

Containment of *Candida auris*, Other Multidrug-resistant Organisms (MDRO), and SARS-CoV-2

November 18, 2020

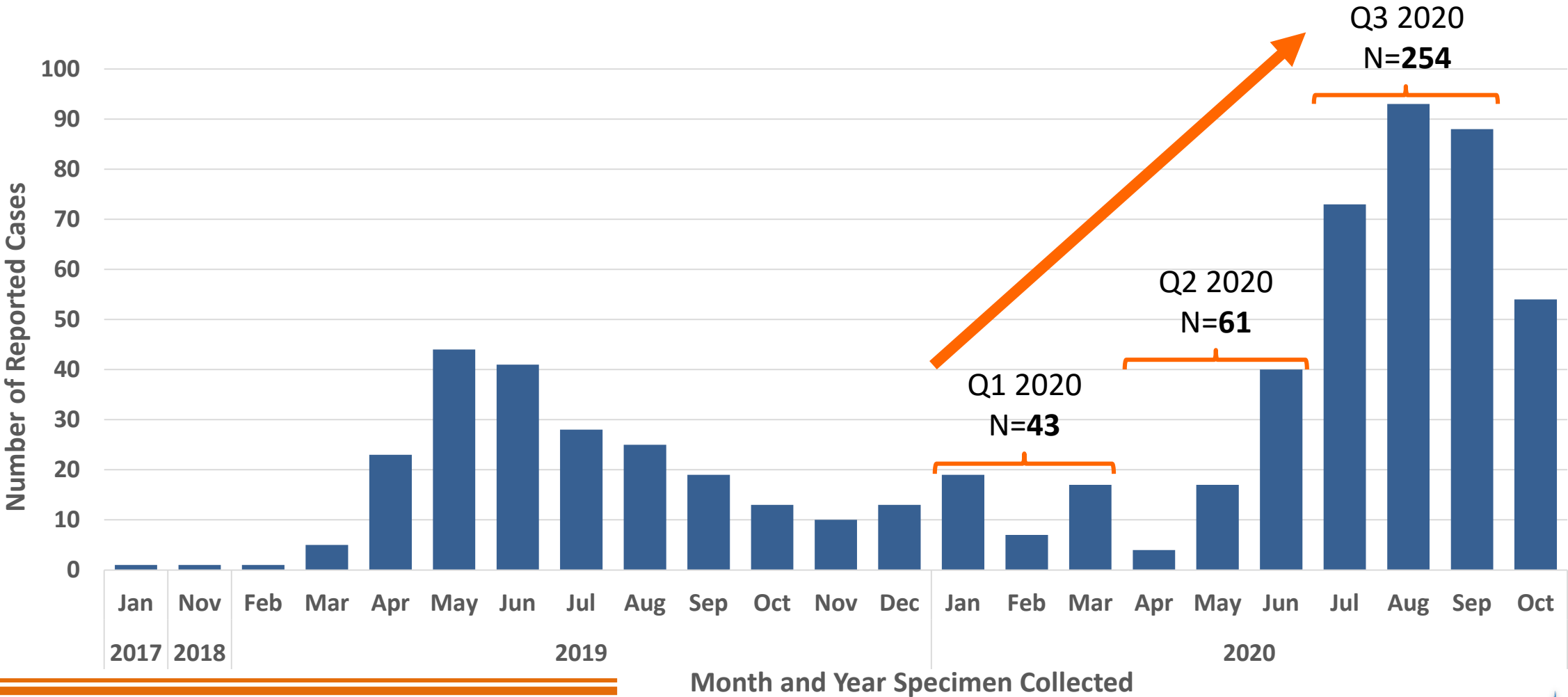
Presented via Webinar

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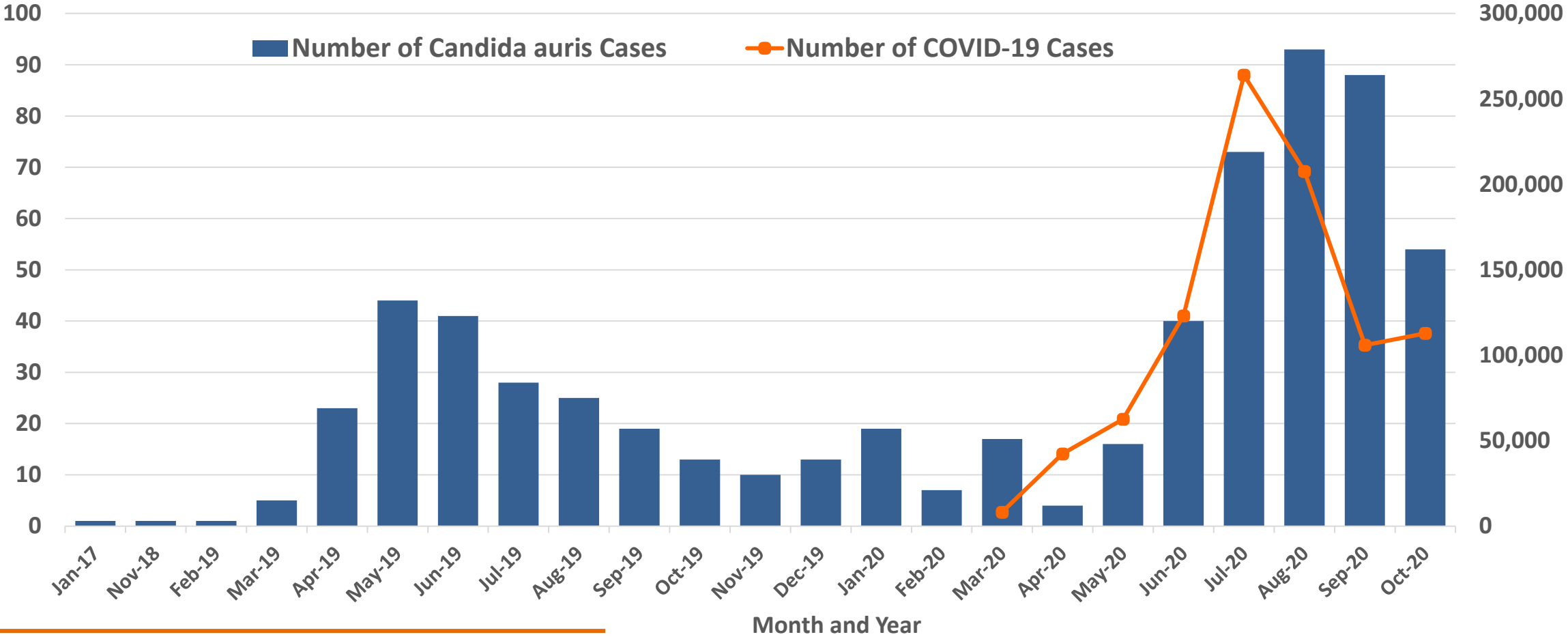
Objectives

- Provide updates on multidrug-resistant organism (MDRO) resurgence in the setting of COVID-19 in California
- Describe healthcare-associated MDRO
- Discuss basic infection control measures to contain MDRO and SARS-CoV-2 transmission in healthcare facilities

