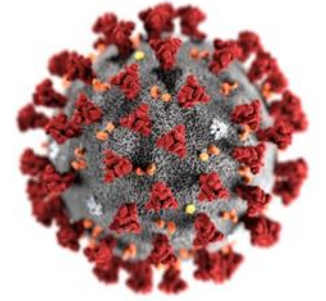




Atrium Health
Wake Forest Baptist



Physical Gatherings, The COVID-19 Vaccines, and Protecting the Health of Your Congregation

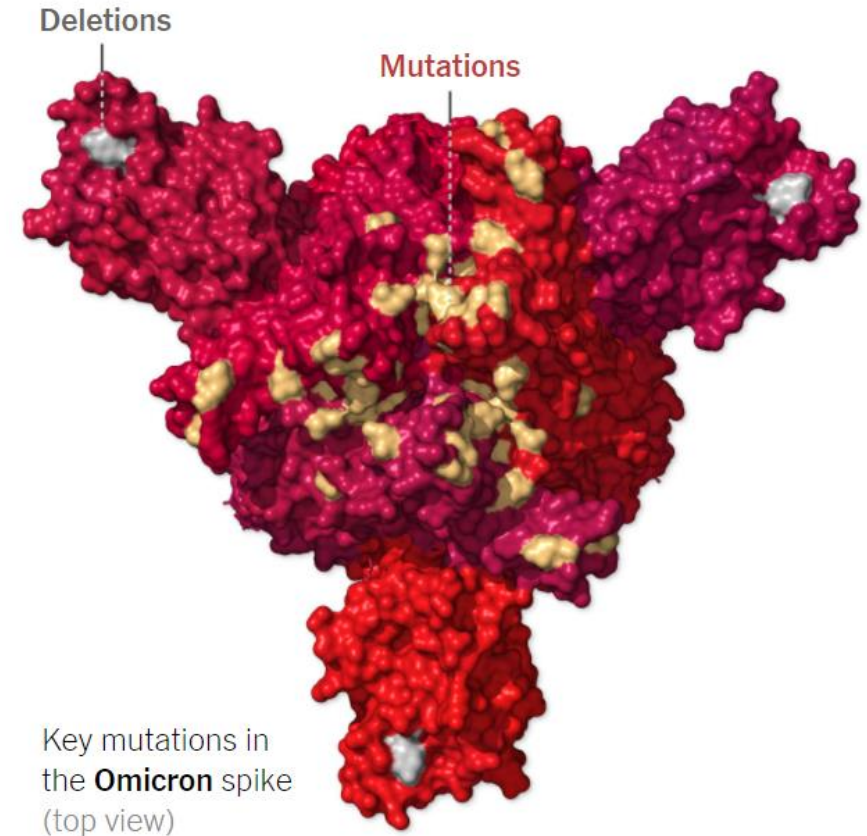
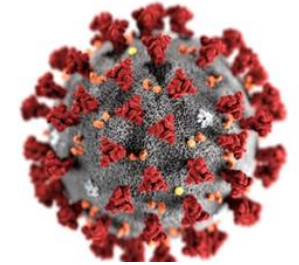
Werner Bischoff, MD PhD

Medical Director Infection Prevention and Health System Epidemiology

Atrium Health Wake Forest Baptist

The Omicron Variant

- 11/12/21 WHO declares Omicron variant a new variant of concern
- About 50 mutations
- 30 mutations in the spike protein
- Several spike mutations are thought to make the virus more infectious
- Found worldwide and in all US States



<https://www.nytimes.com/interactive/2021/health/coronavirus-variant-tracker.html>

Omicron Variant vs Delta Variant

- Symptoms – see chart:
- Transmissibility:
2.7 to 3.7 times higher than Delta variant
- Severity of illness compared to Delta:
 - 53% reduced risk of hospitalization
 - 74% reduced risk of ICU admission
 - 91% reduced risk of death
- Deaths compared to Delta:
 - Omicron: 9 deaths per 1,000 cases
 - Delta: 13 deaths per 1,000 cases
- Long COVID:
 - Fatigue, "brain fog," headaches, joint/muscle pain
 - High levels of anxiety, depression, and insomnia
 - Patients with mild to moderate COVID infections
- Omicron BA.2 subvariant:
 - 1.5 fold more infectious than original BA.1 but same severity
 - Rapidly taking over BA.1 – detected in 57 countries

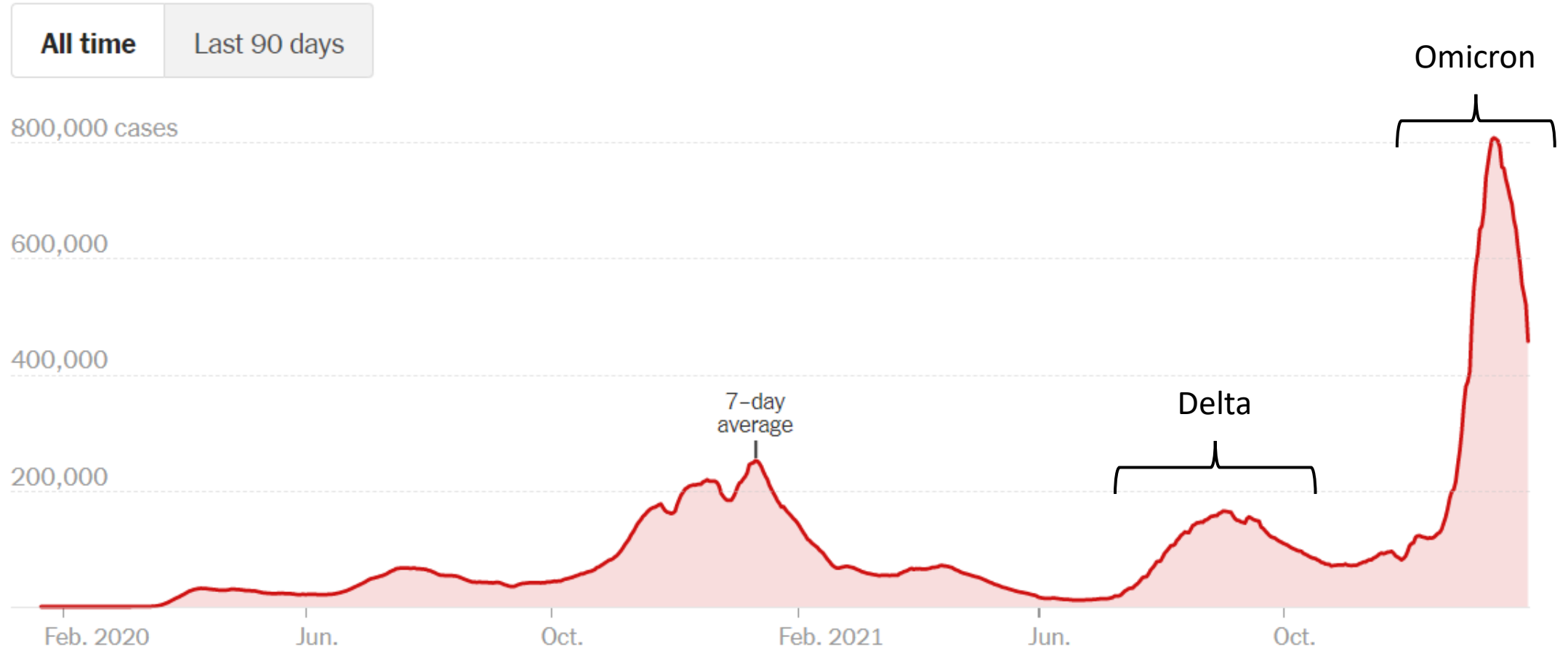
Frequency of COVID-19 symptoms by variant

