

SNF Updates: COVID and *C. auris*

Division of Communicable Disease Control
Orange County Health Care Agency

Overview

- COVID stats and reminders: Dr. Calvet
- *C. auris* update: Dr. Zahn
- Q&A

What's New Since Our COVID Last Update

- Public Health Emergency (PHE) ended 5/11/23
 - No longer an emergency, but certainly not gone!
- Vaccination no longer required for staff as of August 4, 2023 (but still highly recommended):
 - <https://www.federalregister.gov/documents/2023/06/05/2023-11449/medicare-and-medicaid-programs-policy-and-regulatory-changes-to-the-omnibus-covid-19-health-care>
- COVID Data Tracker just following hospital admissions and deaths
 - https://covid.cdc.gov/covid-data-tracker/#maps_new-admissions-rate-county
- New guidance for mask use in healthcare facilities
 - <https://www.cdph.ca.gov/Programs/CID/DCDC/Pages/COVID-19/Guidance-for-Face-Coverings-as-Source-Control-in-Healthcare-Settings.aspx>
- No longer required to report test results to CalREDIE if you are CLIA-waived:
 - [https://www.cdph.ca.gov/Programs/CID/DCDC/CDPH%20Document%20Library/Laboratory Reporting Letter COVID Influenza RSV June2023-FINAL ESP.pdf](https://www.cdph.ca.gov/Programs/CID/DCDC/CDPH%20Document%20Library/Laboratory%20Reporting%20Letter%20COVID%20Influenza%20RSV%20June2023-FINAL%20ESP.pdf)

Orange County COVID Statistics

Weekly OC reported cases since end of PHE:

- May: 400-500
- June: 300-400
- July: was 300-400, but increased to 600 last week of month
- Aug 2: over 700

SNF outbreaks since end of PHE (5/11/23):

- 18 resolved; largest 43 resident cases, but several had over 20 resident infected
- 7 active outbreaks currently
- Few hospitalizations and deaths

Adjusted Daily Case Rate per 100K

2.3

(7-Day Average with 7-Day Lag)

Testing Positivity Rate

9.6%

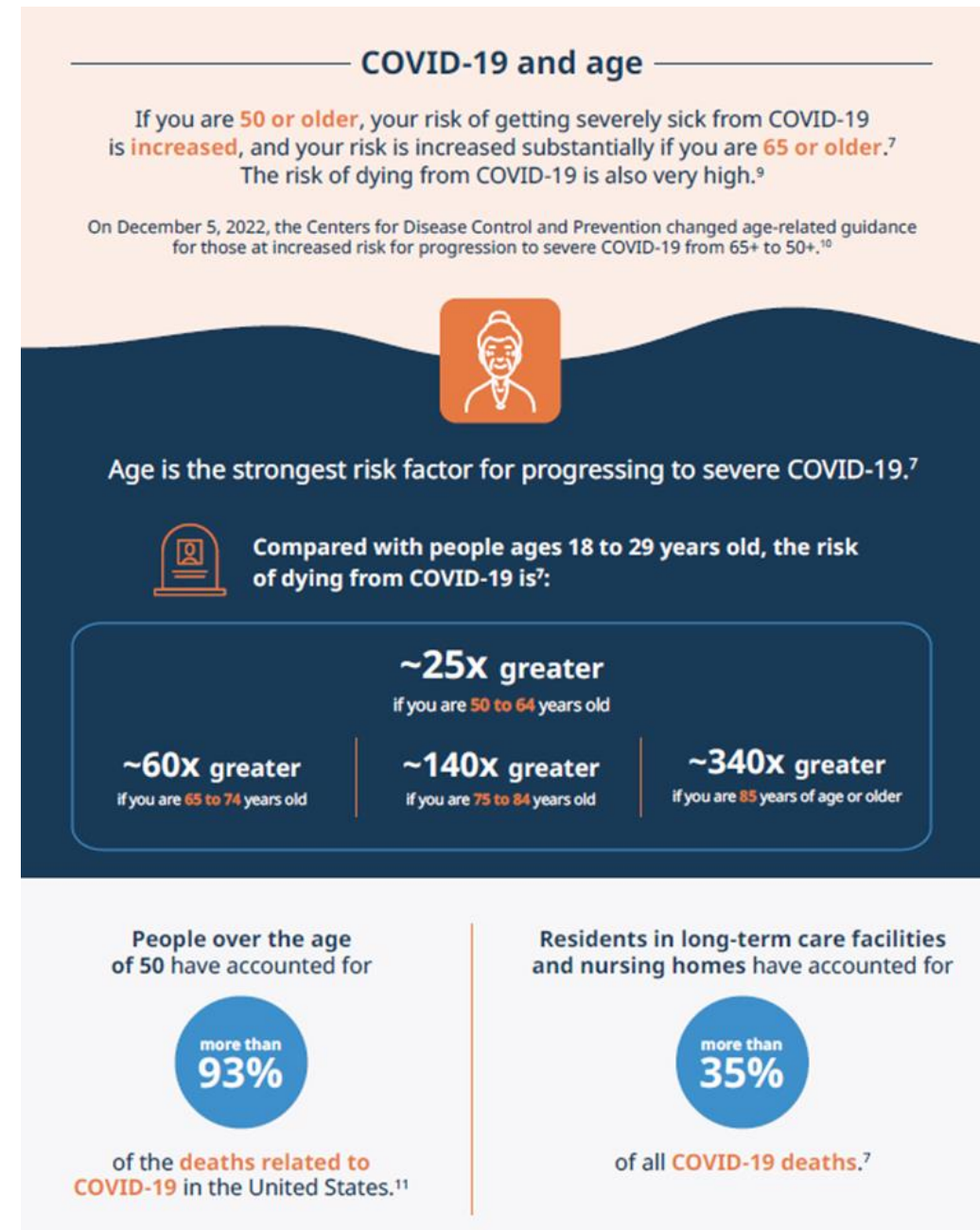
(7-Day Average with 7-Day Lag)

- Updated 8/3/23

<https://ochca.maps.arcgis.com/apps/dashboards/cc4859c8c522496b9f21c451de2fedae>

COVID Reminders

- Still need to report cases to local public health and L&C (single case) and NHSN (aggregate per week)
- Still need to have plan to deal with COVID cases: separating positive from negative, testing, set up isolation area, ventilation concerns, etc.
- No change in duration of isolation for residents
- Don't forget to screen patients for eligibility for Paxlovid, and offer if eligible



Vaccination Recommendations for This Fall



- Influenza Vaccination:
 - Recommended for all residents and staff
- COVID-19 Vaccination:
 - Everyone aged 6 years and older should get 1 updated (XBB 1.5 monovalent) Pfizer-BioNTech or Moderna COVID-19 vaccine 9
 - People aged 65 years and older may get 1 additional dose 4 or more months after the 1st updated COVID-19 vaccine.
 - People who are moderately or severely immunocompromised may get 1 additional dose 2 or more months after the last dose
 - Updated vaccine is projected to be available by late September
- RSV Vaccination:
 - Adults 60 years and older may receive a single dose of RSV vaccine, based on discussions between patient and health care provider.
 - Beginning to be available in pharmacies now
- Patients may receive these vaccines concurrently, though many may choose to space them out
- Facilities should talk with their vaccine resource regarding when RSV and COVID-19 vaccines will be available

Request From Our Health Officer

- OC's Master Plan on Aging (MPA) needs input from people who provide services to older adults
- Will e-mail this info along with slides from presentation; please share with your providers



Are you someone who **provides services** for an older adult?

We want to hear from YOU!



You can also access the Provider Survey here:
<https://qrc0.de/OC-MPA-Provider-Survey>

60+

Be a part of the Older Adults Needs Assessment to shape policies, programs, and resources.



By participating in this survey, you will have a chance to win one of 10 gift cards valued at \$100.



Results will guide Orange County's Master Plan for Aging.



Who is a Provider? Providers are professional caregivers including doctors, nurses, social workers, and community-based organizations that provide services to older adults.



Questions?

949-415-6898 | info@advanceoc.com | www.advanceoc.com

Candida auris Update in Orange County

Matt Zahn, MD

Deputy Health Officer

Orange County Health Care Agency

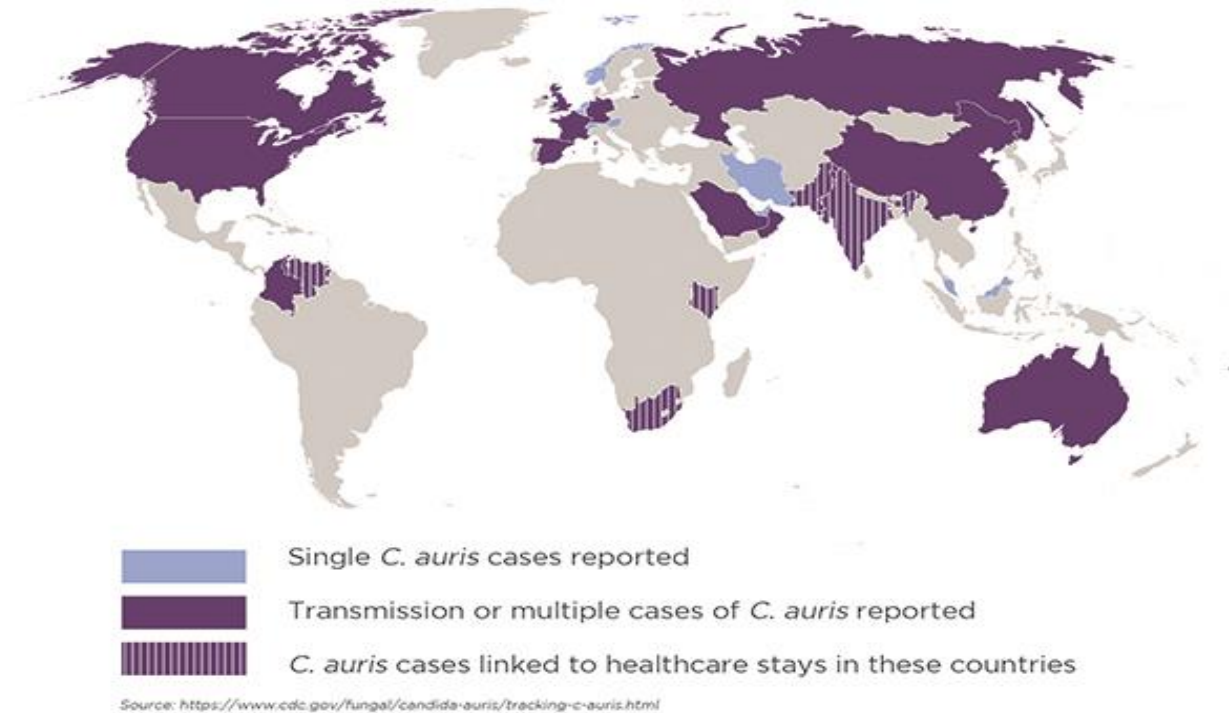
August 9, 2023



Goals for This Presentation

- Review the *C. auris* outbreak progression over time in Orange County
- Provide a summary of current epidemiology
- Review the current county infection control and outbreak response guidance recommendations for LTACHs, ACHs, and SNFs

