





## **Public Health**



## Public Health Update Agenda

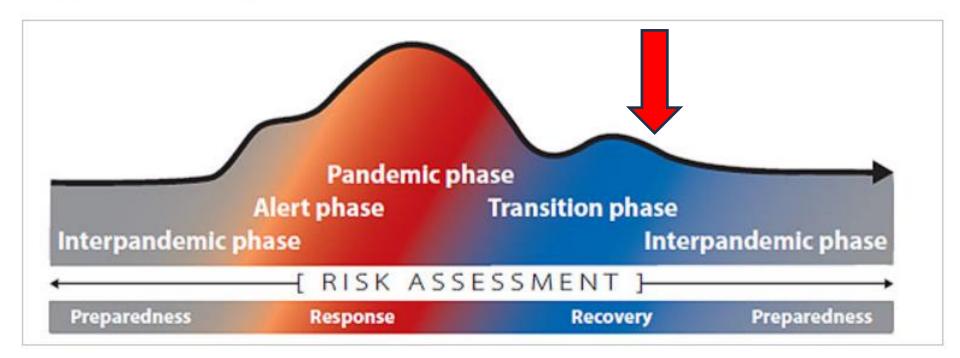
- What happened to the (current) pandemic?
  - Where are we now
  - New CDC guidance on respiratory interventions and vaccines
- The new reality in our (health) world (partial view):
  - Life expectancy
  - Long COVID
  - Sexually transmitted infections
  - "Vaccine-preventable" diseases
  - Mental health trends
- Global health
  - Zoonotic diseases: Dengue
  - Wars, Refugees, Migration and Global Travel
  - Rapidly changing climate
- The next pandemic

## What happened to the pandemic?

- There are now fewer hospitalizations and deaths from COVID-19.
  - 98% of population has some sort of experience with SARS-CoV-2 antigens (vaccines or disease)
- Protective measures (vaccines and antivirals) are generally widely available, albeit underutilized.
- There is a high degree of population immunity against SARS-Co-2 virus.
  - Does not apply to the same extent across the board (immunosuppressed, those with at high risk i.e. >65).

## What happened to the pandemic?

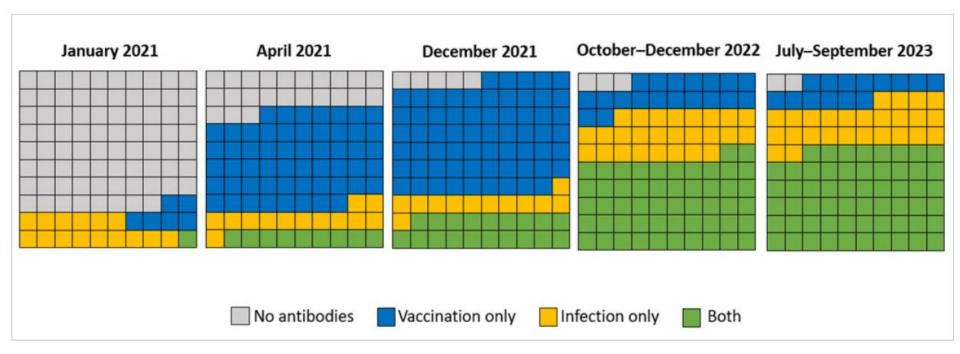
The continuum of pandemic phases



### Changing risk environment

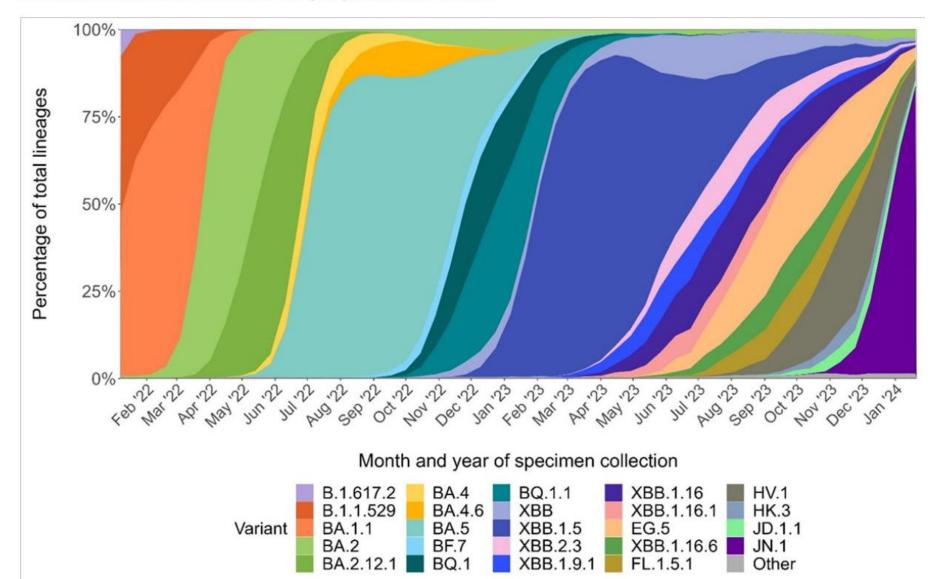
## What happened to the pandemic? Vaccine- and infection-induced antibodies prevalence

Prevalence of vaccine-induced and infection-induced antibodies against SARS-CoV-2 among a cohort of U.S. blood donors ≥16 years



### What happened to SARS-CoV-2 variants over time?

A wide range of SARS-CoV-2 variants have been causing infections over time, most recently dominated by JN.1, representing increased transmission or immune escape by successive variants



# What happened: SARS-CoV-2 vs. respiratory illnesses of seasonal importance

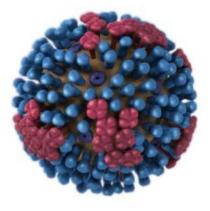
Respiratory viruses include a broad range of viral species.

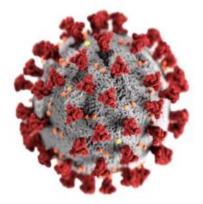
Influenza Viru	s Respiratory Syncytial Virus (RSV)	Rhinovirus	Human Metapneumovirus	Human Parainfluenza Virus
	<ul> <li>SARS-CoV-2</li> <li>Common Cold Coronaviruses</li> <li>MERS-CoV</li> <li>SARS-CoV</li> </ul>		Enteroviruses	Human parechovirus Human bocavirus Adenovirus Others

# What happened: COVID-19 vs. respiratory illnesses of seasonal importance

## The Big 3







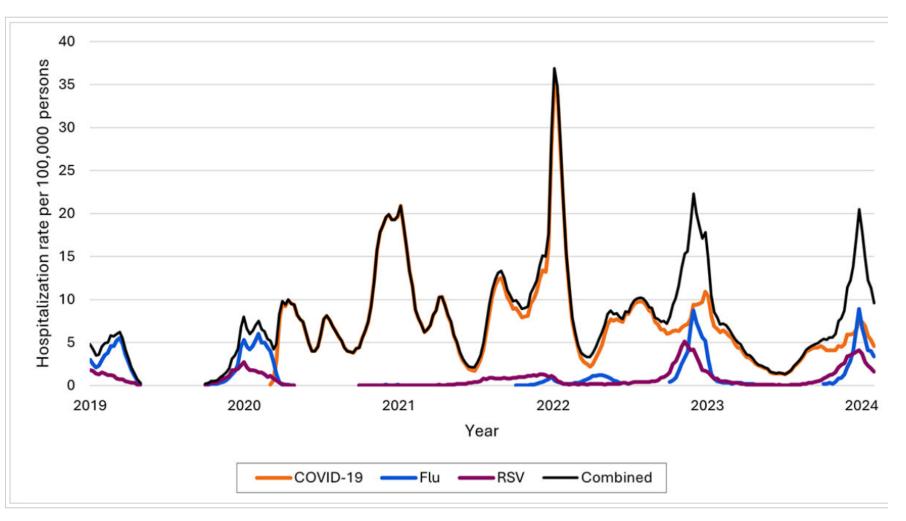
**Respiratory Syncytial Virus** 

Influenza Virus

SARS-CoV-2

## Hospitalizations (2019-2024)

COVID-19 hospitalizations have been declining year-over-year since 2022, with winter peaks more closely resembling those of influenza

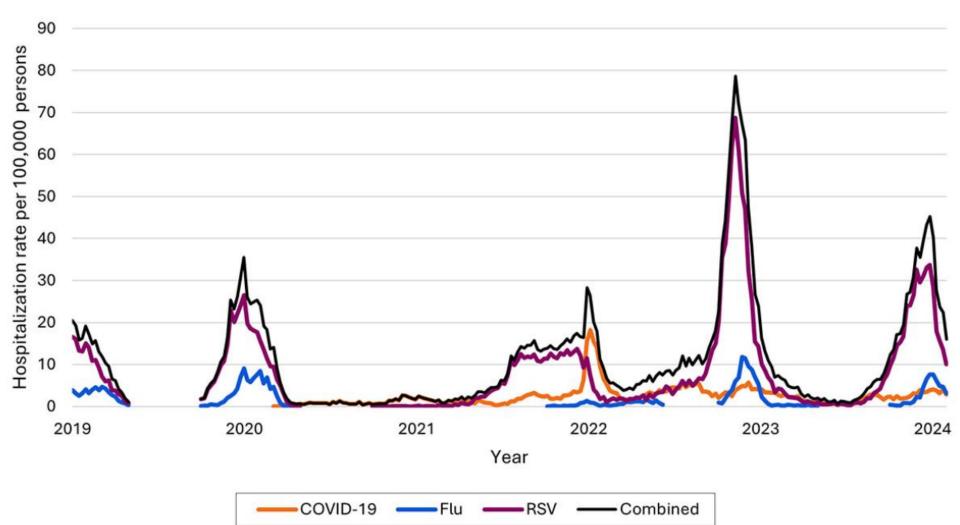


*Data on weekly new hospital admissions of patients with COVID-19, influenza, and RSV from surveillance sites in the Respiratory Virus Hospitalization Surveillance Network (<u>RESP-NET</u>), which cover 8–10% of the U.S. population, October 2019–February 2024.* 

## Hospitalizations: 2020-2024, 0-4yo

Most COVID-19, influenza, and RSV hospitalizations are in older adults and young children, with COVID-19 highest among older adults and RSV highest among young children (note differences in y-axis rates of hospitalizations across age groups)

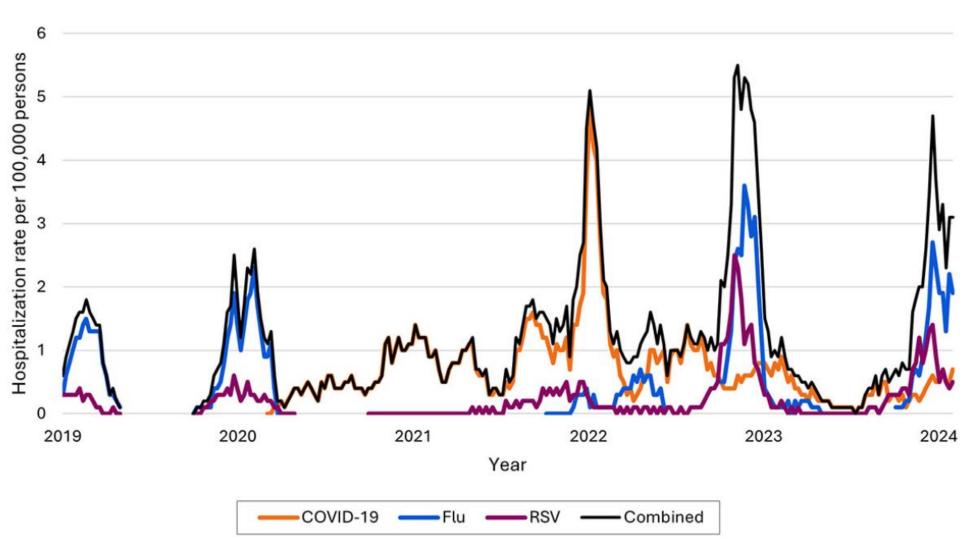
0-4 years



### Hospitalizations: 2020-2024, 5-17yo

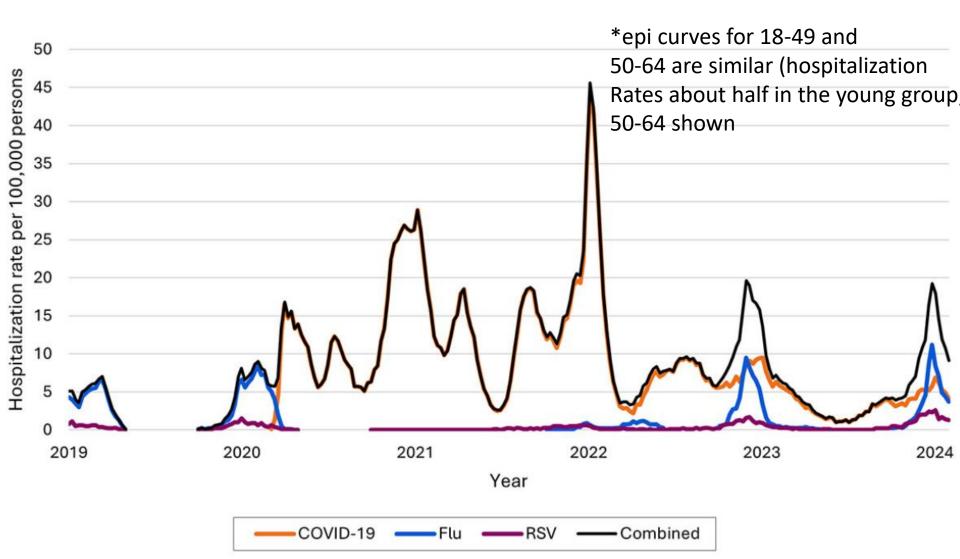
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5-17 years



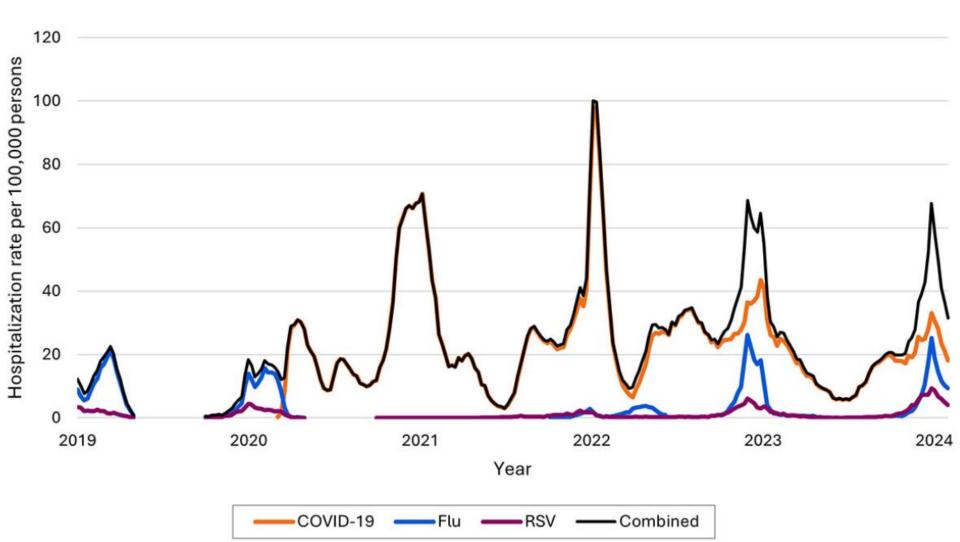
### Hospitalizations: 2020-2024,18-64yo\*

Most COVID-19, influenza, and RSV hospitalizations are in older adults and young children, with COVID-19 highest among older adults and RSV highest among young children (note differences in y-axis rates of hospitalizations across age groups)



