

Infection Prevention Updates for Acute Care & Outpatient Settings

December 13, 2023

NEBRASKA

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DEPT. OF HEALTH AND HUMAN SERVICES



NEBRASKA INFECTION CONTROL ASSESSMENT AND PROMOTION PROGRAM

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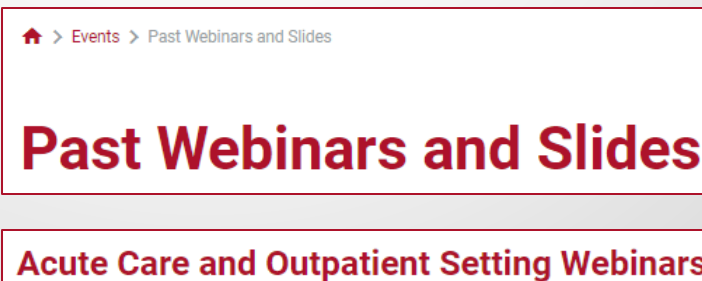
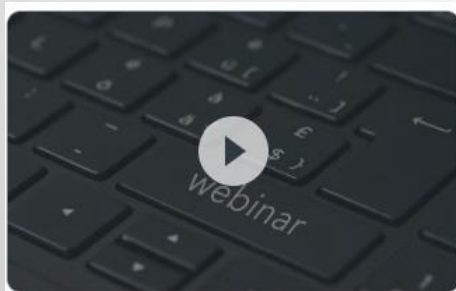
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Questions & Answer Session

- Please use the Q&A box in the webinar platform to type a question to be read aloud.
 - If your question is not answered during the webinar, please call (402) 552-2881 Monday – Friday 8:00 am – 4:00 pm CST to speak with one of our Infection Preventionists or e-mail your question to nebraskaicap@nebraskamed.com

Slides & Webinar Recordings Available

- During this webinar, slides are available on the [NE ICAP Acute Care webpage](#)
- Visit the [NE ICAP Past Webinars and Slides webpage](#)
 - The slides and a recording of this webinar will be posted soon after the webinar
 - Also, various recent NE ICAP webinar slides and recordings are available



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The faculty have nothing to disclose:

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The planning committee members have nothing to disclose:

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Update to Interim Guidance for a Public Health Response to Contain Novel or Targeted Multidrug-resistant Organisms (MDROs)

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Contents

- Introduction to multidrug-resistant organisms (MDRO) related to Healthcare-associated Infections (HAI)
- Basics of Carbapenem Resistant Enterobacterales (CRE)
- Nebraska MDRO Data Update
- Introduction to the Interim Guidance for a Public Health Response to Contain Novel or Targeted MDRO's

Multi-Drug-Resistant-Organisms or MDROs are defined as microorganism, predominantly bacteria, that are resistant to one or more classes of antimicrobial agents

Inappropriate prescribing and use of antibiotics contribute to this growing problem along with other things

Although the names of certain MDROs describe resistance to only one agent (e.g., MRSA, VRE), these pathogens are frequently resistant to most available antimicrobial agents

Prevalence of MDROs varies:

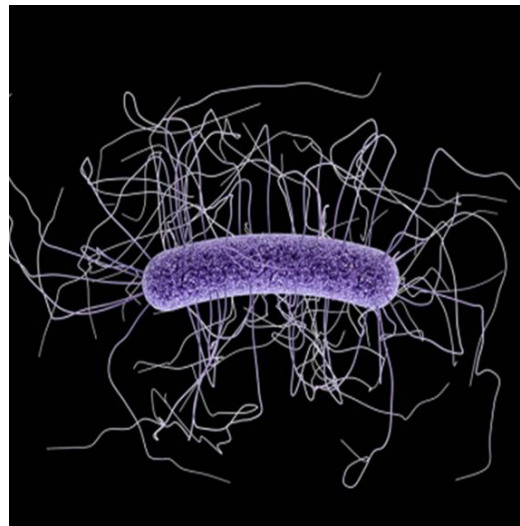
- Temporally
 - Geographically, and by
 - Healthcare setting : 65% acute care, 25% in nursing facilities
- MDROs

Organisms of Concern



ENTEROBACTERIALES

Highly resistant to almost ALL types of antibiotics



CLOSTRIDIOIDES DIFFICILE

Causes diarrhea and colitis



MRSA

Bloodstream infections, pneumonia or surgical site infections



CANDIDA AURIS

Superbug, Resistant to antifungal, high mortality



Naming of CP CRE (Definition)

C-R-E?

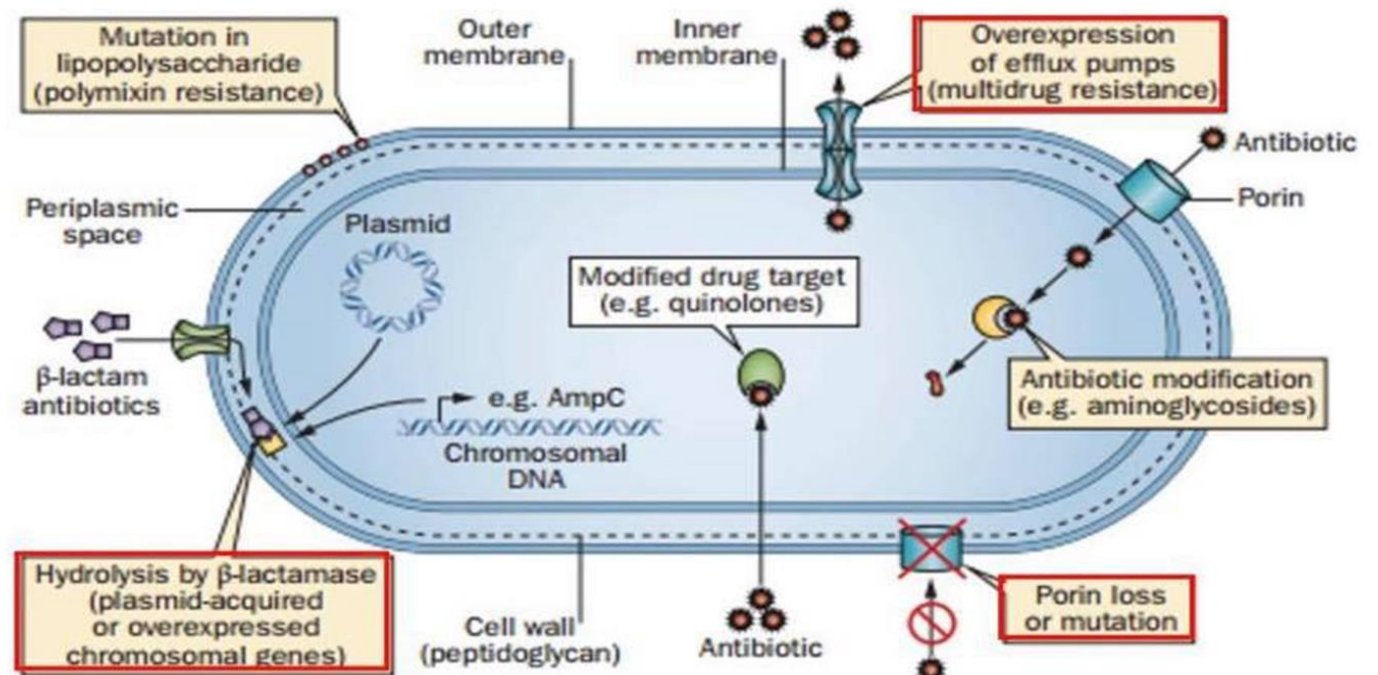


- “C” is for **CARBAPENEM**
- The Carbapenem antibiotics have a broad antimicrobial spectrum, with activity against almost all aerobic and anaerobic pathogens
 - Doripenem
 - Ertapenem
 - Imipenem
 - Meropenem

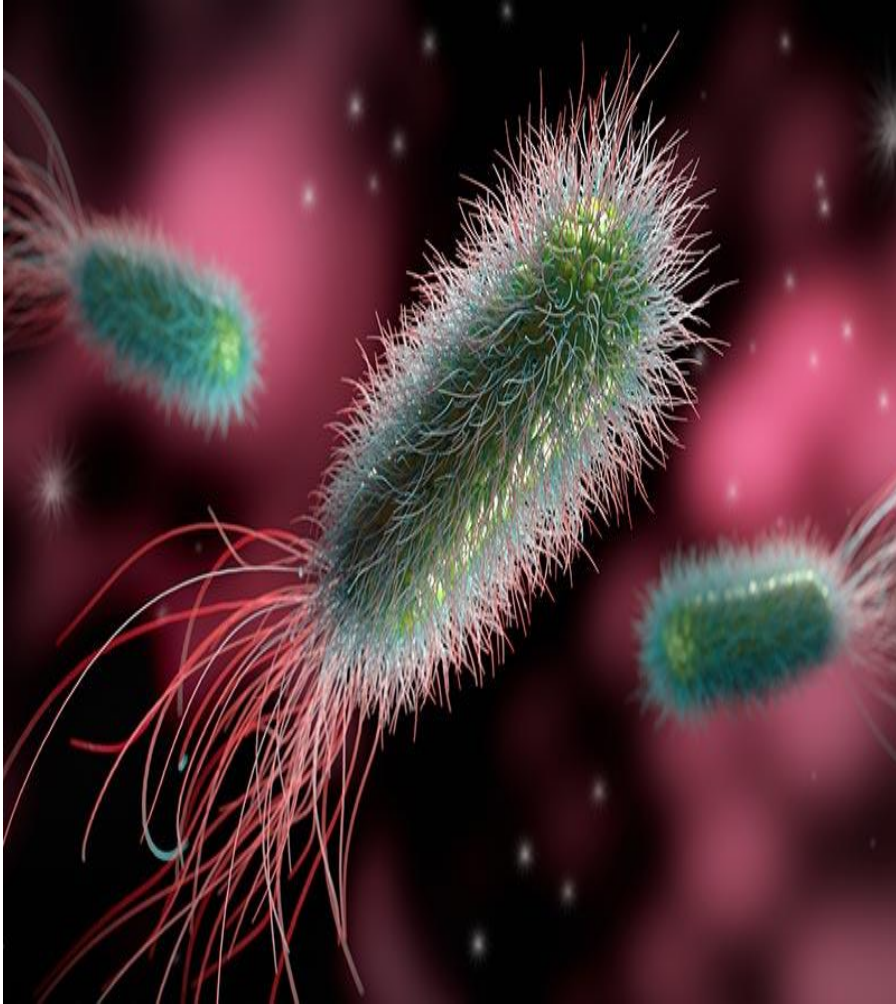
C-R-E?

- “R” is for **RESISTANCE**
- Expanded use of Carbapenem has resulted in some Carbapenem resistance in some gram negative organisms such as enterobacterales and *pseudomonas*

Mechanisms of Carbapenem Resistance



C-R-E?



- “E” is for **ENTEROBACTERIALES**
- Gram-negative bacteria
- Found in gastrointestinal tract
- Cause infection in both healthcare and community settings
- Common Enterobacterales: Klebsiella, Citrobacter, Escherichia coli, Proteus, Enterobacter

What is CP-CRE?

