Preparing for the 2024-2025 Respiratory Virus Season

Eric J. Chow, MD, MS, MPH, FIDSA, FACP, FAAP

October 16, 2024

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Disclosures

- Received travel funding to attend ID Week 2022 from IDSA
- Received travel funding to attend a Common Health Coalition workshop from the Northwest Healthcare Response Network
- Received travel funding to attend the American Academy of Pediatrics Conference in 2024 from the American Academy of Pediatrics.

Objectives

- Review measures of respiratory viral community burden to guide mitigation strategies
- Assess the current epidemiology of influenza, RSV and COVID-19
- Describe updated vaccine recommendations and respiratory illness guidance

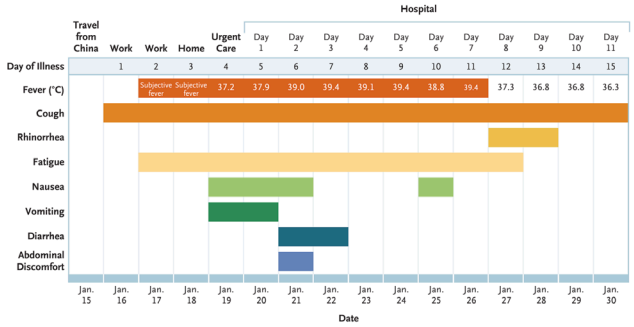
Washington State and the Start of the COVID-19 Pandemic

The NEW ENGLAND JOURNAL of MEDICINE

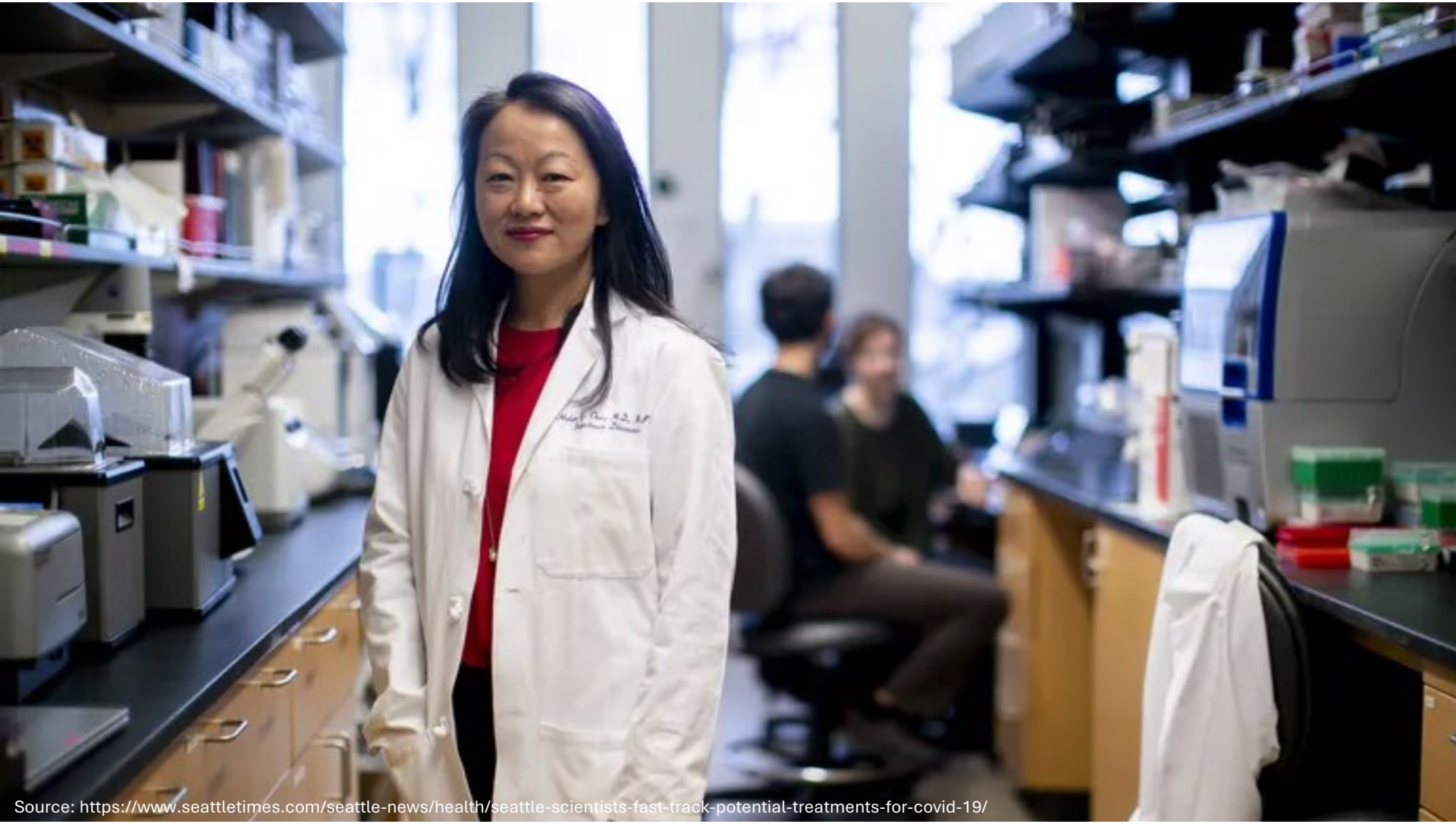
BRIEF REPORT

First Case of 2019 Novel Coronavirus in the United States

Michelle L. Holshue, M.P.H., Chas DeBolt, M.P.H., Scott Lindquist, M.D., Kathy H. Lofy, M.D., John Wiesman, Dr.P.H., Hollianne Bruce, M.P.H., Christopher Spitters, M.D., Keith Ericson, P.A.-C., Sara Wilkerson, M.N., Ahmet Tural, M.D., George Diaz, M.D., Amanda Cohn, M.D., LeAnne Fox, M.D., Anita Patel, Pharm.D., Susan I. Gerber, M.D., Lindsay Kim, M.D., Suxiang Tong, Ph.D., Xiaoyan Lu, M.S., Steve Lindstrom, Ph.D., Mark A. Pallansch, Ph.D., William C. Weldon, Ph.D., Holly M. Biggs, M.D., Timothy M. Uyeki, M.D., and Satish K. Pillai, M.D., for the Washington State 2019-nCoV Case Investigation Team*



Source: https://www.nejm.org/doi/pdf/10.1056/NEJMoa2001191
Source: https://www.cdc.gov/museum/timeline/covid19.html



Source: https://www.seattletimes.com/seattle-news/health/seattle-scientists-fast-track-potential-treatments-for-covid-19/


Seattle
Flu Study
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Seattle Flu Study

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Open access Protocol

BMJ Open

The Seattle Flu Study: a multiarm community-based prospective study protocol for assessing influenza prevalence, transmission and genomic epidemiology

Helen Y Chu,[1] Michael Boeckh,[2] Janet A Englund,[3] Michael Famulare,[4] Barry Lutz,[5] Deborah A Nickerson,[6,7] Mark Rieder,[7] Lea M Starita,[6,7] Amanda Adler,[8] Elisabeth Brandstetter,[1] Chris D Frazer,[1] Peter D Han,[7] Reena K Gulati,[9] James Hadfield,[1] Michael Jackson,[10] Anahita Kiavand,[1] Louise E Kimball,[2] Kirsten Lacombe,[8] Kira Newman,[1] Thomas R Sibley,[2] Jennifer K Logue ,[11] Victoria Rachel Lyon ,[12] Caitlin R Wolf,[1] Monica Zigman Suchsland ,[13] Jay Shendure,[6,14] Trevor Bedford[2,6]

Source: https://bmjopen.bmj.com/content/10/10/e037295.long

Seattle Flu Study

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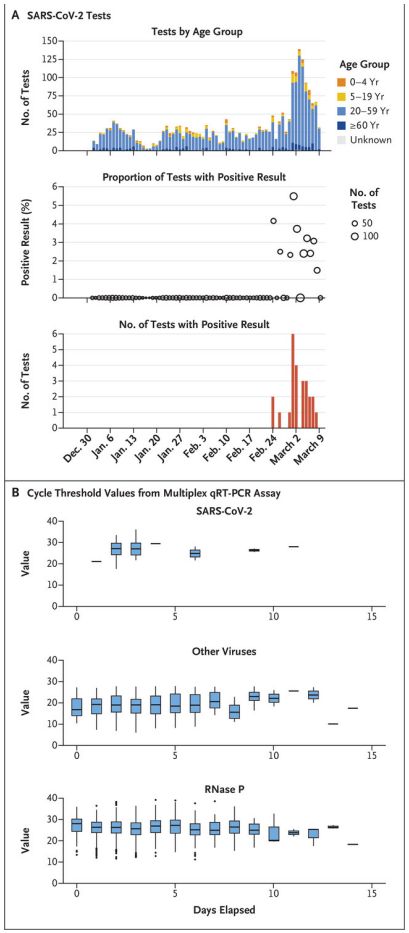
Early Detection of Covid-19 through a Citywide Pandemic Surveillance Platform

TO THE EDITOR: Traditional approaches to respiratory virus surveillance may not identify novel pathogens in time to implement crucial public health interventions.[1] The Seattle Flu Study is a multi-institutional, community-wide pandemic surveillance platform that was established in November 2018.[2] Persons reporting symptoms of respiratory illness provided informed consent for testing to identify influenza and other respiratory pathogens (see the Supplementary Appendix, available with the full text of this letter at NEJM.org). In one study group, persons enrolled online and were sent kits, by rapid-delivery services, for home collection of a midnasal swab;



Source: https://bmjopen.bmj.com/content/10/10/e037295.long
Source: https://www.nejm.org/doi/full/10.1056/NEJMc2008646

Seattle Flu Study

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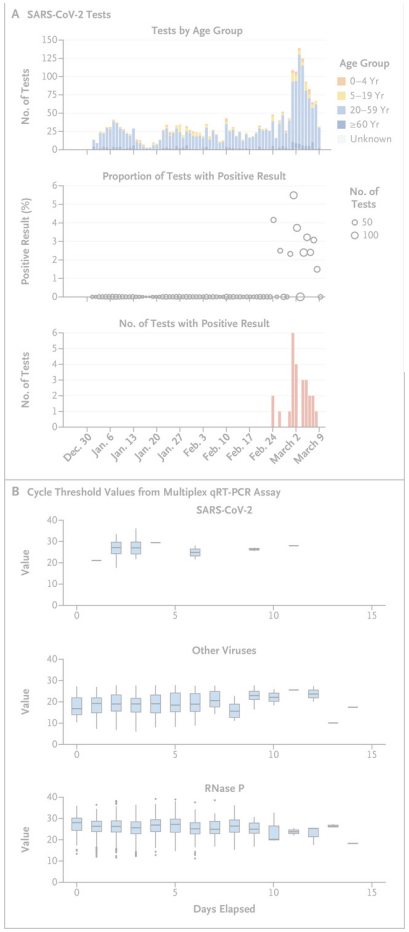


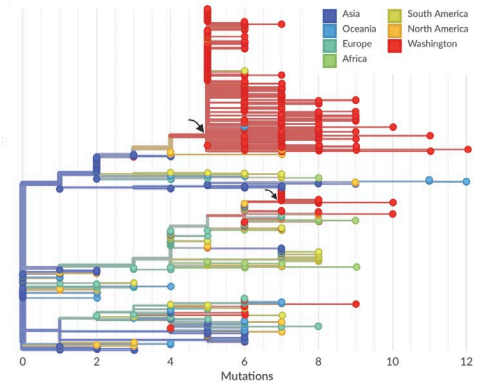
RESEARCH

REPORT

CORONAVIRUS

Cryptic transmission of SARS-CoV-2 in Washington state

Trevor Bedford[1,2,3,*,†], Alexander L. Greninger[1,4,†], Pavitra Roychoudhury[1,4,†], Lea M. Starita[2,3,†], Michael Famulare[5,†], Mei-Li Huang[1,4], Arun Nalla[4], Gregory Pepper[4], Adam Reinhardt[4], Hong Xie[4], Lasata Shrestha[4], Truong N. Nguyen[4], Amanda Adler[6], Elisabeth Brandstetter[7], Shari Cho[2,3], Danielle Giroux[3], Peter D. Han[2,3], Kairsten Fay[1], Chris D. Frazar[3], Misja Ilcisin[1], Kirsten Lacombe[6], Jover Lee[1], Anahita Kiavand[2,3], Matthew Richardson[3], Thomas R. Sibley[1], Melissa Truong[2,3], Caitlin R. Wolf[7], Deborah A. Nickerson[2,3], Mark J. Rieder[2,3], Janet A. Englund[2,6,8], The Seattle Flu Study Investigators‡, James Hadfield[1], Emma B. Hodcroft[9,10], John Huddleston[1,11], Louise H. Moncla[1], Nicola F. Müller[1], Richard A. Neher[9,10], Xianding Deng[12], Wei Gu[12], Scot Federman[12], Charles Chiu[12], Jeffrey S. Duchin[7,13], Romesh Gautom[14], Geoff Melly[14], Brian Hiatt[14], Philip Dykema[14], Scott Lindquist[14], Krista Queen[15], Ying Tao[15], Anna Uehara[15], Suxiang Tong[15], Duncan MacCannell[16], Gregory L. Armstrong[16], Geoffrey S. Baird[4], Helen Y. Chu[2,7]§, Jay Shendure[2,3,17]§, Keith R. Jerome[1,4]§



Source: https://www.nejm.org/doi/full/10.1056/NEJMc2008646

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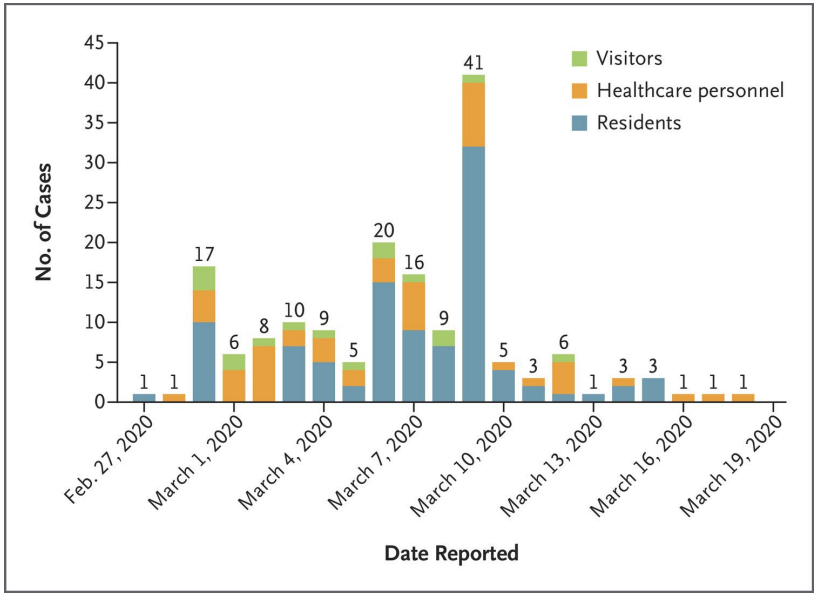
ORIGINAL ARTICLE

Epidemiology of Covid-19 in a Long-Term Care Facility in King County, Washington

Temet M. McMichael, Ph.D., Dustin W. Currie, Ph.D., Shauna Clark, R.N., Sargis Pogosjans, M.P.H., Meagan Kay, D.V.M., Noah G. Schwartz, M.D., James Lewis, M.D., Atar Baer, Ph.D., Vance Kawakami, D.V.M., Margaret D. Lukoff, M.D., Jessica Ferro, M.P.H., Claire Brostrom-Smith, M.S.N., Thomas D. Rea, M.D., Michael R. Sayre, M.D., Francis X. Riedo, M.D., Denny Russell, B.S., Brian Hiatt, B.S., Patricia Montgomery, M.P.H., Agam K. Rao, M.D., Eric J. Chow, M.D., Farrell Tobolowsky, D.O., Michael J. Hughes, M.P.H., Ana C. Bardossy, M.D., Lisa P. Oakley, Ph.D., Jesica R. Jacobs, Ph.D., Nimalie D. Stone, M.D., Sujan C. Reddy, M.D., John A. Jernigan, M.D., Margaret A. Honein, Ph.D., Thomas A. Clark, M.D., and Jeffrey S. Duchin, M.D., for the Public Health–Seattle and King County, EvergreenHealth, and CDC COVID-19 Investigation Team*



Source: https://www.nejm.org/doi/pdf/10.1056/NEJMoa2005412

Research Letter

FREE

April 17, 2020

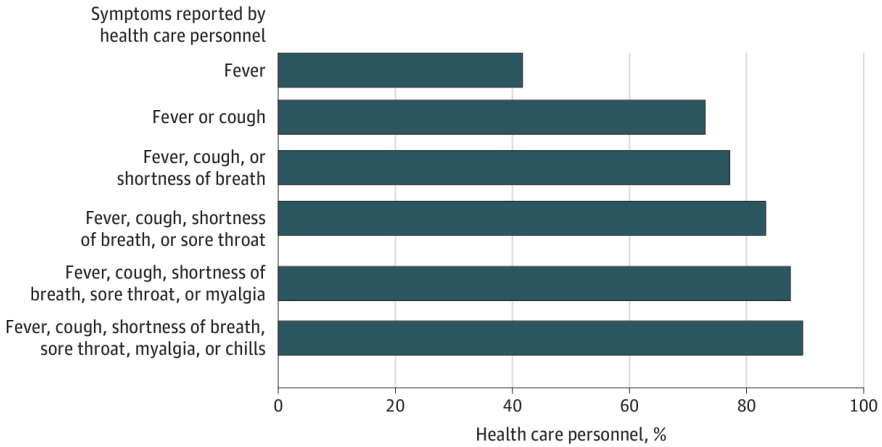
Symptom Screening at Illness Onset of Health Care Personnel With SARS-CoV-2 Infection in King County, Washington

Eric J. Chow, MD, MS, MPH[1]; Noah G. Schwartz, MD[1]; Farrell A. Tobolowsky, DO, MS[1]; et al

» Author Affiliations | Article Information

JAMA. 2020;323(20):2087-2089. doi:10.1001/jama.2020.6637

Figure. Symptom Screening Combination for Health Care Personnel With Coronavirus Disease 2019 at Illness Onset (N = 48)



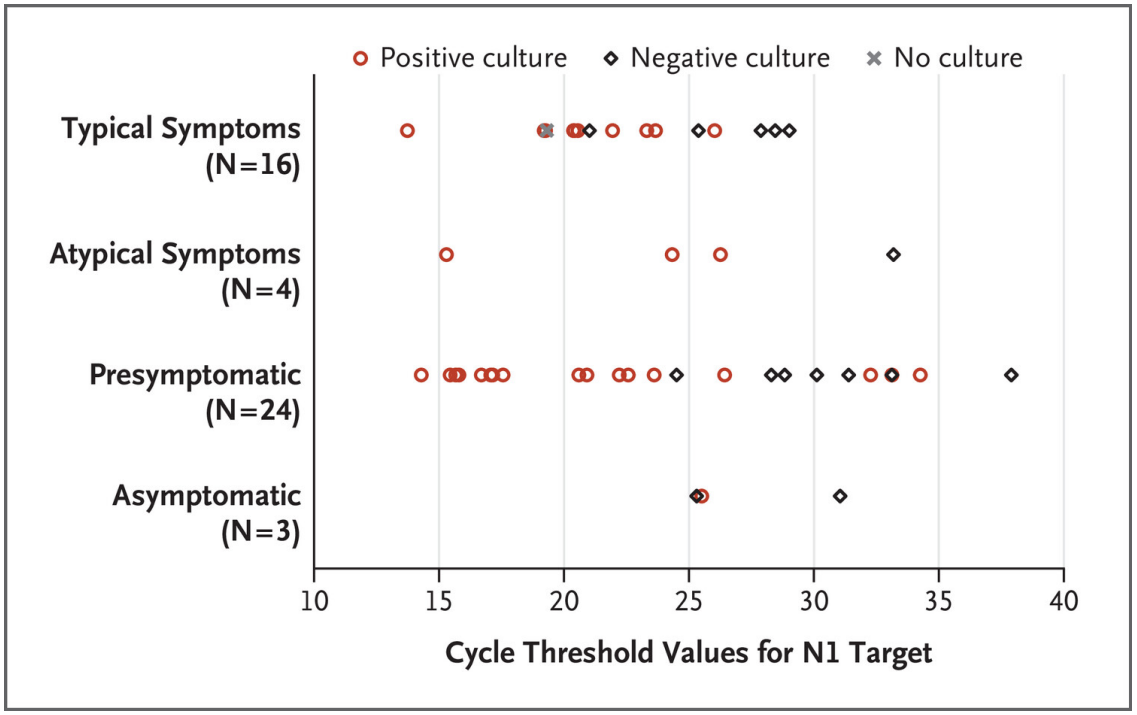
Source: https://jamanetwork.com/journals/jama/fullarticle/2764953

The NEW ENGLAND JOURNAL of MEDICINE

ESTABLISHED IN 1812 MAY 28, 2020 VOL. 382 NO. 22

Presymptomatic SARS-CoV-2 Infections and Transmission in a Skilled Nursing Facility

M.M. Arons, K.M. Hatfield, S.C. Reddy, A. Kimball, A. James, J.R. Jacobs, J. Taylor, K. Spicer, A.C. Bardossy, L.P. Oakley, S. Tanwar, J.W. Dyal, J. Harney, Z. Chisty, J.M. Bell, M. Methner, P. Paul, C.M. Carlson, H.P. McLaughlin, N. Thornburg, S. Tong, A. Tamin, Y. Tao, A. Uehara, J. Harcourt, S. Clark, C. Brostrom-Smith, L.C. Page, M. Kay, J. Lewis, P. Montgomery, N.D. Stone, T.A. Clark, M.A. Honein, J.S. Duchin, and J.A. Jernigan, for the Public Health–Seattle and King County and CDC COVID-19 Investigation Team*



Source: https://www.nejm.org/doi/pdf/10.1056/NEJMoa2008457

Data | Health | Local News | Puget Sound | Science

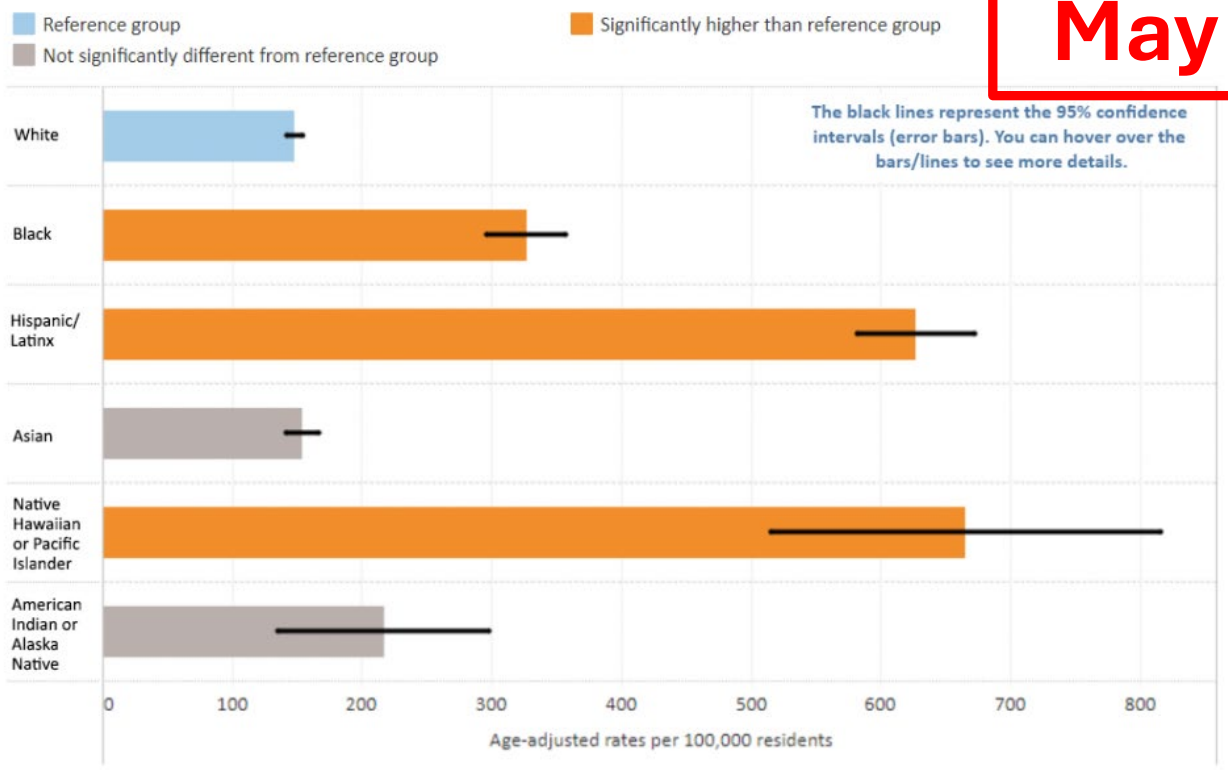
King County has big racial disparities in coronavirus cases and deaths, according to public-health data