C. auris Cases Reported in CA through October 31, 2020 (N=636)



C. auris, COVID-19 Cases in CA through October 31, 2020 (N=636)

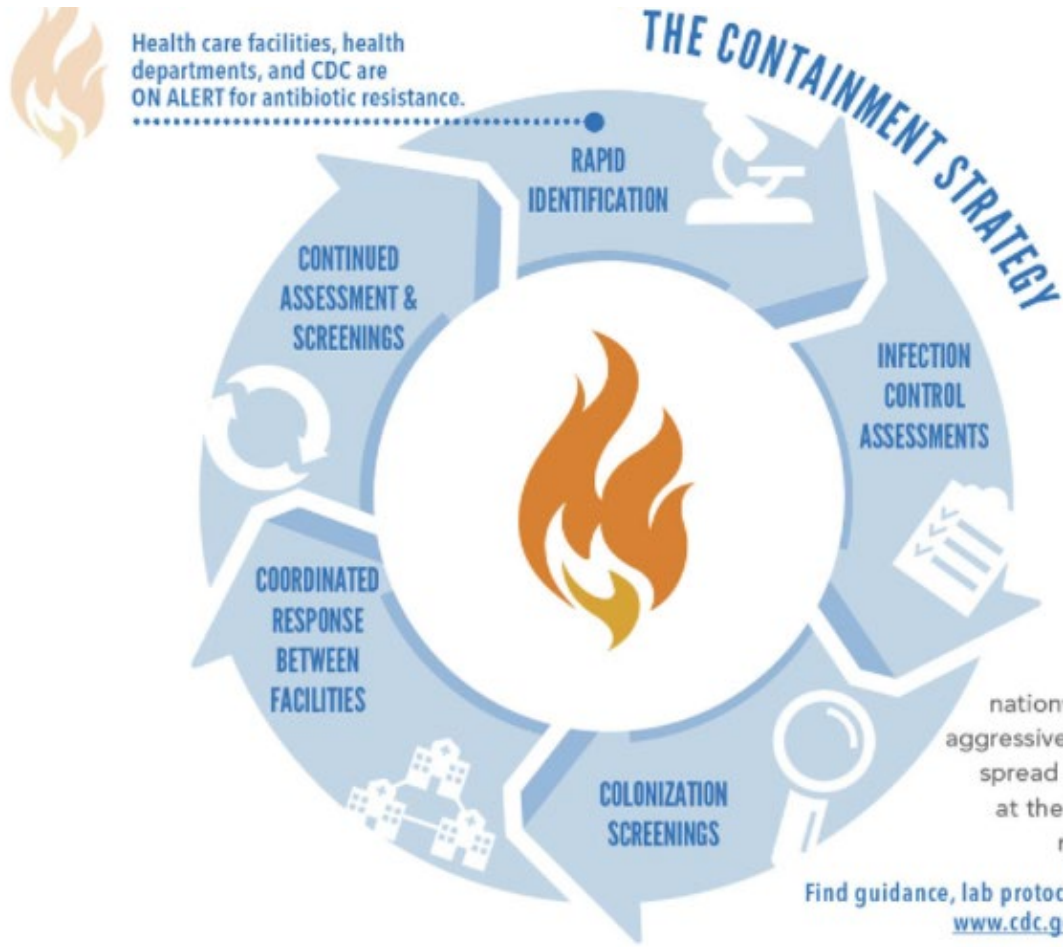


COVID-19-related Challenges in Healthcare Settings

- Staffing, PPE, alcohol-based hand sanitizer (ABHS), cleaning & disinfectant supply shortages
- Disruptions in routine practices and processes, including infection control
- Healthcare personnel (HCP) safety concerns

- We understand!

What Can We Do?



Early detection, infection control and public health-coordinated responses needed to contain spread

Healthcare-associated MDRO*: What We Know

	<i>C. auris</i>	<i>Acinetobacter</i>	Other MDRO (e.g., CRE)	<i>C. diff</i>
Causes outbreaks in healthcare settings	X	X	X	X
Leads to substantial morbidity and mortality	X	X	X	X
Risk factors include frequent or extended healthcare exposure, antimicrobial use	X	X	X	X
Patients can remain colonized for many months (no “clearance” recommendations)	X	X	X	X
Persistent in the healthcare environment	X	X		X
Difficult to identify	X			

*Including *Clostridioides difficile* (*C. diff*)

C. auris=*Candida auris*; CRE=carbapenem-resistant Enterobacteriaceae



Healthcare-associated MDRO*:

Containment, Infection Control Measures

	<i>C. auris</i>	<i>Acinetobacter</i>	Other MDRO (e.g., CRE)	<i>C. diff</i>
Good hand hygiene – ABHS preferred	X	X	X	Soap & water
Contact precautions, single room if possible	X	X	X	X
Thorough environmental cleaning and disinfection	Use C. auris/ List K agent	X	X	Use List K agent
Routine adherence monitoring	X	X	X	X
Cohorting of patients and healthcare personnel	X	X	X	X
Lab surveillance	X	X	X	X
Screening of high-risk contacts	X	X	X	

*Including *Clostridioides difficile* (*C. diff*)

ABHS=alcohol-based hand sanitizer; *C. auris*=*Candida auris*; CRE=carbapenem-resistant Enterobacteriaceae

MDRO* & SARS-CoV-2: Containment, Infection Control Measures

	<i>C. auris</i>	<i>Acinetobacter</i>	Other MDRO (e.g., CRE)	<i>C. diff</i>	SARS-CoV-2
Good hand hygiene – ABHS preferred	X	X	X	Soap & water	X
Contact precautions, single room if possible	X	X	X	X	+ respirator, eye protection
Thorough environmental cleaning and disinfection	Use C. auris/ List K agent	X	X	Use List K agent	Use List N agent (<i>C. auris</i> /List K agent OK)
Routine adherence monitoring	X	X	X	X	X
Cohorting of patients and healthcare personnel	X	X	X	X	X
Lab surveillance	X	X	X	X	X
Screening of high-risk contacts	X	X	X		X