- Carbapenemase-producing bacteria are more likely to spread their resistance to other bacteria
- “CP” is for **CARBAPENEMASE PRODUCING**
- CarbapenemASE : Enzymes that break down carbapenems and related antimicrobials making carbapenems ineffective
- The enterobacterales themselves produce this enzyme
- ALSO known as CPE (CP-CRE)

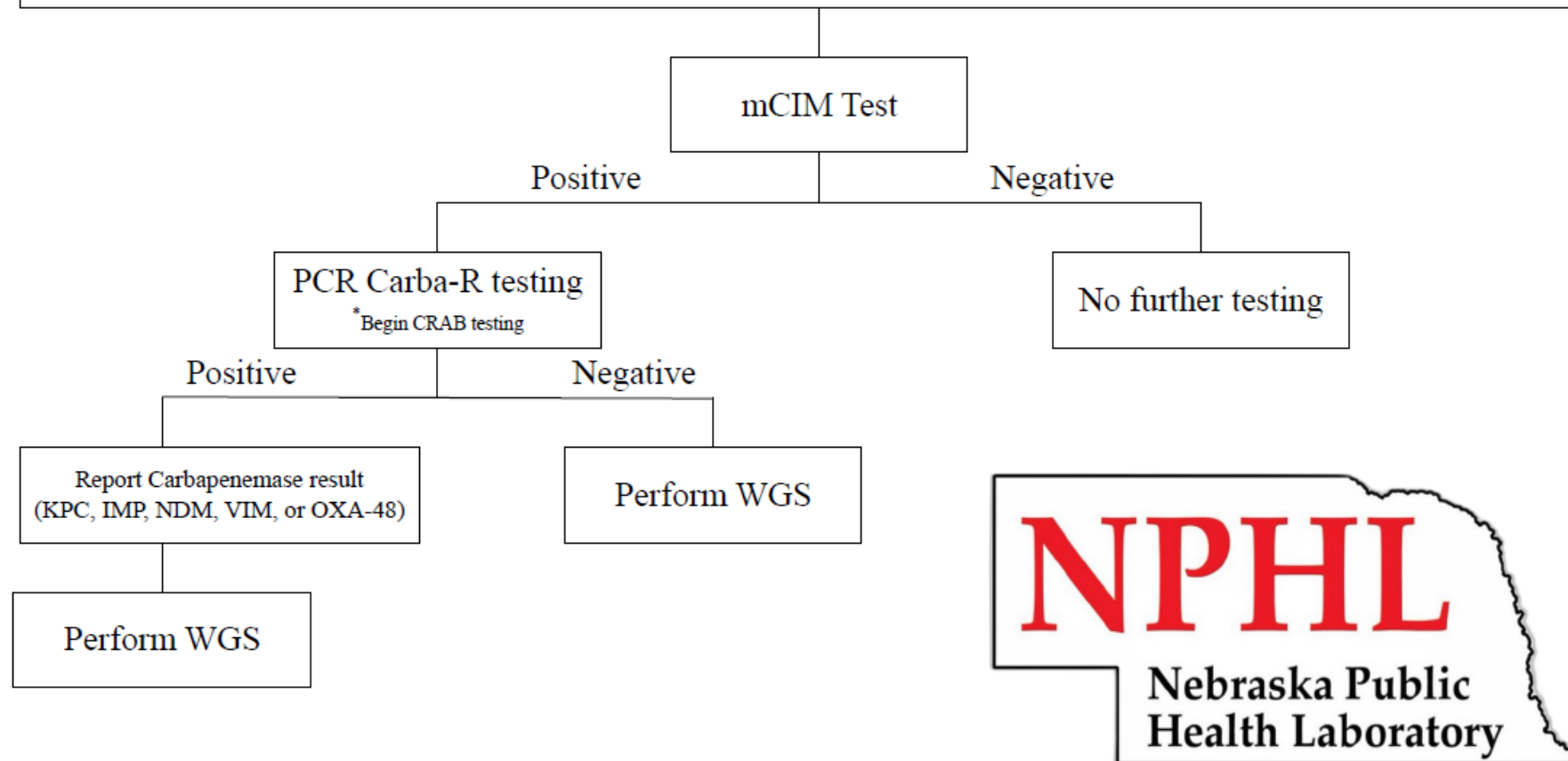
NPHL CRE/ CRPA/ CRAB Testing Algorithm

Receive CRE/ CRPA/ CRAB isolates **with AST report**

CRE: Ertapenem MIC ≥ 1 $\mu\text{g/mL}$ **or** meropenem MIC ≥ 2 $\mu\text{g/mL}$ **or** imipenem MIC ≥ 2 (see exceptions below)

CRPA: Meropenem **or** imipenem MIC ≥ 4 $\mu\text{g/mL}$ **and resistant to both** cefepime and ceftazidime at MIC ≥ 16 $\mu\text{g/mL}$

CRAB: Doripenem ≥ 4 $\mu\text{g/mL}$ **or** imipenem ≥ 4 $\mu\text{g/mL}$ **or** meropenem ≥ 4 $\mu\text{g/mL}$ (bypasses mCIM testing)*



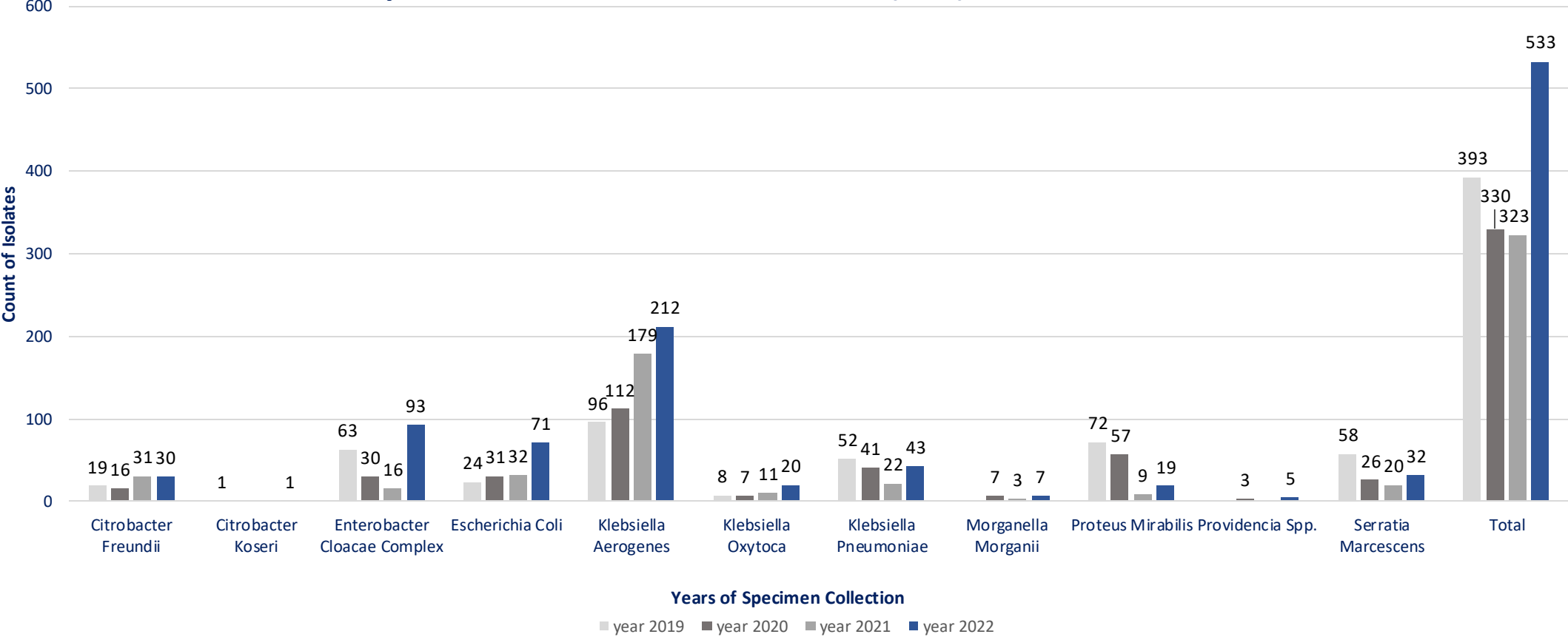
Exceptions:

Do not submit the following isolates:

- *Proteus species*, *Providencia species*, or *Morganella morganii* non-susceptible to imipenem but susceptible to meropenem and ertapenem
- *Pseudomonas aeruginosa* that are mucoid, from a cystic fibrosis patient, or susceptible to cephalosporins

Carbapenem-Resistant Enterobacterales in Nebraska

Carbapenem-resistant Enterobacterales (CRE) Isolates in Nebraska, 2019-2022



Carbapenemase Genes Identified in Enterobacterales Isolates, Nebraska 2019-2023

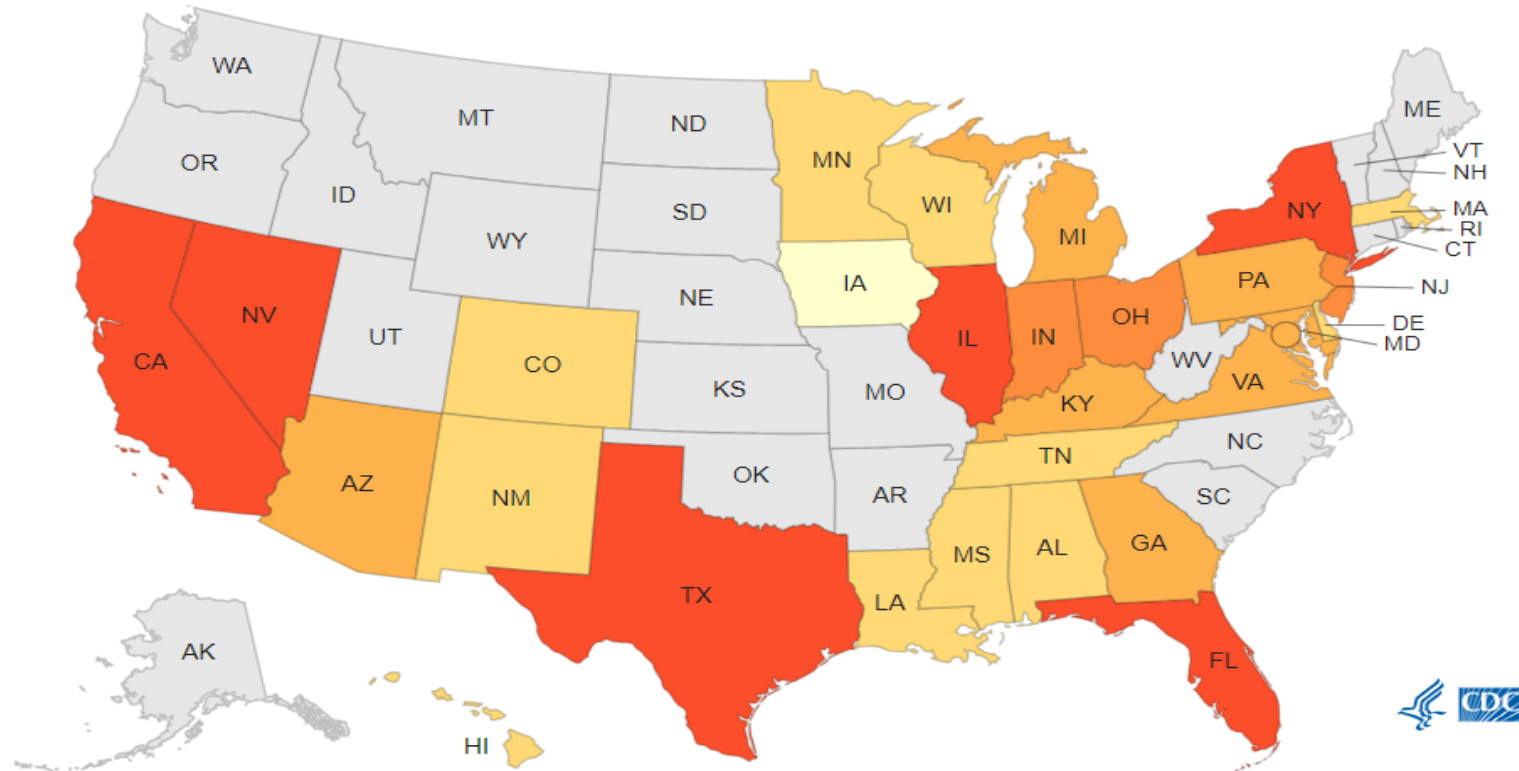
Year	KPC	NDM	VIM	OXA-48	OXA-(Other than 48)	Total
2019	18	9	0	0	3	30
2020	8	0	0	1	0	9
2021	3	0	0	1	0	4
2022	8	3	1	1	0	13
2023 to date	6	6	0	4	2	17

In 2023, 1 case each of Carbapenemase producing *Pseudomonas aeruginosa*, and *Acinetobacter Baumannii* has also been isolated

C. auris tracking data

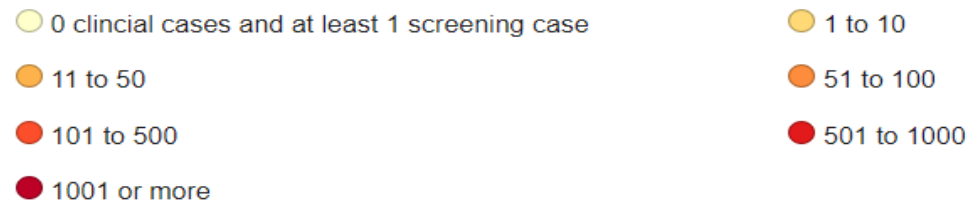
Make a selection from the filters to change the visualization information.

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).



Updated Guidance for Prevention and Response to MDROs

Strategies for Prevention and Response to Novel & Targeted Multidrug-Resistant Organisms (MDROs)

[Print](#)

Overview

Multidrug-resistant organisms (MDROs) are continuing to develop and spread in healthcare settings throughout the United States. Because of this, efforts to prevent MDRO transmission are still needed. In the past, MDROs were identified after lab confirmation, however, research has found that these organisms can spread long before being detected. A prevention approach that incorporates multiple healthcare facilities can potentially limit spread more effectively than response strategies alone.

CDC has developed two guides and FAQs for healthcare facilities, state, local, and territorial health departments to limit the spread of novel or targeted (e.g., *Candida auris*, carbapenemase-producing CRE) MDROs, FAQs, and a graphic (Figure 1) showing the relationship between prevention and response activities.

