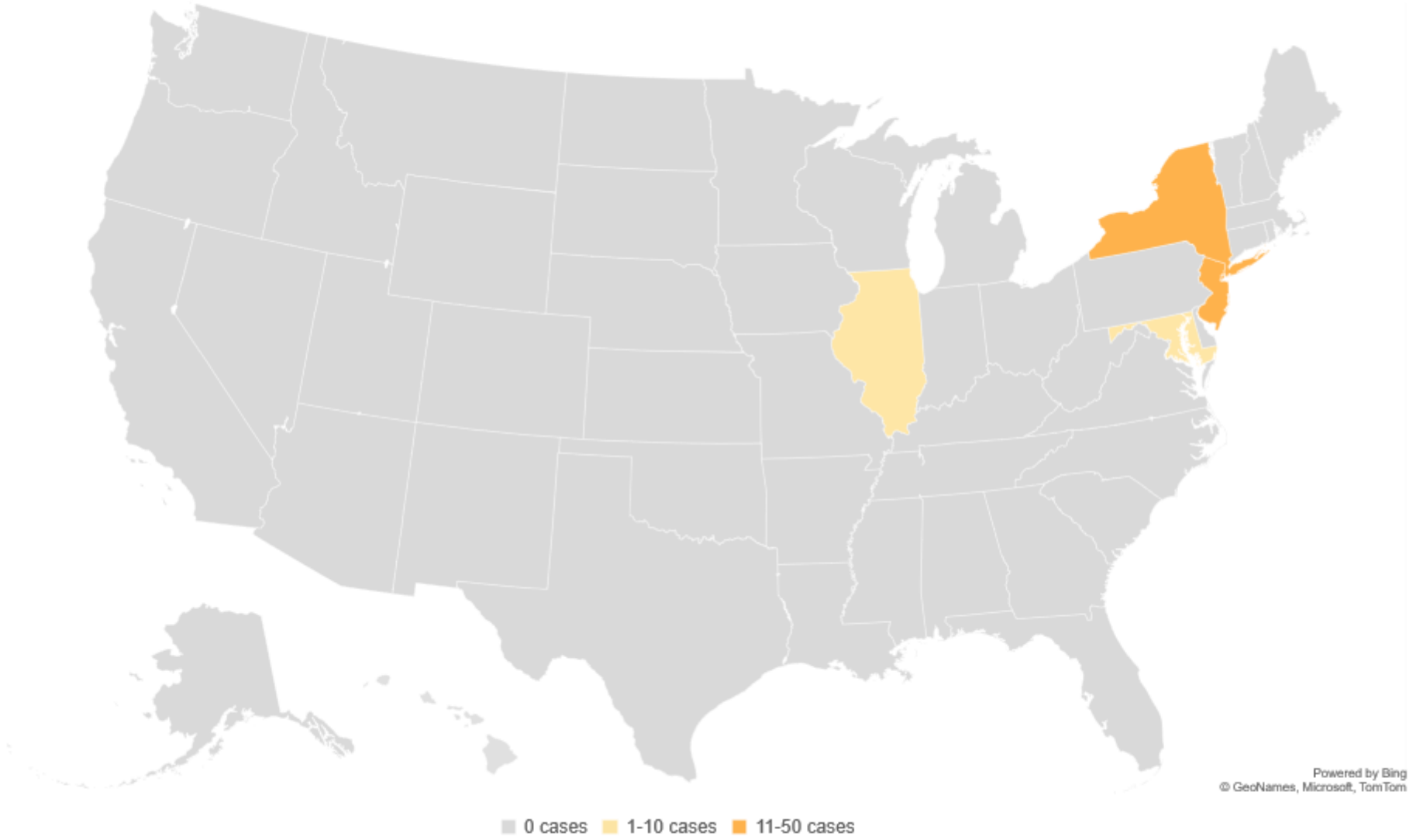
we aim to understand our Oregon epi (and inform the infection control response) as we accumulate data.

