COVID-19 Series for Free & Charitable Clinics

September 16, 2021

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AT THE FOREFRONT UChicago Medicine

Vaccinate with Confidence

A National Strategy to Reinforce Confidence in COVID-19 Vaccines

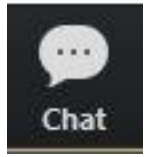
CDC's Strategy: **Empower Healthcare Personnel**: Promote confidence among healthcare personnel in their decisions to get vaccinated and recommend the vaccination to their patients.

Project Goal: Build and reinforce COVID-19 vaccine confidence among healthcare personnel in the safety net sector and, in turn, the patients they serve.

Partnerships: **The National Association of Free and Charitable Clinics** and **15 State Associations** and Federally Qualified Health Centers (FQHCs) in Puerto Rico and the U.S. Virgin Islands.

How: Provide tailored COVID-19 vaccine information to the free and charitable clinic sector through various channels and **give the FCC sector a direct line of communication to CDC**.

Reminders:

- Please use your first name and clinic name when you join the session
- Use the “chat” feature to ask questions 

- Please remember to mute your microphone 

- If you can’t connect audio via computer or you lose computer audio at anytime, you can call in to session at **(408) 638-0968, Meeting ID 932-6566-2201##**
- This activity has been approved for AMA PRA Category 1.25 Credit™ & Nursing CEUs

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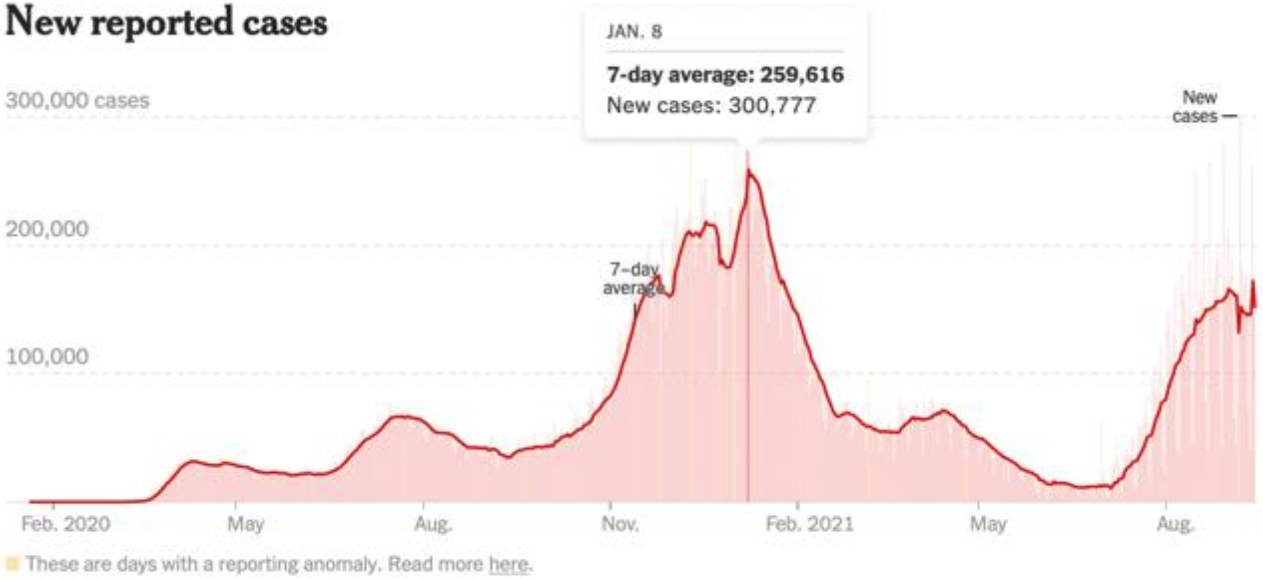
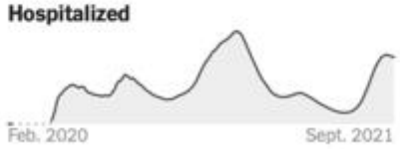
Disclosures

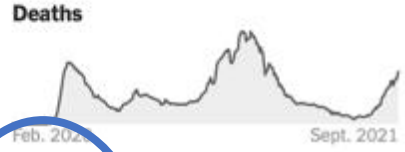
- We have no relevant financial interests to disclose.

Coronavirus in the U.S.: Latest Map and Case Count

New reported cases

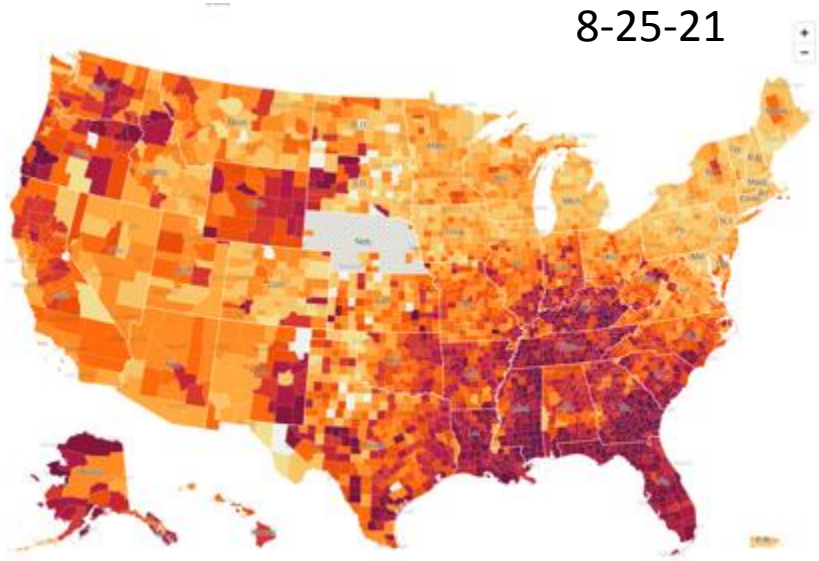




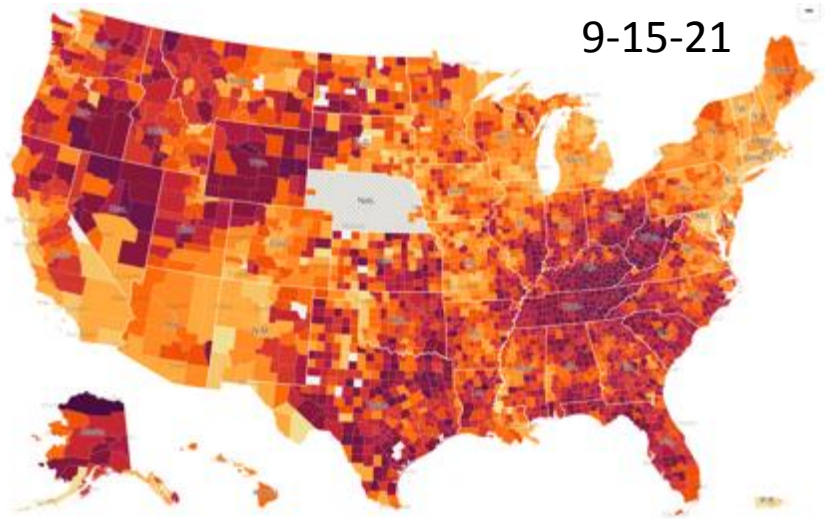


	DAILY AVG. ON SEPT. 14	14-DAY CHANGE	TOTAL REPORTED
Cases	152,177	-5%	41,448,621
Tests	1,583,940	+16%	—
Hospitalized	99,275	-3%	—
Deaths	1,888	+40%	664,231