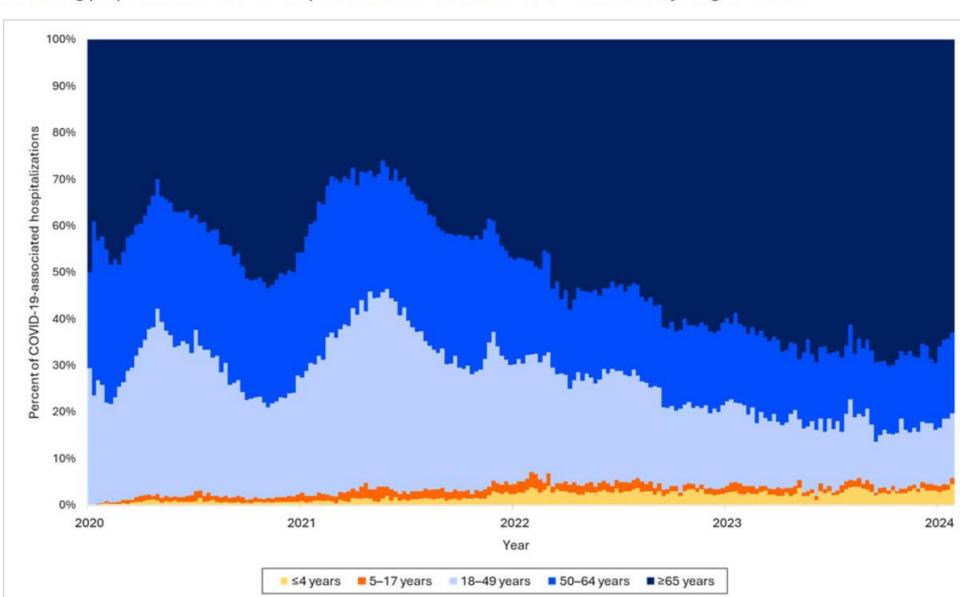
### Hospitalizations: 2020-2024, >65yo

Most COVID-19, influenza, and RSV hospitalizations are in older adults and young children, with COVID-19 highest among older adults and RSV highest among young children (note differences in y-axis rates of hospitalizations across age groups) 65+ years



### COVID-19 Hospitalizations: 2020-2024 by age

Increasing proportion of COVID-19 hospitalizations are in older adults, as well as the youngest children



## COVID-19 Deaths (per influenza season)

COVID-19-associated deaths based on reports on death certificates declined over 5-fold since their peak in 2020-2021 and are now at the same order of magnitude as estimated influenza deaths

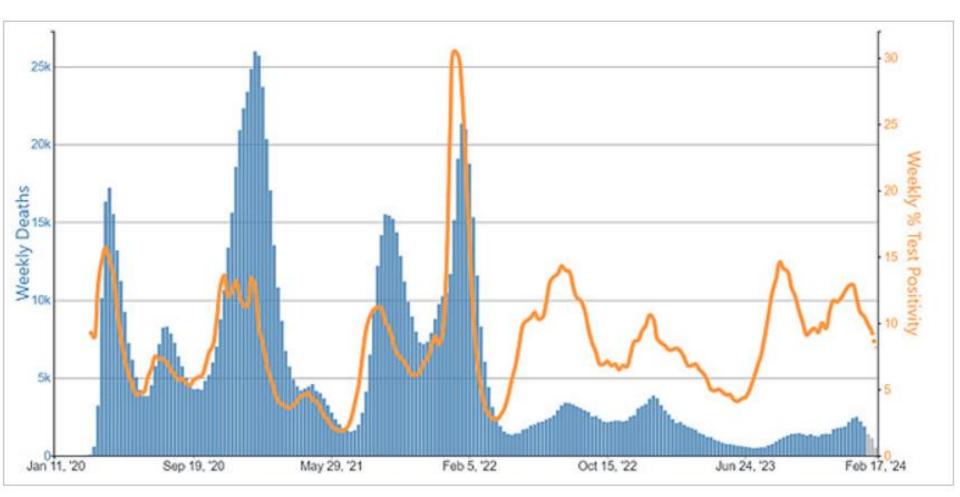
Year corresponding with start of influenza season (Oct. 1- Sept. 30)	Reported COVID- 19 deaths*	Reported influenza deaths	Estimated influenza deaths**	Reported RSV deaths
2018-2019	0	7,181	19,000–96,000	243
2019-2020	208,601	9,432	17,000-85,000	345
2020-2021	517,783	876	Not estimated	85
2021-2022	331,885	2,856	4,000-24,000	396
2022-2023	89,573	9,559	18,000–97,000	736
2023-2024 (through Feb. 17)	32,949 to date	5,854 to date	17,000–50,000 to date	587 to date

\*Reported death data from CDC's National Vital Statistics System based on death certificates, available at <u>CDC WONDER</u>. Data from 2022-2024 are provisional and subject to change.

\*\*\*\*Estimated influenza deaths, accounting for underreporting, based CDC modeling available here: <u>Disease Burden of Flu</u>, including confidence intervals. It has been long recognized that only counting deaths where influenza was recorded on death certificates would <u>underestimate influenza's overall impact on mortality</u>. Influenza can lead to death from other causes, such as pneumonia and

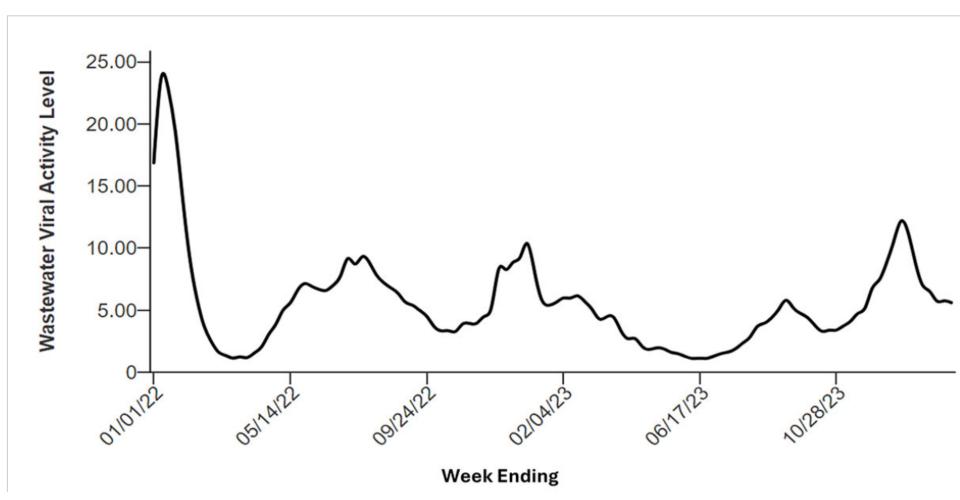
### What happened to COVID-19 Deaths: divergence between infection and severe disease

SARS-CoV-2 test positivity (orange line) has remained elevated, a marker of ongoing COVID-19 spread, but deaths (blue bars) have declined substantially



# COVID-19 Deaths: wastewater activity as high as ever, but sever COVID less frequent

Wastewater viral activity levels of SARS-CoV-2 demonstrate ongoing community transmission



## What happened: COVID-19 Vaccine Effectiveness (hospitalizations)

Vaccine Effectiveness of 2023-2024 vaccine against hospitalization among immunocompetent adults aged ≥18 years

	No. (col %)		Median interval		Vaccine Effectiveness (%)		
OVID-19 vaccination losage pattern	COVID-19 COVID- case- 19 control patients patients		since last dose for vaccinated, days (IQR)	VE %* (95% CI)			
No updated dose (Ref)	15,932 (92)	98,218 (88)	669 (403–792)	Ref			
Received updated dose	1,297 (8)	13,378 (12)	44 (26–64)	47 (44–50)			
7–59 days earlier	825 (5)	9,372 (8)	33 (20–46)	51 (47–54)			
60–119 days earlier	472 (3)	4,006 (4)	74 (66–83)	39 (33–45)			
					20 40 50 80		

VE estimates adjusted for age, sex, race and ethnicity, geographic region, and calendar time. MMWR February 29, 2024

### COVID-19 Vaccine Effectiveness against Hospitalizations vs. other Resp. Vaccines

Vaccines substantially reduce the risk of hospitalization, and many people at higher risk of severe disease are missing this layer of protection

Vaccine	Real-world effectiveness against hospitalization*	% of adults vaccinated	% older adults vaccinated	% of children vaccinated		
COVID- 19**	Approximately 50%	22%	42%	12%		
Influenza**	Approximately 42%	48%	73%	50%		
RSV***	Not yet available	Not approved for all adults	22%	Not approved for all children		

\*Data on COVID-19 vaccine effectiveness among adults for updated (2023-2024) COVID-19 vaccine and 2023-2024 seasonal influenza vaccine

*\*\*Data on 2023-2024 updated COVID-19 vaccines and 2023-2024 seasonal influenza vaccine from CDC's National Immunization Survey (NIS) as of February 16, 2024. More detail, including confidence intervals around these point estimates, is available on CDC's <u>Respiratory Virus Data</u> <u>Channel</u>. Data on percentage of older adults vaccinated for COVID-19 and influenza are for those 65+ years and for those 60+ years for RSV.* 

*\*\*\*RSV vaccination is recommended for older adults aged 60+ years based on shared clinical decision-making with a healthcare provider. RSV protection for young children is available through vaccination of pregnant people or use of an immunization called nirsevimab for young children. As of January 2024, an estimated <u>16% of pregnant people</u> 32+ weeks gestation reported receiving RSV vaccine, and among females with an infant <8 months, <u>41% reported</u> their infant received nirsevimab.* 

# What happened to the general public guidance and isolation for COVID-19

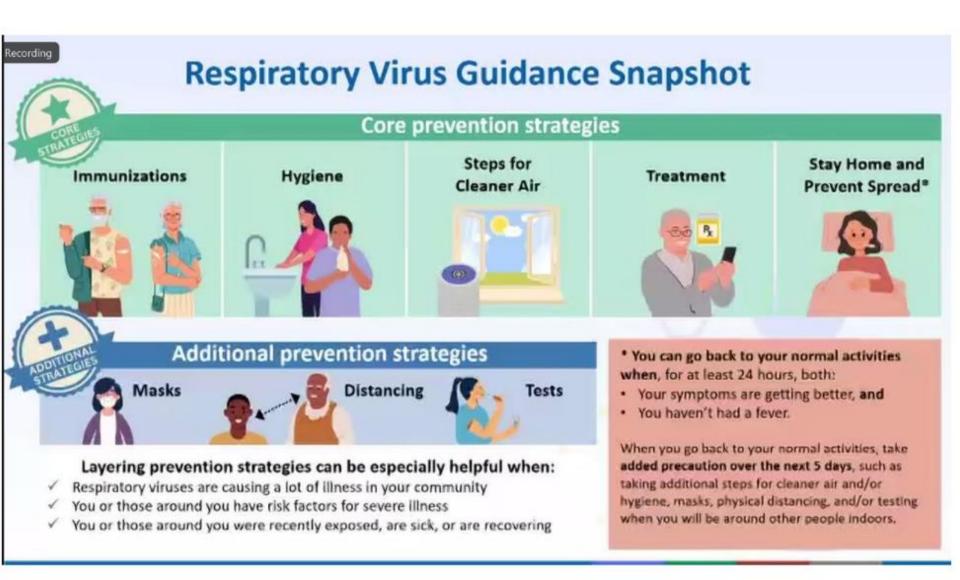
Stay Home and Prevent Spread

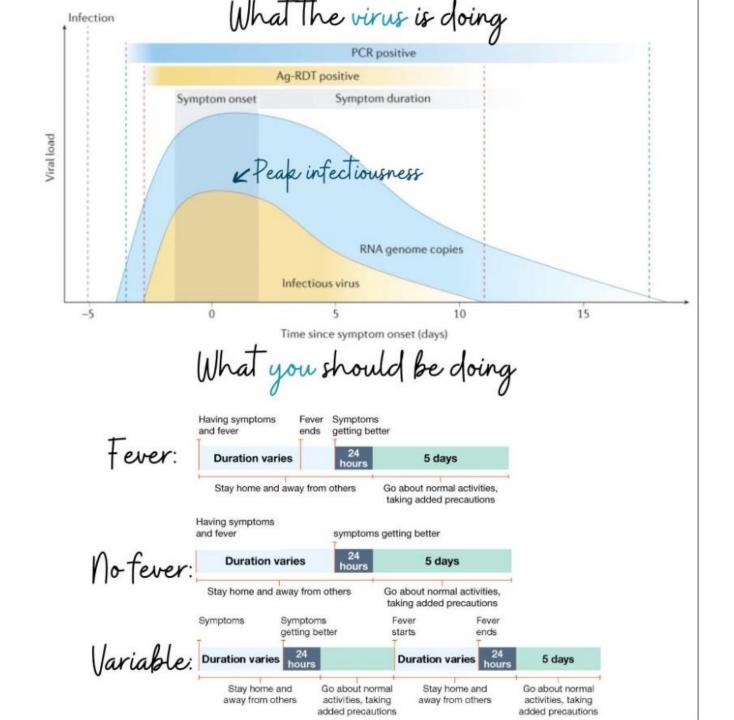
When you may have a respiratory virus...

- You can return to normal activities when, for at least 24 hours, both are true:
  - Your symptoms are getting better overall, and
  - You have not had a fever (and are not using fever-reducing medication).
- Take added precaution over the next 5 days, such as taking additional <u>steps for cleaner air</u>, <u>hygiene, masks</u>, <u>physical distancing</u>, and/or <u>testing when you</u> will be around other people indoors.

### CDC Guidance Snapshot

(What happened to COVID Isolation, Masking?)





### WA Status

- Most recently WA State has been in alignment with CDC isolation guidance for the general public
  - WA has maintained separate isolation guidance for healthcare and other high-risk settings
- DOH is reviewing the new CDC guidance to understand the scope and details of the changes

### This general public guidance DOES NOT apply to healthcare settings

### Note

CDC offers separate, specific guidance for healthcare settings (<u>COVID-19</u>, <u>flu</u>, and <u>general infection</u> <u>prevention and control</u>). <u>Federal civil rights laws</u> may require reasonable modifications or reasonable accommodations in various circumstances. Nothing in this guidance is intended to detract from or supersede those laws.



# What happened to healthcare recommendations?



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

### COVID-19

✿ COVID-19	
About COVID-19	+
Symptoms	
Testing	+
Medical Conditions	
Prevention	+
Vaccines	+
Treatments & Medications	
Long COVID	+
Data & Surveillance	+
Healthcare Workers	_

### Interim Infection Prevention and Control Recommendations for Healthcare Personnel During the Coronavirus Disease 2019 (COVID-19) Pandemic

Search COVID-19

Updated May 8, 2023 Print

The recommendations in this guidance continue to apply after the expiration of the federal COVID-19 Public Health Emergency.

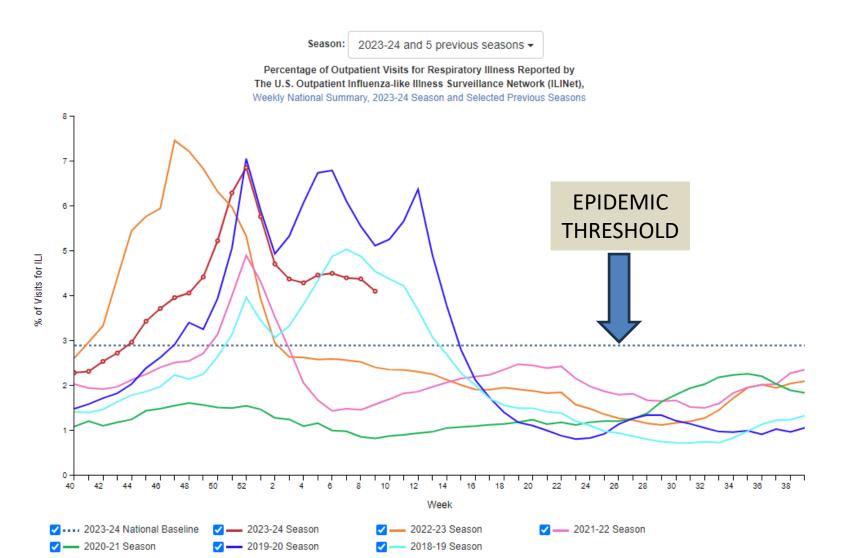
For healthcare personnel, see <u>Isolation and work restriction guidance</u>. For strategies to mitigate healthcare personnel staffing shortages, see <u>Contingency and crisis management</u>. For healthcare professionals advising people in non-healthcare settings about isolation for laboratory-confirmed COVID-19, see <u>Ending Isolation and Precautions for People with COVID-19</u>.

### Summary of Recent Changes

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

### **Outpatient Respiratory Illness Visits**

Nationwide, during Week 9, 4.1% of patient visits reported through ILINet were due to respiratory illness that included fever plus a cough or sore throat, also referred to as ILI. This has decreased (change of > 0.1 percentage points) compared to Week 8. The percentage of visits for ILI remained stable in regions 2, 3, 5, and 7, and decreased in regions 1, 4, 6, 8, 9, and 10 in Week 9 compared to Week 8. Regions 8 and 10 are below their region-specific baselines in Week 9 for the first time since early and mid-November respectively, while all other regions remain above their region-specific baselines. Multiple respiratory viruses are co-circulating, and the relative contribution of influenza virus infection to ILI varies by location.