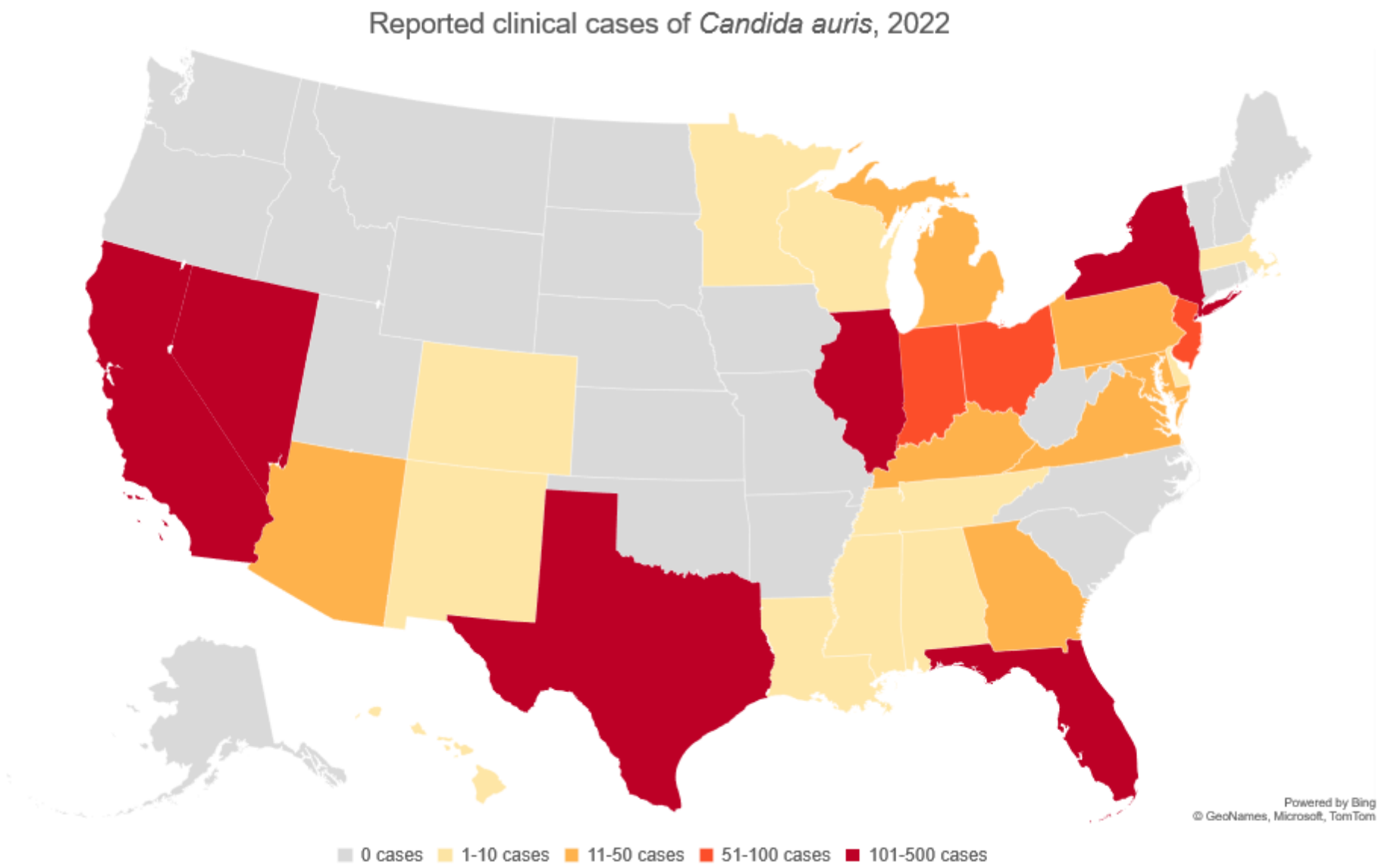
Candida auris

Candida auris
source: CDC

- Fungus (yeast) that persistently colonizes patients and contaminates the environment
- Often multi-drug resistant, some strains pan-resistant
- More than 1 in 3 patients with invasive infection die
- High potential for outbreaks in hospitals and nursing homes, has rapidly spread in other states.