*Including *Clostridiodes difficile* (*C. diff*)

ABHS=alcohol-based hand sanitizer; *C. auris*=*Candida auris*; CRE=carbapenem-resistant Enterobacteriaceae

Infection Control Basics: Hand Hygiene

- Use ABHS over soap and water (unless visibly soiled hands/*C. diff*)
- Place ABHS dispensers in as many patient/resident care locations as possible
- More than just gel-in/gel-out; remember the **5 moments**
- Gloves are **NOT** a substitute for HH; perform HH before donning PPE, after doffing
- Perform adherence monitoring



<https://www.who.int/infection-prevention/campaigns/clean-hands/5moments/en/>

Infection Control Basics: PPE

- If no shortages, do not practice extended use or reuse of gowns* or gloves
- Everyone should adhere, including physicians and ancillary staff
- Double-gowning and -gloving are **NOT** recommended
- Don/Doff WITH hand hygiene
- Keep signage simple and consistent

*<https://www.cdc.gov/coronavirus/2019-ncov/hcp/ppe-strategy/isolation-gowns.html>



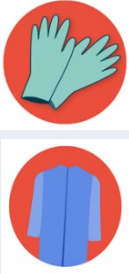




<https://www.cdc.gov/infectioncontrol/pdf/contact-precautions-sign-P.pdf>

Infection Control Basics: Transmission-based Precautions

- Standard precautions +
- Keep it simple, clear signage
- By known organism
- Everyone should adhere, including physicians and ancillary staff
- Perform adherence monitoring

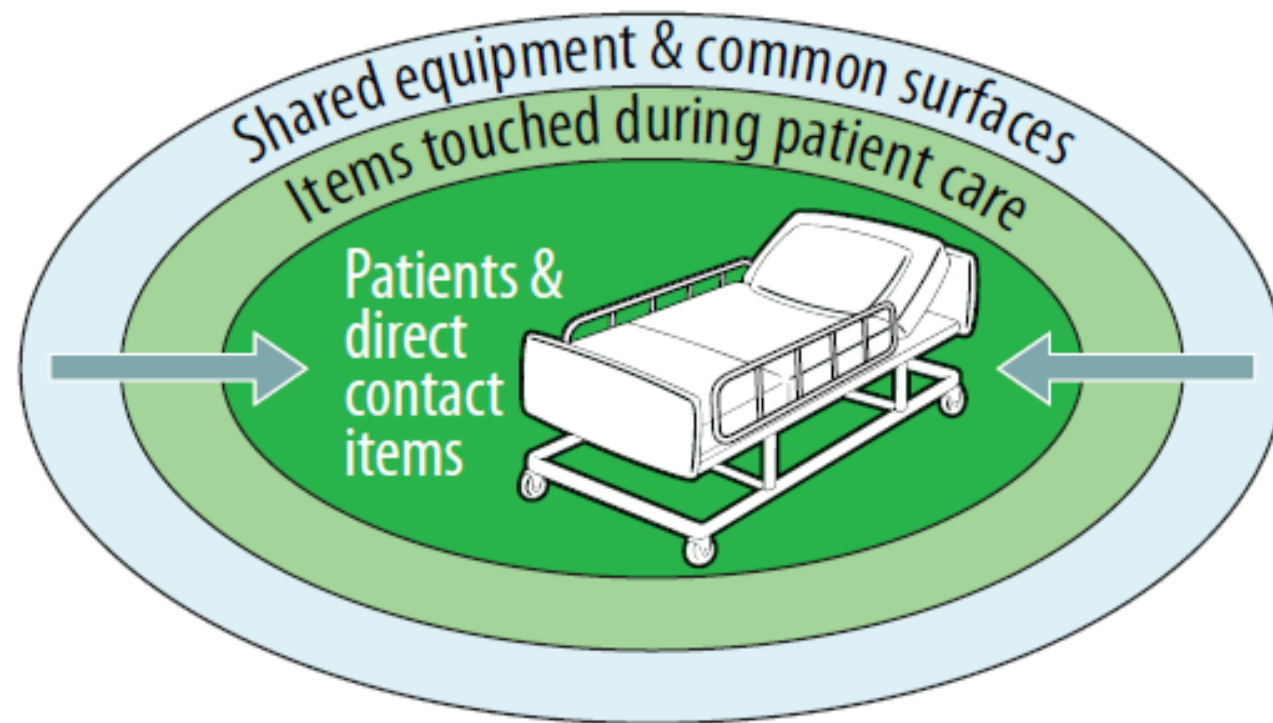
Cohorting patients

- By known organism, regardless of specimen source, infection or colonization

Contact		<i>C. auris</i> Carbapenem-resistant Enterobacteriaceae (CRE), <i>Pseudomonas</i> , <i>Acinetobacter</i> MRSA, VRE
Contact + Enteric/ Spore		<i>C. difficile</i> Norovirus
Droplet		Influenza
Contact + Respirator + Eye Protection		COVID-19
Airborne	 AIIR	Tuberculosis Measles Varicella