May 1, 2020 at 6:28 pm | *Updated May 1, 2020 at 6:57 pm*

Source: https://www.seattletimes.com/seattle-news/health/king-county-has-big-racial-disparities-in-coronavirus-cases-and-deaths-according-to-public-health-data/

Confirmed cases per 100,000 residents (Age-adjusted)

May 1, 2020



Source: https://publichealthinsider.com/2020/05/01/new-analysis-shows-pronounced-racial-inequities-among-covid-19-cases-hospitalizations-and-deaths/

Morbidity and Mortality Weekly Report

Trends in Racial and Ethnic Disparities in COVID-19 Hospitalizations, by Region — United States, March–December 2020

Sebastian D. Romano, MPH[1]; Anna J. Blackstock, PhD[1]; Ethel V. Taylor, DVM[1]; Suad El Burai Felix, MPH[1]; Stacey Adjei, MPH[1]; Christa-Marie Singleton, MD[1]; Jennifer Fuld, PhD[1]; Beau B. Bruce, MD, PhD[1]; Tegan K. Boehmer, PhD[1]

Annals of Internal Medicine

REVIEW

Racial and Ethnic Disparities in COVID-19–Related Infections, Hospitalizations, and Deaths

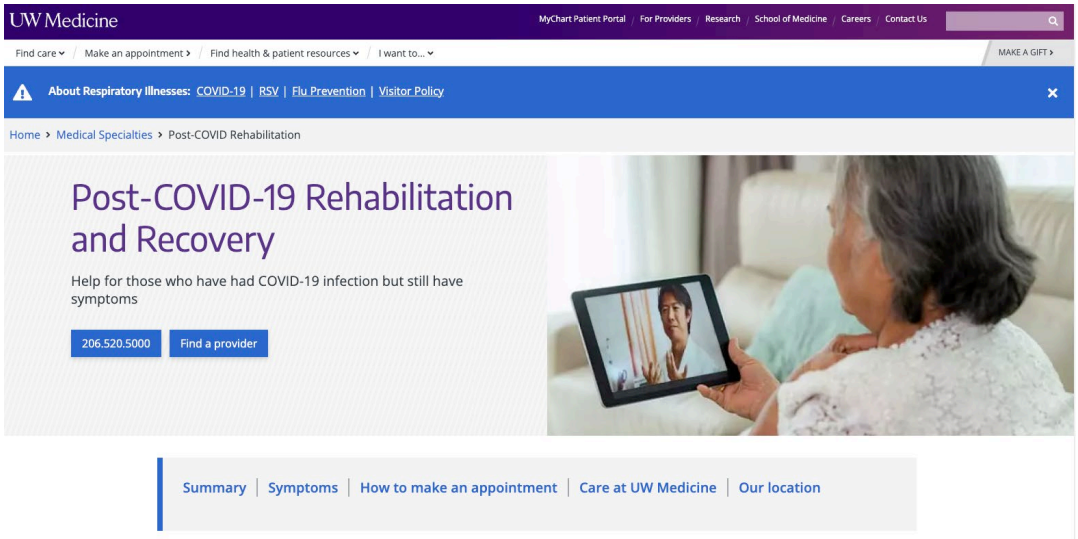
A Systematic Review

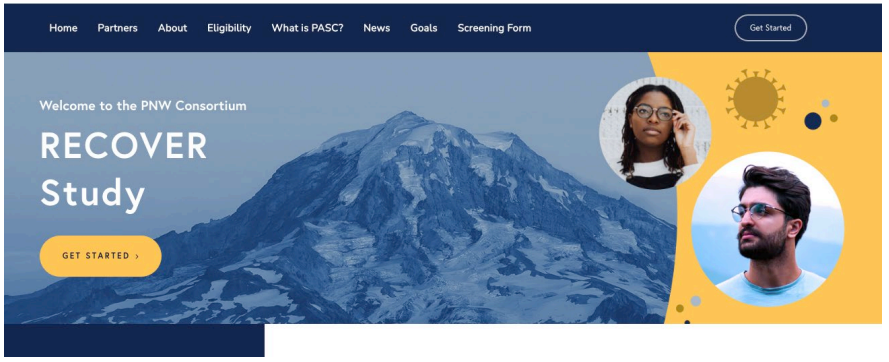
Katherine Mackey, MD, MPP; Chelsea K. Ayers, MPH; Karli K. Kondo, PhD; Somnath Saha, MD, MPH; Shailesh M. Advani, MD, MPH; Sarah Young, MPH; Hunter Spencer, DO; Max Rusek, MD; Johanna Anderson, MPH; Stephanie Veazie, MPH; Mia Smith, MPH; and Devan Kansagara, MD, MCR

Source: https://www.cdc.gov/mmwr/volumes/70/wr/mm7015e2.htm#:~:text=Racial%20and%20ethnic%20disparities%20in%20COVID%2D19%20hospitalization%20were%20largest,and%20%3E3.0%20in%20the%20Northeast.

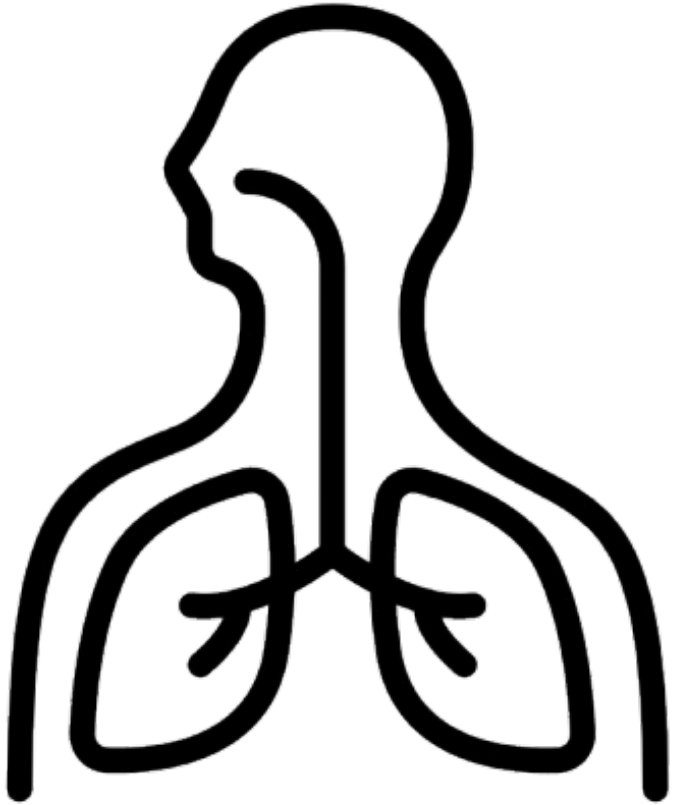
Source: https://www.acpjournals.org/doi/full/10.7326/M20-6306

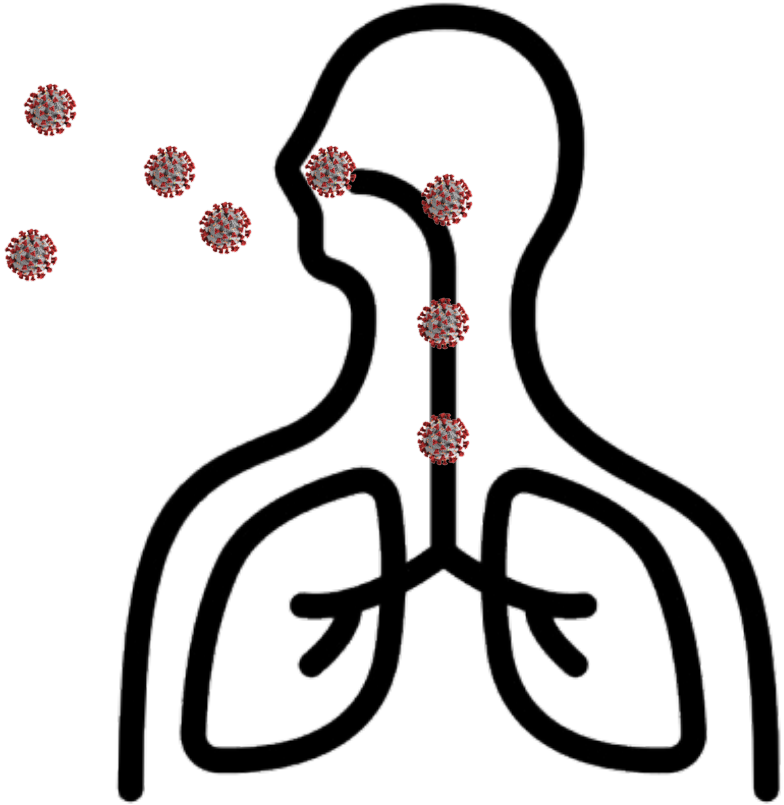
Source: https://www.cidrap.umn.edu/covid-19/risk-long-covid-has-ebbed-during-pandemic-mostly-thanks-vaccines-new-data-reveal

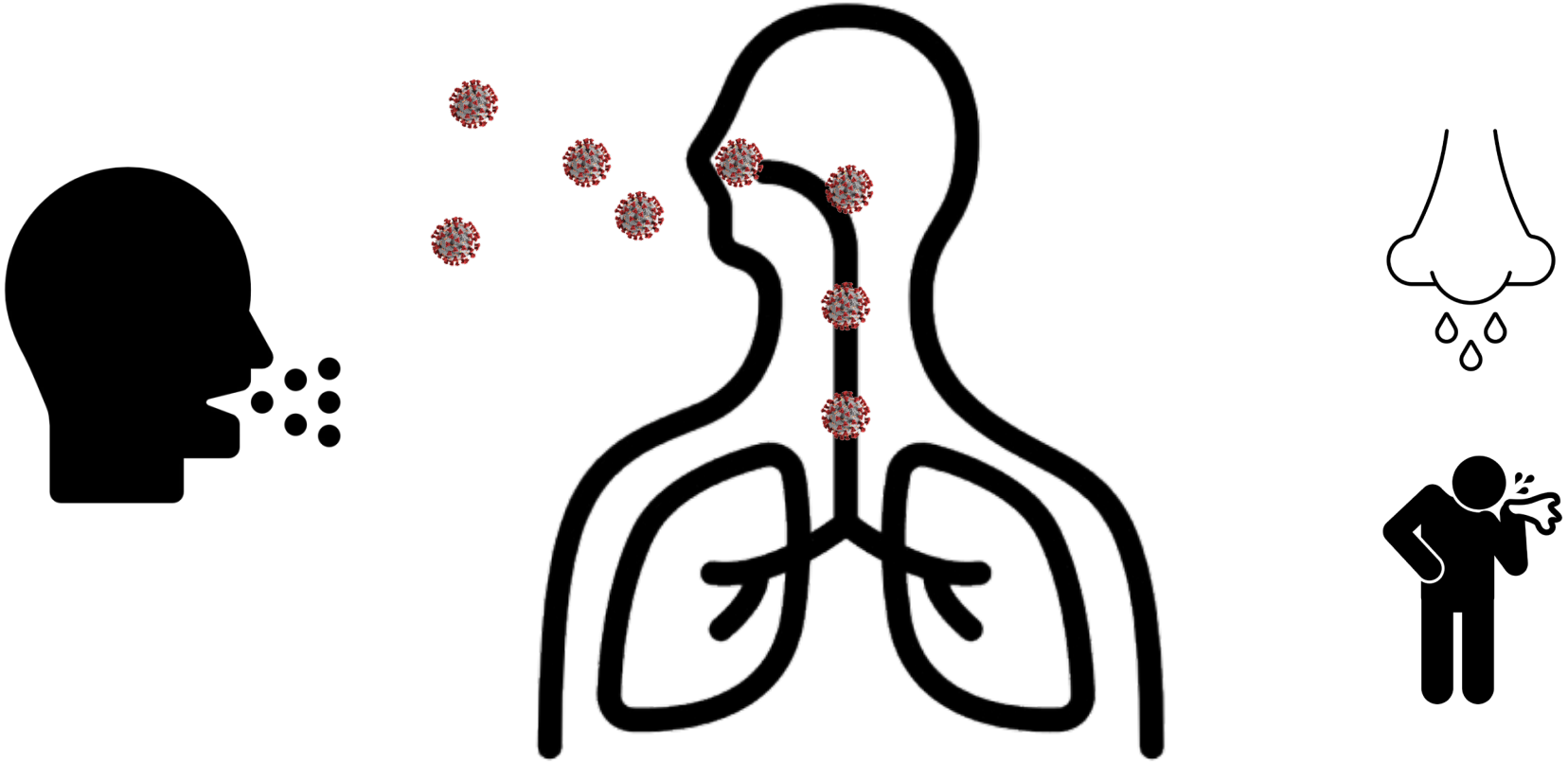


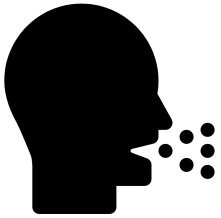


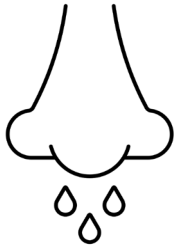
Source: https://www.uwmedicine.org/specialties/post-covid-rehabilitation
Source: https://isbscience.org/pnwrecover/





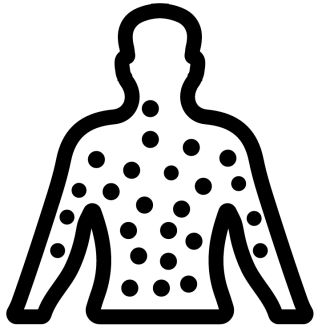











Source: https://www.npr.org/sections/goatsandsoda/2020/05/06/850707907/from-loss-of-smell-to-covid-toes-what-experts-are-learning-about-symptoms

	and reuse, and virus levels in the respiratory tract of the symptomatic or asymptomatic infected wearer (for source control) or in expelled particles of the infected individuals (for prevention)	
Respiratory etiquette	Cover coughs and sneezes of symptomatic persons with tissues, sleeves and elbows and avoid the use of hands	Limit virus transmission by reducing suspension and dispersal of respiratory droplets and aerosols containing infectious virus expelled by symptomatic infected persons to the surrounding environment, hands, and high-touch surfaces
Hand hygiene	Hand washing with soap and water or hand sanitation with an alcohol-based hand sanitizer	Reduce virus transmission through contact with surfaces and fomites
Social distancing	Maintain a separation of 2 m or more from others and avoid crowds	Reduce likelihood of virus transmission through respiratory droplets and aerosols from infected persons to exposed persons
Screening and isolation of sick individuals	Physically separate ill individuals from others at home, in public, at school and at work, combined with virus testing	Reduce virus transmission from infected symptomatic persons during the infectious period to close contacts (does not identify infected persons who are asymptomatic/presymptomatic)
Quarantine of exposed individuals in the community	Identify exposed individuals and encourage or require them to stay at home. Monitor them for the onset of symptoms, combined with virus testing	Identify high-risk exposures early and mitigate virus transmission to others before a potentially infected individual is contagious. Identify infected contacts and isolate them early in the infection course to further reduce spread to their contacts
Community		
Face mask mandates in public spaces	Require the use of face masks in closed public settings and on public transportation	Limit virus transmission in situations with limited ability for social distancing
School and childcare facility closures	Close childcare facilities and limit social gatherings outside school and childcare facilities	Reduce virus infections among members of vulnerable age groups that may have difficulty with implementation of individual or personal NPIs and reduce virus introduction into households and the risk of secondary transmission
	Close schools, colleges and universities; implement distance learning	Reduce virus infection popul to in and th
Postponing or cancelling gatherings and events	Limit large gatherings, particularly in enclosed spaces	Reduce co
Stay-at-home and lockdown measures	Close non-essential businesses and prohibit indoor dining at restaurants (with the option to offer takeaway orders only)	Reduce comm in public spaces
	Implement stay-at-home measures and limit movement in the community to essential workers	Maximize p businesses remain functional
	Encourage teleworking in professions where in-person attendance is not essential	Reduce workplace virus transmissi stay at home when ill Minimize the impact on b
	Home delivery of necessities including groceries, food and medications	Reduce community spread of vi workers in these fields. Reduc settings
Contact tracing	Identify and test exposed close contacts combined with quarantine	Identify, evaluate, quarantine and m with high-risk exposures to reduce furth among first-responders, providers and patients in he

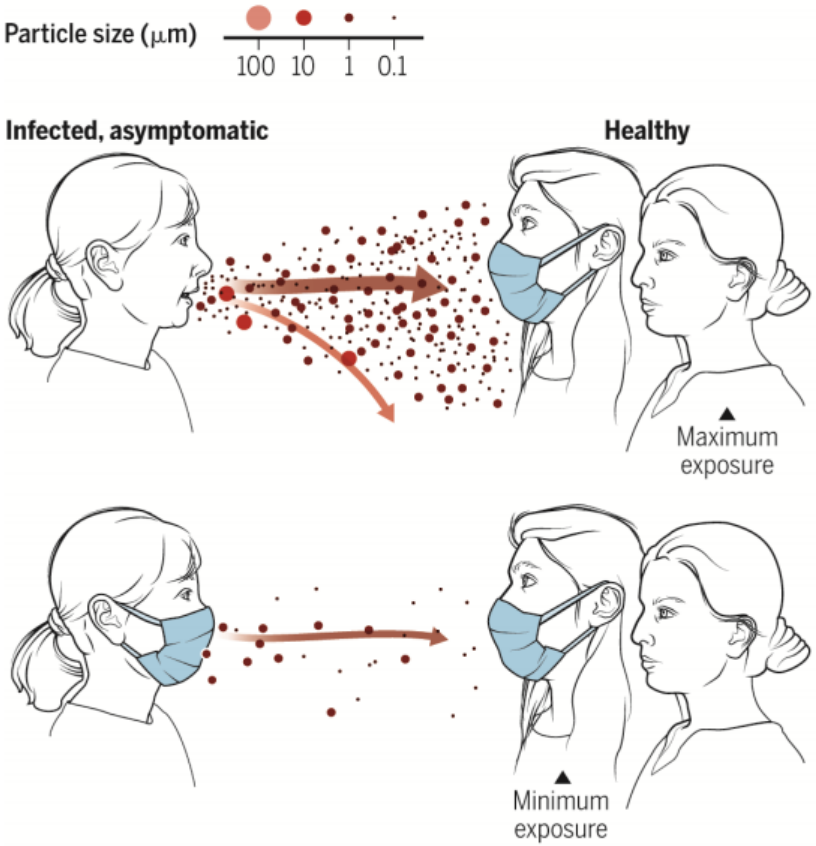
surveillance	disease in specific community populations	spread, allowing rapid implementation of other community measures to mitigate community disease burden
Environmental		
Air quality improvement	Upgrade and improve ventilation systems in homes and buildings in consultation with heating, ventilation and air conditioning professionals. Enhance air filtration, including the use of portable air filters, HEPA filters, improvements to central air filtration and the use of restroom exhaust fans	Reduce the concentration of viral particles in the air in enclosed spaces to reduce transmission in enclosed spaces, including workplaces, health care settings, public indoor spaces and congregate settings
	Increase air exchanges through opening of windows and doors and the use of fans particularly when indoor social distancing may not be possible	Reduce the concentration of viral particles in the air at home to reduce transmission, particularly in situations where social distancing may be difficult and in homes with a high density of people
	Use of ultraviolet germicidal irradiation where other systems may not be available	Reduce the concentration of viable viral particles in the air capable of causing infection to reduce transmission where other forms of air filtration are not available
Disinfection of high-touch surfaces	Routine surface cleaning of high-touch objects, including toys, refrigerator handles, desks, doorknobs, railings, bathroom fixtures	Reduce transmission of virus from fomites, including in community health care settings
Country policies		
Border closures	Restrict travel into countries and between political borders	Reduce the introduction of virus from geographic locations with a high burden of infections. Limit the introduction of asymptomatic and symptomatic infected people. Slow down the introduction of virus and variants of concern
Health screening at points of entry/exit	Identify infected individuals through various screening methods before they leave or enter a country. Screening and virus testing of symptomatic persons or testing of all persons	Reduce or slow down international spread of virus in or out of a country, including for variants of concern
Quarantine measures for inbound travel	Quarantine of inbound travellers to certain countries and locations upon entry	Reduce the introduction of virus into a country, including from infected persons in their incubation period who are asymptomatic/presymptomatic or who have not yet yielded a positive test result
Travel advisories, mandates and restrictions	Require negative test results and/or up-to-date vaccination	Reduce the spread of virus from infected individuals
	Travel alerts to visiting locations with a high burden of infection	Educate individuals before travel, including to practise precautions or to avoid non-essential travel, particularly to locations with a high burden of infection, and provide educational materials to visitors to these locations when travel is necessary
	Face mask mandates for air travel	Reduce the spread of virus when social distancing may no be possible. Limit virus transmission from as minimally symptomatic infected individ

Many community mitigation measures were implemented at the start of the pandemic.