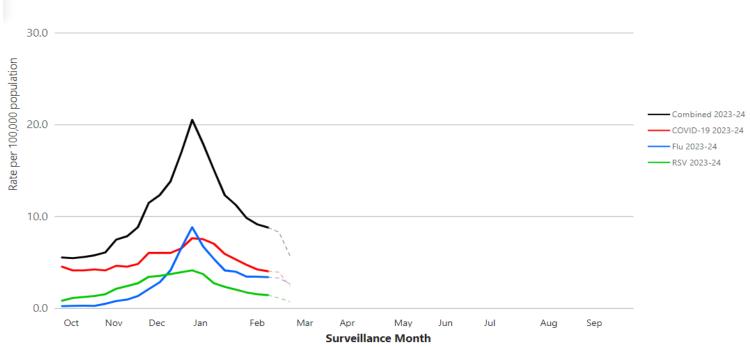
Search

Public Health Surveillance and Data

### https://www.cdc.gov/surveillance/resp-net/dashboard.html



### **RESP-NET** Interactive Dashboard



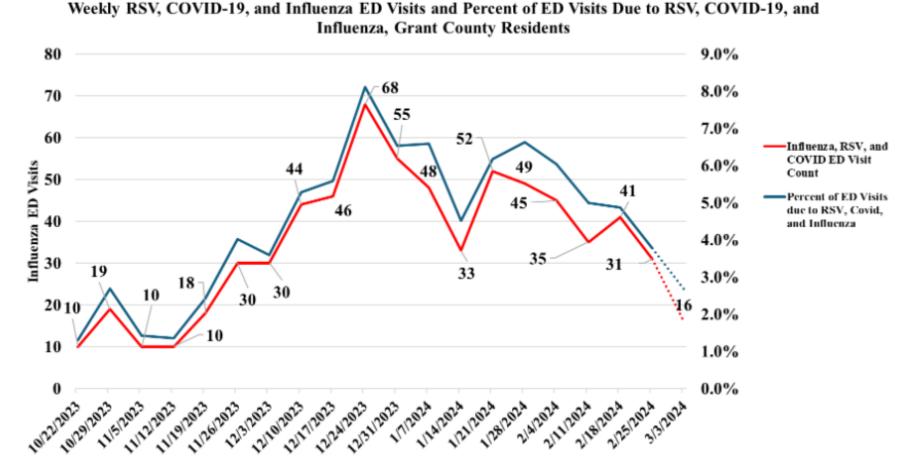
Data last updated: March 6, 2024. | Accessibility: Right click on the graph area to display options such as show data as table and copy visual.

Q

## COVID-19 by School District (Grant)

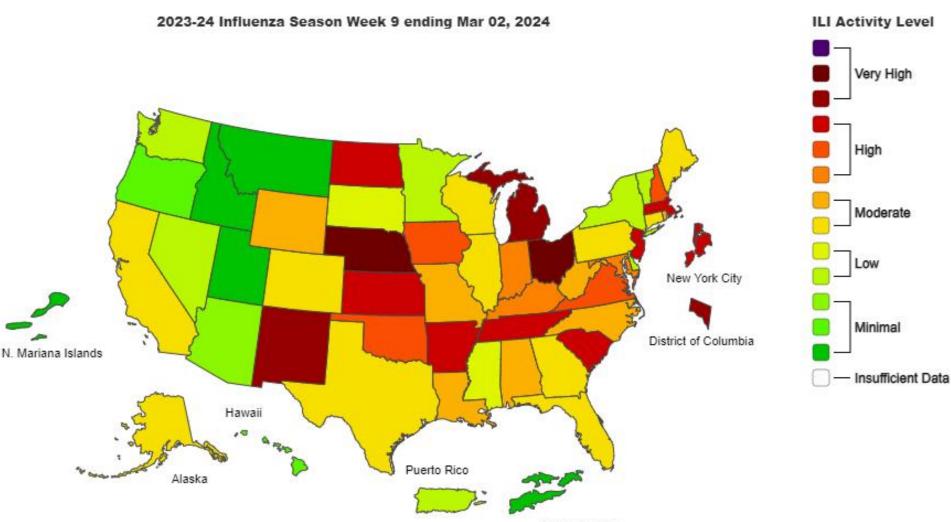
Covid-19 Weekly Incidence Rate by School District February 29th, 2024-March 6th, 2024						
School District by zipcode	Last Week's Cases	Total Cases		100,000/7	Incidence Rate/100,000/7	Absolute Change from last week
Coulee-Hartline	1	1	1405	71	71	0
Ephrata	1	6	12217	8	49	41
Grand Coulee	0	0	2452	0	0	0
Moses Lake	49	17	47753	103	36	-67
Quincy	15	9	14208	106	63	-42
Royal City	1	2	25297	4	8	4
Soap Lake	0	3	4636	0	65	65
Wahluke	3	3	8146	37	37	0
Warden	0	1	3908	0	26	26
Wilson Creek	0	0	544	0	0	0

### Weekly combined RSV, COVID-19 and Influenza ED Visits (Grant)



\*Final week of graph are preliminary numbers and subject to possible change

### U.S. 2023-2024 Flu Activity Map (03/02/24)



Virgin Islands

### Restating the obvious...

### THE WALL STREET JOURNAL.

### Four Years Later, Covid Isn't Done With Us

After 1.2 million deaths in the U.S., there is little agreement about how we should remember the pandemic—or prepare for the next one.

A pedestrian crosses a deserted street in Chicago, March 23, 2020. CHARLES REX ARBOGAST/ASSOCIATED PRESS

*By Nicholas Christakis* March 8, 2024 9:00 pm ET

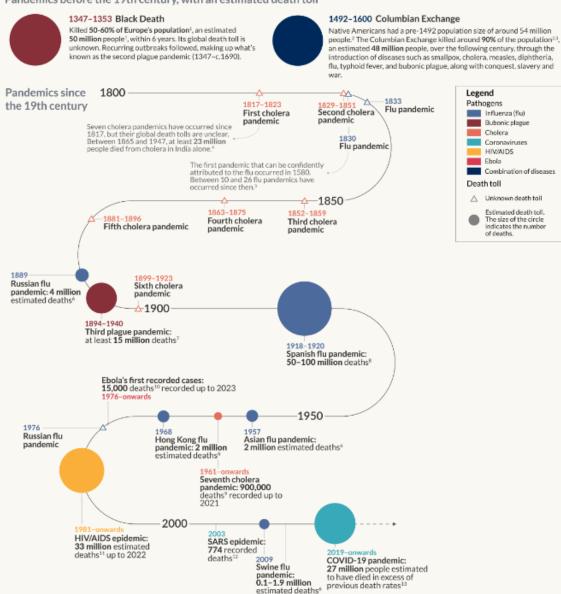
Our World

in Data

### A TIMELINE OF PANDEMICS Time and again, humanity suffered through large pandemics

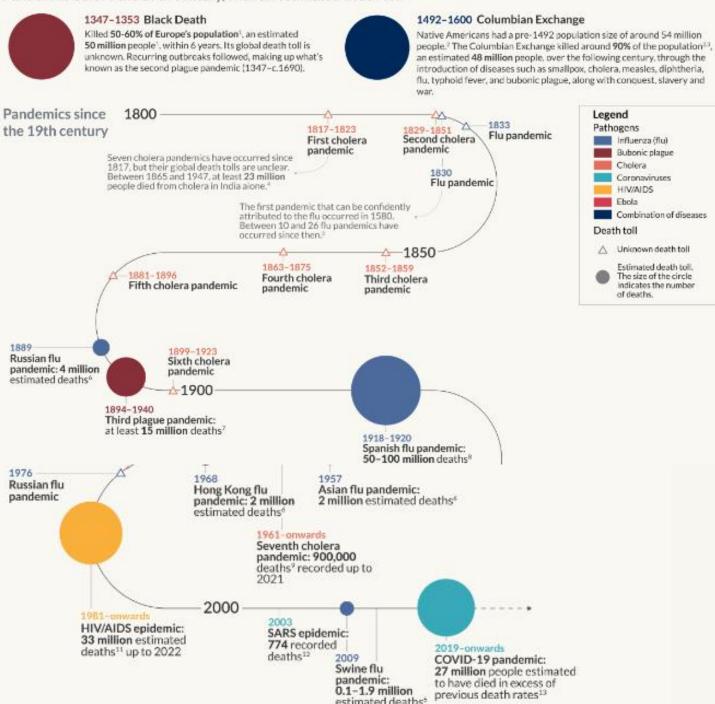
Historical knowledge about many pandemics in the past is sparse. Pandemics with unknown death tolls are shown as triangles, while those with an estimated death toll are shown as circles.

### Pandemics before the 19th century, with an estimated death toll



2012-onwards MERS epidemic: 935 deaths12 recorded up to 2023

### Pandemics before the 19th century, with an estimated death toll

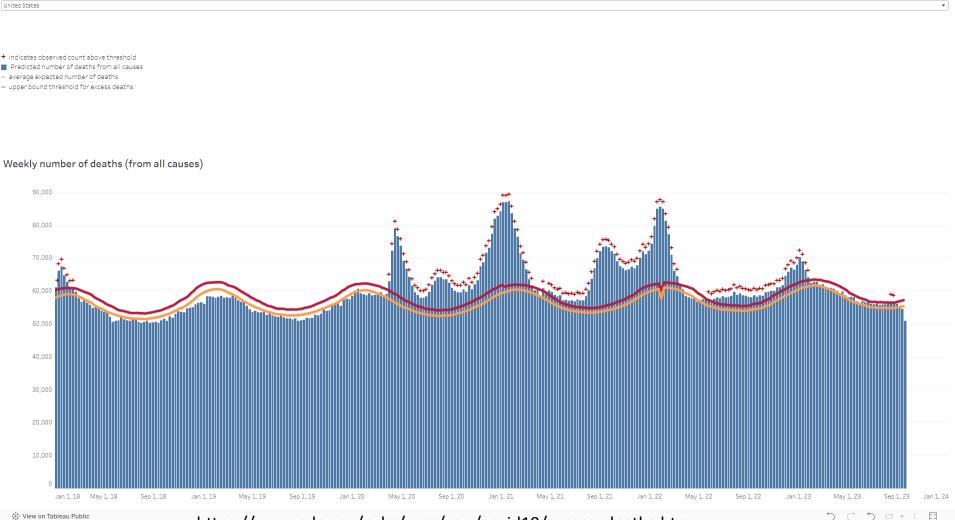


## COVID reverberations?

- 1.2 million excess deaths since January 2024
- Hospitalizations: weekly COVID-19 hospital admissions are down 75% compared to Jan 2022
  - But: of those hospitalized (last week: 15,000), >95% have no record of the most recent COVID vaccine
- Deaths: weekly deaths are down 90% compared to January 2022
  - But: 26 consecutive weeks with COVID deaths >1,000

## U.S.: Excess Deaths Jan 2018 – Jan 2024 (Total)

Select a jurisdiction:



https://www.cdc.gov/nchs/nvss/vsrr/covid19/excess deaths.htm

### U.S.: Excess Deaths 2018-2024 (COVID-19 in blue, predicted)

Select a jurisdiction:

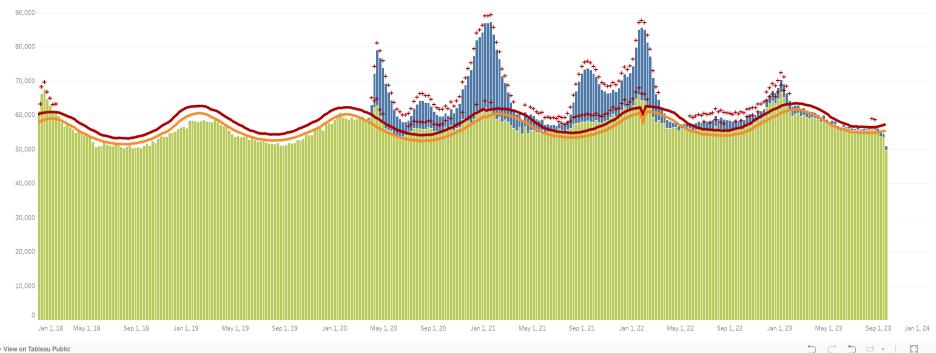
United States

+ indicates observed count above threshold

- Predicted number of deaths from all causes, including COVID-19
- Predicted number of deaths from all causes, excluding COVID-19
- average expected number of deaths
- upper bound threshold for excess deaths

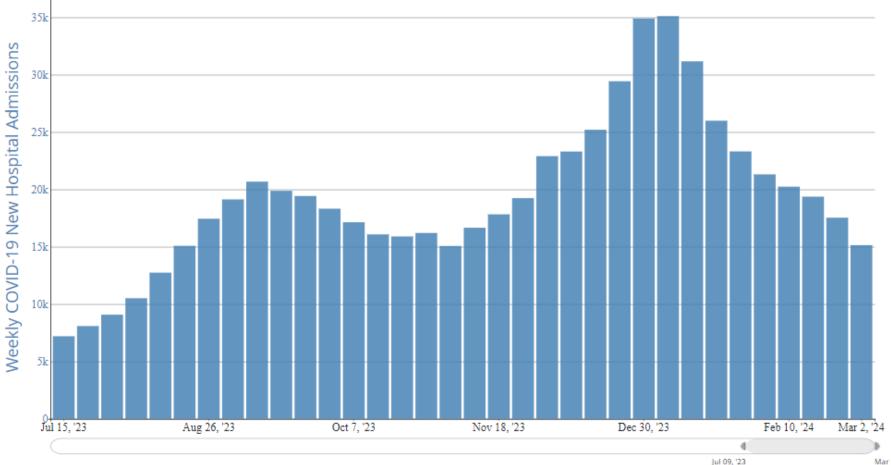
### Weekly number of deaths

Comparing excess deaths including/excluding COVID-19



## U.S. COVID-19 Hospitalizations

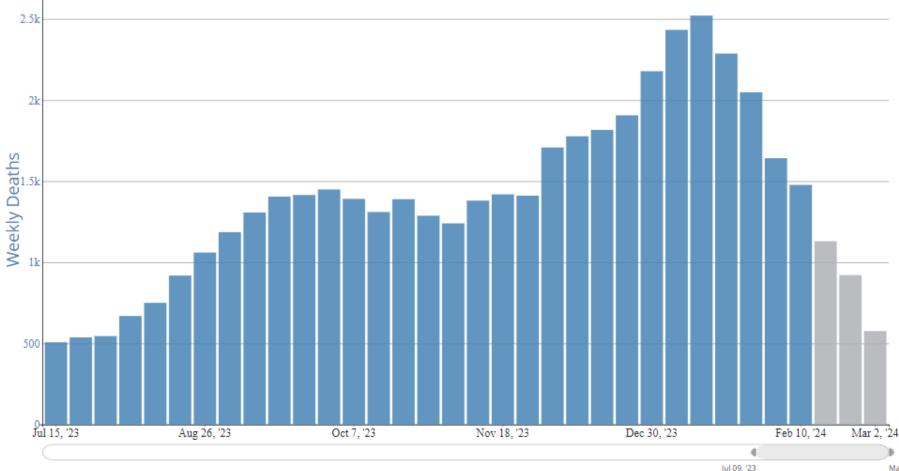
COVID-19 New Hospital Admissions, by Week, in The United States, Reported to CDC



Mar 02, '24

### U.S. COVID-19 Weekly Deaths (1,500) (~200 /day)

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



## COVID-19 Vaccine Information

Page last updated: February 29, 2024

#### <u>CDC recommends</u> everyone 6 months and older should get an updated 2023-2024 COVID-19 vaccine.

February 28th, 2024 - The <u>Centers for Disease Control and Prevention (CDC) recommend</u> adults ages 65 years and older receive an additional updated 2023-2024 COVID-19 vaccine dose. The recommendation acknowledges the increased risk of severe disease from COVID-19 in older adults, along with the currently available data on vaccine effectiveness.

People who are up to date have lower risk of severe illness, hospitalization, and death from COVID-19 than people who are unvaccinated or who have not completed the doses recommended for them by CDC.

- <u>Everyone aged 5 years and older</u> should get 1 dose of an updated COVID-19 vaccine to protect against serious illness from COVID-19.
- <u>Children aged 6 months-4 years</u> need multiple doses of COVID-19 vaccines to be <u>up to date</u>, including at least 1 dose of updated COVID-19 vaccine.
- <u>People who are moderately or severely immunocompromised</u> may get additional doses of updated COVID-19 vaccine.
- People 65 years old and older should receive an additional dose of updated 2023-2024 COVID-19 vaccine at least 4 months after their last 2023-2024 dose.