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




Reported clinical cases of *Candida auris*, 2022
Powered by Bing
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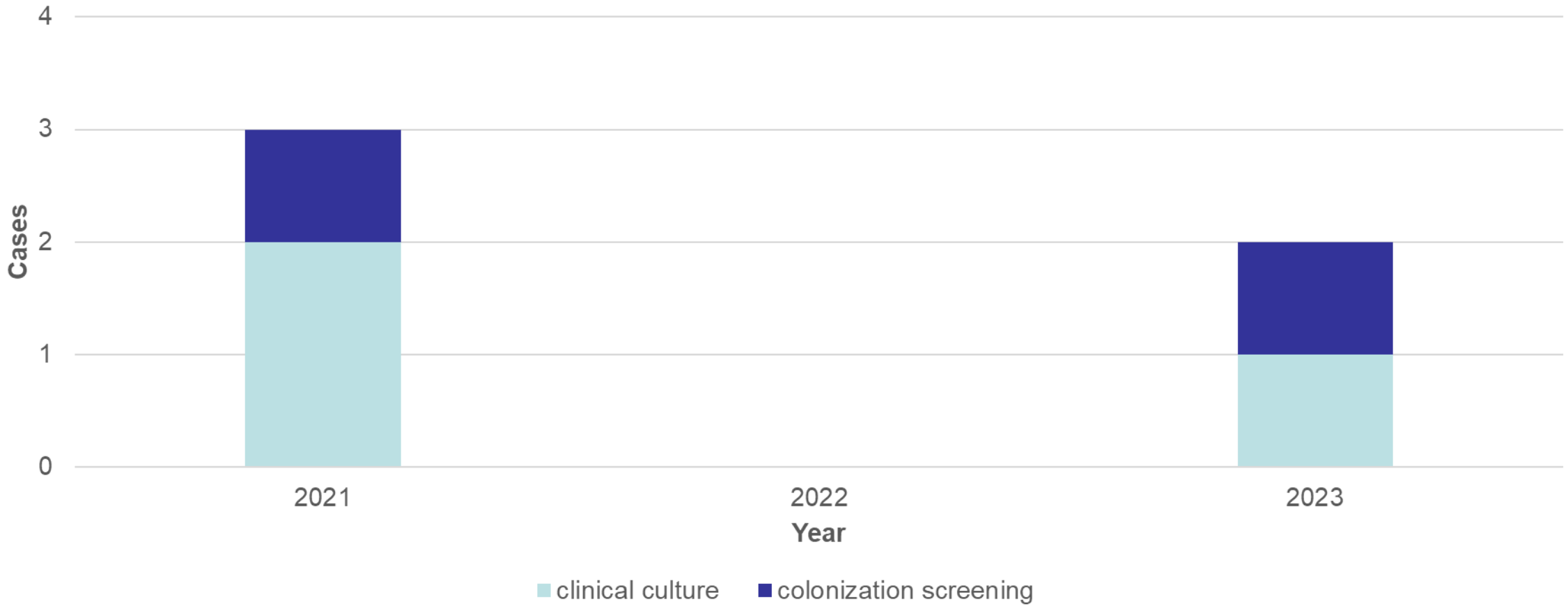
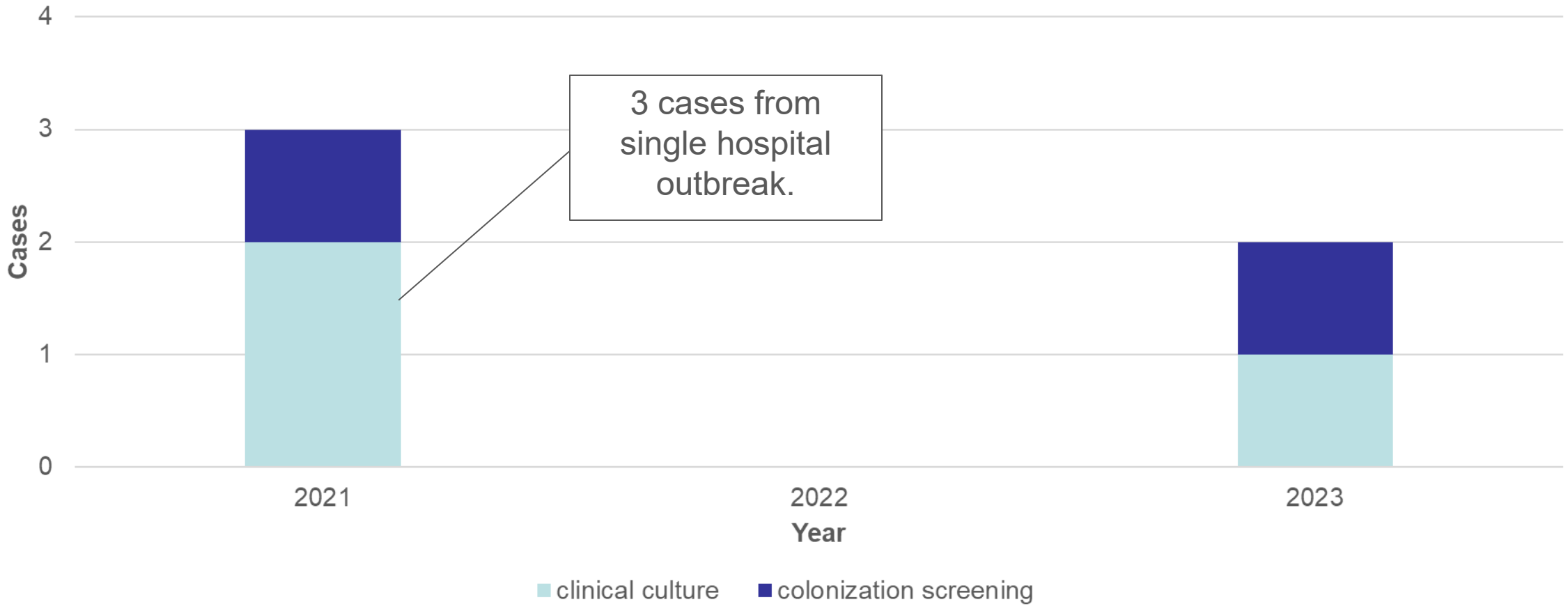
0 cases
1-10 cases
11-50 cases
51-100 cases
101-500 cases