SYMPTOM	OMICRON	DELTA	PRE-DELTA
Runny nose	Common	Common	Sometimes
Headache	Common	Common	Common
Fatigue	Common	Common	Common
Sneezing	Common	Sometimes	Rare
Sore throat	Common	Common	Sometimes
Persistent cough	Sometimes	Common	Common
Chills or shivers	Sometimes	Sometimes	Sometimes
Fever	Sometimes	Sometimes	Common
Loss of smell	Rare	Sometimes	Common
Chest pain	Rare	Rare	Rare
Shortness of breath	Rare	Sometimes	Sometimes

Table: Shayanne Gal/Insider • Source: Analysis of data from the Zoe COVID Symptom Study

Omicron Variant vs Delta Variant

New reported cases



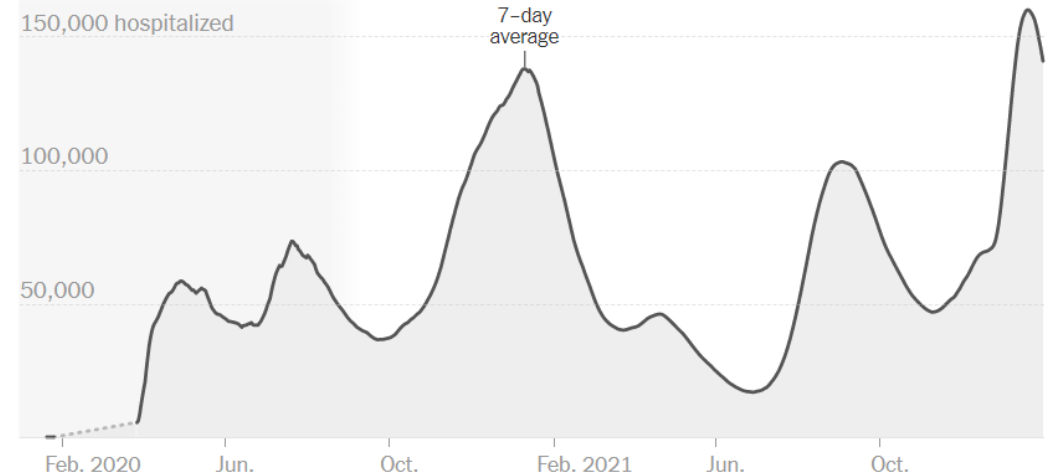
<https://www.nytimes.com/interactive/2021/us/covid-cases.html>

Update – Global and U.S.

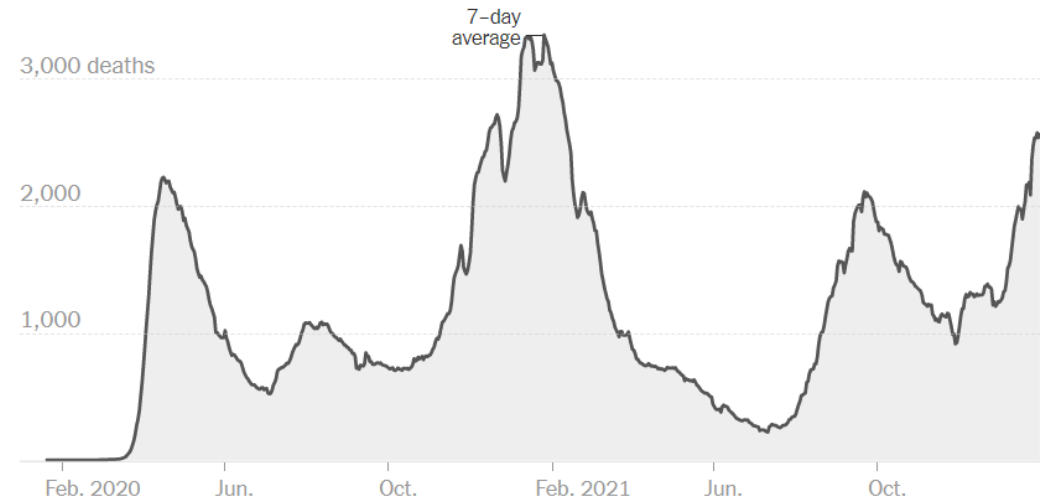
- As of 02/02/2022 (6:48 am)
 - 381,724,054 confirmed cases
 - 5,688,009 deaths
- US: 75,350,359 confirmed cases
- US: 890,770 deaths
- <https://gisanddata.maps.arcgis.com/apps/opsdashboard/index.html#/bda7594740fd40299423467b48e9ecf6>
- <https://www.bbc.com/news/world-51235105>

Hospitalizations

Early data may be incomplete.