Infection Control Basics: Environmental Cleaning

- High-touch surfaces, clean to dirty
- Read labels: know contact time
- Who cleans what: nursing vs EVS
- Adhesives, peeling and cracking surfaces
- Observe and monitor with fluorescent marker, ATP
- Training, re-training
- For *C. auris*, use [EPA-registered disinfectant effective against *C. auris*](#); consider for prevention



<https://www.cdc.gov/hai/prevent/resource-limited/cleaning-procedures.html>

Communication




- Key to preventing inter-facility transmission!
- Actively seek MDRO status of all admissions
- Flag medical record for future admissions
- Educate patients and family
- Establish a system between IP, nurse & case manager to ensure clear communication
- Use inter-facility transfer form

HEALTHCARE FACILITY TRANSFER FORM (ABBREVIATED)

Use this form for all transfers to an admitting healthcare facility.

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

ISOLATION PRECAUTIONS

Patient currently on isolation precautions? <input type="checkbox"/> Yes <input type="checkbox"/> No		Personal Protective equipment (PPE) to consider at receiving facility:
If yes, check all that apply: <input type="checkbox"/> Contact precautions <input type="checkbox"/> Droplet precautions <input type="checkbox"/> Airborne precautions		<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <input type="checkbox"/> Gloves </div> <div style="text-align: center;">  <input type="checkbox"/> Gowns </div> <div style="text-align: center;">  <input type="checkbox"/> Masks </div> </div>

ORGANISMS

Patient has multidrug-resistant organism (MDRO) or other lab results for which the patient should be in isolation? <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, specify organism(s) and include specimen source and collection date.		
Organism	Source	Date
<input type="checkbox"/> <i>C. difficile</i>		
<input type="checkbox"/> Carbapenem-resistant <i>Enterobacteriaceae</i> (CRE) (e.g., <i>Klebsiella</i> , <i>Enterobacter</i> or <i>E. coli</i>)		
<input type="checkbox"/> Extended-spectrum beta lactam-resistant (ESBL) (e.g., <i>E. coli</i> , <i>Klebsiella</i>)		
<input type="checkbox"/> MDR gram negatives (e.g., <i>Acinetobacter</i> , <i>Pseudomonas</i>)		
<input type="checkbox"/> Methicillin-resistant <i>Staphylococcus aureus</i> (MRSA)		
<input type="checkbox"/> Vancomycin-resistant <i>Enterococcus</i> (VRE)		
<input type="checkbox"/> Other, specify: (e.g., lice, scabies, disseminated shingles (<i>Herpes zoster</i>), norovirus, influenza, tuberculosis)		

Include copy of **lab results** with organism I.D. and antimicrobial susceptibilities.

<https://www.cdph.ca.gov/Programs/CHCQ/HAI/Pages/InterfacilityCommunication.aspx>

Key Messages

- MDRO transmission in healthcare facilities remains a challenge
- Implementation and reinforcement of basic infection control practices can:
 - Improve patient AND healthcare personnel health and safety
 - Reduce transmission of MDRO AND SARS-CoV-2
- Public health resources are available to support MDRO testing and containment