On This Page

[Comparison of Strategies](#)

[FAQs](#)

[Lab Resources](#)

[Investigation Guides](#)

[Colonization Screenings](#)

[Inter-facility Transfer Forms](#)

[MRDO Resources](#)



Prevention Strategies

To prevent the spread of novel and targeted MDROs across healthcare facilities



Containment Strategy

To address the initial response to novel and targeted MDROs

Interim Guidance for a Public Health Response to **Contain** Novel or Targeted Multidrug-resistant Organisms (MDROs)



Updated December 2023



Centers for Disease
Control and Prevention
National Center for Emerging and
Zoonotic Infectious Diseases

<https://www.cdc.gov/hai/mdro-guides/index.html>

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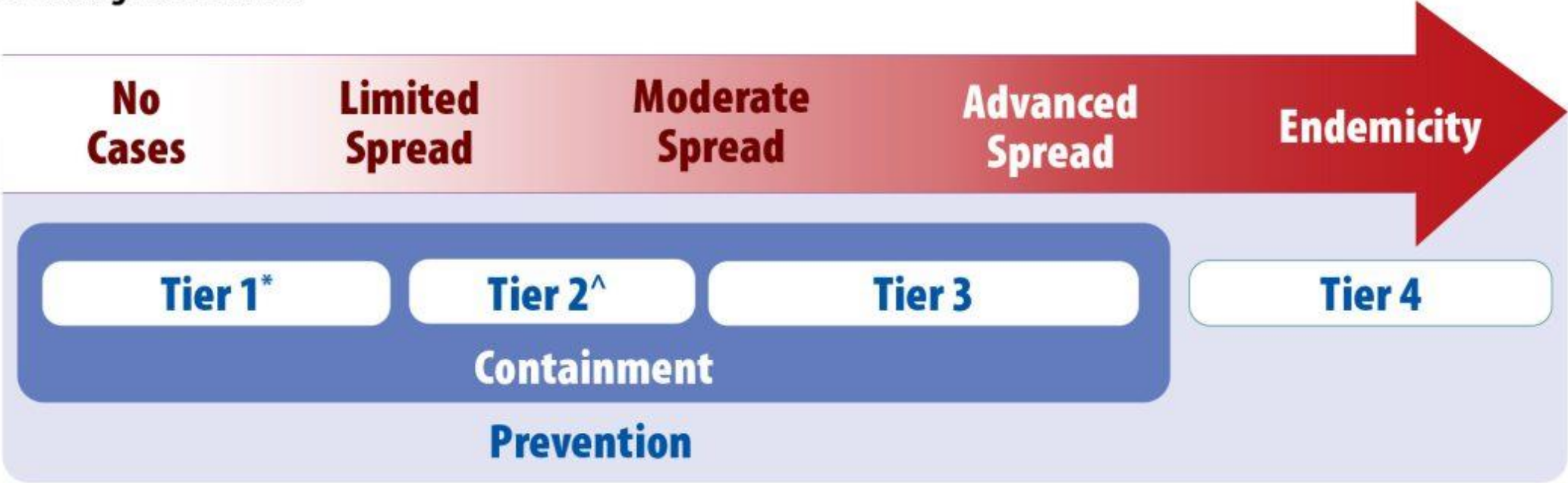
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Key Updates

- ❑ In the past Tier 1 was saved for organisms never reported or very rare in the U.S. and which were resistant to all types of available antibiotics. Now, if we understand their resistance mechanism, then we can move them to Tier 2
- ❑ Tier 3 includes additional steps to transition from response to prevention
- ❑ Tier 4 is added to include organism endemic to specific jurisdiction
 - ❑ The section “Containment Strategies for Healthcare Facilities at High Risk for Transmission of MDROs” has been superseded by the Interim Guidance for Public Health Measures to Prevent the Spread of Novel and Targeted Multidrug-resistant Organisms (MDROs).

Tier Definitions, Epidemic Stages, Response and Prevention

Figure 1. Relationship between epidemic stages, response tiers, containment response, and prevention activities for novel or targeted MDROs.



Organism or resistant mechanism that have

*Never (or very rarely) been identified **in the United States** and for which experience is extremely limited are Tier 1.

^Never (or very rarely) been identified **in a public health jurisdiction but are more common in other parts of the U.S.** are Tier 2.

CDC's Containment Guidelines

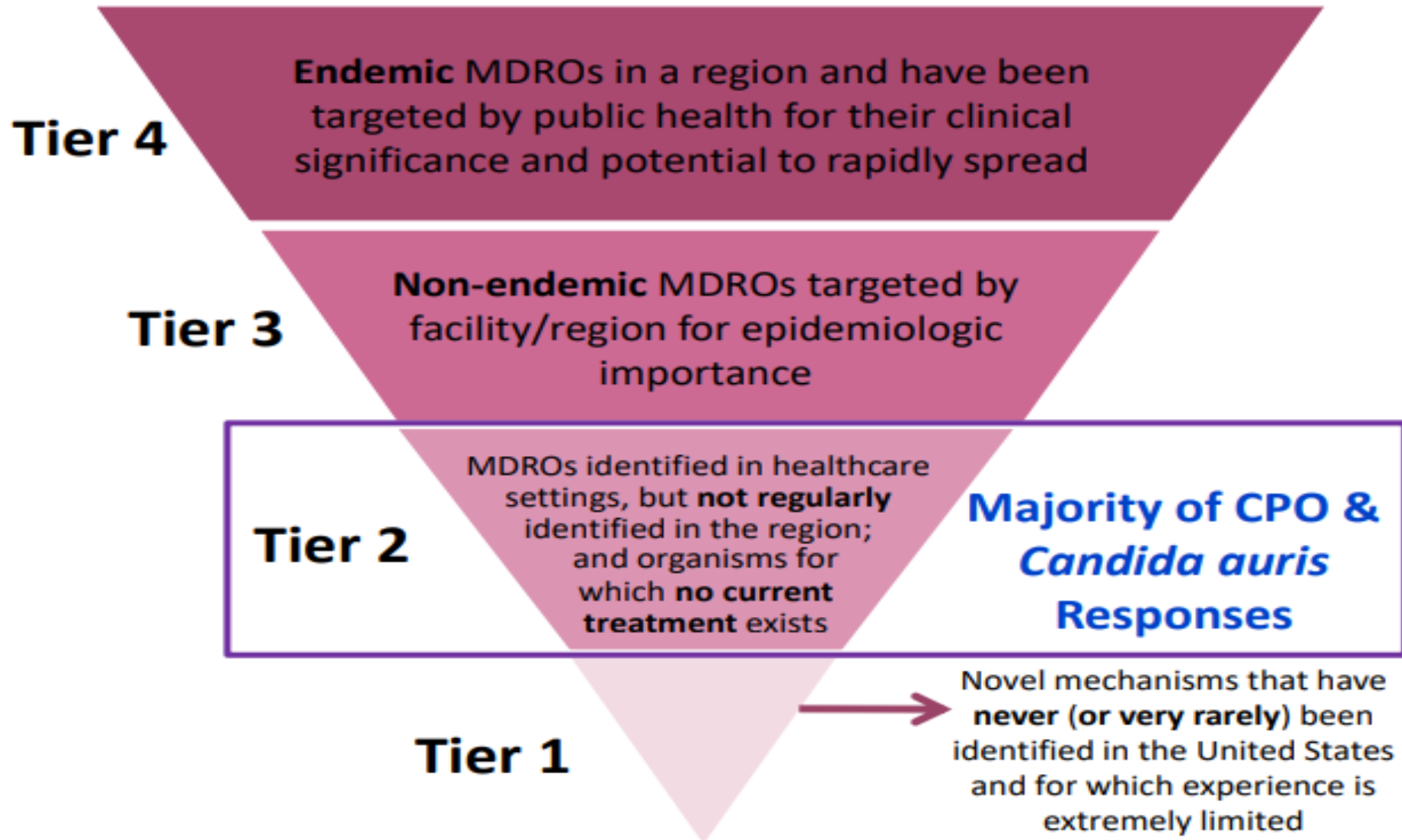


Table 1: Summary of Response Recommendations for Multidrug-resistant Organism (MDRO) Containment by Tier

Containment Tiers

Epidemic Stages	No cases identified Limited spread	Limited to moderate spread	Moderate to advanced spread	Endemic
Tiers with definitions	Tier 1 Organisms or resistance mechanisms never or very rarely identified in the United States	Tier 2 Mechanisms and organisms not regularly found in a region. Pan-not susceptible organisms with the potential for wider spread in a region	Tier 3 Mechanisms and organisms regularly (i.e., frequently) found in a region but not endemic.	Tier 4 Mechanisms and organisms that are endemic.
	Novel Carbapenemases	<i>C. auris</i> Carbapenemases (e.g. KPC, NDM, OXA-48, VIM, IMP) <ul style="list-style-type: none"> Enterobacterales <i>Pseudomonas aeruginosa</i> <i>Acinetobacter baumannii</i> 	TBD Considering ESBL+ organism	MRSA, VRE

Interim Guidance for a Public Health Response to Contain Novel or Targeted Multidrug-resistant Organisms (MDROs)

Containment Response Strategies, Tier 1 to Tier 3

1. Initial response measures
2. Conduct a healthcare investigation
3. Conduct a contact investigation
4. Clinical Laboratory Prospective and Retrospective Surveillance*
5. Environmental Cultures**
6. Implement a system to ensure adherence to infection control measures

For the purposes of today's presentation, we will be focusing on the response for a Tier 2 Organism

[Interim Guidance for a Public Health Response to Contain Novel or Targeted Multidrug-resistant Organisms \(MDROs\)](#)

Response Elements

Elements	Tier 1	Tier 2	Tier 3	Tier 4	
Healthcare Investigation ¹					
Review the patient's healthcare exposures prior to and after the positive culture ¹	ALWAYS Typical review period: 30 days prior to culture collection to present	ALWAYS Typical review period: 30 days prior to culture collection to present	ALWAYS Typical review period: Current admission and sometimes immediately prior admission	Prioritize prevention; containment principles generally do not apply.	
Contact Investigation ¹					
Screening of healthcare contacts (i.e., residents and patients) ²	ALWAYS	ALWAYS	USUALLY		
Household contact screening	USUALLY	RARELY	RARELY	Prioritize prevention; containment principles generally do not apply.	
Healthcare personnel screening	USUALLY	RARELY	RARELY		
Additional Actions if Transmission Identified in Healthcare					
Recurring response-driven point prevalence surveys ³	ALWAYS	ALWAYS	RARELY	Prioritize prevention; containment principles generally do not apply.	
Evaluate potential spread to healthcare facilities that regularly share patients with the index healthcare facility ⁴	USUALLY	USUALLY	RARELY		

Elements	Tier 1	Tier 2	Tier 3	Tier 4
Clinical Laboratory Surveillance				
Retrospective lab surveillance ⁶	ALWAYS	ALWAYS	RARELY	Prioritize prevention; containment principles generally do not apply.
Prospective lab surveillance ⁵	ALWAYS	ALWAYS	ALWAYS	
Environmental Cultures				
Environmental sampling	SOMETIMES	RARELY	RARELY	Prioritize prevention; containment principles generally do not apply.
Infection Control Measures				
Notify healthcare providers; promptly implement appropriate transmission-based precautions	ALWAYS	ALWAYS	ALWAYS	Prioritize prevention; containment principles generally do not apply.
Infection control assessment with observations of practice	ALWAYS	ALWAYS	SOMETIMES	
Clear communication of patient status with transferring facilities	ALWAYS	ALWAYS	ALWAYS	

Initial Response Measures (Tier 2 Organism)

Goals of initial containment response include:

- ❑ Identify affected patients.
- ❑ Ensure appropriate control measures are promptly implemented to limit further spread.
- ❑ Determine if transmission within a healthcare facility and dissemination to other facilities are occurring (Tiers 1-2).
- ❑ Characterize novel organisms or mechanisms to guide further response actions, patient management, and future responses.
- ❑ Coordinate response with ongoing prevention activities (e.g., MDRO education, infection prevention and control improvement initiatives, routine colonization screening, and improved interfacility communication) in the region.
- ❑ In addition to this general guidance, further pathogen-specific guidance for some MDROs can be found here:
 - [Vancomycin-resistant *Staphylococcus aureus* \[PDF – 20 pages\]](#)
 - [Carbapenem-resistant Enterobacterales](#)
 - [Candida auris](#)

[Interim Guidance for a Public Health Response to Contain Novel or Targeted Multidrug-resistant Organisms \(MDROs\)](#)

Initial Response Measures



- ☐ Initial response measures are intended to facilitate prompt implementation of appropriate infection prevention and control (IPC) measures
 - ☐ Contact Precautions (if not already implemented for another indication) for the index patient, at the facility where they are currently admitted, to prevent transmission.
- ☐ If the index patient is currently admitted to a healthcare facility:
 - ☐ Prioritize the facility for a rapid infection control assessment to identify and address any potential gaps in IPC
 - ☐ Notify the patient and family about the results and infection control measures.
 - ☐ If the MDRO was present on admission, notification of the transferring facility should occur so appropriate review can occur at that facility.