The Washington State Department of Health is currently updating webpages and documents to align with the most recent CDC guidance.

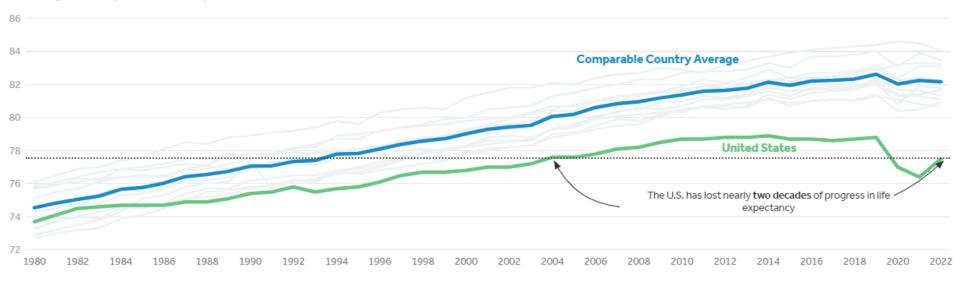
#### https://doh.wa.gov/emergencies/covid-19/vaccine-information

New reality of the health space (world) in the interpandemic period

- Background: LiveNation had the strongest year ever in 2023 (620mln tickets); revenge travel; WHOOP wearable fitness tracker: dancing up (1mln); wars; gambling revenue tripled 2020-2023 (\$65bln)...
- Life expectancy (already below "comparables"):
  - Dropped (and rebounded some) to 77.5 years (2022).
     COVID erased 20 years of life expectancy progress.
- Long COVID (conservative estimates):
  - Approximately 5% of all people with prior COVID-19 have chronic symptoms which did not exist before.

## New reality: life expectancy?

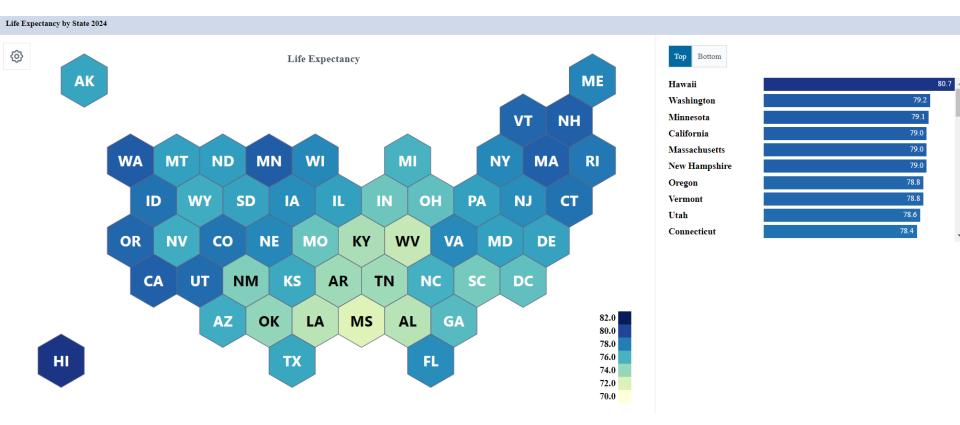
Life expectancy at birth, in years, 1980-2022



Notes: Comparable countries include Australia, Austria, Belgium, Canada, France, Germany, Japan, the Netherlands, Sweden, Switzerland, and the U.K. See Methods section of "How does U.S. life expectancy compare to other countries?"

Source: KFF analysis of CDC, OECD, Australian Bureau of Statistics, Japanese Ministry of Health, Labour, and Welfare, Statistics Canada, and U.K. Office for National Statistics data • Get the data • PNG Peterson-KFF

### U.S. life expectancy by state

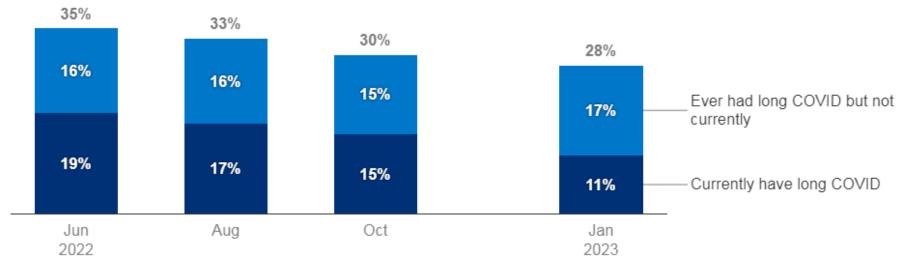


https://worldpopulationreview.com/staterankings/life-expectancy-by-state

# New reality: Long COVID (5%? 10%?)

# Among People Who Have Had COVID, the Percentage who Currently Have Long COVID is Declining

Percentage of people reporting that they currently have or ever had long COVID among those who have had COVID as of January 16, 2023



NOTE: The Pulse Survey, an experimental survey conducted by the Census Bureau and National Center for Health Statistics, asked respondents whether they had any symptoms of COVID that had lasted longer than 3 months. This figure reports the findings as of 6/13/2022, 8/8/2022, 10/17/2022, and 1/16/2023.



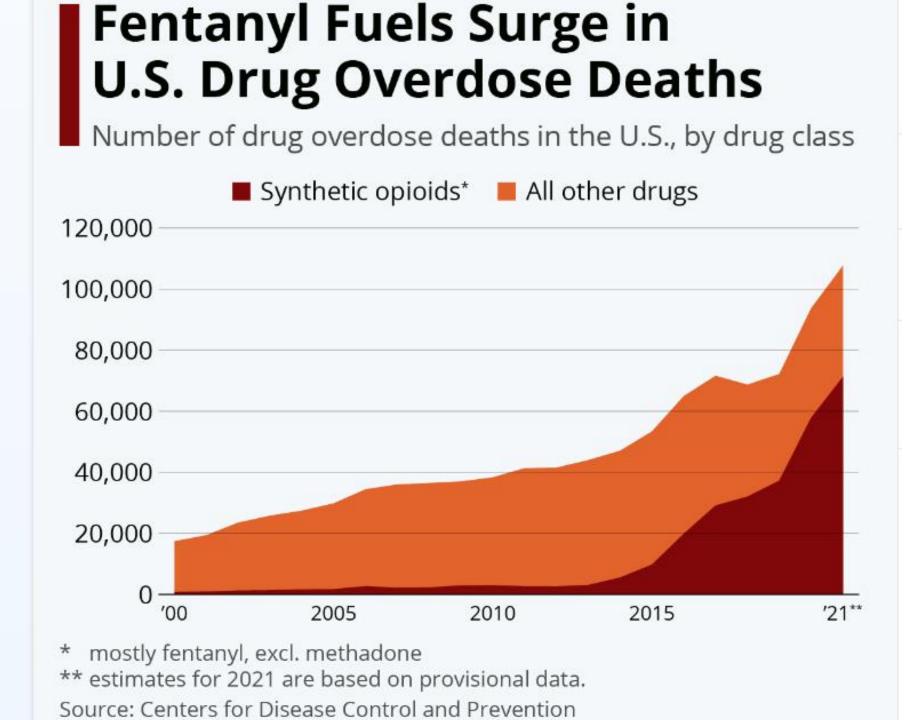
SOURCE: National Center for Health Statistics. Post-COVID Conditions. Data accessed Jan 26, 2023. Available from: https://data.cdc.gov/d/gseaw83j. • PNG

### New reality

- Risk behaviors /accidents:
  - Motor vehicle deaths: alcohol related up 18%, speeding related up 17% compared to 2019

#### • Substances:

- Drug-related deaths are up 30% since 2019, mostly due to fentanyl and other synthetic opioids
- Alcohol-related deaths up 30% (about 500 deaths/day)



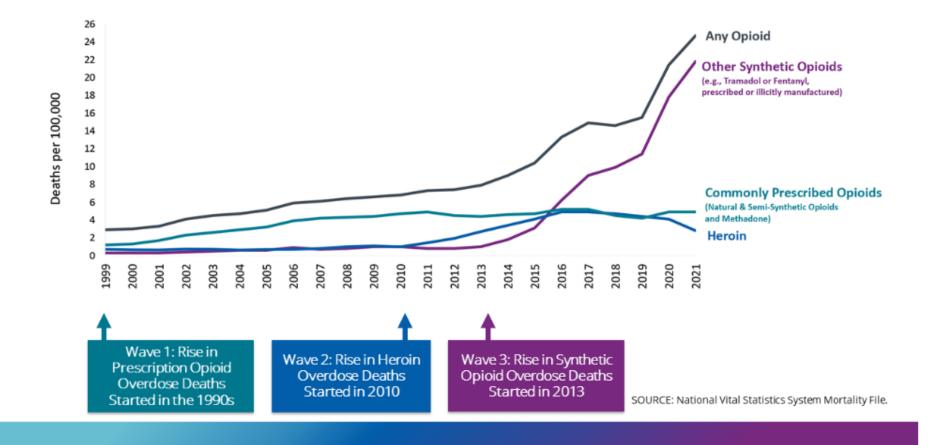


died each day from an opioid overdose in 2021.



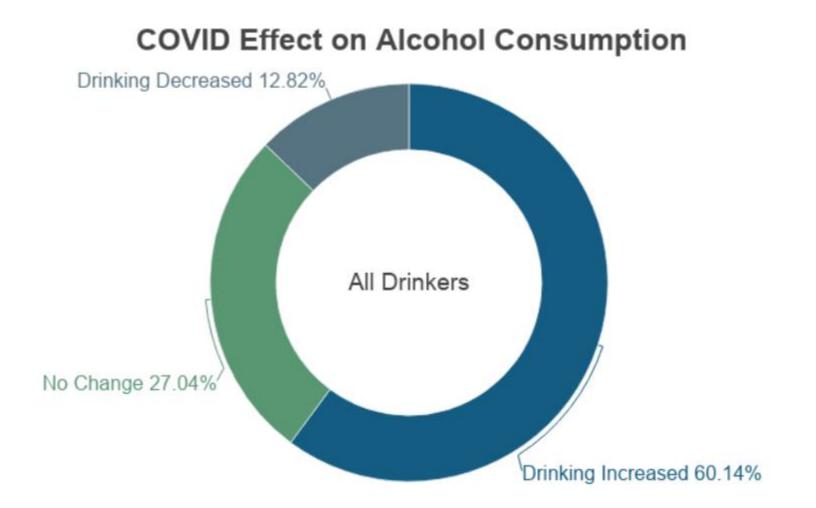
#### New reality: opioid overdoses

**Three Waves of Opioid Overdose Deaths** 



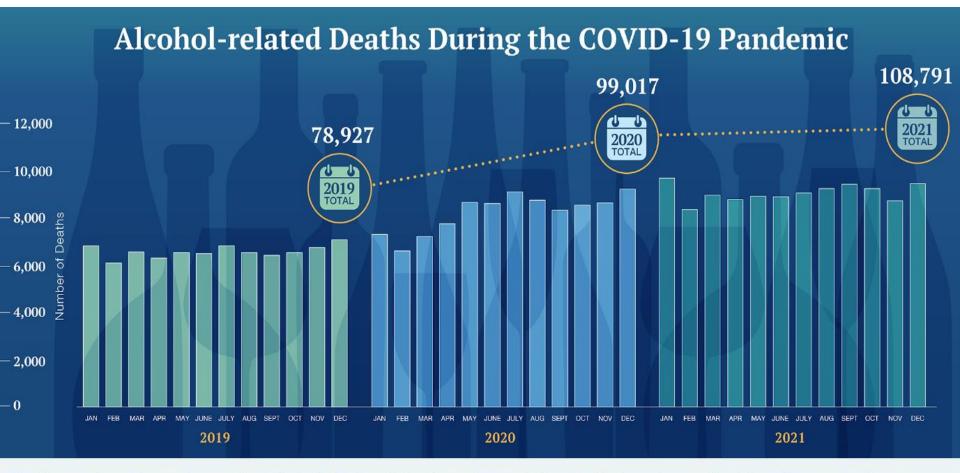
From 1999-2021, nearly 645,000 people died from an overdose involving any opioid, including prescription and illicit opioids<sup>1</sup>.

## New reality: alcohol consumption



https://drugabusestatistics.org/alcohol-abuse-statistics/

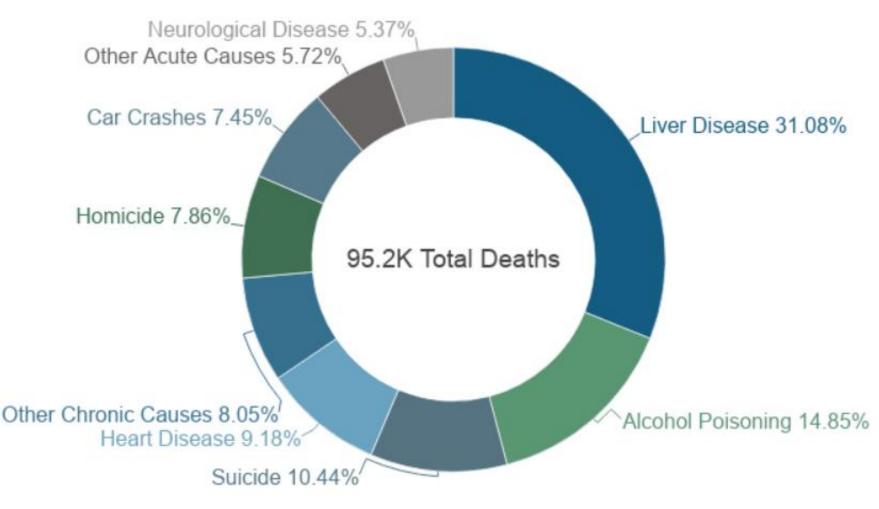
## New reality: alcohol consumption



The figure above shows the number of alcohol-related deaths each month in 2019 (before the pandemic) and in 2020 and 2021 (during the pandemic). Source: NIAAA.

## New reality: rising alcohol deaths

#### **Causes of Alcohol-Related Deaths**



### New reality

- Sexually transmitted infections (STIs):
  - STIs have continued their relentless rise; Chlamydia was a temporary exception; gonorrhea up 11%; syphilis up 80%+; neonatal syphilis up 183%+ (all since 2018).
  - Rapidly changing dynamics of syphilis.
- "Vaccine-preventable" diseases:
  - Rising or retrenching antivaccination sentiment;
  - Increase in schools falling behind with vaccination reqs, rising waiver rates; administrative non-compliance;
  - Gathering storm of measles, pertussis, mumps, etc.

