# Masks in Healthcare are Infection Control

Massachusetts Coalition for Health Equity

April 5, 2023

# Our asks

We urge Massachusetts DPH to ensure **equitable access for all** to:

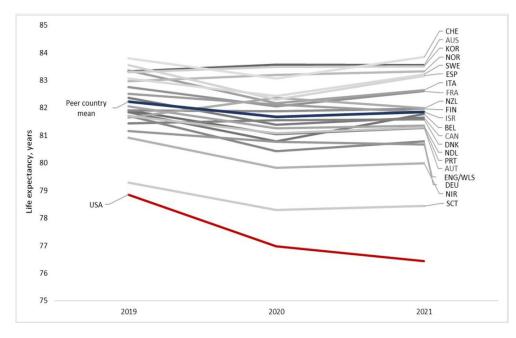
## **Essential spaces**

- Require masks in healthcare settings at all times, including dental offices
- Require improvements in indoor air quality
- Employ layered protection (masks, surveillance testing, ventilation) to allow universal access to public spaces

## **Keep COVID Care Free for All**

- Vaccines
- Testing (PCR & RAT)
- Treatments
- N95 respirators

# **U.S. dramatic declines in life expectancy**



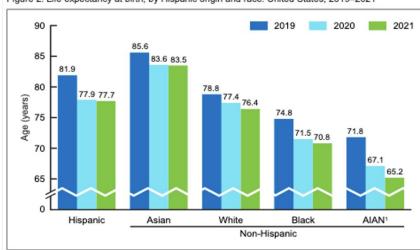


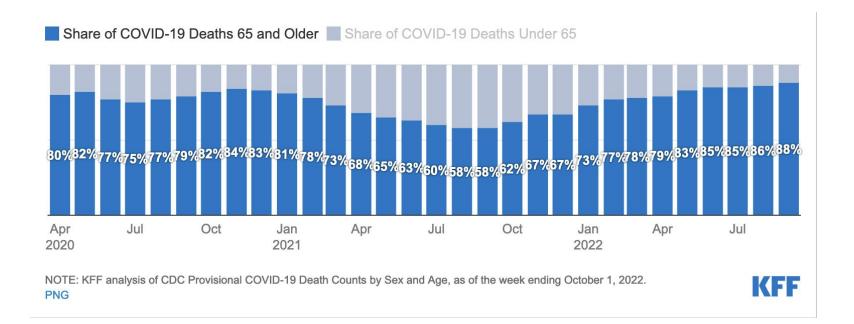
Figure 2. Life expectancy at birth, by Hispanic origin and race: United States, 2019-2021

<sup>1</sup>American Indian or Alaska Native.

NOTES: Estimates are based on provisional data for 2021. Provisional data are subject to change as additional data are received. Estimates for 2019 and 2020 are based on final data. Life tables by race and Hispanic origin are based on death rates that have been adjusted for race and Hispanic-origin misclassification on death certificates; see Technical Notes in this report. SOURCE: National Center for Health Statistics, National Vital Statistics System, Mortality.

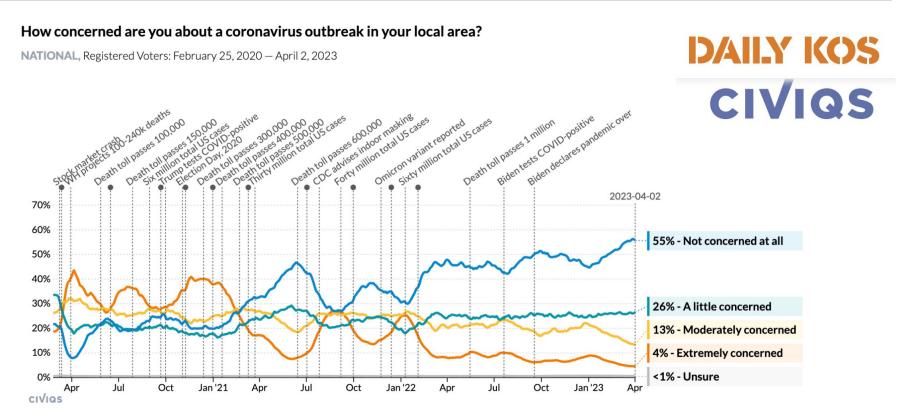
Life expectancy, 2019–2021, United States versus 21 peer countries, and peer country average. (<u>Masters et al., 2022</u>) Life expectancy at birth, by Hispanic origin and race: United States, 2019–2021(<u>Arias et al., 2022</u>).

