## **MEDICAL MANAGEMENT OF** CHEMICAL EXPOSURES

#### KATHY JACOBITZ, MHA, BSN, RN, CSPI

#### FEBRUARY 27 | 11:00AM - 12:00PM, CST | ZOOM

Join Kathy Jacobitz and Josh Trebach of the R7DHRE Chemical Specialty Team, as they discuss the recognition and medical management of selected chemical threats, an overview of the **R7DHRE Chemical Specialty Team, CHEMPACKs, and other** chemical exposure resources.



#### Objectives

- Describe the toxicity and treatment of exposures to nerve agents, asphyxiants, irritant gases, and acids.
- Discuss the roles and responsibilities of poison centers and the R7DHRE Chemical Specialty Team in the medical management of chemical and other hazardous materials incidents.
- Discuss the availability of clinical guidelines, CHEMPACKs, and other evidence-based chemical exposure management resources.

#### REGISTER HERE

This webinar is designed for physicians, nurses, first responders, healthcare coalitions, public health, emergency managers, federal and state partners and other professionals throughout Region 7 (IA, KS, MO, and NE) and beyond.

#### Continuing education credits will be provided.



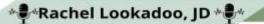
In support of improving patient care, University of Nebraska Medical Center is jointly accredited by the Accreditation Council for Continuing Medical Education (ACCME), the Accreditation Council for Pharmacy Education (ACPE), and the American Nurses Credentialing Center (ANCC), to provide continuing education for the healthcare team.





#### CLIMATE AND HEALTH IN **REGION 7**

Understanding the Impacts and Preparing for the Future



#### MARCH 6 | 12:30-1:30PM, CST | ZOOM

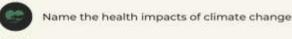


Climate change and extreme climate events are already having impacts across Region 7, These can include immediate impacts to individual and community health, as well as to access to healthcare. This presentation will review the way climate change impacts health generally, the various extreme climate events that have occurred in Region 7, and the ways that healthcare and public health practitioners can prepare for and mitigate these impacts.

# TARGET AUDIENCE

This webinar is designed for physicians, nurses, first responders, healthcare coalitions, public health, emergency managers, federal and state partners and other professionals throughout Region 7 (IA, KS, MO, and NE) and beyond.

#### OBJECTIVES









Describe potential interventions for public health and healthcare preparedness for climate change and extreme climate events.

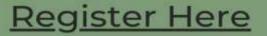
#### CONTINUING EDUCATION

In support of improving patient care, University of Nebraska Medical Center is jointly accredited by the Accreditation Council for Continuing Medical Education (ACCME), the Accreditation Council for Pharmacy Education (ACPE), and the American Nurses Credentialing Center (ANCC), to provide continuing education for the healthcare team.



Continuing education credits will be provided.

JOINTLY ACCREDITED PROVIDER\* REPORTED AND A CONTRACTOR FROM STORE





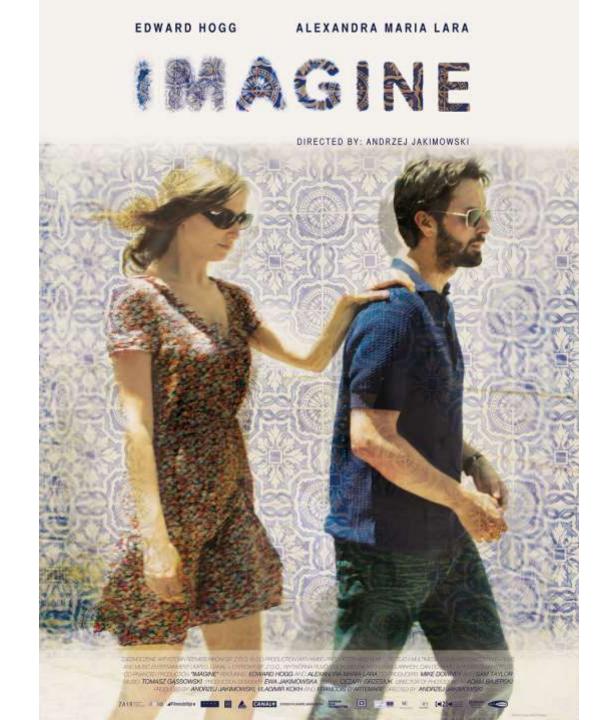
Nebraska Updates TUESDAY 02/20/2024



DEPT. OF HEALTH AND HUMAN SERVICES

- > International and National Updates
- > Infectious Disease Manual for Schools- Andrea Riley
- > Public Health and Coalition Leader Updates
- ICAP LTC & ALF Updates Juan Teran
- > Other Updates All

## **INTERNATIONAL & NATIONAL UPDATES**



# COVID-19 Update

February 20, 2024

Democracy Dies in Darknes

# CDC plans to drop five-day covid isolation guidelines



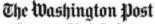
February 13, 2024 at 6:00 a.m. EST

By Lena H. Sun



"CDC officials acknowledged in internal discussions and in a briefing last week with state health officials how much the covid-19 landscape has changed since the virus emerged four years ago, ... The new reality – with most people having developed a level of immunity to the virus because of prior infection or vaccination – warrants a shift to a **more practical approach**, experts and health officials say."