#### THE STATE OF STIS IN THE UNITED STATES, 2022

CDC's 2022 STI Surveillance Report underscores that STIs must be a public health priority 1.6 million CASES OF CHLAMYDIA 6.2% decrease since 2018

0.270 Geclease soice 2010

648,056 CASES OF GONORRHEA EARN MORE

Ą

www.cdc.gov/std/

207,255 CASES OF SYPHILIS 80% increase since 2018

3,755 CASES OF SYPHILIS AMONG NEWBORNS

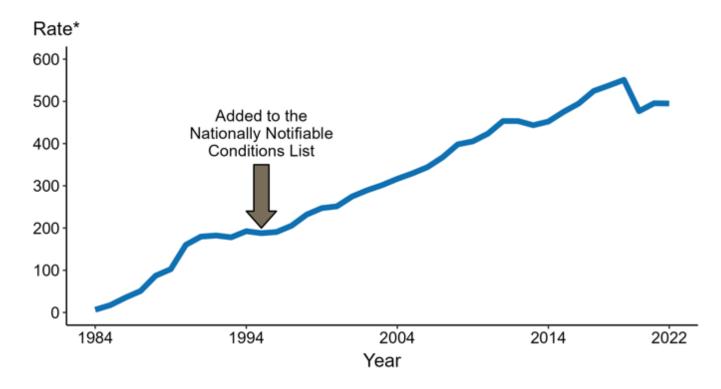
ANYONE WHO HAS SEX COULD GET AN STI, BUT SOME GROUPS ARE MORE AFFECTED 183% increase since 2018

- O YOUNG PEOPLE AGED 15-24
- O GAY & BISEXUAL MEN
- O PREGNANT PEOPLE

RACIAL & ETHNIC MINORITY GROUPS

### New reality: Chlamydia

# Chlamydia — Rates of Reported Cases by Year, United States, 1984–2022



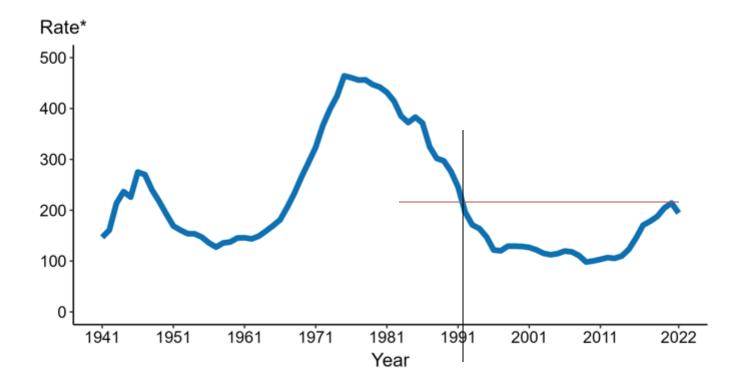
\* Per 100,000



https://www.cdc.gov/std/statistics/2022/figures.htm

#### New reality: Gonorrhea

Gonorrhea — Rates of Reported Cases by Year, United States, 1941–2022

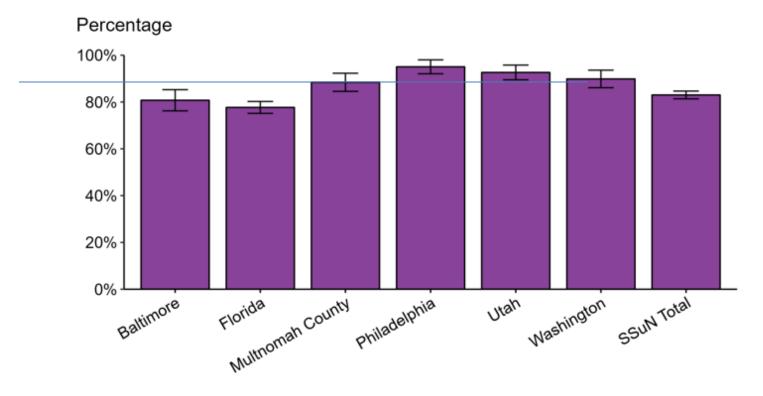


\* Per 100,000



### U.S.: Gonorrhea % Cases Treated

Gonorrhea — Estimated Proportion of Cases Treated with Recommended Regimen by Jurisdiction, STD Surveillance Network (SSuN), 2022

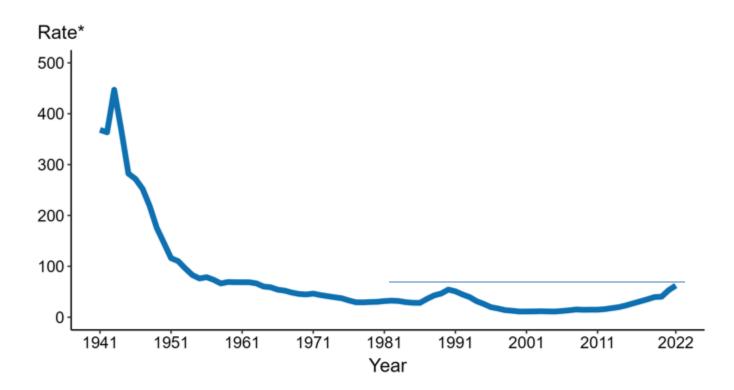




NOTE: Includes SSuN jurisdictions with treatment and dosage data ascertained for at least 80% of sampled, investigated cases. In 2022, the recommended treatment for uncomplicated gonorrhea was ceftriaxone 500 mg, intramuscular.

### U.S.: 2041-2022 Syphilis Rates (per 100,000)

Syphilis — Rates of Reported Cases by Year, United States, 1941–2022





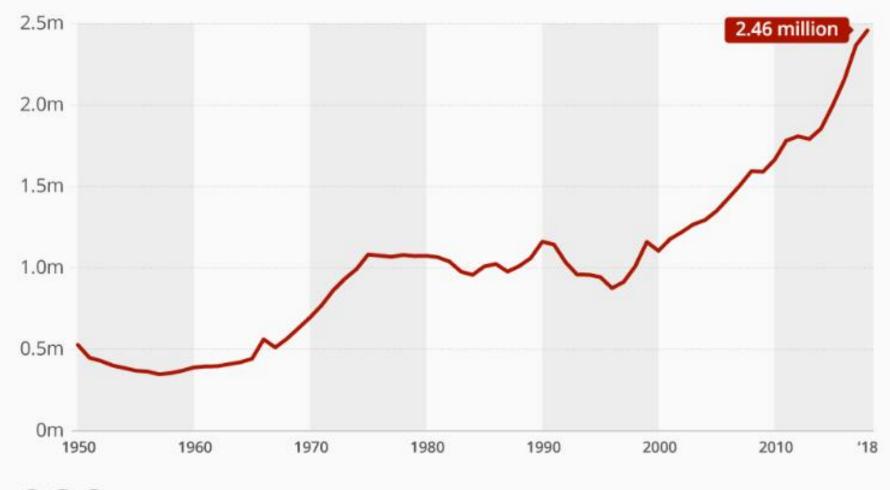
\* Per 100,000

NOTE: Total syphilis includes all stages of syphilis and congenital syphilis

## U.S.: 1950-2018 Syphilis Cases

#### **U.S. STD Cases Rise To Record High**

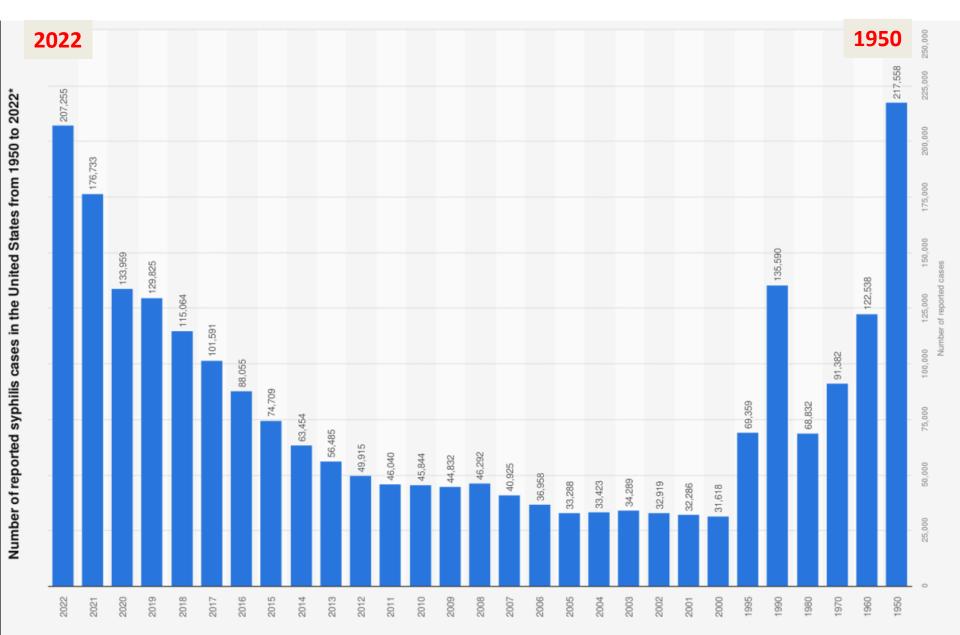
Total reported cases of syphilis, gonorrhea, chlamydia, congenital & chancroid diseases\*



(c) (i) (=) \* U.S. chlamydia cases have only been documented since 1984. @StatistaCharts Source: Centers for Disease Control and Prevention

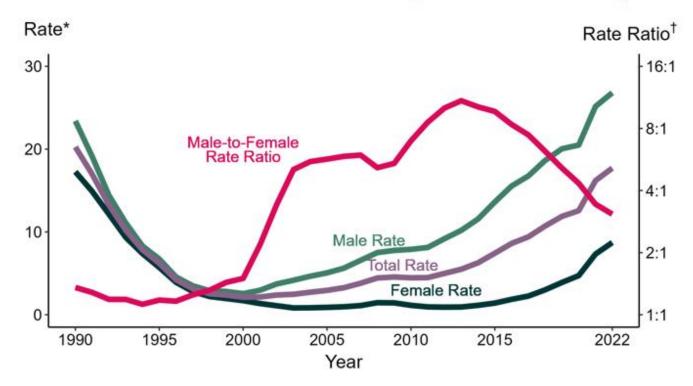


#### U.S.: Syphilis Cases, 2022 vs. 1950



## U.S.: Syphilis, Changing Dynamics

#### Primary and Secondary Syphilis — Rates of Reported Cases by Sex and Male-to-Female Rate Ratios, United States, 1990–2022

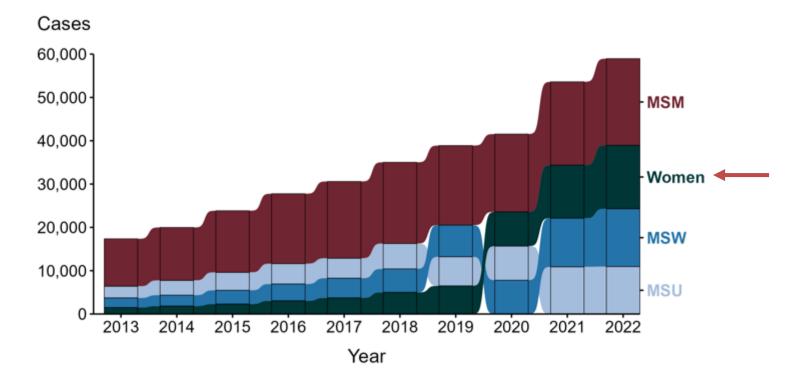




\* Per 100,000 † Log scale

## New reality: syphilis dynamics

Primary and Secondary Syphilis — Reported Cases by Sex and Sex of Sex Partners, United States, 2013–2022





ACRONYMS: MSM = Men who have sex with men; MSU = Men with unknown sex of sex partners; MSW = Men who have sex with women only

### New reality: newborn syphilis

U.S. Newborn Syphilis Cases Surge Over 10 Years

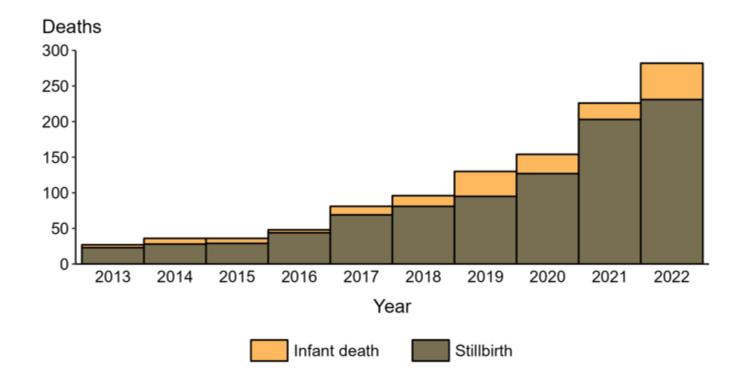






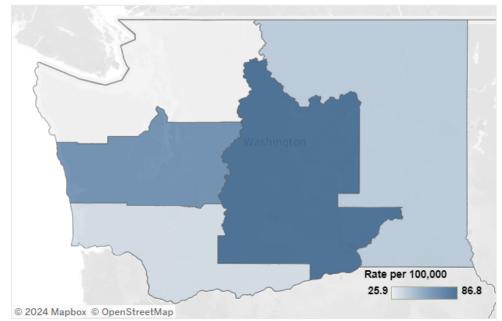
### New reality: syphilis a killer

# Congenital Syphilis — Reported Stillbirths and Infant Deaths, United States, 2013–2022





#### New local STIs reality

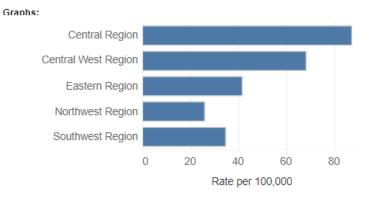


Note: Due to the current lack of Small Area Data Estimates from Office of Financial Management (OFM), the population data used to calculate rates in this dashboard come from the population interim estimates

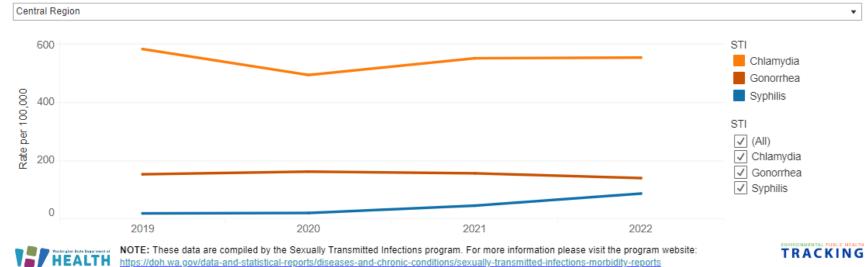
(PIE) developed by Public Health - Seattle and King County (PHSKC). Because we have applied PIE to historic data, some rates will be different from what we published previously.

#### Map:

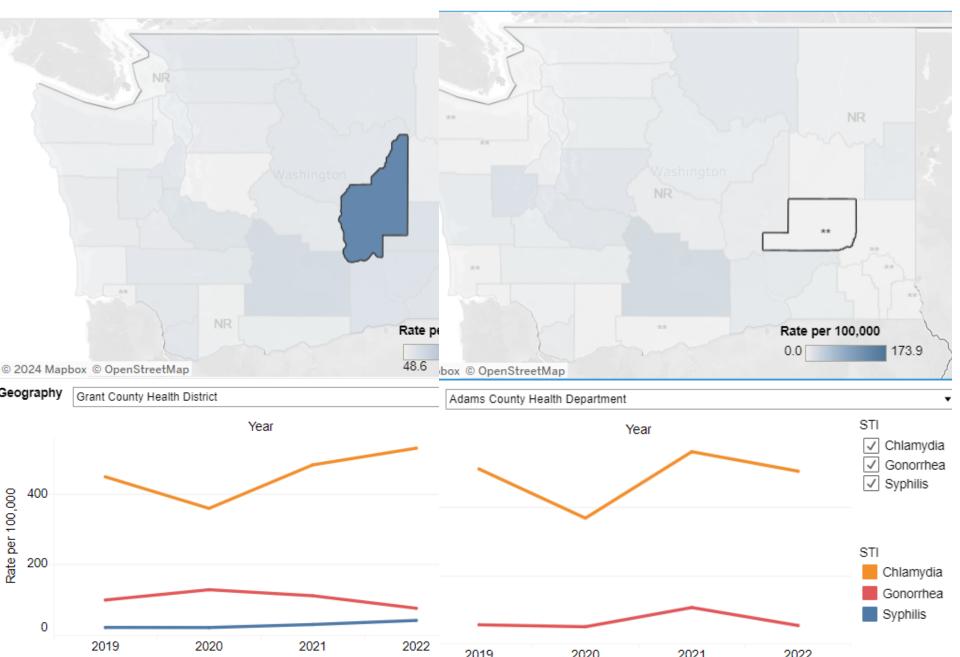
\*\* Suppressed due to small numbers NR rates may not be reliable due to low counts



Geography



#### STIs in Grant and Adams Counties



NW PROS





More measles cases reported in Spokane after Michigan ripe for country trip

SWX

**EXPO '74** 

Mar 7, 2024 Updated Mar 7, 2024

NonStop LOCAL

MENU

#### Measles Cases Reported In Midwest While Outbreak Grows In Florida

NEWS

WEATHER

The first measles case in five years was reported in Chicago, while three cases and the potential for more raised concern in Michigan. Also: news on meningitis, RSV, covid, and more.

#### Chicago Tribune: First Case Of Measles Detected In Chicago In 5 Years

Chicago public health officials on Thursday said they had identified the first case of measles in the city since 2019 and urged city residents to make sure they were vaccinated against the disease. Illinois saw five measles cases in 2023, public health officials said. (Kubzansky, 3/7)

#### USA Today: Michigan Reports Three Measles Cases As Numbers Grow In Florida, Other States

Three new measles cases and hundreds of notential exnosure have been renorted in Michigan



Washington Idaho Business Education Health Photos Further |



Winter Weather Advisory: West Slope Northern Sierra Nevada, Western Plumas County/Lassen Park >

#### SACRAMENTO

KHO MD

#### Hundreds possibly exposed to measles at UC Davis Medical Center, officials say

by: <u>Sergio Robles</u> Posted: Mar 8, 2024 / 04:51 PM PST Updated: Mar 8, 2024 / 04:51 PM PST

The Body Shop is closing

down all US operations

after filing for

🔽 NBCNEWS OSCARS 2024 MEET THE PRESS POLITICS U.S. NEWS WORLD BUSINESS HEALTH NBC NEWS TIPLINE 🔹 🕨

'eliminating' virus

Philadelphia measles outbreak has hos on alert after child was sent to day care despite quarantine instructions

Eight people have been diagnosed since last month. None was immune to measles they either never got vaccinated or contracted measles before.