# People 65+ experience an increasing proportion of COVID-19 deaths

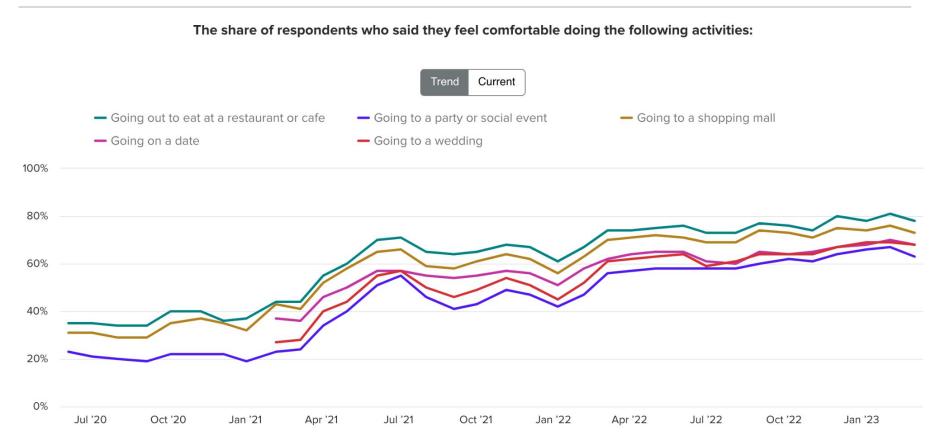


Freed M, Neuman T, Kates J, Cubanski J. Deaths Among Older Adults Due to COVID-19 Jumped During the Summer of 2022 Before Falling Somewhat in September. KFF. Published October 6, 2022. Accessed December 29, 2022. <u>https://www.kff.org/coronavirus-covid-19/issue-brief/deaths-among-older-adults-due-to-covid-19-jumped-during-the-summer-of-2022-before-falling-</u> somewhat-in-september/

# About 45% of U.S. residents are still concerned about COVID outbreaks

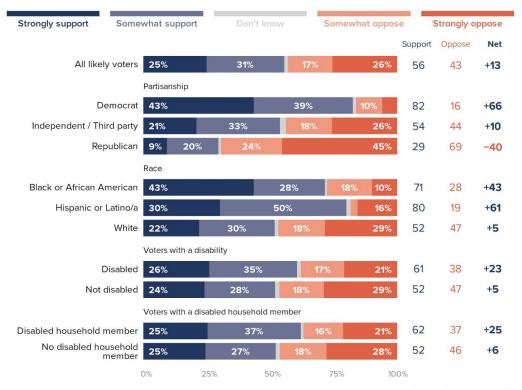


# More than 20% of U.S. respondents are uncomfortable going to a restaurant or cafe



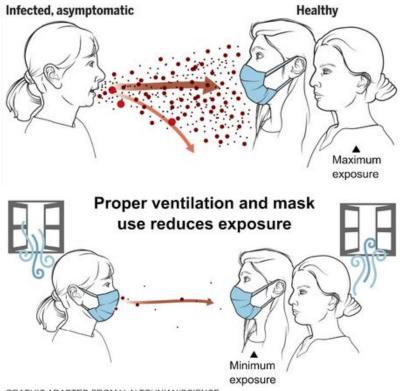
# Voters support masks in indoor public spaces

Do you support or oppose requiring that all individuals wear masks in public indoor spaces, like in grocery stores, restaurants, and retail shops, in order to combat another surge of coronavirus infections?



m data for **progress** 

# Covid is airborne: it spreads through the air like smoke



As much as **40% of COVID transmission is asymptomatic**, which means people can infect

each other without knowing it.

Ma Q, Liu J, Liu Q, et al. Global Percentage of Asymptomatic SARS-CoV-2 Infections Among the Tested Population and Individuals With Confirmed COVID-19 Diagnosis: A Systematic Review and Meta-analysis. JAMA Netw Open. 2021;4(12):e2137257. doi:10.1001/jamanetworkopen.2021.37257

GRAPHIC ADAPTED FROM V. ALTOUNIAN/SCIENCE

## We've seen COVID outbreaks in healthcare over and over...

## Cluster of COVID-19 cases at Brigham and Women's Hospital rises to 28

Nineteen hospital employees and nine patients have tested positive for coronavirus amid the outbreak.



Nurse Natasha Cacciatore works in a patient room of the Special Pathogens Unit ICU at Brigham and Women's Hospital on April 27. *Craig F. Walker / The Boston Globe, File* 

LOCAL NEWS >

#### 4 residents dead in COVID-19 outbreak at Yarmouth nursing home



BY WBZ-NEWS STAFF UPDATED ON: MARCH 3, 2023 / 11:23 PM / CBS BOSTON

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# And over...