Covid-19 antigen home tests indicating a positive result. (Patrick Sison/AP)



Democracy Dies in Darkness

# CDC says fully vaccinated Americans no longer need masks indoors or outdoors in many cases

The relaxation of restrictions incentivizes people to get the shots and helps pave the way for a full reopening of society



- "We have all longed for this moment when we can get back to some sense of normalcy," CDC Director Rochelle Walensky said
- She also noted the rarity of breakthrough infections in those who are fully vaccinated and the lesser severity of the relatively few infections that have occurred.
- "This is a day that I think will be marked as a true **turning point** in the pandemic in the United States," said Richard Besser

# US COVID Deaths Since May 13, 2021: 590,000

The Washington Post Democracy Dies in Darkness

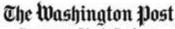
# CDC's new approach to covid means most Americans can go without masks

New guidelines reflect view that the U.S. has entered a potentially less dangerous phase of the pandemic

By Lena H. Sun, Dan Keating and Laura Meckler Updated February 25, 2022 at 3:33 p.m. EST | Published February 25, 2022 at 3:54 p.m. EST

- The new guidelines, which took effect Friday, reflect the administration's view that the United States has entered a different, potentially **less dangerous phase** of the pandemic.
- CDC officials said the shift reflects the reality that after more than two years of living with the virus, most communities have greater protection against severe disease because of widespread immunity gained from both vaccinations and infections, as well as the increased availability of treatments, testing and higher-quality masks.

## US COVID Deaths Since Feb 25, 2022: 236,000



Democracy Dies in Darkness

# CDC loosens coronavirus guidance, signaling strategic shift

By Lena H. Sun and Leel Achenbach Updated August 11, 2022 at 645 p.m. EDT | Published August 11, 2022 at 3:00 p.m. EDT

- The agency's **focus now is on highly vulnerable populations** and how to protect them not on the vast majority of people who at this point have some immunity against the virus and are unlikely to become severely ill.
- "The **current conditions of this pandemic are very different** from those of the last two years," CDC epidemiologist Greta Massetti said Thursday ...more favorable circumstances allow public health officials to focus on "sustainable measures to further reduce medically significant illness as well as to minimize strain on the health care system, while reducing barriers to social, educational, and economic activity."

## US COVID Deaths Since Aug 11, 2022: 133,000

# What the CDC Should Announce...

"In the recent fall and winter we have experienced another surge of COVID deaths and hospitalizations – thankfully less severe than during the first two years of the pandemic."

140 Weekly Death Rate Per 100K (age-adjusted Currently Hospitalized COVID-19 Patients 120 80 60 20 Jan 11, '20 Sep 19, '20 May 29, '21 Feb 5, '22 Oct 15, '22 Jun 24, '23 Feb 10, '24 Jan 11, '20 Feb 10, '24

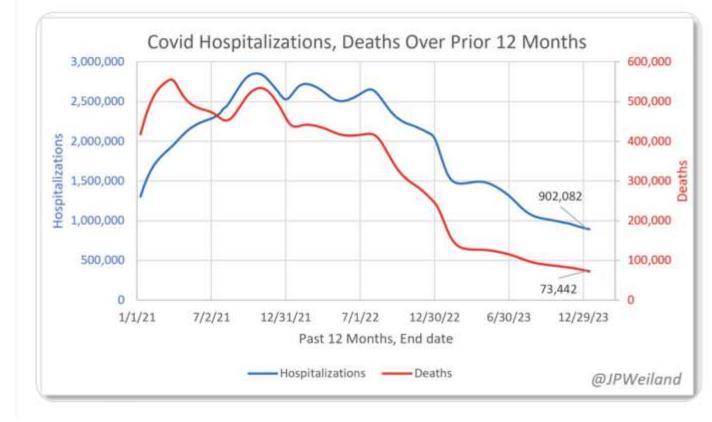
Currently Hospitalized Patients with Confirmed COVID-19 and COVID-19 Death Rate per 100,000 Population (Age-Adjusted), by Week, in The United States, Reported to CDC

JWeiland @JPWeiland

Current burden of Covid vs Influenza+Pneumonia, US (Acute Only):

Despite significant declines since 2021, reported covid deaths stand at 73,000 over the past 12 months, and hospitalizations at 900,000.

Both of these numbers are roughly double the anual burden of ILI+Pneumonia.



"COVID is still a major health threat. Last year, we still suffered roughly double the number of hospitalizations and deaths from COVID than we would expect from influenza in a typical year."



"We continue to experience among the highest rates of overall community transmission of COVID outside of the Omicron surge of January 2022."

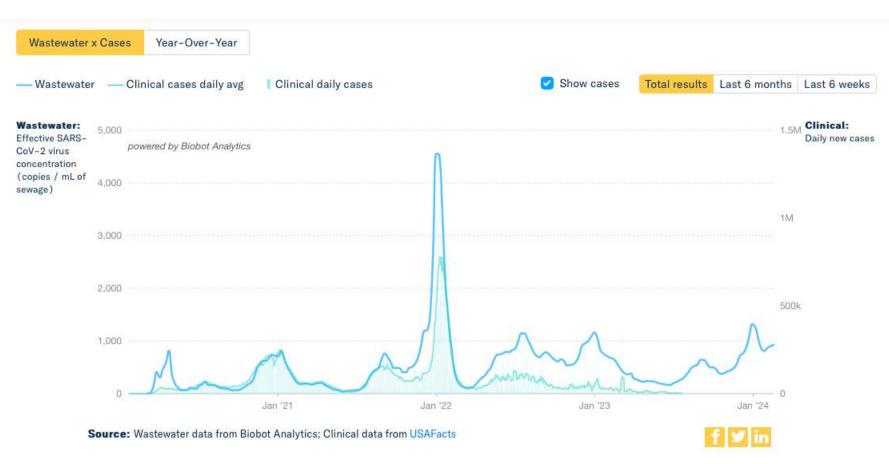
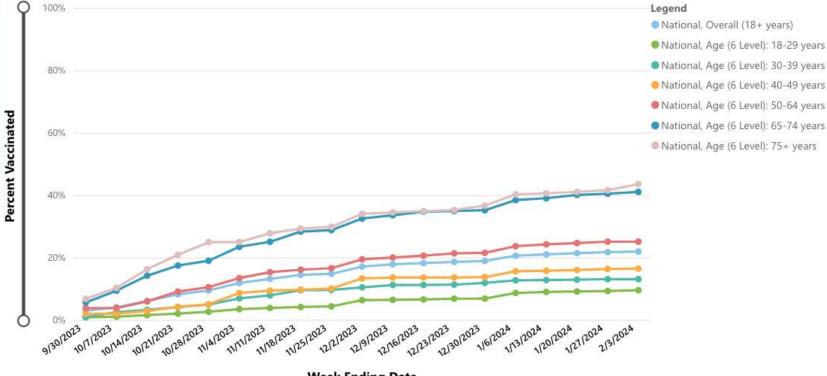


