



SHEA

The Society for Healthcare
Epidemiology of America

SAFE HEALTHCARE FOR ALL



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The Rapid Response Podcasts



COVID-19 Updates: What We Know Now

Newest Episodes:

- To Mask or Not to Mask as Part of Standard Precautions?

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TUNE IN TO THE SHEA JOURNALS PODCASTS



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COVID-19 Real-Time Learning Network



Specialty Society Collaborators:

- American Academy of Family Physicians
- American Academy of Pediatrics
- American College of Emergency Physicians
- American College of Physicians
- American Geriatrics Society
- American Thoracic Society
- Pediatric Infectious Diseases Society
- Society for Critical Care Medicine
- Society for Healthcare Epidemiology of America
- Society of Hospital Medicine
- Society of Infectious Diseases Pharmacists

With funding from the Centers for Disease Control and Prevention, IDSA has launched the COVID-19 Real Time Learning Network, an online community that brings together information and opportunities for discussion on latest research, guidelines, tools and resources from a variety of medical subspecialties around the world.

www.COVID19LearningNetwork.org

@RealTimeCOVID19 | #RealTimeCOVID19



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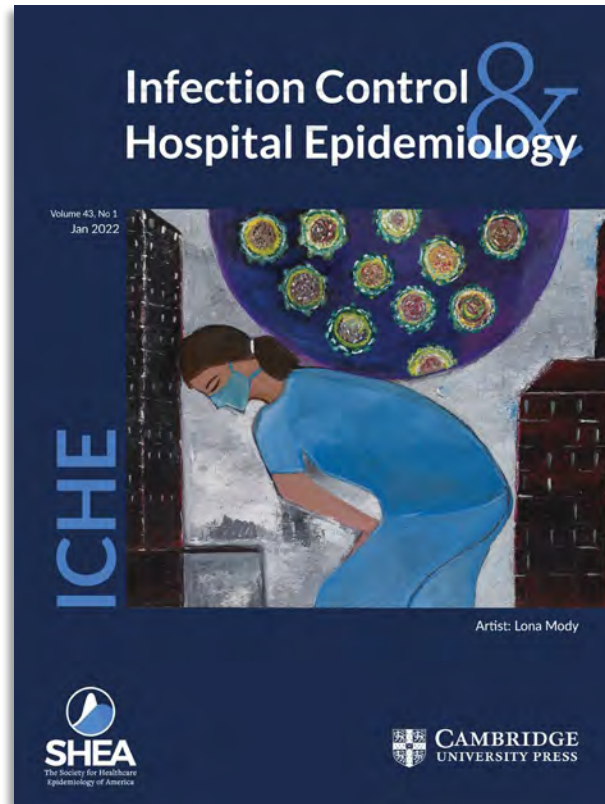
Prevention

An online learning module
designed with frontline
healthcare personnel in mind.

PreventionCHKC.org



ICHE Journal – Fast Tracking COVID Article Submissions



Infection Control & Hospital Epidemiology publishes scientifically authoritative, clinically applicable, peer-reviewed research on control and evaluation of the transmission of pathogens in healthcare institutions and on the use of epidemiological principles and methods to evaluate and improve the delivery of care. Major topics covered include infection control practices, surveillance, antimicrobial stewardship, cost-benefit analyses, resource use, occupational health, and regulatory issues.

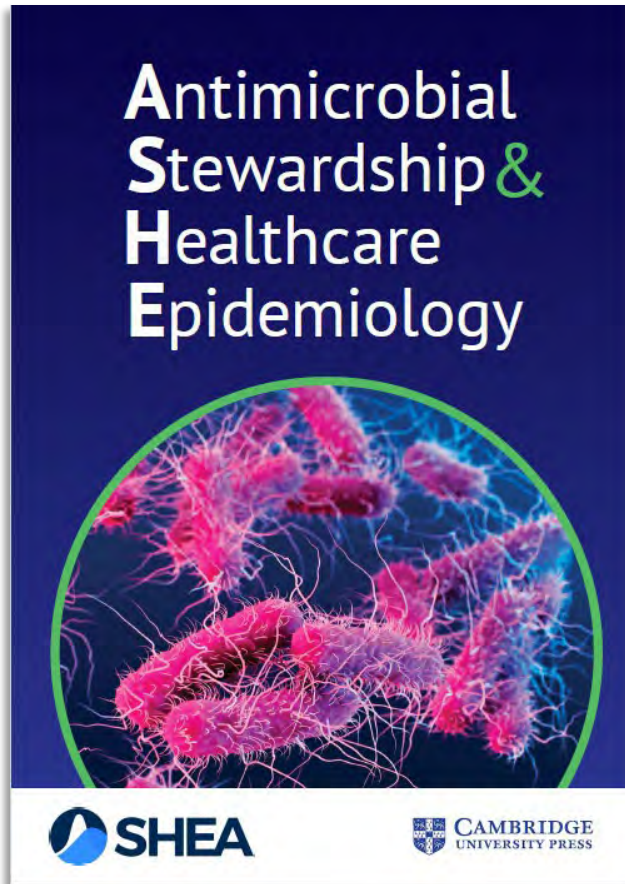
www.cambridge.org/iche



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ASHE JOURNAL



High quality articles across the full spectrum of antimicrobial stewardship and healthcare epidemiology.

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SHEA Webinar

***COVID-19 Town Hall
Round 87***

House Keeping Items



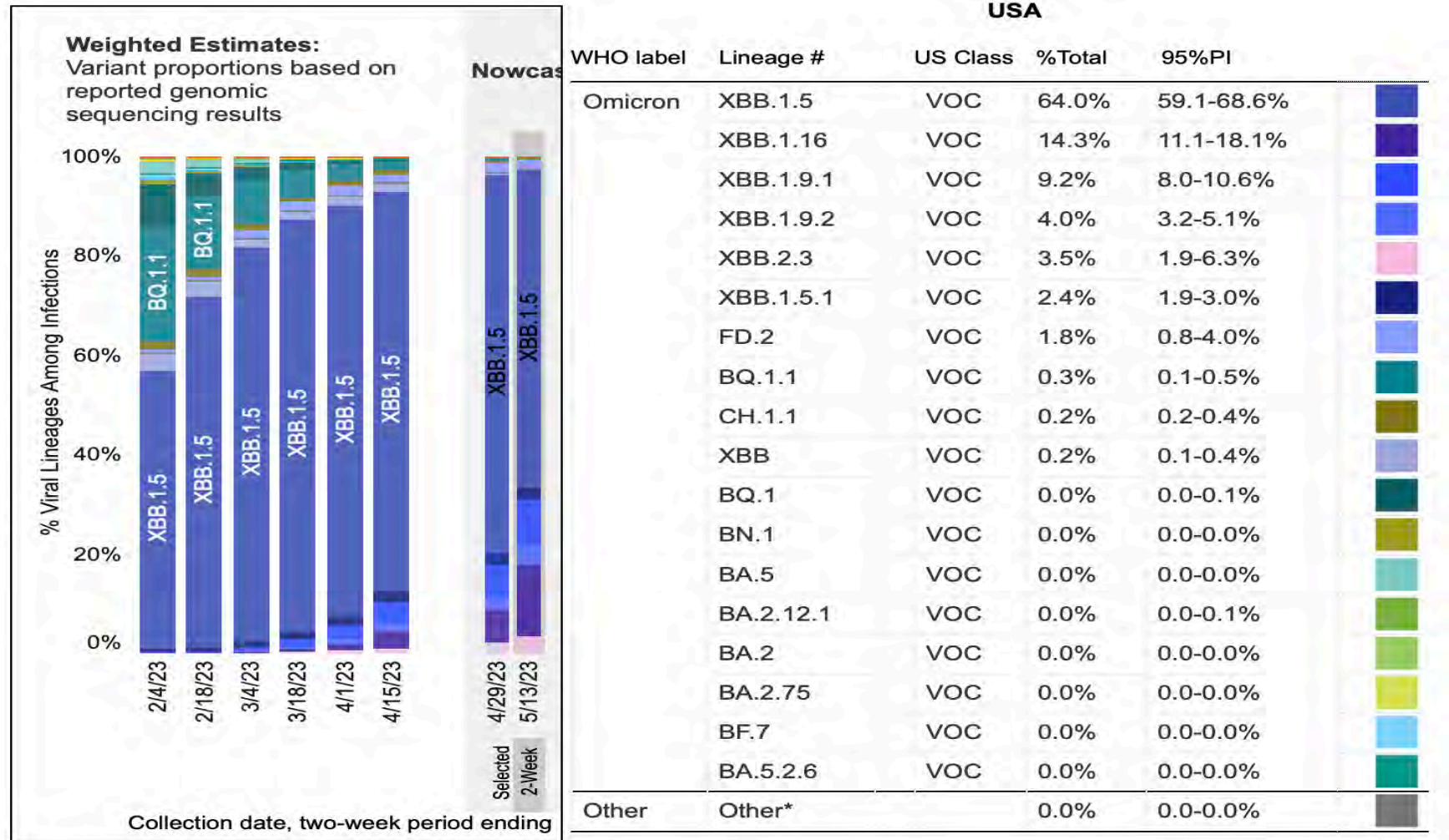
- Technical difficulties? Visit: <https://support.zoom.us>
- Webinar recording, PowerPoint presentation, and references available LearningCE's [Rapid Response Program](#)
- Streaming Live on SHEA's Facebook page
- Zoom Q&A and Chat