"39% of exposed roommates at MGB tested positive for COVID-19 after 14 days of admission between 2020 and 2021, but rates likely higher with more infectious variants"

Karan A, Klompas M, Tucker R, Baker M, Vaidya V, Rhee C. The Risk of Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) Transmission from Patients With Undiagnosed Coronavirus Disease 2019 (COVID-19) to Roommates in a Large Academic Medical Center. Clin Infect Dis. 2022 Mar 23;74(6):1097-1100. doi: 10.1093/cid/ciab564. PMID: 34145449.

### Risk for SARS-CoV-2 transmission 'quite high' among hospital roommates

#### ADD TOPIC TO EMAIL ALERTS

Nearly 40% of patients who shared a hospital room with a patient with SARS-CoV-2 at one Boston hospital became infected within 14 days, according to study results published in *Clinical Infectious Diseases*.

The researchers concluded that "nosocomial spread of SARS-CoV-2 is relatively rare with standard infection protocols" but "there is a high risk of transmission for patients in shared hospital rooms if their roommate is acutely infected."



Hospitals must balance the need to provide essential care for patients against the risk for transmission in shared patient rooms.

Abraar Karan, MD, MPH, DTM&H



SAVE

# Is this safe?

As of March 31, 2023 surveillance testing in Long-Term Care Facilities is no longer required in Massachusetts



MAURA T. HEALEY Governor

KIMBERLEY DRISCOLL Lieutenant Governor

#### The Commonwealth of Massachusetts

Executive Office of Health and Human Services Department of Public Health Bureau of Health Care Safety & Quality 67 Forest Street, Marlborough, MA 01752

> KATHLEEN E. WALSH Secretary

MARGRET R. COOKE Commissioner

#### Tel: 617-624-6000 www.mass.gov/dph

#### Memorandum

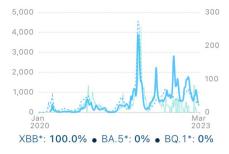
TO:	Long-Term Care Facilities								
FROM:	Elizabeth Daake Kelley, MBA, MPH,								
	Director, Bureau of Health Care Safety and Quality								
SUBJECT:	Update to Caring for Long-Term Care Residents during the COVID-19 Response,								
	including Visitation Conditions, Communal Dining, and Congregate Activities								
DATE:	March 13, 2023								
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Updates	Summary:								
• ]	Removed requirement to perform staff surveillance testing, effective March 31,								
	2023								
	Removed recommendations to create dedicated COVID-19 units and visitation space in alignment with CDC updates								

# Masks are a cornerstone of infection control for airborne transmission

- **Removing masks in healthcare is dangerous**, puts people at risk in the very place they are accessing vital healthcare services
- Removing masks in healthcare **exposes people to COVID without their informed consent**, especially babies and children who can't mask
- Relying on **community transmission data** to decide when to use masks in healthcare **is flawed** because the data underestimates transmission rates
  - In Oct 2021 CDC estimated 1 in 4 COVID-19 infections were reported
  - Modelers from the Institute for Health Metrics and Evaluation (IHME) have stated that only 4–5% of infections are reported

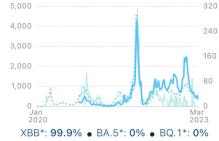
# We need better data to follow infection rates



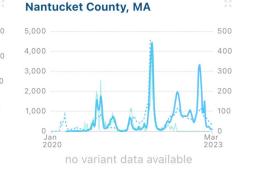


County wastewater .... Nationwide wastewater

#### **Middlesex County, MA**

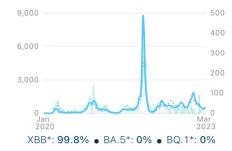


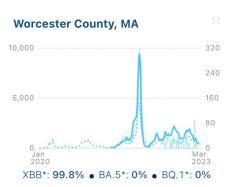
Clinical cases per 100k



#### **Plymouth County, MA** 9,000 240 6,000 160 3,000 80 0 Jan Mar XBB\*: 99.9% • BA.5\*: 0% • BQ.1\*: 0%







https://biobot.io/data/

# It's not time to let down our guard...

#### **bt** Business Today

# India sees 114% rise in Covid-19 deaths, 437% rise in cases in 28 days, Omicron variant XBB.1.16 behind the surge, warns WHO

The WHO is monitoring the new Omicron variant XBB.1.16 in India which is believed to be behind the sudden surge of the cases.