Resources

- **CDPH *C. auris* Quicksheet:**
https://www.cdph.ca.gov/Programs/CHCQ/HAI/CDPH%20Document%20Library/C%20auris%20Quicksheet_Interim_070720_ADA.pdf
- **CDPH CRE Quicksheet:**
https://public.staging.cdph.ca.gov/sites/ada/Programs/CHCQ/HAI/CDPH%20Document%20Library/CRE_QuicksheetOct2019.pdf
- **CDPH Carbapenem-resistant *Pseudomonas and Acinetobacter* Quicksheet:**
https://www.cdph.ca.gov/Programs/CHCQ/HAI/CDPH%20Document%20Library/CRO_Quicksheet_Oct2020.pdf
- **CDPH Antimicrobial Resistance Resources**
<https://www.cdph.ca.gov/Programs/CHCQ/HAI/Pages/AntimicrobialResistanceLandingPage.aspx>
- **CDPH Enhanced Standard Precautions:** <https://www.cdph.ca.gov/Programs/CHCQ/LCP/CDPH%20Document%20Library/Enhanced-Standard-Precautions.pdf>
- **CDPH Adherence Monitoring Tools:**
<https://www.cdph.ca.gov/Programs/CHCQ/HAI/Pages/MonitoringAdherenceToHCPracticesThatPreventInfection.aspx>
- **LACDPH Skilled Nursing Facilities:** <http://publichealth.lacounty.gov/acd/ncorona2019/healthfacilities/snf/prevention/>
- **AR Lab Network Testing Resources:** <https://www.cdc.gov/drugresistance/laboratories/AR-lab-network-testing-details.html>
- **CDC *C. auris* Identification:** <https://www.cdc.gov/fungal/candida-auris/identification.html>
- **CDC Disinfectants Effective against *C. auris*:** <https://www.cdc.gov/fungal/candida-auris/c-auris-infection-control.html#disinfection>

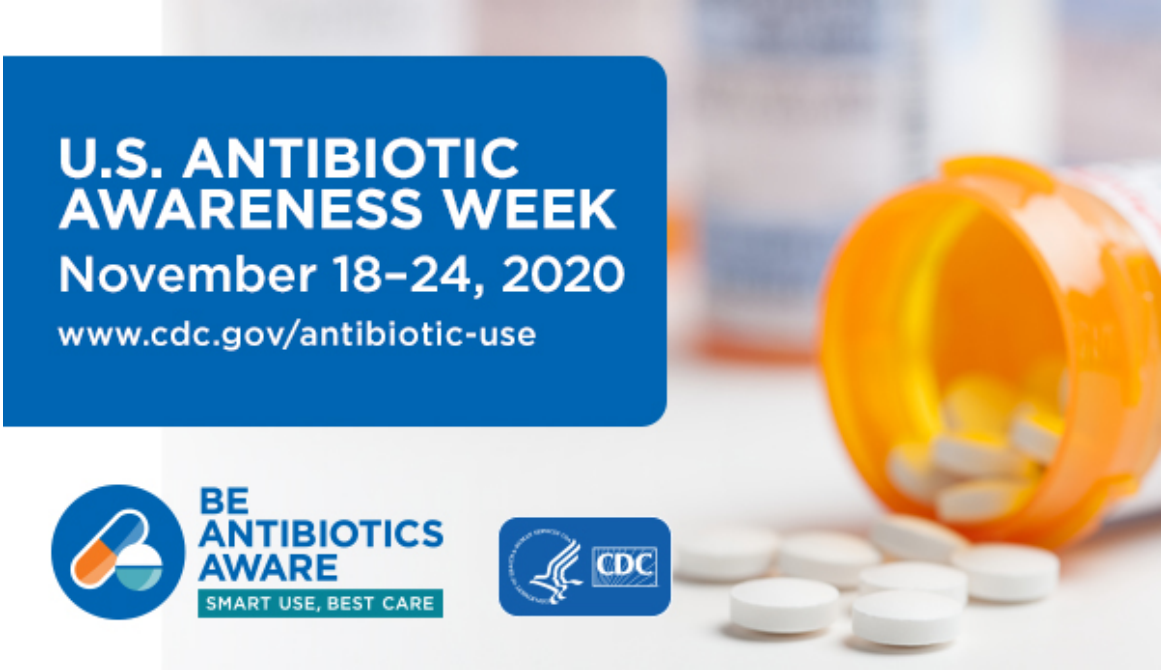
Acknowledgements

Local Public Health Partners


- Orange County Health Care Agency
- Los Angeles County Department of Public Health


Centers for Disease Control and Prevention

Antibiotic Awareness Week



U.S. ANTIBIOTIC AWARENESS WEEK
November 18-24, 2020
www.cdc.gov/antibiotic-use

 **BE ANTIBIOTICS AWARE**
SMART USE, BEST CARE



The graphic features a blue rounded rectangle with white text on the left. To the right is a photograph of an orange pill bottle lying on its side with several white pills scattered on a light surface. At the bottom left are two logos: 'Be Antibiotics Aware' with a pill icon and the slogan 'SMART USE, BEST CARE', and the CDC logo.

Thank you!

Questions?

For more information,
contact

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