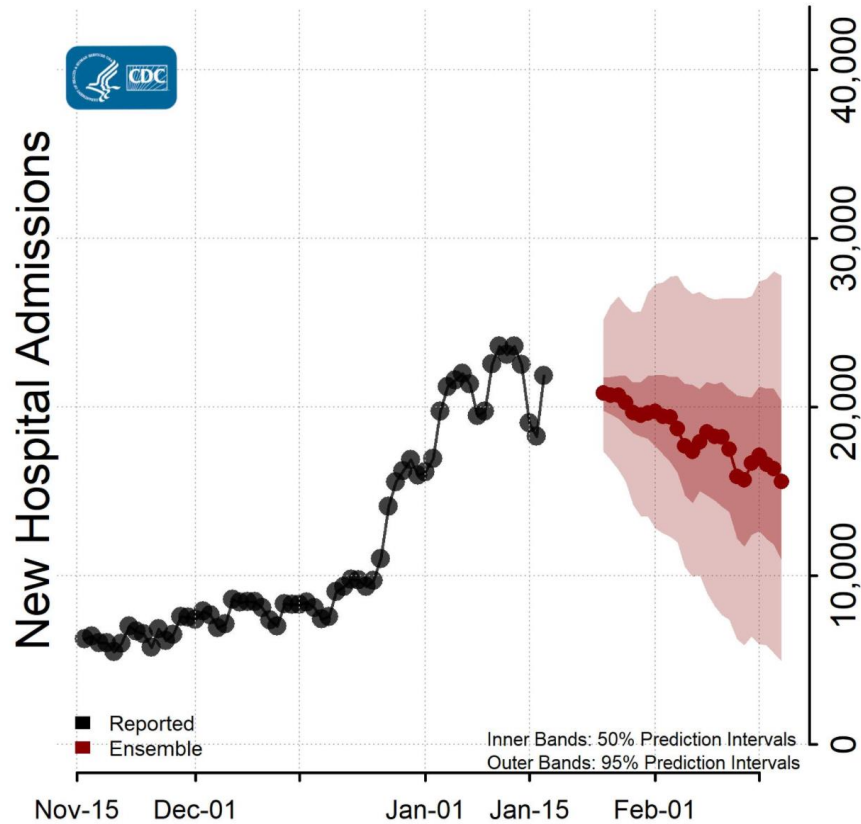


New reported deaths by day

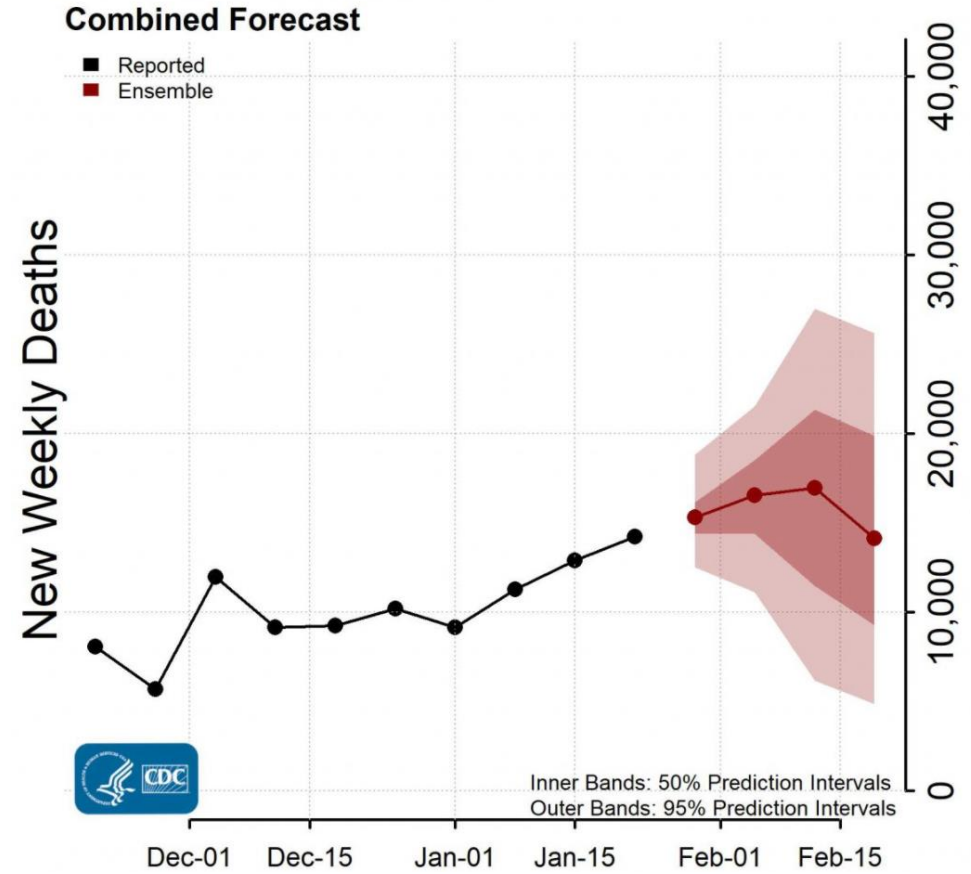


COVID-19 Forecast:

National Forecast



National Forecast

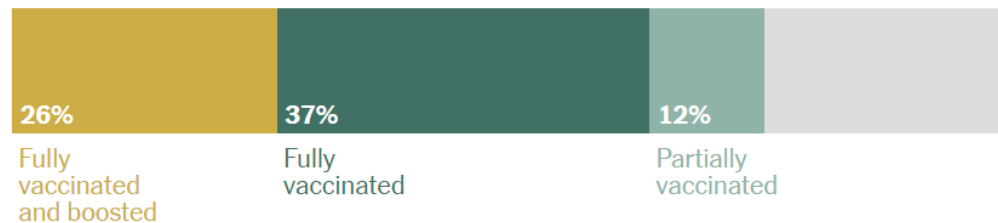


Interventions

Interventions - Vaccines

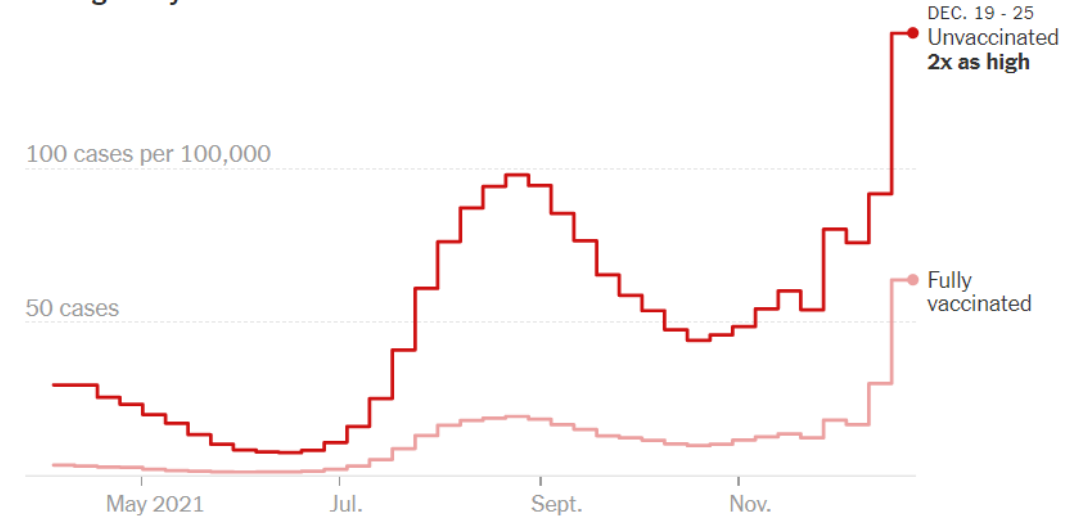
- Vaccination:
 - Effective against Omicron
 - Third dose of mRNA vaccines – Delta and Omicron Variants (preventing 94% and 82% of urgent care/emergency encounters; preventing 94% and 90% of hospitalizations)
 - Safe: 10.1 billion doses given
 - Reinfection: unvaccinated are 2 to 5 times more likely to get reinfected than fully vaccinated