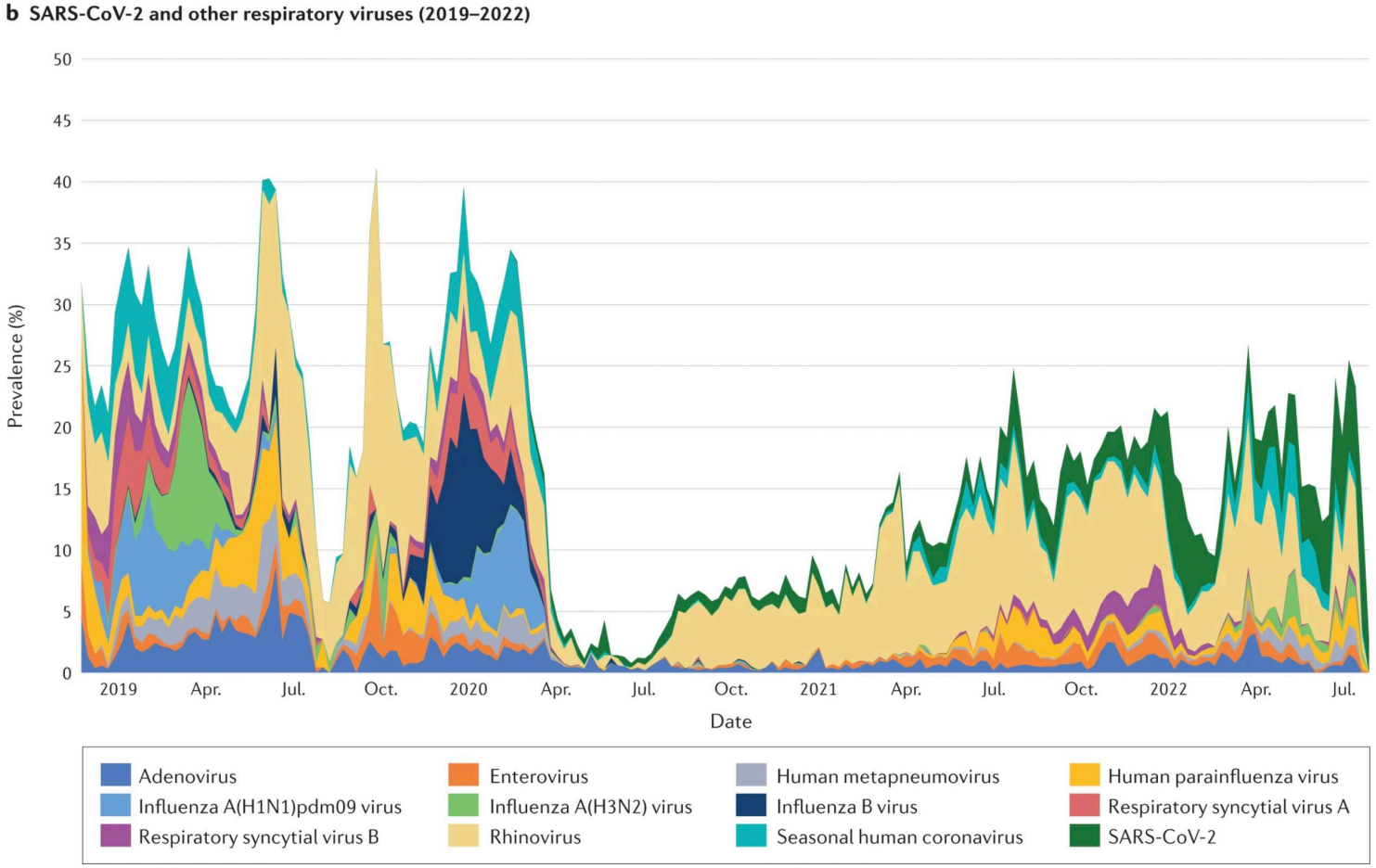
Sources: https://www.nature.com/articles/s41579-022-00807-9

Masks reduce airborne transmission

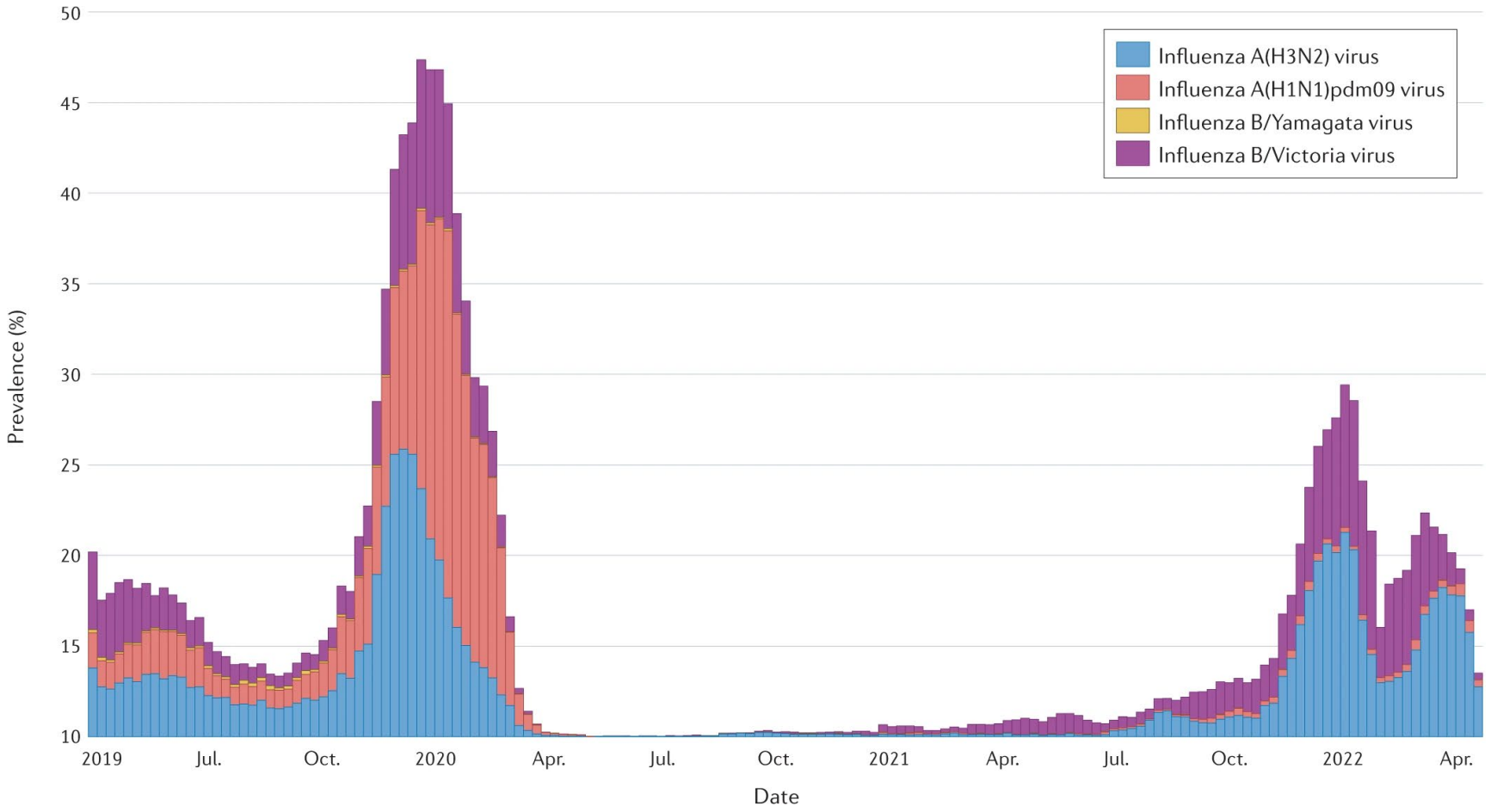
Infectious aerosol particles can be released during breathing and speaking by asymptomatic infected individuals. No masking maximizes exposure, whereas universal masking results in the least exposure.



Source: https://healthpolicy-watch.news/masks-are-necessary-to-reduce-asymptomatic-transmission-in-aerosols-and-droplets-say-health-experts/

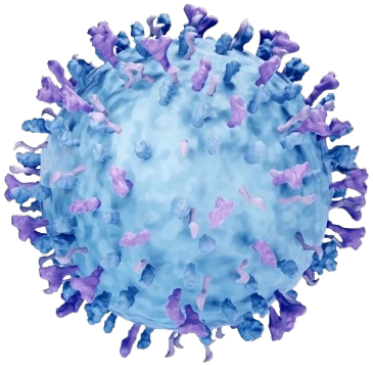
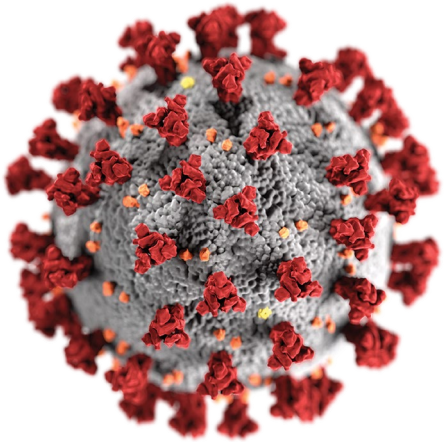
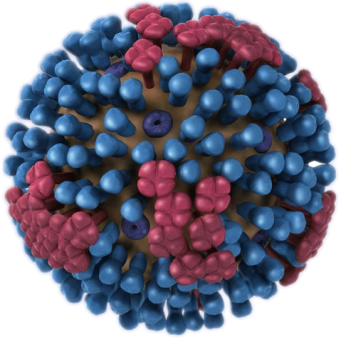


Source: https://www.nature.com/articles/s41579-022-00807-9/figures/1



Source: https://www.nature.com/articles/s41579-022-00807-9/figures/1

Community Burden Measures for Respiratory Illness

The Big 3: COVID-19, Influenza (Flu), and Respiratory Syncytial Virus (RSV)

How We Track COVID-19 and Other Respiratory Illnesses Has Changed

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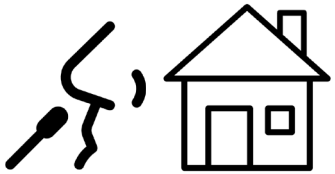
- Following cases of COVID-19 is no longer an accurate measure of levels of infection.

How We Track COVID-19 and Other Respiratory Illnesses Has Changed

- Following cases of COVID-19 is no longer an accurate measure of levels of infection.

Fewer people test



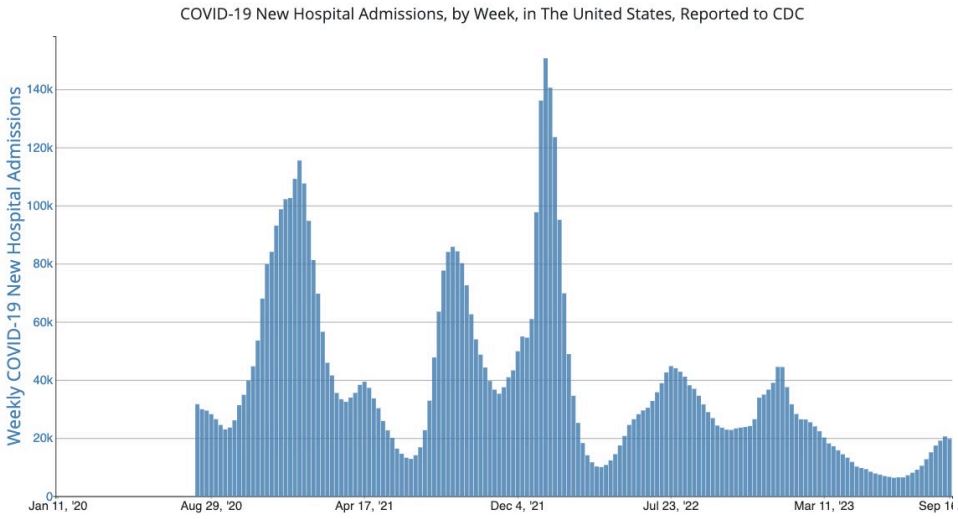
More people test at home
and don't report their results

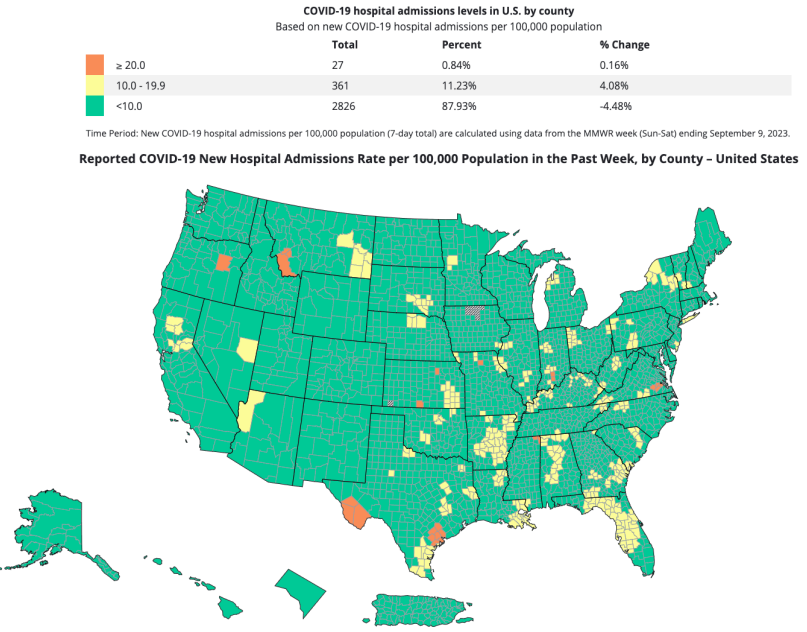
How We Track COVID-19 and Other Respiratory Illnesses Has Changed

- Following cases of COVID-19 is no longer an accurate measure of levels of infection.

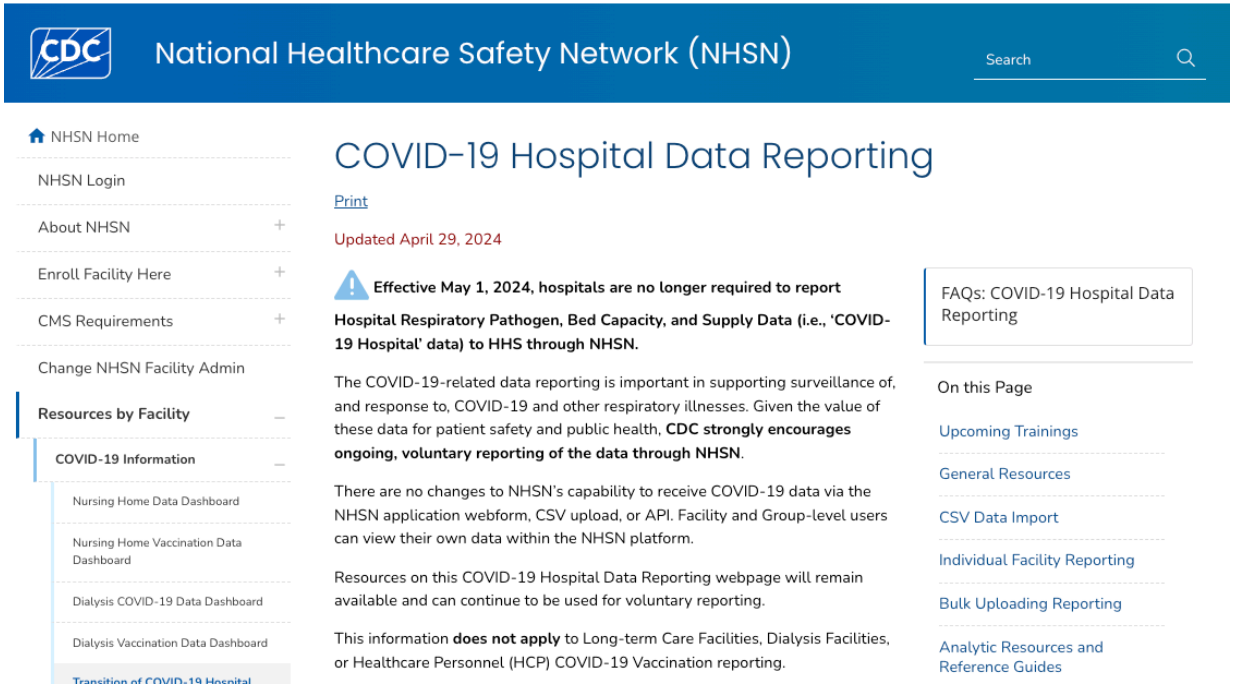
- Hospitalization data not available in many places because reporting requirements have changed

Previously Used COVID-19 Hospital Admission Levels



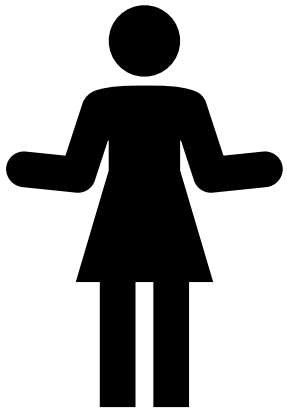


As of May 1, 2024, hospitals are no longer required to report COVID-19 hospitalizations.



Source: https://www.cdc.gov/nhsn/covid19/hospital-reporting.html

So where should we look for information?



So where should we look for information?

- What's happening across the US?
  - CDC Websites

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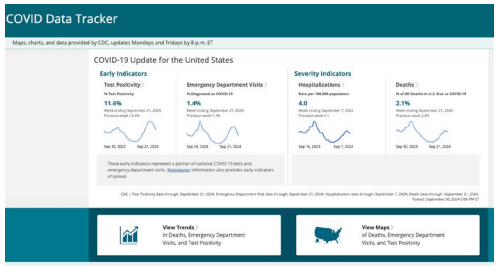

Source: https://covid.cdc.gov/covid-data-tracker/#datatracker-home

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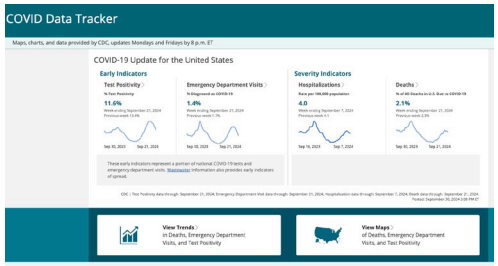

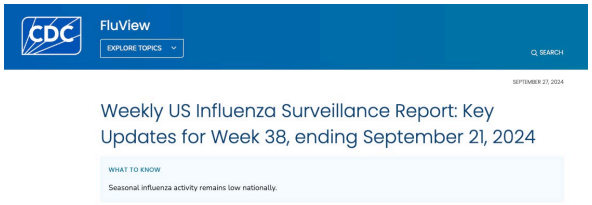

Source: https://www.cdc.gov/fluview/index.html

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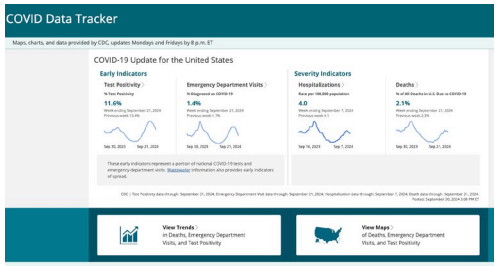

Source:
https://www.cdc.gov/rsv/php/surveillance/index.html#:~:text=Each%20year%20in%20the%20United,adults%2060%20years%20and%20older.

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- What's happening in the state of Washington?
  - WA DOH Dashboards

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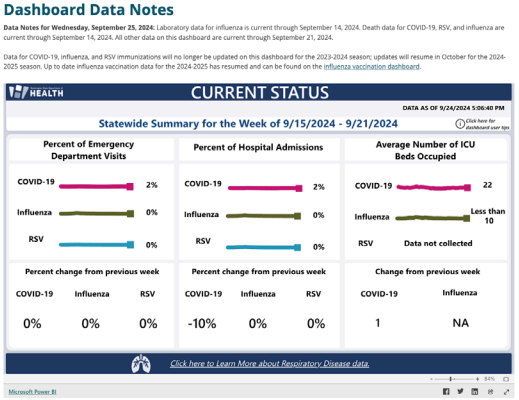
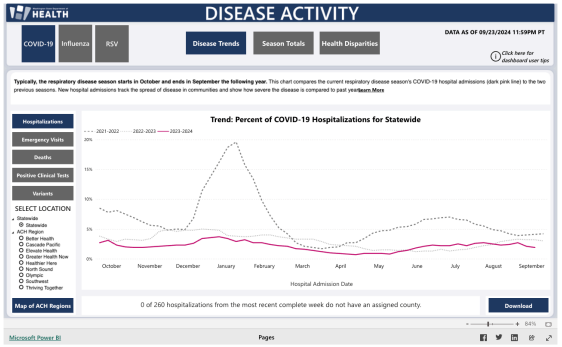




Source: https://doh.wa.gov/data-and-statistical-reports/diseases-and-chronic-conditions/communicable-disease-surveillance-data/respiratory-illness-data-dashboard#CurrentStatus

So where should we look for information?

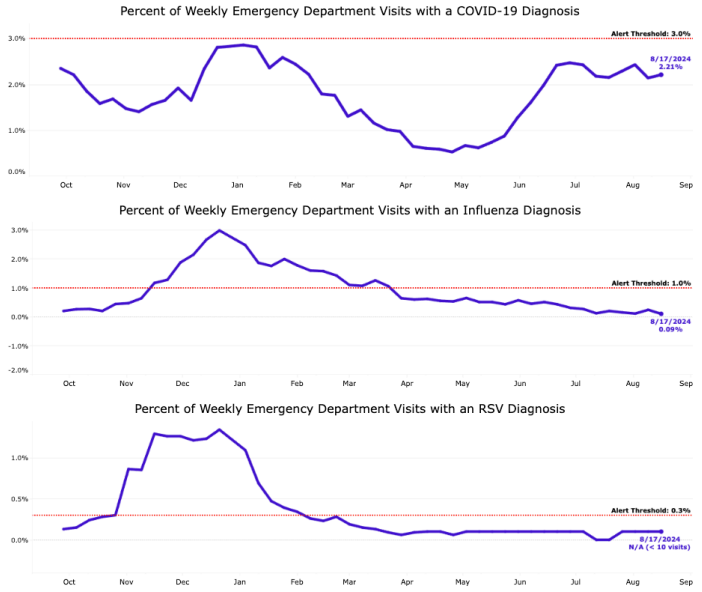
- What's happening across the US?
  - CDC Websites
- What's happening in the state of Washington?
  - WA DOH Dashboards
- What's happening in my county?
  - County Specific Dashboards (e.g. King County)

Respiratory Illness Data For King County

https://kingcounty.gov/en/dept/dph/health-safety/disease-illness/facts-and-data/respiratory-virus-data

Respiratory Illness Data For King County

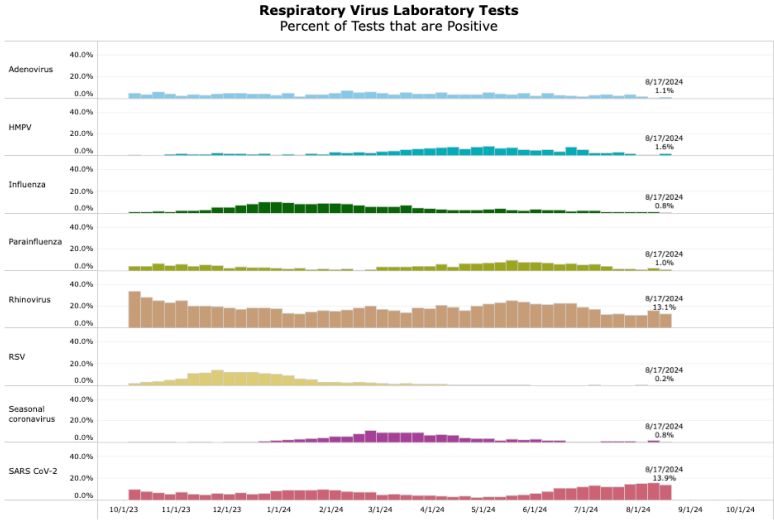
- Reasons for emergency department visits



https://kingcounty.gov/en/dept/dph/health-safety/disease-illness/facts-and-data/respiratory-virus-data

Respiratory Illness Data For King County

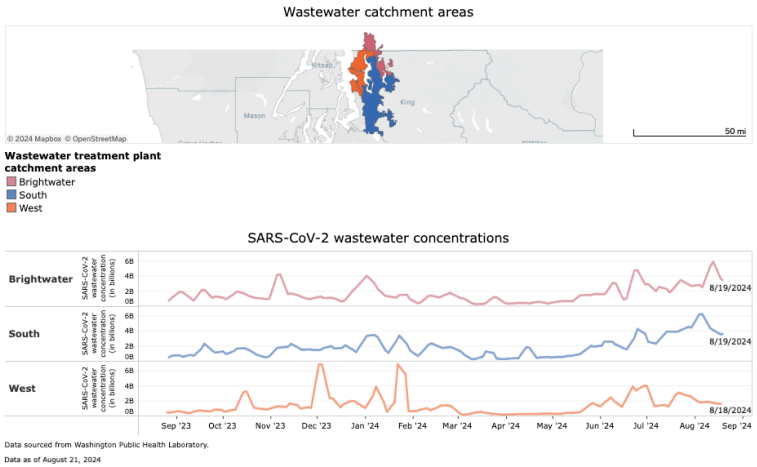
- Reasons for emergency department visits
- Laboratory testing results for respiratory viruses



https://kingcounty.gov/en/dept/dph/health-safety/disease-illness/facts-and-data/respiratory-virus-data

Respiratory Illness Data For King County

- Reasons for emergency department visits
- Laboratory testing results for respiratory viruses
- Wastewater surveillance data

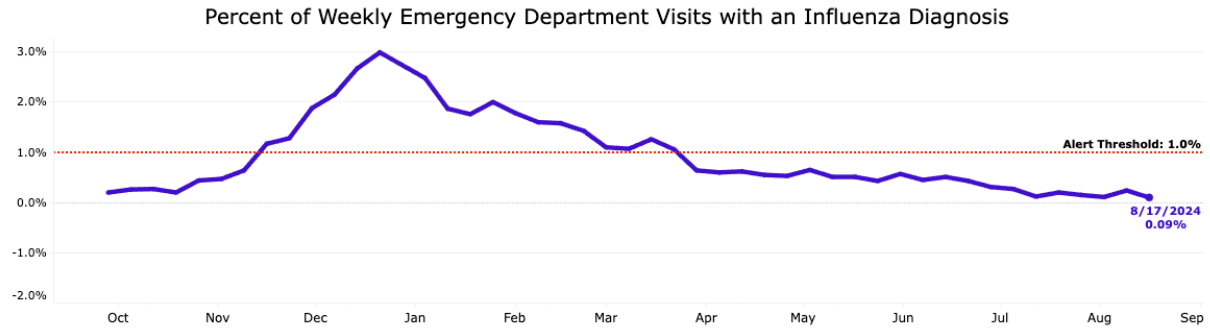


https://kingcounty.gov/en/dept/dph/health-safety/disease-illness/facts-and-data/respiratory-virus-data

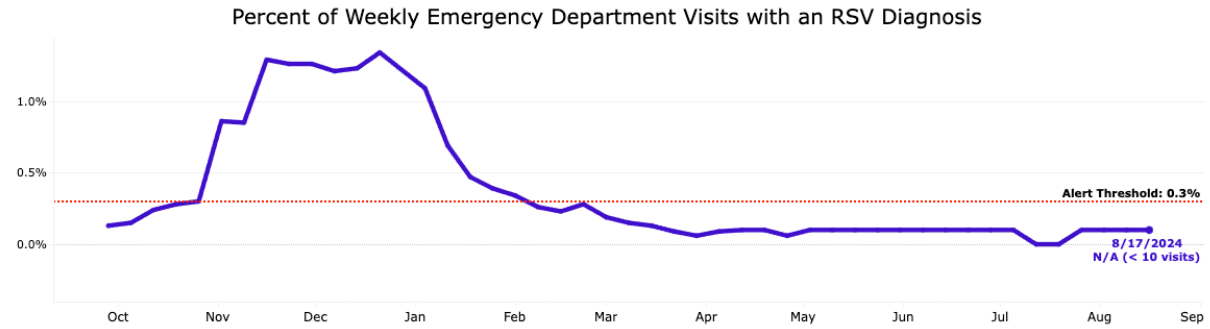
Updates on COVID-19, Influenza and RSV: Trends, Epidemiology and Complications

We saw seasonal peaks in fall/winter for flu and RSV.