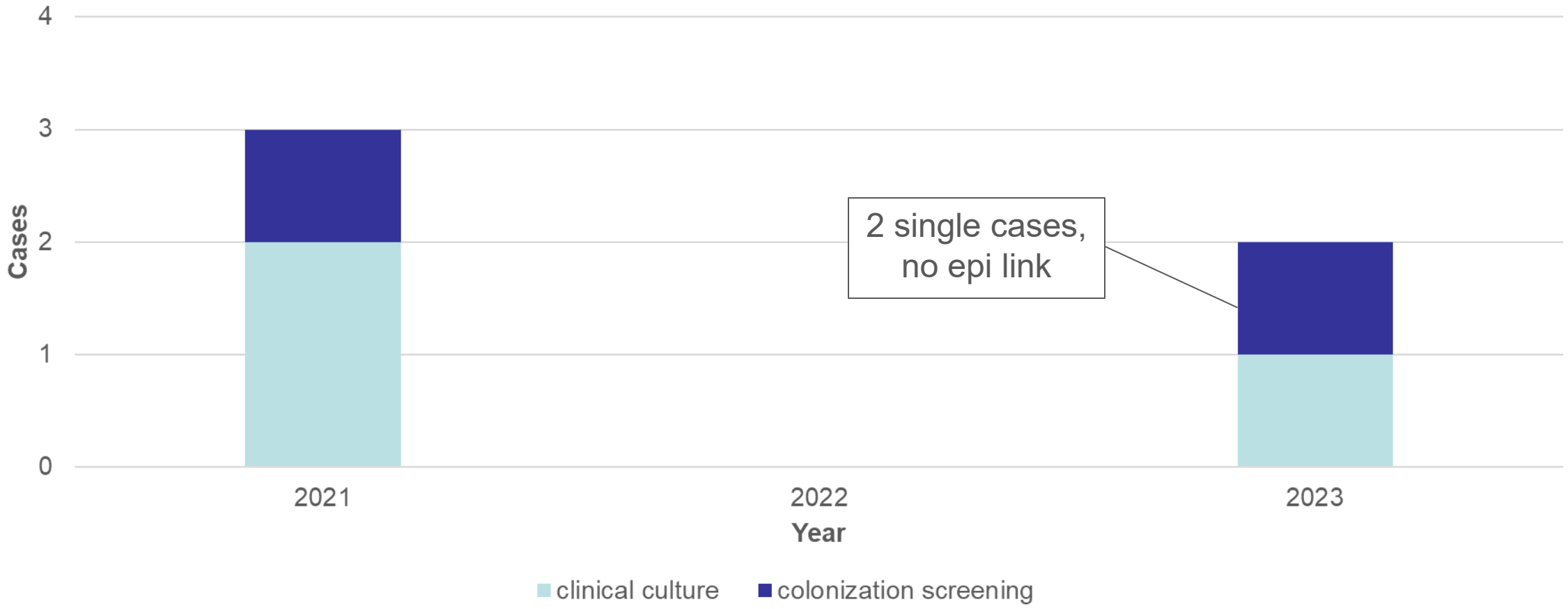
Oregon cases of *Candida auris*, 2021-present