75 percent of people in the U.S. have received at least one dose

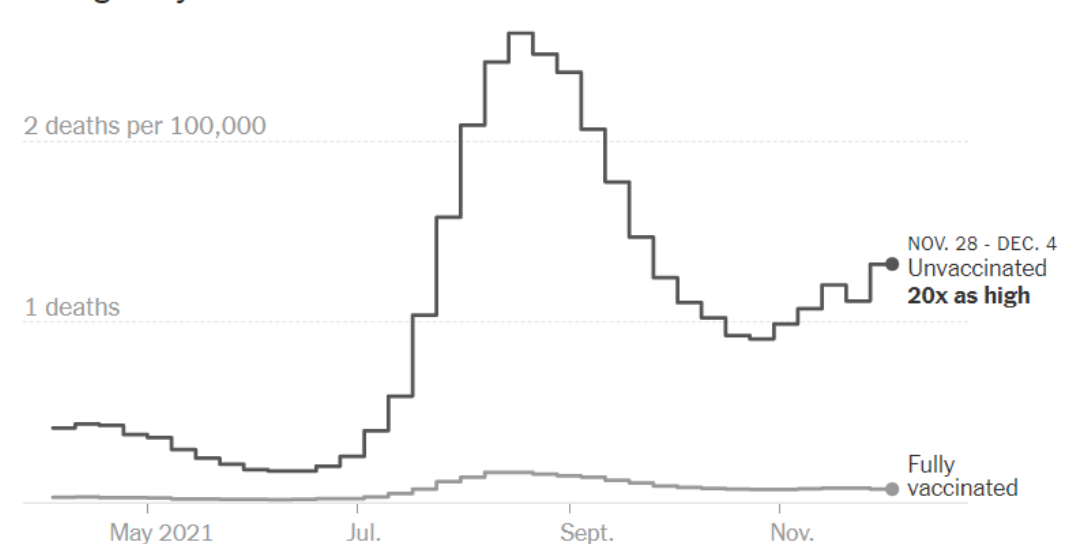


Sources: Centers for Disease Control and Prevention, U.S. Census Bureau | Note: Figures include the U.S. territories and three countries with [special agreements](#). The C.D.C. reported on Nov. 30, 2021 that booster doses are sometimes misclassified as first doses, which may overestimate first dose coverage.

Average daily cases



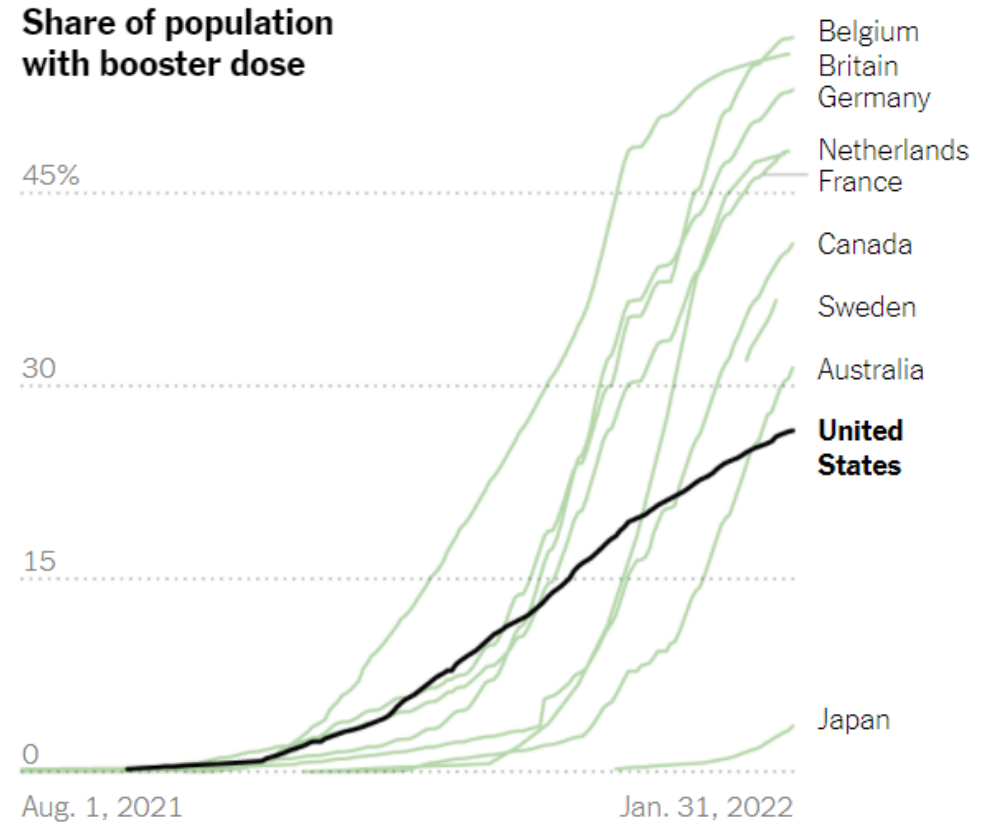
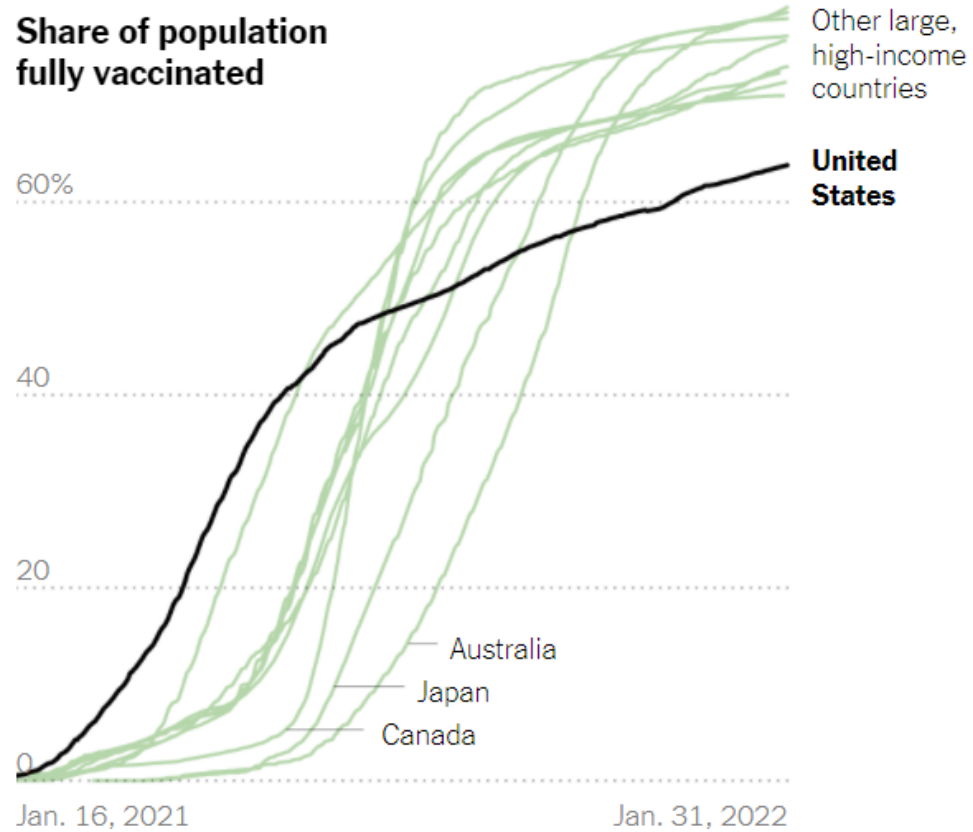
Average daily deaths