Flu



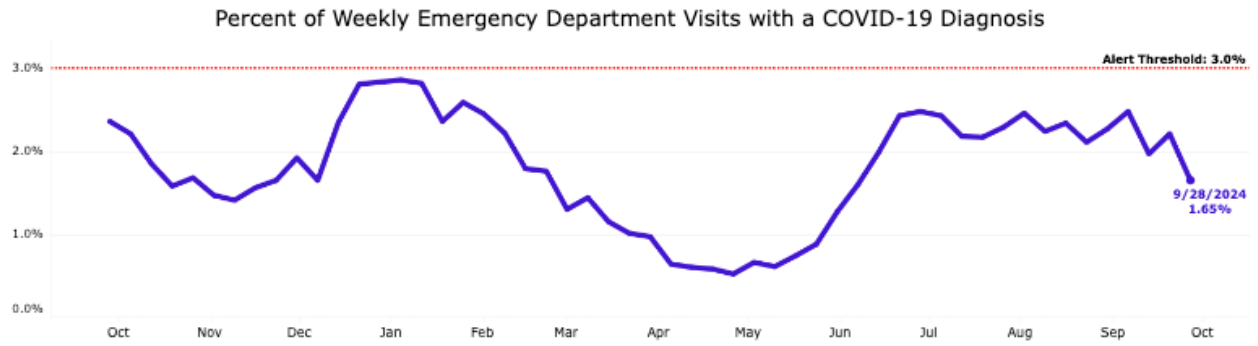
RSV



Source: https://kingcounty.gov/en/dept/dph/health-safety/disease-illness/facts-and-data/respiratory-virus-data

COVID-19 had waves in fall/winter and a wave in the summer.

COVID-19



Source: https://kingcounty.gov/en/dept/dph/health-safety/disease-illness/facts-and-data/respiratory-virus-data

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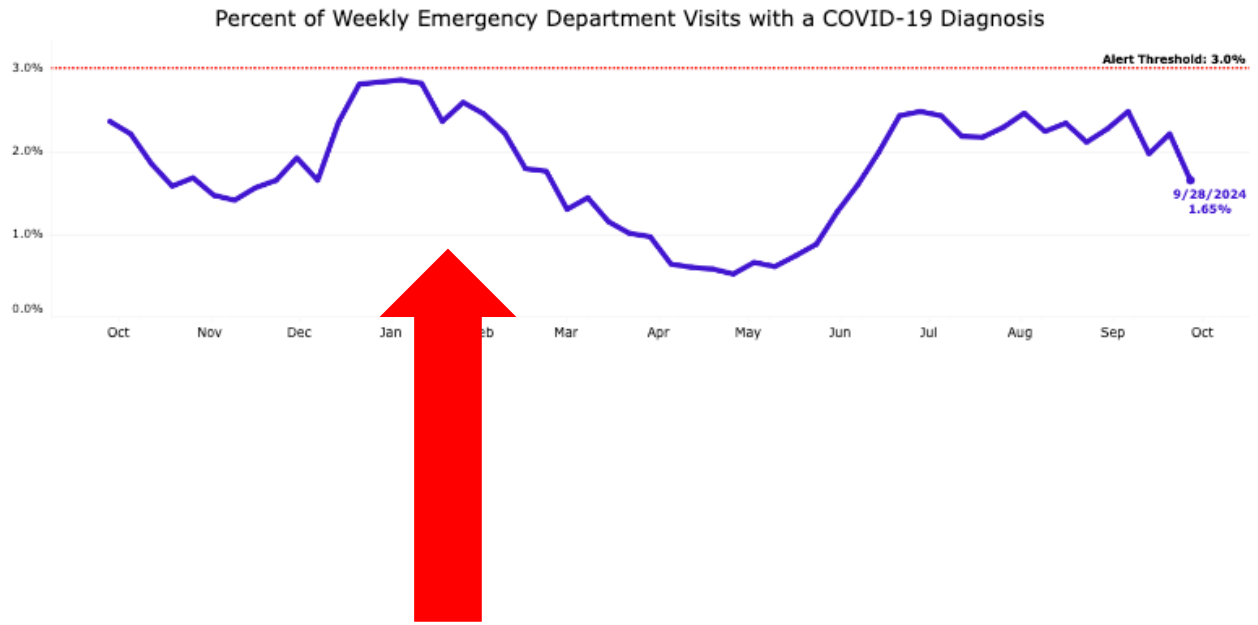

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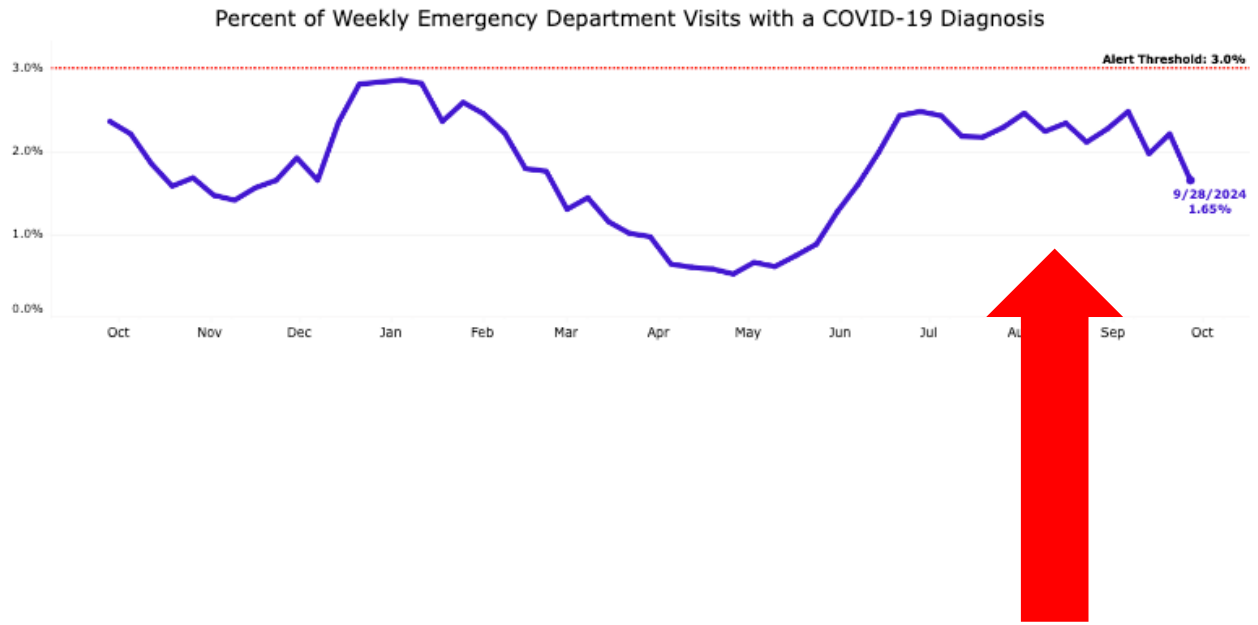

Source: https://kingcounty.gov/en/dept/dph/health-safety/disease-illness/facts-and-data/respiratory-virus-data

This was seen in other measures too.

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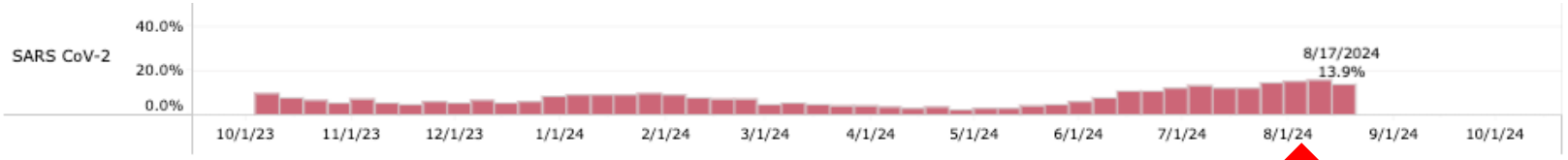

Testing Positivity

Source: https://kingcounty.gov/en/dept/dph/health-safety/disease-illness/facts-and-data/respiratory-virus-data

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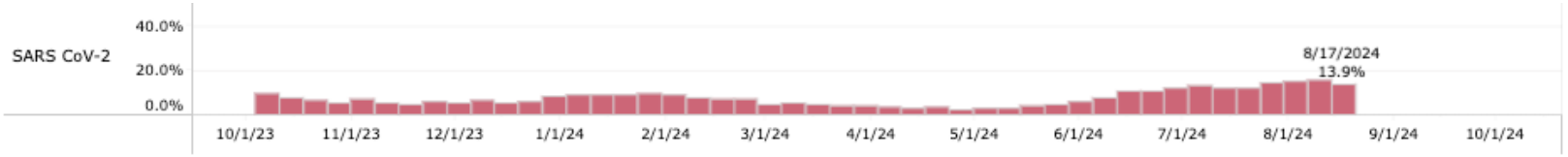

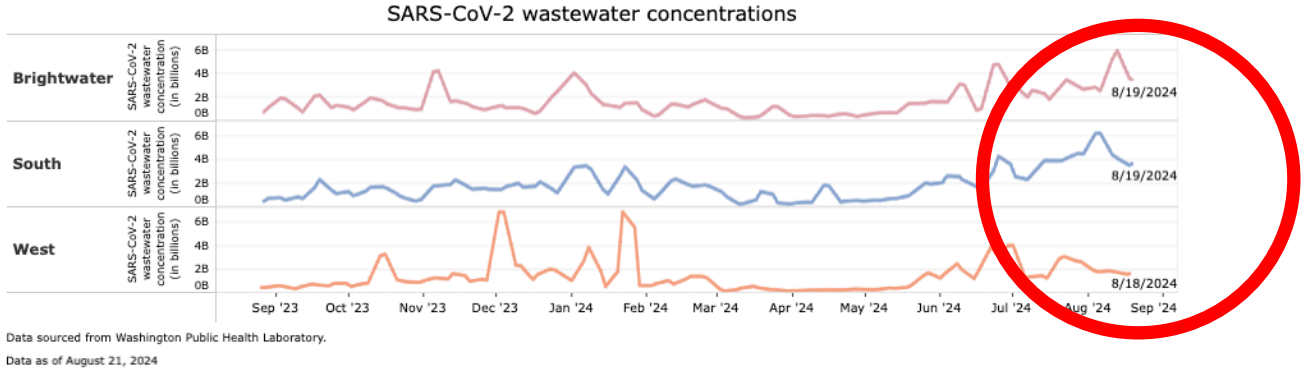

Wastewater Surveillance

Source: https://kingcounty.gov/en/dept/dph/health-safety/disease-illness/facts-and-data/respiratory-virus-data

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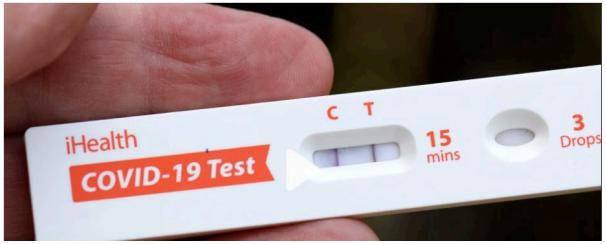
The US is experiencing its largest summer Covid wave in at least two years

By Brenda Goodman, CNN

5 minute read · Updated 2:57 PM EDT, Fri August 16, 2024



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BY NATHANIEL WEIXEL - 08/17/24 5:00 PM ET

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Summer surge of COVID-19 causing spike in hospitalizations

By Jennifer Dowling | Published July 26, 2024 9:19pm PDT | News | FOX 13 Seattle

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Late-Summer Travel Plans? You Might Want to Put On a Mask.

With U.S. Covid-19 cases at very high levels and new vaccines still several weeks away, we asked experts for their advice on when and where to wear a mask.

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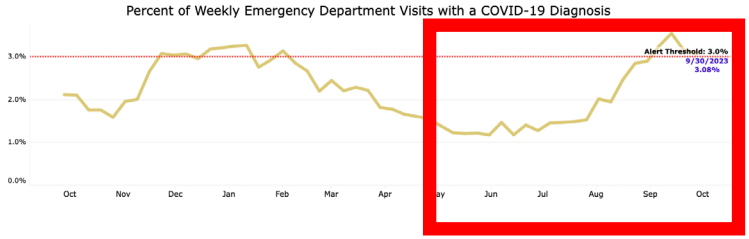
Summer COVID surge approaches in Seattle area as travel season begins

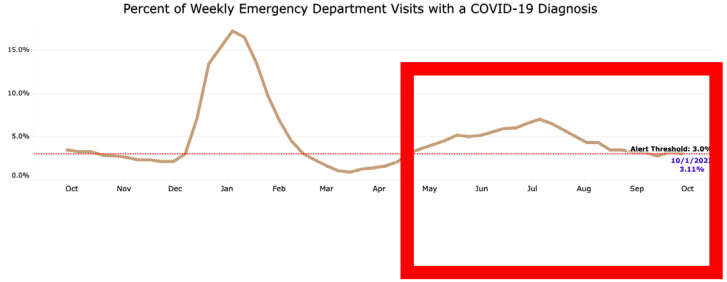
June 17, 2024 at 6:00 am | *Updated June 17, 2024 at 6:00 am*

The Summer COVID-19 Wave

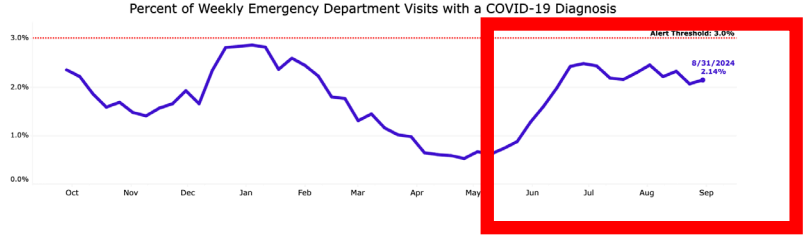
2022-2023



2021-2022



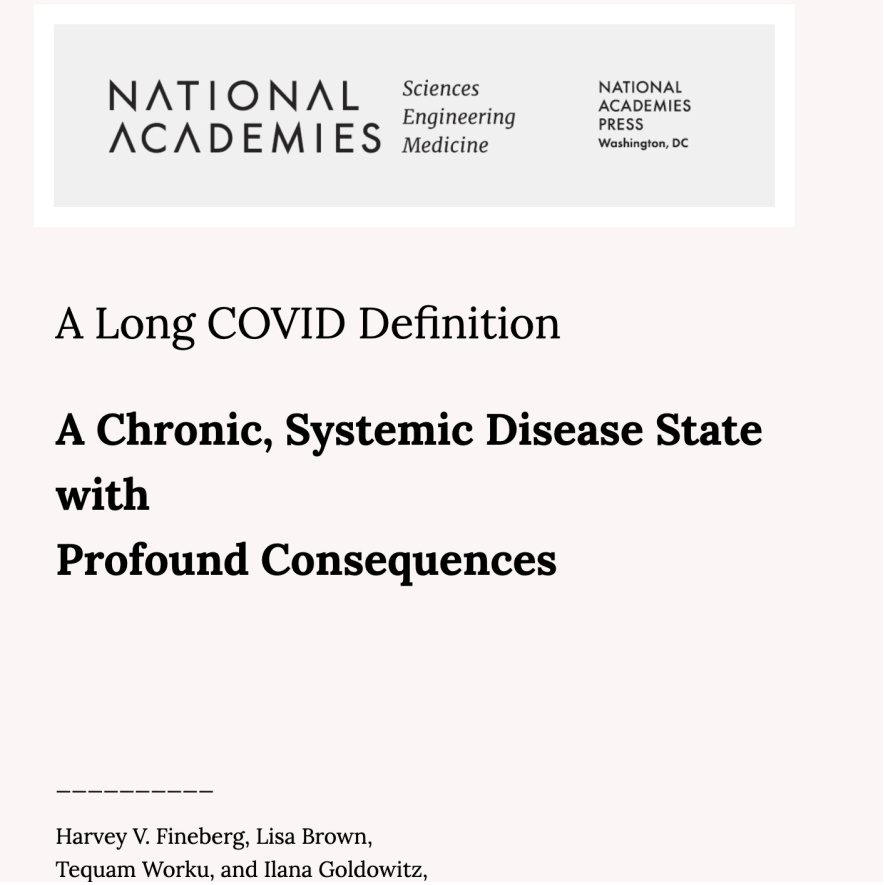
2023-2024



Source: https://www.cidrap.umn.edu/covid-19/risk-long-covid-has-ebbed-during-pandemic-mostly-thanks-vaccines-new-data-reveal

2024 Report: Long COVID Definition

Source: https://nap.nationalacademies.org/download/27768#

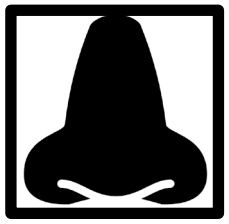


Characterized by over 200 signs, symptoms and conditions.

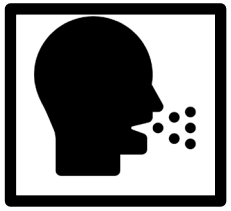
Fatigue

Shortness of breath

Chest pain or palpitations



Anosmia



Cough

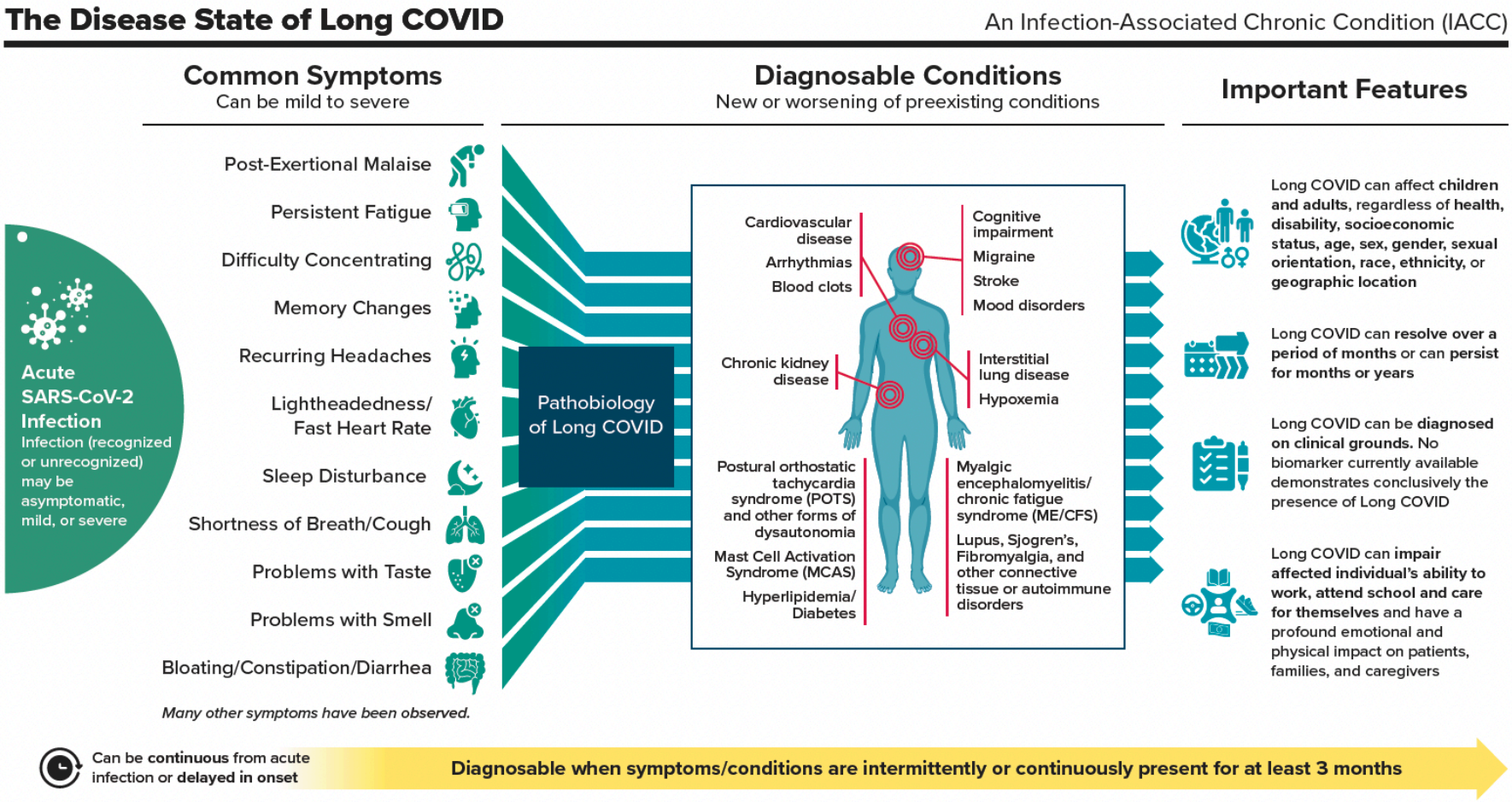
Dizziness or balance issues

Headache

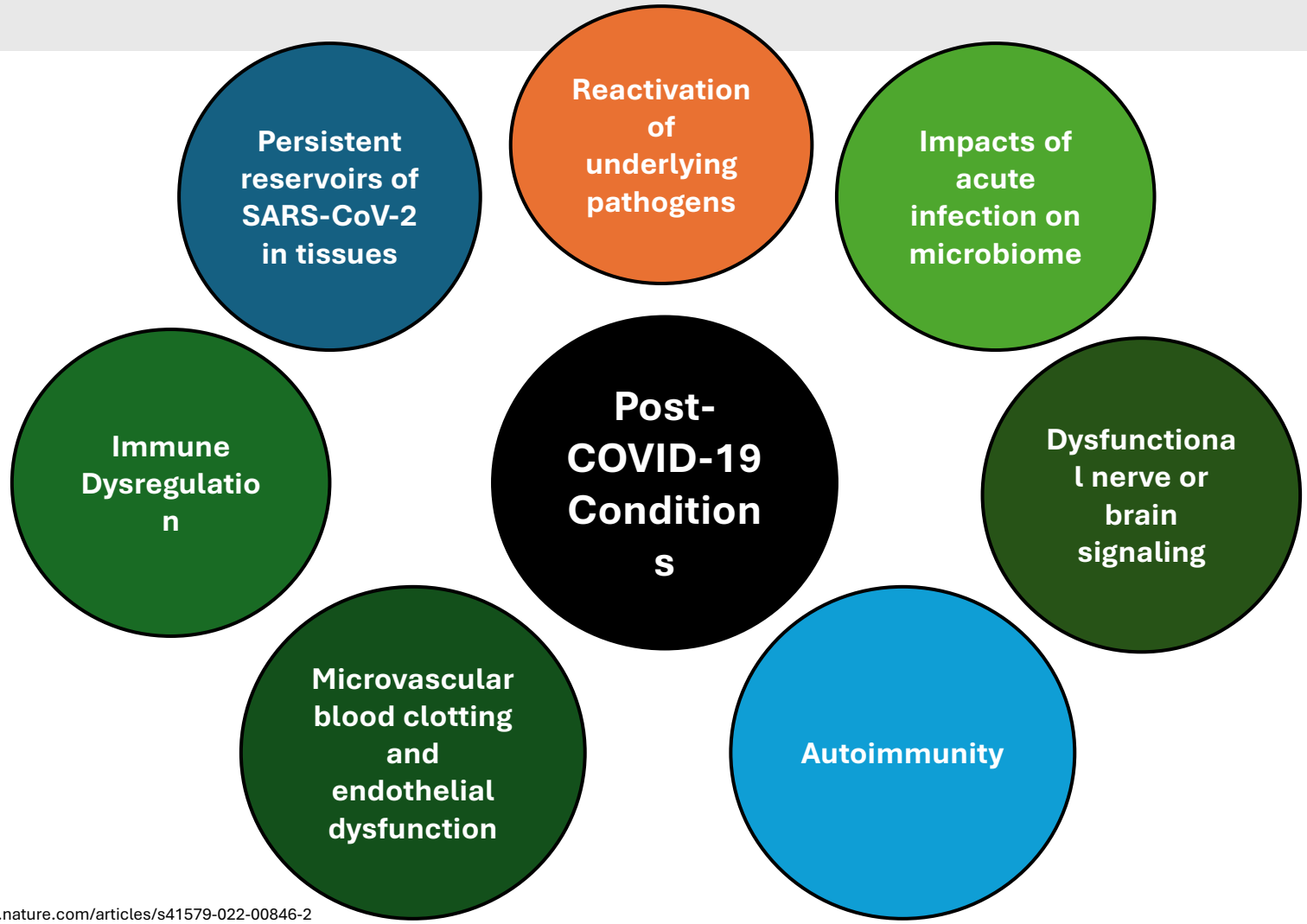
Insomnia or sleep disturbances

Depression or anxiety

Also includes but is not limited to fever, joint pain, change in libido, cognitive difficulties, GI issues, menstrual cycle irregularities