C. auris Worldwide



- First identified in the ear of a patient in Japan in 2009
- Rapidly identified worldwide

C. auris Transmission

- Most *Candida* infections result from endogenous flora
- *C. auris* appears to be acquired exogenously
- Seems to be easily transmitted between patients
- Persistently colonizes host skin and the environment
- Can cause disease months to years after initial colonization

C. auris Antifungal Resistance Patterns

- 40% of *C. auris* isolates will be resistant to 2 or more drug classes
- 10% resistant to all antifungal drugs
- For US isolates:
 - 90% resistant to fluconazole
 - 30% resistant to amphotericin
 - 5% resistant to echinocandins
- Multiple resistance mechanisms may be present
 - Biofilms and efflux pumps play a role

C. auris Clades

- Genetic sequences of *C. auris* isolates group into four geographically distinct clades
- These four clades have remained discrete
- All isolates have grouped into one of the four clades
- Suggests that *C. auris* emerged independently and nearly simultaneously in at least four geographic locations.



Why *C. auris* Now?

- No clear reasons, but hypotheses are out there based on *C. auris*' character:
 - Many patients with *C. auris* infection had been receiving antifungal drugs at the time *C. auris* was isolated
 - Closely related *Candida* species found in several animal, food, and environmental sources: fish, cassava roots, sea water
 - Can grow in conditions with high salinity and high temperatures

When First Case Identified in OC in 2019:

- Limited spread initially identified in the county
- This seemed to be distinct from spread reported in other communities in U.S.
- OCHCA was aggressive in our initial response
- CDC team assisted us initially

The Clinical Laboratory Serving OC LTACHs Began Speciating *Candida* Urine Specimens in 2018

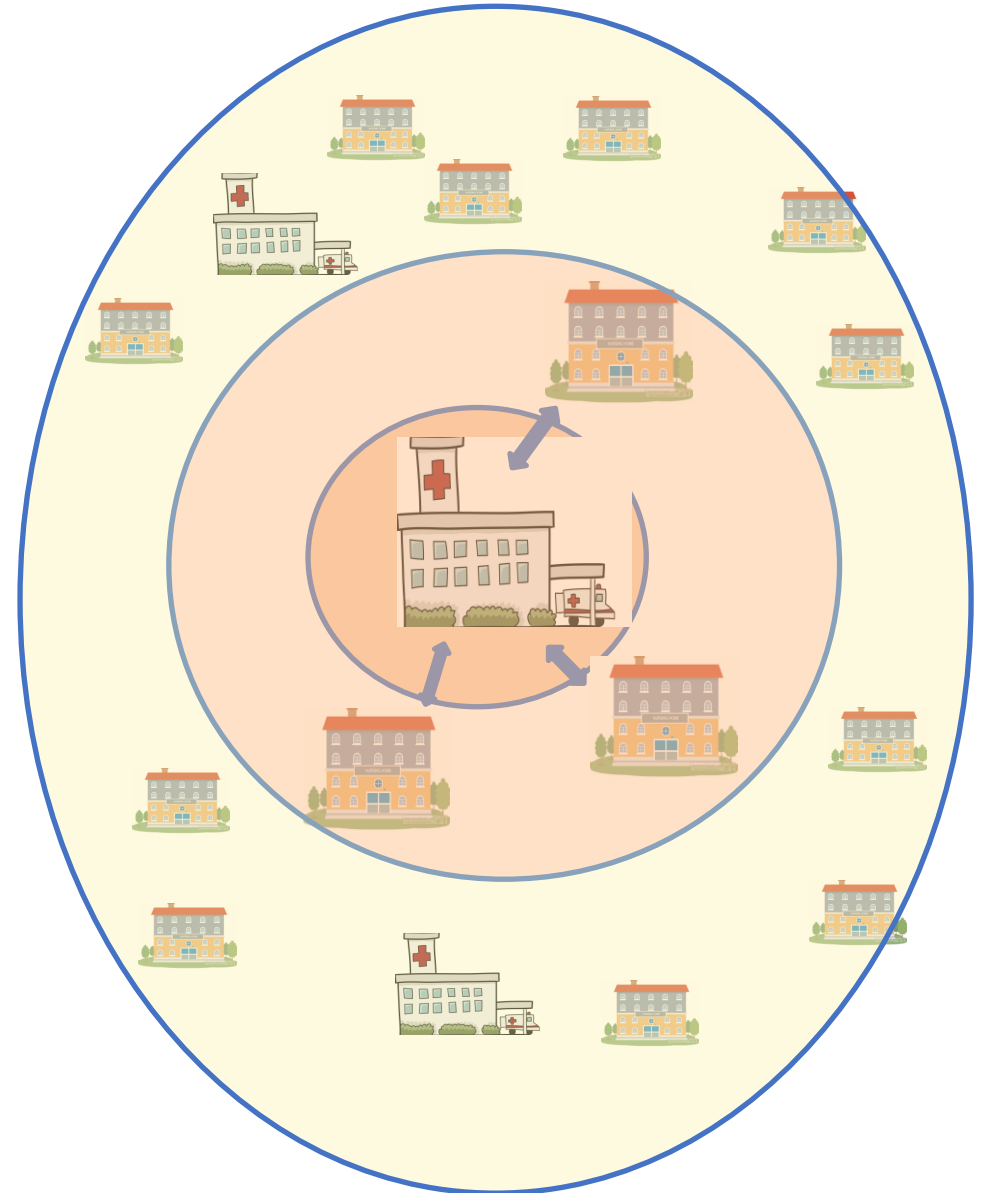
- Began speciating urine *Candida* isolates at suggestion of public health in Sept, 2018
 - This was crucial to identifying the organism's presence in Orange County
 - Speciation remains critical to case identification
- Clinical laboratories often do not speciate *Candida*
 - Speciation of *Candida*+ cultures requires significant laboratory resources

Initial Response:

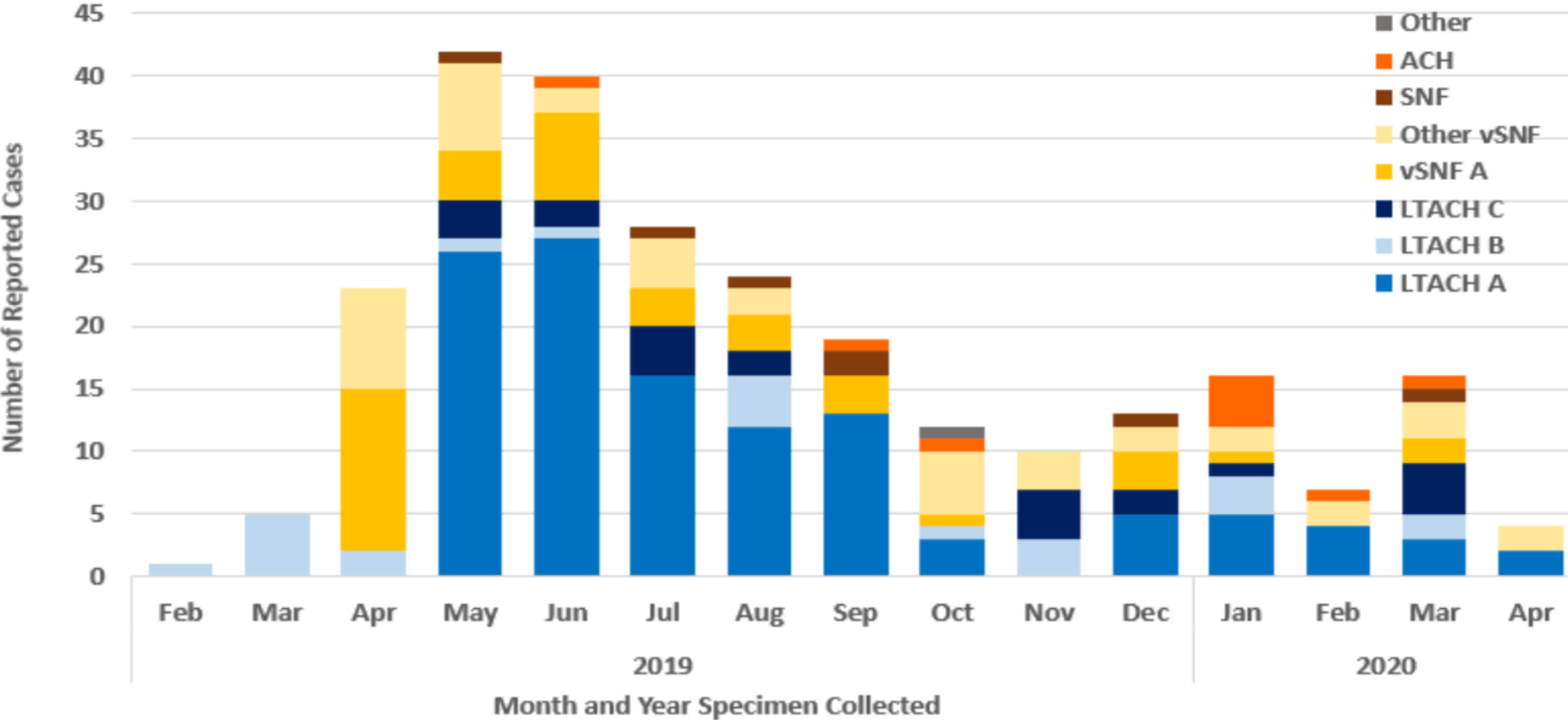
- Follow every single case actively to know where they are staying and that they are being cared for using appropriate infection control precautions
- Aggressive education regarding infection control measures
- Conduct point prevalence surveys (PPS) in every LTACH and vSNF where a new case of *C. auris* is identified (whether colonized or infection)
 - Repeat PPS until no new cases for 2 consecutive screenings