Initial Response Measures continued

- ☐ Upon identification of the organism or mechanism in a laboratory, the laboratory or healthcare facility should promptly notify
 - ☐ Patient's primary healthcare provider
 - ☐ Healthcare personnel caring for the patient
 - ☐ Infection control department
 - ☐ Other healthcare staff per facility policies.
- ☐ Generally, local and state public health departments should also be notified



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Healthcare Investigation (Tier 2 Organism)

Healthcare Investigation

- ☐ Review the patient's healthcare exposures from approximately 30 days prior to the initial positive culture up to the present.
- ☐ Prioritize collecting information about the index patient
- ☐ Additional epidemiological case-level data may be gathered after the initial healthcare investigation commences, to avoid delays in assessing for and preventing spread
- ☐ If information is available about the time that the organism was most likely acquired, then consider this period the risk period for transmission for investigation.



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Contact Investigation (Tier 2 Organism)

Screening of Healthcare Contacts

In general, the recommendations apply to all inpatient healthcare exposures of the index patient in the 30 days prior to the identification of the target organism to the present.

Depending on the type of exposure and organism, contact investigations may sometimes include healthcare facilities where the patient received care but did not stay overnight

- outpatient clinics
- community contacts

If the index patient had recent inpatient healthcare exposure, screen epidemiologically linked patients.

Screening should occur even if the index patient was being managed with Contact Precautions or Enhanced Barrier Precautions

[Interim Guidance for a Public Health Response to Contain Novel or Targeted Multidrug-resistant Organisms \(MDROs\)](#)

Screening of Healthcare Contacts



- ❑ Screening recommendations for the following contacts:
 - ❑ Roommates and patients who shared a bathroom with the index patient.
 - ❑ Screen these contacts even if they have been discharged from the facility to another inpatient setting.
 - ❑ If discharged to home, consider notifying the contact and offering screening or flagging the chart to facilitate preemptive Contact Precautions and *admission screening if they are readmitted in the next six months.*
 - ❑ Screen the patient currently admitted to room(s) and bed spaces where the index patient stayed at least one night in healthcare facilities identified during the healthcare investigation

[Interim Guidance for a Public Health Response to Contain Novel or Targeted Multidrug-resistant Organisms \(MDROs\)](#)

Screening of Healthcare Contacts continued

In most situations, perform broader screening to comprehensively assess for transmission

- ❑ Broader screening using point prevalence surveys (PPS) is preferred.
 - ❑ Alternatively, broader screening may initially target contacts who are at higher risk due to overlap on the same ward as the index patient and presence of a risk factor for MDRO acquisition (e.g., bedbound, high levels of care, receipt of antimicrobials, or mechanical ventilation), and who are still admitted.
- ❑ *Considerations* – When deciding whether to use a risk-factor-based approach, PPS, or both strategies in combination, consider individual facility characteristics, local epidemiology, characteristics of index patient, feasibility of identifying contacts, and laboratory capacity.
 - ❑ If it will take several days to identify higher risk contacts or if most higher risk contacts have been discharged from a facility, perform a unit-wide point prevalence survey promptly.
 - ❑ Consider flagging charts of contacts who have been discharged, to facilitate preemptive Contact Precautions and admission screening if they are readmitted in the next six months.
 - If these individuals have been discharged to high-acuity post-acute care, health departments should consider screening these individuals.

Ongoing Transmission

- ❑ Patient screening when transmission is suspected or ongoing:
 - ❑ Wider point prevalence surveys are indicated if there is evidence or suspicion for ongoing transmission (e.g., isolates from multiple patients) or if initial targeted screening of high-risk patients identifies new cases.
 - ❑ If new cases are identified, periodic (e.g., every two weeks) point prevalence surveys are recommended until transmission is controlled. Control is generally defined as two consecutive point prevalence surveys with no new MDRO cases identified, or, in facilities with high colonization pressure (i.e., >30%), substantially decreased transmission.
 - ❑ In healthcare facilities with high colonization pressure, consider continuing point prevalence surveys at increasing intervals (e.g., monthly and then quarterly) after transmission is controlled, to ensure transmission remains low.

Healthcare and Household Screening

- ☐ Healthcare personnel screening:
 - ☐ In the absence of known or suspected transmission from HCP or other strong epidemiologic links, HCP screening is not recommended.
- ☐ Household contact screening:
 - ☐ Screen household contacts who have extensive contact (e.g., share a bed or assist with personal care) with the index patient if the household contact has frequent inpatient healthcare exposure to determine if transmission-based precautions are necessary for their subsequent admissions.
 - ☐ Consider screening other household contacts if household transmission is suspected.
 - ☐ If household contacts are HCP, prior to pursuing screening consider what actions will be taken if they are colonized (e.g., work restrictions and rescreening).

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Clinical Laboratory Prospective and Retrospective Surveillance (Tier 2 Organism)

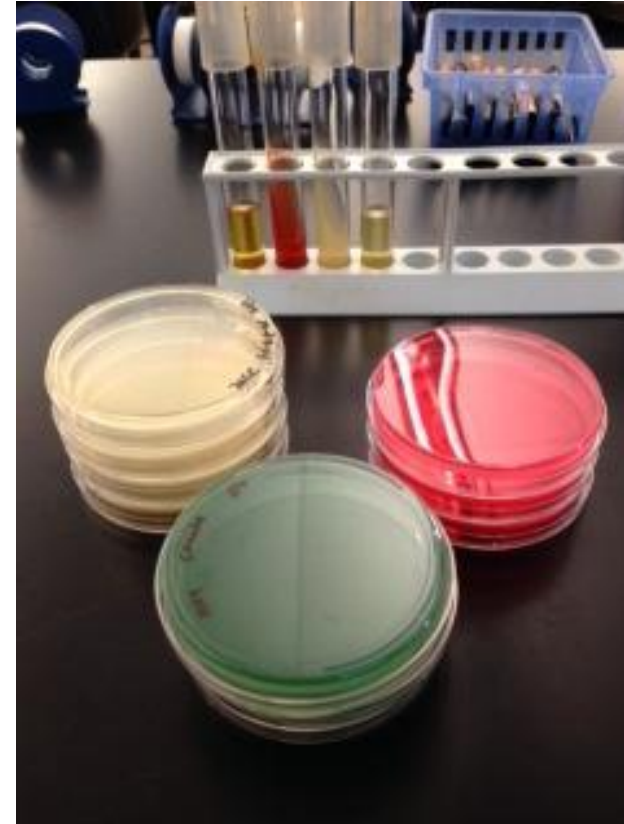
Clinical Laboratory Prospective and Retrospective Surveillance

- ❑ Engage clinical microbiology laboratories that serve healthcare facilities identified in the healthcare investigation (or in the period since suspected acquisition) for prospective and retrospective surveillance to identify organisms with similar resistance profiles from clinical cultures.
- ❑ Laboratories should perform prospective surveillance **for at least three months** after identification of the index patient or, if transmission is identified through surveillance or screening, three months after the last case is identified.
- ❑ All isolates identified during prospective surveillance should be promptly tested to investigate whether they have the same mechanism of resistance as the index case
 - ❑ Isolates should be saved as additional testing at the state, regional or CDC laboratory might be indicated.
- ❑ **Perform retrospective surveillance** (laboratory lookbacks) of results from these clinical laboratories to identify organisms with similar resistance patterns, **extending three months prior to identification of the index case** (or to the time of suspected acquisition, if shorter). If available, these retrospective isolates should be tested (e.g., at a public health laboratory) to see if they have the same mechanism of resistance as the index case.

Environmental Cultures (Tier 2 Organism)

Environmental cultures

- ❑ Most public health responses to Tier 2 organisms and mechanisms will not require environmental cultures.
 - ❑ In some situations, environmental cultures may help identify environmental reservoirs or evaluate the effectiveness of cleaning and disinfection.
 - ❑ Environmental cultures are recommended only if transmission is identified or suspected and there is epidemiologic evidence implicating an environmental reservoir in ongoing transmission.



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[Interim Guidance for a Public Health Response to Contain Novel or Targeted Multidrug-resistant Organisms \(MDROs\)](#)

Infection Prevention Measures

Implement a System to Ensure Adherence to Infection Control Measures

These steps outline assessment and ongoing support of measures to promote high levels of adherence to recommended infection control practices at facilities where the index patient received care, including the facility where the patient or resident is currently receiving care.

Infection control steps typically occur concurrently with or even precede the contact investigation.



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Communication on MDRO Status

- ❑ Healthcare facilities and health departments should ensure the index patient's MDRO status and required infection control precautions are communicated at **transfer to higher or lower levels of care**.
 - ❑ A decision to discharge a patient from one level of care to another (e.g., moving a patient from an intensive care unit to a medical ward) or to another healthcare facility should be based on clinical criteria and not colonization status.
- ❑ Healthcare facilities should:
 - ❑ Educate and inform the HCP and visitors for the index patient about the organism and precautions indicated to prevent transmission.
 - ❑ **Flag affected patients'** medical records to initiate appropriate infection control precautions upon readmission.
 - ❑ Make plans for how receiving facilities will be notified of affected patients' MDRO status, if the patient is transferred, including whether to notify the health department prior to transfer.



[Interim Guidance for a Public Health Response to Contain Novel or Targeted Multidrug-resistant Organisms \(MDROs\)](#)



Center for Clinical Standards and Quality/Quality, Safety & Oversight Group

Ref: QSO-23-16-Hospitals

DATE: June 6, 2023

TO: State Survey Agency Directors

FROM: Director, Quality, Safety & Oversight Group (QSOG)

SUBJECT: Requirements for Hospital Discharges to Post-Acute Care Providers

Memorandum Summary

CMS is committed to ensuring that the health and safety of patients are protected when discharges from hospitals and transfers to post-acute care providers occur. Therefore, we are providing the following information:

- Reminding state agencies (SAs), accrediting organizations (AOs), and hospitals of the regulatory requirements for discharges and transfers to post-acute care providers.
- Highlighting the risks to patients' health and safety that can occur due to an unsafe discharge.
- Recommendations that hospitals can leverage to improve their discharge policies and procedures to improve and protect patients' health and safety.

Background:

When a patient is discharged from a hospital, it is important to provide their post-acute provider and caregivers as applicable with the appropriate patient information related to a patient's treatment and condition in order to decrease the risk of readmission or an adverse event. For example, when a patient is discharged to a post-acute care (PAC) provider such as a skilled nursing facility (SNF) or home health agency (HHA), these providers must receive accurate and complete information related to the patient's condition and treatment (e.g., diagnoses and medications) in order to protect and improve the patient's health and safety.

CMS has identified areas of concern related to missing or inaccurate patient information when a patient is discharged from a hospital. These areas of concerns include missing or inaccurate information related to:

- Patients with serious mental illness (SMI), complex behavioral needs, and/or substance use disorder (SUD). Information related to patient's acute condition may be included, but information related to the patient's underlying diagnoses of SMI and/or SUD is not included. Additionally, specific treatments that were implemented to help manage these conditions while in the hospital are omitted from patient information upon hospital discharge and transfer to the PAC provider, such as additional supervision that was provided throughout the patient's hospital stay (or was provided for some of

Requirements for Hospital Discharges to Post-Acute Care Providers

“When a patient is discharged from a hospital, it is important to provide their post-acute provider and caregivers as applicable with the appropriate patient information related to a patient's treatment and condition in order to decrease the risk of readmission or an adverse event.

For example, when a patient is discharged to a post-acute care (PAC) provider such as a skilled nursing facility (SNF) or home health agency (HHA), *these providers must receive accurate and complete information related to the patient's condition and treatment (e.g., diagnoses and medications)* in order to protect and improve the patient's health and safety.”

[Requirements for Hospital Discharges to Post-Acute Care Providers](#)

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Contact Precautions

Contact Precautions are used when caring for residents who are actively infected or colonized with an MDRO (like *C. auris* or CP-CRE)

- require the use of a gown and gloves whenever entering the room
- placing the resident in a single person room,
- restricting them from all group activities.



[Interim Guidance for a Public Health Response to Contain Novel or Targeted Multidrug-resistant Organisms \(MDROs\)](#)

Reassessment of Colonization

- ❑ In general, screening individuals with a history of colonization or infection with a targeted MDRO with the aim of discontinuing transmission-based precautions is not recommended.
 - ❑ Long-term follow-up of colonized patients in healthcare facilities, especially those patients who continue to require complex medical care, such as ventilator support, suggests colonization persists for a prolonged period of time.
 - ❑ Repeat colonization swabs may alternate between detecting and not detecting.



[Interim Guidance for a Public Health Response to Contain Novel or Targeted Multidrug-resistant Organisms \(MDROs\)](https://www.health.state.mn.us/diseases/idlab/mdhcroguidance.pdf)

<https://www.health.state.mn.us/diseases/idlab/mdhcroguidance.pdf>

Patient Placement



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- ☐ Patients on Contact Precautions should be placed in a single-patient room whenever possible.
- ☐ When single rooms are not available, facilities may choose to cohort patients with novel MDRO's together in the same room.
- ☐ Facilities also can place patients with novel MDRO's together in a dedicated unit or part of a unit to decrease movement of healthcare personnel and equipment from those colonized or infected with novel MDRO's to those who are not.
- ☐ Facilities could also consider dedicating healthcare personnel (e.g., nurses, nursing assistants) who provide regular care to these patients during a shift.