# Coronavirus variant XBB.1.16 spotted in 18 US states

Ashleigh Hollowell (Twitter) - yesterday



The new SARS-CoV-2 omicron variant XBB.1.16 has spurred increased hospitalizations and deaths in some countries. In the U.S., the dominant variant is still XBB.1.5, but health officials say other variants are on the rise.

## Why are hospital administrators lobbying to remove masks?

Write and Call Gov. Healey: using our form at linkt.ree/MassCHE and call Healey at 617 725-4005

Call your hospital's patient advocacy line: Ask why hospital administrators want to remove masks? *Is this about money, or our lives and health?* 

The spokesperson noted that infection control leaders at several of the state's largest hospital systems have repeatedly asked the state health department to end its mandate even in advance of May 11. The spokespe expressed by several other people, including infectious disease physician



#### Health groups call on Mass. to keep mask mandates in health care settings

Some expressed concern for those with compromised immune systems and other conditions.

By Kay Lazar Globe Staff, Updated April 5, 2023, 5:47 a.m.



Patients wore masks during a visit to Brigham and Women's Hospital. SUZANNE KREITER/GLOBE STAFF

# The way out of the pandemic is together



With Evusheld not currently authorized, CDC recommends people with weakened immune systems and household members take multiple prevention measures to protect themselves against COVID-19. More: bit.ly/3bGvO6p

If you have a weakened immune system or live with someone who does, create a COVID-19 action plan



We can't avoid airborne infections alone. We must protect each other "I'LL MAKE SURE TO TEST" "LET'S FIND A SPOT OUTDOORS!" "EVERYONE WILL BE MASKED" "HOW CAN I SEE YOU SAFELY?"

# **IS MY LOVE LANGUAGE**

**#SeeYouSafer** 

seeyousafer.org

# We all must take action

Write Call Gov. Healey and your Representatives: using our form at linkt.ree/MassCHE and call Healey at 617 725-4005

**Call your hospital administrators:** Demand they Keep Universal Masking in Healthcare. Ask why hospital administrators are lobbying to remove them.

**Inform your loved ones:** Covid is Airborne, Masks in Healthcare Are Infection Control. Urge them to take action.

**Organize your community members:** If you are part of any groups, civic, religious, sports and otherwise, inform them you are concerned about your health and theirs. Find another high-risk, disabled or otherwise concerned person in your group and together, present this information to your community. We will make these slides available to everyone at our **linktr.ee/MassCHE** 

# Why we care: COVID-19 is #3 cause of death in US since 2020

Category		Total deaths (JanSept. 2022)	Total deaths (2021)	Total deaths (2020)			
1	Heart disease	572,336	767,937	764,512			
2	Cancer	454,176	604,358	599,607			
3	COVID-19	234,434	475,059	343,566			
4	Accidents	170,166	226,987	203,033			
5	Stroke	123,215	162,769	159,248			
6	Chronic respiratory	107,559	141,906	152,051			
7	Alzheimer	87,866	119,442	134,271			
8	Diabetes	74,716	103,197	101,355			
9	Other respiratory	50,635	66,381	66,053			
10	Renal failure	42,596	53,057	51,221			

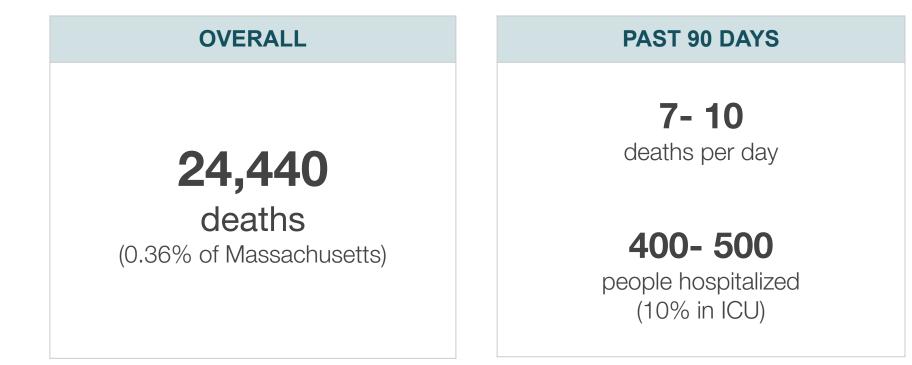
Notes: For 2022, the total death sum for each category is for January 1 - September 30, 2022, except deaths from accidents and suicides are from January - September 2021. Chronic respiratory is chronic lower respiratory disease.