Point Prevalence Surveys

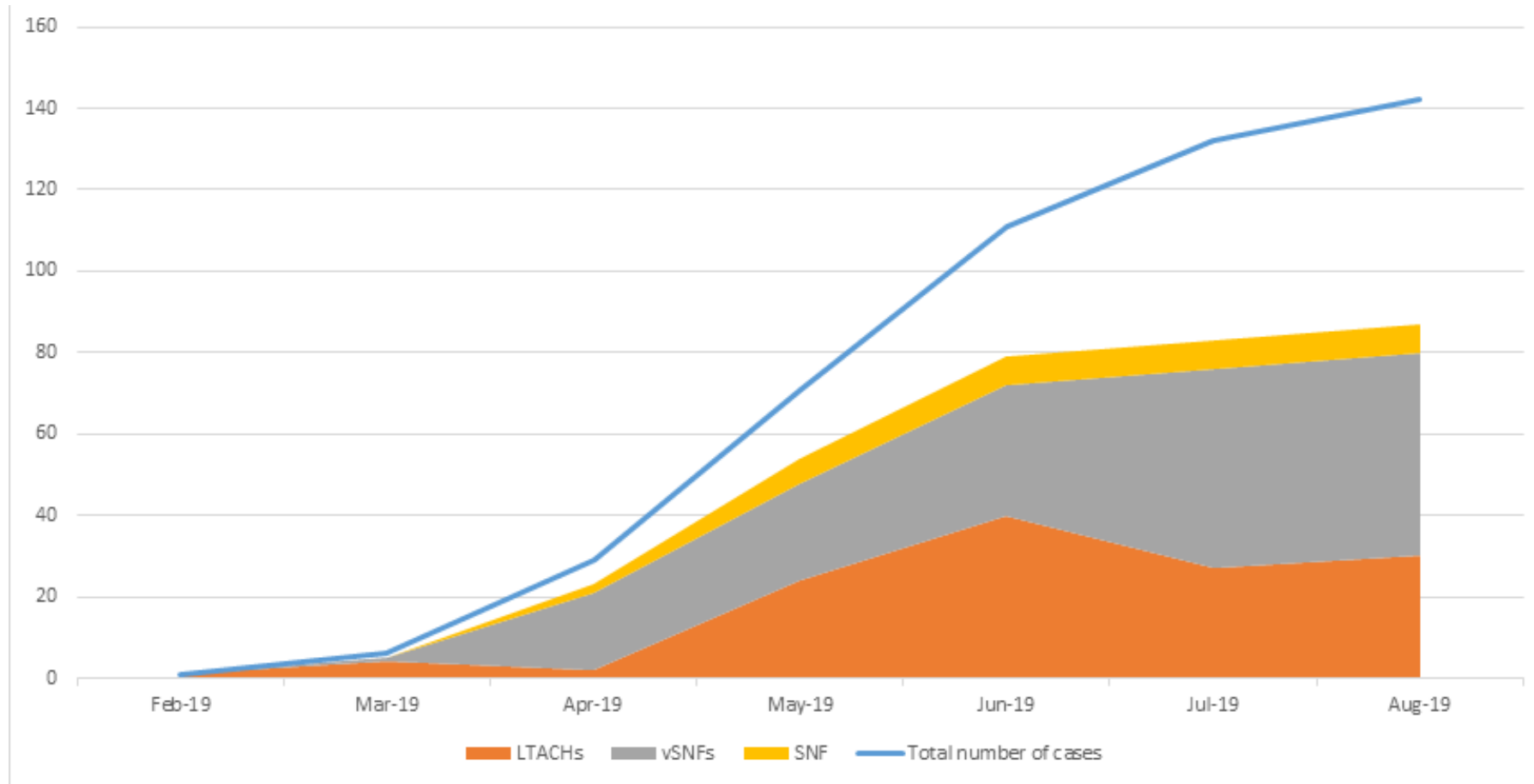
- Axilla and groin testing for *C. auris* (culture or PCR) of all patients in a facility or unit.
- Initially targeted to LTACHs and vSNFs that were known to be affected
- Quickly changed to performing PPSs at some cadence in all 14 vSNFs and all 3 LTACHs in Orange County



C. auris Cases in Orange County February 2019 – April 2020

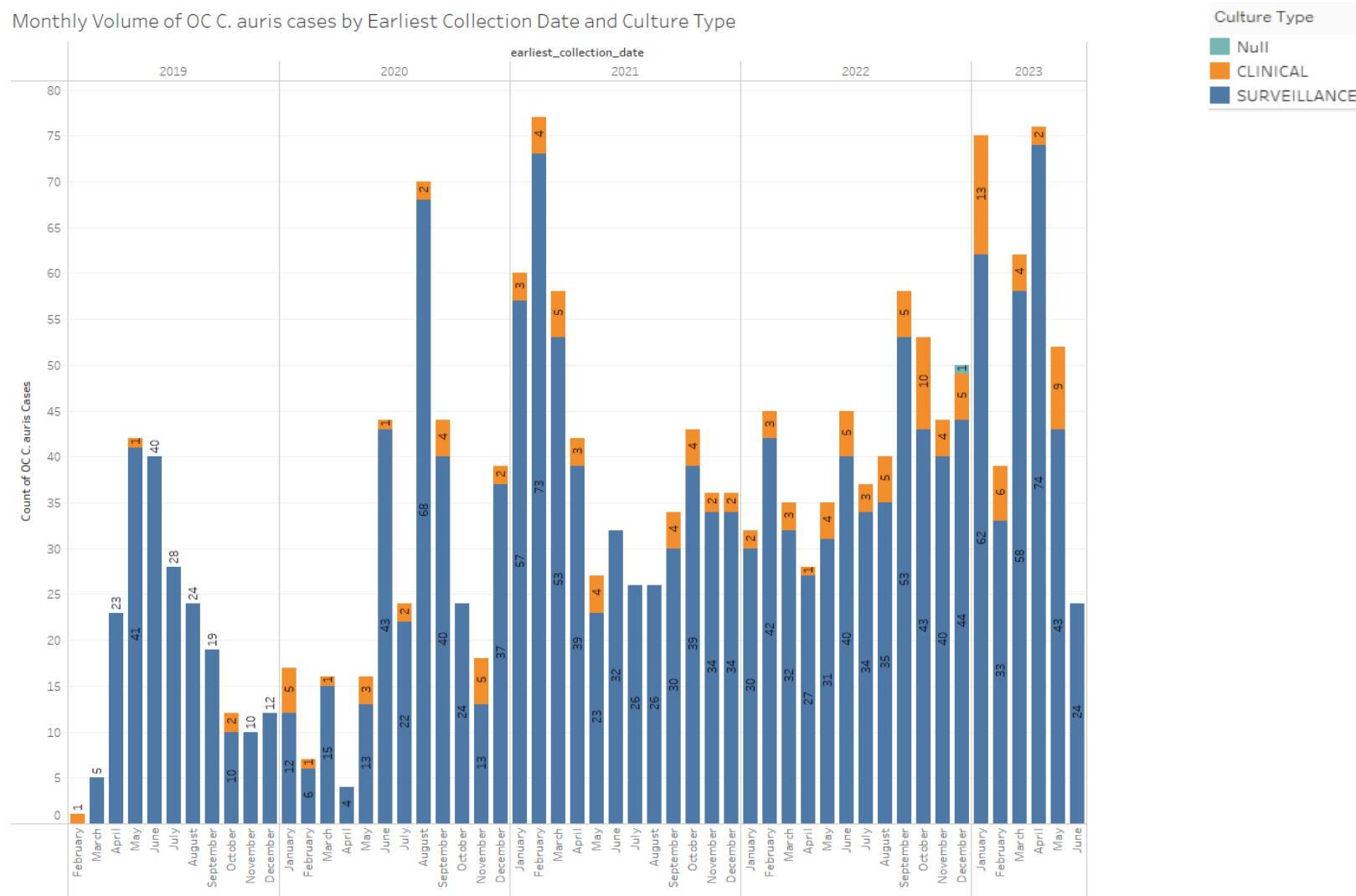


Orange County *C. auris* Colonized Patients By Location: 2/23/19-8/13/19



Monthly Volume of OC C. auris cases by Earliest Collection Date and Culture Type (n=1,866)

Monthly Volume of OC C. auris cases by Earliest Collection Date and Culture Type



C. auris Status in OC High Risk Facilities

- LTACHs have gradually transitioned to seeing consistent transmission
- vSNFs continue to see sporadic transmission, though clusters can generally be effectively contained
- Difference in situations in these two facility types likely related to their patient population and care types