Source: https://nap.nationalacademies.org/catalog/27768/a-long-covid-definition-a-chronic-systemic-disease-state-with



Source: https://www.nature.com/articles/s41579-022-00846-2

- **44% of people with Long COVID cannot work and those that do work 51% fewer hours.**
- **Up to $9000 healthcare costs per person annually if extrapolating from chronic fatigue syndrome.**
- **As of January 2022, cost of Long COVID including lost wages and medical expenses is estimated to be >$386 billion.**

Source: https://www.longhauler-advocacy.org/calculations-formulas
Source: https://www.tandfonline.com/doi/full/10.1080/21641846.2021.1878716
Source: https://solvecfs.org/wp-content/uploads/2022/04/Long_Covid_Impact_Paper.pdf

frontiers | Frontiers in Public Health

TYPE Original Research
PUBLISHED 30 January 2024
DOI 10.3389/fpubh.2023.1324636

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Myer Glickman,
Office for National Statistics, United Kingdom

REVIEWED BY
Ana Izabel Passarella Teixeira,
Federal University of Mato Grosso do Sul, Brazil
Pratibha Shrestha,

Ethnic and racial differences in self-reported symptoms, health status, activity level, and missed work at 3 and 6 months following SARS-CoV-2 infection

- Self-reported symptoms were similar regardless of race/ethnicity
- BIPOC individuals **experienced greater health burden and quality of life impacts** than White participants.

https://www.frontiersin.org/journals/public-health/articles/10.3389/fpubh.2023.1324636/full

ORIGINAL ARTICLE—CME

Race, ethnicity, and utilization of outpatient rehabilitation for treatment of post COVID-19 condition

Claudia B. Hentschel MD[1] | Benjamin A. Abramoff MD[2] | Timothy R. Dillingham MD[2] | Liliana E. Pezzin PhD JD[3]

ORIGINAL ARTICLE—CME

PM&R

Race, ethnicity, and utilization of outpatient rehabilitation for treatment of post COVID-19 condition

Claudia B. Hentschel MD[1] | Benjamin A. Abramoff MD[2] | Timothy R. Dillingham MD[2] | Liliana E. Pezzin PhD JD[3]

Black population had a lower utilization of outpatient rehabilitation services despite similar incidence of post COVID-19 conditions.

Source: https://onlinelibrary.wiley.com/doi/abs/10.1002/pmrj.12869

CORRESPONDENCE · Volume 12, Issue 5, E33-E34, May 2024

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Effectiveness of COVID-19 vaccines to prevent long COVID: data from Norway

Nhung TH Trinh [a] ✉ · Annika M Jödicke [b] · Martí Català [b] · Núria Mercadé-Besora [b] · Saeed Hayati [a] · Angela Lupattelli [a] · et al. Show more

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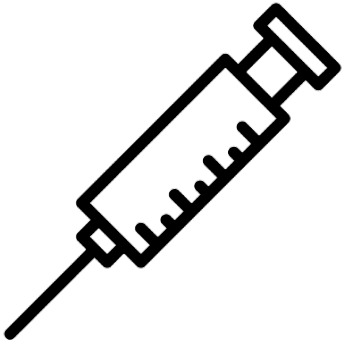


Risk of Long COVID ~ 50%

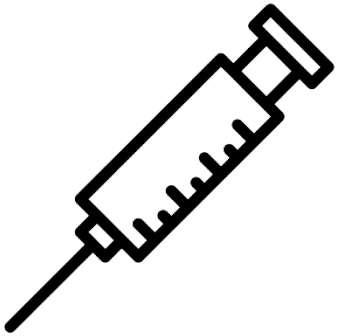
Source: https://www.thelancet.com/journals/lanres/article/PIIS2213-2600(24)00082-1/fulltext

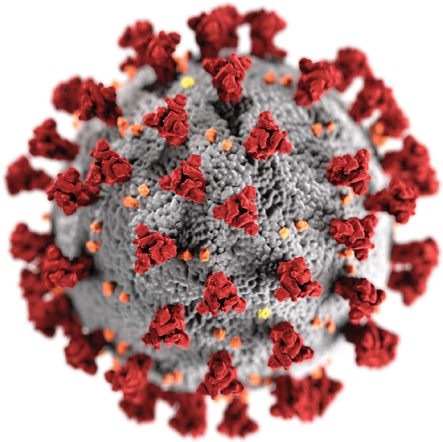
Respiratory Illness Vaccine Recommendations and Community Mitigation Guidance

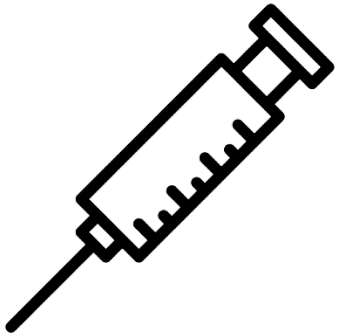
”Vaccines don’t save lives. Vaccination save lives.”

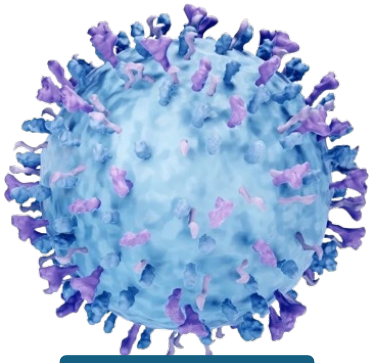
~ Walter Orenstein, MD, Emory University

Source: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6930108/



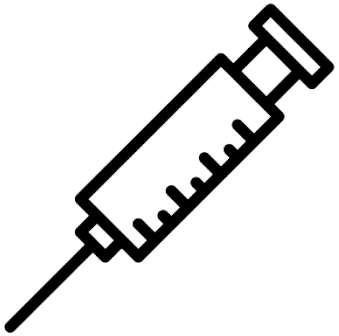


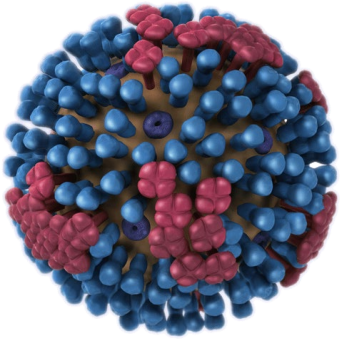




RSV

COVID-19

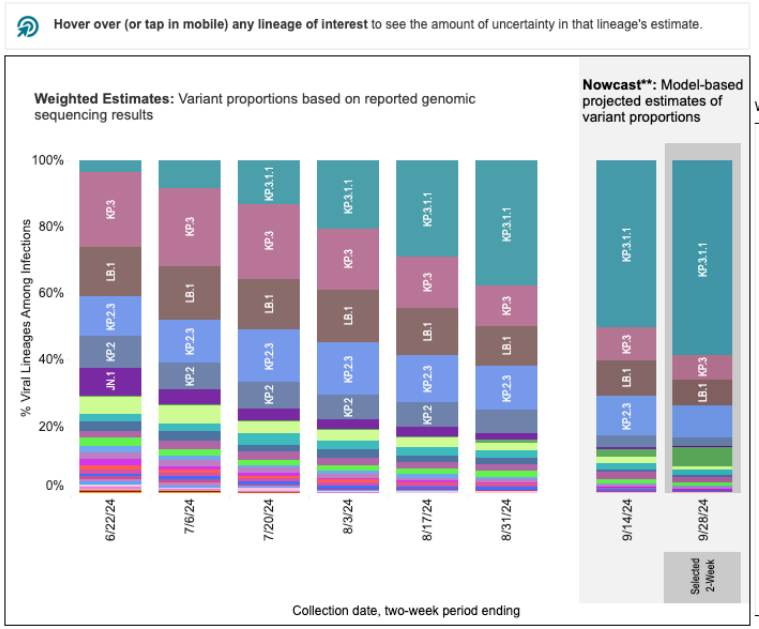




Flu

New COVID-19 variants continue to emerge.

Weighted and Nowcast Estimates in United States for 2-Week Periods in 6/9/2024 – 9/28/2024



Nowcast Estimates in United States for 9/15/2024 – 9/28/2024

USA

WHO label	Lineage #	%Total	95%PI
Omicron	KP.3.1.1	58.7%	54.4-62.9%
	KP.2.3	9.4%	8.3-10.7%
	LB.1	7.9%	6.6-9.4%
	KP.3	7.1%	6.1-8.4%
	XEC	6.0%	2.4-13.2%
	KP.2	2.5%	1.9-3.5%
	LP.1	1.7%	1.1-2.5%
	KP.1.1.3	1.4%	1.0-2.0%
	KP.1.1	1.1%	0.8-1.5%
	JN.1.18	1.1%	0.5-2.4%
	KS.1	0.6%	0.4-0.9%
	JN.1.16.1	0.6%	0.4-0.8%
	KP.2.15	0.4%	0.2-0.7%
	LF.3.1	0.3%	0.2-0.4%
	JN.1	0.2%	0.1-0.3%
	JN.1.11.1	0.1%	0.1-0.3%
	KP.4.1	0.1%	0.0-0.2%
	XDV.1	0.0%	0.0-0.1%
	KW.1.1	0.0%	0.0-0.0%
	JN.1.7	0.0%	0.0-0.0%
	JN.1.16	0.0%	0.0-0.0%
	KQ.1	0.0%	0.0-0.0%

Source: https://covid.cdc.gov/covid-data-tracker/#variant-proportions

Which prompted FDA to change the strain used in the 2024-2025 vaccines.

FDA U.S. FOOD & DRUG ADMINISTRATION

← Home / Vaccines, Blood & Biologics / Updated COVID-19 Vaccines for Use in the United States Beginning in Fall 2024

Updated COVID-19 Vaccines for Use in the United States Beginning in Fall 2024

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Vaccines, Blood & Biologics

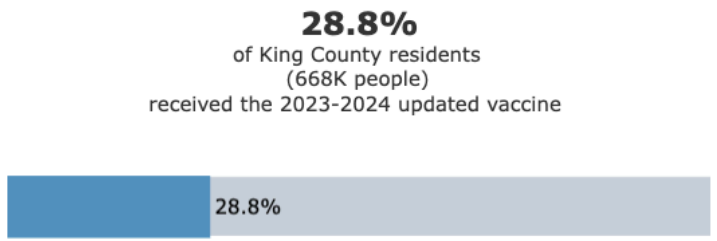
Infectious Disease Tests

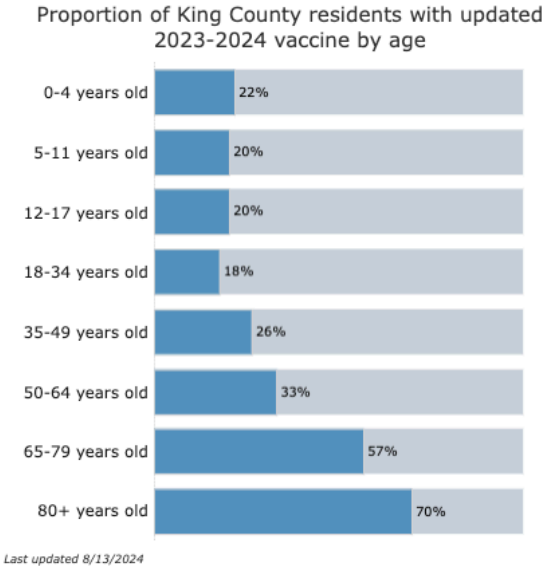
Español

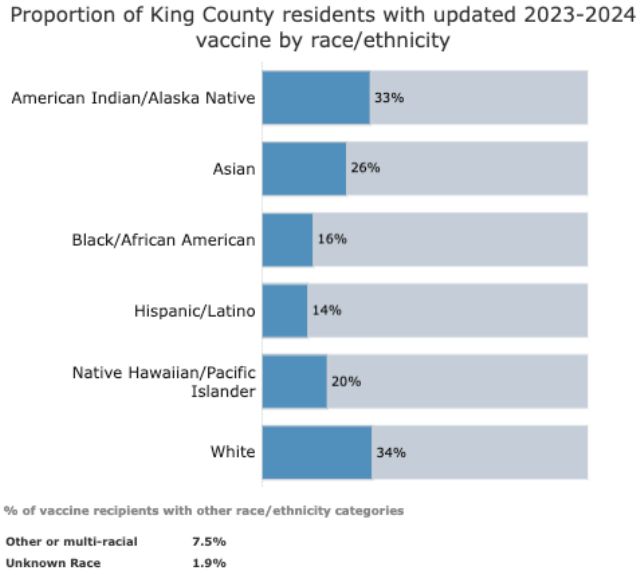
FDA Updates Advice to Manufacturers of COVID-19 Vaccines (2024-2025 Formula): If Feasible Use KP.2 Strain of JN.1-Lineage

Source: https://www.fda.gov/vaccines-blood-biologics/updated-covid-19-vaccines-use-united-states-beginning-fall-2024

King County COVID-19 Vaccination Rates for 2023-2024







Source: https://kingcounty.gov/en/dept/dph/health-safety/disease-illness/covid-19/data/vaccination

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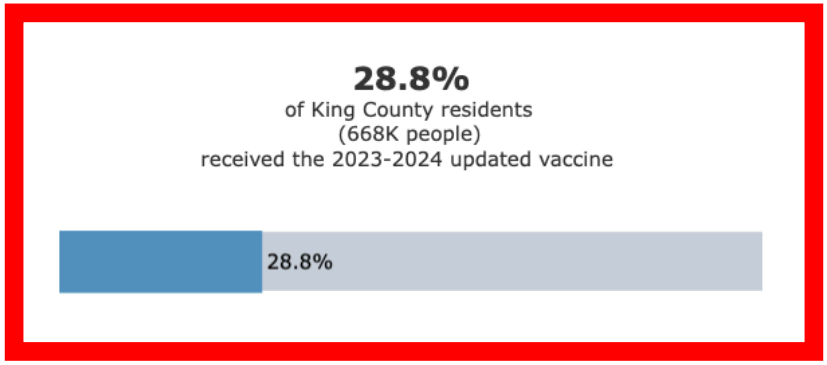

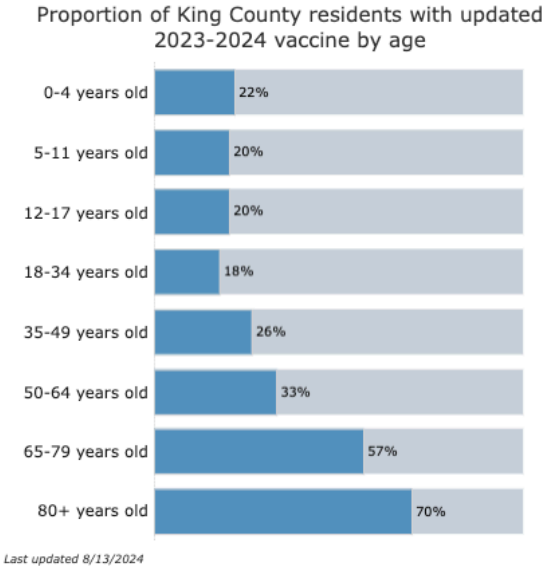

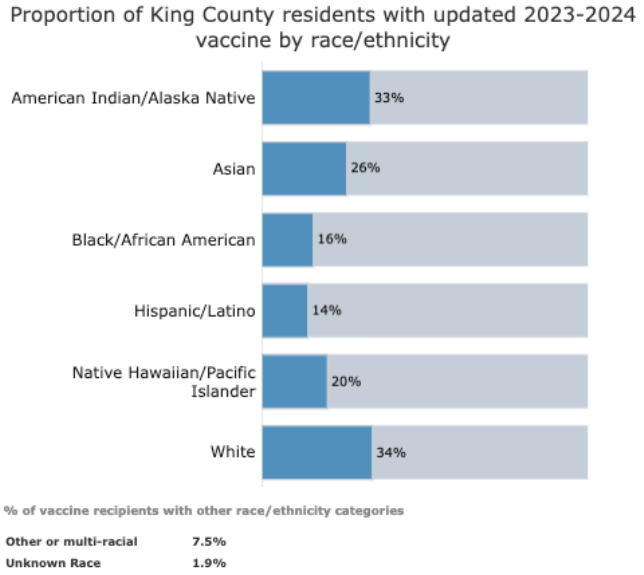

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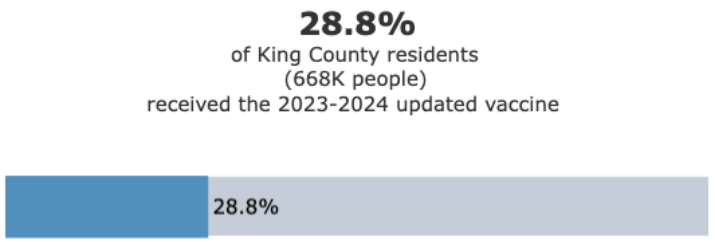

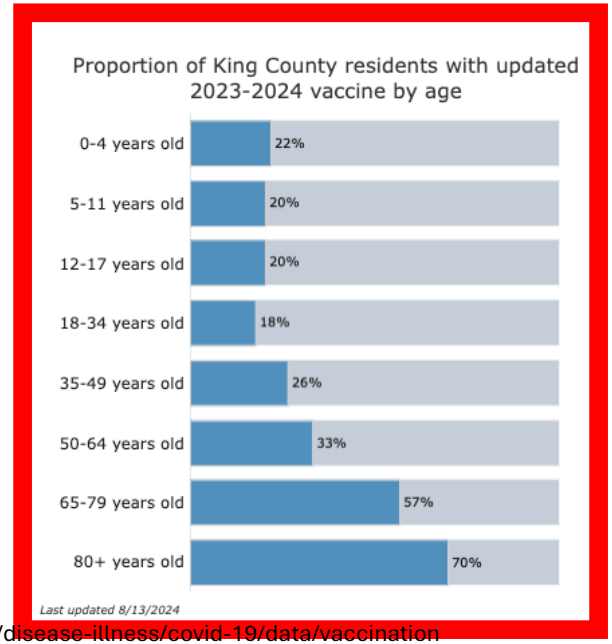

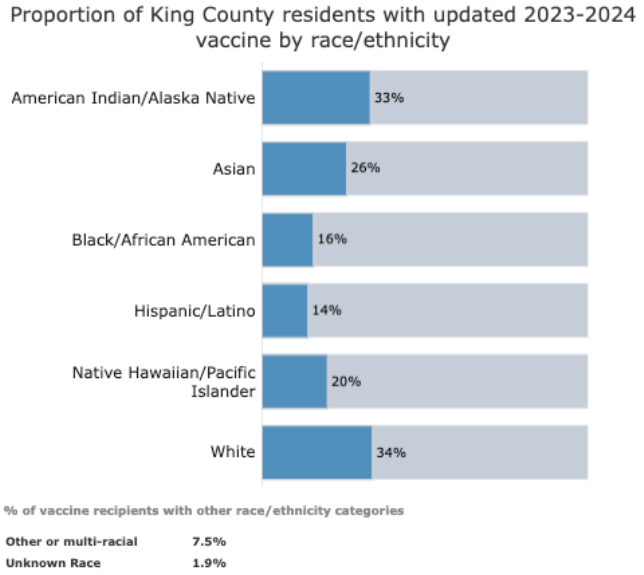

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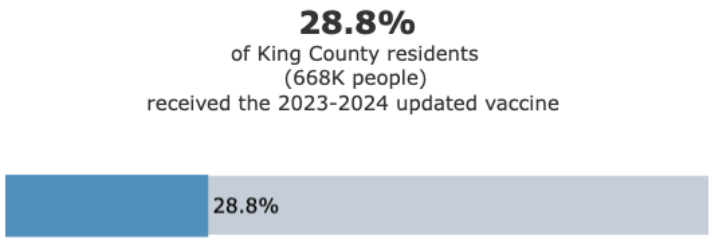
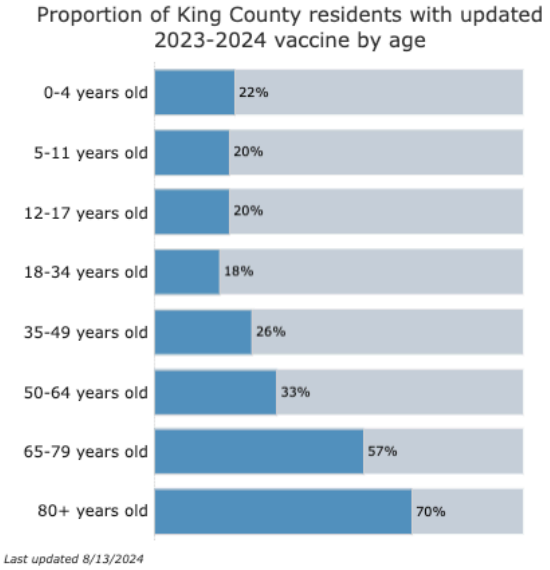
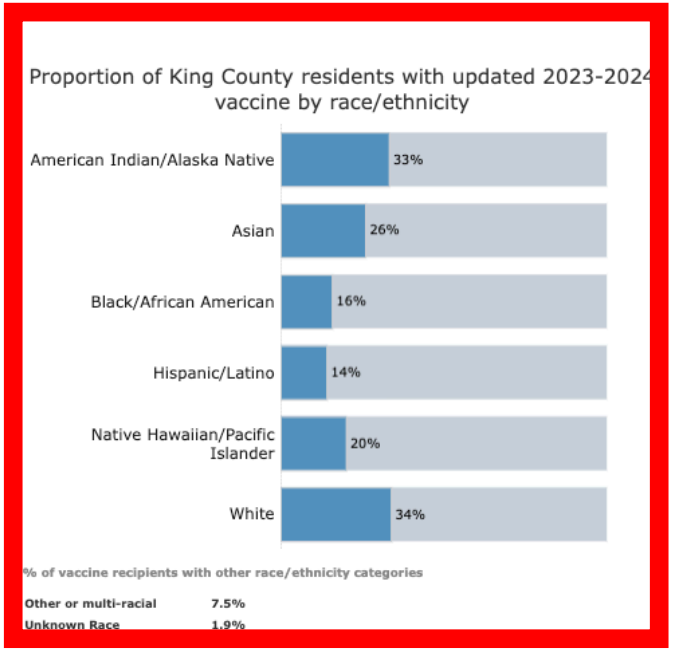
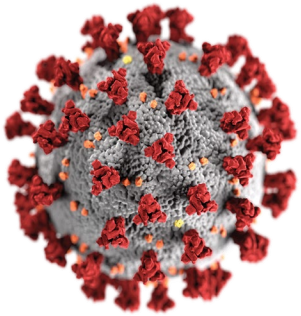






Source: https://kingcounty.gov/en/dept/dph/health-safety/disease-illness/covid-19/data/vaccination

The updated 2024-2025 COVID-19 vaccine is recommended for everyone 6 months and older.