Figure 3A. Cumulative Percentage of Adults 18 Years and Older Vaccinated with the Updated 2023-24 COVID-19 Vaccine<sup>\*,†,‡,±</sup> Data Source: National Immunization Survey–Adult COVID Module

"Americans remain vulnerable, as our rates of upto-date vaccinations are quite low. We know that up-to-date COVID vaccination status dramatically lowers your chances of death, hospitalization, long COVID, and post-COVID adverse health effects."

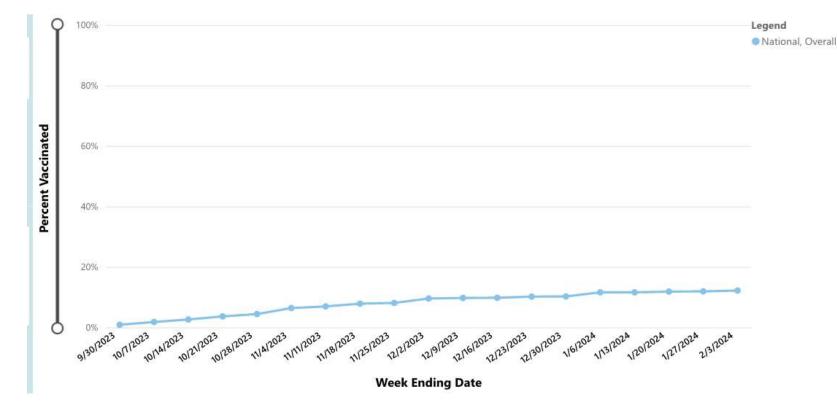


Week Ending Date

= 63

Figure 1A. Cumulative Percentage of Children 6 Months-17 Years Who Are Up to Date with the Updated 2023-24 COVID-19 Vaccine<sup>†,‡</sup>. Data Source: National Immunization Survey

"Up-to-date COVID vaccination status is even worse for American children and adolescents."



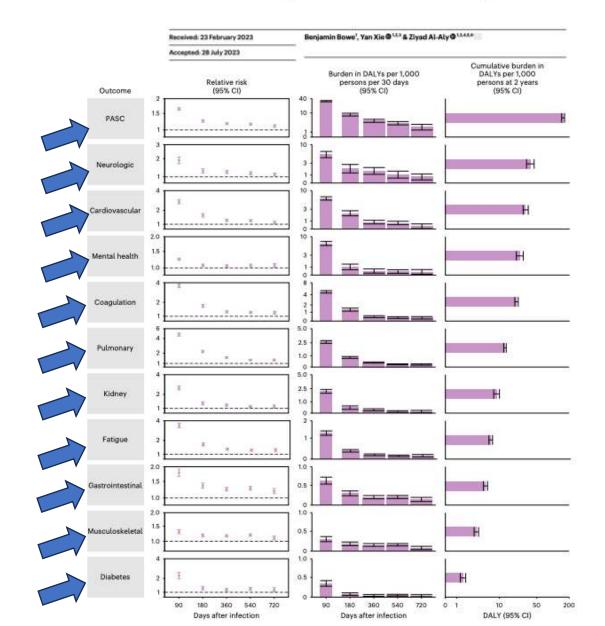
nature medicine

Article

https://doi.org/10.1038/s41591-023-02521-2

#### Postacute sequelae of COVID-19 at 2 years

"Long-COVID and post-COVID adverse health effects continue to be a threat to Americans and are creating a serious burden for our healthcare system."



6

JAMA Network Open	JAMA Network Open 🗸		Enter Search Term	
Views 4 003	Citations <b>0</b> Altmetri	145		
This Issue Views 4,092				

Cognitive Symptoms of Post-COVID-19 Con-

of the COVID States Project, an internet survey conducted by a consortium of academic sites (COVIDstates.org)26 between December 22, 2022, and January 7, 2023, and again April 5 to May 5, 2023, in all 50 US states and the District of Columbia. "

"We incorporated data from 2 waves

Adults 18 y/o and older.