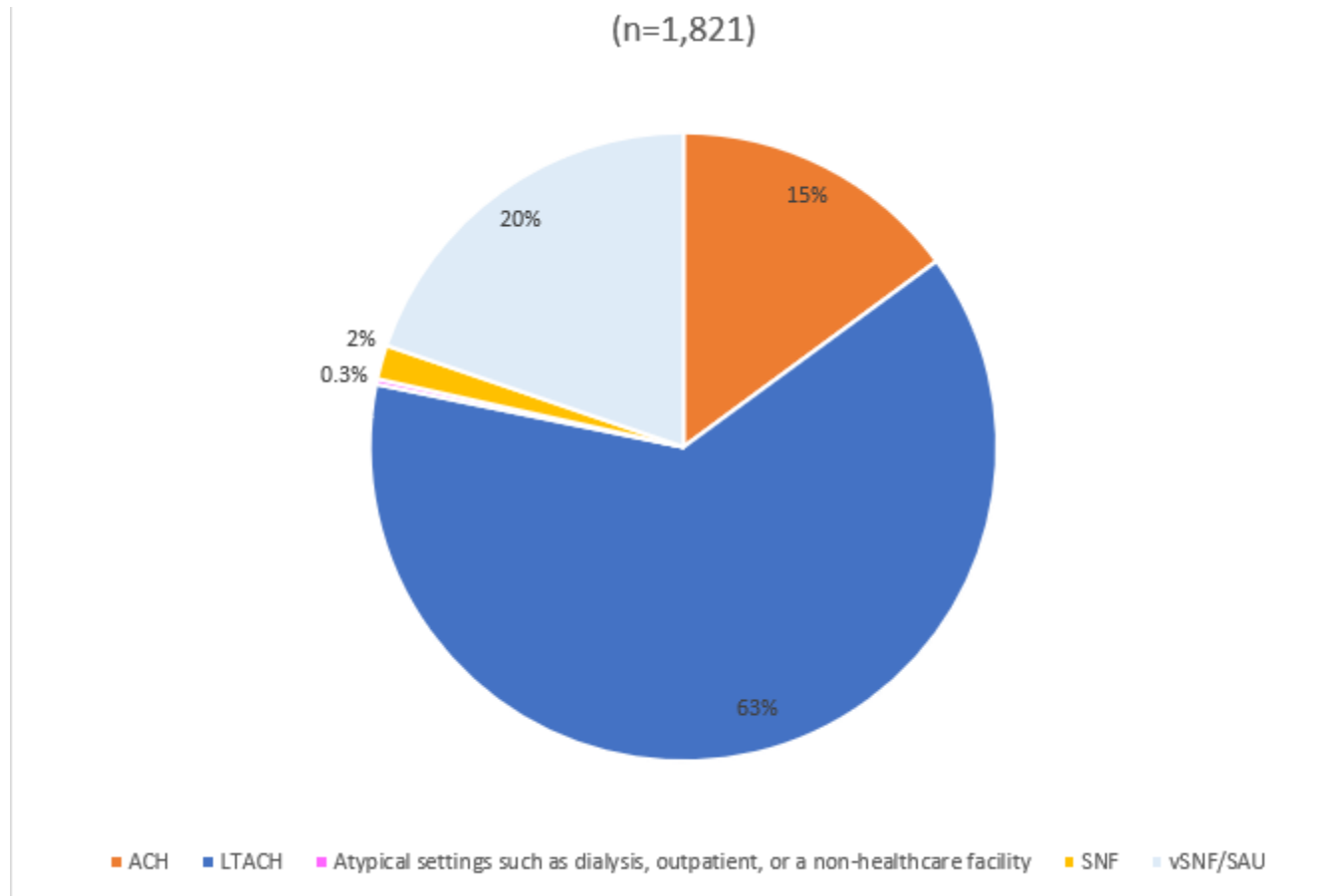
C. auris Burden in OC Acute Care Hospitals

- Low-level transmission is occurring in OC ACHs
- LTACHs have recorded colonized patients with no previous LTACH or vSNF exposure transferred from every ACH in OC
- Response PPS more often identify new cases in these settings
 - Hard to distinguish new transmission vs higher community burden
- Transmission and risk seems very weighted toward high risk settings
 - ICUs and burn units

C. auris in SNF setting

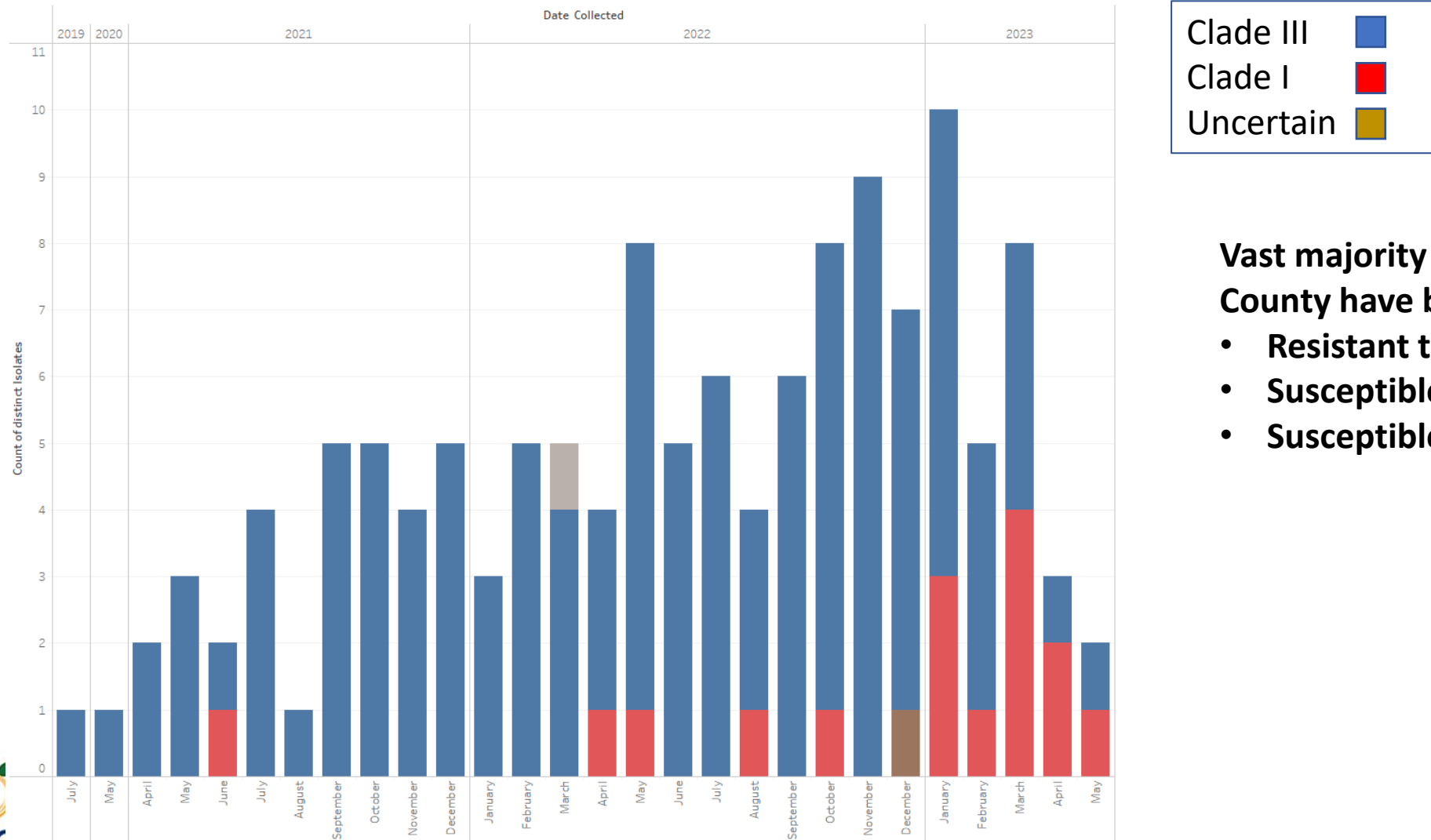
- *C. auris* is present in at least some “regular” SNFs
- UCI surveillance project found *C. auris* in 7/15 non-vSNFs screened
- Remains less common than vSNF settings
- *C. auris* invasive disease in “regular” SNF population remains rare
 - Thus far, only one case of invasive *C. auris* disease has been identified in OC residents who were found to be colonized through “regular” SNF testing

Total Proportion of *C. auris* Colonized Persons Identified by Facility as of 5/23/2023



6.9% (128/1866) of all OC *C. auris* isolates had Whole Genome Sequencing performed

OC PHL WGS for *C. auris*



Vast majority of *C. auris* isolates in Orange County have been found to be:

- **Resistant to fluconazole**
- **Susceptible to echinocandins**
- **Susceptible to amphotericin**

California *C. auris* Map

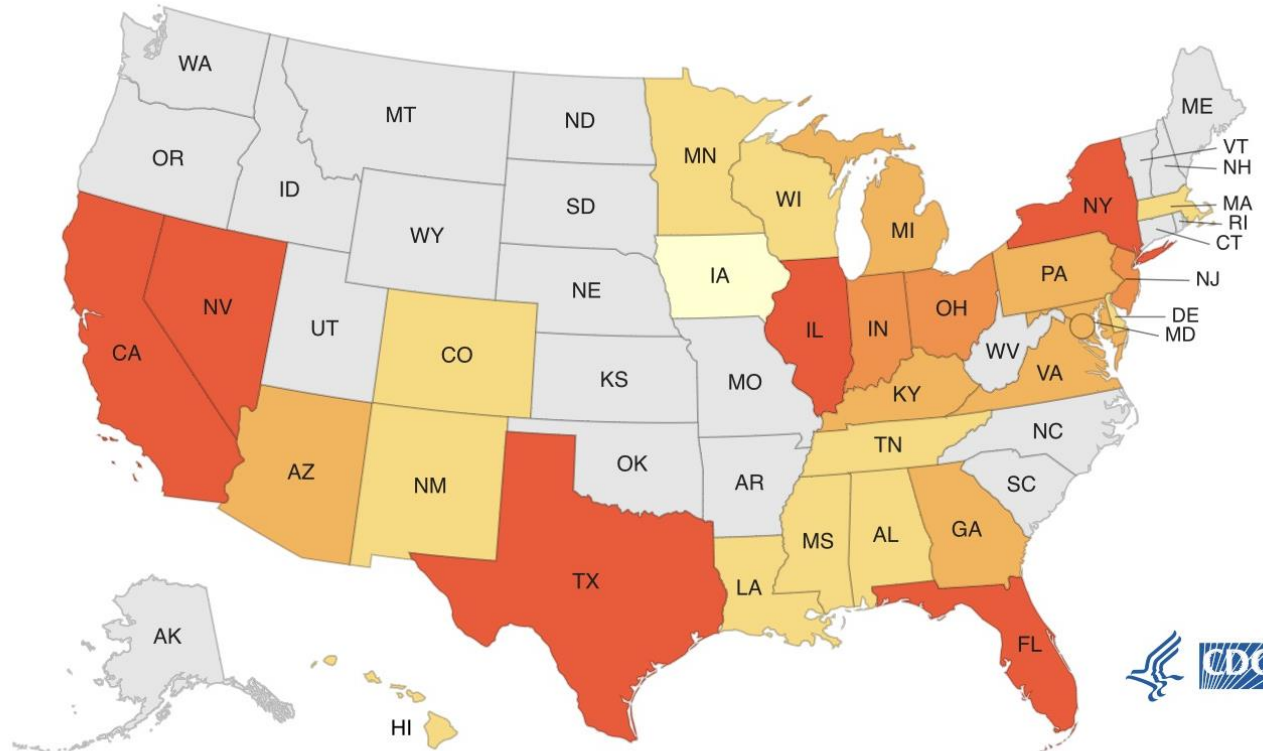
- What is our responsibility to other counties?
- When do we declare an organism endemic?