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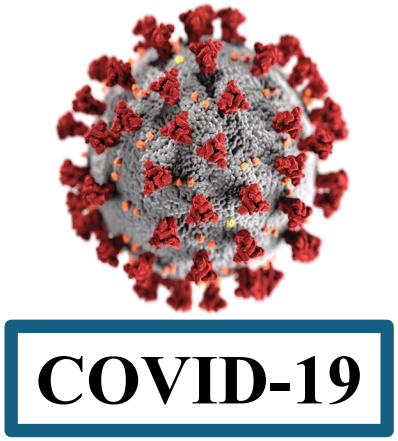

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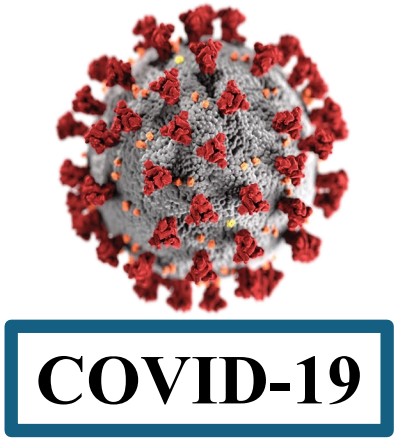

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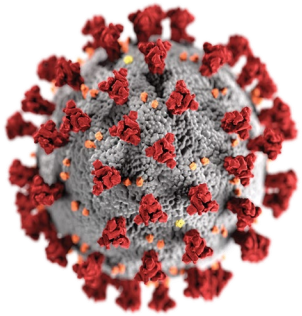

COVID-19

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- Provides protection against severe disease and long COVID even if you had vaccines or boosters before

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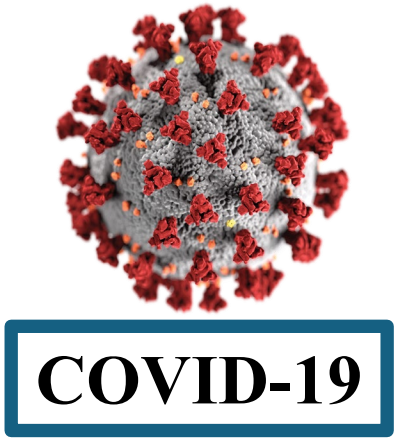
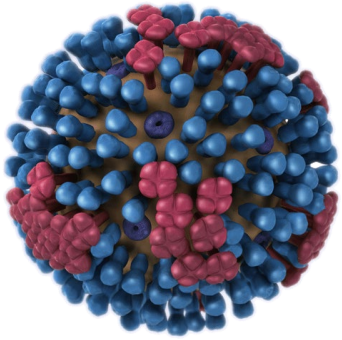


- New COVID-19 vaccine appointments can be scheduled now and more available soon.
- Updated to target recent variants
- Provides protection against severe disease and long COVID even if you had vaccines or boosters before
- May not prevent infection but will reduce how severe your illness is.

The annual flu vaccine is recommended for everyone 6 months and older.



Flu

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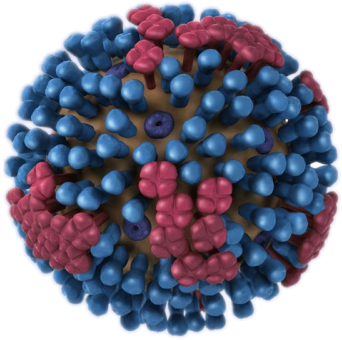

Flu

- New flu vaccine available likely in September

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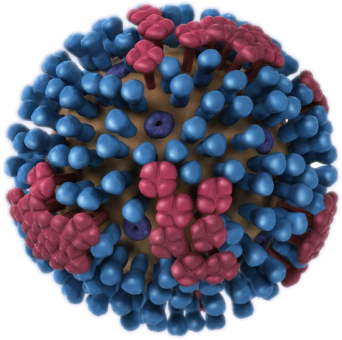

Flu

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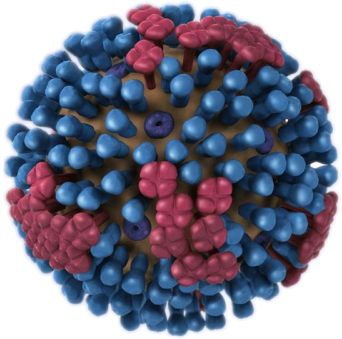
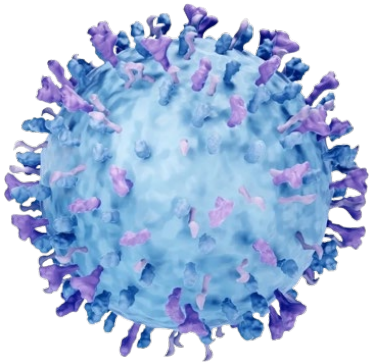


Flu

- New flu vaccine available likely in September
- Targets 3 different flu strains
- May not prevent infection but will reduce your risk of severe illness or death.

RSV immunizations are recommended for infants, pregnant people, and older adults.



RSV

- Infants
  - Infants <8 months during first RSV season
  - Children 8-19 months who are high risk
- Pregnant people:
  - At 32-36 weeks of pregnancy from Sept –Jan
  - Only 1 dose at this time
- Older adults:
  - 60-74 years with increased risk
  - All people 75 + years
  - Only 1 dose at this time

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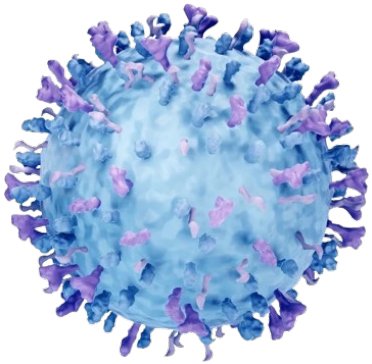

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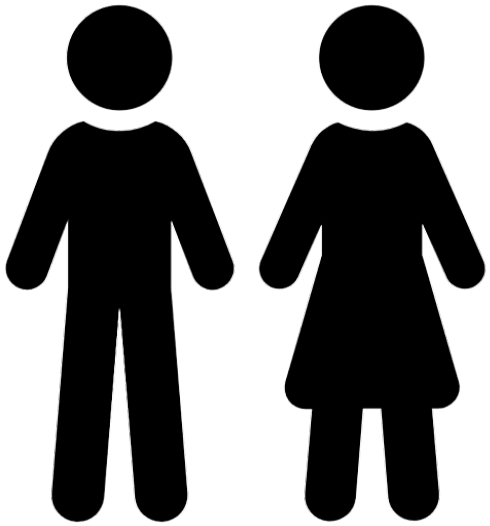
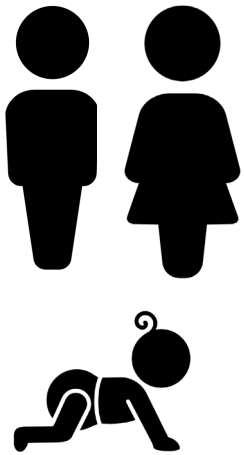
Which respiratory virus vaccines should adults get?



- Updated **COVID-19 vaccine** even if they had prior vaccines or boosters.
- Annual **flu vaccine**
- **RSV vaccination** for all adults aged 75+ years if not previously vaccinated
- **RSV vaccination** for adults 60-74 years at high risk if not previously vaccinated
- Talk to the doctor about **other vaccines** that are recommended

What respiratory virus vaccines should my children get?

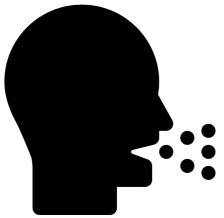


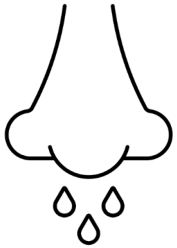
- For children 6 months and older:
  - Updated **COVID-19 vaccine** even if they had prior vaccines or boosters.
  - Annual **flu vaccine**
- For children <8 months during the season: **RSV immunization** (if mom was not vaccinated)
- For children 8-19 months who are high risk during the season: **RSV immunization**
- Talk to your doctor about **other childhood vaccines** that are recommended

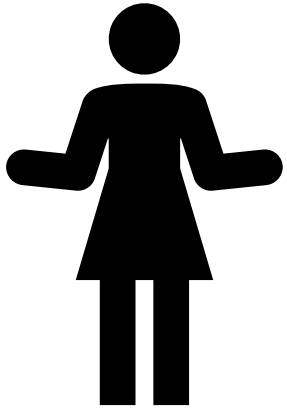
Which respiratory virus vaccines should my pregnant family member get?

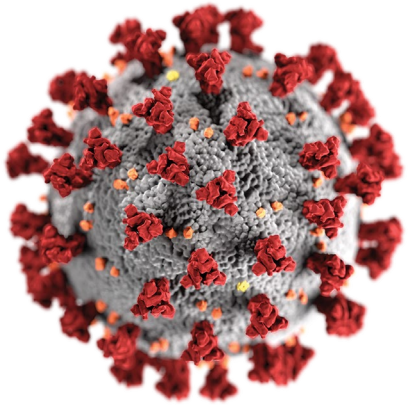
- Updated **COVID-19 vaccine** even if they had prior vaccines or boosters.
- Annual **flu vaccine**
- **RSV vaccination** between 32-36 weeks of pregnancy if they never had RSV vaccination before
- Talk to the doctor about **other vaccines** that are recommended during pregnancy

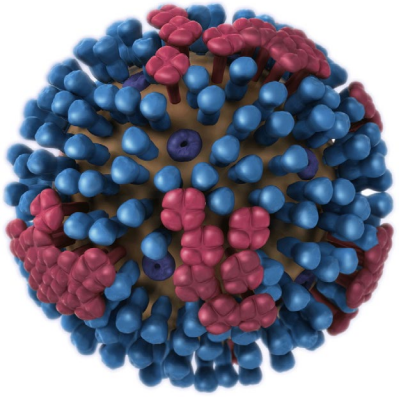
On March 1, 2024, CDC updates their respiratory virus recommendations.

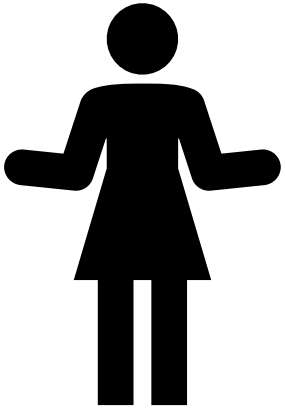


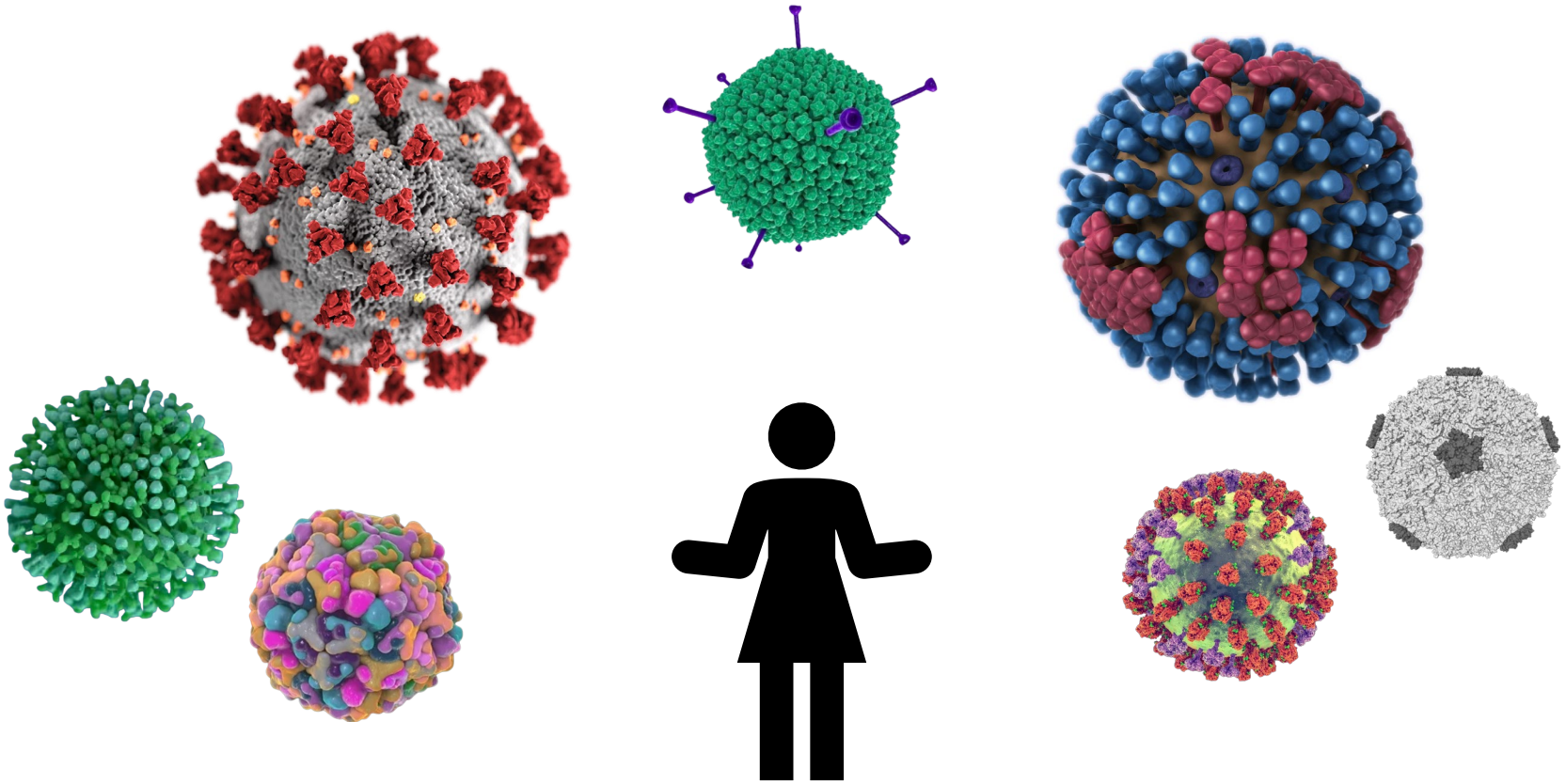












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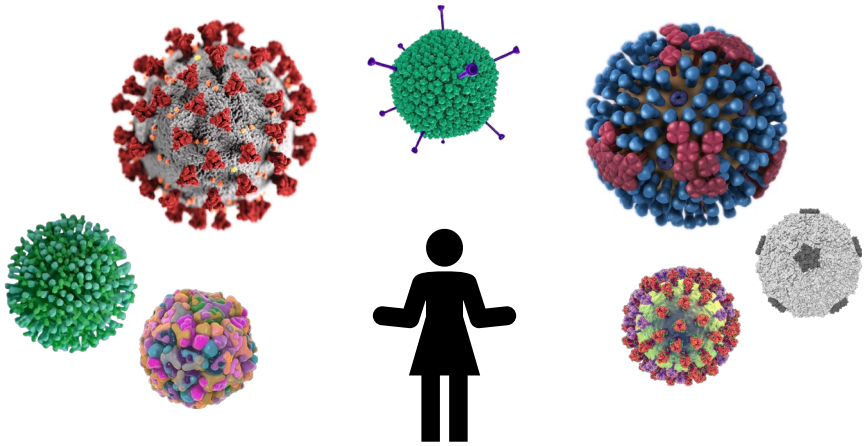
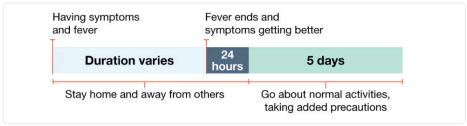
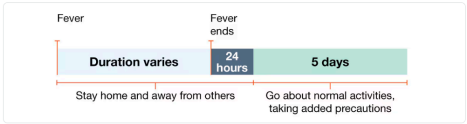


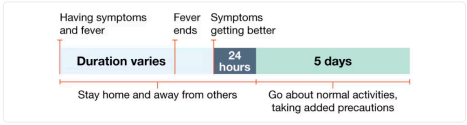
Example 1: Person with fever and symptoms.



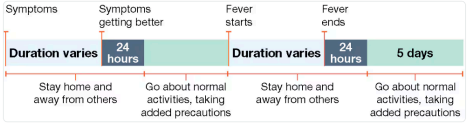
Example 2: Person with fever but no other symptoms.



Example 3: Person with fever and other symptoms, fever ends but other symptoms take longer to improve.

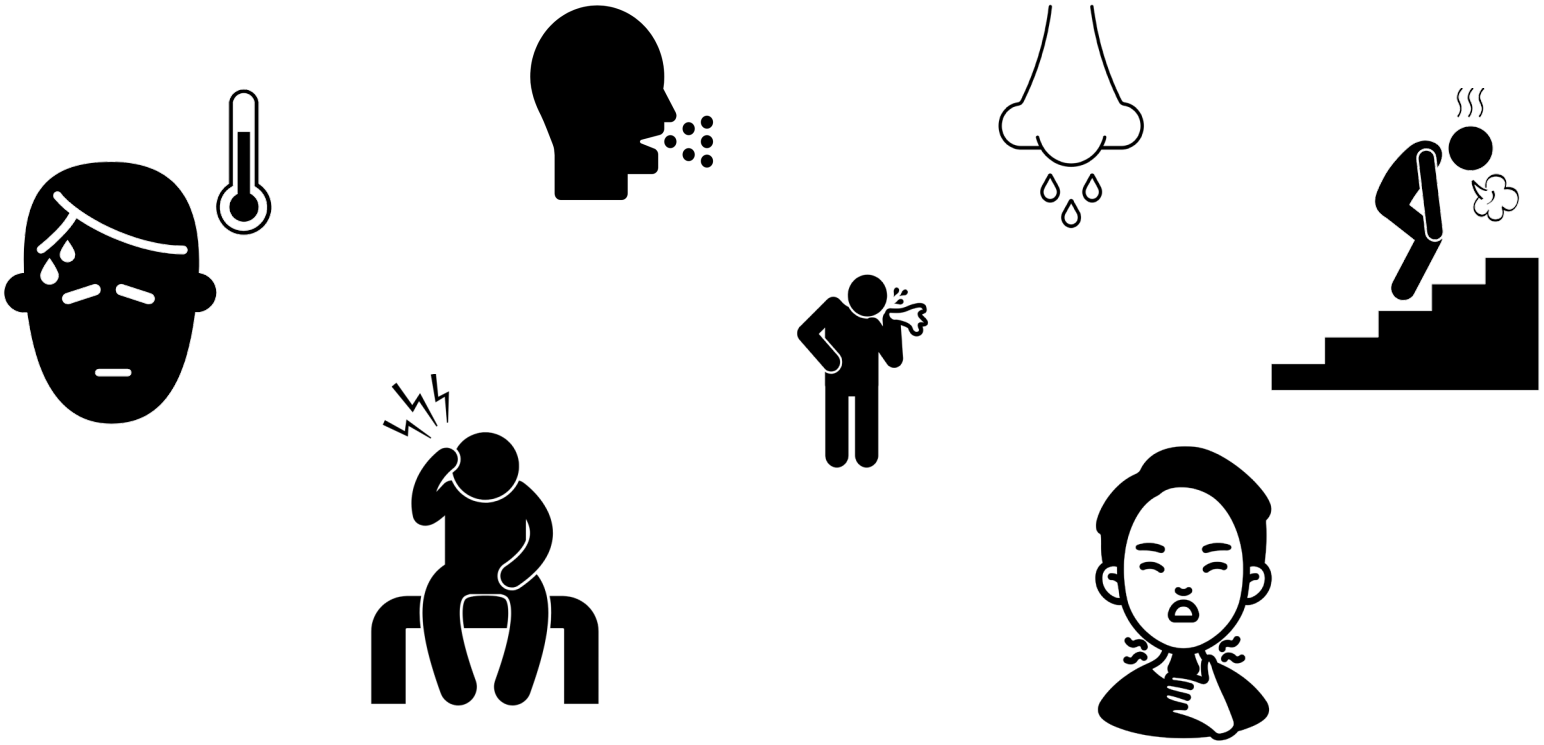


Example 4: Person gets better and then gets a fever.



Source: https://www.cdc.gov/respiratory-viruses/prevention/precautions-when-sick.html

When you have respiratory virus symptoms



Stay at home and away from other people

Source: https://www.cdc.gov/respiratory-viruses/prevention/precautions-when-sick.html

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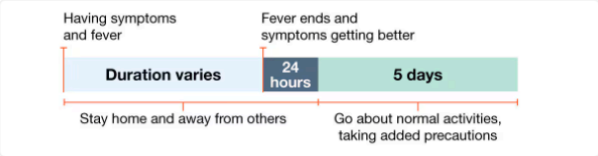
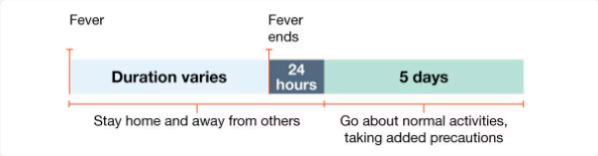
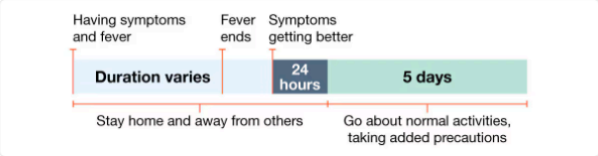


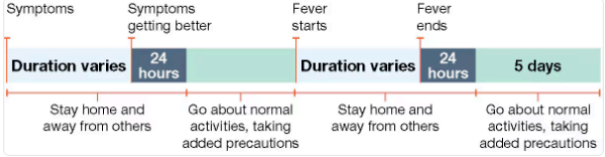
Example 2: Person with fever but no other symptoms.



Example 3: Person with fever and other symptoms, fever ends but other symptoms take longer to improve.



Example 4: Person gets better and then gets a fever.



Source: https://www.cdc.gov/respiratory-viruses/prevention/precautions-when-sick.html

Until both of the following are true:

- Your symptoms are getting better overall

AND

- Your fever has resolved (without the use of fever reducing medications like Tylenol or Advil)

Then for at least the next 5 days:

- Wear a well-fitting, high-quality mask
- Hand hygiene
- Physically distance
- Take steps towards cleaner air

Source: https://www.cdc.gov/respiratory-viruses/prevention/precautions-when-sick.html

Your Local Epidemiologist

Changing Covid-19 isolation?

My thoughts.

KATELYN JETELINA

FEB 16, 2024

Source: https://yourlocalepidemiologist.substack.com/p/changing-covid-19-isolation

Your Local Epidemiologist

Changing Covid-19 isolation?

My thoughts.

KATELYN JETELINA
FEB 16, 2024

BUSINESS INSIDER

POLITICS

Before face masks, Americans went to war against seat belts

Daniel Ackerman May 26, 2020, 8:03 AM PDT

Share | Save

Source: https://www.businessinsider.com/when-americans-went-to-war-against-seat-belts-2020-5

Source: https://yourlocalepidemiologist.substack.com/p/changing-covid-19-isolation

What is public health?

Source: https://www.businessinsider.com/when-americans-went-to-war-against-seat-belts-2020-5

Source: https://yourlocalepidemiologist.substack.com/p/changing-covid-19-isolation

Original Investigation | Infectious Diseases

January 7, 2021

SARS-CoV-2 Transmission From People Without COVID-19 Symptoms

Michael A. Johansson, PhD[1,2]; Talia M. Quandelacy, PhD, MPH[1]; Sarah Kada, PhD[1]; et al

» Author Affiliations | Article Information

JAMA Netw Open. 2021;4(1):e2035057. doi:10.1001/jamanetworkopen.2020.35057

At least 50% of new SARS-CoV-2 infections were estimated to have originated from exposure to individuals with infection but without symptoms.