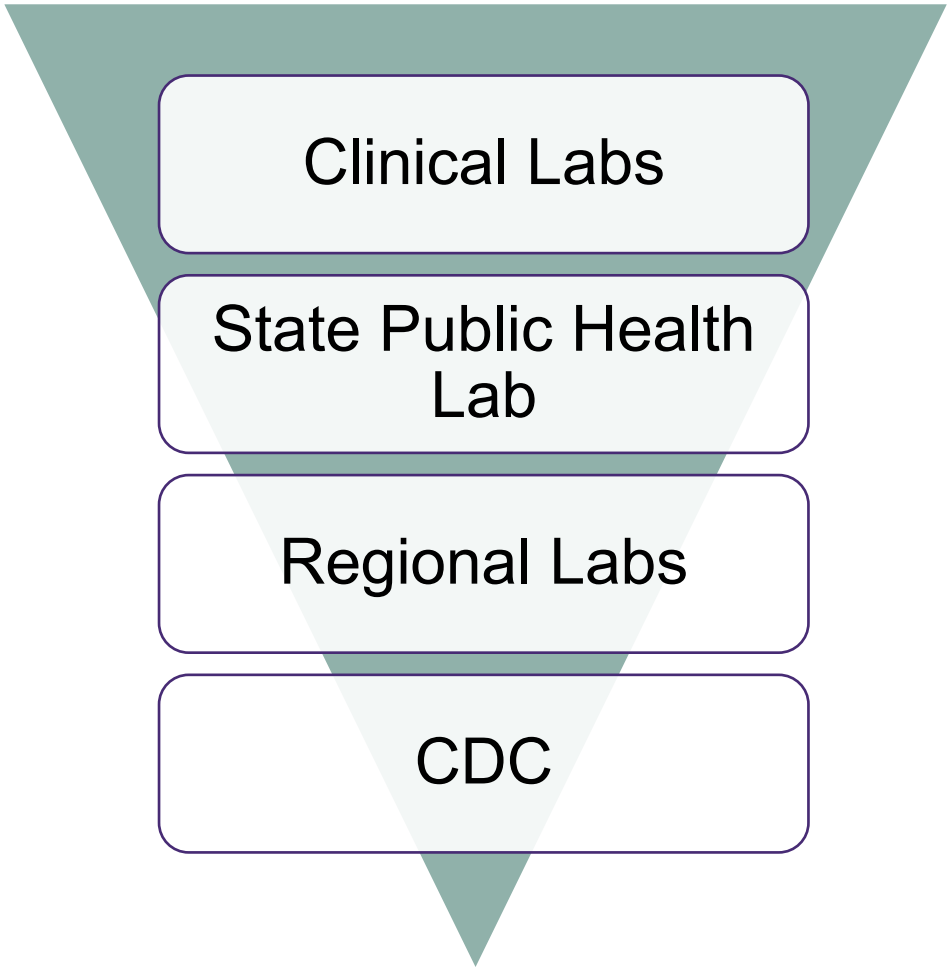
Oregon cases of *Candida auris*, 2021-present



Oregon cases of *Candida auris*, 2021-present



MDRO Testing Capacity



How we work together.

Current public health laboratory capacity and workflow

Testing Capacity	Process
Routine testing	
CPO testing of CRE, CRA, CRPA	Send isolates to OSPHL
Candida species identification and susceptibility testing (includes *C. auris* confirmation or rule-out)	Contact HAI program to initiate
CPO admission screening	Contact HAI program to initiate
C. auris admission screening	Contact HAI program to initiate
Responsive testing	
CPO responsive screening	Initiated by HAI program
C. auris responsive screening	Initiated by HAI program
Sequencing for epi-linked CPO or other unusual cases	Usually initiated by HAI program

Other MDRO Updates

Updated MDRO reporting rules (OAR 333-019-0052)

Organism	Reportable?
Pan non-susceptible (panNS and panR) organisms	YES
Carbapenem-resistant *Enterobacterales* (CRE)	YES
Carbapenem-resistant *Acinetobacter* species (CRA)	Started Oct 2023
Carbapenemase producing organisms (CPO)*	Started Oct 2023
*Candida auris**	Restarted Oct 2023

Note: the reporting requirement includes sending isolates to OSPHL for carbapenemase testing.