Abhishek Jaywant, PhD<sup>1</sup>; Faith M. Gunning, PhD<sup>1</sup>; Lauren E. Oberlin, PhD

dition and Daily Functioning

> Author Affiliations | Article Information

February 14, 2024

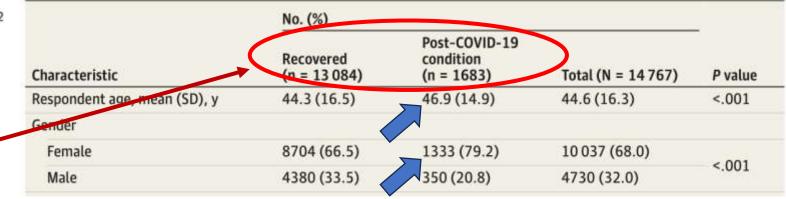


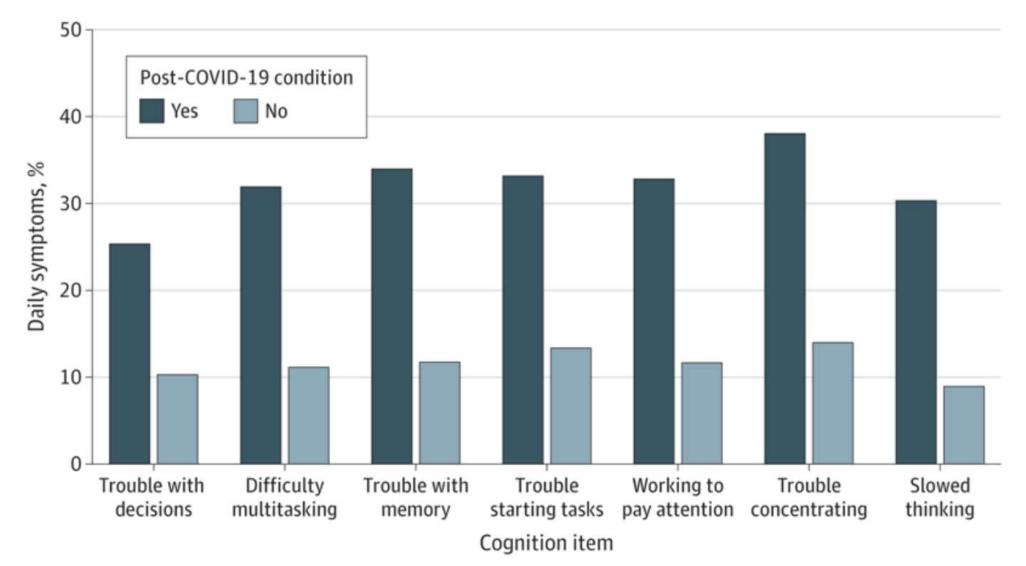
Table 1. Characteristics of Individuals Who Did or Did Not Report Persistence of Post-COVID-19 Condition

Symptoms for at Least 2 Months

JAMA Netw Open. 2024;7(2):e2356098. doi:10.1001/jamanetworkopen.2

## 13% experienced long COVID

# Figure 1. Proportion of Individuals Reporting Individual Cognitive Symptoms Occurring at Least Daily



Clinical Infectious Diseases

Timing and Predictors of Loss of Infectivity Among Healthcare Workers With Mild Primary and Recurrent Coronavirus Disease 2019 (COVID-19): A Prospective Observational Cohort Study

Stotania Dziecielowska,<sup>1</sup> Hugues Charest,<sup>23,4</sup> Tanya Roy,<sup>3,4</sup> Judith Fafard,<sup>3,4</sup> Sara Carazo,<sup>4,5</sup> Ines Lovade,<sup>3,4</sup> Jean Longtin,<sup>1</sup> Leighanne Parkes,<sup>12</sup> Syfvie Nancy Beaulac,<sup>1,4</sup> Jasmin Villaneove,<sup>4</sup> Patrice Savard,<sup>2,4</sup> Jacques Corbeil,<sup>5</sup> Gaston De Serres,<sup>43</sup> and Yves Longtin,<sup>17,0,0</sup>

"McGill University Faculty of Medicine, Monthial, Canada, "Faculta de modecine. Università de Monthial, Monthial, Canada, "Laboration de Santa Publique du Castler, Sainta Ares de Bollowa, Canada, "Institut Monteal de Santa Publique du Castleo, Day, Canada, "Environte Lavel, Daster, City, Canada, "Del du Castleo,—Università Lavel, Daster, Castle, "Del du Castleo, Del Castleo, Castleo, "Lovento, Castleo, Castl

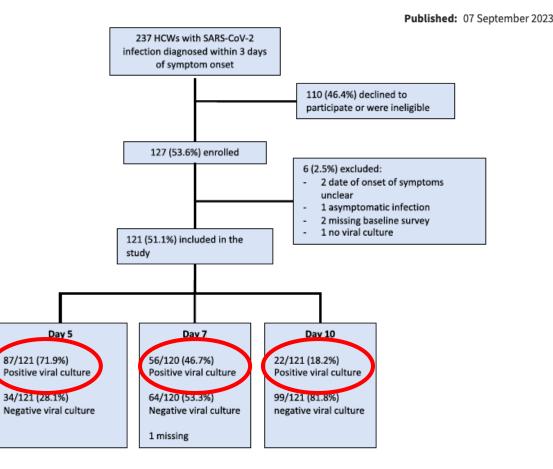


Figure 1. Flow diagram of participant selection into the study and proportion of infective participants at each follow-up visit. Abbreviations: HCW, healthcare worker; SARS-CoV-2, severe acute respiratory syndrome coronavirus 2.

"We know that people with COVID-19 continue to shed virus and present a transmission risk to others for an extended period of time – on average for 7-10 days."

# "What You Can Do Reduce COVID Impact:"

- "Make sure you and your family are up-to-date on COVID vaccines."
- "If you are sick, stay home. Isolate and avoid contact with others for at least seven days. With no symptoms and a negative molecular test, you can return to normal activities. Exercise precautions, such as masking, around immunocompromised persons for at least two weeks after infection."
- "If you feel ill, get a COVID test. If you test positive, talk to your physician about antiviral treatment, which can significantly reduce your risk of hospitalization and post-COVID complications."
- "When community levels of COVID are high (such as now) take precautions in high-risk settings: crowds, indoor public environments, and poorly ventilated spaces. Wear a well-fitting facemask."