Source: KFF analysis of CDC mortality and KFF COVID-19 tracker data • Get the data • PNG

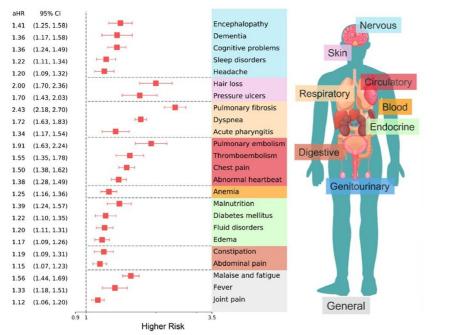
#### Peterson-KFF Health System Tracker

Total deaths in the United States from COVID-19 and other leading causes, 2020-2022 (Ortaliza et al., 2022)

# Where we are: COVID-19 in Massachusetts



# Long COVID may impact 10-70% of infected



Long COVID affects organs throughout the body

Of all Massachusetts residents:

15.7% experienced Long COVID

(approx 882,000)

7.4% report current limitations from it

(approx 416,000)

## 3.4%

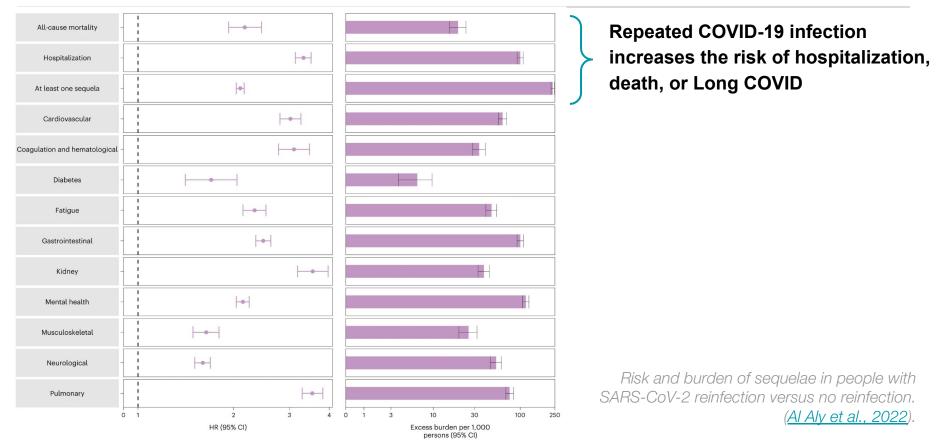
#### report significant limitations from it

(approx 191,100)

Davis HE, McCorkell L, Vogel JM, Topol EJ. Long COVID: major findings, mechanisms and recommendations. Nat Rev Microbiol. Published online January 13, 2023. Zang C, Zhang Y, Xu J, et al. Understanding Post-Acute Sequelae of SARS-CoV-2 Infection through Data-Driven Analysis with Longitudinal Electronic Health Records: Findings from the RECOVER Initiative. Published online May 22, 2022.

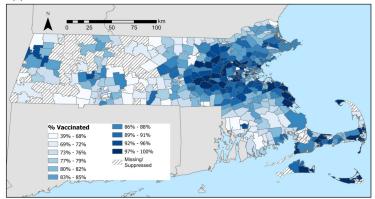
National Center for Health Statistics. U.S. Census Bureau, Household Pulse Survey, 2022–2023. Long COVID. Generated interactively: from <a href="https://www.cdc.gov/nchs/covid19/pulse/long-covid.htm">https://www.cdc.gov/nchs/covid19/pulse/long-covid.htm</a> <a href="https://www.cdc.gov/nchs/covid.htm">https://wwww.cdc.gov

# Why we care: Repeated infections increase the risk of bad outcomes

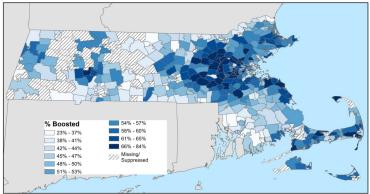


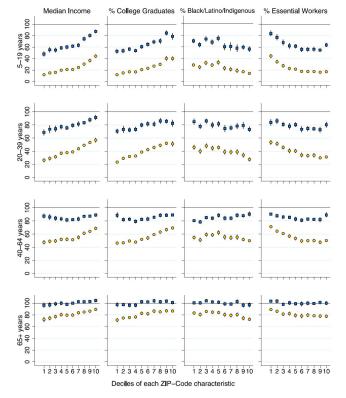
# Inequities in vaccine/booster uptake in MA