C. auris tracking data





Make a selection from the filters to change the visualization information.

Most Recent 12 Months 



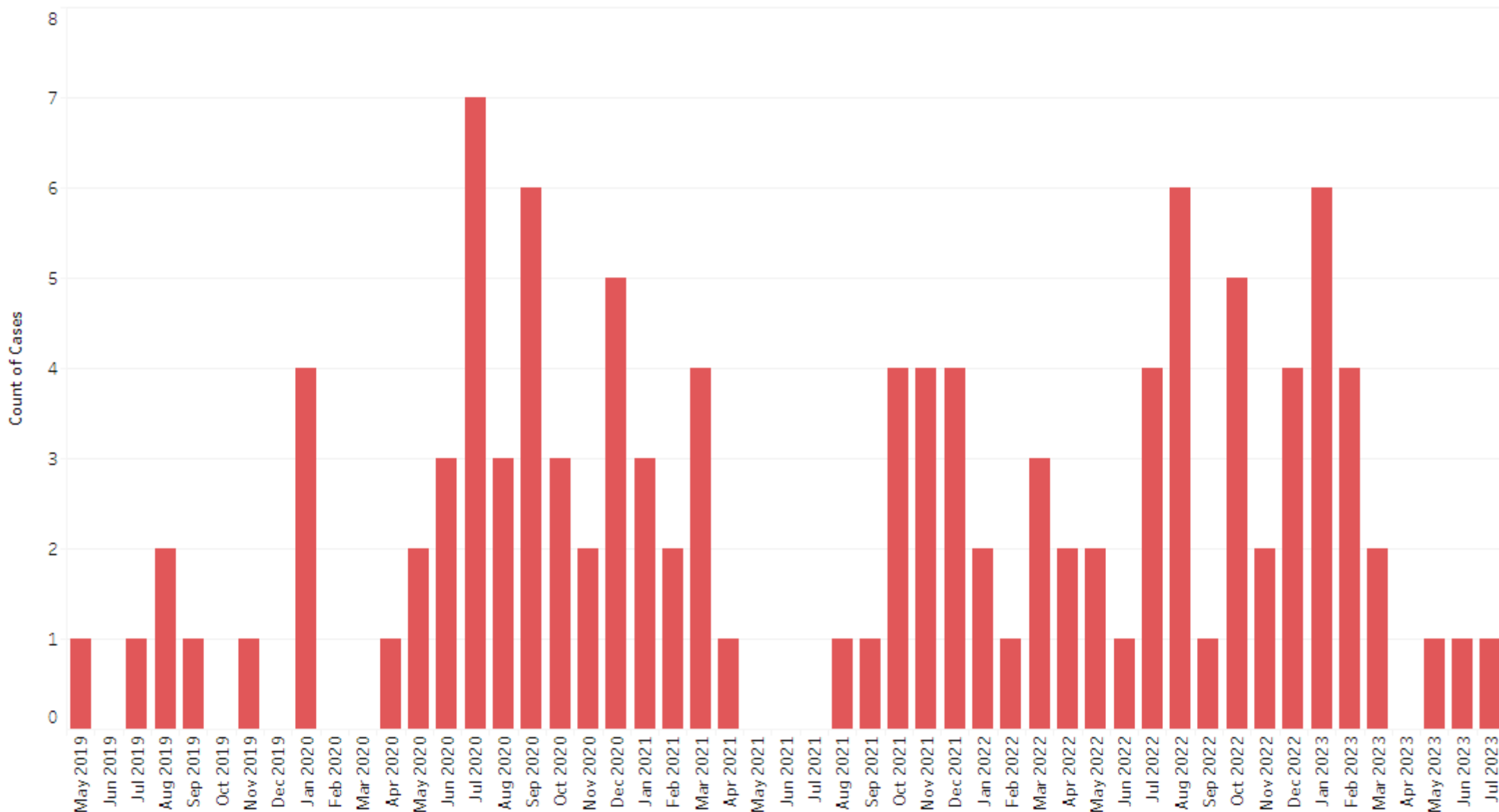
Number of *C. auris* clinical cases through December 31, 2022

In the most recent 12 months, there were 2,377 clinical cases and 5,754 screening cases (January 2022 - December 2022).

-  0 clinical cases and at least 1 screening case
-  1 to 10
-  11 to 50
-  51 to 100

As *C. auris* Becomes More
Prevalent, Our Emphasis Should
Shift to Some Degree to
Preventing Disease

C. auris Blood Specimen Positive Cases in Orange County by Earliest Blood Specimen Collection Date





US hospital data show high death rate with *Candida auris* infections

News brief | June 9, 2023

[Chris Dall, MA](#)

Topics: [Antimicrobial Stewardship](#), [Candida auris](#), [Fungal Infection](#)



Centers for Disease Control and Prevention
CDC 24/7: Saving Lives, Protecting People™

Candida auris

Fungal Diseases > *Candida auris*

Can a person die from infection with *C. auris*?

Yes. Invasive infections with any *Candida* species can be fatal. We don't know if patients with invasive *C. auris* infection are more likely to die than patients with other invasive *Candida* infections. Based on information from a limited number of patients, 30–60% of people with *C. auris* infections have died. However, many of these people had other serious illnesses that also increased their risk of death.

30 Day Mortality for OC *C. auris* Patients

<i>Candida</i> Status	30 day Mortality
<i>C. auris</i> colonized	231/1821 (12.6%)
<i>C. auris</i> fungemia	30/111 (27%)
<i>Candida</i> (non- <i>C. auris</i>) fungemia in OC LTACHs	5/21 (24%)

- 65/114 (57%) of the blood+'s expired as of May 2023.
- Of 65 blood+'s that expired, almost half expired within 1 month of the blood cx + result
- For blood culture +s, 12 of 65 reported some form of fungal related condition as cause of death on death certificate

If pan-resistant *C. auris* becomes prominent in OC, our response may change

Candida auris Isolates Resistant to Three Classes of Antifungal Medications — New York, 2019

Belinda Ostrowsky, MD¹; Jane Greenko, MS²; Eleanor Adams, MD²; Monica Quinn, MS³; Brittany O'Brien, MS⁴; Vishnu Chaturvedi, PhD^{4,5}; Elizabeth Berkow, PhD⁶; Snigdha Vallabhaneni, MD⁶; Kaitlin Forsberg, MPH⁶; Sudha Chaturvedi, PhD^{4,5}; Emily Lutterloh, MD^{3,5}; Debra Blog, MD^{3,5}; *C. auris* Investigation Work Group

Candida auris is a globally emerging yeast that causes outbreaks in health care settings and is often resistant to one or more classes of antifungal medications (1). Cases of *C. auris* with resistance to all three classes of commonly prescribed antifungal drugs (pan-resistance) have been reported in multiple countries (1). *C. auris* has been identified in the United States since 2016; the largest number (427 of 911 [47%]) of confirmed clinical cases reported as of October 31, 2019, have been reported in New York, where *C. auris* was first detected in July 2016 (1,2). As of June 28, 2019, a total of 801 patients with *C. auris* were identified in New York, based on clinical cultures or swabs of skin or nares obtained to detect asymptomatic colonization (3). Among these patients, three were found to have pan-resistant *C. auris* that developed after receipt of antifungal medications, including echinocandins, a class of drugs that targets the fungal cell wall. All three patients had multiple comorbidities and no known recent domestic or foreign travel. Although extensive investigations failed to document transmission of pan-resistant isolates from the three patients to other patients or the environment, the emergence of pan-resistance is concerning. The occurrence of these cases underscores the public health importance of surveillance for *C. auris*, the need for prudent antifungal prescribing, and the importance of conducting susceptibility testing on all clinical isolates, including serial isolates from individual patients, especially those treated with echinocandin medications. This report summarizes investigations related to the three New York patients with pan-resistant infections and the subsequent actions conducted by the New York State Department of Health and hospital and long-term care facility partners.

Clinical *C. auris* cases were defined as those in which *C. auris* was identified in a clinical culture obtained to diagnose or treat disease. Screening cases were defined as those in which *C. auris* was identified by polymerase chain reaction testing and culture, or by culture only, of a sample from an axilla, groin, or nares swab obtained for the purpose of state public health surveillance (2). To assess ongoing colonization with *C. auris*, additional swabs were collected over time from patients colonized with *C. auris*.