# INFECTIOUS DISEASE MANUAL FOR SCHOOL NURSES

# The NICE Book

And New Resources for Schools

- Andrea Riley, RN BSN, Children's Nebraska School Health Liaison and Nebraska State School Nurse Consultant
- Chris Cashatt, BSN, RN, CIC, Nebraska ICAP Infection Preventionist

Statewide COVID Briefing, February 20, 2024



Nebraskan Infection Control for Education





# The Problem

### **Rural Health Disparities**

- Many rural schools don't have a nurse
- Some rural schools have a nurse but no doctor in town (lack of access to healthcare, or the nurse may be the only health provider the child sees)
- Smaller districts don't have the same access to resources as metro areas do, but still serve a diverse population, need CLAS resources
- Health information changes and takes time to find, schools already overloaded with demands
- Not that much school-specific health information available from federal level
- All schools, whether or not they have medically-trained staff, still need to uphold Communicable Disease regulations

# The Vision

- Create a manual to fill in the gaps of knowledge, a comprehensive 1-stop shop
- Make it free and accessible to everyone
- Center on equity
- Include Nebraska data for context
- Make it visually engaging and easy to understand
- Include Nebraska student voices
- Focus on staff safety as well as student health
- Give schools tools they can use (sample letters, forms, handouts)
- Give it some nice, snappy name (thanks Dr. Sato)!



# The Challenge: Write a Book in 4 Months

AAP's Managing Infectious Diseases in Schools Chapter Innovation Grant

- July 25<sup>th</sup>: Notified we had been awarded this grant
- August: Team assembled, outline written
- September: Writing, Handwashing poster contest launched, hoping for submissions in English and Spanish
- October: Writing, writing, writing, poster contest winners decided
- November: Reviewing, revising, and designing
- December: Continuing revisions, first finished copy submitted to AAP
- January: Book submitted to printer, online version created
- February: Printed copies (round 1) distributed, Flipping Book version created

# How we did it: (Really) NICE Partners

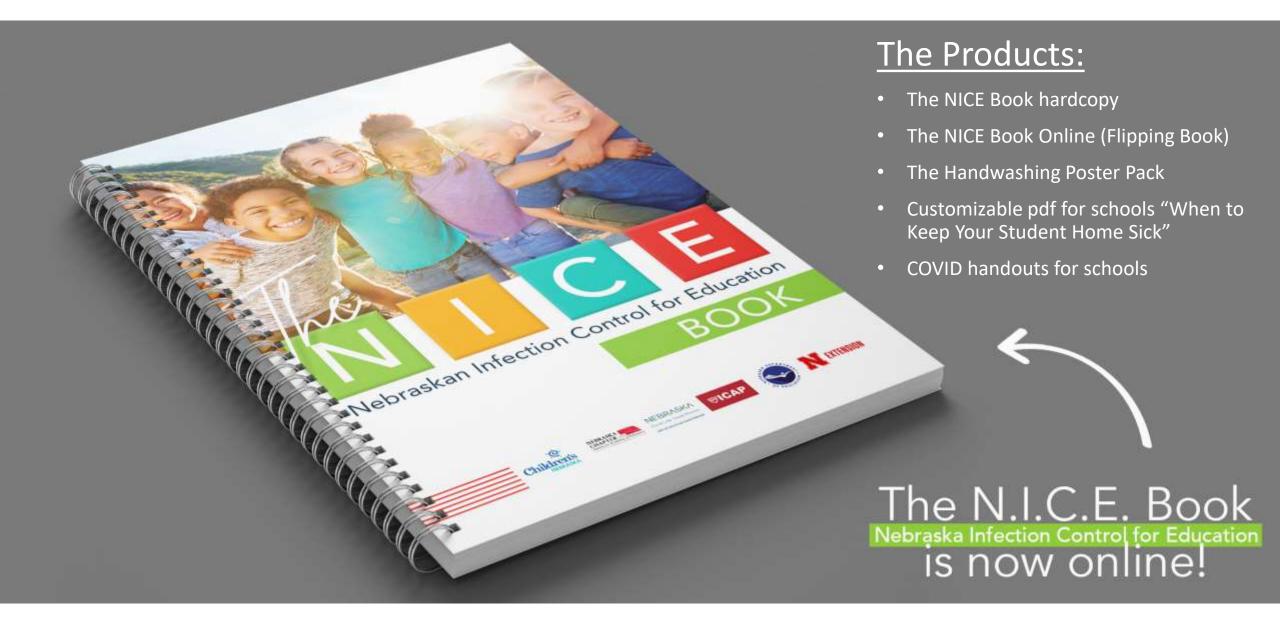
Key Agency Partners:

- DHHS
- ICAP
- NDE
- AAP
- Nebraska Extension
- Children's Nebraska

Many other individuals, such as School Nurse Advisors.

Dr. Sato as Medical Editor





# What's in the NICE Book?



## Hand Hygiene

## Promote hand hygiene





# Hand sanitizer vs washing hands with soap and water

Poster Contest





Environmental Cleaning & Disinfection

- Know the difference between cleaning, sanitizing, and disinfection.
- Learn how to select best and safest products to perform each step.
- Know how to use the products correctly to obtain desired results and keep kids and staff safe.
- Routine cleaning schedules versus enhanced cleaning

# Ventilation





#### **Increase Ventilation Rates**



#### Increase HVAC Filter Efficiency



Supplement with Portable Air Cleaners



Pets & Animals	
Oral Health	
Staff Wellness	





### **Enhanced Cleaning**



**Respiratory Outbreaks** 



Gastrointestinal Disease Outbreaks



Germs In Jall by Quinn from Ansley



What's included:

- Nebraska School Immunization Laws and FAQ
- Information/handouts for parents:
  - Vaccines for Children (VFC) program
  - COVID-19 vaccine information
  - CDC Vaccine Schedule information
  - Sample parent letter on Nebraska vaccine requirements







This section includes parent handouts on...