SAFE HEALTHCARE FOR ALL

SHEA Town Hall 87
Overview

SARS-CoV-2 VARIANTS, US, CDC

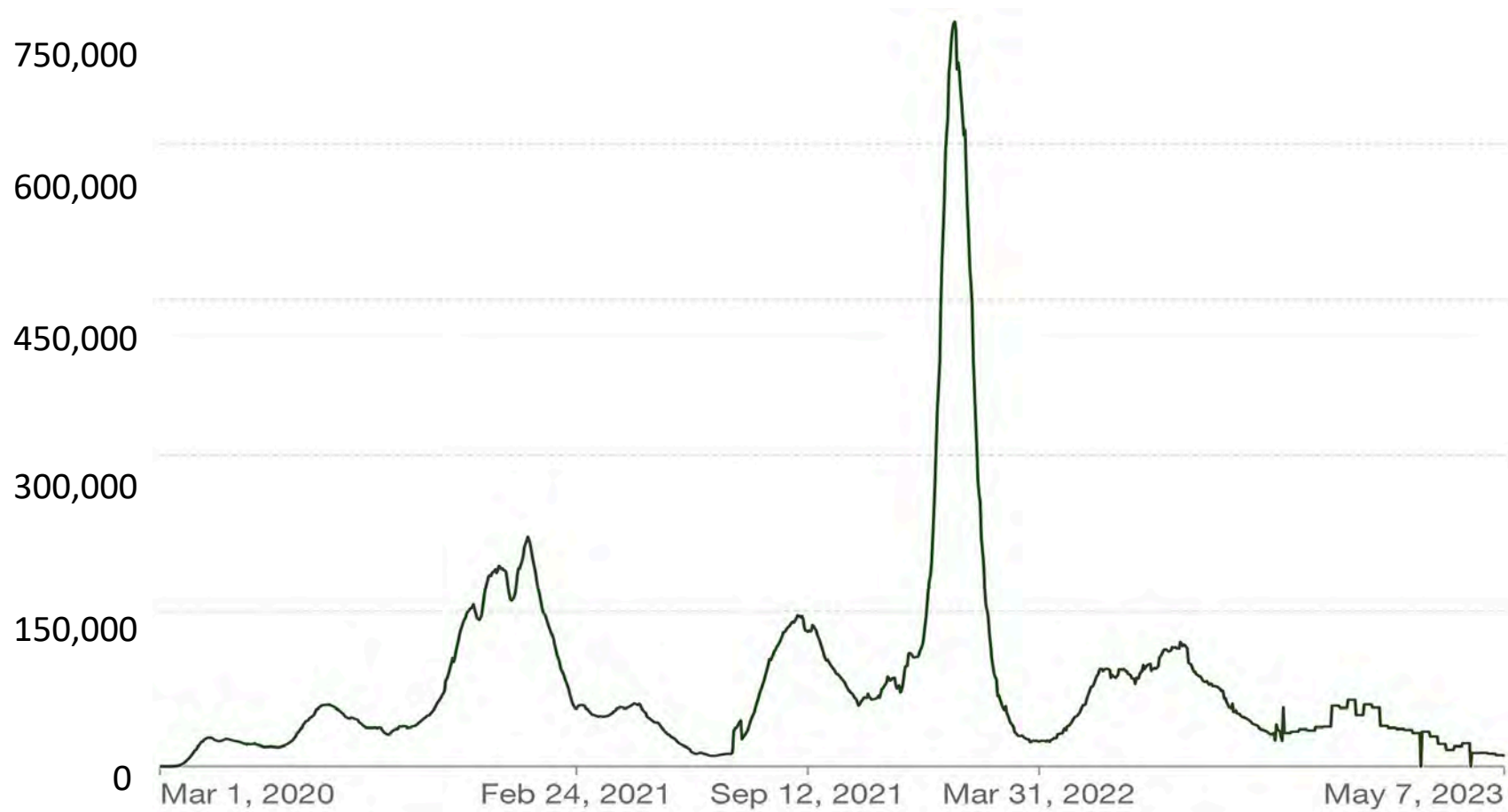


* Enumerated lineages are US VOC and lineages circulating above 1% nationally in at least one 2-week period. "Other" represent the aggregation of lineages which are circulating <1% nationally during all 2-week periods displayed.

BA.1, BA.3 and their sublineages (except BA.1.1 and its sublineages) are aggregated with B.1.1.529. Except BA.2.12.1, BA.2.75, XBB and their sublineages, BA.2 sublineages are aggregated with BA.2. Except BA.2.75.2, CH.1.1 and BN.1, BA.2.75 sublineages are aggregated with BA.2.75. Except BA.4.6, sublineages of BA.4 are aggregated to BA.4. Except BF.7, BF.11, BA.5.2.6, BQ.1 and BQ.1.1, sublineages of BA.5 are aggregated to BA.5. Except the lineages shown and their sublineages, sublineages of XBB are aggregated to XBB. Except XBB.1.5.1 and FD.2, sublineages of XBB.1.5 are aggregated to XBB.1.5. For all the other lineages listed, their sublineages are aggregated to the listed parental lineages respectively. Previously, XBB.2.3 and XBB.1.16 were aggregated to

REPORTED COVID-19 CASES IN THE UNITED STATES

Cumulative Cases – 103,340,000



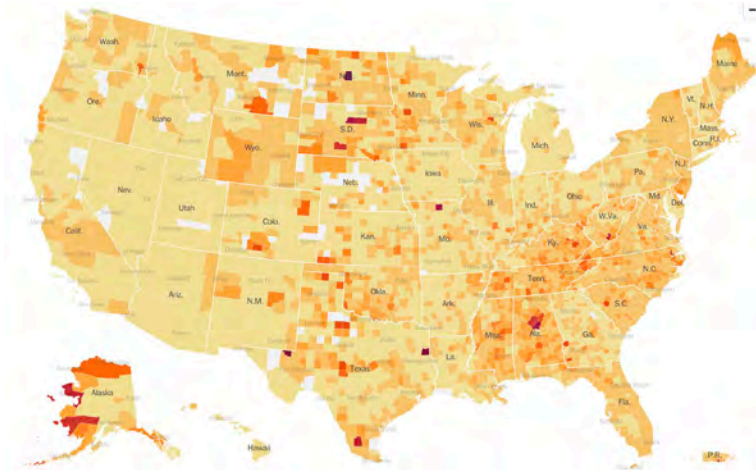
Cases decreased by 56% from four weeks earlier