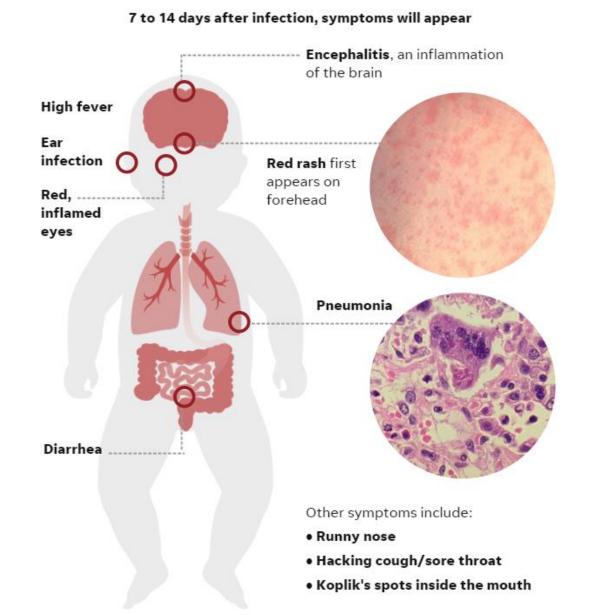
Measles outbreak threatens US

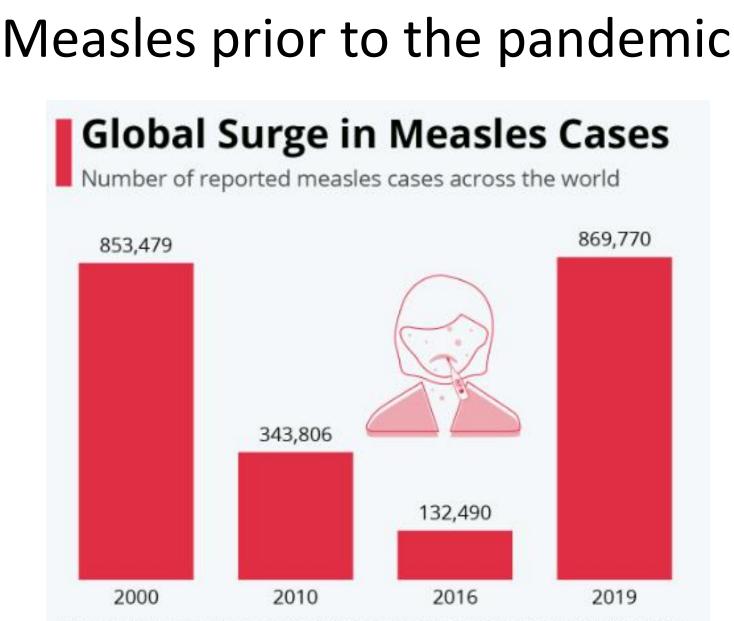
NEWS > HEALTH

#### Health district predicts more cases of measles following Spokane County's first patient since 2015

Feb. 21, 2024 Updated Wed., Feb. 21, 2024 at 8:38 p.m

#### Measles symptoms and complications



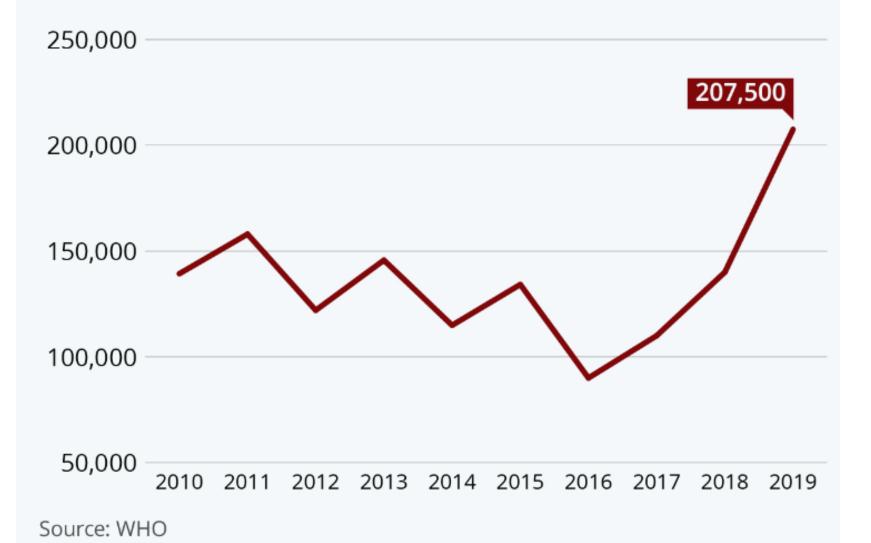


Estimated total measles cases including those unreported was 9,828,400 in 2019 with an estimated death toll of 207,500

Sources: World Health Organization, U.S. Centers for Disease Control and Prevention

#### Measles: Deadly Disease Makes a Comeback

Estimated global deaths due to measles 2010-2019

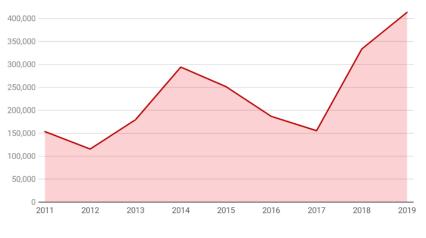


#### Top 10 Countries with Measles Outbreaks\*

### Global Measles Outbreaks 2019, 2023

е

Global cases of measles reported, 2011-2019

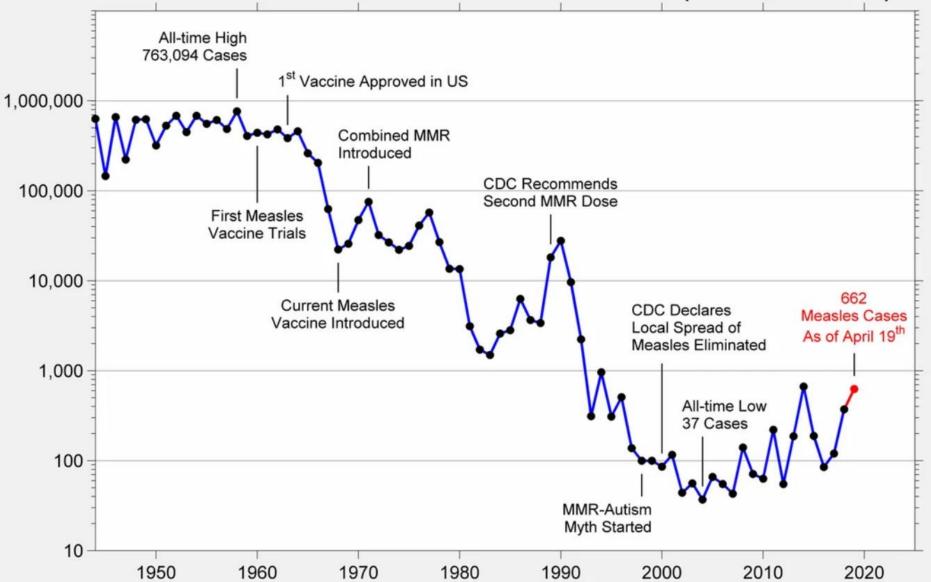


Rank	Country	Number of Cases
1	Yemen	18,464
2	Azerbaijan	13,721
3	Kazakhstan	13,195
4	India**	12,301
5	Ethiopia	10,060
6	Russian Federation	7,720
7	Iraq	7,601
8	Pakistan	7,027
9	Kyrgyzstan	5,777
10	Indonesia	3,205

Provisional data based on monthly data reported to WHO (Geneva) as of early February 2024. Data covers July 2023 – December 2023.

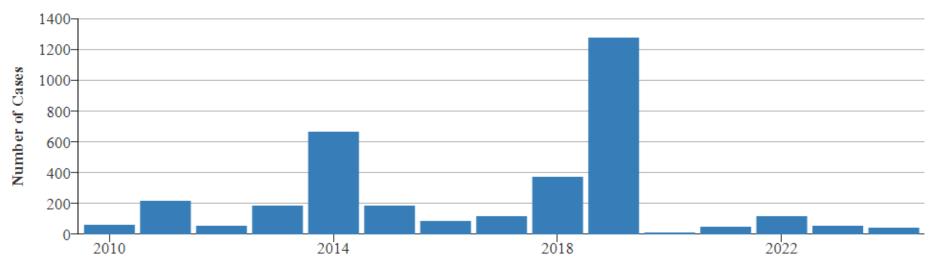
### U.S.: Measles, historical perspective

#### Annual Measles Cases in the USA (1944 - 2019)



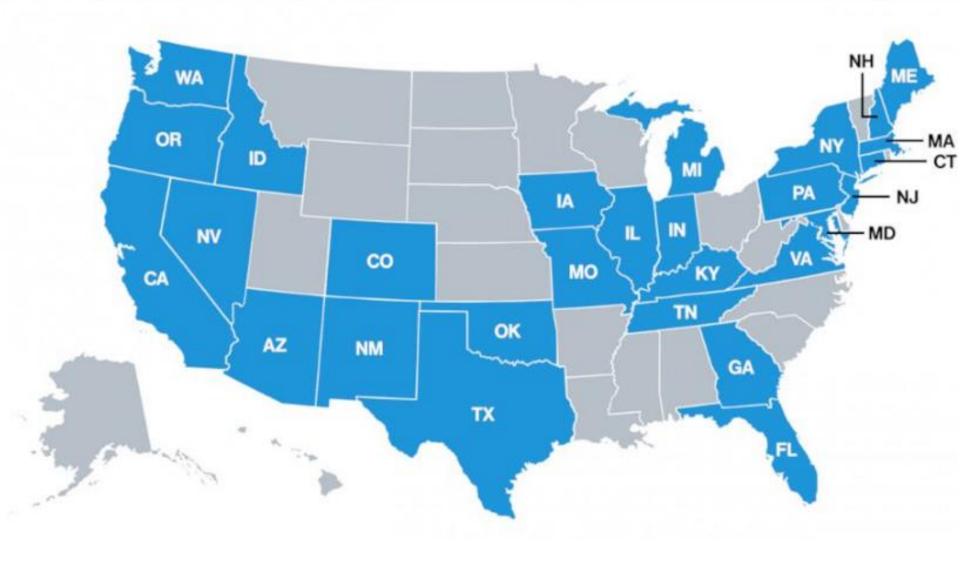
#### U.S.: Measles Cases by Week (2010-2022)

#### Number of measles cases reported by year



2010-2024\* (as of March 7, 2024)

#### **STATES WITH MEASLES CASES IN 2019**



## "While you were gone": measles 2024

Confirmed measles cases reported by state:

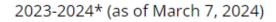
\*As of Feb. 29, 2024

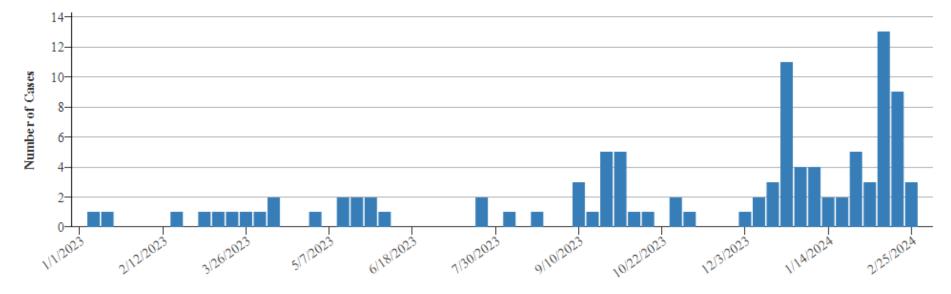
#### Measles cases in 2024

As of March 7, 2024, a total of 45 measles cases were reported by 17 jurisdictions: Arizona, California, Florida, Georgia, Illinois, Indiana, Louisiana, Maryland, Michigan, Minnesota, Missouri, New Jersey, New York City, Ohio, Pennsylvania, Virginia, and Washington.

## U.S.: Measles Cases by Week (2023-2024)

## Number of measles cases reported by week



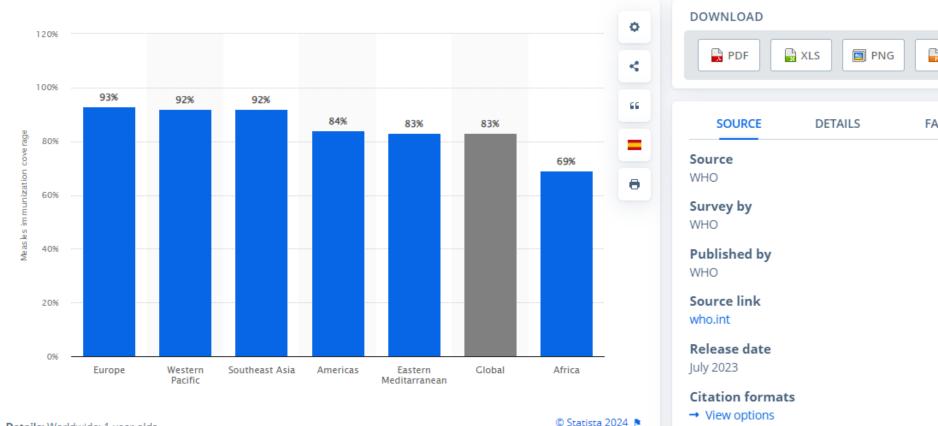


## Measles cases in 2024

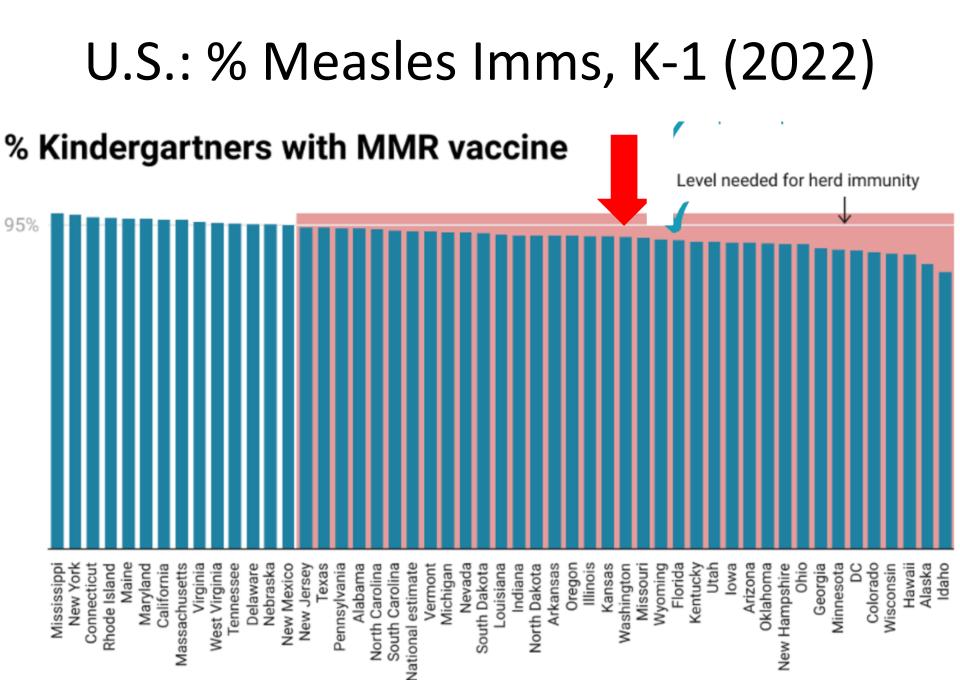
As of March 7, 2024, a total of 45 measles cases were reported by 17 jurisdictions: Arizona, California, Florida, Georgia, Illinois, Indiana, Louisiana, Maryland, Michigan, Minnesota, Missouri, New Jersey, New York City, Ohio, Pennsylvania, Virginia, and Washington.