Hand Hygiene



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- ☐ When caring for patients with a novel MDRO, healthcare personnel should follow standard hand hygiene practices.
- ☐ Alcohol-based hand sanitizer (ABHS) is the preferred hand hygiene method when hands are not visibly soiled.
- ☐ If hands are visibly soiled, wash with soap and water. Wearing gloves is not a substitute for hand hygiene.

[Interim Guidance for a Public Health Response to Contain Novel or Targeted Multidrug-resistant Organisms \(MDROs\)](#)
[Infection Prevention and Control for *Candida auris*](#)

Cleaning and Disinfection

- ❑ CP-CRE and C. Auris can persist on surfaces in healthcare environments.
- ❑ Perform thorough routine (at least daily) and terminal cleaning and disinfection of patients' rooms and other areas where patients receive care (e.g., radiology, physical therapy) using an appropriate disinfectant.
- ❑ Clean and disinfect shared or reusable equipment (e.g., ventilators, physical therapy equipment) after each use.
- ❑ Label cleaned and disinfected equipment as such and store it away from dirty equipment.
- ❑ All healthcare personnel providing patient care should be trained on which mobile and reusable equipment they are responsible for cleaning and how to clean the equipment properly.
- ❑ Follow all manufacturer's directions for use of surface disinfectants and apply the product for the correct contact time.
 - ❑ Some products with C. albicans or fungicidal claims may not be effective against C. auris, and accumulating data indicate that products solely dependent on quaternary ammonia compounds (QACs) are NOT effective.



Auditing

- ☐ Conduct ongoing adherence monitoring of infection control practices and provide feedback to HCP
 - ☐ This could include audits for compliance of Hand Hygiene, PPE Use, and Cleaning/Disinfection
- ☐ Audits are an important means of noting when additional training in response to lapses may be needed. Audits include:
 - ☐ Direct observation or monitoring of healthcare personnel adherence to job-specific IP measures.
 - ☐ Formal audits include collection and aggregation of data to determine what proportion of time personnel are adhering to facilities policies and processes.
- ☐ Environmental Cleaning
 - ☐ Options for auditing practices include:
 - ☐ Florescent gel applied to surfaces prior to cleaning; highlighter applied to surfaces prior to cleaning; ATP testing of surfaces after cleaning.



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Onsite Infection Prevention and Control Assessments

- ❑ Health departments or other experts (ICAP) should conduct on-site IPC assessments at all healthcare facilities identified in the healthcare investigation and any outpatient facilities where patients or HCP may have had extensive contact with the index patient, such as wound care clinics.
- ❑ If multiple healthcare facilities are identified as part of the healthcare investigation, prioritize assessments for the facility currently caring for the index patient, for any facilities with evidence of transmission, and for high-acuity post-acute care facilities (e.g., LTACHs and vSNFs).
- ❑ Conduct IPC assessments on-site whenever possible:
 - ❑ If an on-site assessment cannot be conducted promptly, consider a remote video assessment in the interim, prior to the on-site assessment.
 - ❑ If many facilities are identified as part of the healthcare investigation, consider using remote video assessment to rapidly initiate identification and mitigation of IPC gaps and determine which facilities to prioritize for on-site assessments first.
 - ❑ If a facility has recently participated in a recent infection control assessment (e.g., in the last three months), a repeat assessment may not be needed, but health departments should assess the facility's progress in mitigating previously identified infection control gaps



THANK YOU

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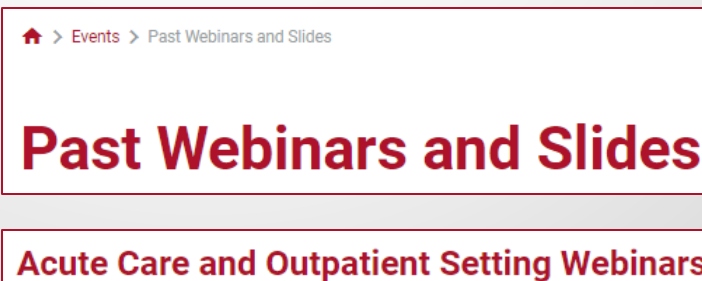
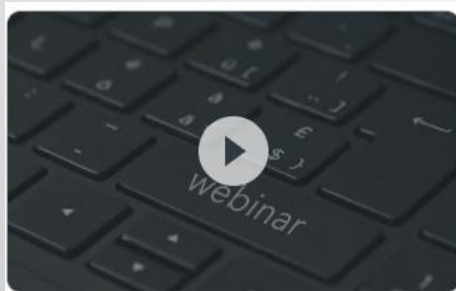
QUESTIONS?

Questions & Answer Session

- Please use the Q&A box in the webinar platform to type a question to be read aloud.
 - If your question is not answered during the webinar, please call (402) 552-2881 Monday – Friday 8:00 am – 4:00 pm CST to speak with one of our Infection Preventionists or e-mail your question to nebraskaicap@nebraskamed.com

Slides & Webinar Recordings Available

- During this webinar, slides are available on the [NE ICAP Acute Care webpage](#)
- Visit the [NE ICAP Past Webinars and Slides webpage](#)
 - The slides and a recording of this webinar will be posted soon after the webinar
 - Also, various recent NE ICAP webinar slides and recordings are available



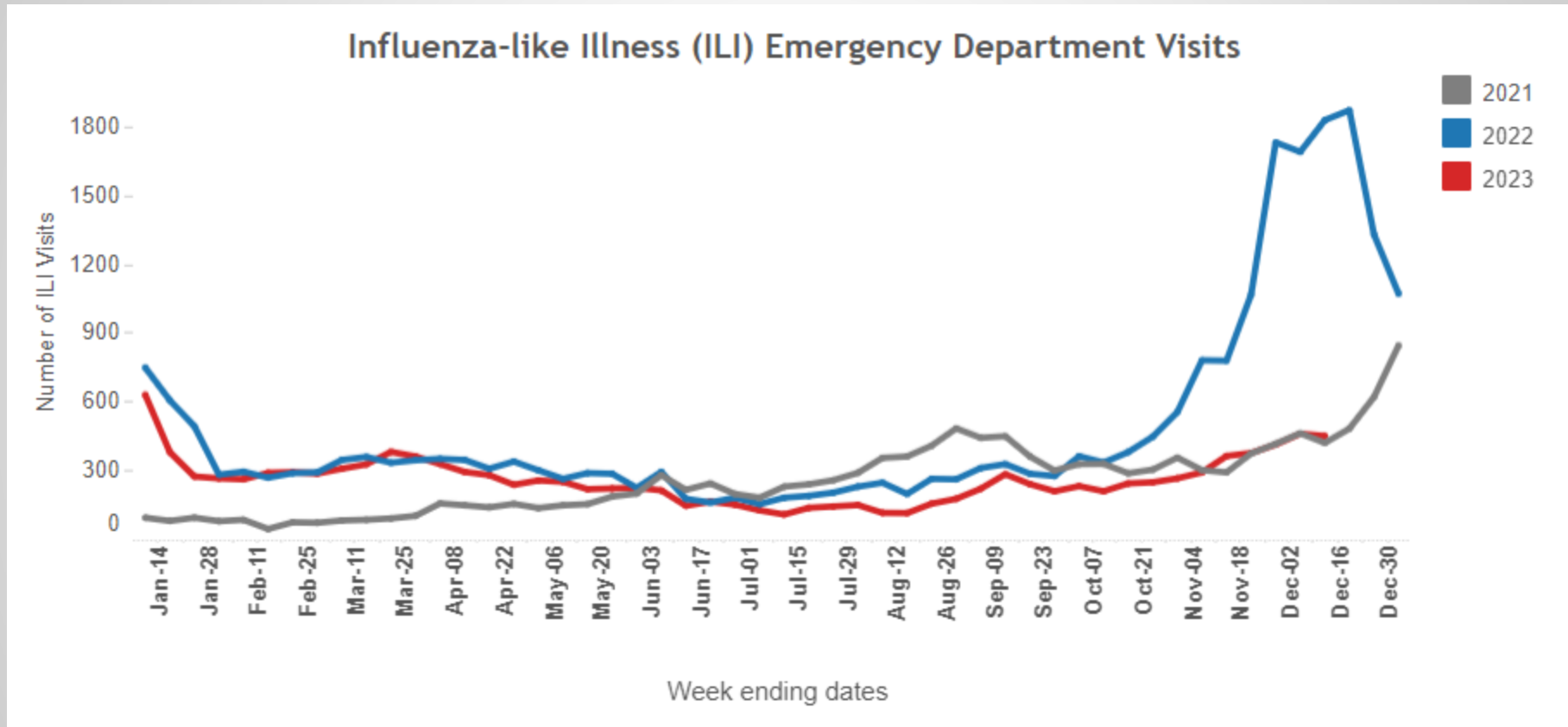
Respiratory Season Update

Juan Teran, MD

Medical Director, NE ICAP



Influenza-like Illness (ILI) report

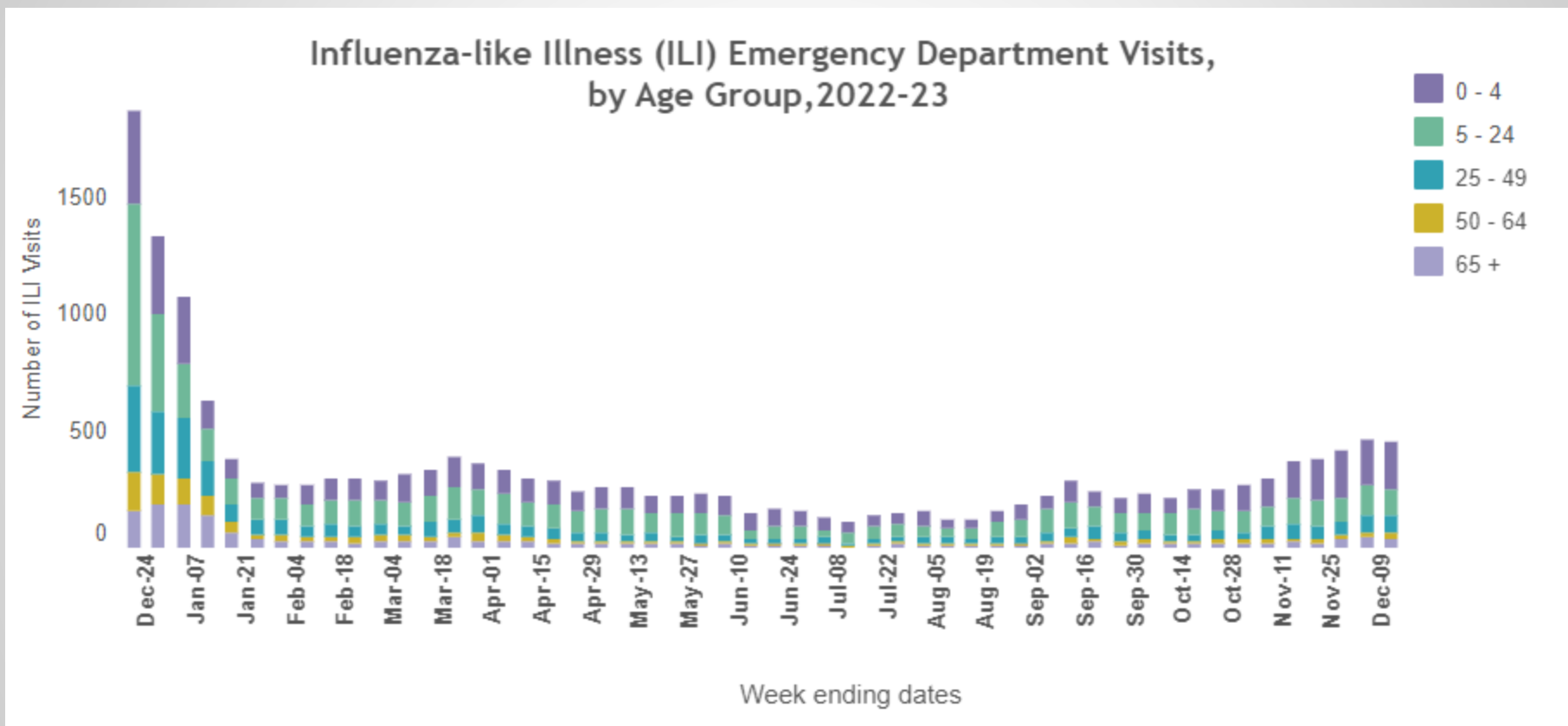


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ILI Emergency Visits By Age Group