Sources: Our World in Data: <https://ourworldindata.org/covid-cases> 5-23-2023

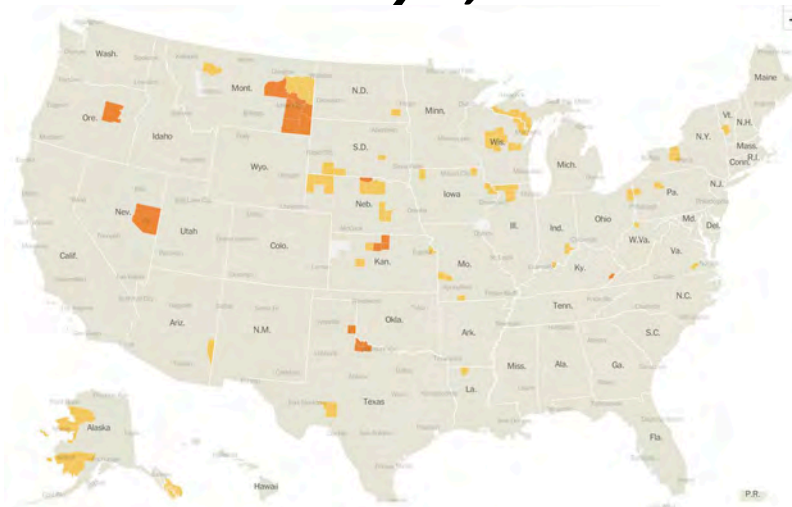
US COVID-19 HOTSPOTS



February 6, 2022



February 12, 2023

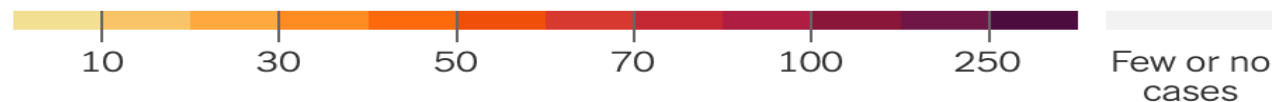


April 23, 2023



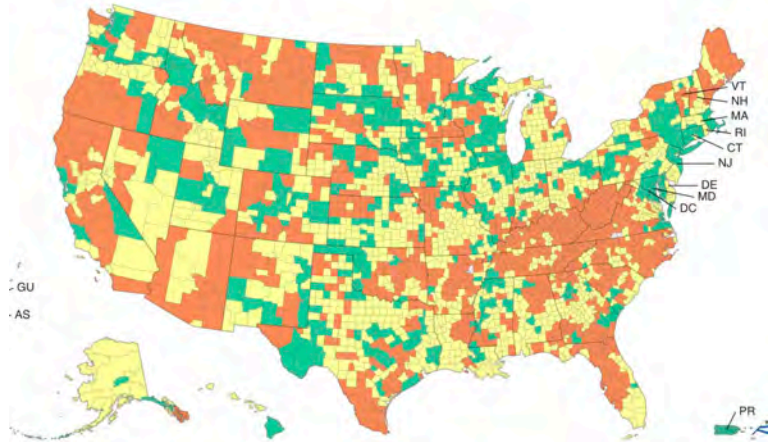
May 19, 2023

Average daily cases per 100,000 people in past week

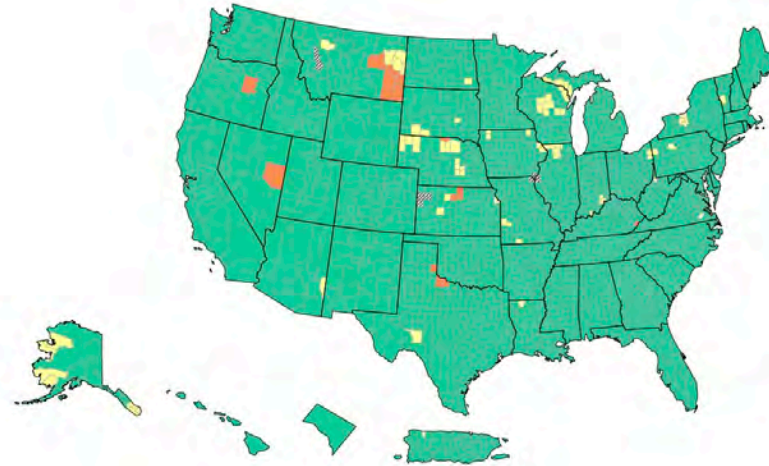


Source: New York Times <https://www.nytimes.com/interactive/2023/us/covid-cases.html> 4-19-2023

CDC COVID-19 COMMUNITY LEVELS



February 27, 2022



April 23, 2023

● High

● Low

● Medium

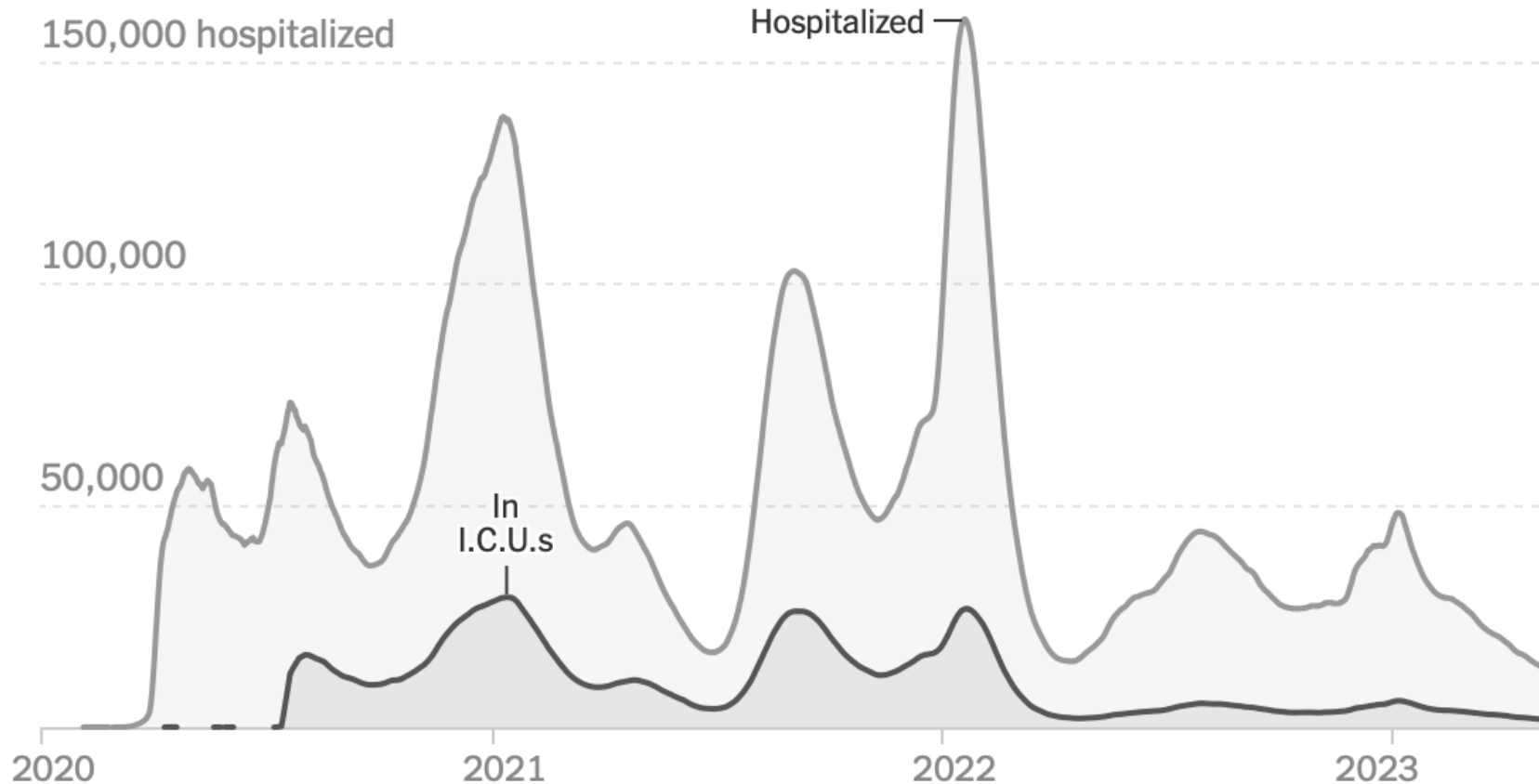
● N/A

X

May 19, 2023

Source – https://covid.cdc.gov/covid-data-tracker/#county-view?list_select_state=all_states&list_select_county=all_counties&data-type=CommunityLevels&null=CommunityLevels

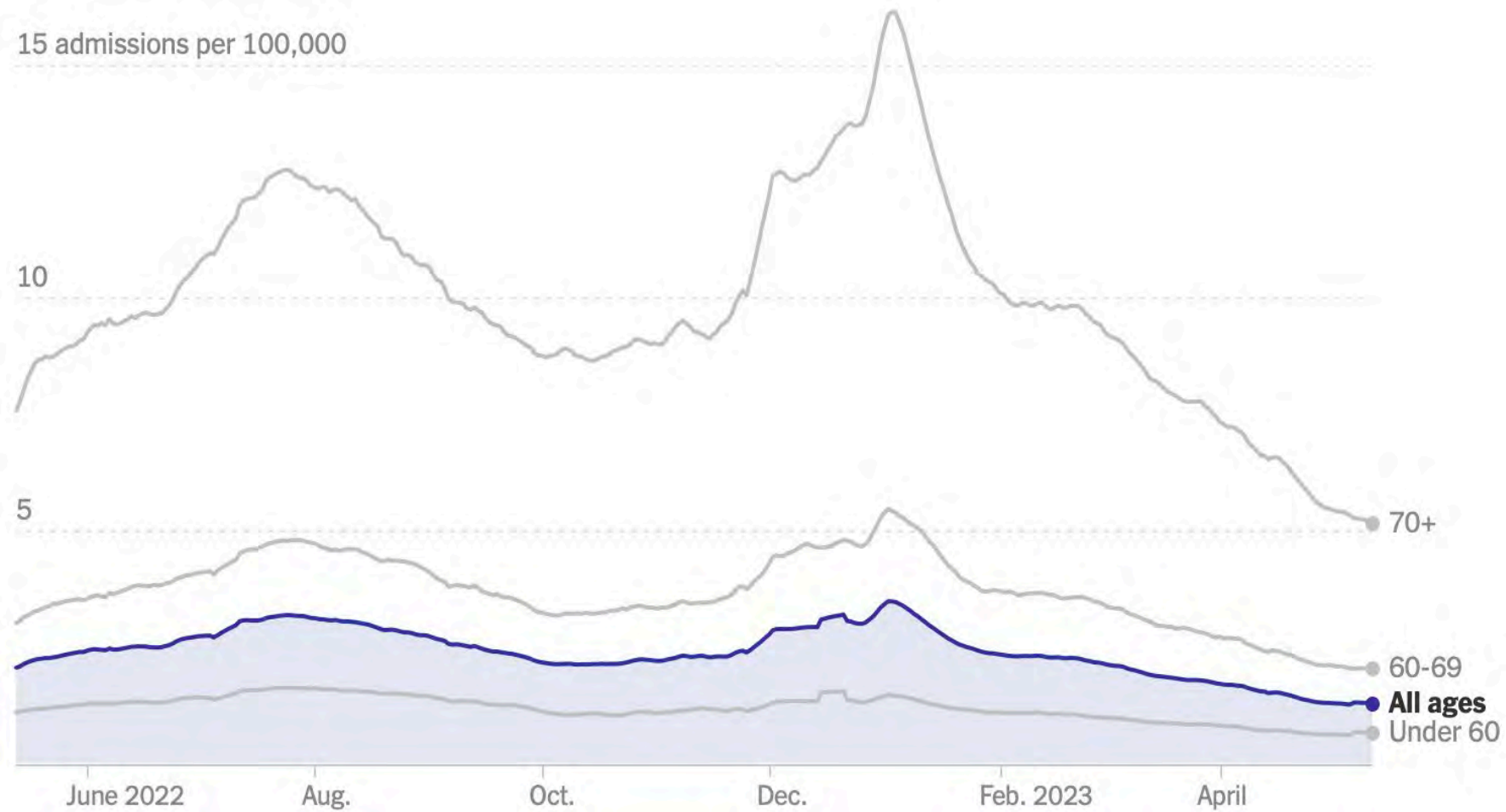
HOSPITAL AND ICU ADMISSIONS FOR COVID-19 IN THE UNITED STATES



Hospitalizations decreased 26.0% from our last Town Hall
ICU admissions decreased 23.4% from our last Town Hall