8-25-21

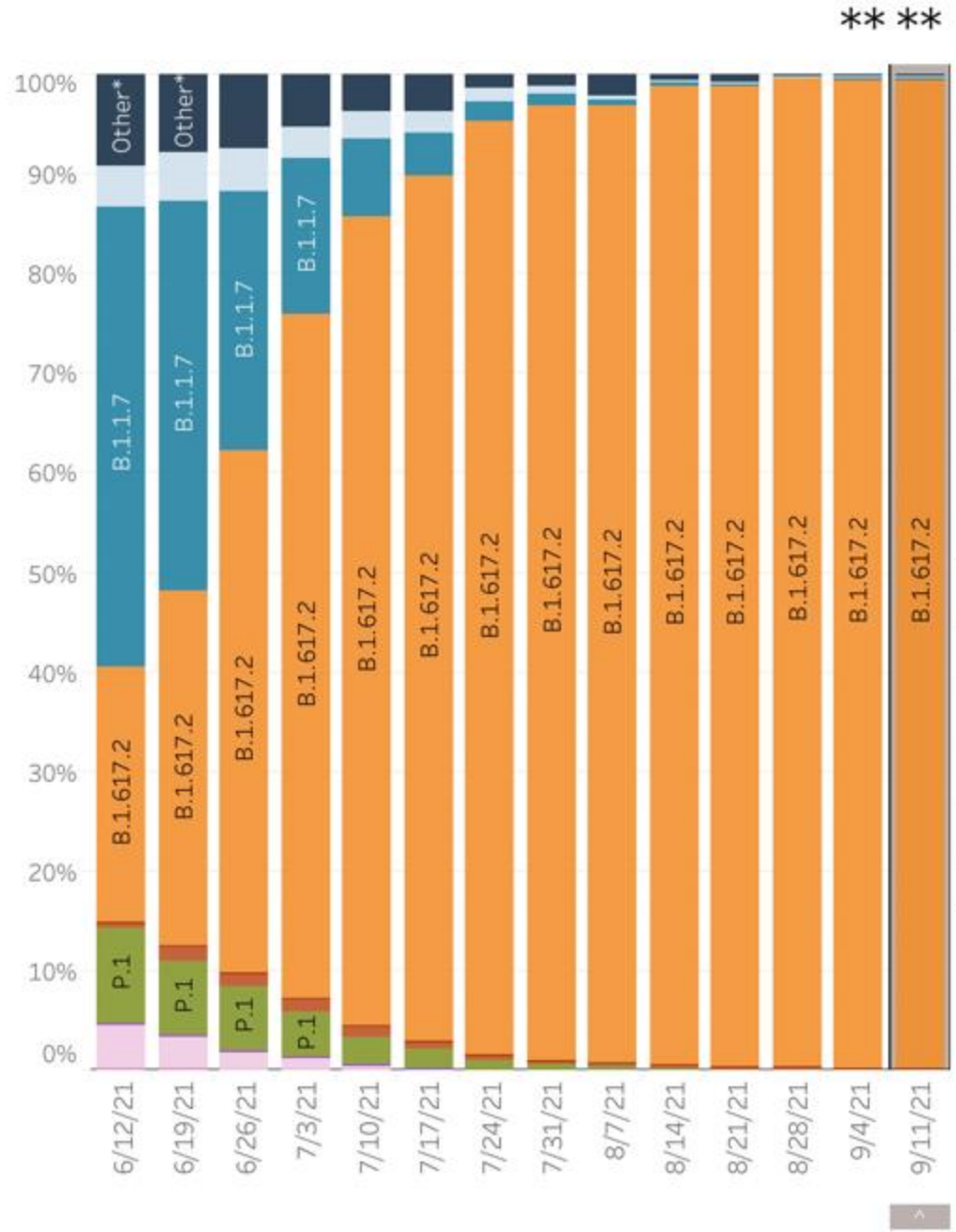


9-15-21



https://www.nytimes.com/interactive/2021/us/covid-cases.html?action=click&module=Top%20Stories&pgtype=Homepage

United States: 6/6/2021 – 9/11/2021



United States: 9/5/2021 – 9/11/2021 NOWCA

USA

WHO label	Lineage #	Type	%Total	95%PI
Alpha	B.1.1.7	VOC	0.0%	0.0-0.2%
Beta	B.1.351	VOC	0.0%	0.0-0.2%
Gamma	P.1	VOC	0.0%	0.0-0.2%
Delta	B.1.617.2	VOC	99.4%	98.6-10(
	AY.1	VOC	0.2%	0.0-0.7%
	AY.2	VOC	0.1%	0.0-0.5%
Eta	B.1.525	VOI	0.0%	0.0-0.2%
Iota	B.1.526	VOI	0.0%	0.0-0.2%
Kappa	B.1.617.1	VOI	0.0%	0.0-0.2%
Mu	B.1.621		0.1%	0.0-0.5%
N/A	B.1.617.3	VOI	0.0%	0.0-0.2%
Other	Other*		0.2%	0.0-0.7%

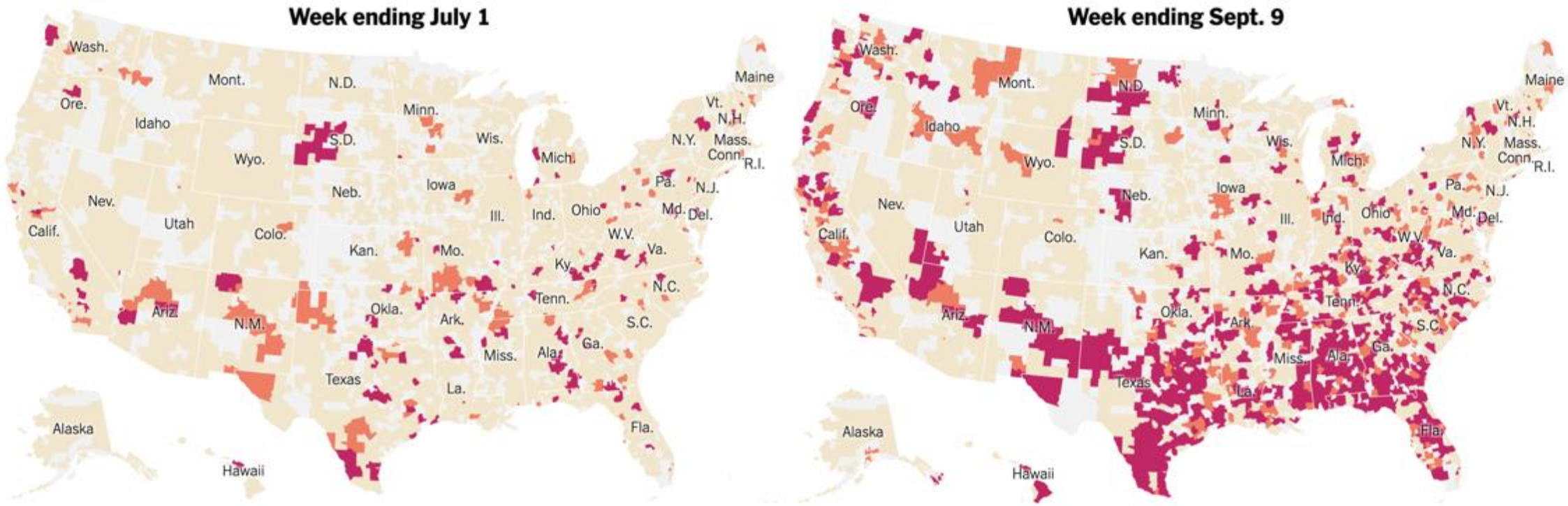
* Enumerated lineages are VOI/VOC or are circulating >1% in at least one HHS region during at least one two week period; remaining lineages are aggregated as "Other".