Wadsworth Center, the New York State public health laboratory, conducted testing to confirm presumptive *C. auris* isolates from various health care facilities in New York during

August 2016–June 2019 by matrix-assisted laser desorption/ionization time-of-flight mass spectrometry, using both the manufacturer's and in-house validated library databases. The laboratory also performed antifungal susceptibility testing for azoles and echinocandins by broth microdilution and for amphotericin B, by E-test methods* as described previously, and categorized isolates as resistant based on CDC's tentative breakpoints (1,2). A pan-resistant isolate was defined as one with resistance to the triazole class (fluconazole minimum inhibitory concentration [MIC] ≥ 32 $\mu\text{g}/\text{mL}$), polyene class (amphotericin B MIC ≥ 2 $\mu\text{g}/\text{mL}$ [E-test values of 1.5 rounded up to 2]), and echinocandins (anidulafungin MIC ≥ 4 $\mu\text{g}/\text{mL}$, caspofungin MIC ≥ 2 $\mu\text{g}/\text{mL}$, micafungin MIC ≥ 4 $\mu\text{g}/\text{mL}$), tested at Wadsworth Center with confirmation by the laboratory at CDC's Mycotic Diseases Branch (1,2).

Epidemiologic investigation of patients with pan-resistant cases included collecting clinical and exposure data, screening close contacts (persons who had an epidemiologic link to a patient in place or time), and assessing infection control practices in health care facilities that cared for the patients (2,4,5). When close contacts could be located, the New York State Department of Health attempted to obtain swabs for culture.

Site visits involved observations of infection control practices, on-site education, and point prevalence studies. During point prevalence surveys, samples were collected from the nares, axilla, and groin of consenting patients. When possible, samples from the environments of facilities where patients with pan-resistant infections were admitted or resided were collected, with priority given to frequently touched surfaces and objects in patients' rooms.

As of June 28, 2019, a total of 801 patients with *C. auris* were detected in New York, identified through clinical cultures (349) or skin or nares screening swabs only (452) (3). Testing of the first available clinical isolates with susceptibilities revealed that 276 of 277 (99.6%) were resistant to fluconazole, 170 of 277 (61.3%) were resistant to amphotericin B, and none was resistant to echinocandins (1,6). Testing of subsequent available isolates obtained from infected patients with susceptibilities revealed 330 of 331 (99.7%) were resistant to fluconazole,

*E-test, previously known as Epsilonometer test, is a method for antimicrobial susceptibility testing that provides an MIC.

CDPH *C. auris* Guidance to Local Health Departments

- **Phase 1.** No *C. auris* cases in LHJ: PREVENTION
- **Phase 2.** Newly identified case(s) in LHJ: AGGRESSIVE CONTAINMENT + PREVENTION
- **Phase 3.** Ongoing transmission in >50% high-risk facilities for > 6 months in LHJ, but not in surrounding LHJ (locally endemic): MITIGATION
- **Phase 4.** Ongoing transmission in >50% high-risk facilities for >6 months in LHJ, and some surrounding LHJ with highly-connected patient sharing networks (regionally endemic): MAINTENANCE

Current *C. auris* Epidemiology in Orange County

- Transmission seen in inpatient risk settings:
 - LTACHs with consistent transmission
 - vSNFs have more sporadic transmission, occasional clusters
 - ACHs with evidence of sporadic internal transmission
- Similar to what is being seen in other parts of the country with endemic *C. auris*
- Invasive disease is occurring, but seems proportional to disease severity of other *Candida* infections
- *C. auris* in Orange County remains relatively susceptible to antifungal treatment

OCHCA Communicable Disease Control Division (CDCD) Multi-Drug Resistant Organism (MDRO) Tier List and Guidance

For reporting and inquiries, contact HCA at:
HAITeam@ochca.com or HAI_EPI@ochca.com
 (714) 834-8180

Tier	Tier Description	List of MDROs	HCA Procedure	Transmission-Based Precautions Guidance**
Tier 1	Pathogens/resistance mechanisms that are never or very rarely detected in Orange County.	<ul style="list-style-type: none"> Novel organism or resistance mechanism Carbapenemase-producing (CP) CRE that is NOT KPC-producing CP-CRAB that is NOT OXA-23-producing CP-CRPA Pan-non-susceptible or Pan-resistant CP-CRE or CP-CRPA 	A thorough public health investigation that entails more extensive epidemiologic information gathering, assessment for transmission, as well as requests for medical records for further review and isolates* to be submitted to OC PHL for additional testing.	<p>Long-Term and Short-Stay Acute Care Hospitals: Contact Precautions</p> <p>Ventilated and Non-Ventilated Skilled Nursing Facilities: Enhanced Standard Precautions***</p>
Tier 2	Pathogens/resistance mechanisms uncommonly detected in Orange County	<ul style="list-style-type: none"> <i>C. auris</i> Pan-non-susceptible or Pan-resistant CRAB OXA-23 	<p>A standard public health investigation that entails epidemiologic information gathering and assessment for transmission.</p> <p>Isolates are requested to be submitted to OC PHL for additional testing for non- axilla/groin/nares positive <i>C. auris</i> specimens.* Isolates are also requested if the Pan-non-susceptible or Pan-resistant CRAB OXA-23 was found in a non-public health lab.</p>	<p>Long-Term and Short-Stay Acute Care Hospitals: Contact Precautions</p> <p>Ventilated and Non-Ventilated Skilled Nursing Facilities: Enhanced Standard Precautions***</p>
Tier 3	Pathogens/resistance mechanisms regularly detected/ endemic in Orange County.	<ul style="list-style-type: none"> CRE producing KPC CRAB producing OXA-23 Carbapenem resistant organisms (CROs) without carbapenemase gene detected or tested (including CRE, CRAB, CRPA) MRSA ESBL-producing organisms VRE 	<p>Only unusual increase in cases or detected clusters would prompt a standard public health investigation for each individual case involved in the unusual finding (see Tier 2).</p> <p>Isolates are requested to be submitted to OC PHL for additional testing for CREs/CRABs/CRPAs.* Results of additional testing for CREs/CRABs/CRPAs will determine if MDRO is escalated to Tier 1 or 2.</p> <p>Isolate submission for all other MDRO's on this list are not needed.</p>	<p>Long-Term and Short-Stay Acute Care Hospitals: Contact Precautions</p> <p>Ventilated and Non-Ventilated Skilled Nursing Facilities:</p> <ul style="list-style-type: none"> For KPC-CRE, CRAB OXA-23, and all other CROs: Enhanced Standard Precautions*** For MRSA, VRE, ESBL: Enhanced Standard Precautions*** if there are signs of transmission or lines, tubes, and unhealed wounds

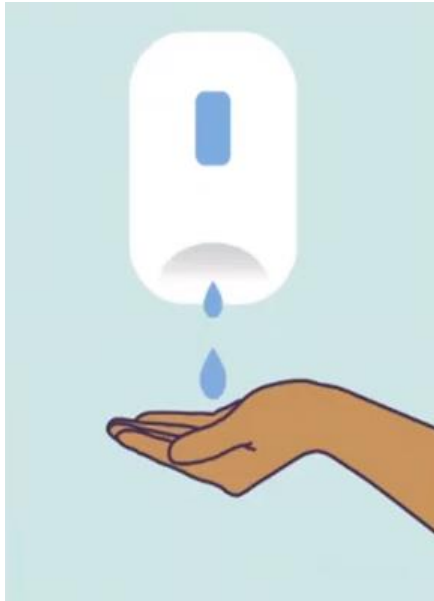
*Contact HCA for technical isolate submission logistics and criteria.

** Guidance for transmission based-precautions may differ for new emerging pathogens.

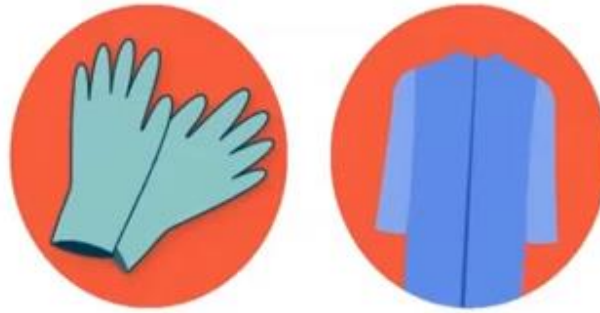
*** In an event of ongoing transmission, Contact Precautions may be recommended.

Recommendations to Prevent and Minimize *C. auris* Transmission in Orange County

Infection Control Precautions



Hand
Hygiene



Personal Protective
Equipment (PPE) &
Precautions



Effective environmental
Cleaning & Disinfection
(EPA List P)

Hand Hygiene

Alcohol-based hand sanitizer preferred over soap and water except when hands are visibly soiled



Apply product to one hand.



Rub hands together, covering all surfaces, until hands and fingers feel dry.



Process should take about 20 seconds.

Infection Control Precautions for *C. auris* in SNFs and vSNFs: Enhanced Standard Precautions (in most situations)

For these six groups of care activities, use hand hygiene, gloves, and gowns.



Infection Control Precautions for *C. auris* in Acute Care Hospitals and LTACHs: Contact Precautions



CONTACT PRECAUTIONS EVERYONE MUST:



Clean their hands, including before entering and when leaving the room.