Source: New York Times <https://www.nytimes.com/interactive/2023/us/covid-cases.html>
accessed 5-16-23

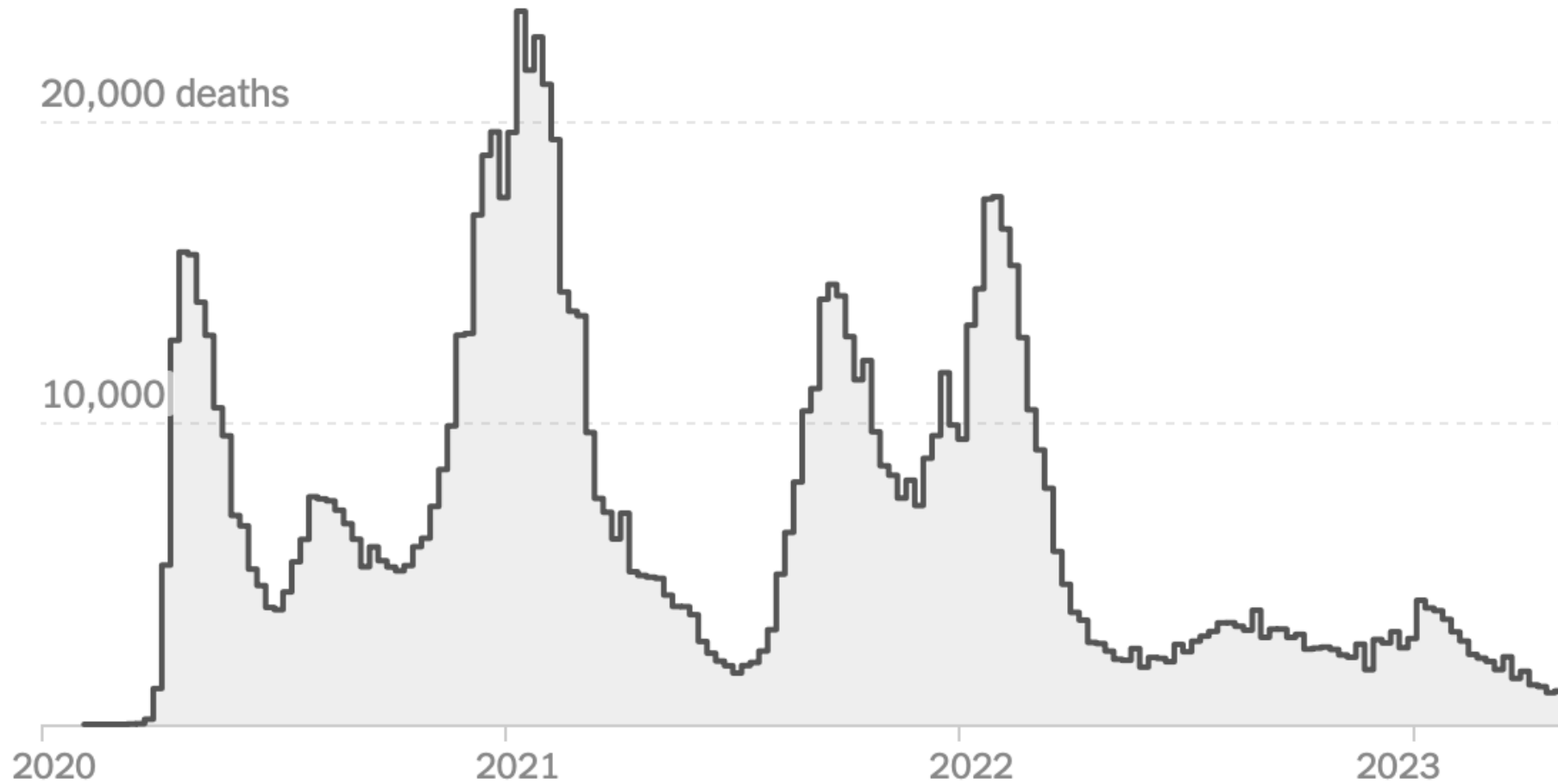
COVID-19 HOSPITAL ADMISSIONS IN THE UNITED STATES, BY AGE



Source: New York Times 5-19-2023

COVID-19 DEATHS IN THE UNITED STATES

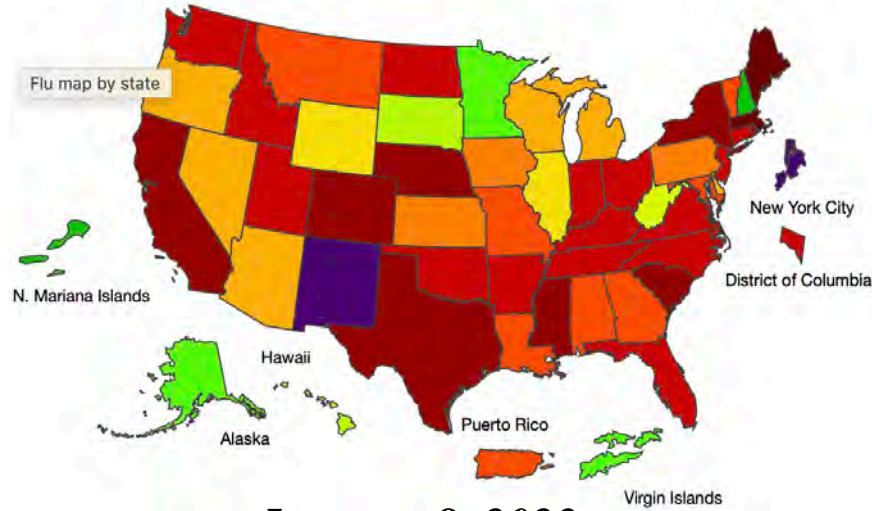
Cumulative Deaths – 1,127,928



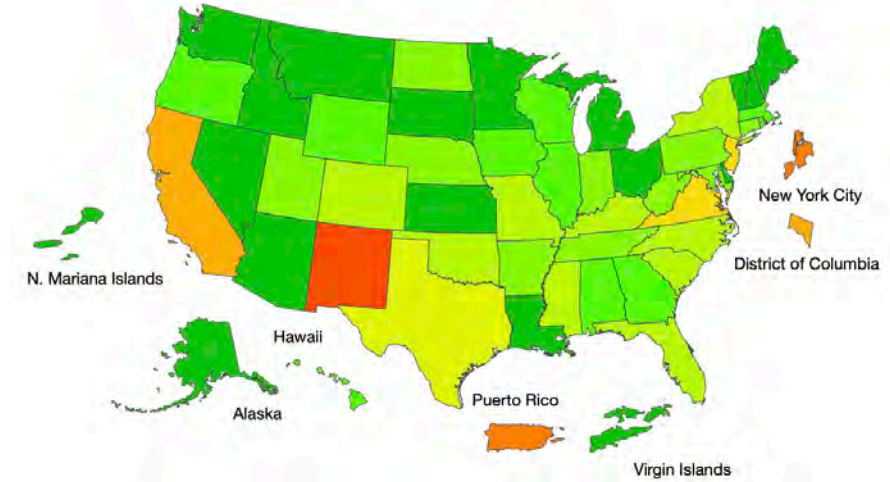
35% decrease from our last Town Hall

NY Times <https://www.nytimes.com/interactive/2023/us/covid-cases.html> 5-19-23

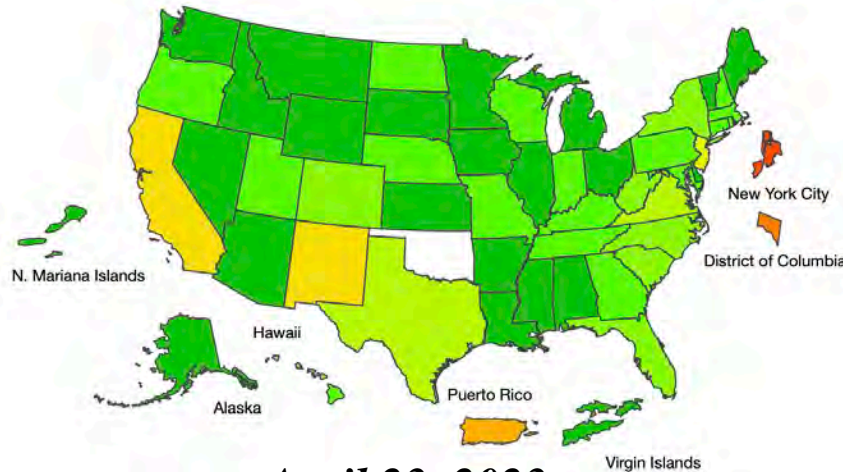
INFLUENZA ACTIVITY BY STATE IN THE UNITED STATES