- Conjunctivitis (Pinkeye)
- Hand Foot and Mouth Disease
- MRSA
- Head Lice
- Bed Bugs
- Ticks

Handouts on influenza and COVID available in Section 2: Outbreaks

#### Part 4: MANAGEMENT OF INFECTIOUS DISEASES AND PESTS 87

Disease-Specific Guidance for Schools	88
	88
	89
Campylobacter	90
Chickenpox (Varicella)	92
	94
Conjunctivitis (Pink Eye)	96
COVID-19	100
	102
	104
	104 106
	108
Pinworms (Enteroplasis) also known as Threadworm and Seatworm	
	110
	112
	116
	118
	120
	122
	124
	126
	130
	134
Pertussis (Whooping Cough)	136
Poliomyelitis (Polio, Infantile Paralysis) 1	138
Ringworm and Related Disorders	140
Contraction	142
Salmonella	144
Scabies (Human Itch Mite)	146
Shigella 1	148
Shinales / Heroes Zoster	150
	152
Pulmonary Tuberculosis	154
Insects and Biting Pests	156
	158
ned Dues	156 164
	104 172
	172 174
Ticks f	174

## Tool for Schools:

- Download the parent handout: "When to Keep Your Student Home Sick"
- Fillable PDF to customize to your setting
- Available in English and Spanish





\*Generally, students may return to school if they have not had fever for 24 hours without use of fever-reducing medication, such as acetaminophen or ibuprofen. Certain illnesses, such as COVID-19, may require the student to stay home for longer.

> NEBRASKA CHAPTER

EBRASK

**Children's** 

#### **CHICKENPOX** (VARICELLA)

Chickenpox is a highly contagious disease caused by the varicella-zoster virus (VZV). It can cause an itchy, blister-like rash and in severe cases, as many as 500 lesions may be present. The chickenpox rash usually first appears on the chest, back, and face, then spreads over the entire body. The virus spreads easily by air, droplets, and touching fluid from lesions. Be aware, scratching can introduce bacteria and lead to secondary bacterial infection.

Signs and Symptoms:	<ul> <li>Fever</li> <li>Lack of energy</li> <li>Cough</li> <li>Cough</li> <li>Itchy, red resh that turns into small blisters, often with a small halo of redness around them ("dewdrops on a rose petal"). They pop and scab over time.</li> <li>Rash often starts on trunk or scalp.</li> <li>Students will have rash, blisters, and scabs at the same time. Illness typically lasts 4-7 days.</li> </ul>
Incubation and Contagious Period:	<ul> <li>Incubation: 2-3 weeks</li> <li>Contagious period: Two days before lesions appear until all lesions have scabbed over.</li> </ul>
Spreads By:	<ul> <li>Breathing in viral particles from the air in serosols or droplets</li> <li>Contact with respiratory secretions</li> <li>Touching fluid from blisters after they pop</li> </ul>
Prevent Spread at School By:	<ul> <li>Performing hand hygiene</li> <li>Disinfecting desk and shared surfaces</li> <li>Opening classroom windows if able or use other methods to improve ventilation</li> <li>Encouraging families to veccinete their children</li> </ul>
Care for Student:	<ul> <li>Tell students not to itch. Itching can cause skin infection by introducing bacteria from skin and nails.</li> <li>Have parents call the student's doctor</li> <li>Do not give aspirin to ill children – it may lead to Reye's syndrome (brein swelling, liver failure)</li> </ul>
PPE and Staff Safety Precautions:	<ul> <li>Surgical mask and disposable gloves</li> <li>Alert pregnant women, unvaccinated staff members and parents of immune-suppressed or children who are incompletely vaccinated (0 or 1 dose received) of possible exposure so they can discuss possible prophylaxis with their doctor. Adults and children need two doses of chickenpox vaccine to be fully protected.</li> <li>Report infection to local health department So</li> </ul>
Exclude When:	<ul> <li>"Exclude until all lesions are crusted; avoid contact with susceptibles. No exclusion of contacts. Alert parents of immune-suppressed child/ren) of possible exposure.</li> <li>If student develops resh 5-26 days after receiving chickenpox vaccine and resh is only around site of injection they do not need to be excluded. Cover resh with bandage and clothing.</li> </ul>
Students May Return When:	<ul> <li>All skin lesions are scabbed</li> <li>Immunized students that have a mild infection may not develop blisters or scabs, just red spots or no rash at all. In this case, students may return when no new red bumps have appeared in last 24 hours.</li> </ul>

\*Text is from the Minimum Isolation Periods and Control Measures in Title 173 Chapter 3 (nebraska.gov)

# Diseasespecific guidance

# ...and photos

#### CHICKENPOX (VARICELLA)







Note: Chickenpox rash can have vesicles (clear) or pustules (cloudy) as rash evolves and that new lesions come in crops, so patient will have lesions in different stages at the same time. The bottom photo shows a mild rash of breakthrough varicella in an immunized child.