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

Sublineages of P.1, B.1.351 and B.1.621 are aggregated with the parent lineage and included in parent lineage's proportion. Q.1-Q.8 are aggregated with B.1.1.7. AY.3-AY.25 are aggregated with B.1.617.2.

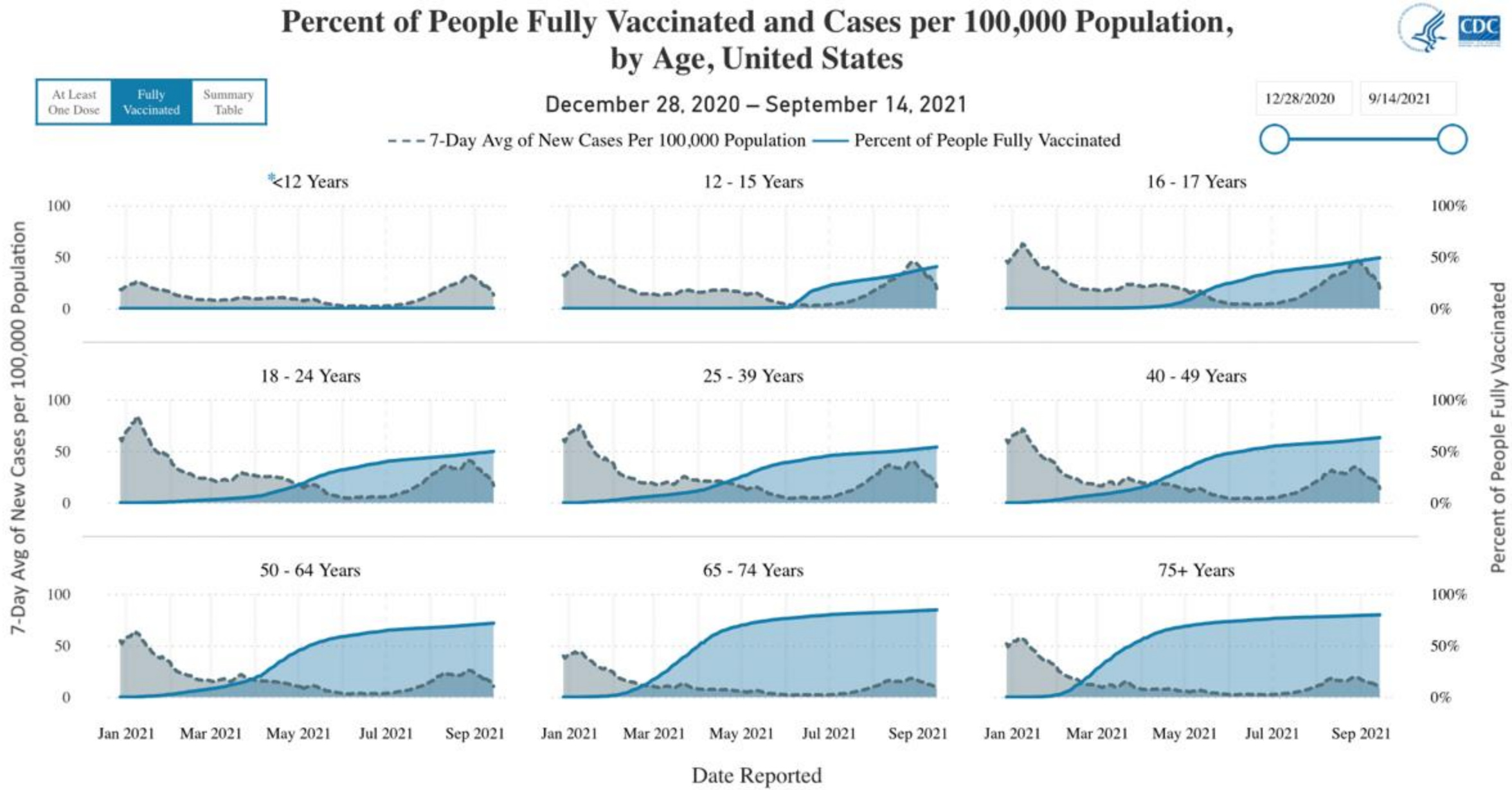
Share of I.C.U. beds occupied in each hospital service area

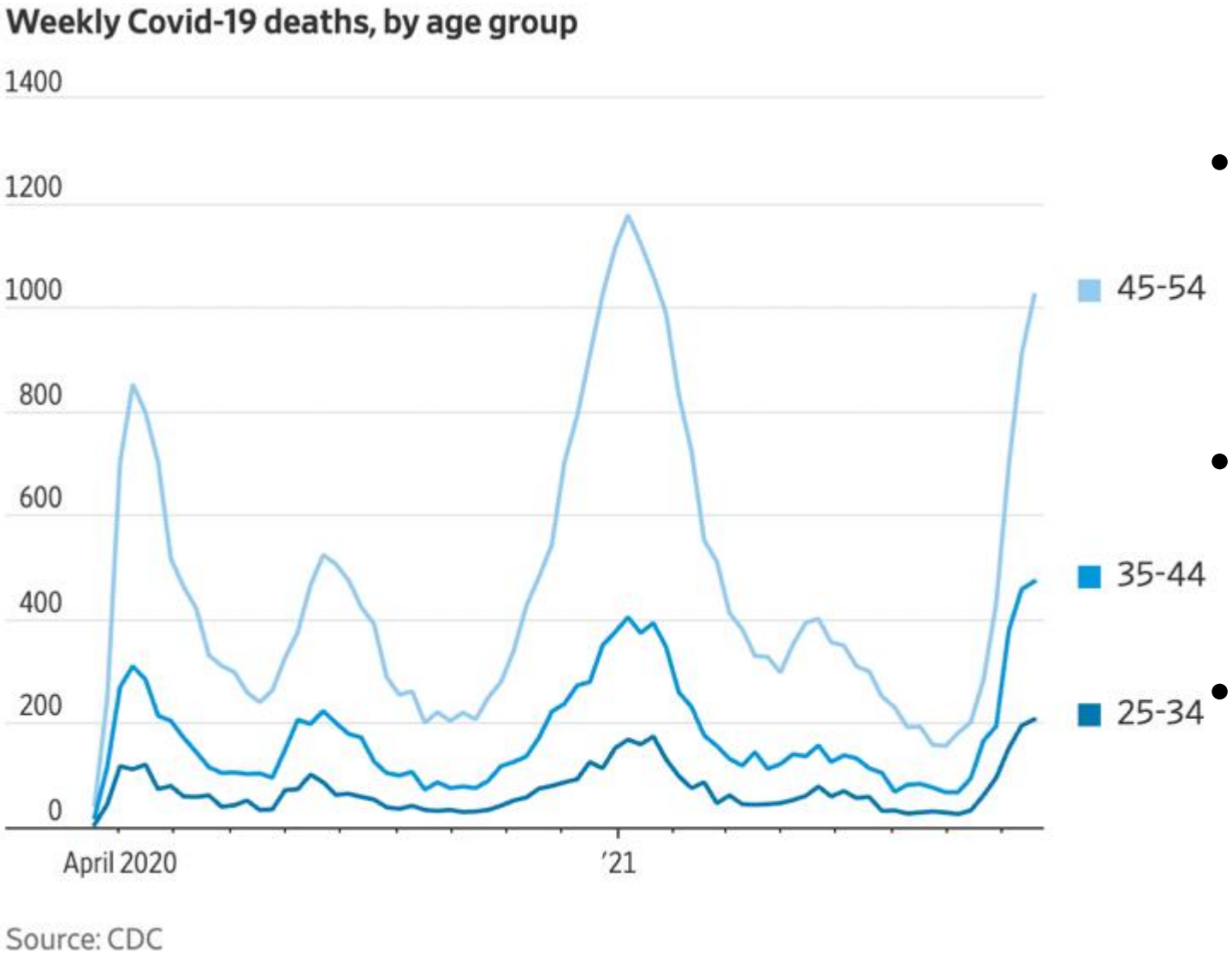
● More than 95% ● 90-95% ● Less than 90% ● No data



Source: New York Times analysis of U.S. Department of Health and Human Services data; Dartmouth Atlas of Health Care. • Note: Shows seven-day average patient count by hospital referral region ending on date shown.