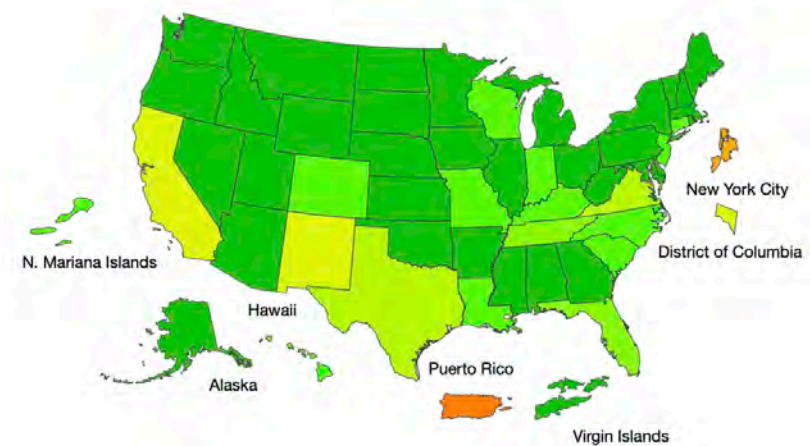
January 8, 2023



March 17, 2023



April 23, 2023



May 6, 2023



Source: CDC <https://www.cdc.gov/flu/weekly/usmap.ntm> 3-17-23

This Month's Emerging Infectious Disease News

1. *A study in the **New England Journal** found that BCG immunization, which ostensibly enhances overall antiviral immunity, did not reduce risk for COVID infection.*
2. *A **New England Journal** perspective piece argues for a comprehensive approach to care for patients who develop long COVID.*
3. *A **Lancet** paper provides evidence for starting mRNA SARS-CoV-2 vaccination three months after HSCT, irrespective of concurrent GVHD or use of immunosuppressive medications.*
4. *A **Lancet eBio** paper found that broad immunity to SARS-CoV-2 variants of concern can be mediated by a SARS-CoV-2 receptor-binding domain protein vaccine .*
5. *Another **Lancet eBio** paper described breath testing as offering a promising, non-invasive point-of-care method to detect mild COVID-19 infection..*
6. *A **JAMA Oncology** paper described the clinical features and risk factors associated with multisystem inflammatory syndrome in children (MISC) with cancer and COVID-19 .*

References available in the chat

This Month's Emerging Infectious Disease News

7. *A **JAMA Network Open** paper described a VA study that found excess mortality among patients compared with the overall US population during the first year of the pandemic.*
8. *An **Annals of Internal Medicine** “Living Review” found, despite data limitations, mask use associated with a small reduction in risk for SARS-CoV-2 infection in community settings;*
9. *A **Science** paper found that an AS03-adjuvanted COVID-19 vaccine generates broadly neutralizing antibodies against the entire class of sarbecoviruses.*
10. *A **Nature** paper found that monoclonal antibodies that target the human angiotensin-converting enzyme-2 receptor block infection by all hACE2 binding sarbecoviruses tested, including SARS-CoV-2 ancestral, Delta and Omicron variants.*
11. *A broadly representative cohort study of 407 infants born to 403 mothers in **JAMA Network Open** found no association was found between mild or asymptomatic maternal SARS-CoV-2 infection during pregnancy and infant cognition, language, or motor development.*
12. *An opinion piece published in the **New York Times** written by the scientists who led the creation of the Johns Hopkins Coronavirus Resource Center argue for creating the robust data and reporting systems that would allow the a much more aggressive response to future pandemic threats.*

References available in the chat

Panelists:



Dr. David Henderson
NIH



Dr. Debbie Yokoe
University of California, San Francisco



Dr. Sarah Haessler
Baystate Health



Dr. David Weber
UNC School of Medicine

What happens now that
the COVID-19 Public
Health Emergency has
expired?



What Does the End of the PHE Mean for You?

Most tools, like vaccines, treatments, and testing, will remain available. But, some tools, like certain data sources and reporting, will change.

End of the Federal COVID-19 Public Health Emergency (PHE) Declaration

Updated May 5, 2023 [Español](#) | [Other Languages](#) [Print](#)



Vaccines will remain available.

Access to COVID-19 vaccines will generally not be affected for now. The U.S. government is currently distributing free [COVID-19 vaccines](#) for all adults and children. To help keep communities safe from COVID-19, HHS remains committed to maximizing continued access to COVID-19 vaccines.





COVID-19 at-home tests may not be covered by insurance.

Insurance providers will no longer be required to waive costs or provide free COVID-19 tests. CDC's [No Cost COVID-19 Testing Locator](#) can help people find current community and pharmacy partners participating in the [Increasing Community Access to Testing \(ICATT\) program](#).



Treatments will remain available.

Medication to prevent severe COVID-19, [such as Paxlovid](#)  , will remain available for free while supplies last. After that, the price will be determined by the medication manufacturer and your health insurance coverage. Check with your healthcare provider if you need [early treatment to prevent severe COVID-19](#).



National reporting of COVID-19 may change.

We have the right data for this phase of COVID-19 that will allow us to understand what's happening with the virus in America in real-time. Simply put, while what we have going forward will be different, it will still allow CDC, local public health officials, and the members of the public to understand COVID-19 dynamics at the community level.

<https://www.cdc.gov/coronavirus/2019-ncov/your-health/end-of-phe.html>

<https://www.idsociety.org/globalassets/covid-19-real-time-learning-network/u.s.-covid-19-response-transition-spring-2023.pdf>

IPC impacts

- CDC will no longer have access to comprehensive COVID-19 vaccine administration data
 - Some state and territorial jurisdictions have signed a COVID-19 Data Use Agreement through the end of 2023
 - **Healthcare personnel COVID-19 vaccination weekly reporting** into NHSN **will continue** to be required for all CMS-certified healthcare facilities

CDC Updated interim IPC recommendations for healthcare personnel during the COVID-19 pandemic (May 8, 2023)

- Largely unchanged
- Updated recommendations for admission testing in nursing homes (now at the discretion of the nursing facility)
- Appendix added to discuss considerations for implementing broader masking in healthcare settings

CDC Update: When to implement broader use of masking

- Even when masking is not required, allow individuals to use a mask or respirator based on personal preference, perceived level of risk and potential for severe disease
- Source control
 - Suspected or confirmed COVID-19 or other respiratory infections
 - After high-risk exposures during the 10 days after exposure
- Broader source control consistent with CDC's Core IPC Practices:
 - Units/areas experiencing COVID-19 or other respiratory infection outbreaks
 - Facility-wide or targeted toward higher risk areas or patient populations during higher levels of community transmission
 - If recommended or required by local public health authorities

<https://www.cdc.gov/coronavirus/2019-ncov/hcp/infection-control-recommendations.html>

<https://www.cdc.gov/infectioncontrol/guidelines/core-practices/index.html>

CDC Update: When to implement broader use of masking

- Risk assessment: Consider lower action thresholds in areas:
 - Caring for patients at high risk for severe disease (e.g., BMT unit, cancer centers)
 - More likely to care for patients with respiratory infections (e.g., ED, urgent care)

CDC COVID-19 county-level metrics

Prior to 5/11/23

- **Community Levels** (used to make public health decisions)
 - New cases per 100,000 population in past 7 days
 - New COVID-19 admissions per 100,000 population (7-day total)
 - Percent of staffed inpatient beds in use by COVID-19 patients (7-day average)
- **Community Transmission Levels** (used to guide healthcare facility decisions around interventions like universal masking, asymptomatic testing, etc.)
 - New cases per 100,000 population in the past 7 days
 - Percent of positive SARS-CoV-2 NAAT tests during the past 7 days (requires numbers of positive and negative test results)

Impact of the PHE expiration on CDC's access to data

- Laboratories and healthcare provider no longer required to report negative and positive NAAT results to state and local public health and to the CDC (previously required by the CARES Act)
 - Voluntary reporting except for areas with local/state reporting requirements
 - No longer able to track all metrics needed for COVID-19 Community Levels or Community Transmission Levels
- Hospitals are still required to submit COVID-19 data elements through April 30, 2024, but with fewer data elements and at a reduced frequency (weekly vs. daily)
 - Reporting will continue through NHSN (patients hospitalized with COVID-19, etc.)

CDC COVID-19 county-level metrics

After 5/11/23

- **Community Levels** (used to make public health decisions)
 - ~~New cases per 100,000 population in past 7 days~~
 - New COVID-19 admissions per 100,000 population (7-day total) **WEEKLY**
 - Percent of staffed inpatient beds in use by COVID-19 patients (7-day average) **WEEKLY**
- **Community Transmission Levels** (used to guide healthcare facility decisions around interventions like universal masking, asymptomatic testing, etc.)
 - ~~New cases per 100,000 population in the past 7 days~~
 - ~~Percentage of positive NAAT tests during the past 7 days (requires numbers of positive and negative test results)~~

How do we decide when infection prevention-related practices need to change?