Top & bottom photos from CDC. Middle photo from Skin Deep dftbskindeep.com

#### RESOURCES



Varicella (Chickenpox) HealthyChildren.org \*\*\*

Chickenpox (Varicella) I CDC www.cdc.gov/chickenpox %





- Developing an Exposure Control Plan
- Staff Training Requirements
- Recordkeeping, Tracking and Trending Requirements
- Cleaning Up Blood & Body Fluid Spills
- Disposal of Infectious Waste





# Resources



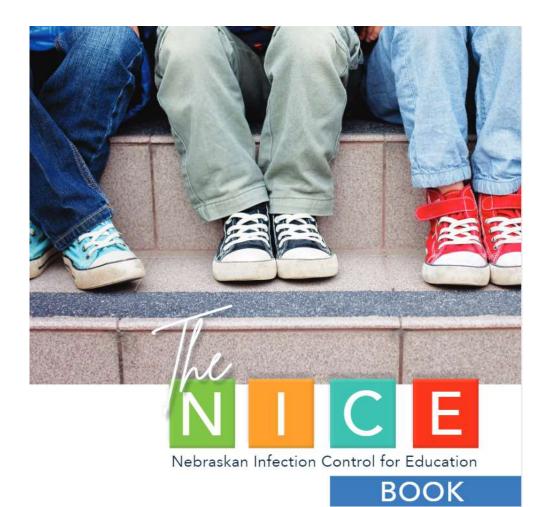
- Educational Service Units
- Local Health Departments
- Medicaid Unwinding flyers for parents



# Questions?

Andrea Riley anriley@ChildrensNebraska.org

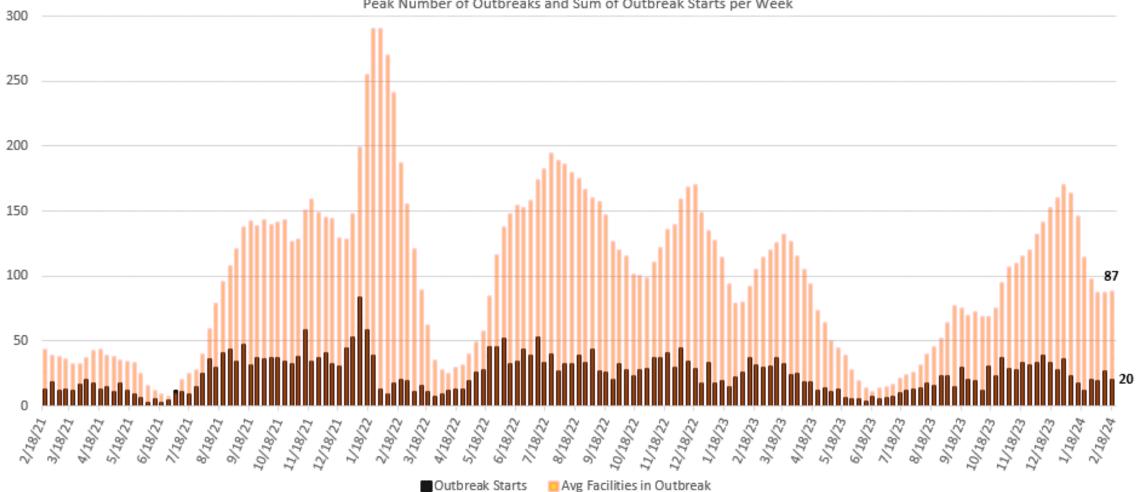
Chris Cashatt <u>ccashatt@nebraskamed.com</u>





# PUBLIC HEALTH & COALITION LEADERS UPDATES (ALL)

## ICAP LTC & ALF - JUAN TERAN



#### Nebraska LTC Facilities in COVID Outbreak by Week

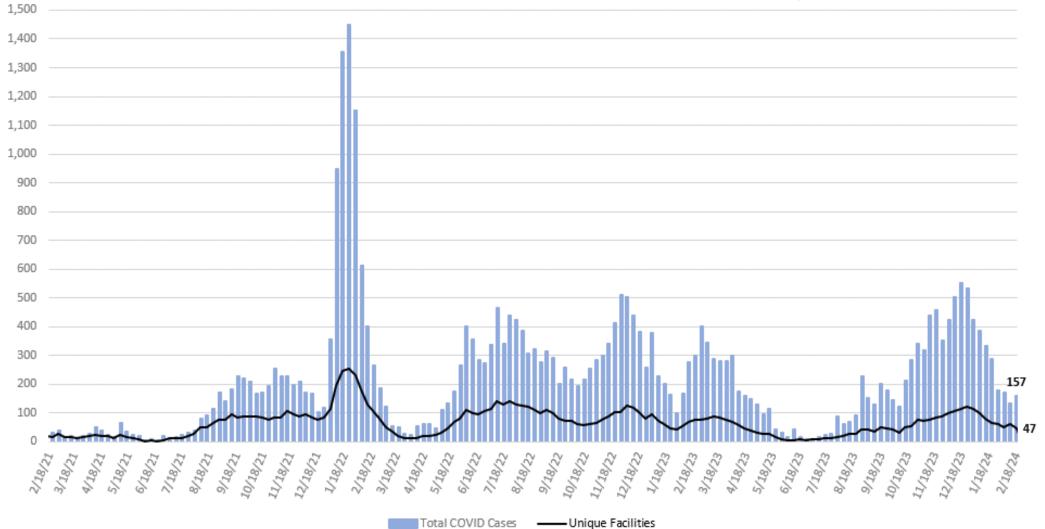
Peak Number of Outbreaks and Sum of Outbreak Starts per Week