Source: https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2774707

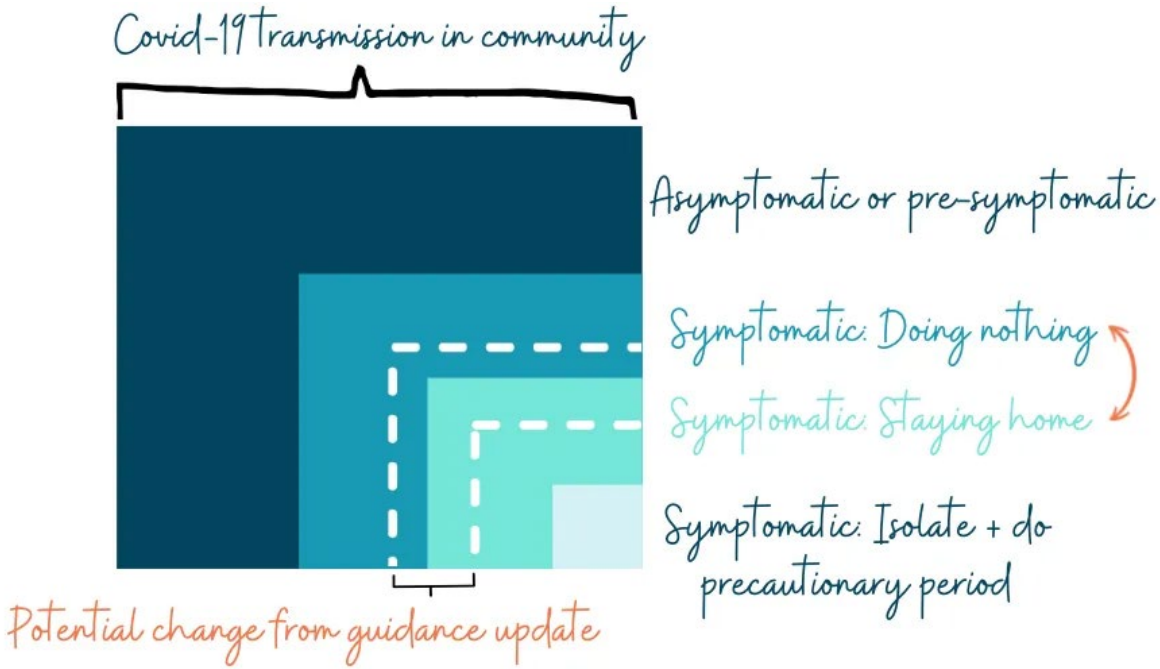
Your Local Epidemiologist

CDC updates isolation guidance

What to do when you're sick? The debate and my thoughts.

KATELYN JETELINA

MAR 05, 2024



Source: https://yourlocalepidemiologist.substack.com/p/cdc-updates-isolation-guidance

The “End” of the COVID-19 Pandemic

The NEW ENGLAND JOURNAL of MEDICINE

Perspective

OCTOBER 12, 2023

Do Pandemics Ever End?

Joelle M. Abi-Rached, M.D., Ph.D., and Allan M. Brandt, Ph.D.

“The declaration of the end of a pandemic therefore marks a critical point when the value of a human life becomes a variable of actuarial significance – in other words, when a government determines that the social, economic, and political costs of saving a life exceed the benefits of doing so….

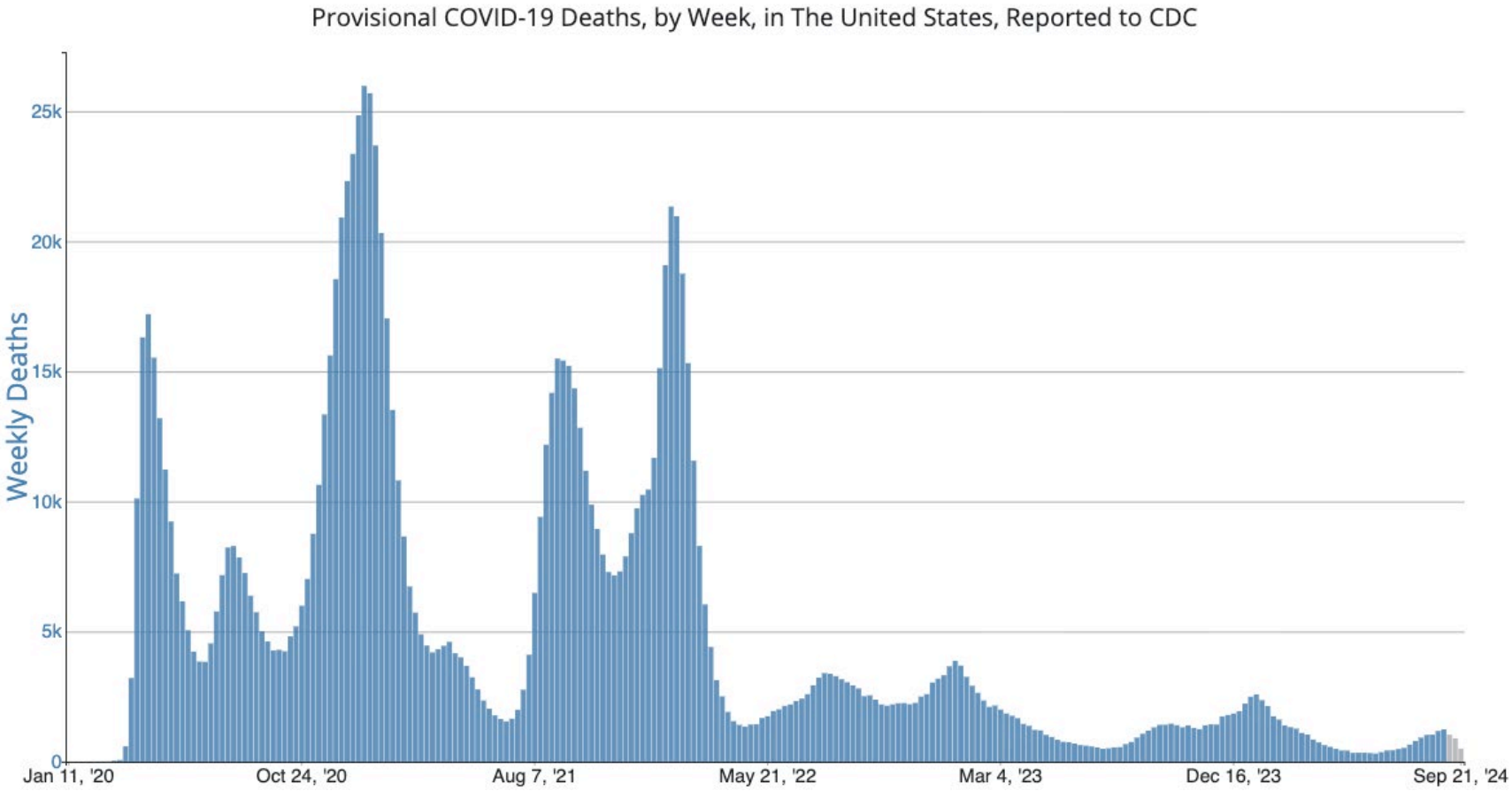
It is neither epidemiology nor any political declaration that determines the end of a pandemic, but the normalization of mortality and morbidity by means of a disease’s routinization and endemicization – what in the context of the COVID-19 pandemic has been called ’living with the virus.’ ”

~ Joelle M. Abi-Rached, MD, PhD and Allan M. Brandt, PhD

Source: https://www.npr.org/sections/coronavirus-live-updates/2020/03/29/823517467/fauci-estimates-that-100-000-to-200-000-americans-could-die-from-the-coronavirus

As of September 26, 2024, deaths in the US involving COVID-19 totaled **1,207,293 people**.

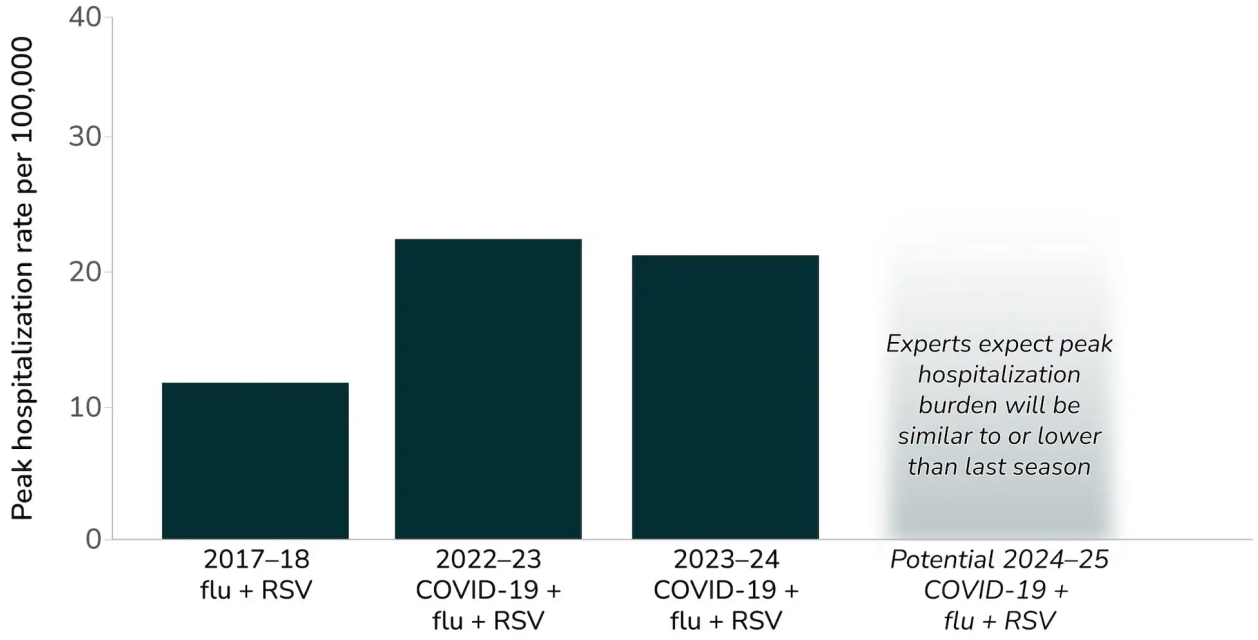
Source: https://www.cdc.gov/nchs/nvss/vsrr/covid19/index.htm
Source: https://www.npr.org/sections/coronavirus-live-updates/2020/03/29/823517467/fauci-estimates-that-100-000-to-200-000-americans-could-die-from-the-coronavirus



Source: https://covid.cdc.gov/covid-data-tracker/#trends_weeklydeaths_select_00

Upcoming 2024–25 respiratory season peak hospitalization burden likely similar to or lower than last year

Combined peak hospitalization burden of COVID-19, influenza, and RSV



Source: https://www.cdc.gov/cfa-qualitative-assessments/php/data-research/season-outlook24-25/index.html?ACSTrackingID=USCDC_2254-DM135144&ACSTrackingLabel=CDC%202024-2025%20Respiratory%20Disease%20Season%20Outlook&deliveryName=USCDC_2254-DM135144

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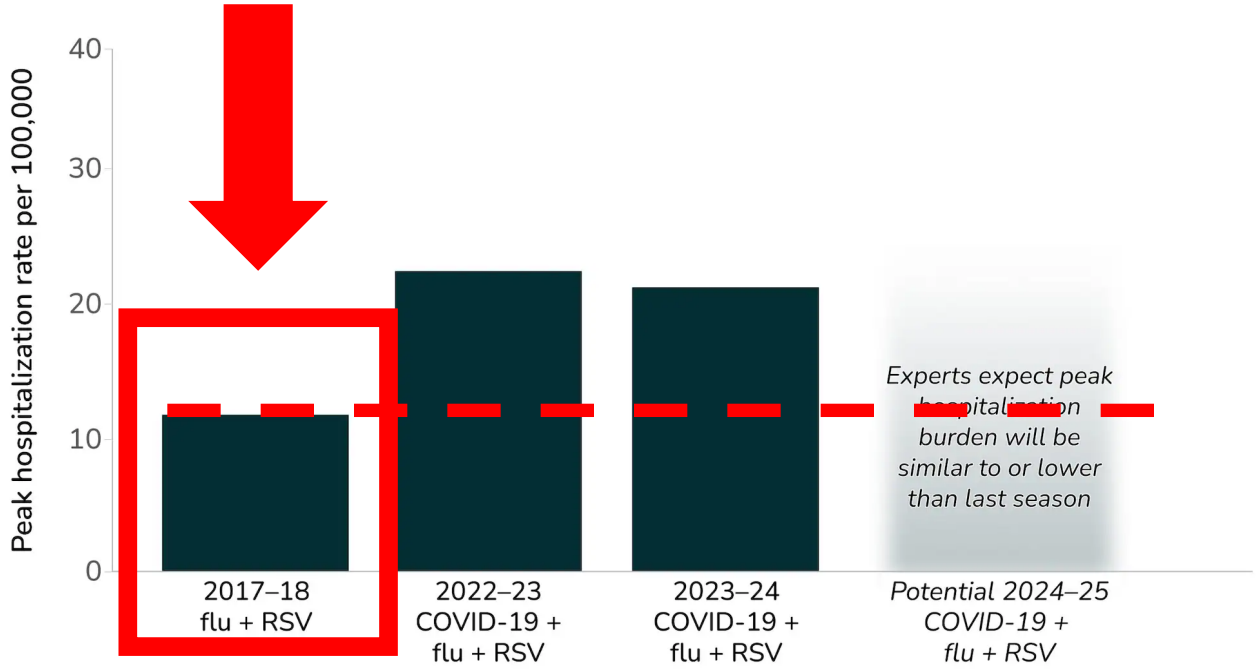

Source: https://www.cdc.gov/cfa-qualitative-assessments/php/data-research/season-outlook24-25/index.html?ACSTrackingID=USCDC_2254-DM135144&ACSTrackingLabel=CDC%202024-2025%20Respiratory%20Disease%20Season%20Outlook&deliveryName=USCDC_2254-DM135144

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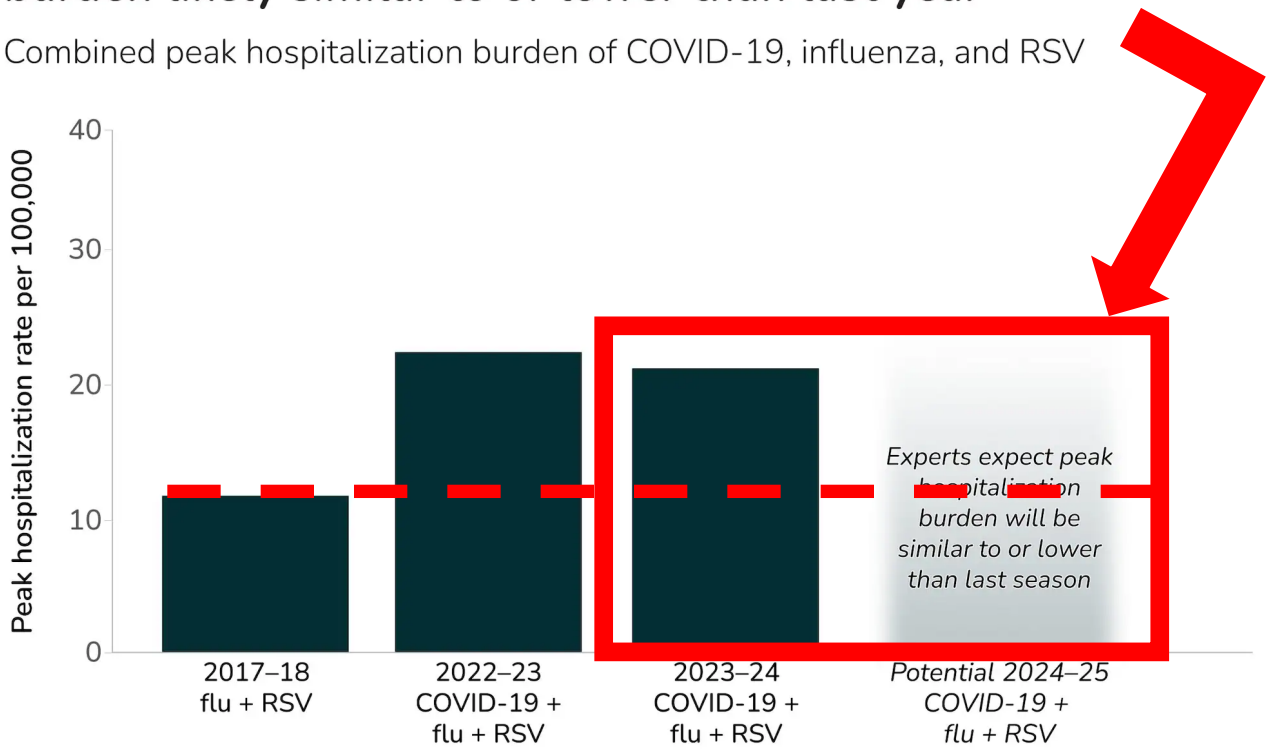
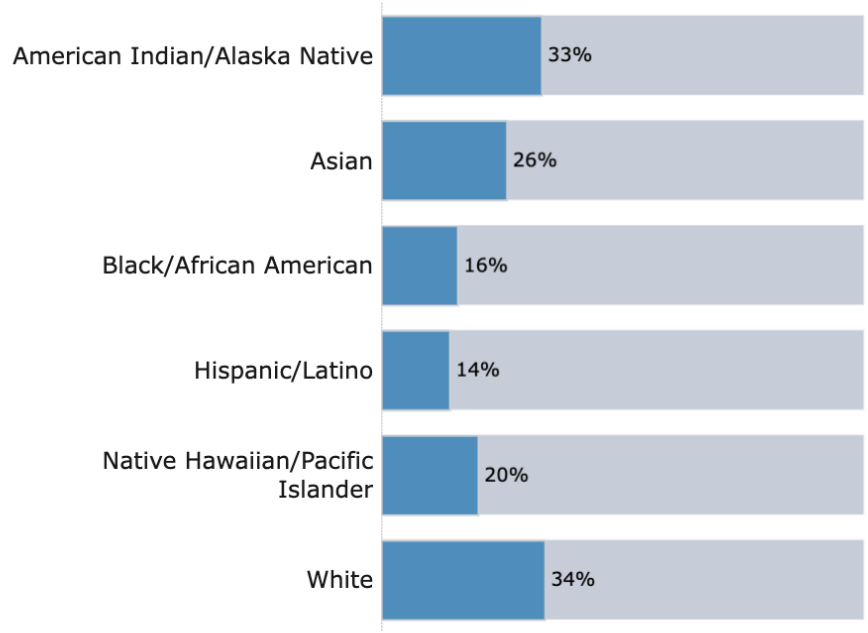


Source: https://www.cdc.gov/cfa-qualitative-assessments/php/data-research/season-outlook24-25/index.html?ACSTrackingID=USCDC_2254-DM135144&ACSTrackingLabel=CDC%202024-2025%20Respiratory%20Disease%20Season%20Outlook&deliveryName=USCDC_2254-DM135144

Proportion of King County residents with updated 2023-2024 vaccine by race/ethnicity



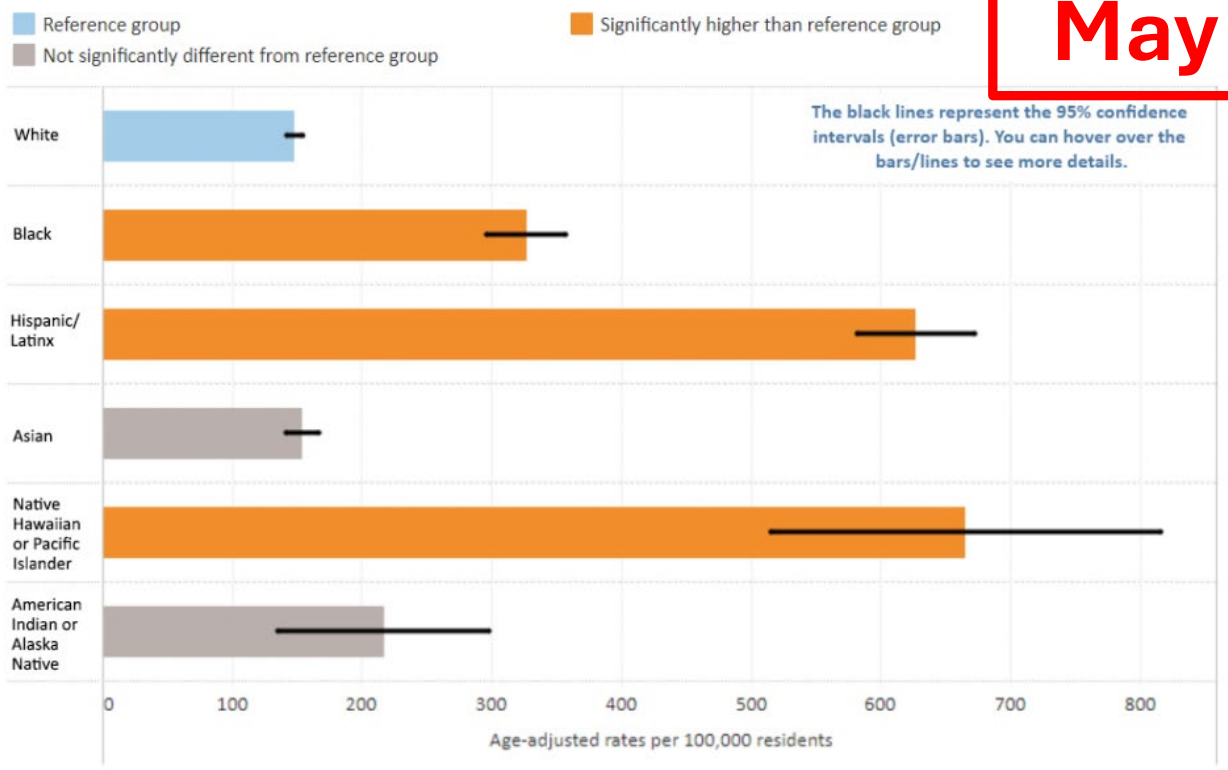
% of vaccine recipients with other race/ethnicity categories

Other or multi-racial	**7.5%**
Unknown Race	**1.9%**

Source: https://kingcounty.gov/en/dept/dph/health-safety/disease-illness/covid-19/data/vaccination

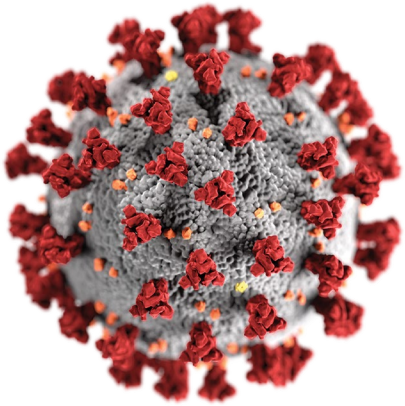
Confirmed cases per 100,000 residents (Age-adjusted)

May 1, 2020



Source: https://publichealthinsider.com/2020/05/01/new-analysis-shows-pronounced-racial-inequities-among-covid-19-cases-hospitalizations-and-deaths/

It is incorrect to force COVID-19 to fit influenza.



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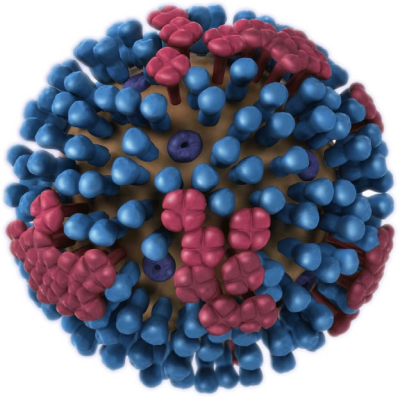


COVID-19 remains more deadly than the flu.

Letters

RESEARCH LETTER

Mortality in Patients Hospitalized for COVID-19 vs Influenza in Fall-Winter 2023-2024

In the first year of the COVID-19 pandemic, risk of death in people hospitalized for COVID-19 was substantially higher than in people hospitalized for seasonal influenza.[1,2] The risk of death due to COVID-19 has since declined. In fall-winter 2022-2023, people hospitalized for COVID-19 had a 60% higher risk of death compared with

Supplemental content

or seasonal influenza between October 1, 2023, and March 27, 2024, and within 2 days before and 10 days after a positive test result for SARS-CoV-2 or influenza. Patients with either infection hospitalized for another reason or those hospitalized for both COVID-19 and seasonal influenza were excluded. The cohort was followed up for 30 days, until death, or until March 31, 2024. Baseline characteristics between patients hospitalized for COVID-19 vs influenza were compared using absolute standardized differences; a standardized difference less than .01 suggests good balance.