- **Levels of COVID-19 hospital admission rates (low, medium, high) have replaced COVID-19 Community Levels**
 - >99% concordance between COVID Community Levels and COVID hospital admission levels (Feb 2022-Mar 2023)
 - April 2022 – March 2023 COVID-19 hospitalization rates (NHSN) lagged one day behind case rates and 4 days behind % positive NAAT results
 - Available at county level
- **Severity of disease indicator**
 - % COVID-19-associated deaths (NVSS)
- **Early indicators for COVID-19 monitoring**
 - % positive COVID-19 test results (NREVSS) and COVID-19 ED visits (NSSP)
 - NREVSS and NSSP data available at the HHS regional level

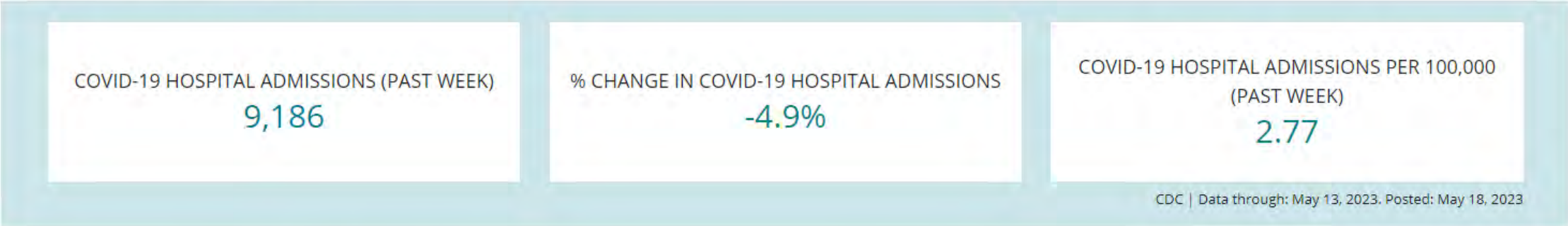
Silk BJ, et al. MMWR ePub:5 May 2023 DOI: <http://dx.doi.org/10.15585/mmwr.mm7219e1>

Scobie HM, et al. MMWR ePub:5 May 2023 DOI: <http://dx.doi.org/10.15585/mmwr.mm7219e2>

United States COVID-19 Hospitalizations, Deaths, and Emergency Visits by Geographic Area

Maps, charts, and data provided by CDC, updates weekly on Thu by 8 pm ET[†]

[View Footnotes and Download Data](#)



View:
☒ Hospitalizations
☐ Deaths
☐ Emergency Visits

Scale:
☒ County
☐ State

Time period:
☒ In Past Week

Metric:
☒ COVID-19 new hospital admissions
☐ Inpatient beds occupied by COVID-19 patients
☐ ICU beds occupied by COVID-19 patients

Measure:
☐ Count
☒ Rate per 100,000
☐ % Change from prior week

This shows the total number of new COVID-19 hospital admissions for every 100,000 people in the past week, allowing for comparisons between areas with different population sizes but not adjusted for age distribution. For more information on hospitalizations, see the [trends](#) page.

COVID-19 hospital admissions levels in US by county			
Based on new COVID-19 hospital admissions per 100,000 population			
	Total	Percent	% Change
≥ 20.0	9	0.28%	-0.03%
10.0 - 19.9	35	1.09%	0.59%
<10.0	3179	98.76%	-0.5%

Time Period: New COVID-19 hospital admissions per 100,000 population (7-day total) are calculated using data from the MMWR week (Sun-Sat) ending May 13, 2023.

CDC Update: When to implement broader use of masking

- **Consider metrics that reflect a broader range of respiratory viruses**
 - National Respiratory and Enteric Viruses Surveillance System (NREVSS)
 - RESP-NET interactive dashboard
 - National Emergency Department Visits for COVID-19, Influenza, and Respiratory Syncytial Virus
 - ILINet
- Facilities could consider recommending masking during the typical respiratory viral season (e.g., Oct-Apr)
- Thresholds for action are not currently well-defined
- Data is not uniformly available across geographic areas
- CDC is developing metrics reflecting multiple respiratory viruses to guide public health and healthcare facility decisions around infection prevention interventions



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

The National Respiratory and Enteric Virus Surveillance System (NREVSS)

All data graphs on this site are updated weekly. The graphs were last updated on May 3, 2023.

Coronavirus

Human Metapneumovirus

Human Parainfluenza Virus

Respiratory Syncytial Virus

Respiratory Adenovirus

Rotavirus

Norovirus

- Sentinel network of >450 clinical, public health, and commercial **laboratories**
- Will soon include SARS-CoV-2 surveillance data

National Emergency Department Visits for COVID-19, Influenza, and Respiratory Syncytial Virus

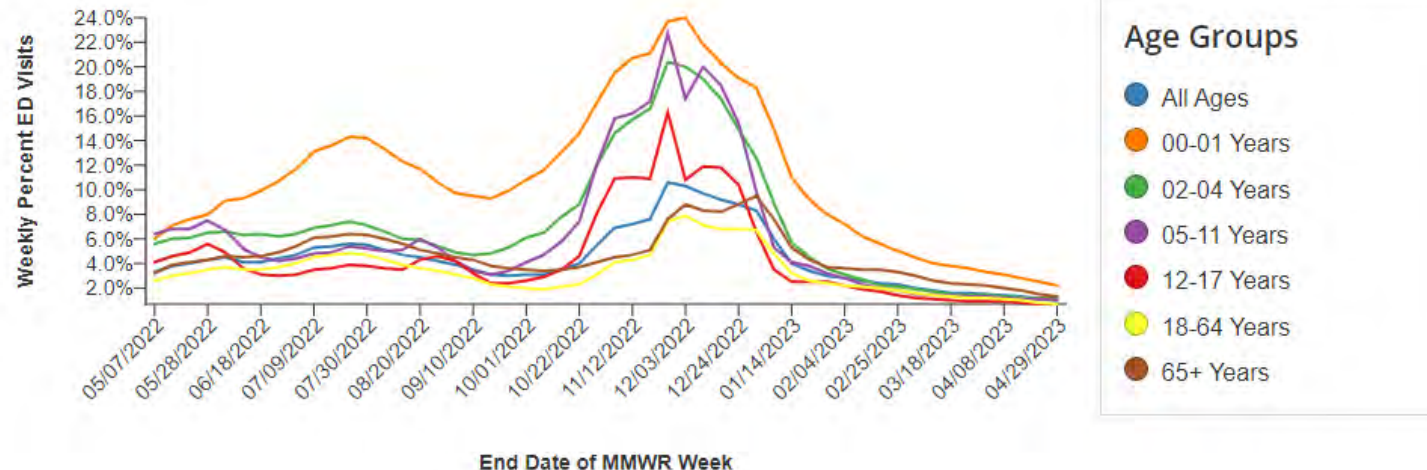


Weekly Emergency Department Visits by Age Group and Respiratory Illness, as a Percent of All Emergency Department Visits