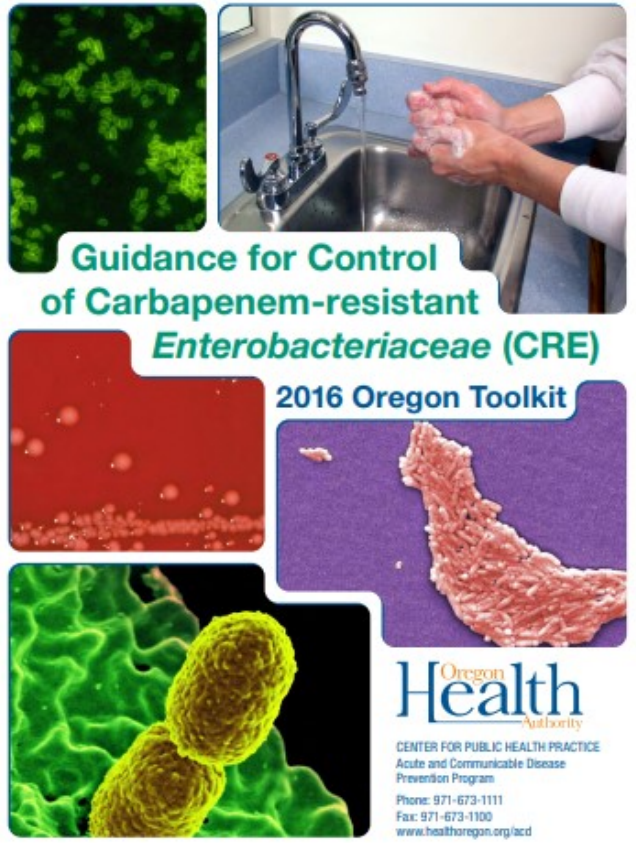
*These organisms were previously reportable under the “outbreaks and uncommon illnesses” but will be explicitly listed as reportable starting this year.

**Many labs submit CRPA isolates to OSPHL as a part of voluntary sentinel surveillance. This is appreciated and OSPHL will continue to test all CRPA isolates received for carbapenemase production.

https://secure.sos.state.or.us/oard/viewSingleRule.action?ruleVrsnRsn=53933

Updated CRO Toolkit

- Original CRE toolkit published in 2013
  - Based on 2012 CDC CRE Toolkit
- Written by DROP-CRE workgroup
- Last updated in 2016



Updated CRO Toolkit

2016 Toolkit

- CRE and CP-CRE only
- Numbered format
- Recommendations by facility type

2023 Toolkit

- Expanded to CRO and CPOs
- Checklist format
- Recommendations by facility type
  - Updated recommendations to align with new CDC prevention and containment guidance published 2022
  - Expanded prevention section for each facility type
  - New section for LTACHs and vSNFs
- Updated resources and appendices

Candida auris Prevention

OHA Admission Screening Recommendations – Draft

- Recommendations based on admission screening programs from other jurisdictions that we perceived as successful
- Feedback provided by a group of hospital epis and IPs representing small and large hospital systems from across the state
- These are considered minimum screening criteria
- 1 hospital already implementing screening for *C. auris*
- 2 high-acuity LTCFs working towards implementation, one has opted to screen all newly admitted patients
- Several other hospitals actively working towards implementation

Admission Screening Recommendations

Option #1	Screen patients with the following exposures **outside of Oregon** in the past 12 months: • spent the night in a healthcare facility (hospital or long-term care), or • outpatient surgery, or • hemodialysis
Preferred, and ideal if pairing C. auris and CPO admission screening	

Option #2	Screen patients with the following exposures outside of **Oregon, Washington, or Idaho** in the past 12 months: • spent the night in a healthcare facility (hospital or long-term care)
Consider if: screening for C. auris only and identification of patients based on more specific criteria is expected to be challenging	

Option #3	Screen patients with the following exposures in the past 12 months: • spent the night in a healthcare facility (hospital or long-term care) outside of the United States or in an area of high burden within the United States AND • are known to be colonized with a carbapenemase producing organism OR • have an invasive medical device (such as endotracheal tube, feeding tube, or central venous catheter)
Consider if: screening for C. auris only and resources are available to support implementation of more complicated screening questions and there is concern about burden of screening many patients	

Discussion: Barriers and potential solutions to admission screening?

- What barriers exist to implementing these screening criteria?
- What potential solutions exist to overcome these barriers?

Discussion: What else could we be doing around *C. auris* prevention?

- Plans for *C. auris* PCR screening in clinical labs?
  - Barriers to in-house *C. auris PCR?*

Questions? Reach out to us!

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