We adjusted for differences in baseline characteristics

Source: https://jamanetwork.com/journals/jama/fullarticle/2818660

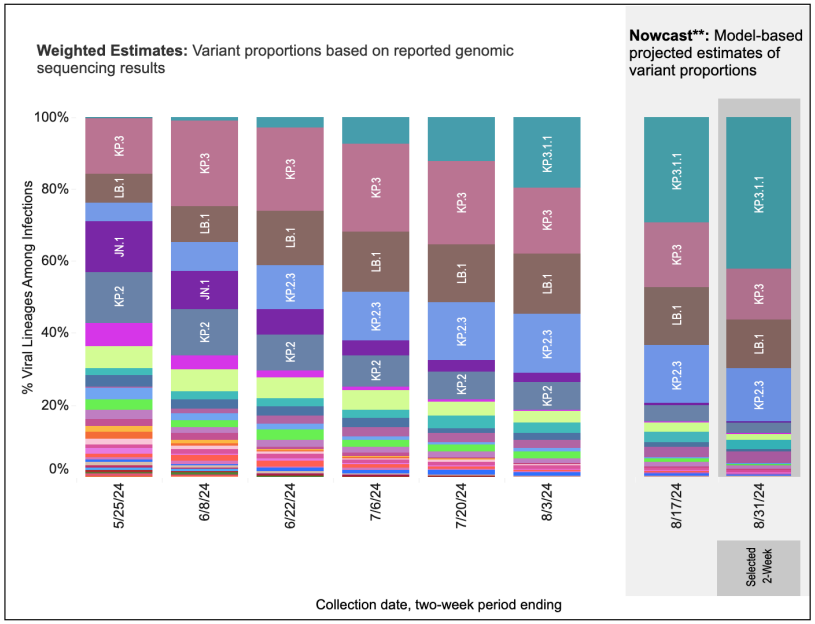
HHS Region: USA

Data for the 2-Week Period Ending on: 8/31/2024(Nowcast)

This shows weighted and Nowcast estimates for the United States. The table and map show estimates for the 2-week period ending on 8/31/2024(Nowcast) if available.

Weighted and Nowcast Estimates in United States for 2-Week Periods in 5/12/2024 – 8/31/2024

Hover over (or tap in mobile) any lineage of interest to see the amount of uncertainty in that lineage's estimate.



Nowcast Estimates in United States for 8/18/2024 – 8/31/2024

USA

WHO label	Lineage #	%Total	95%PI
Omicron	KP.3.1.1	42.2%	37.7-46.9%
	KP.2.3	14.6%	12.4-17.0%
	KP.3	14.2%	12.8-15.8%
	LB.1	13.5%	11.3-16.0%
	KP.2	3.1%	2.4-4.0%
	LP.1	3.1%	2.0-4.7%
	KP.1.1.3	2.6%	1.9-3.6%
	KP.1.1	2.0%	1.5-2.6%
	KS.1	1.0%	0.6-1.7%
	KP.2.15	0.8%	0.4-1.4%
	LF.3.1	0.7%	0.5-1.1%
	JN.1.16.1	0.7%	0.5-0.9%
	JN.1.18	0.5%	0.4-0.8%
	KP.4.1	0.3%	0.1-0.7%
	JN.1	0.2%	0.1-0.3%
	JN.1.11.1	0.2%	0.1-0.3%
	XDV.1	0.1%	0.0-0.2%
	KW.1.1	0.1%	0.0-0.2%
	JN.1.16	0.1%	0.0-0.1%
	KP.1.2	0.0%	0.0-0.1%
	JN.1.7	0.0%	0.0-0.1%
	KQ.1	0.0%	0.0-0.0%
	JN.1.13.1	0.0%	0.0-0.0%
	JN.1.4.3	0.0%	0.0-0.0%
	XDP	0.0%	0.0-0.0%
	JN.1.8.1	0.0%	0.0-0.0%

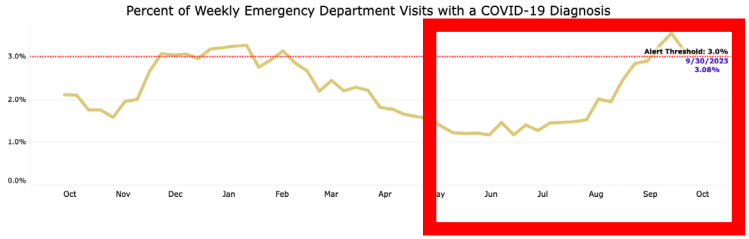
** These data include Nowcast estimates, which are modeled projections that may differ from weighted estimates generated at later dates

Enumerated lineages are US VOC and lineages circulating above 1% nationally in at least one 2-week period. "Other" represents the aggregation of lineages which are circulating <1% nationally during all 2-week periods displayed. While all lineages are tracke by CDC, those named lineages not enumerated in this graphic are aggregated with their parent lineages, based on Pango lineage definitions, described in more detail here: https://web.archive.org/web/20240116214031/https://www.pango.network/the-pango-nomenclature-system/statement-of-nomenclature-rules.

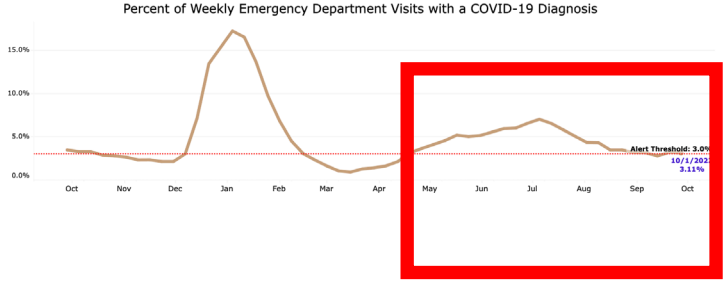
Source: https://covid.cdc.gov/covid-data-tracker/#variant-proportions

The Summer COVID-19 Wave

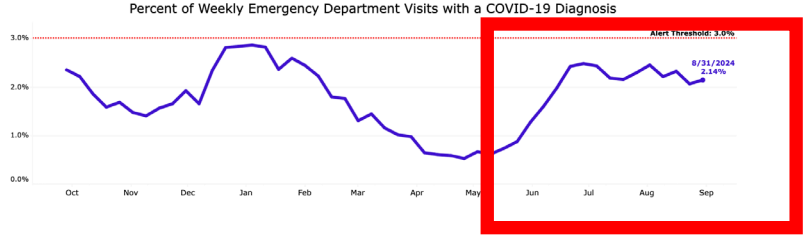
2022-2023



2021-2022



2023-2024



PUBLIC HEALTH INSIDER

OFFICIAL INSIGHTS FROM PUBLIC HEALTH – SEATTLE & KING COUNTY STAFF

FALL AND WINTER VACCINES: Q&A WITH DR. ERIC CHOW

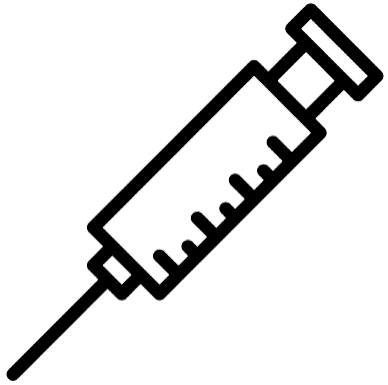
FOLLOW BLOG VIA EMAIL

PUBLIC HEALTH INSIDER

OFFICIAL INSIGHTS FROM PUBLIC HEALTH – SEATTLE & KING COUNTY STAFF

COVID-19 IS RISING LOCALLY: A Q&A WITH DR. CHOW ON PRACTICAL STEPS

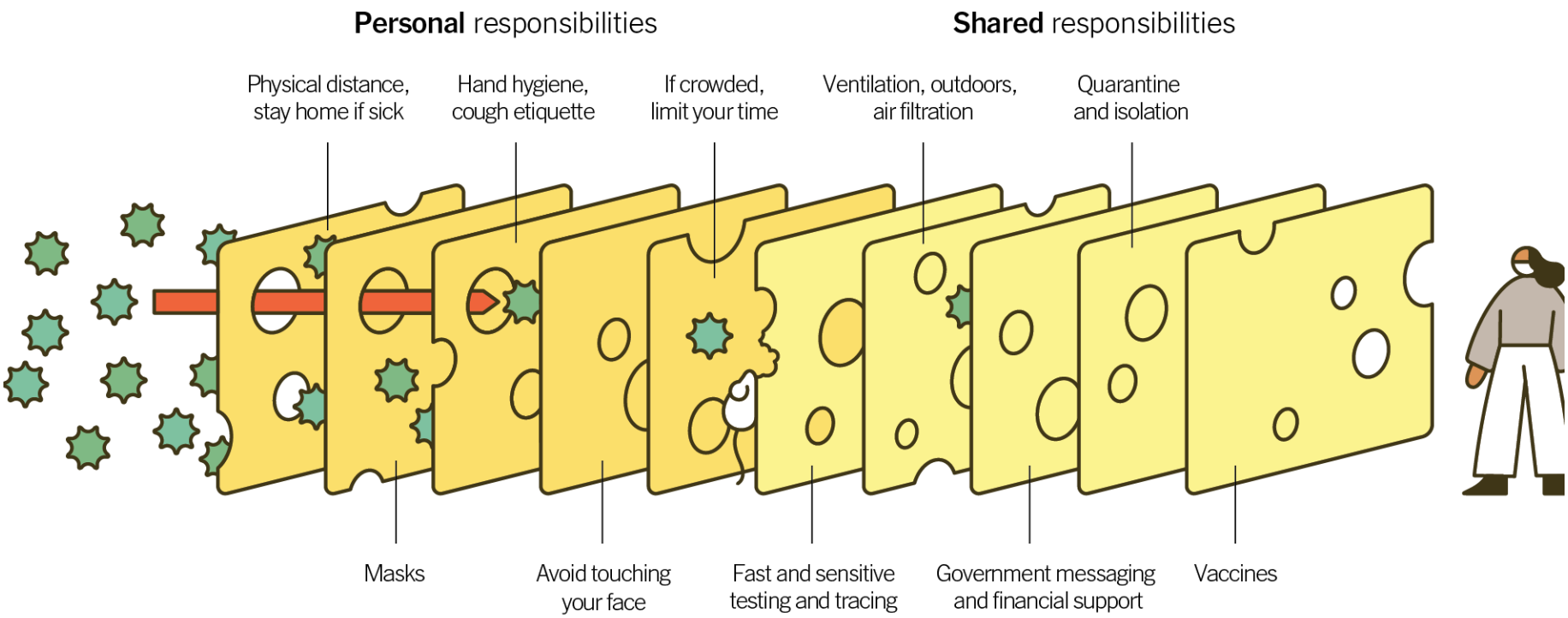
FOLLOW BLOG VIA EMAIL



Source: https://publichealthinsider.com/2024/08/30/fall-and-winter-vaccines-qa-with-dr-eric-chow/
Source: https://publichealthinsider.com/2024/07/10/covid-19-is-rising-locally-a-qa-with-dr-chow-on-practical-steps/

Multiple Layers Improve Success

The Swiss Cheese Respiratory Pandemic Defense recognizes that no single intervention is perfect at preventing the spread of the coronavirus. Each intervention (layer) has holes.



ource: Adapted from Ian M. Mackay (virologydownunder.com) and James T. Reason. Illustration by Rose Wong

Source: https://www.nytimes.com/2020/12/05/health/coronavirus-swiss-cheese-infection-mackay.html

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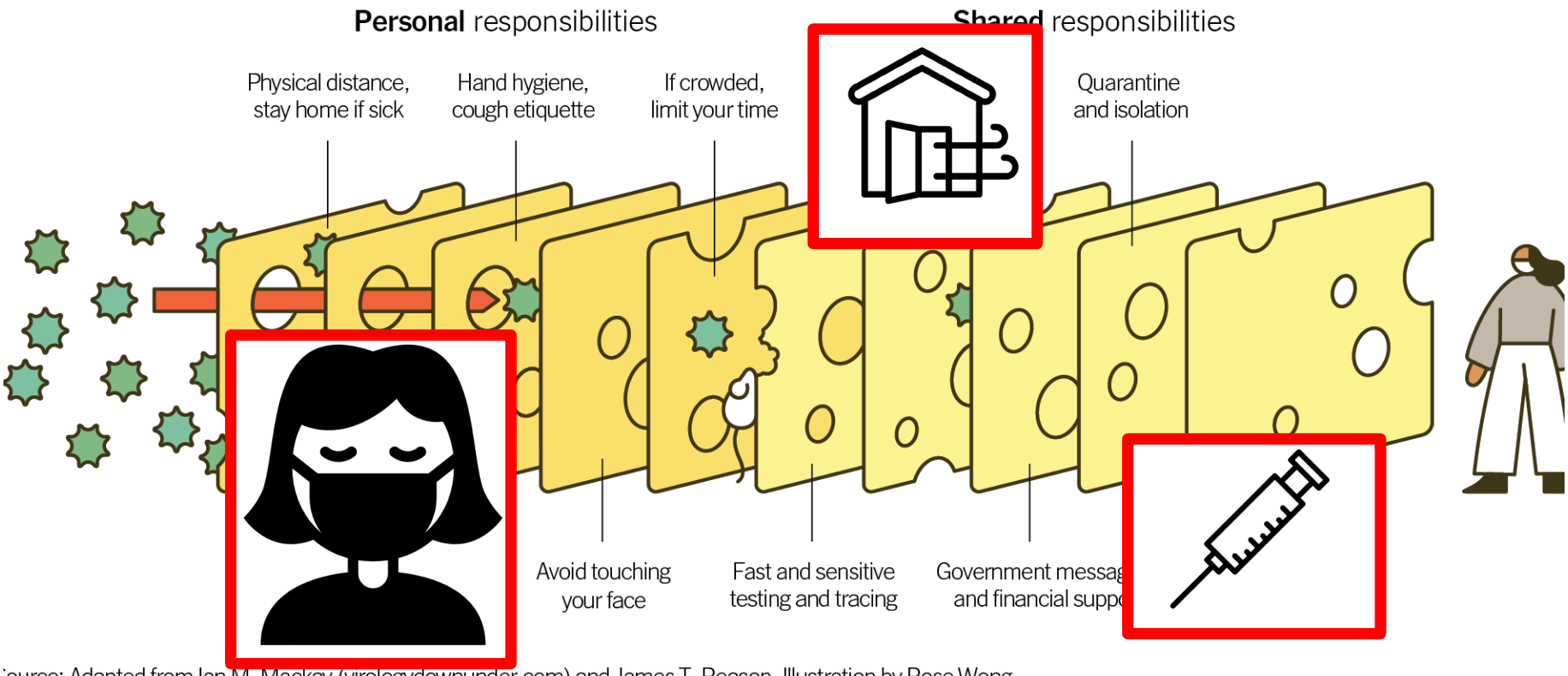

Source: Adapted from Ian M. Mackay (virologydownunder.com) and James T. Reason. Illustration by Rose Wong

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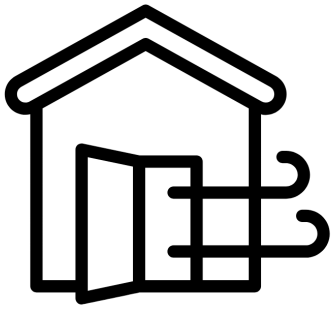
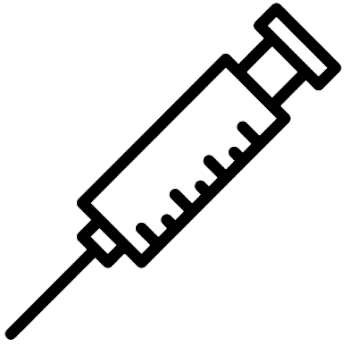




Source: https://informingfamilies.org/wp-content/uploads/2021/01/vaccine-shield.jpg

Questions?

Eric J. Chow, MD, MS, MPH, FIDSA, FACP, FAAP

Public Health
Seattle & King County

erchow@kingcounty.gov

Acknowledgements ~ Noun Project

- Adult by Alexander Gruzdev
- Woman by Mohammed Rabiul Alam
- Lungs by Karina
- Fever by Lorie Shaull
- Cough by Asep Yopie Hardi Noer
- Exhaustion by Gan Khoon Lay
- Respiratory Tract by Muh Zakaria
- Runny Nose by Pham Thanh Loc
- Sneeze by Akhmad Taufiq
- Cough by Asep Yopie Hardi Noer
- Sore Throat by Victor Ruler
- Medication by Webtechops LLP
- Pills by Verrena
- Syringe by Bartama
- Medical Treatment by Visual Wrold
- Exhaustion by Gan Khoon Lay
- Headache by Gan Khoon Lay
- Nose by Xinh Studio
- Stomachache by Gan Khoon Lay
- Rash by Delwar Hossain
- Chest Pain by Gan Khoon Lay
- Dizzy by Gan Khoon Lay
- Insomnia by Ayub Irawan
- Headache by B farias
- Depression by Narakor Chanchittakarn
- Disorientation by Nithinan Tatah, TH
- Mouse by Iconic
- Thirst by Adrien Coquet
- Colon by Turkkub
- Heat by AmruID
- Couple in Bed by Alvaro Cabrera
- DNA by Pictranoosa
- GI by Podgornaia Elena
- Ventilation by Andre Buand
- Swab by The Icon Z

Acknowledgements ~ Viruses

- Influenza Virus: https://www.cdc.gov/ncird/whats-new/flu-surveillance-avian-influenza-a-h5n1.html
- SARS-CoV-2: https://phil.cdc.gov/Details.aspx?pid=23312
- Respiratory Syncytial Virus: https://www.cdc.gov/resp-net/dashboard/index.html
- Rhinovirus: https://www.wikilectures.eu/w/Rhinovirus
- Human Metapneumovirus: https://theweek.com/public-health/1024152/all-about-the-underestimated-human-metapneumovirus
- Enterovirus: https://www.news-medical.net/life-sciences/Enterovirus-71-Infection.aspx
- Adenovirus: https://www.livescience.com/what-are-adenoviruses.html

Scientific Innovation

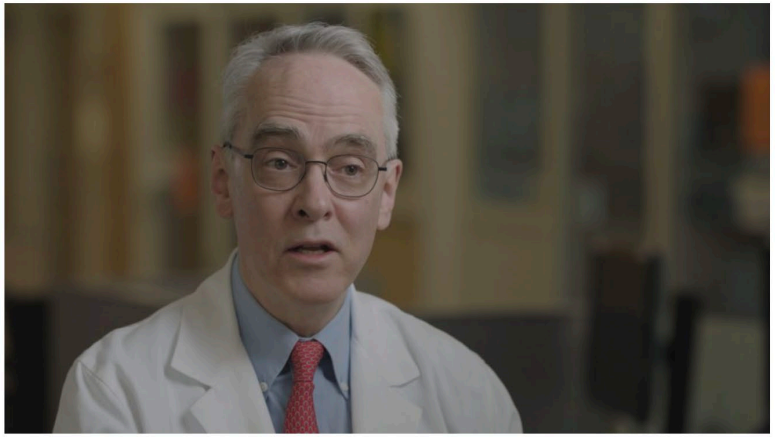
Reflecting on Treating the First Person Diagnosed with COVID-19 in the United States

Stories@Gilead - June 29, 2021 - 4 min read

Source: https://stories.gilead.com/articles/reflecting-on-treating-the-first-person-diagnosed-with-covid-19-in-the-united-states

Francis Riedo

Medical Director, Infection Control and Prevention, EvergreenHealth



Source: https://www.pbs.org/wgbh/frontline/interview/francis-riedo/

nature reviews microbiology

https://doi.org/10.1038/s41579-022-00846-2

Review article

Check for updates

Long COVID: major findings, mechanisms and recommendations

Hannah E. Davis[1], Lisa McCorkell[2], Julia Moore Vogel[3] & Eric J. Topol[3]

10-30% of non-hospitalized cases

50-70% of hospitalized cases

10-12% of vaccinated cases

Source: https://www.nature.com/articles/s41579-022-00846-2

Annals of Internal Medicine®

Ideas and Opinions | 22 August 2023

Lessons From the COVID-19 Pandemic: Updating Our Approach to Masking in Health Care Facilities

FREE

Authors: Eric J. Chow, MD, MS, MPH, John B. Lynch, MD, MPH, Danielle M. Zerr, MD, MPH, Francis X. Riedo, MD, Mary Fairchok, MD, Steven A. Pergam, MD, Christopher S. Baliga, MD, John Pauk, MD, MPH, James Lewis, MD, MPH, and Jeffrey S. Duchin, MD | AUTHOR, ARTICLE, & DISCLOSURE INFORMATION

Publication: Annals of Internal Medicine • Volume 176, Number 9 • https://doi.org/10.7326/M23-1230

Source: https://www.acpjournals.org/doi/10.7326/M23-1230

Masking in Acute Care and Outpatient Clinics

2023-2024 Respiratory Season Summary and Future Planning

Coordinated by the Northwest Healthcare Response Network

Posted: 06/27/2024

Introduction and Background

On April 3, 2023, the Washington state Secretary of Health Mask Order requiring universal masking in healthcare facilities was discontinued. Recognizing the ongoing importance of masking in these spaces to protect the health and well-being of patients and employees, the Acute Infectious Disease Masking Workgroup was formed. This workgroup consists of infectious disease and public health subject matter experts (SME) representing the major healthcare systems and jurisdictions in our regional coalition and whose goal was to establish an approach to universal masking in healthcare facilities by incorporating lessons learned from the COVID-19 pandemic. Their work has been predicated on the following principles:

1. The highest priority is the health and safety of patients and employees in healthcare settings
2. The recommended action is based on the best available, most recent scientific evidence.

Source: https://nwhrn.org/wp-content/uploads/2024/06/HC_Masking_2023-2024_Resp_Season_Summary_2024-06-27_FINAL.pdf

Transmission alert threshold

The chart below shows a point that is the transmission alert threshold for each virus based on emergency department visits. When the percent of emergency department visits for a virus is above that point, it's a sign that there is substantial spread of that virus.

Emergency Department Transmission Alert Thresholds

COVID-19	Below transmission alert threshold
Influenza	Below transmission alert threshold
RSV	Below transmission alert threshold

Data as of 8/31/2024
Updated on 9/4/2024

Source: https://kingcounty.gov/en/dept/dph/health-safety/disease-illness/facts-and-data/respiratory-virus-data

Community respiratory viral metrics to inform masking in healthcare settings: A regional consensus approach

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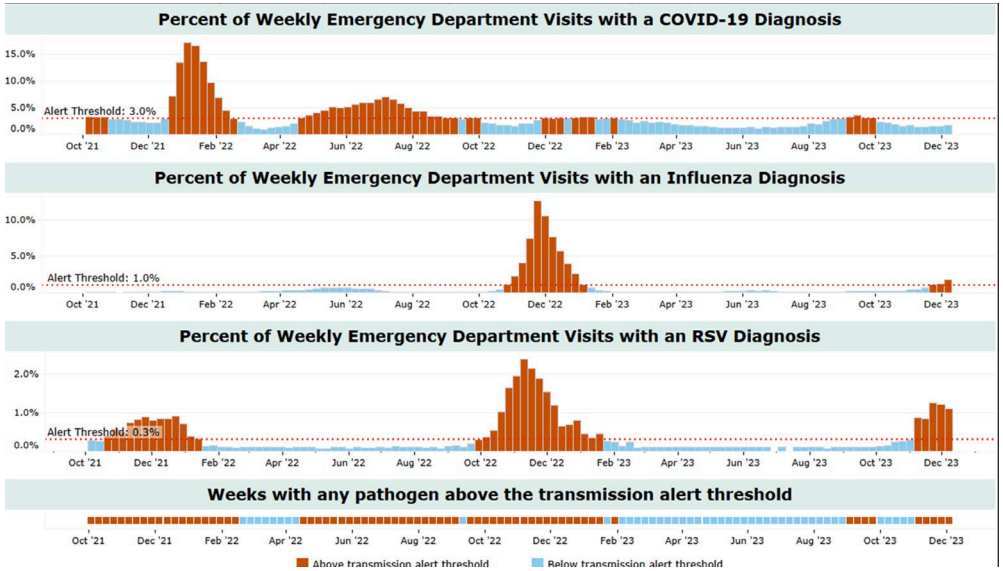

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