PROVIDERS AND STAFF MUST ALSO:



**Put on gloves before room entry.
Discard gloves before room exit.**



**Put on gown before room entry.
Discard gown before room exit.**

**Do not wear the same gown and gloves
for the care of more than one person.**



**Use dedicated or disposable equipment.
Clean and disinfect reusable equipment
before use on another person.**

Environmental Cleaning and Disinfection

- CDC recommends use of an [Environmental Protection Agency \(EPA\)-registered hospital-grade disinfectant effective against *C. auris* \(List P\)](#)
- It is important to follow all manufacturers' directions for use of surface disinfectants, including applying the product for the correct contact time.
- If none of the above products are available, CDC recommends use of an EPA-registered hospital-grade disinfectant effective against *Clostridioides difficile* spores (list K)
- Consider using across entire unit or facility if multiple residents screen positive for *C. auris*



Equipment Can Be a Source of Transmission

- Dedicate daily care equipment as much as possible
- Consider using single-use, disposable, non-critical devices



Cohorting of Patients

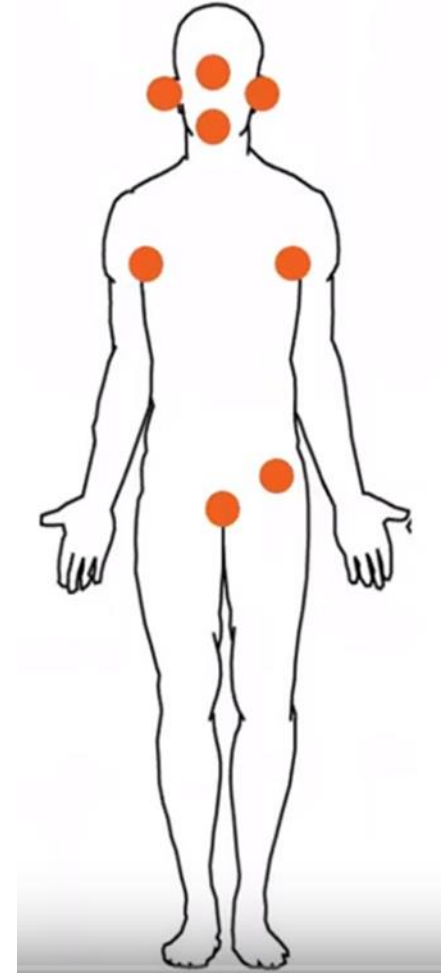
If multiple *C. auris*-infected or -colonized patients are present in a healthcare facility, whenever feasible:

- Place them in rooms in the same geographic area of the facility
- Dedicate primary HCP (e.g., nursing) without responsibility to care for *non-C. auris* patients
- HCP who cannot be dedicated to *C. auris* patients should care for non-*C. auris* patients before *C. auris* patients
- Facilities should consider feasibility of cohorting based on resources and number of *C. auris* residents in facility

SNF or vSNF residents may be allowed to ambulate if they can be maintained in hygienic condition and don clean clothes

Residents are Colonized Indefinitely

- Primarily on skin, but nares and other body sites also can become colonized
- Persistent, for months or years
- No currently known decolonization strategies
- Retesting of colonized persons is not recommended



Facilities Are Responsible for Interfacility Communication of Patient MDRO Status



INFECTION CONTROL TRANSFER FORM

This form should be sent with the patient/resident upon transfer. It is NOT meant to be used as criteria for admission, only to foster the continuum of care once admission has been accepted.

Affix any patient labels here.

Demographics	Patient/Resident (Last Name, First Name): _____		
	Date of Birth: / /	MRN: _____	Transfer Date: / /
	Sending Facility Name: _____		
	Receiving Facility Name: _____		
	Receiving Facility Contact Name: _____	Receiving Facility Contact Phone: _____	

⚠	Currently on transmission-based precautions? <input type="checkbox"/>	No transmission-based precautions <input type="checkbox"/>
	<input type="checkbox"/> Yes - Reason: _____	
	If Yes, check: <input type="checkbox"/> Contact <input type="checkbox"/> Droplet <input type="checkbox"/> Airborne <input type="checkbox"/> Other: _____	

Organisms	Does the person have a history of a multidrug-resistant organism (MDRO) or other potentially transmissible infectious organism?:	History of infection/colonization	Recent exposure or pending results
	MRSA/VRE	<input type="checkbox"/>	<input type="checkbox"/>
Candida auris	<input type="checkbox"/>	<input type="checkbox"/>	
CRAB/CRPA (Acinetobacter or Pseudomonas resistant to carbapenem antibiotics)	<input type="checkbox"/>	<input type="checkbox"/>	
CRE (E. coli, Klebsiella or Enterobacter resistant to carbapenem antibiotics)	<input type="checkbox"/>	<input type="checkbox"/>	
ESBL (E. coli or Klebsiella producing extended-spectrum beta lactamase)	<input type="checkbox"/>	<input type="checkbox"/>	
C. difficile	<input type="checkbox"/>	<input type="checkbox"/>	
Other (e.g. lice, scabies, disseminated shingles, norovirus, flu, TB, etc): _____ _____	<input type="checkbox"/>	<input type="checkbox"/>	
Additional information if known: _____	<input type="checkbox"/> NO history of infection/colonization	<input type="checkbox"/> NO recent exposure or pending results	

Symptoms	Check any that currently apply:		
	<input type="checkbox"/> Cough/uncontrolled respiratory secretions	<input type="checkbox"/> Acute diarrhea	<input type="checkbox"/> Other uncontained body fluid/drainage
	<input type="checkbox"/> Incontinent of urine	<input type="checkbox"/> Vomiting	<input type="checkbox"/> Concerning rash (e.g.; vesicular)
	<input type="checkbox"/> Incontinent of stool	<input type="checkbox"/> Draining/open wounds	<input type="checkbox"/> None applicable

Please send documentation related to medical history, e.g culture and antimicrobial susceptibility test results with applicable dates.

Person completing form/Title: _____

Contact phone: _____

Date: _____

Facility-Specific Guidance

- Individual facilities will need to establish their appropriate response protocol
- Facility response will vary based on:
 - Facility type
 - Facility epidemiology
 - Patient population
 - Available resources
- Facilities may elect to do more than basic recommendations
- OCHCA HAI team is available to discuss questions

C. auris Guidance for OC Skilled Nursing Facilities

vSNFs:

- **Should** continue to conduct admit screening for all residents entering vSNFs
 - OCHCA Laboratory offers admit screening for vSNF residents
- **Should** continue aggressive response to clusters internal transmission
- **Should** continue to performed periodic (3-6 month) PPSs

SNFs:

- OCHCA does **not** routinely recommend aggressive efforts to identify transmission in the “regular” SNF setting
 - Risk of invasive disease in this population is very low
 - Transmission is less common than in subacute units

C. auris and Room Placement in SNFs

CDC Guidance:

Patient placement: Considerations for private rooms and cohorting of patients in shared rooms

Patients on Contact Precautions should be placed in a single-patient room whenever possible. If a limited number of single-patient rooms are available, they should be prioritized for people at higher risk of pathogen transmission (e.g., those with uncontained secretions or excretions, acute diarrhea, draining wounds).

In nursing homes, although single-patient rooms are not required for residents with *C. auris*, facilities with the capacity to offer single-patient rooms for these individuals may choose to do so. Healthcare providers can find recommendations about patient placement in nursing homes using Enhanced Barrier Precautions in CDC's [FAQs about Enhanced Barrier Precautions in Nursing Homes](#).

As *C. auris* becomes more common in OC, we anticipate that colonized SNF residents will have roommates who are non-colonized

C. auris and Room Placement in SNFs

- Cohorting with a *C. auris*-colonized roommate(s) is appropriate
- If not possible to cohort with like pathogen(s) then cohort with low-risk resident (no lines, tubes, devices or unhealed wounds and competent immune system)
- In multi-bed rooms, treat each bed space as a different room; HCP must change gown and gloves and perform hand hygiene between.
- *C. auris* colonized residents may be colonized with other MDROs. First priority for room decision making should be for those high-risk pathogens (SARS-CoV-2, *C. auris*, CPO, CRO or other novel high risk pathogen)
- OCHCA can assist to discuss these situations

C. auris Guidance for OC LTACHs

LTACHs:

- **Should** continue to conduct admit screening for all patients
- OCHCA will be de-emphasizing routine PPS in LTACHs moving forward
- LTACHs may perform PPS periodically to establish facility epidemiology
 - Every 3-6 months
- OCHCA will recommend an investigation when an increase of new cases from facility's baseline rate is identified
 - PPSs will be conducted from at-risk units until back to baseline
 - Ongoing infection control and environmental response efforts will be emphasized

C. auris Guidance for OC Acute Care Hospitals

- If a *C. auris* colonized patient is identified and not in contact precautions, **ACHs**:
 - **Should** screen roommates that are still in a healthcare facility
 - **May** screen entire unit based on facility epidemiology and capacity
 - **May** flag roommates or unit resident who went home for readmission

C. auris Guidance for OC Acute Care Hospitals

ACHs **should** screen for *C. auris* and implement preemptive Contact precautions for those who:

- Have received care at LTACH or vSNF
- Who are close healthcare contacts of a newly-identified *C. auris* case
- Colonized or infected with another multidrug-resistant organism (MDRO), especially carbapenemase-producing organisms
- Who had an overnight healthcare exposure outside the U.S. in the past 12 months, especially if in a country with documented *C. auris* cases.

When ACH Internal Transmission Is Identified:

- OCHCA is no longer investigating individual events of apparent transmission within ACHs
- OCHCA conducts an investigation when an increase of new cases from facility's baseline rate is identified
 - High risk units are emphasized: ICUs or Burn Units
 - PPSs are conducted from at-risk units until back to baseline
 - Ongoing infection control and environmental response efforts are emphasized
- Facilities may be more aggressive depending on their situation and resources

C. auris Laboratory Resources

- OCHCA Laboratory will conduct testing for:
 - Confirming *C. auris* from a clinical isolate
 - Screening testing for vSNF admissions
 - Outbreak response
- Several private laboratories offer surveillance screening

OCHCA Communicable Disease Control Division (CDCD) Multi-Drug Resistant Organism (MDRO) Tier List and Guidance

For reporting and inquiries, contact HCA at:
HAITeam@ochca.com or HAI_EPI@ochca.com
 (714) 834-8180