https://www.cdc.gov/mmwr/volumes/71/wr/mm7104e3.htm?s_cid=mm7104e3_x

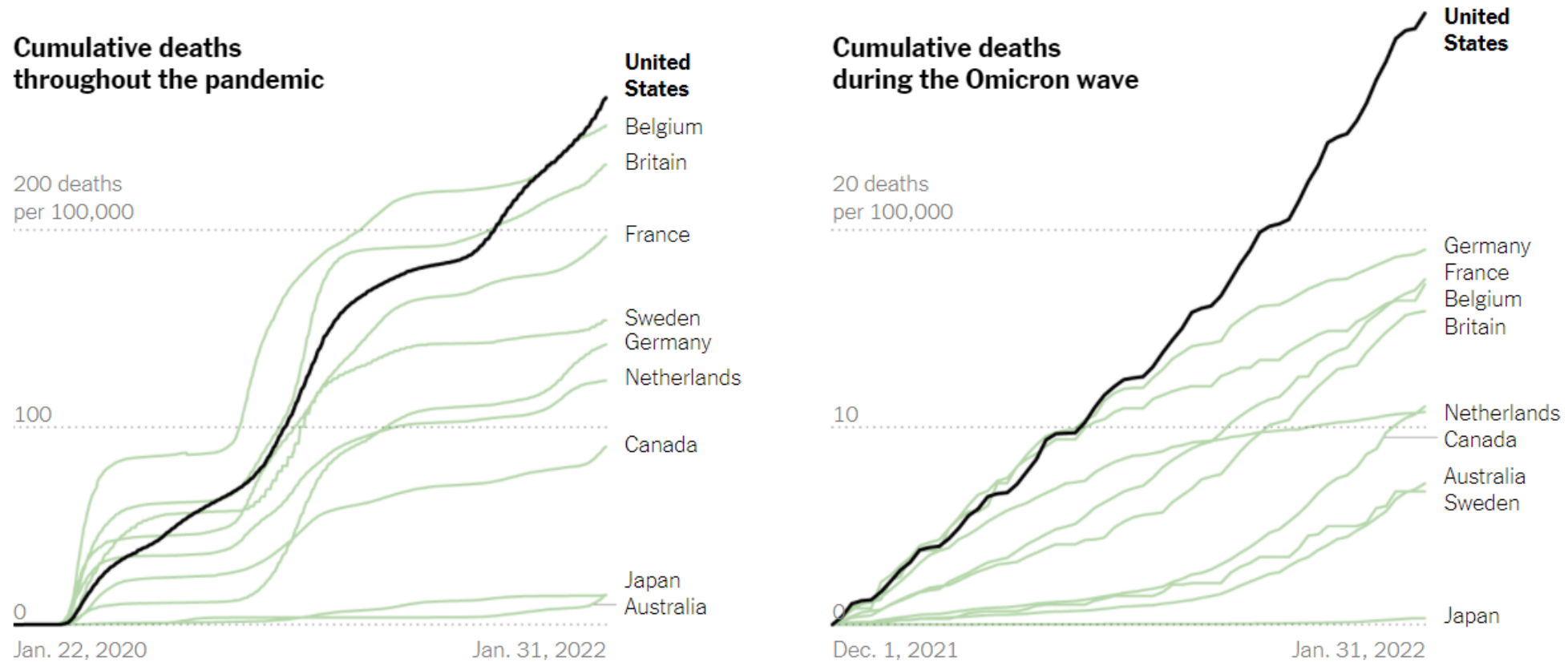
<https://www.nytimes.com/interactive/2021/us/covid-cases.html>

Interventions - Vaccines



Sources: Our World in Data (world vaccinations); Centers for Disease Control and Prevention (U.S. vaccinations) • Note: Vaccination and booster data in some countries are available infrequently. Sweden data for booster doses is available only from Jan. 20, 2022.

Interventions - Vaccines



Sources: New York Times database of reports from state and local health agencies (U.S. deaths); The Center for Systems Science and Engineering at Johns Hopkins University (world deaths); World Bank (world populations); United States Census Bureau (U.S. population) • Note: Countries shown are those with the highest gross national income per capita among countries with a population of more than 10 million people.