(A) Percent vaccinated



#### (B) Percent boosted



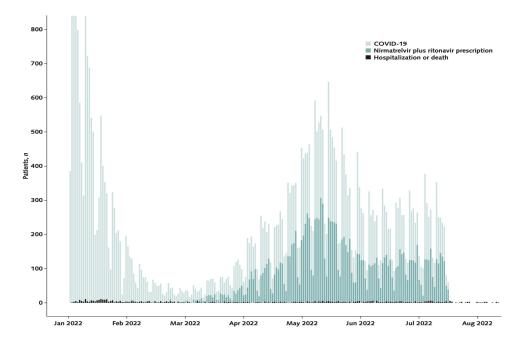


through Oct 2022 (Bor et al. 2023)

# **Paxlovid Prescriptions in Massachusetts**

#### Less than <sup>1</sup>/<sub>3</sub> of eligible people received a prescription (12,541 out of 44,551)

between January - July 2022 in one health system in greater Boston area



# Racial/ Ethnic minorities are being prescribed antiviral therapy less in MA

Odds ratio of receiving a prescription:

 White (Reference)
 1.00

 Black/African American
 0.53 (95% CI: 0.46- 0.62)

 Hispanic/Latino
 0.77 (95% CI: 0.68- 0.86)

# Many people are at high risk

# 4 in 10 U.S. adults are at higher risk

due to older age or health condition

# 6.2% of U.S. adults are immunocompromised

ages 18-64

&

## 92.6 million people

## **Evusheld is no longer effective**

against circulating variants

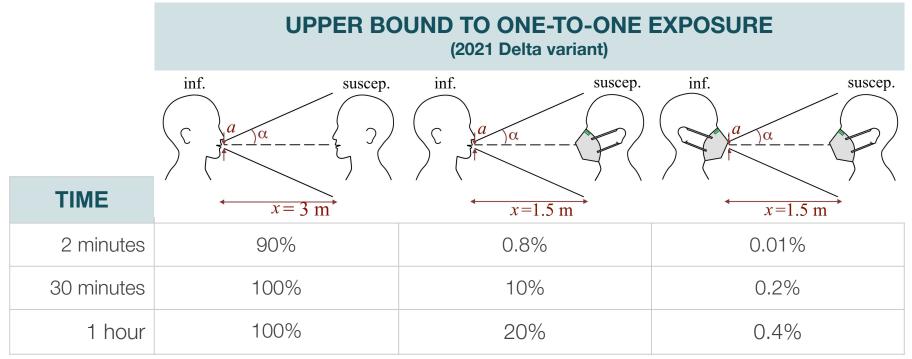
Patel M, Chen J, Kim S, et al. Analysis of MarketScan Data for Immunosuppressive Conditions and Hospitalizations for Acute Respiratory Illness, United States - Volume 26, Number 8—August 2020 - Emerging Infectious Diseases journal - CDC. doi: <u>10.3201/eid2608.191493</u>
 Koma W, Neuman T, Claxton G, Rae M, Kates J, Michaud J. <u>How Many Adults Are at Risk of Serious Illness If Infected with Coronavirus?</u> Updated Data. KFF. Published April 23, 2020. Accessed July 13, 2022.
 <u>Center for Drug Evaluation and Research. FDA announces Evusheld is not currently authorized for emergency use in the U.S. FDA.</u> Published online January 25, 2023. Accessed January 29, 2023.

# Even with the tools..

Vaccination status*	No. (weighted %) <sup>§</sup>											
	Immunocompromised <sup>¶</sup>					Not immunocompromised**						
	ICU admission			Death		ICU admission		Death				
	Yes	No	aOR (95% CI)	Yes	No	aOR (95% CI)	Yes	No	aOR (95% CI)	Yes	No	aOR (95% CI)
Vaccinated	85 (25.0)	269 (75.0)	1.01 (0.64–1.58)	55 (16.5)	298 (83.5)	1.34 (0.71–2.51)	257 (18.7)	1,044 (81.3)	0.85 (0.60–1.12)	113 (9.5)	1,188 (90.5)	0.58 (0.39–0.86) <sup>††</sup>
Unvaccinated	129 (25.5)	351 (74.5)	Ref	66 (12.9)	413 (87.1)	Ref	1,121 (21.6)	3,771 (78.4)	Ref	488 (10.1)	4,409 (89.9)	Ref

Association of vaccination status with intensive care unit admission and in-hospital death among patients hospitalized for COVID-19, by immunocompromise status–COVID-NET, 10 states, March 1, 2021-February 28, 2022. (Singson et al., 2022).