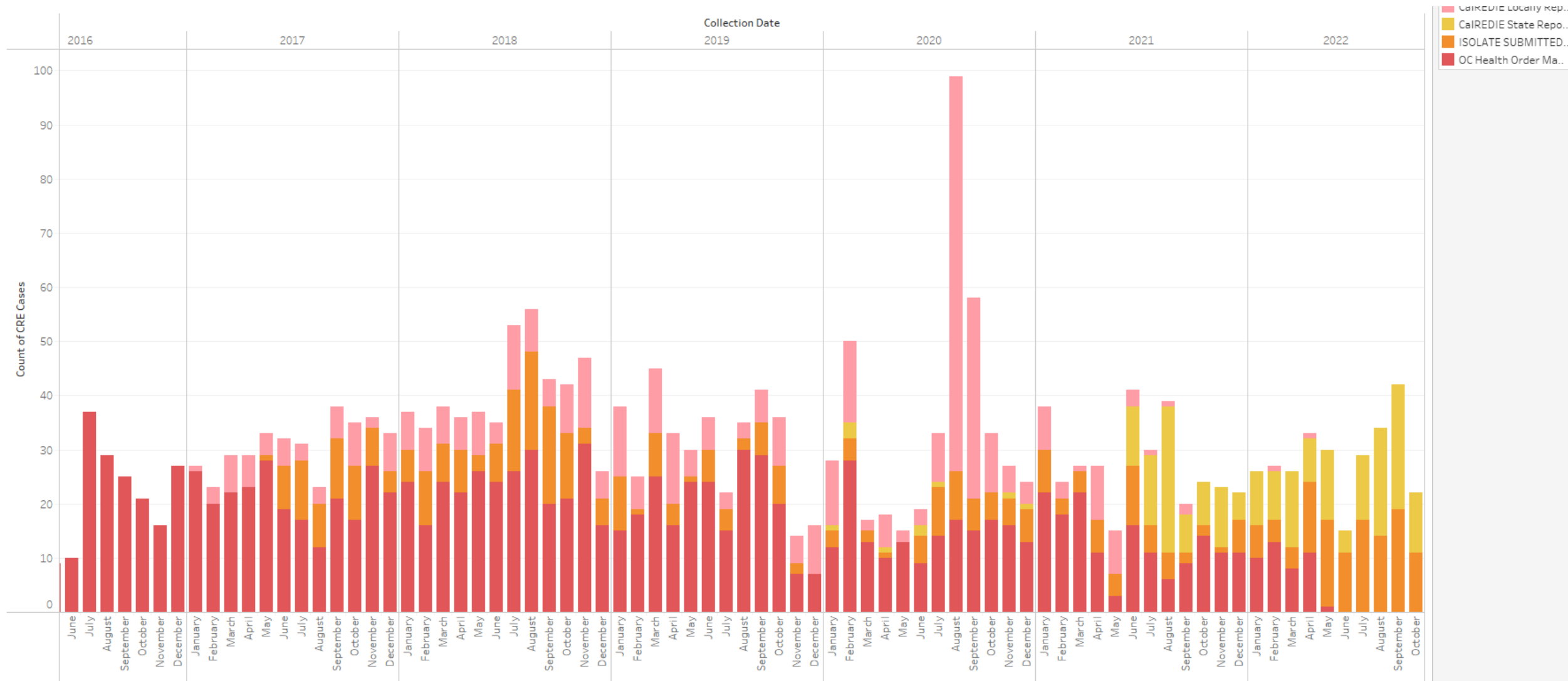
Tier	Tier Description	List of MDROs	HCA Procedure	Transmission-Based Precautions Guidance**
Tier 1	Pathogens/resistance mechanisms that are never or very rarely detected in Orange County.	<ul style="list-style-type: none"> Novel organism or resistance mechanism Carbapenemase-producing (CP) CRE that is NOT KPC-producing CP-CRAB that is NOT OXA-23-producing CP-CRPA Pan-non-susceptible or Pan-resistant CP-CRE or CP-CRPA 	A thorough public health investigation that entails more extensive epidemiologic information gathering, assessment for transmission, as well as requests for medical records for further review and isolates* to be submitted to OC PHL for additional testing.	<p>Long-Term and Short-Stay Acute Care Hospitals: Contact Precautions</p> <p>Ventilated and Non-Ventilated Skilled Nursing Facilities: Enhanced Standard Precautions***</p>
Tier 2	Pathogens/resistance mechanisms uncommonly detected in Orange County	<ul style="list-style-type: none"> <i>C. auris</i> Pan-non-susceptible or Pan-resistant CRAB OXA-23 	<p>A standard public health investigation that entails epidemiologic information gathering and assessment for transmission.</p> <p>Isolates are requested to be submitted to OC PHL for additional testing for non- axilla/groin/nares positive <i>C. auris</i> specimens.* Isolates are also requested if the Pan-non-susceptible or Pan-resistant CRAB OXA-23 was found in a non-public health lab.</p>	<p>Long-Term and Short-Stay Acute Care Hospitals: Contact Precautions</p> <p>Ventilated and Non-Ventilated Skilled Nursing Facilities: Enhanced Standard Precautions***</p>
Tier 3	Pathogens/resistance mechanisms regularly detected/ endemic in Orange County.	<ul style="list-style-type: none"> CRE producing KPC CRAB producing OXA-23 Carbapenem resistant organisms (CROs) without carbapenemase gene detected or tested (including CRE, CRAB, CRPA) MRSA ESBL-producing organisms VRE 	<p>Only unusual increase in cases or detected clusters would prompt a standard public health investigation for each individual case involved in the unusual finding (see Tier 2).</p> <p>Isolates are requested to be submitted to OC PHL for additional testing for CREs/CRABs/CRPAs.* Results of additional testing for CREs/CRABs/CRPAs will determine if MDRO is escalated to Tier 1 or 2.</p> <p>Isolate submission for all other MDRO's on this list are not needed.</p>	<p>Long-Term and Short-Stay Acute Care Hospitals: Contact Precautions</p> <p>Ventilated and Non-Ventilated Skilled Nursing Facilities:</p> <ul style="list-style-type: none"> For KPC-CRE, CRAB OXA-23, and all other CROs: Enhanced Standard Precautions*** For MRSA, VRE, ESBL: Enhanced Standard Precautions*** if there are signs of transmission or lines, tubes, and unhealed wounds

*Contact HCA for technical isolate submission logistics and criteria.

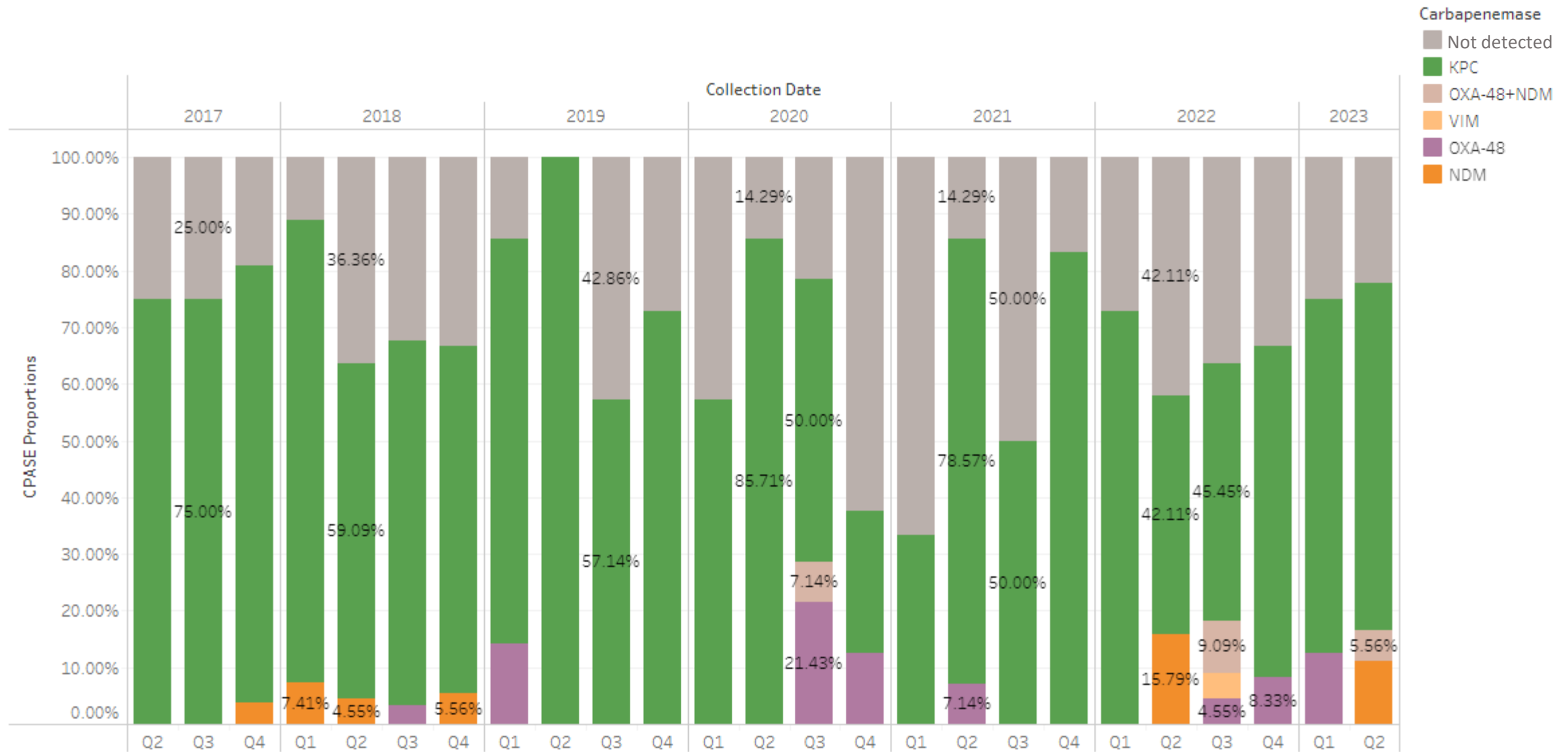
** Guidance for transmission based-precautions may differ for new emerging pathogens.

*** In an event of ongoing transmission, Contact Precautions may be recommended.

CRE Cases Reported in Orange County



Klebsiella Pneumonia Carbapenemase Types



Summary

- *C. auris* has become endemic in Orange County and much of Southern California
- Virtually all *C. auris* antifungal testing thus far has indicated echinocandin susceptibility
- *C. auris* bacteremia is associated with a significant mortality rate
 - However, this mortality rate is primarily related to the underlying health status of the patient.
- OCHCA will continue working with healthcare facilities to best utilize resources to limit *C. auris* spread

Thank you!

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 - Cherry Fontela and OCHCA HAI team
 - Larry Bottorf