<https://www.nytimes.com/interactive/2022/02/01/science/covid-deaths-united-states.html>

Interventions – Masks/Respirators

- Efficacy of face masks/respirators:

INFECTED INDIVIDUAL	UNINFECTED INDIVIDUAL			
	Nothing	Cloth mask	Disposable mask <i>Surgical mask</i>	Respirator <i>N95</i>
Nothing	15 minutes	20 minutes	30 minutes	2.5 hours
Cloth mask	20 minutes	27 minutes	40 minutes	3.3 hours
Disposable mask <i>Surgical mask</i>	30 minutes	40 minutes	1 hour	5 hour
Respirator <i>N95</i>	2.5 hours	3.3 hours	5 hours	25 hours

*Note: These results were published last spring, before the omicron variant, which is believed to spread more easily than earlier variants.
Source: American Conference of Governmental Industrial Hygienists Pandemic Task Force*

Interventions – Masks/Respirators

- Wear the highest quality mask/respirator, you can find:
 - N95 Respirator > KN95 Respirators > Procedure/Medical Masks > Cloth Masks

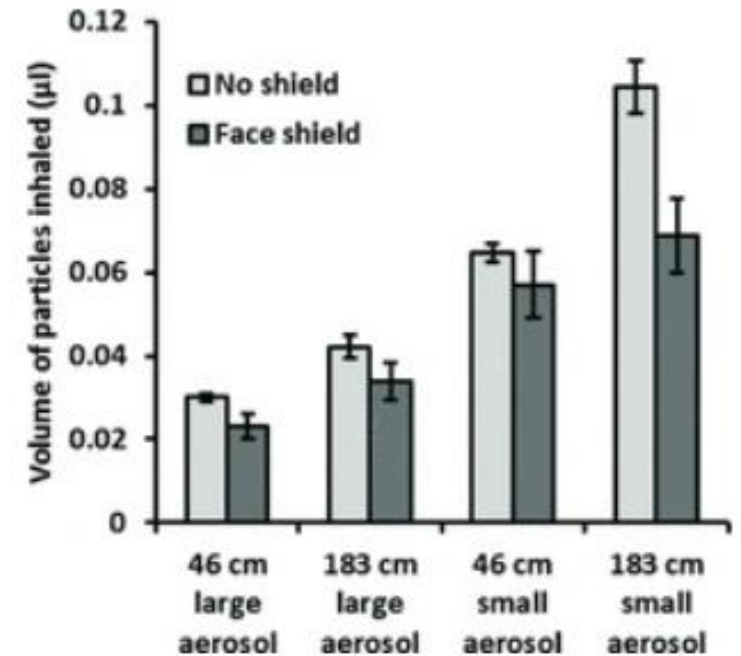


- Cloth Masks: high-quality cloth mask (multiple layers, close knit fabric)
- Make sure that the mask/respirator fits snugly against your face



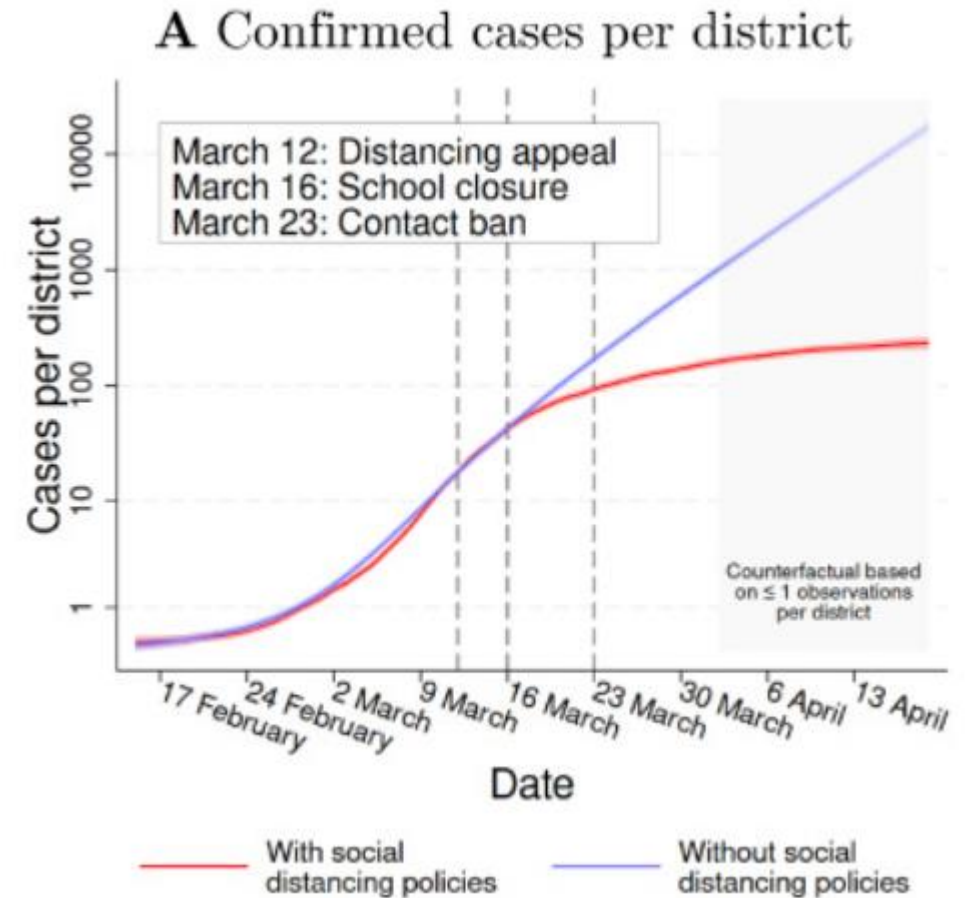
Interventions – Face Shields

- Larger aerosols are successfully blocked (96%).
- Smaller aerosols are blocked only 68% of the time.
- Always combine a face shield with a mask for adequate protection.



Interventions - Social Distancing

- Germany:
 - In comparison to a no-social-distancing benchmark, within three weeks, the policies **avoided 84% of the potential COVID-19 cases (point estimate: 499.3K) and 66% of the potential fatalities (5.4K).**
- Brazil and Sweden, primarily averse to lockdown policies, revealed deteriorating trends.
- Countries that adopt strict lockdown have better addressed the spread of the virus.



Interventions - Testing

All commercially available tests detect the current variants

Home Tests:

- Free tests (4 for every home): <https://www.covidtests.gov/>

Testing Sites - Free:

- <https://www.wakehealth.edu/Coronavirus/COVID-19-Testing>



Please Use Community Testing Sites for Free COVID-19 Testing

If you have been exposed to COVID-19 or are experiencing symptoms, it's important that you get tested as quickly as possible.