Percent of People Fully Vaccinated and Cases per 100,000 Population, by Age, United States

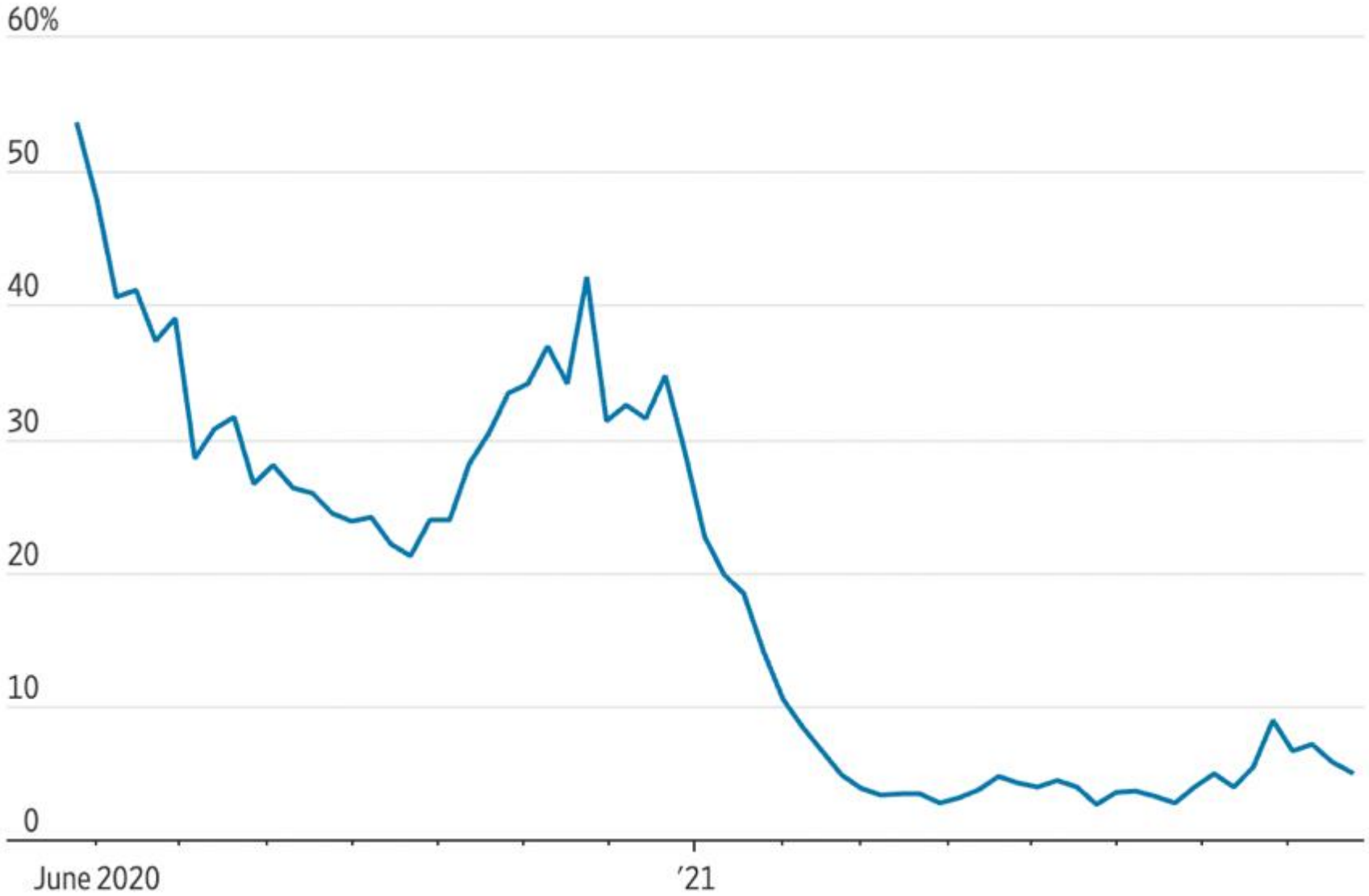




- People in their 30s are four times as likely to die from infections as people ages 18 to 29
- For people ages 75 to 84, the risk of death is 220 times as high
- Unvaccinated Americans were 4.6 times as likely to be infected, 10 times as likely to be hospitalized and 11 times as likely to die

https://www.wsj.com/articles/covid-19-deaths-in-delta-surge-hit-younger-unvaccinated-people-11631525400?mod=hp_lead_pos5

Share of Covid-19 deaths occurring among nursing home residents



Controversy About Need For Boosters?

- 2 FDA officials wrote an op-ed in The Lancet this week suggesting there is not enough data to support boosters in all people
- The 2 scientists are leaving their posts at least in part because they disagreed with the Biden administration's push for boosters before federal scientists could review the evidence and make recommendations.
- The Biden administration has proposed administering vaccine boosters eight months after the initial shots. But many scientists have opposed the plan, saying the vaccines continue to be powerfully protective against severe illness and hospitalization.
- Experts said that whatever advantage boosters provide would not outweigh the benefit of using those doses to protect the billions of people who remain unvaccinated worldwide.
- Boosters may be useful in some people with weak immune systems, they said, but are not yet needed for the general population.
- Several studies published by the Centers for Disease Control and Prevention, including three on Friday, suggest that while efficacy against infection with the Delta variant seems to wane slightly over time, the vaccines hold steady against severe illness in all age groups. Only in older adults over 75 do the vaccines show some weakening in protection against hospitalization.

https://www.thelancet.com/journals/lancet/article/ PIIS0140-6736(21)02046-8/fulltext

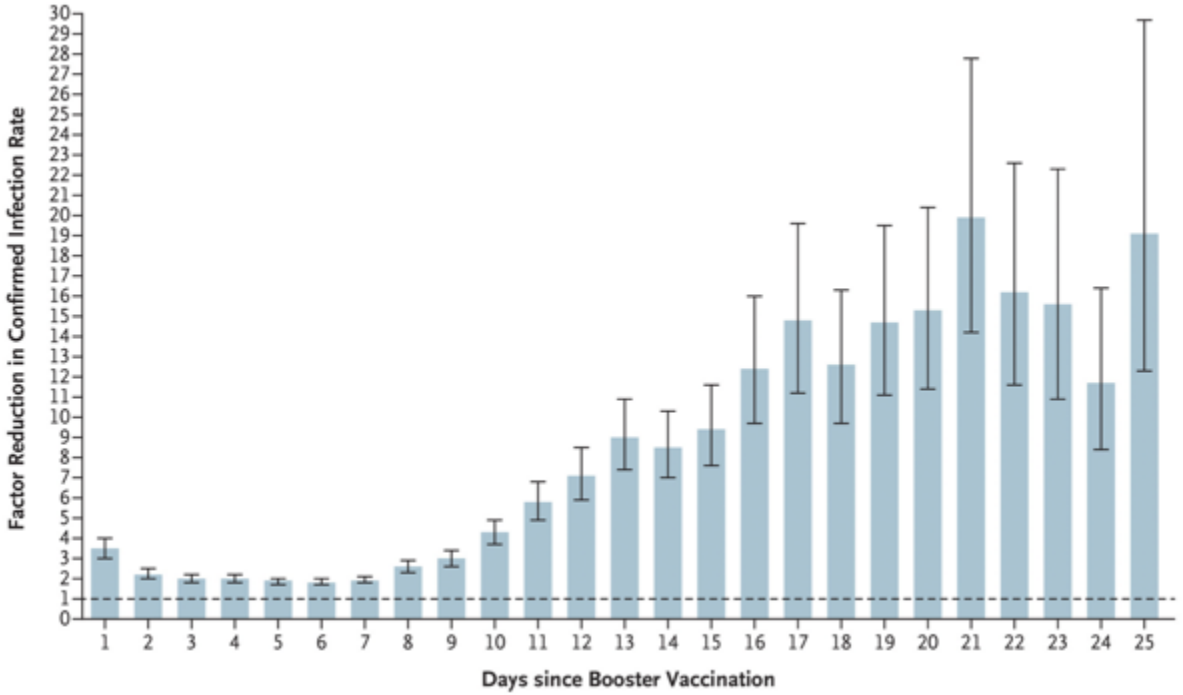
What dose will the “boosters” be?