# Universal masking makes a huge difference..

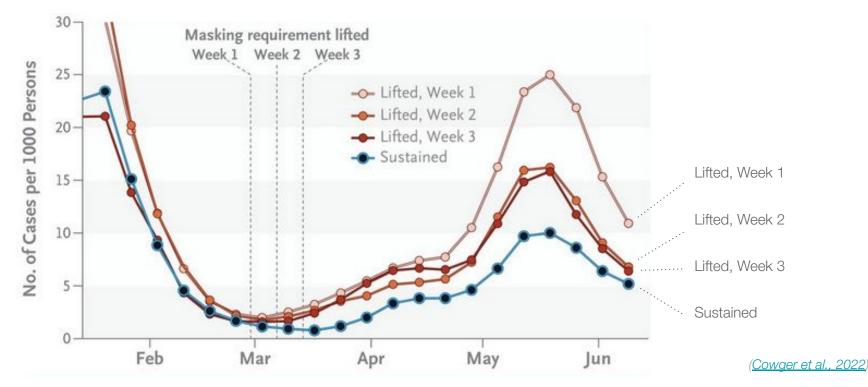


Scenario: an infectious breathing/speaking to a breathing-only masked susceptible, where the susceptible is exposed to the nondiluted total outward leakage of the infectious exhale. Masks depicted are well-fitted FFP2 masks.

PNAS - An upper bound on one-to-one exposure to infectious human respiratory particles 2021

# ..even when done imperfectly

**COVID-19** cases in schools in Massachusetts According to masking requirement



# Join US

Take Action in and With Your Community

**Follow Us for More Resources** Massachusetts Coalition for Health Equity on social media, check out our linktr.ee/MassCHE for more resources

Twitter: MassCHE2020

Instagram: MAHealthEquity

linkt.ree/MassCHE

Web: <u>https://masscoalitionforhealthequity.org/</u>



# Nosocomial transmission has been observed in U.S. academic medical centers (including in Boston)

A study at MGB showed that 39% of exposed roommates tested positive for COVID-19 after 14 days of admission between 2020 and 2021, but rates likely higher with more infectious variants

During the first Omicron surge in December 2021 in England, 20.3% patients hospitalized with SARS-CoV-2 were first diagnosed more than 7 days after hospital admission, an increase from 8.3% in first week of November 2021

Authors of MGB nosocomial transmission study later recommended:

- Mandating Booster shots for healthcare workers
- More frequent testing of patients during hospitalization
- Universal use of N95 respirators

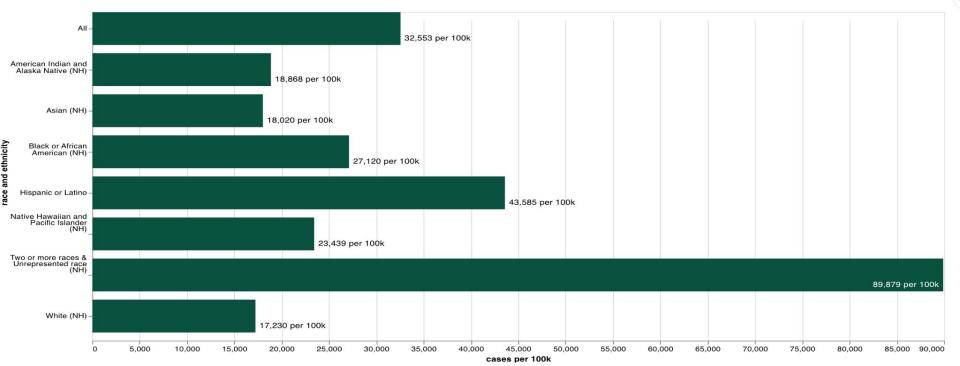
Karan A, Klompas M, Tucker R, Baker M, Vaidya V, Rhee C. The Risk of Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) Transmission from Patients With Undiagnosed Coronavirus Disease 2019 (COVID-19) to Roommates in a Large Academic Medical Center. Clin Infect Dis. 2022 Mar 23;74(6):1097-1100. doi: 10.1093/cid/ciab564. PMID: 34145449.

UK Health Security Agency. SARS-CoV-2 variants of concern and variants under investigation in England: technical briefing 33. Published December 23, 2021. Accessed March 27, 2023.

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\_data/file/1043807/technical-briefing-33.pdf

Klamman M. Kanan A. Dreventing CADC CoV/O Transmission in Llastin Care Cattings in the Contact of the Originan Variant JAMA 2020-2027/2/040 020

## **Overall minoritized populations most impacted by COVID19**



COVID-19 cases since Jan 2020 per 100k people in Massachusetts

Sources: CDC Case Surveillance Restricted Access Detailed Data (updated March 2023) and American Community Survey 5-year estimates (updated 2019).