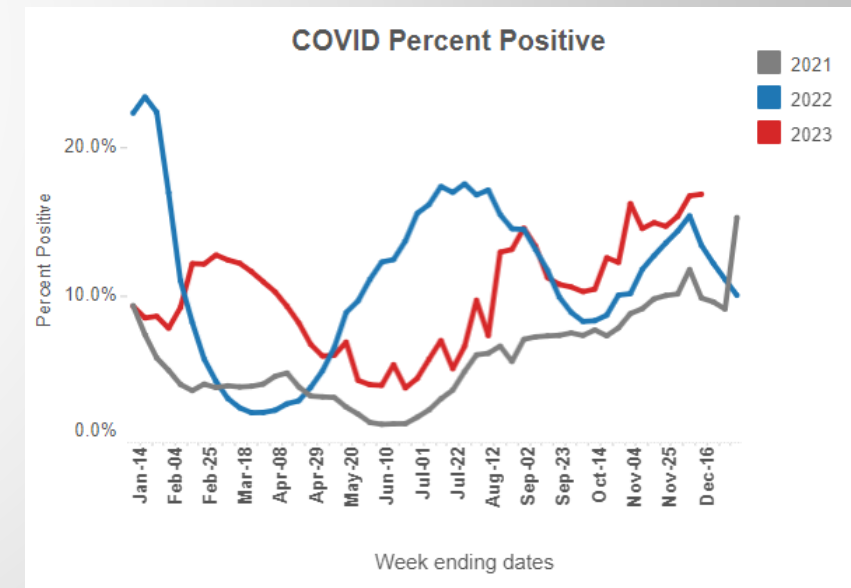
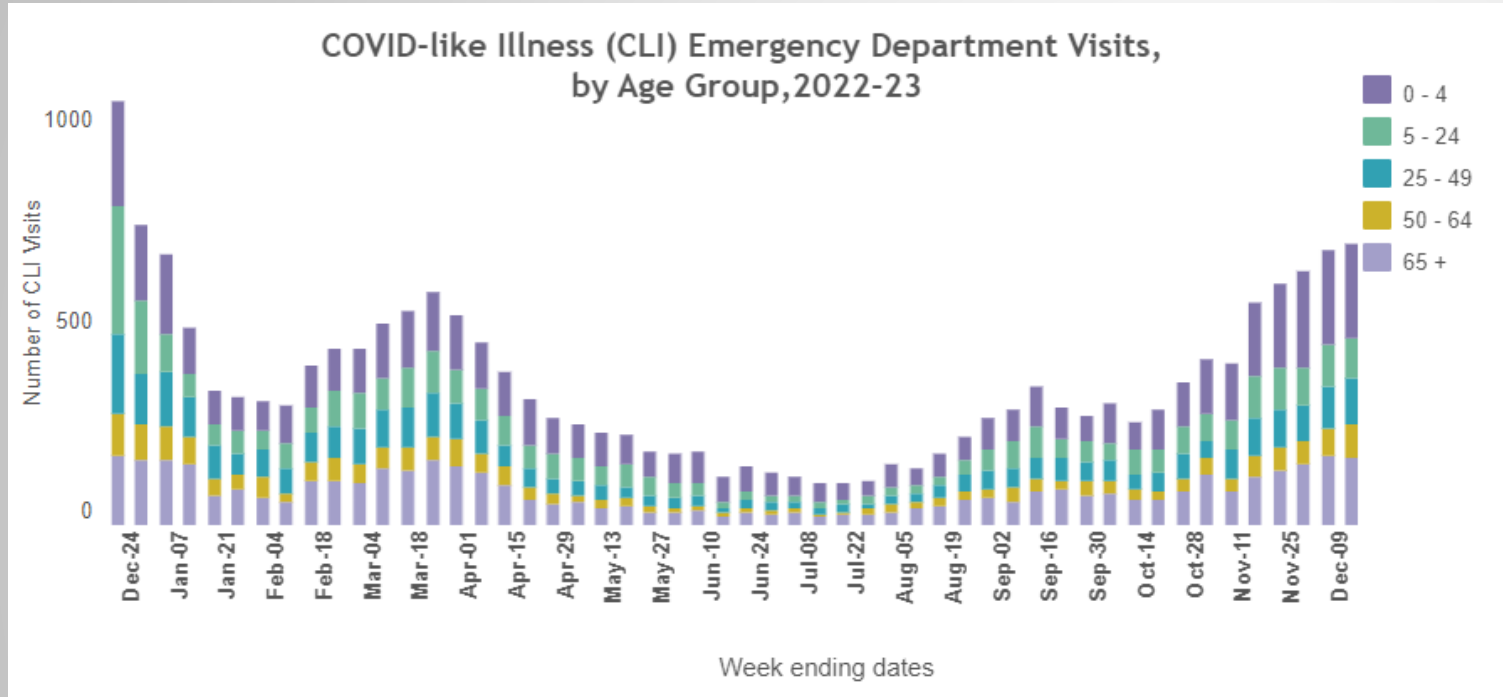


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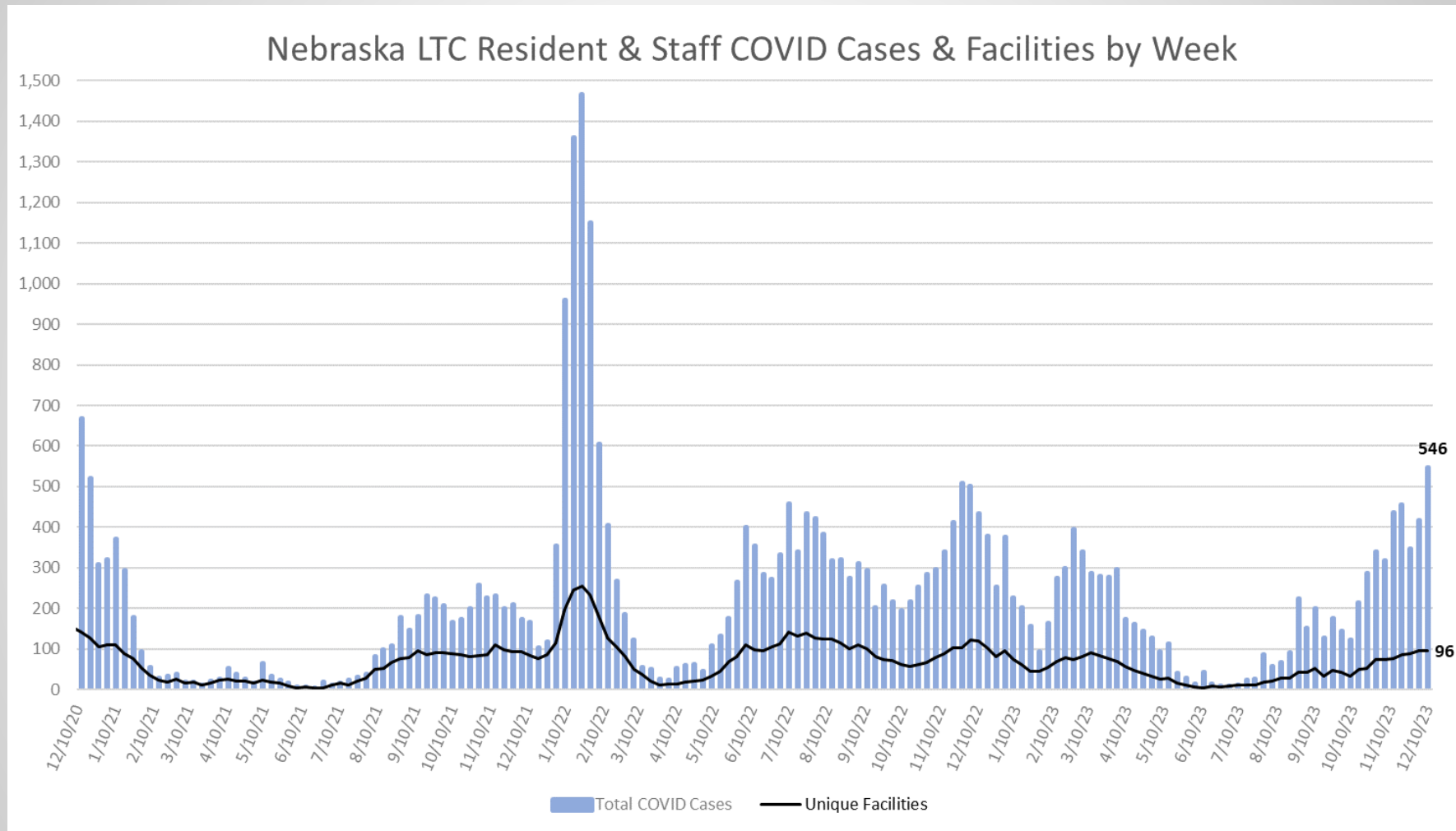
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NE DHHS COVID Data



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COVID Cases Long Term Care

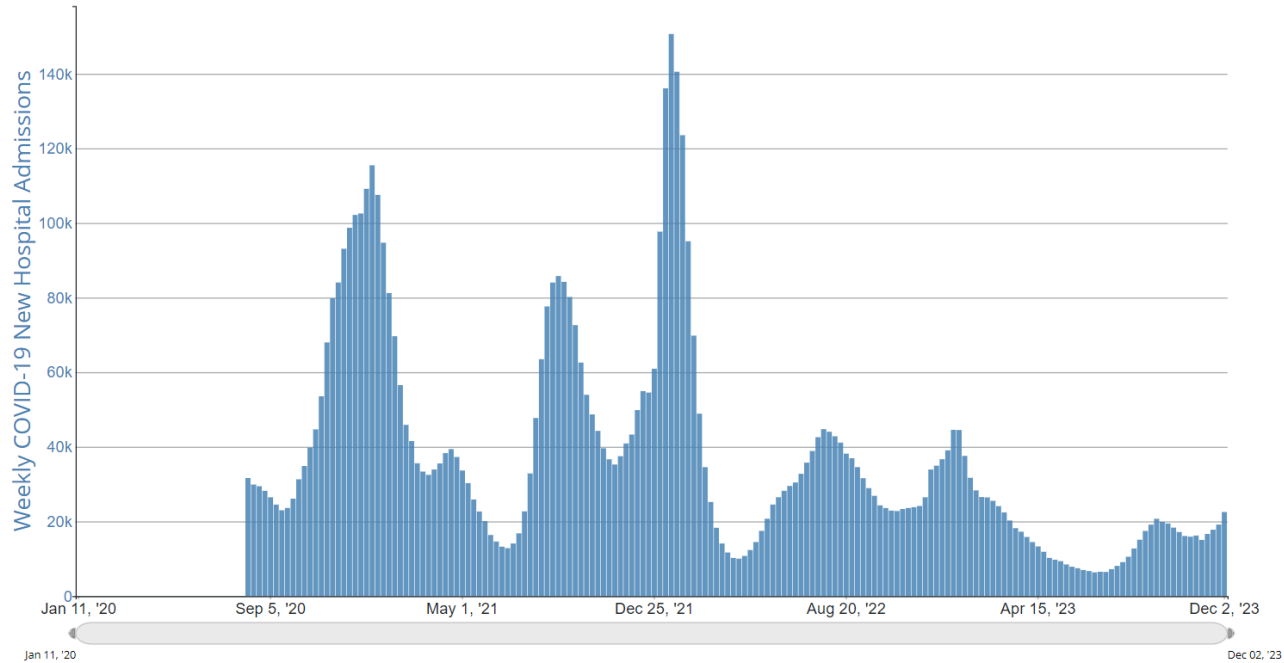


Source: Unofficial Counts Compiled by Nebraska ICAP based on data reported by facilities and DHHS; Actual Numbers may vary slightly