- FDA hasn't decided on the dose. Moderna wants a half-shot booster. Pfizer a full shot. But could the best dose for Americans and for the world be even less?
- We've known since earlier this year that a half-dose of the Moderna vaccine produces antibody levels similar to the standard-dose and newer information suggests that even a quarter-dose vaccine may do the same.
- Lower doses could also reduce risks of adverse effects.
- The chosen booster dose also has profound implications for global vaccine equity. Producing boosters for developed countries will reduce the supply of first and second doses available to countries where most people haven't received a first dose.

https://www.medpagetoday.com/opinion/second-opinions/94500?xid=nl_mpt_SRInfectiousDisease_2021-09-15&eun=g966870d0r&utm_source=Sailthru&utm_medium=email&utm_campaign=InfectiousDiseaseUpdate_091521&utm_term=NL_Spec_Infectious__Disease_Update_Active

Protection of BNT162b2 Vaccine Booster against Covid-19 in Israel

- At least 12 days after the booster dose, the rate of confirmed infection was lower in the booster group than in the non-booster group by a factor of 11.3 (95% confidence interval [CI], 10.4 to 12.3); the rate of severe illness was lower by a factor of 19.5 (95% CI, 12.9 to 29.5). In a secondary analysis, the rate of confirmed infection at least 12 days after vaccination was lower than the rate after 4 to 6 days by a factor of 5.4 (95% CI, 4.8 to 6.1)
- 60 years of age or older and had received two doses of the BNT162b2 vaccine at least 5 months earlier, found that **the rates of confirmed Covid-19 and severe illness were substantially lower among those who received a booster (third) dose of the BNT162b2 vaccine.**

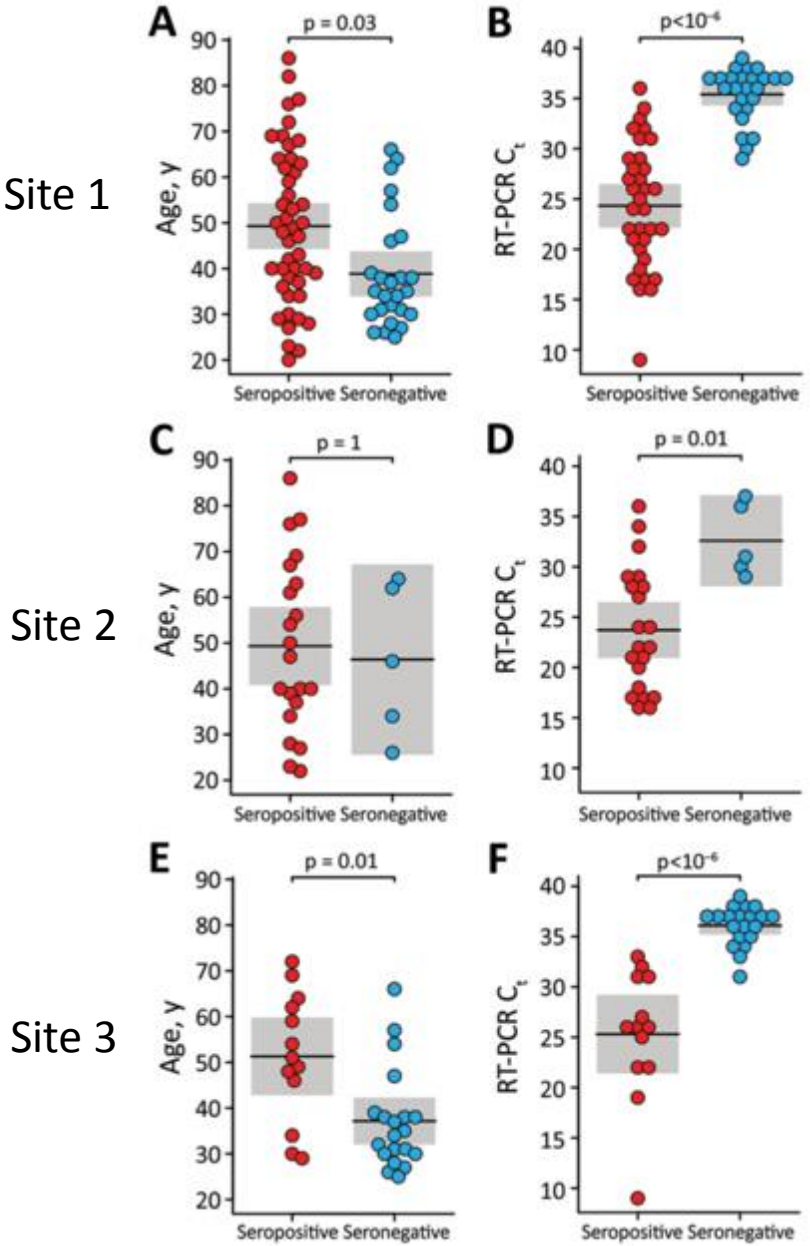


DOI: 10.1056/NEJMoa2114255

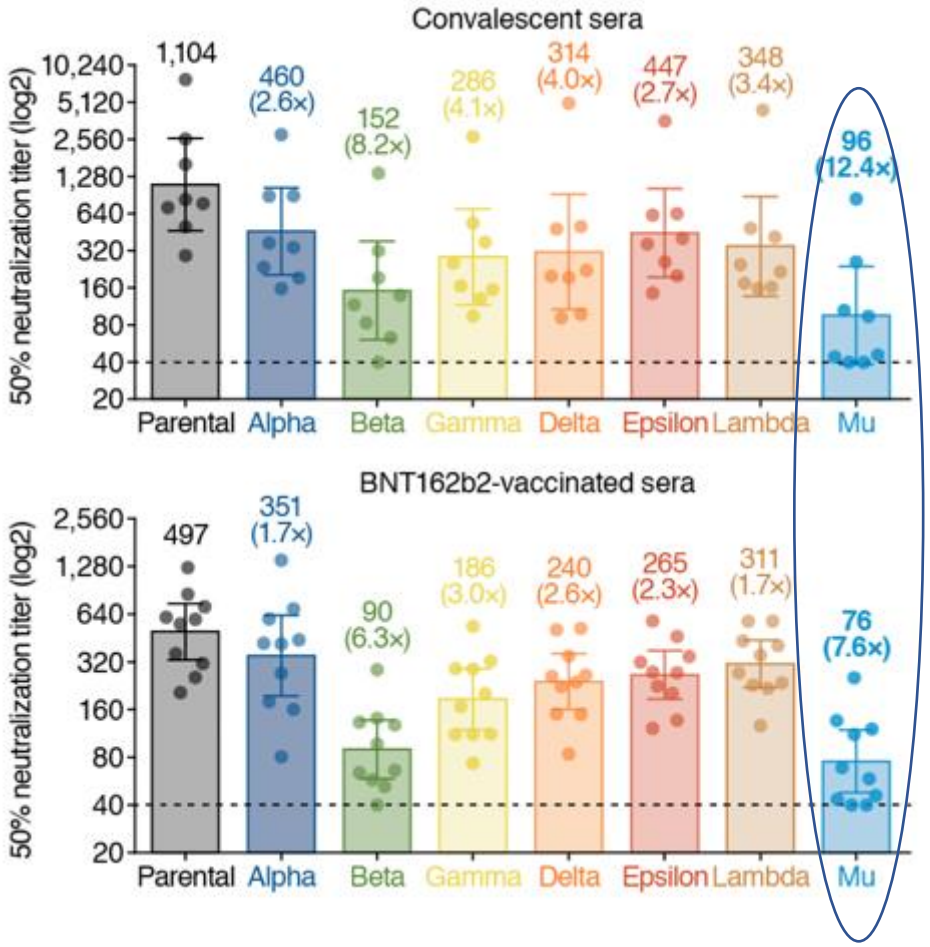
Predictors of Nonseroconversion after SARS-CoV-2 Infection