Please do not go to the Emergency Department or an Urgent Care location if you only need a COVID-19 test.

Go to the ED or call 911 only if it's a life-threatening emergency.

Location	Address	Hours	Details
Winston-Salem <i>In partnership with the City of Winston-Salem and Winston-Salem State University</i>	Bowman Gray Stadium (West lot) 1250 S. Martin Luther King Jr. Drive	Mon - Fri, 9 am - 6 pm; Sat, 10 am - 3 pm	Outdoor, drive-thru site
High Point	Providence Place 1701 Westchestser Drive, Suite 850	Mon - Fri, 9 am - 6 pm; Sat, 10 am - 3 pm	Indoor site, follow signs to parking and entrance
Wilkesboro <i>In partnership with the Town of Wilkesboro and the County of Wilkes</i>	Lowe's Park at River's Edge 1610 Industrial Dr.	Mon - Fri, 9 am - 6 pm; Sat, 10 am - 3 pm	Outdoor, drive-thru site



Interventions - Treatment

NIH COVID-19 Treatment Guidelines:

- Pre-exposure prophylaxis (PrEP, tixagevimab plus cilgavimab [Evusheld]) for adults and adolescents who do not have SARS-CoV-2 infection, who have not been recently exposed to an individual with SARS-CoV-2 infection, AND who:
 - Are moderately to severely immunocompromised and may have inadequate immune response to COVID-19 vaccination (B1a); or
 - Are not able to be fully vaccinated with any available COVID-19 vaccines due to a documented history of severe adverse reaction to a COVID-19 vaccine or any of its components (A1a).
- Therapeutic Management of Nonhospitalized Adults With COVID-19
- COVID-19 Treatment Guidelines Panel's Statement on Therapies for High-Risk, Nonhospitalized Patients With Mild to Moderate COVID-19



CAVEAT: Limited supply of anti-COVID-19 therapeutics

<https://www.covid19treatmentguidelines.nih.gov/>

Risk Assessment

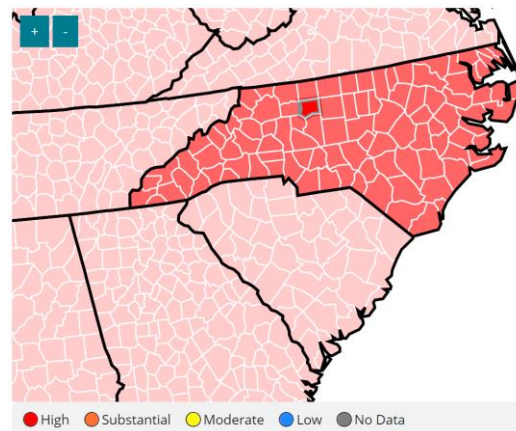
Congregational Settings – Risk Assessment

Goal: Return to In-Person Services

- Check State-Issued Prevention Measures
- Monitor Local Risk Levels:

- CDC COVID Tracker - Community Data:

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



Forsyth County, North Carolina

[State Health Department](#) [↗](#)

7-day Metrics | [7-day Percent Change](#)

Community Transmission

● High

Everyone in **Forsyth County, North Carolina** should wear a mask in public, indoor settings. Mask requirements might vary from place to place. Make sure you follow local laws, rules, regulations or guidance.

[How is community transmission calculated?](#)

February 1, 2022

Cases	5,582
Case Rate per 100k	1,460.13
% Positivity	34.38%
Deaths	20
% of population ≥ 5 years of age fully vaccinated	63.6%
New Hospital Admissions	268

Congregational Settings – Risk Assessment

Goal: Return to In-Person Services

- Determine Risk Factors:
 - Presence of individuals/groups at higher risk (e.g., older adults, individuals with pre-existing conditions such as chronic respiratory illnesses or cancer)
 - Vaccination status – difficult to assess
 - Testing status – availability, costs
 - Willingness to adhere to interventions such as masking, social distancing etc.
- Weighing against:
 - Need for in-person contact
 - Communion with others
 - Worship experience



Guidance

Congregational Settings – Guidance I

Tips for In–Person Gatherings:

- Limit the number attending based on the space available.
- Social distancing at 3 feet. In some instances, this will mean moving to a larger room for bigger events.
- All attendees should be masked (e.g., N95 respirators preferred or procedure/medical face mask or high-quality cloth masks with multiple layers and close knit fabric).
- Wearing face shields is encouraged but should not replace a respirator/mask.
- If possible, ventilation within the meeting area should be increased by opening windows or doors.

Congregational Settings – Guidance II

Serving of beverages and/or food should be discouraged. If being served, the guidance below can be followed:

- Only use prepackaged food and beverages or pre-plated meals. Buffet style catering should be served by catering staff.
- Attendees will wear masks while not eating, including during distribution of pre-packaged food items and prepared beverages and after eating.
- Utensils for beverage or food consumption (e.g., pitchers, cutlery, etc.) should not be shared. Use of disposable items is recommended.
- Recommendation to place families, known contacts together at tables when eating without masks

Congregational Settings – Guidance III

Tips for Group Activities:

- **Children - follow local school guidance** (CDC: <https://www.cdc.gov/coronavirus/2019-ncov/community/schools-childcare/k-12-guidance.html>):
 - Universal indoor masking (ages 2 years and older)
 - Kids less than 2 years of age do not need masking but contact should be limited to their parents/care givers
 - Ventilation, handwashing and respiratory etiquette, staying home when sick and getting tested
 - Isolation/quarantine time reduced to 5 days
- **Older Adults** (CDC: https://www.cdc.gov/coronavirus/2019-ncov/daily-life-coping/index.html?CDC_AA_refVal=https%3A%2F%2Fwww.cdc.gov%2Fcoronavirus%2F2019-ncov%2Fdaily-life-coping%2Fgoing-out.html):
 - Get vaccinated - vaccines (mRNA) show a 94% reduced risk of COVID-19 hospitalizations
 - Wear a well-fitted mask
 - Wash your hands often
 - Test to prevent spread to others
 - Increase ventilation in meeting spaces

Congregational Settings – Guidance IV

Tips for Group Activities:

- Choir/Singing/Live Musical Performances:

- Increased risk of transmission
- Performers - Vaccination status
- Environmental Risk Mitigation:
 - Space
 - Increased ventilation
 - Distance from each other
 - Distance from audience
 - Duration of performances (shorter are better)