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



Slide Credit: Dan German

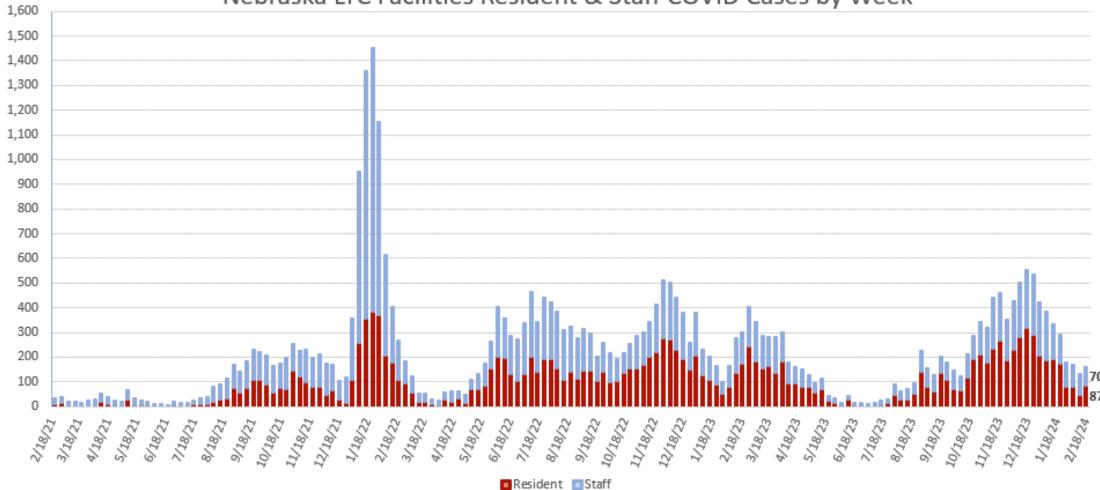
### Nebraska LTC Resident & Staff COVID Cases & Facilities by Week



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



Slide Credit: Dan German



Nebraska LTC Facilities Resident & Staff COVID Cases by Week

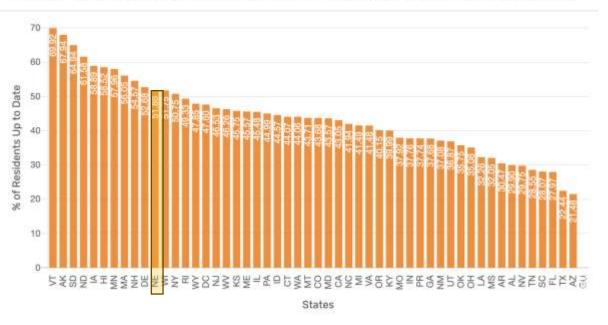
Source: Unofficial Counts Compiled by Nebraska ICAP based on data reported by facilities and DHHS; Actual Numbers may vary slightly



Slide Credit: Dan German

## **CMS Nursing Home Data**

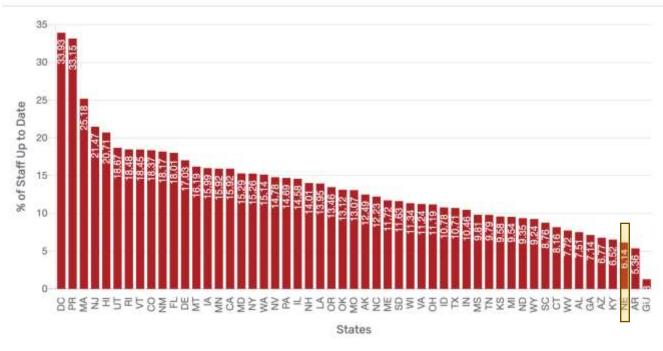
#### Percentage of Current Residents Up to Date with COVID-19 Vaccines per Facility



This shows the average percentage among facilities who have reported vaccination data in the current or prior week.

#### Percentage of Current Staff Up to Date with COVID-19 Vaccines per Facility

This shows the average percentage among facilities who have reported vaccination data in the current or prior week.



NE 17.69 -> 8% Partial correction from NHSN

# **Educational Opportunity**

♠ - College of Medicine - Department of Internal Medicine - Divisions - Infectious Diseases - ECHO - Achieving Equitable Health Outcomes in Nebraska - Phase 2 - Achieving Equitable Health Outcomes in Nebraska

# Phase 2 - Achieving Equitable Health Outcomes in Nebraska

This is an extension of the ongoing ECHO Project on Health Equity, Cultural Sensitivity and Quality Improvement.

#### Timeline: June 2023-May 2024

The highlights of registering in this project (an ECHO Project funded by Nebraska DHHS through a CDC grant) include:

- Meet the Joint Commission's new Leadership Standards that have been <u>elevated to a National</u> <u>Patient Safety Goal 16.10.01</u>, and this includes ambulatory care organizations, behavioral health care, human services organizations, critical access hospitals, and hospitals, effective July 1, 2023.
- Remain up to date on guidance for improving COVID-19 prevention, diagnosis, and treatment in your
  practice setting.

<u>When:</u> Third Wednesday of Every Month

### Time: 12 noon to 1 PM CST

## Next ECHO Session On: February 21<sup>st</sup>, 2024

### **Registration Survey Link:**

https://redcap.nebraskamed.com/surv eys/?s=9D448KMYJTF4JXA4

https://www.unmc.edu/intmed/divisions/id/echo/health-equity/index.html

IN THIS SECTION

Achieving Equitable Health Outcomes in Nebraska: An

ECHO Project Funded by Nebraska DHHS through a CDC

Phase 2 - Achieving

in Nebraska

- Project Team

Equitable Health Outcomes

Grant

# **Session 9 Topic and Objectives**

## **Session Topic**: Setting Aims for Equity

Date and Time: Wednesday, February 21<sup>st</sup> at Noon

## **Session Objectives:**

- Identify the characteristics of effective aim statements.
- Apply the characteristics of effective aim statements in the context of health equity related improvements.
- Demonstrate the ability to distinguish effective from ineffective aim statements in the context of a case discussion.

# **HOT TOPICS / OTHER UPDATES**