- Not all persons recovering from severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) infection develop SARS-CoV-2–specific antibodies.
- Recent study showed that nonseroconversion is associated with younger age and higher reverse transcription PCR cycle threshold values and identify SARS-CoV-2 viral loads in the nasopharynx as a major correlate of the systemic antibody response.

Richards et al, doi:10.1001/jamanetworkopen.2021.24331



The Mu Variant



- The majority of Mu variants harbors the following eight mutations in spike protein: T95I, YY144-145TSN, R346K, E484K, N501Y, D614G, P681H, and D950N.
- These include mutations commonly identified in VOCs: E484K (shared with Beta, Gamma), N501Y (shared with Alpha), P681H (shared with Alpha) and D950N (shared with Delta).
- Of those, the E484K change has been shown to reduce sensitivity towards antibodies induced by natural SARS-CoV-2 infection and vaccination.
- Virus neutralization assays revealed that the Mu variant is 12.4-fold more resistant to sera of eight COVID-19 convalescents, who were infected during the early pandemic (April–September, 2020), than the parental virus (*P*=0.0078).
- Mu variant was 7.6-fold more resistant to sera obtained from ten BNT162b2-vaccinated individuals compared to the parental virus (*P*=0.0020;).
- Beta VOC was thought to be the most resistant variant to date -- **Mu pseudoviruses were significantly more resistant to convalescent serum-mediated neutralization than Beta pseudoviruses**

Uriu et al. https://doi.org/10.1101/2021.09.06.459005

Do I need to worry about the Mu Variant?

- In short, not now…
- Makes up 39% of cases in Columbia and 13% in Ecuador, but less than 1% in US and less than 0.1% worldwide
- Mu has been in the US for the last 3 months and has not made any increases
- Unclear if its more transmissible or virulent – empiric evidence would suggest it is not more transmissible
- Continues to be a variant of interest (VOI) , not of concern (VOC) and definitely not a variant of high concern

Self-care Strategies for the Busy Health Care Professional

Glenn Goss

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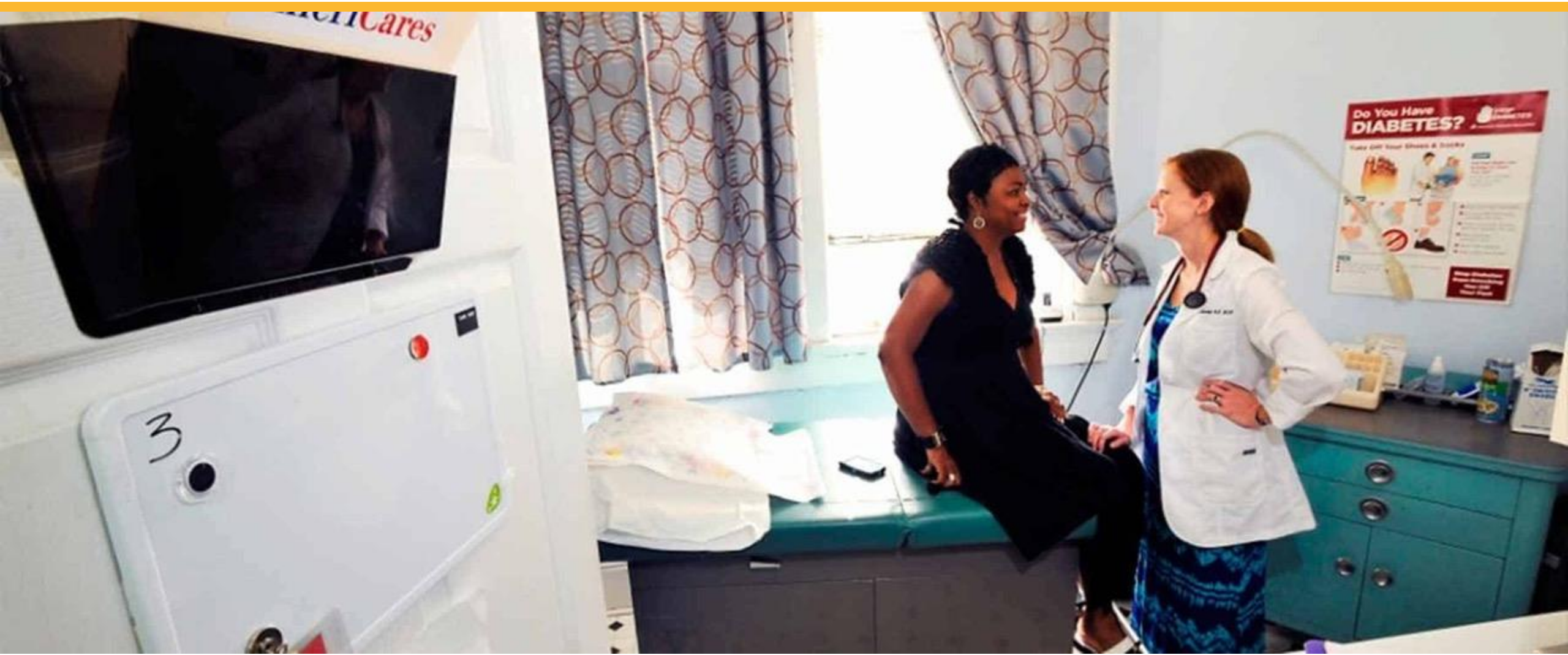

Some Recent Stressors

- Remote and/or stressful work
- Disconnection from colleagues, partners, donors etc.
- Covid-19 related issues – family health, school, separation and financial issues
- Child and elder care
- Personal loss and grief
- Systemic Racism
- Accumulation of stressful stories and events – hurricanes & wildfires

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JEFE ENFERMERA PAOLA ROJAS
JUNTOS PODEMOS LOGRARLO
DRA. RUTH DUQUE
JUNTOS PODEMOS LOGRARLO
REGENTE FARMACIA LUZ SERRANO
JUNTOS PODEMOS LOGRARLO

Objectives

Recognize signs of personal and work stress.

Understand the health consequences that prolonged emotional distress can generate

Understand the natural emotional reactions to emergencies.

Learn coping skills and self-care strategies for handling emotional distress and supporting personal wellness.

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Common Stress Responses of Health Care Providers

- **Burnout:**
  - The physical and emotional exhaustion that one experiences due to low job satisfaction, feeling powerless, or overwhelmed at work

- **Compassion Fatigue:** Emotional and physical impact of caring for others which can affect a provider's ability to refuel and regenerate.