- Singing masks and instrument (bell) covers are available

- Resources:

- Meyer et al. Reentry Following COVID-19: Concerns for Singers ([https://www.nats.org/Library/COVID_19_Resource_Docs/Meyer et al Reentry COVID-19 JOS advance 2021 VAPD6085 fin r2.pdf](https://www.nats.org/Library/COVID_19_Resource_Docs/Meyer_et_al_Reentry_COVID-19_JOS_advance_2021_VAPD6085_fin_r2.pdf))
- American Choral Directors: <https://acda.org/resources-for-choral-professionals-during-a-pandemic>

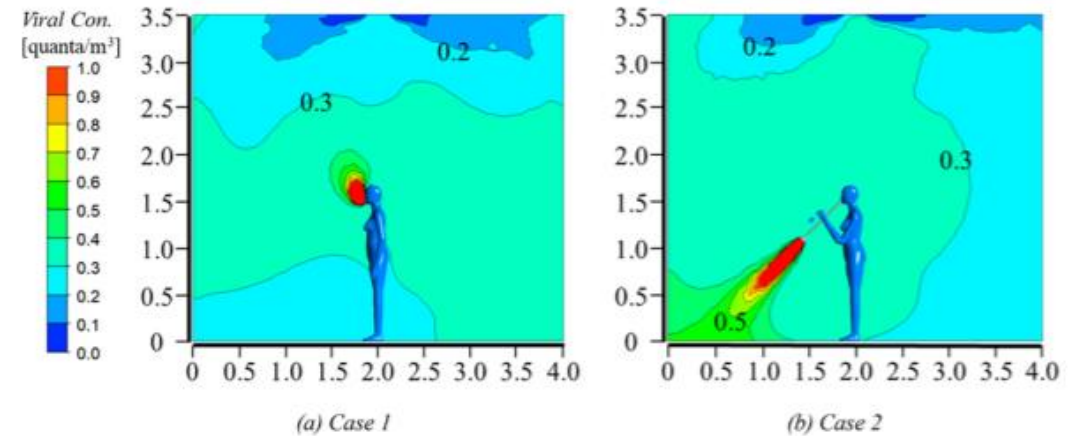


Figure 18. Quanta concentration distribution in the vertical section across the middle plane of the musician's body in the indoor environment. X and Y axes show distances in meters.

<https://pubs.acs.org/doi/pdf/10.1021/acsenvironau.1c00007>

Congregational Settings – Guidance V

Sharing a Microphone

- If masked, o.k., if not masked discouraged especially if the microphone is in close proximity to the mouth

Air Purifiers:

- Effective against COVID-19
- Dependent on space and air exchange
- No immediate effect but reduction of overall burden over time

Need for Contact Tracing:

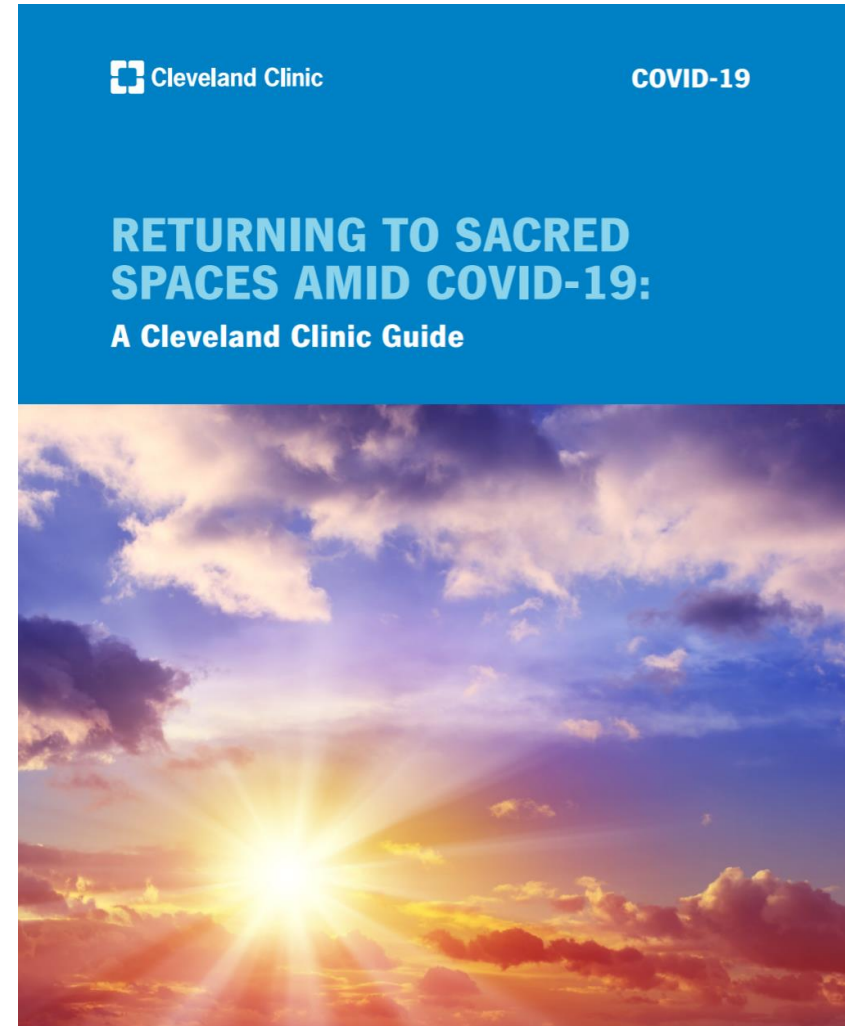
- Limited use at current state of pandemic



Congregational Settings – Guidance VI

Recommended Resource:

- Cleveland Clinic – Returning to Sacred Spaces Amid COVID-19
(<https://my.clevelandclinic.org/-/scassets/files/org/employer-solutions/covid-19-faith-leaders-guide.pdf>)



Outlook

When and How

- The omicron variant poses a real challenge due to high transmissibility.
- Current projections indicate a decline in community cases over the next few weeks.
- The situation in each setting may vary requiring an individual risk assessment as outlined above.
- The option to offer both in-person and online services may allow gradual loosening of restrictions. In-person home visits of members at higher risk may offer another safe option to (re-)connect.
- Vaccination is safe and the best available strategy to overcome the pandemic.

Faith Based Settings...

What should we do now?

- Every congregation and physical facility is different
- Balancing spiritual, community, congregation and individual needs with health and safety

Thanks

Marktkirche, Hannover, Germany