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

Respiratory Illness

Combined ▼

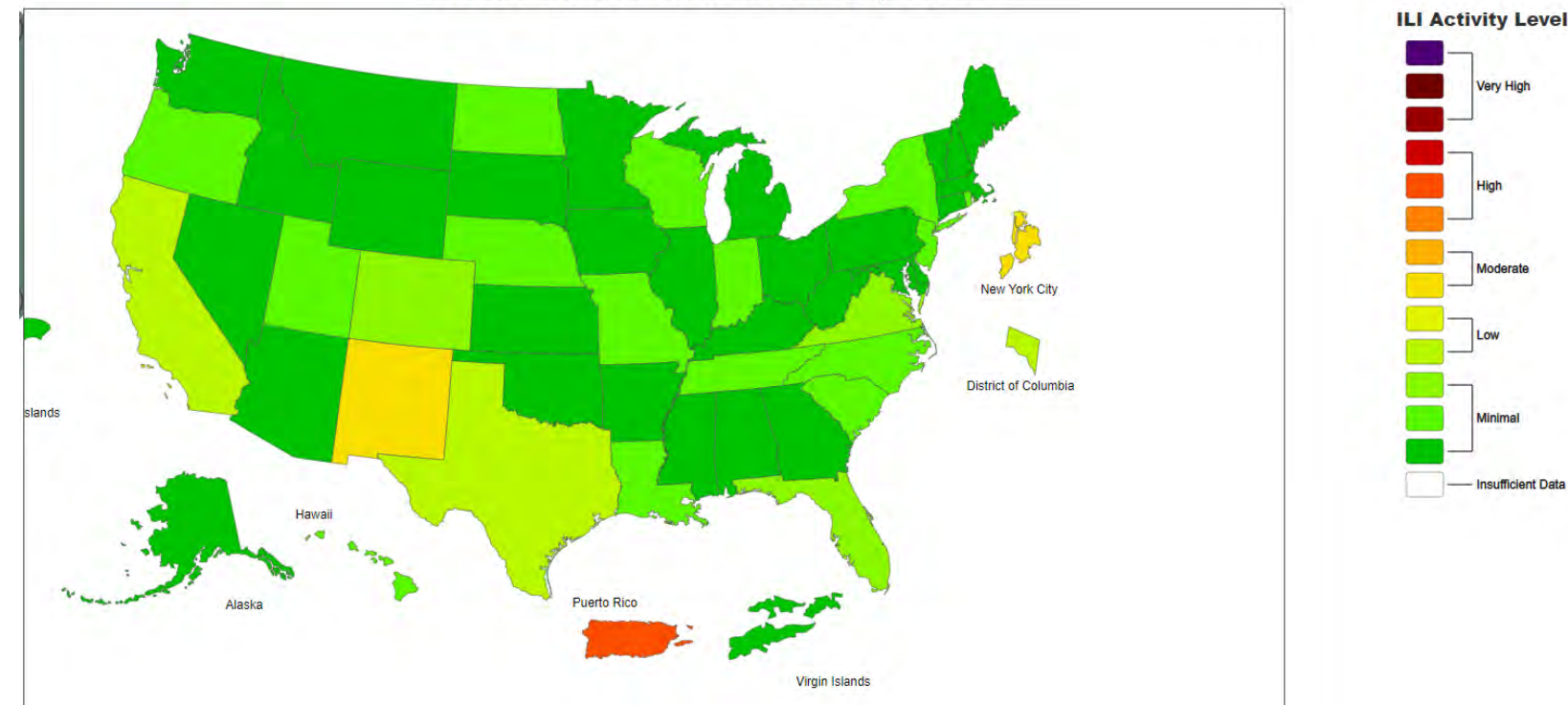


- Based on discharge diagnoses from 6,300 emergency departments
- All 50 states



U.S. Outpatient Influenza-like Illness Surveillance Network (ILINet)

2022-23 Influenza Season Week 17 ending Apr 29, 2023



- Outpatient influenza-like illness visits
- **>3,000 outpatient healthcare providers** in 50 states

U.S. Outpatient Influenza-like Illness Surveillance Network (ILINet)

2022-23 Influenza Season Week 17 ending Apr 29, 2023

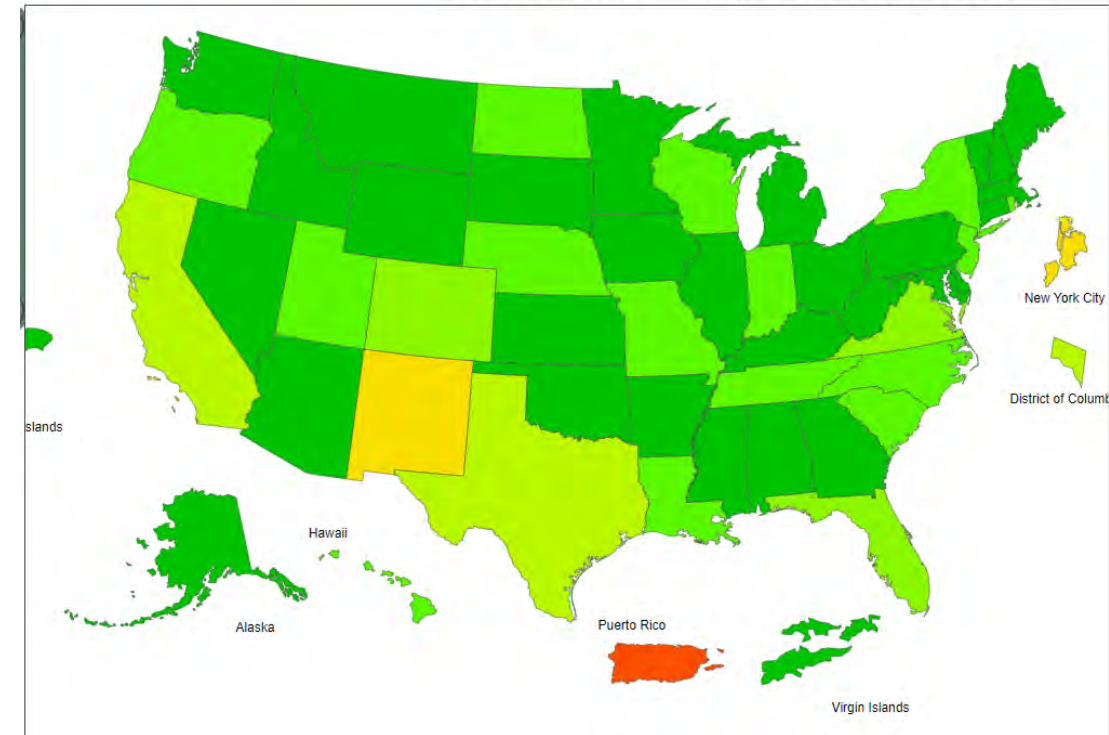
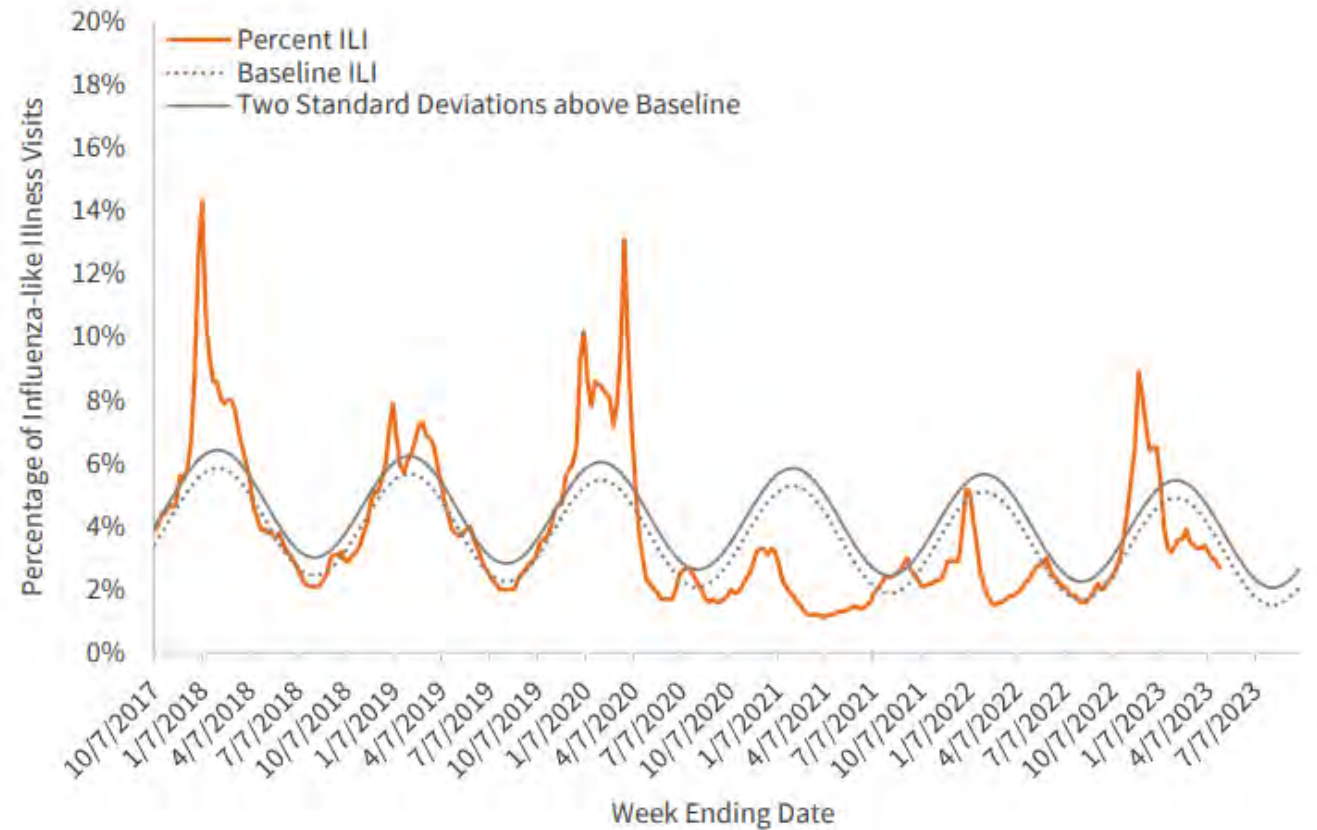


Figure 3. Percentage of Influenza-like Illness Visits Among Patients Seen by California Sentinel Providers, 2017–2023 Season to Date