- **Secondary Traumatic Stress:** The emotional reaction that results when hearing an individual's firsthand trauma experiences.

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Various Symptoms of …

Burnout

- Impaired attention & concentration
- Chronic fatigue
- Issues with sleep/insomnia
- Feeling detached & cynical
- Over identification with patients
- Poor work performance/ lack of productivity
- Increased feelings of:
  - Anger
  - Agitation
  - Numbness
  - Isolation

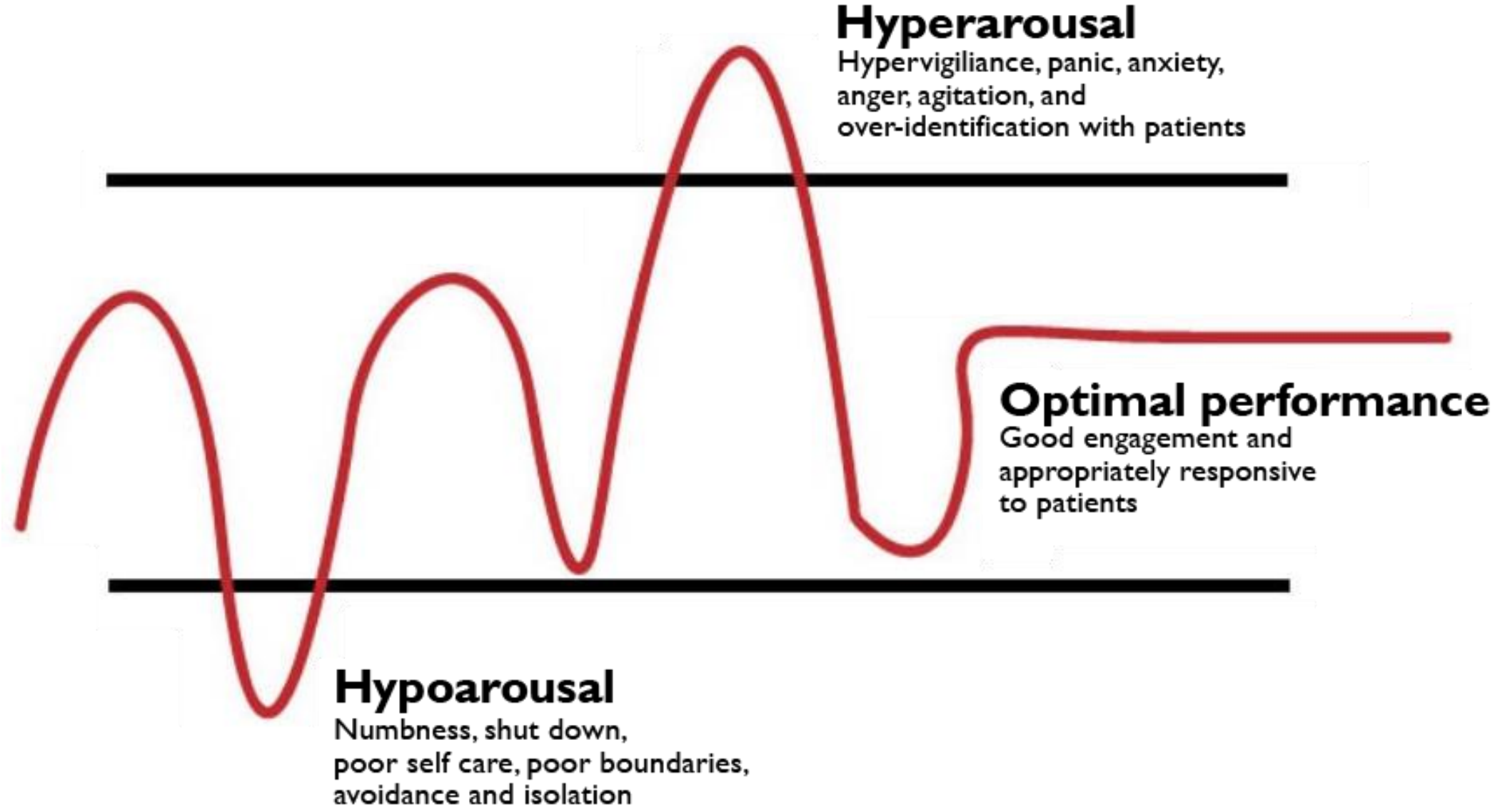
Compassion Fatigue

- Feelings of:
  - Self-contempt
  - Hopelessness
  - Anger/Agitation
- Thinking negatively
- Blaming others for their hardships
- Excessive blaming
- Reduced ability to feel empathy towards others
- Experiencing dread / avoidance of work
- Losing passion for work
- Withdrawing from usual routine, social supports

Secondary Trauma

- Having low energy/fatigue
- Experiencing trauma injury and/or intrusive thoughts
- Feeling numb or detached
- Constantly feeling overwhelmed
- Engaging in unhealthy coping mechanisms
- Experiencing confusion, difficulty with decision making
- Isolation
- Becoming emotionally unavailable

Window of Tolerance



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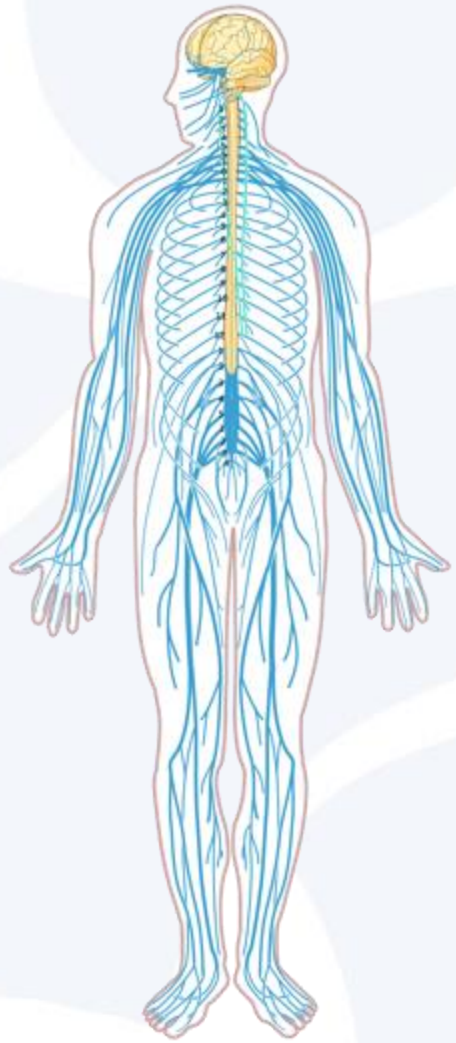
How do you manifest stress?

Healthy Functions of Natural Stress Reactions

- Amygdala: the brain's smoke detector
  (Van Der Kolk, 2014)
- Survival response: 'Fight - Flight - Freeze'
- Stress hormones
  - Cortisol
  - Adrenaline
- Protection and Healing (Short Term)
  (Horesh, 2015)



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Effects of Sustained Stress

- General Adaptation Syndrome (Selye,1956)
  - Alarm stage
  - Resistance stage
  - Exhaustion stage

- Health complications potentially brought on by long term sustained stress in health care workers:
  - Immune cell function decreases, making one susceptible to infections (Horesh, 2015)
  - Similarly, one's healing rate is slowed down (Horesh, 2015)

Coping Mechanisms

Maslow's Hierarchy of Needs

How secure did you feel in these categories prior to the pandemic?