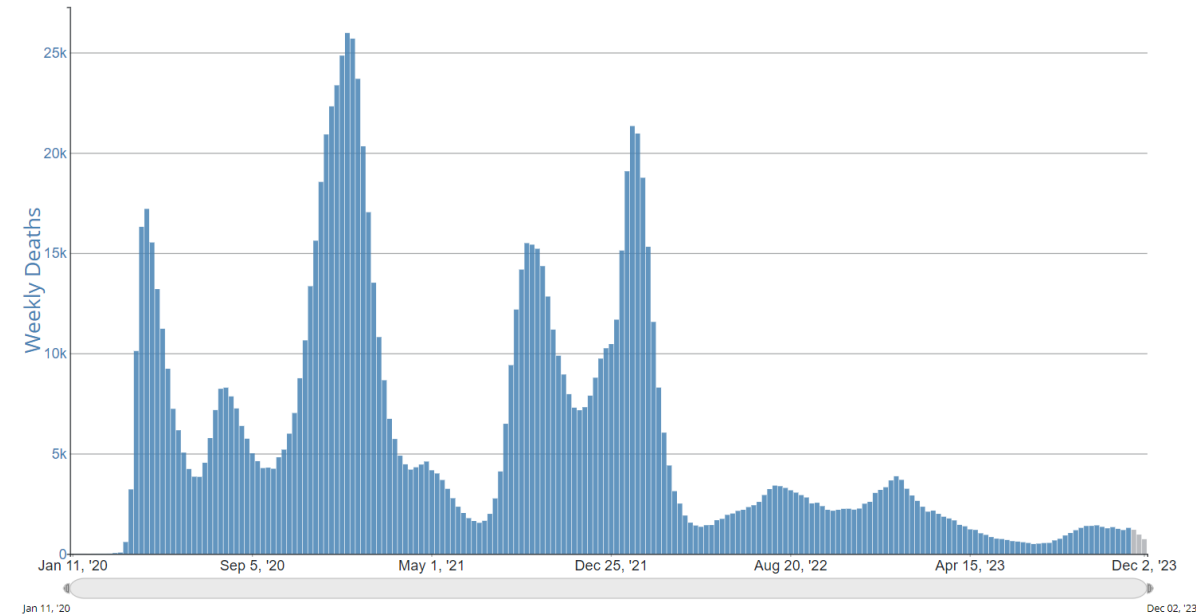


COVID Rate of Hospitalizations US

COVID-19 New Hospital Admissions, by Week, in The United States, Reported to CDC

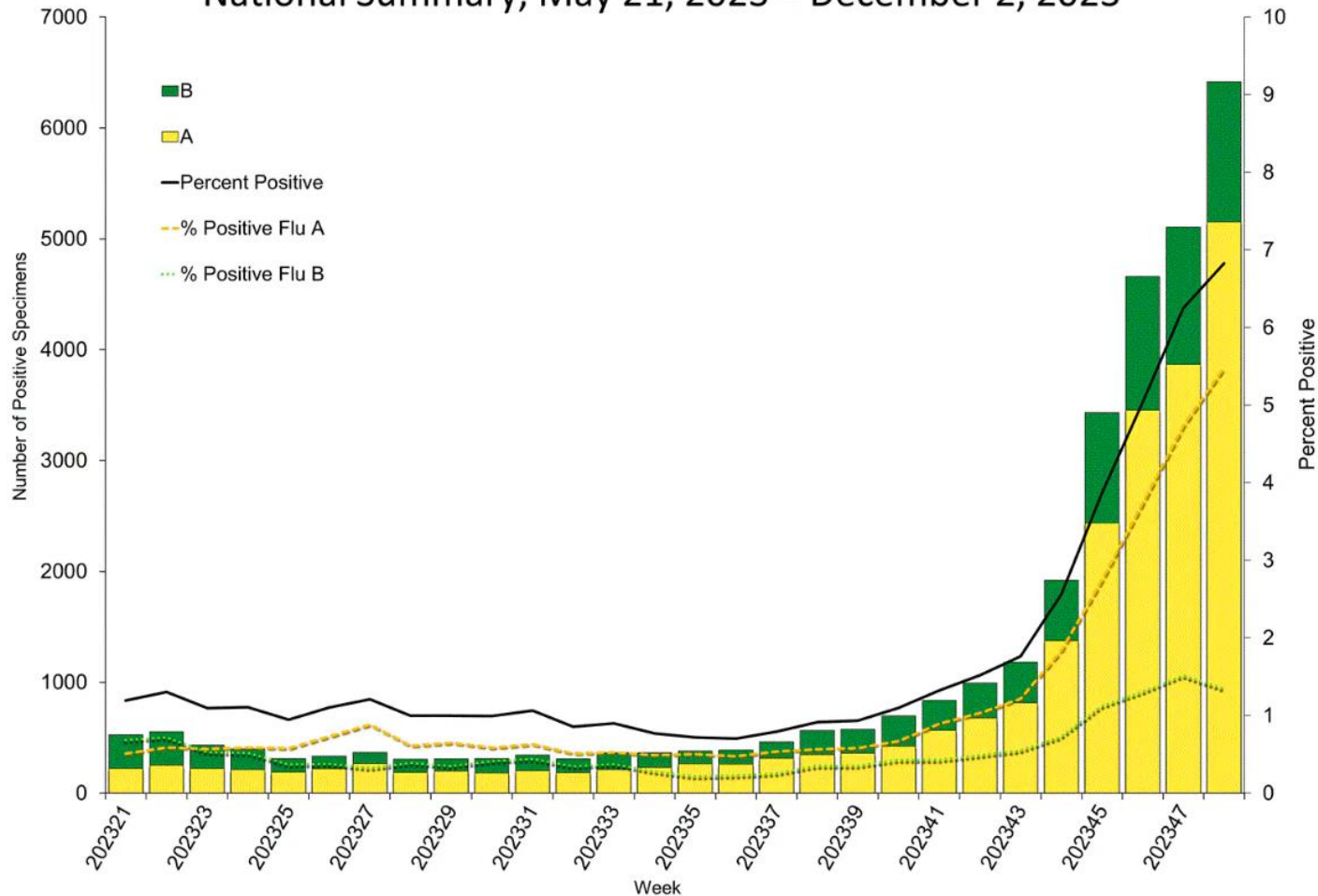


Provisional COVID-19 Deaths, by Week, in The United States, Reported to CDC

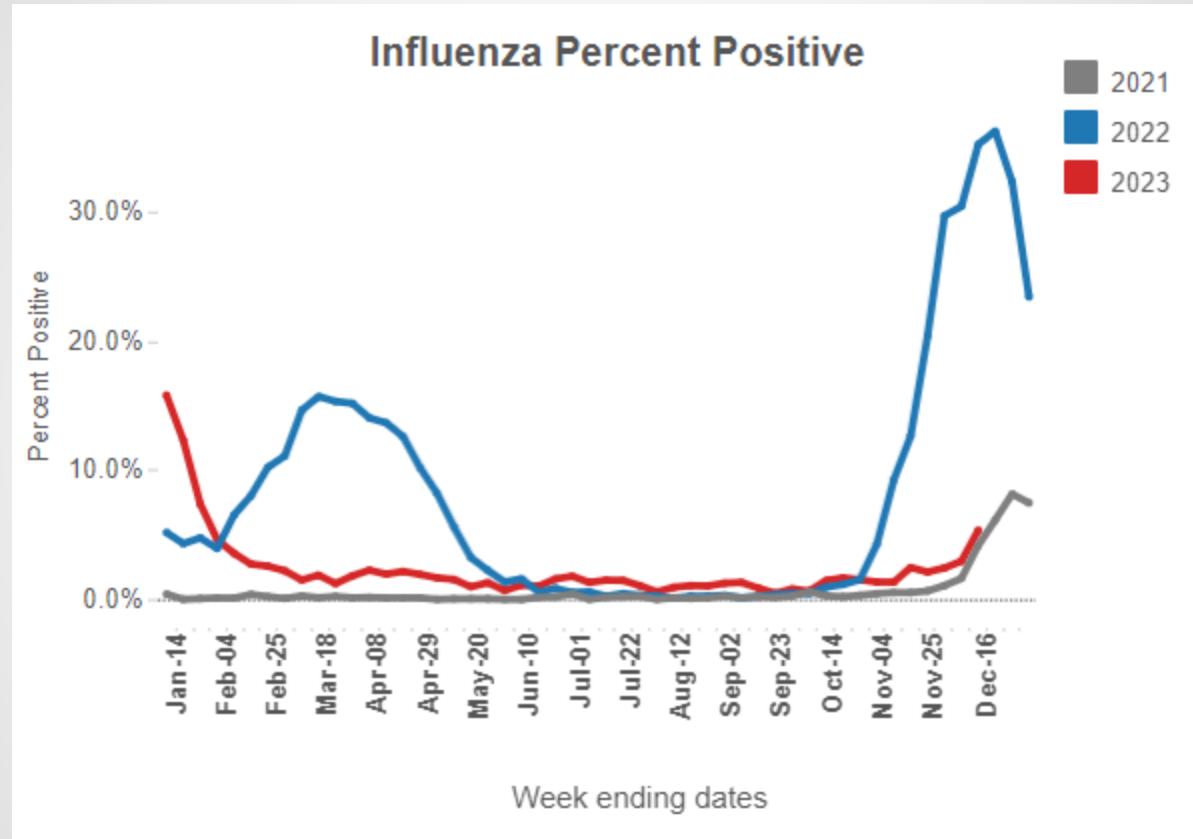


Influenza Report CDC

Influenza Positive Tests Reported to CDC by U.S. Clinical Laboratories,
National Summary, May 21, 2023 – December 2, 2023