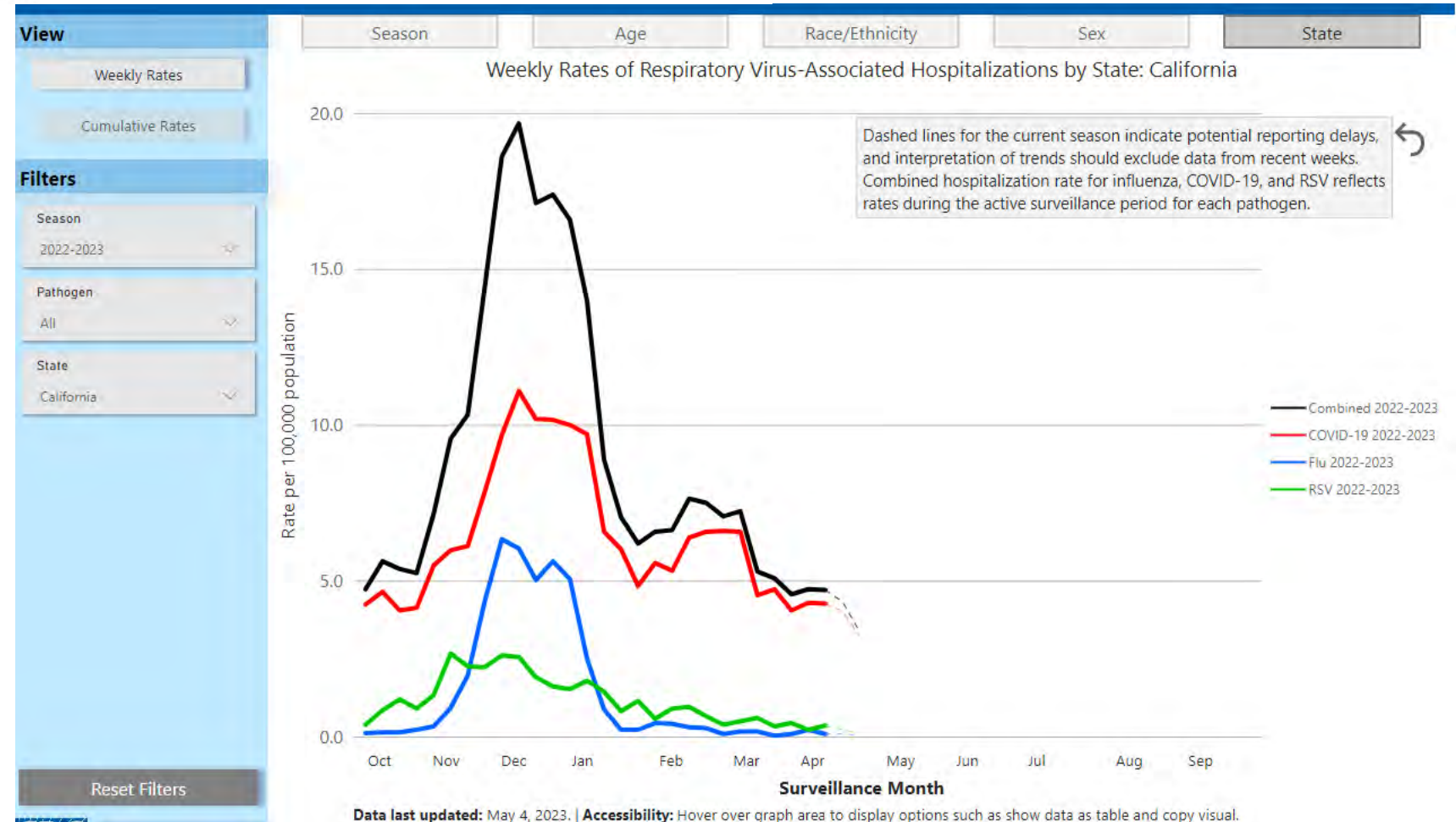


RESP-NET

Respiratory Virus Hospitalization Surveillance Network

RESP-NET Interactive Dashboard

- Number of hospitalizations associated with laboratory-confirmed COVID-19, influenza, RSV per 100,000 population
- Network of select **acute care hospitals** in 13 states

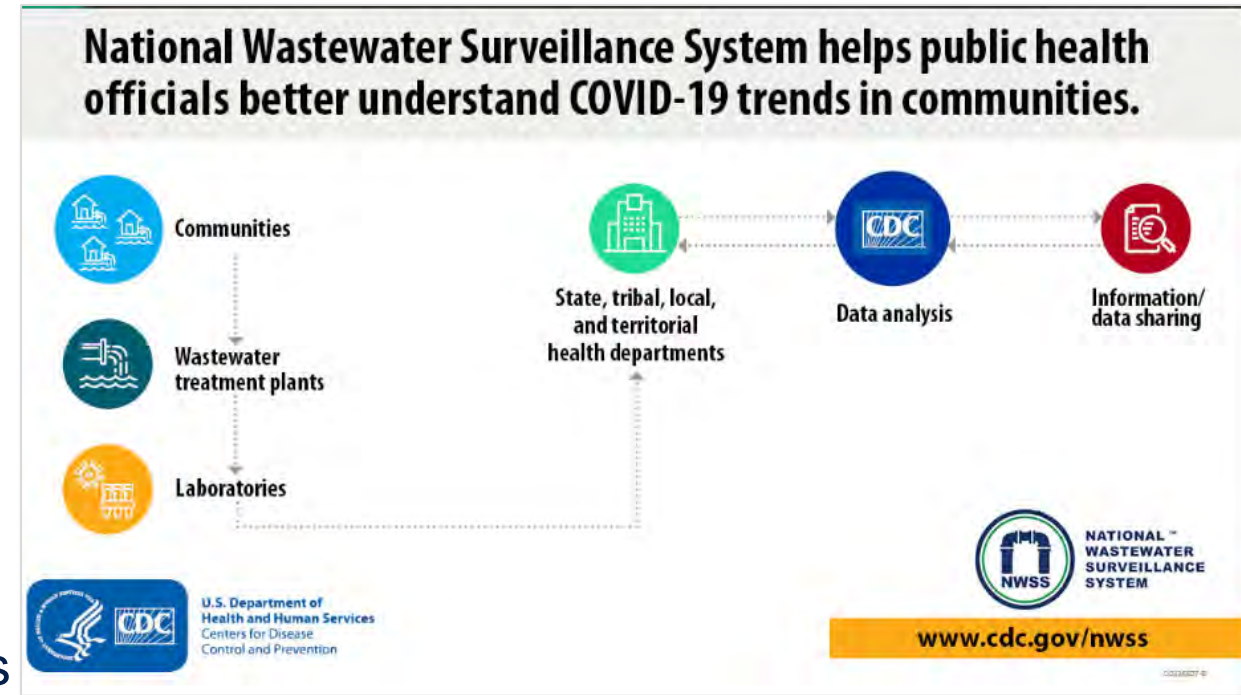


What are some alternative metrics to use for decision-making?

- Hospitals can use their own clinical laboratory test positivity rates (usefulness may be impacted by reduced utilization of lab-based COVID-19 testing)
- Hospital employee COVID-19 case rates
- Wastewater surveillance

Wastewater surveillance

- National Wastewater Surveillance Systems (NWSS): RT-PCR of sewage for specific pathogens
- Expanded partnerships (health depts, CDC, municipal utilities, private analytics companies, academic institutions) during the COVID-19 pandemic
- Results used along with other metrics to guide public health and healthcare recommendations
- Duration and direction of change in virus levels used to trend SARS-CoV-2 and other infectious diseases (mpox, influenza, RSV, polio, etc.)
- Used to track emergence of variants



COVID-19 Wastewater Surveillance

- Wastewater SARS-CoV-2 levels based on % change over the last 15 days
 - Dark blue = Large decrease (-100%)
 - Light blue = Decrease (-99% to -10%)
 - Yellow = Stable (-9% to 9%)
 - Orange = Increase (10 to 99%)
 - Red = Large increase (100% or more)



Wastewater surveillance

- Limitations:
 - Equity: NWSS sites are unevenly distributed
 - One in six Americans live in unsewered locations
 - Requires sustainable partnerships with utilities, labs, health depts, academic institutions
 - Requires integration with data from other disease surveillance systems



What's next?

- Loss of COVID-19 Community Transmission Levels or Community Levels but continued access to COVID-19 hospital admissions per 100,000 population
- Each healthcare facility will need to identify metrics and thresholds to guide changes in interventions (e.g., when to broaden masking requirements)
- Can consider combining available COVID-19-specific data, broader respiratory virus metrics (e.g., ILI rates), and other metrics if locally available (e.g., wastewater surveillance)



Appendix: Menu of metrics

	Continuing	Ending
COVID-19 Community Levels and Community Transmission Levels		<ul style="list-style-type: none"> COVID-19 Electronic Reporting
Hospital COVID-19 data	<ul style="list-style-type: none"> Hospital reporting into NHSN weekly vs daily, fewer data elements County level 	
National Vital Statistics System (NVSS)	<ul style="list-style-type: none"> Count and % of COVID-19-associated deaths, COVID-19 deaths per 100,000 population National, HHS regional, state data 	
National Syndromic Surveillance Program (NSSP)	<ul style="list-style-type: none"> % ED visits with COVID-19 discharge diagnosis codes and change compared to previous week 6,300 EDs in all 50 states National, HHS regional, select states 	

	Continuing	Ending
National Respiratory and Enteric Virus Surveillance System (NREVSS)	<ul style="list-style-type: none"> • % SARS-CoV-2 test positivity for sentinel network of labs • 450 clinical, public health, and commercial labs • National 	
ILINet	<ul style="list-style-type: none"> • Outpatient influenza-like illness visits • >3,000 outpatient healthcare providers in 50 states • National and HHS regional data 	
RESP-NET: COVID-NET, FluServ-NET, and RSV-NET	<ul style="list-style-type: none"> • Number of hospitalizations associated with laboratory-confirmed COVID-19, influenza, RSV, adenovirus per 100,000 population • Network of select acute care hospitals in 13 states • National and state data 	
National Wastewater Surveillance System (NWSS)	<ul style="list-style-type: none"> • Many sites but unevenly distributed in the U.S. • Useful for tracking variants, other infectious disease 	