# **Personal impact**

A woman calls about her 92 year old father who has been acting unusual for the last 72 hours. His only complaint is weakness but he was talking to someone who wasn't in the room. She thought it was a UTI. Only later, when I (the doctor on call for the mobile team service who would be sending an EMT to her home) did she happen to mention in passing that she had COVID, but she "didn't think that was it."

When the EMT arrived the patient's was seen his heart rate was 122, his O2 was 90%, he went straight to the emergency department and was admitted to ICU. He did initially improve with remdesivir, dexamethasone, but then passed away 72 hours later...

... COVID is still serious and dangerous and the "tools" don't always work.

# **Testimonials**

"My immunocompromised and rare disease child needs to safely access medical care. Her team already agonizes over which in-person appointments and tests are absolutely necessary given the risk of exposure. Please don't hurt the most vulnerable and make care less safe and more inaccessible!" -Newton, MA

"I am immunocompromised and depend on being protected in medical spaces. I can't believe I have to beg to survive a respiratory airborne virus with basic commonsense masking in medical settings. Disabled folks have been erased from public settings. Don't take the last place we can hope to be safe." - South Hadley, MA

"Please keep requiring masks in healthcare settings. I need surgery and I would rather not catch COVID while I'm intubated & under anesthesia." -Dracut, MA

"I am an immunocompromised person who has multiple chronic health issues that require in person care. Making masks optional puts me at a higher risk of Covid and higher risk of complications. I have already caught it once and ended up in the hospital twice despite meticulous masking because I am usually the only one doing it. It is especially important to protect all patients, but especially ones like me." - Woburn, MA

"This is a massive access-to-care issue that affects young and old Massachusetts residents alike. The PHE refers to a governmental status triggering release of emergency funds, and its removal does not signify the end of the pandemic itself nor its dangers to patients and healthcare workers alike. COVID is the #3 killer in the country at the moment. Chronically ill and disabled people deserve to access safe medical care, which they desperately need. KEEP MANDATORY RESPIRATORS IN HEALTHCARE SETTINGS!" -Brookline, MA

# **Testimonials**

"Please keep masks in healthcare. It is bad enough high-risk people have to shelter in place due to no masks anywhere and people [are] just going everywhere sick, with no regard to anyone else. Now this will prohibit them from receiving needed healthcare or maybe result in their death if healthcare is unavoidable. Of all the terrible things Covid has done, at least let us have learned the one lesson that masks make sense in the places sick people go and where compromised/at-risk people must also go. Please." - Marion, MA

"Please also include Pharmacies. Pharmacies dispense medication, perform lab tests, and perform immunizations, making them a health care facility in which vulnerable people continue to need protection from airborne pathogens. Currently they are exposed by being in line with unmasked, coughing patients while waiting for their own tests and vaccines." -Brookline, MA

As an immunocompromised transplant recipient, N95 masks are essential protection in all medical/dental settings. One-way masking is ineffective. Please restore mask mandates for high-quality well-fitting masks to protect the young, the immunocompromised, the elderly and everyone! Obtaining healthcare/dental care should not [mean] risk [of] severe disease/death, due to lack of precautions to prevent infection disease spread." -Donna Kaiser, North Reading, MA

"This is an equity and inclusion issue, as well as an ADA issue. Hospitals and health care centers that do not require masks are creating an ADA Title II violation. Please keep masks in ALL healthcare settings, and do better than former Gov. Baker - expand to ALL healthcare settings (including physical therapy, occupational therapy, etc.)." -Marlborough, MA

# **Testimonials**

*"I'm disabled due to chronic illness. As someone with chronic, disabling, progressive health issues that have progressed quite a bit more as healthcare has been crushed by wave after wave of COVID, I am quite literally begging you to please keep mask requirements in healthcare settings.* 

We have had mask requests in these settings during bad flu seasons. This isn't new. And we know that one way masking is not enough to keep everyone safe from an airborne virus.

I've lost so much access to care as surges have happened and hospitals were overwhelmed. Each time we get a foothold it seems like, and I try to put my care back on track, the CDC yanks it away.

The most recent example of this is their foolish, unscientific decision to weaken guidance on masks in clinical settings. CLINICAL settings. Removing masks in these settings will expose patients, will expose workers. You will kill people. You will have more staffing shortages.

You will hurt the people most who are least able to afford an acute infection or long- term consequences. Disease prevention through GOOD sound source control is not a new concept in healthcare...Keep the masks."

-Weymouth, MA

# **Leading Causes of Death in Massachusetts**

### Leading causes: All deaths, Massachusetts