## World: % Measles Imms, 1y.o. (2022)

#### Percentage of 1-year-olds with a measles immunization worldwide in 2022, by region

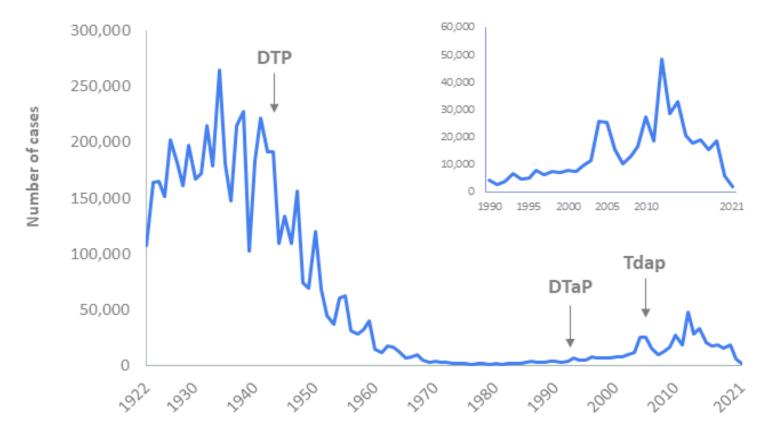


Details: Worldwide; 1-year-olds



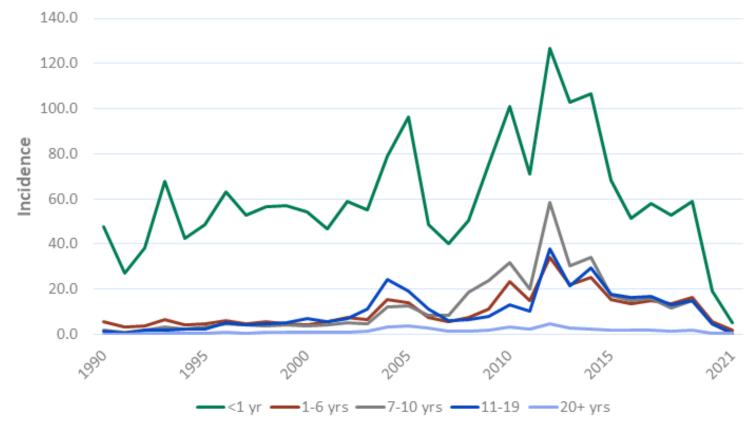
## New reality: pertussis drop and now what?

## Reported NNDSS pertussis cases: 1922-2021



## U.S.: Pertussis, a temporary break?

## Reported pertussis incidence by age group: 1990-2021



## Provisional 2022 Reports of Notifiable Diseases

https://wonder.cdc.gov/nndss/static/2022/52/2022-52-table1z.html

NOTE: The pertussis case definition was modified by CSTE effective January 1, 2020. Criteria were modified increasing sensitivity for case ascertainment such that case counts may increase. The 2020 CSTE case definition can be viewed here: https://ndc.services.cdc.gov/case-definitions/pertussis-2020/.

#### **Reported Pertussis Cases**

2021: **1,609**\*

2022: **2,388** 

\*Provisional 2021 Week 52 reported pertussis cases; final 2021 data were not available at the time of publication.

#### Reported Pertussis Cases and Percent Hospitalization by Age Group

#### Reported Pertussis Deaths

Age	No. of Cases (% of total)	Age Inc /100,000	% Hospitalized by age**
< 6 mos	139 (5.8)	7.8	17.1
6-11 mos			4.9
1-6 yrs			1.9
7-10 yrs	176 (7.4)	1.1	0.0
11-19 yrs	231 (9.7)	0.6	1.2
20+ yrs	0+ yrs 1,089 (45.6)		11.2
Unknown Age	1 (0.0)	N/A	N/A
Total	2,388 (100)	<b>0.7</b> *	6.9

Age	Deaths*		
Cases, aged < 1 yr	1		
Cases, aged ≥ 1 yr	2		
Total	3†		

\*Deaths reported through NNDSS Confirmation of deaths is ongoing and may result in changes to the final count for 2022.

\*Total incidence per 100,000 calculated from 2,387 cases with age reported.

\*\*Calculated from those with known hospitalization status.

Pertussis: among the top 4 to affect your school (clinic, workplace or hospital next). Mumps, measles, varicella are the other 3

## **Chelan-Douglas Health District**

200 Valley Mall Parkway, East Wenatchee, WA 98802

FOR IMMEDIATE RELEASE

News Release 2024-07

March, 08, 2024

## **Pertussis Outbreak - Update**

**East Wenatchee, WA** – Chelan-Douglas Health District (CDHD) continues its investigation and monitoring of local pertussis cases. To date we have seventeen (17) cases that have been confirmed with a positive lab result or have clinical symptoms consistent with pertussis and exposure to a lab-confirmed case.

Chelan-Douglas Health District continues to receive reports of suspected cases throughout the community. As of March 6 2024, we have received laboratory confirmation of an additional case of Pertussis with no link to the other known cases. This supports our suspicion that pertussis is circulating more broadly throughout the community.



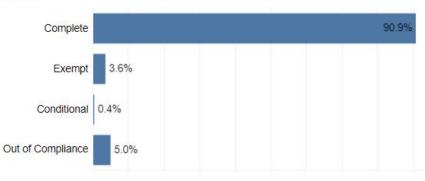
#### Washington State School Immunization Status Data

		0					
<	Yearly Trends	County	School District	School Building	County Data Download	School District Data Download	School Building Dat Download
	Map Immunization Status Complete						Ì
			154		4		Low Marked
	© 2024 Mapbox © OpenStre	etMap		~~~~			nmunization Status

#### Grant K-12 Overall Compliance Status, 2022-23

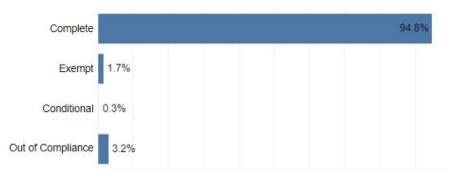


#### State K-12 Overall Compliance Status, 2022-23

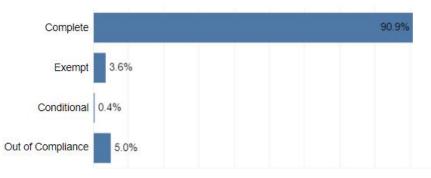


#### Washington State School Immunization Status Data 0 Yearly Trends County School District School Building County Data Download School Building Data School District Data Download Download Map Immunization Status Complete Ŧ % Immunization Status 71.1% 297.5 © 2024 Mapbox © OpenStreetMap

#### Adams K-12 Overall Compliance Status, 2022-23



#### State K-12 Overall Compliance Status, 2022-23



# New (and old) reality

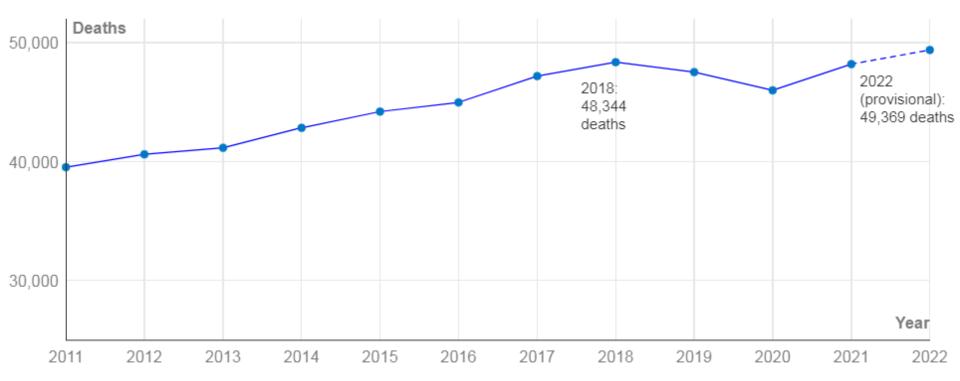
## • Mental Health Trends:

- 2011 to 2022: over half a million lives (539,810) were lost to suicide.
- Suicide by firearm and firearm deaths and violence rose dramatically during pandemic.
- Suicides did not show a convincing trend during or after pandemic, dropping in 2020, rising in 2021 and 2022, but then decreasing in 2023.
- Challenges with youth mental health were exaggerated and superimposed on prior unfavorable trends.
- 988 Suicide and Crisis Lifeline expanded nationally in 2020.

# New (and old) reality

## Number of Deaths Due to Suicide, 2011 to 2022

2022 CDC data is provisional



KFF

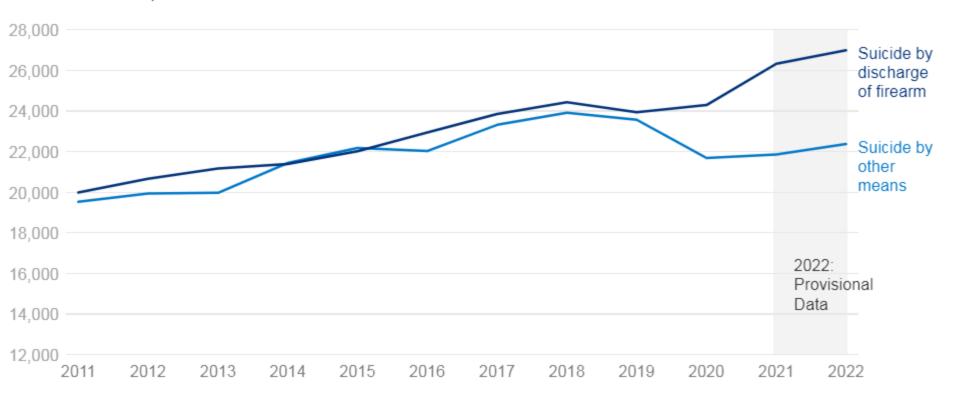
NOTE: Analysis of CDC WONDER underlying cause of death data, 2011 to 2022. Provisional data used for 2022 is not yet final and may represent incomplete data for that year that is subject to change. Suicide deaths are identified using the following codes: X72-X74, U03, X60-X71, X75-X84, and Y87.0) It is possible that some suicides may be classified under other categories.

SOURCE: KFF analysis of CDC WONDER data, 2011 to 2022 • PNG

# New reality: means of suicide

# Number of Deaths Due to Suicide, by Firearm or Other Means, 2011 to 2022

2022 CDC data is provisional



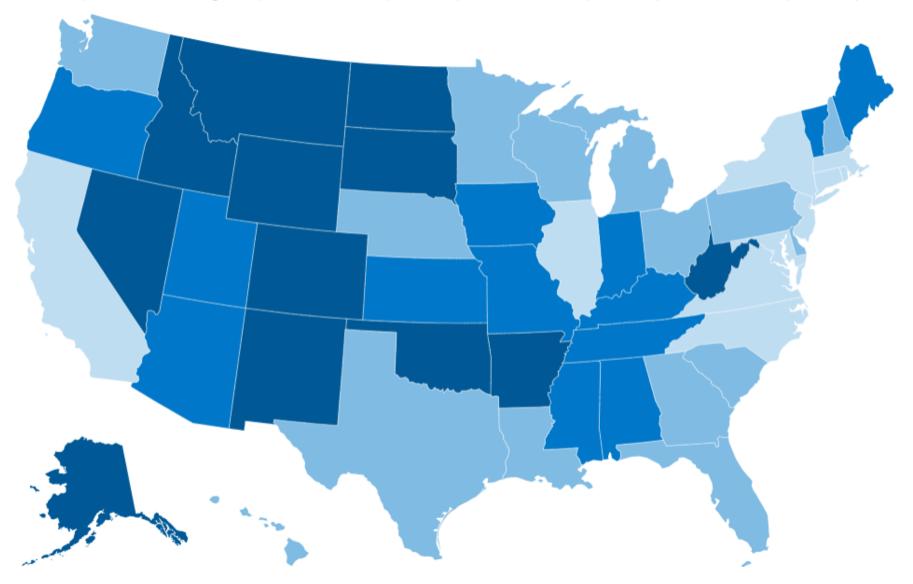
NOTE: Analysis of CDC WONDER underlying cause of death data, 2011 to 2022. Suicide deaths by the discharge of a firearm were identified using codes X72-X74. Suicide deaths by other/unspecified means were identified using ICD-10 codes U03, X60-X71, X75-X84, and Y87.0) The rate of suicides by firearms and suicides by other means are statistically different in 2021 and 2022. It is possible that some suicides may be classified under other categories.

KFF

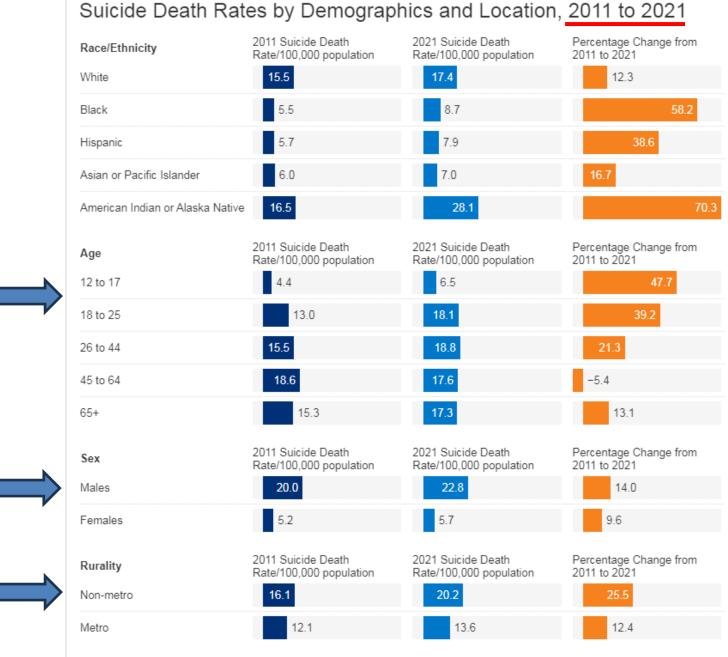
SOURCE: KFF analysis of CDC WONDER data, 2011 to 2021 • PNG

#### Suicide Death Rate per 100,000 Population in 2021, Age-Adjusted

<13.5 (11 states including D.C.) 13.5 to 15.3 (15 states) 15.5 to 20.3 (13 states) 20.4 to 32.3 (12 states)</p>



NOTE: Analysis of CDC WONDER underlying cause of death data, 2011 to 2021. Suicide deaths were identified using ICD-10 113 Cause List, Intentional self-harm (U03, X60-X84, Y87.0). SOURCE: KFF analysis of CDC WONDER • PNG

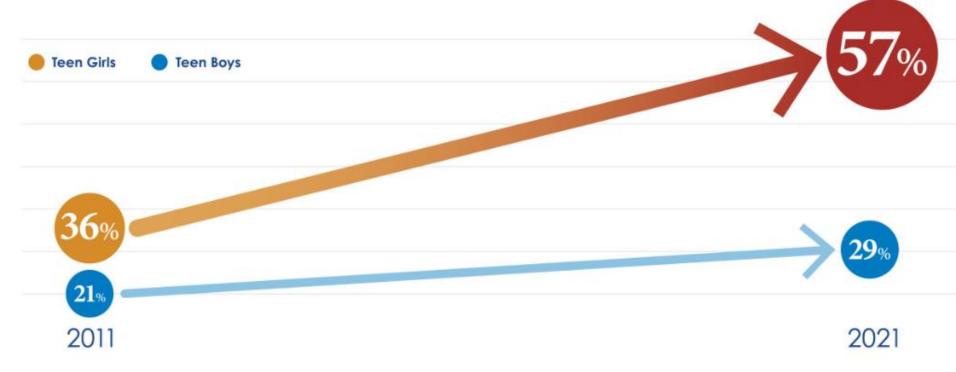


NOTE: Analysis of CDC WONDER underlying cause of death data, 2011 to 2021. Suicide deaths were identified using ICD-10 113 Cause List, Intentional self-harm (U03, X60-X84, Y87.0). Rates are age-adjusted for all demographics except age groups. Persons of Hispanic origin may be of any race but are categorized as Hispanic for this analysis; other groups are non-Hispanic. Data were insufficient to allow for analysis of other racial groups.

SOURCE: KFF analysis of CDC WONDER, 2011 to 2021 · PNG

## New reality: Mental Health

## TEEN GIRLS WHO PERSISTENTLY FELT SAD OR HOPELESS INCREASED DRAMATICALLY FROM 2011 TO 2021



https://www.cdc.gov/healthyyouth/data/yrbs/questionnaires.htm

# ...So, for now:

- Respiratory viruses will stay, but we now have tools blunting their edge. Let's use these tools more.
- Review your employees' and students' vaccination status now; adhere to vaccination policies, state laws.
- Help us understand disease trends by enhancing testing and reporting mechanisms in your organizations;
- Stay on alert for substance misuse; promote Narcan;
- Ready urgently for cases and outbreaks of vaccinepreventable and other contagious diseases;
- Advocate and refocus on stopping STIs neglect;
- Mental health challenges demand focus on early interventions, destigmatization, access to treatments, and mental health education within school.