Influenza NE DHHS report

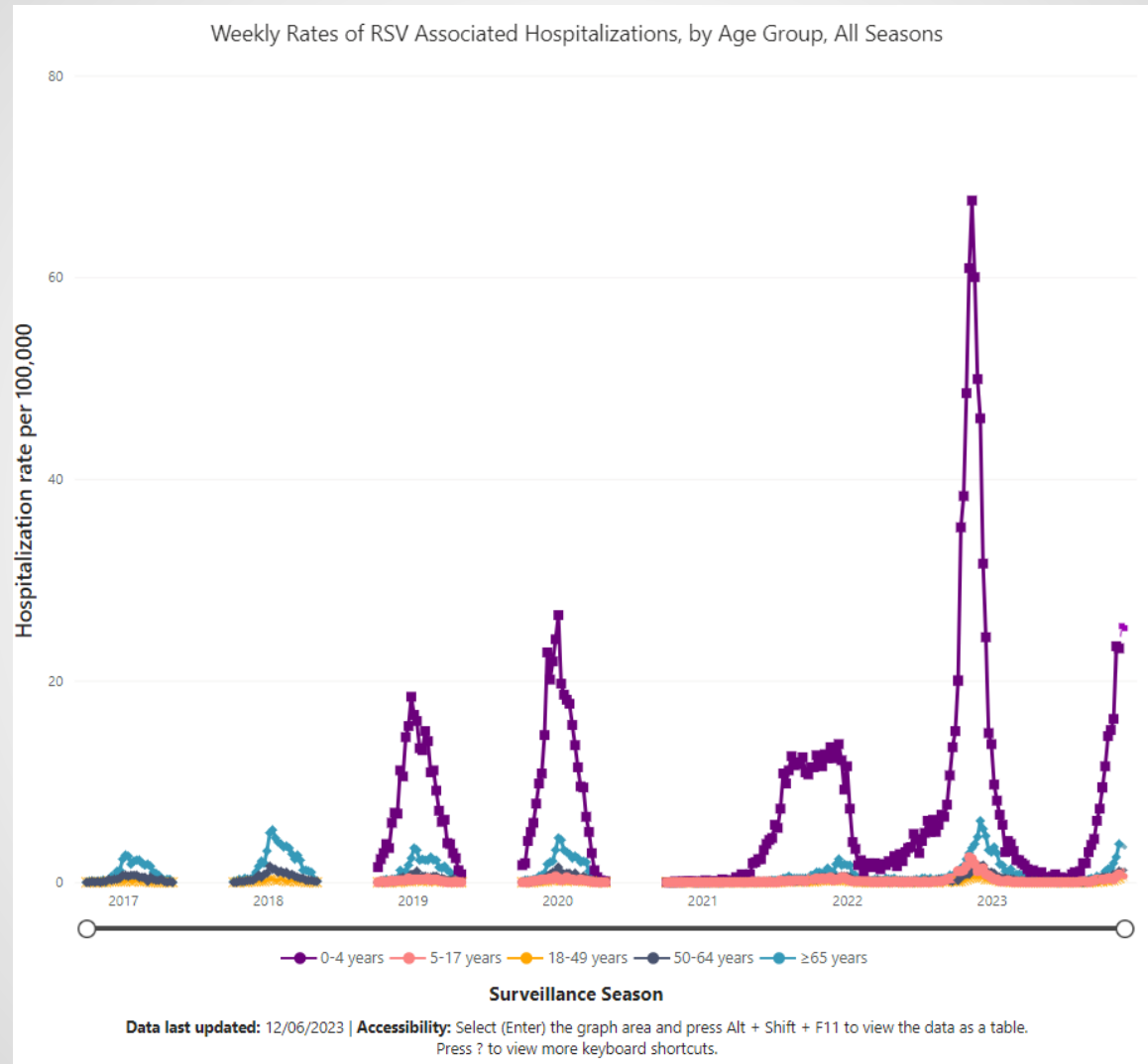


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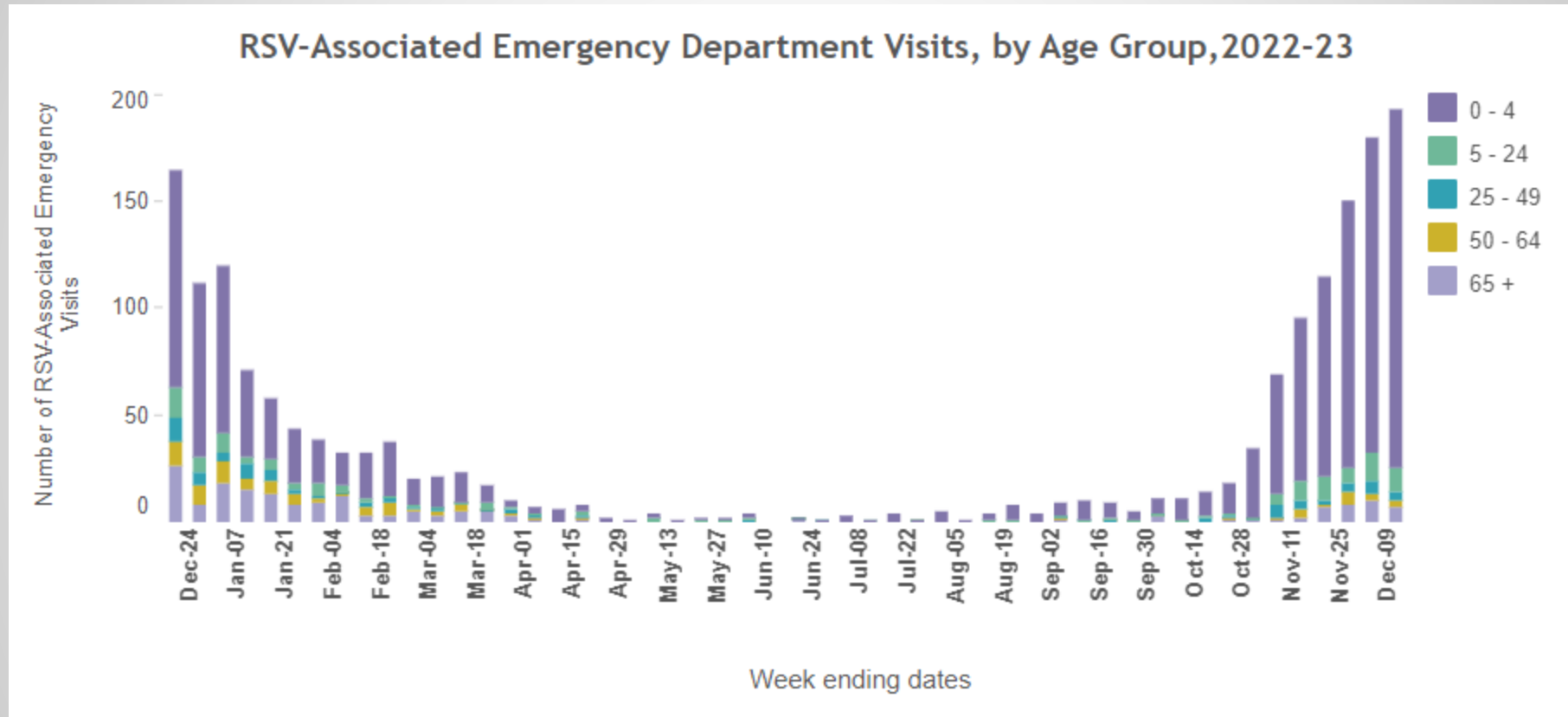
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RSV Hospitalization Rate US



RSV ER Visits By Age Group



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Misc. Updates & Upcoming Educational Opportunities

Rebecca Martinez, BSN, BA, RN CIC
Infection Preventionist, NE ICAP



Amended Regulations for Hospitals

Title 175 Health Care Facilities And Services Licensure

View Title 175 on the Secretary of State's website. [↗](#)

Chapter 1 **Adopted 3/12/2023**
General Facility and Services Regulations

Chapter 2
(Reserved)

Chapter 3 **Amended 3/22/2004**
Regulations and Standards Governing Centers for the Developmentally Disabled

Chapter 4 **Amended 4/3/2007**
Assisted Living Facilities

Chapter 5 **Amended 6/16/2008**
Adult Day Services

Chapter 6 **Amended 6/23/2012**
Children's Day Health Services

Chapter 7 **Amended 1/16/2007**
Health Clinics

Chapter 8 **Amended 11/3/2020**
Pharmacies

Chapter 9 **Amended 11/12/2023**
Hospitals

Chapters 10- 11
(Reserved)

- Effective 11/12/2023, the regulations for hospitals were amended.
- This Title 175 Chapter 9 – Hospitals should be reviewed within your facility.
- Note that infection control section is now covered in Title 175 Chapter 1 – General Facility and Services Regulations which applies to healthcare facilities in general.
- With these changes, some of your prior links may no longer work and access to the regulations may look a little different.

<https://dhhs.ne.gov/Pages/Title-175.aspx>

New Ways to Access Rules & Regulations

The screenshot shows the top navigation bar of the Nebraska Rules and Regulations website. The main header is 'Rules and Regulations'. Below it, there's a search bar with the text '175 NAC 9' entered. To the right of the search bar is a yellow 'Search' button. The page also features links for 'Browse Rules by Agency' and 'Proposed Rules & Regulations Docket'.

< SOS.NEBRASKA.GOV Rules Home Page About Rules & Regulations Login Options

Rules and Regulations

Search Rules & Regulations [Browse Rules by Agency](#) [Proposed Rules & Regulations Docket](#)

Welcome to the new home for the Nebraska Administrative Code!

As part of a new system to move rule & regulation review and approval to a fully electronic process, the Secretary of State has transitioned to a new filing and library system for the Code. This new library will be more user friendly, more accessible, and automatically updated whenever a new rule is adopted, amended, or repealed. You can see more about this new system on our About page [here](#).

This page allows you to search the entire Code by keyword.

If you want to [Browse Rules by Agency](#) you can click this link to proceed to that page.

Rules and Regulations Search

175 NAC 9 Search

<https://rules.nebraska.gov>

[View Chapter](#)

Chapter

TITLE 175 HEALTH CARE FACILITIES AND SERVICES LICENSURE

CHAPTER 9 HOSPITALS

[Download PDF](#)

Subscribe to the NE DHHS Health Alert Network (HAN) To Stay Updated

<https://dhhs.ne.gov/pages/Health-Alert-Network.aspx>

Health Alert Network

 Subscribe For Updates

Last Updated: December 12, 2023

About the Health Alert Network

The Health Alert Network (HAN) is a nationwide system for coordinating and distributing important information about public health events. It helps us strengthen our emergency preparedness at the local, state and federal levels.

Nebraska Department of Health and Human Services (NDHHS) uses Health Alert Network (HAN) for sharing important and timely information about public health incidents and prevention/treatment guidelines to health care providers, hospitals, laboratories, pharmacies, veterinarians, dentists, long term care/nursing facilities, Tribal health centers and local health departments by email and text messages.

Level of Communication Types:

- **Health Alert:** Conveys the highest level of importance; warrants immediate action or attention.
- **Health Advisory:** Provides important information for a specific incident or situation; might not require immediate action.
- **Health Update:** Provides updated information regarding an incident or situation; unlikely to require immediate action.

NE DHHS HAN 11 22 2023 Recall on Certain Brands of Saline and Sterile Water Products

Nebraska Department of Health and Human Services

Health Alert Network

ADVISORY
November 22, 2023

Recall on Certain Brands of Saline and Sterile Water Medical Products

The U.S. Food and Drug Administration recently issued a "Safety Communication" warning consumers, health care providers, and health care facilities not to use recalled saline (0.9% sodium chloride) and sterile water medical products manufactured by **Nurse Assist, LLC**. The potentially contaminated products are sold under various brands and include a wide range of product types with expiration dates that extend to 2025 and beyond.

Water-based medical products include sterile saline (0.9% sodium chloride) and sterile water medical products used for irrigation or flushing of wounds or medical tubing, such as IV catheters and urinary catheters. Water-based products may also be used for other medical purposes.

The FDA recommends the following for Consumers, Health Care Providers, and Facilities.

- Check your supply of saline (0.9% sodium chloride) and sterile water medical products (bottles, spray cans, cups, and prefilled syringes) to find out if you have any of the recalled products at home or in your health care facility's inventory.
- Do not use these recalled products and follow the recommendations in the company's [recall](#) announcement.
- Be aware that these recalled products may be available as individual units or may be included as part of a kit.
- If you have questions about this recall, contact Nurse Assist, LLC by phone at 800-649-6800 Monday through Friday between the hours of 8:00 am and 4:30 pm CST or by e-mail at productremovalinfo@nurseassist.com.
- Report any problems with saline and sterile water medical products by Nurse Assist, LLC to the FDA.

For further information including details on affected products (brand names, descriptions and unique device identifiers), and instructions on reporting problems to the FDA please refer to the "Safety Communication" at the following link: <https://www.fda.gov/medical-devices/safety-communications/2023-safety-communications>

In addition to reporting problems to the FDA as described in the "Safety Communication," healthcare providers should also report any healthcare-associated infections secondary to the use of these recalled products to Nebraska Department of Health and Human Services using the following link <https://epi-dhhs.ne.gov/redcap/surveys/?s=7XWYTTPPFHAAP3ALX>

Matthew Donahue, MD
State Epidemiologist
402-471-2937

Salman Ashraf, MBBS
HAI/AR Medical Director
402-219-3115

Timothy Tesmer, MD
CMO Public Health
402-471-8566

Subscribe to the CDC Health Alert Network (HAN)

Health Alert Network (HAN)

[Print](#)



CDC's Health Alert Network (HAN) is CDC's primary method of sharing cleared information about urgent public health incidents with public information officers; federal, state, territorial, tribal, and local public health practitioners; clinicians; and public health laboratories.

CDC's HAN collaborates with federal, state, territorial, tribal, and city/county partners to develop protocols and stakeholder relationships that will ensure a robust interoperable platform for the rapid distribution of public health information.

CDC's HAN is a strong national program that provides vital health information and the infrastructure to support dissemination at state and local levels. The majority of the state-based HAN programs have more than 90% of their populations covered under the HAN umbrella. The HAN messaging system directly and indirectly transmits Health Alerts, Advisories, Updates, and Info Services to more than one million recipients.

HAN Archive, Types & Jurisdictions

- [HAN Archive](#)
- [HAN Message Types](#)
- [HAN Jurisdictions](#)

Receive HAN Updates

- [Sign Up for HAN Email Updates](#)
- [Subscribe to the HAN RSS Feed](#)

<https://emergency.cdc.gov/han/>

Join Us on Upcoming Webinars

- **January 10, 2024**

- Infection Prevention in Health Care Providers: Employee Health Review and FAQs
 - Richard Starlin, MD

- **February 14, 2024**

- To Be Determined (TBD)
 - *Tell Us What You Would LOVE To Have Presented on VALENTINE'S DAY*

- If you have suggestions for future webinar topics or would like to learn more about a topic one on one, please contact us with your request by calling at 402.552.2881 or email nebraskaICAP@nebraskamed.com. You can also include them in the continuing education (CE) survey.

*Do you an Employee Health question for the next webinar related to infection prevention? Send your FAQ! Call or email NE ICAP or Rebecca Martinez
remartinez@nebraskamed.com*



Image Courtesy of rawpixel.com

Focused ICAR Visits Are Available

Nebraska ICAP is available for on-site infection control assessment and response (ICAR) non-regulatory voluntary visits. Based on your request, we can provide a more focused assessment including some, or all of the below domains. An example would be an SSI focused ICAR looking at surgical suite practices including device reprocessing.

- Surgical Site Infection (SSI) Prevention
- Device Reprocessing including sterilization and high-level disinfection
- Infection Control Program and Infrastructure
- Hand Hygiene
- Personal Protective Equipment (PPE)
- Catheter-associated Urinary Tract Infection (CAUTI) Prevention
- Central Line associated Bloodstream Infection (CLABSI) Prevention
- Ventilator-associated Event (VAE) Prevention
- Injection Safety
- Clostridioides difficile infection (CDI) Prevention
- Environmental Cleaning & Disinfection (ATP testing offered during visit)
- Systems to Detect, Prevent, and Respond to HAIs and MDROs
- Healthcare Personnel Safety
- Water Management
- COVID-19 Prevention and Response
- Antimicrobial Stewardship
 - The NE ASAP program can provide comprehensive assessments



Please let us know if interested
nebraskaicap@nebraskamed.com
(402) 552-2881

Inpatient Dialysis Assessments



INJECTION PRACTICES

HAND HYGIENE



MEDICATION PREP

PPE USE

AUDIT IPC PRACTICES



FISTULA/GRAFT ACCESS

CATHETER ACCESS



DIALYSIS SITE CARE

CLEANING & DISINFECTION

Social Media



Follow us on Facebook at

<https://www.facebook.com/nebraska.icap.asap>



Follow us on LinkedIn at

<https://www.linkedin.com/company/nebraska-icap-asap>



Now on Instagram! Follow us at

https://www.instagram.com/nebraska_icap_asap/



Subscribe to our YouTube at:

https://www.youtube.com/@nebraska_icap_asap

ICAP Contact Information

Call 402-552-2881

Office Hours are Monday – Friday

8:00 AM - 4:00 PM Central Time

Weekends and Holidays 8:00-4:00

On-call hours are available for emergencies only



Scan the QR Code to be taken to
our [NE ICAP Contact Form](#).

You can request to be connected to an
Infection Preventionist that specializes in your area,
get added to our setting specific communication list
for webinar and training invites,
sign up for newsletters and reminders,
or request an ICAR review for your facility.



Webinar CE Process

1 Nursing Contact Hour is awarded by NE Medicine

- Nebraska Medicine is approved as a provider of nursing continuing professional development by the Midwest Multistate Division, an accredited approver by the American Nurses Credentialing Center's Commission on Accreditation.

CNE Nursing Contact Hours:

- ✓ Completion of survey is required.
 - The survey must be specific to the individual obtaining credit (i.e.: 2 people cannot be listed on the same survey)
 - Survey functionality is lost on mobile devices
- ✓ One certificate is issued quarterly for all webinars attended
 - Certificate comes directly from ICAP via email