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Healthy Coping Strategies During the Pandemic

Environmental

- Take a break from news and social media
- Decrease screen time
- Spend time in nature

Emotional

- Use mindfulness to remain focused on the “here and now”
- Practice Self-Compassion
- Validate your emotional responses and say them out loud.
- Dim the lights or turn on the lights based on your mood or arousal

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Healthy Coping Strategies During the Pandemic

Social

- Connect with others – be physically distant, but socially connected

Physical and/or Behavioral

- Take a warm bath or shower
- Practice Yoga/Stretching
- Be physically active- dance, bounce, shake; just move!
- Eat healthy meals

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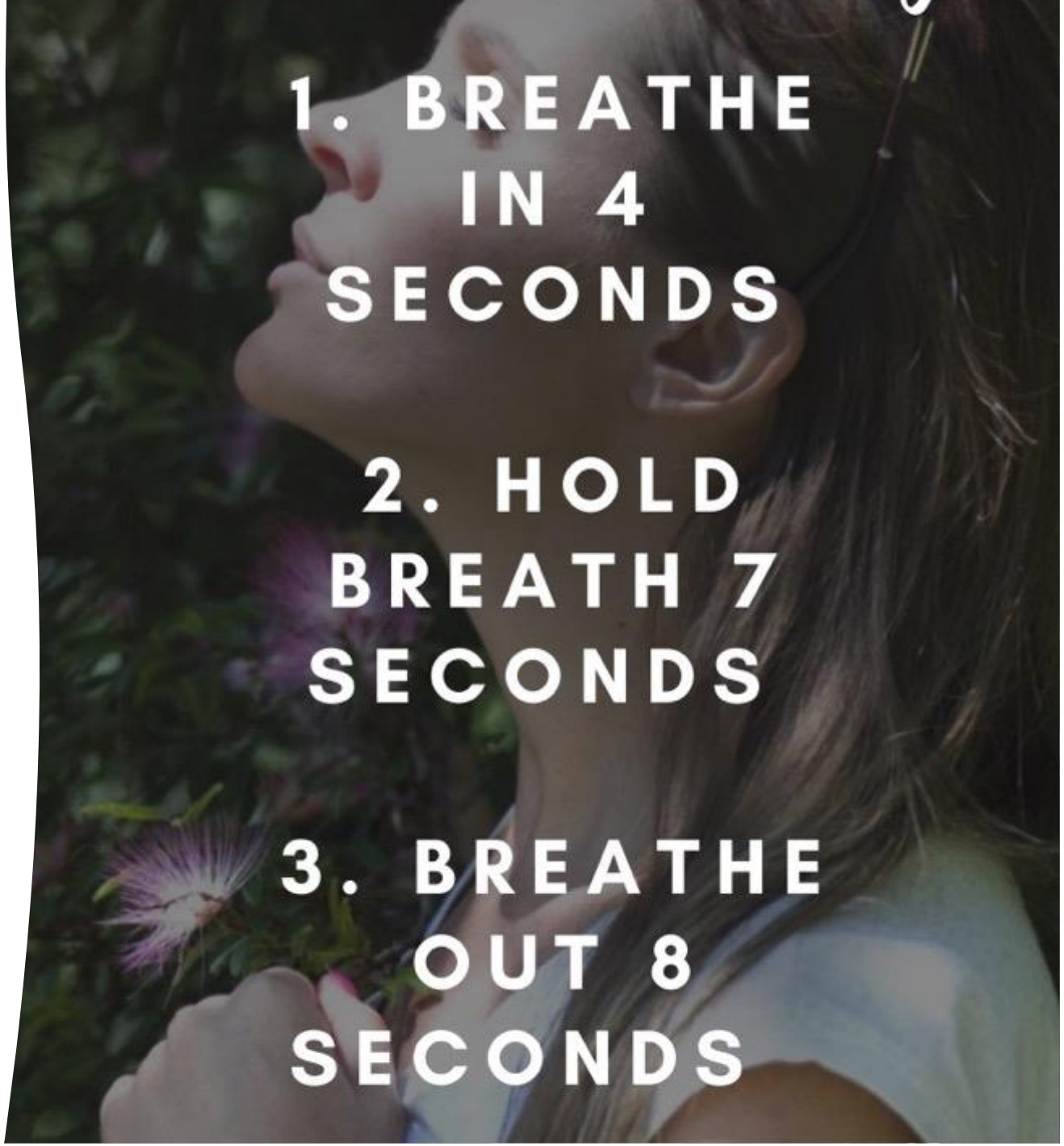
Mindfulness Practice



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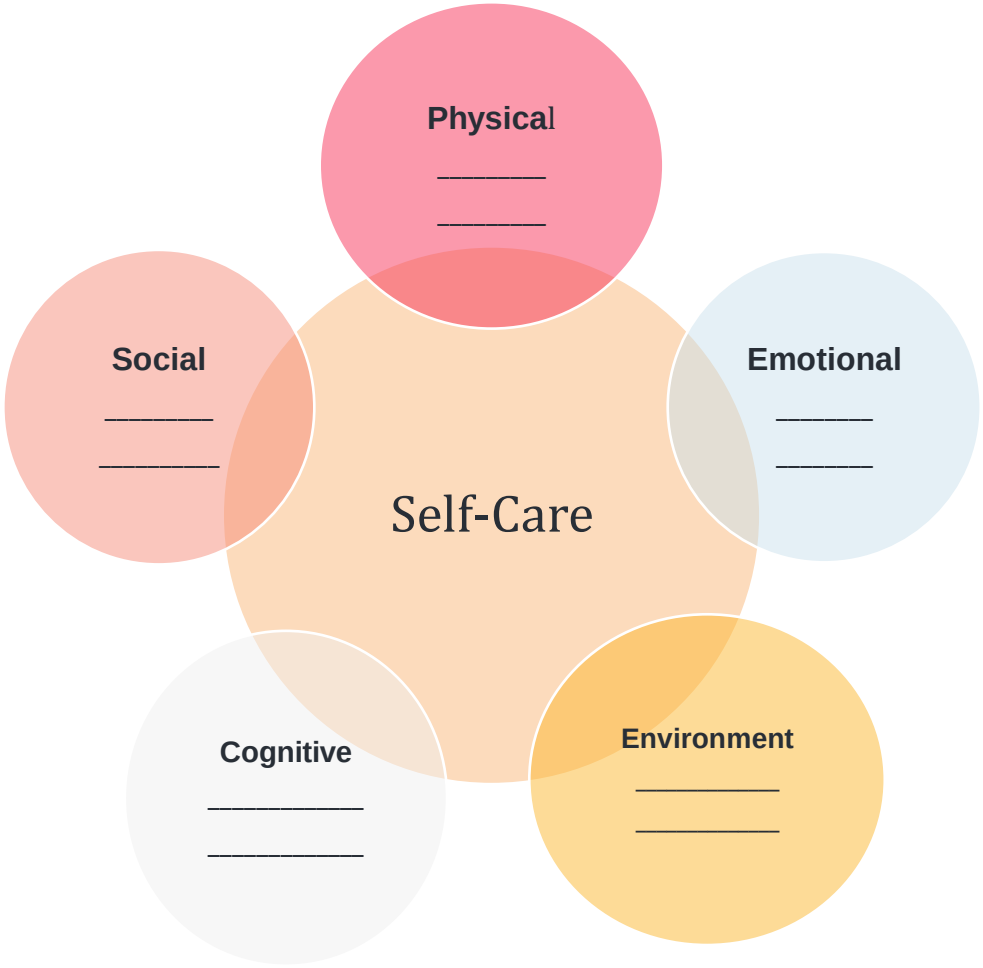
Self-care plan



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Learn more at: https://www.americares.org/what-we-do/emergency-programs/resources-for-clinics-health-workers/

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Questions?

Thank you!

Next Session: Thursday, September 16th,12-1pm CST

Resources & recording of the session

https://www.echo-chicago.org/resources/covid19/

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