# Dengue Fever (2023)

## **DENGUE ON THE RISE**

Changes in temperature and rainfall patterns in the Americas might help to explain high incidences of dengue in recent years.

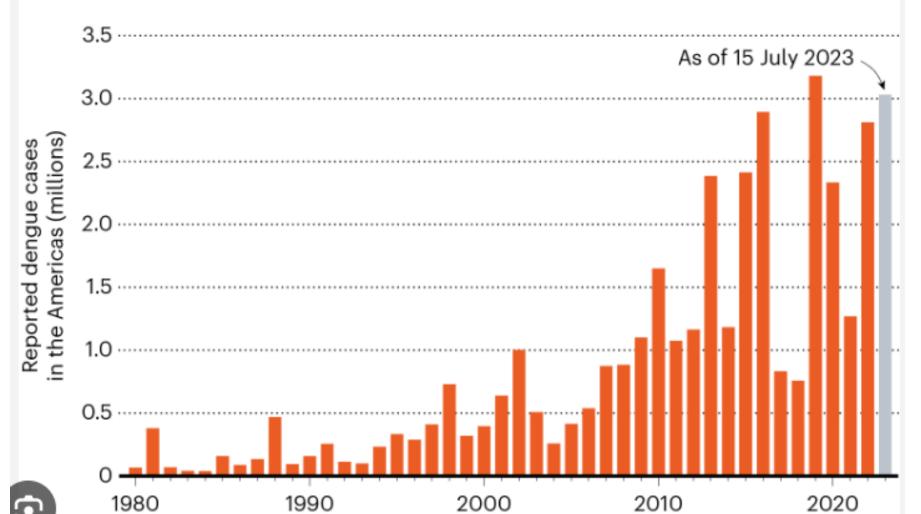
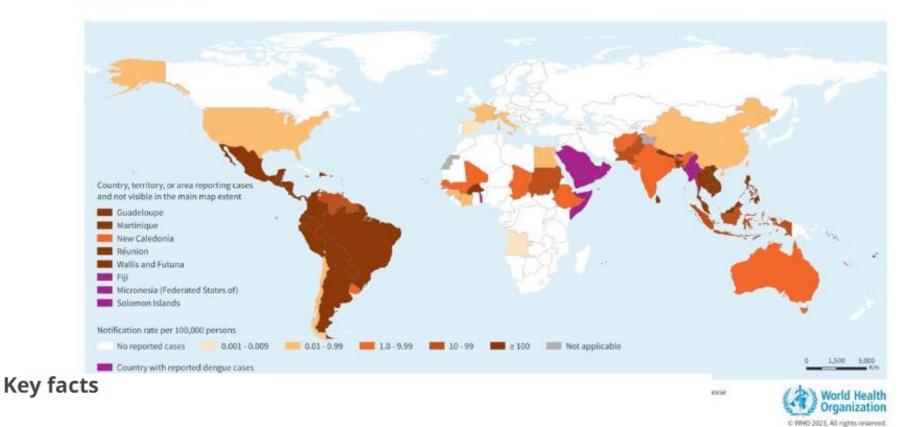


Figure 1: Countries/territories/areas reporting autochthonous dengue cases (November 2022-November 2023) \*



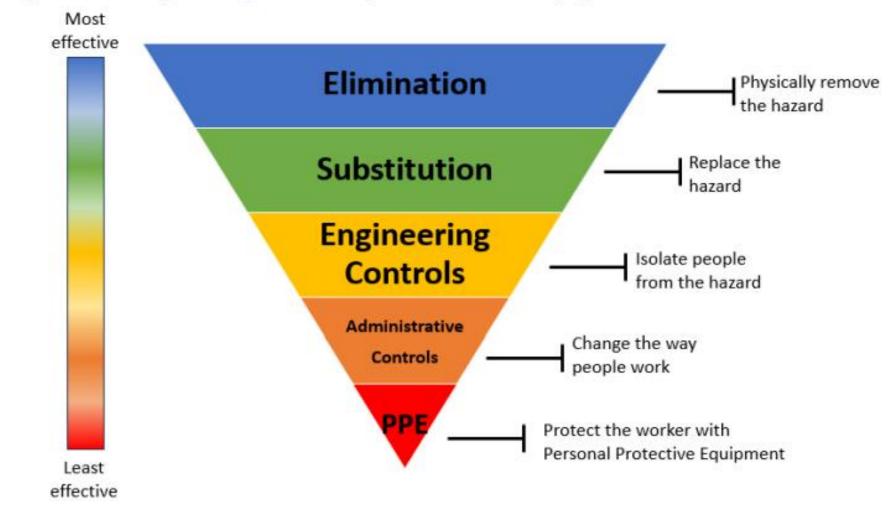
- Dengue is a viral infection caused by the dengue virus (DENV), transmitted to humans through the bite of infected mosquitoes.
- About half of the world's population is now at risk of dengue with an estimated 100–400 million infections occurring each year.
- Dengue is found in tropical and sub-tropical climates worldwide, mostly in urban and semi-urban areas.
- While many DENV infections are asymptomatic or produce only mild illness, DENV can occasionally cause more severe cases, and even death.
- Prevention and control of dengue depend on vector control. There is no specific treatment for dengue/severe dengue, and early detection and access to proper medical care greatly lower fatality rates of severe dengue.

## Spectrum of Prevention

Level of Spectrum	Definition
Influencing policy and legislation	Develop strategies to change laws and policies to influence outcomes
Changing organizational practices	Adopt regulations and shape norms to improve health and safety
Fostering coalitions and networks	Bring together groups and individuals for broader goals & greater impact
Educating providers	Inform providers who will transmit skills and knowledge to others
Promoting community education	Reach groups of people with information and resources to promote health & safety
Strengthening individual knowledge and skills	Enhance an individual's capability to prevent injury/illness & promote safety

# Reverse pyramid of public health interventions

Figure 1. Hierarchy of occupational safety and health controls [45]



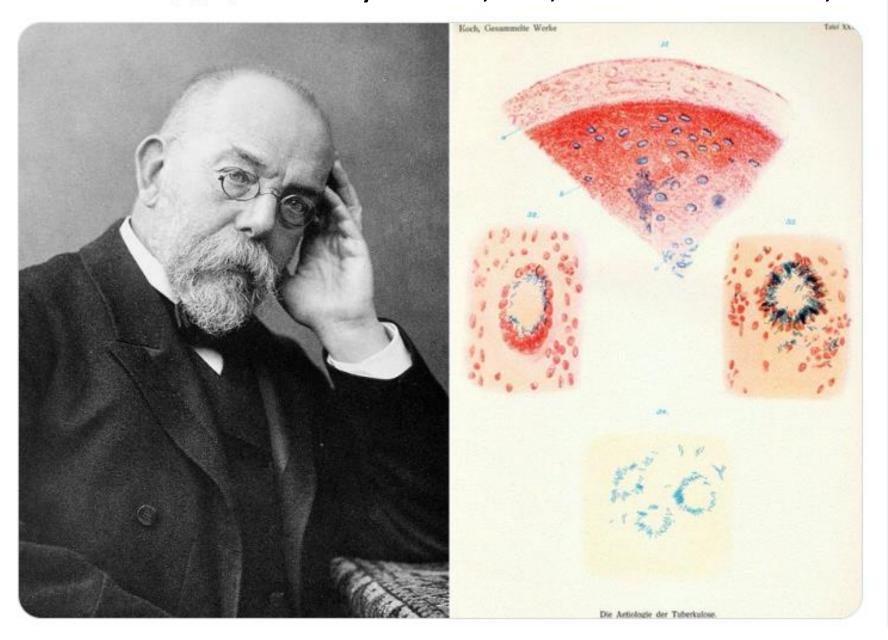


## **QUESTIONS AND ANSWERS**

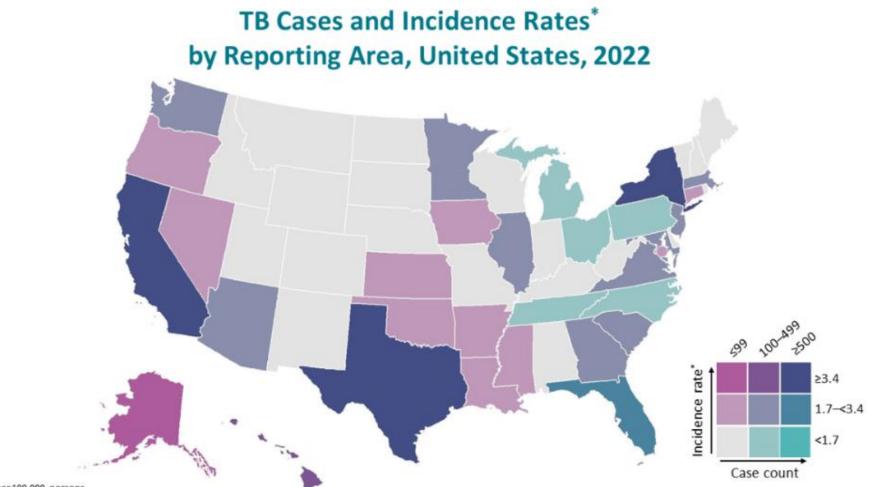




# Photos: Robert Koch circa. 1900 and a drawing of the causes of tuberculosis (right). Discovery March 24, 1882; Nobel Prize in Medicine, 1905

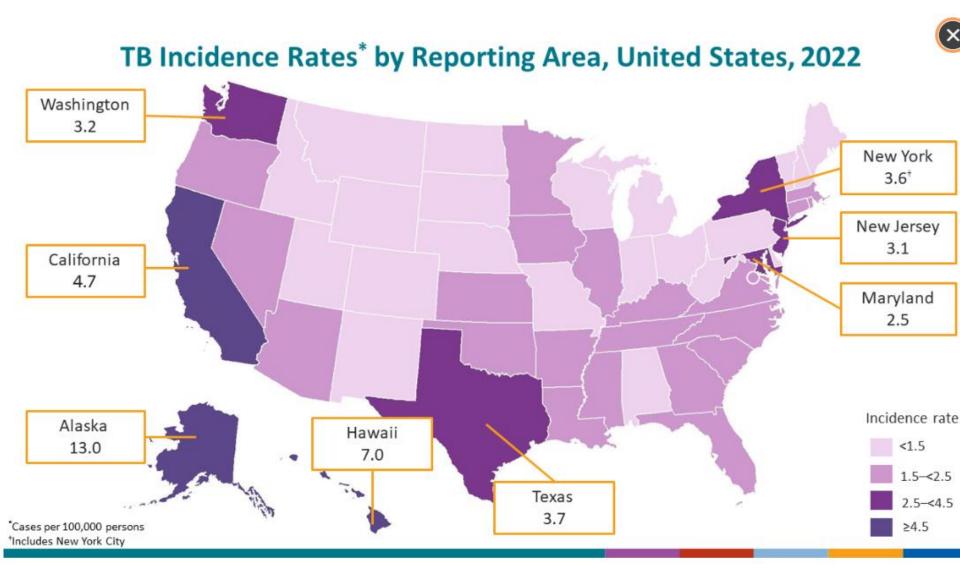


## U.S.: TB Cases and Rates

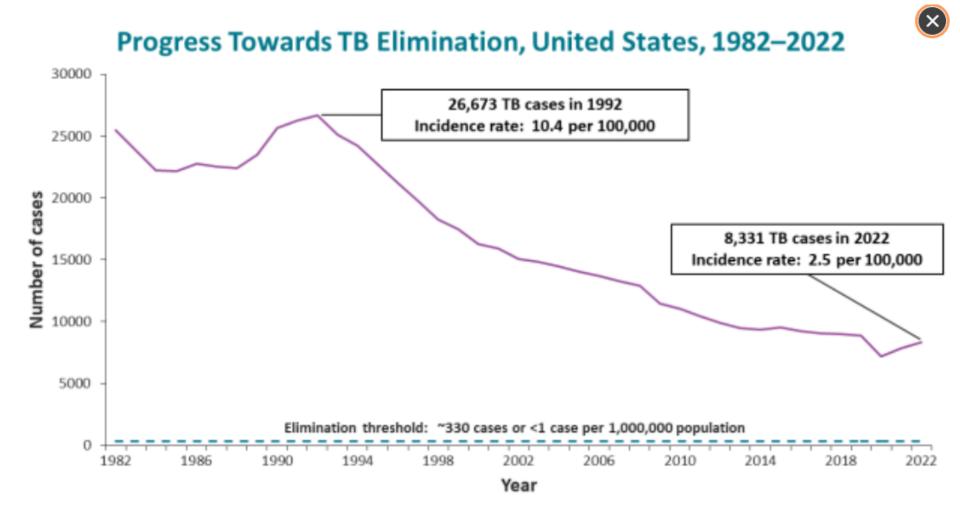


Cases per 100,000 persons

## U.S.: TB Incidence

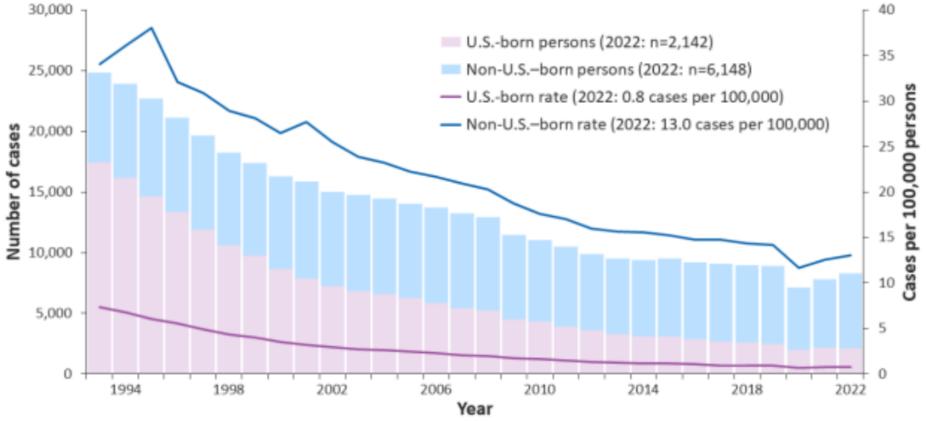


# U.S.: TB Trend (1982-2022)



# U.S.: TB Cases by Origin of Birth

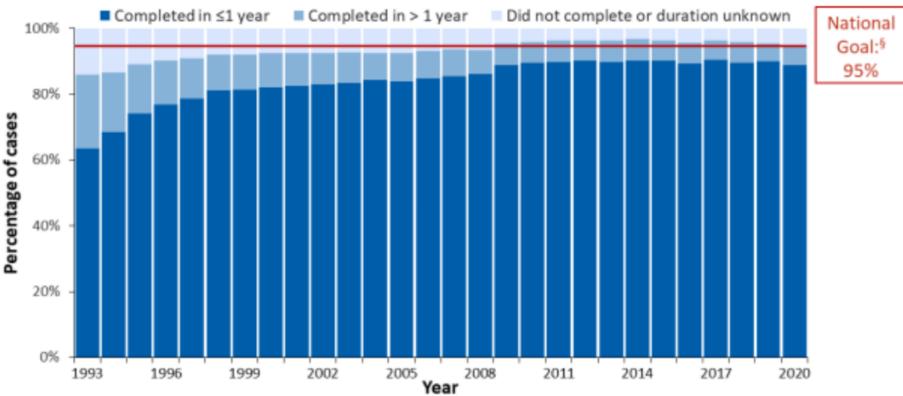
TB Cases and Incidence Rates by Origin of Birth,\* United States, 1993–2022



Persons born in the United States, certain U.S. territories, or elsewhere to at least one U.S. citizen parent are categorized as U.S.-born. All other persons are categorized as non-U.S.-born.

# U.S.: TB Therapy Completion (%)

#### Percentage of TB Cases<sup>\*</sup> by Completion of TB Therapy, United States, 1993–2020<sup>†</sup>



\*Persons alive at diagnosis who started TB therapy and for whom therapy ≤1 year was indicated. \*Most recent year for which data are complete.

<sup>1</sup>National goal: for 95% of patients with newly diagnosed TB disease for whom <12 months of treatment is indicated to complete treatment within 12 months.

## TB: The Risk

## Percentage of Social and Behavioral Risk Factors Among Persons Aged ≥15 Years with TB, United States, 2022

