

I-VAC Adult Learning Collaborative for COVID-19 Vaccination



Please use your first name and health center name when you join the session



Use the “**chat**” feature to let us know if you have a question



Please remember to **mute your microphone** unless speaking



If you can't connect audio via computer or lose computer audio at anytime, you can call in to session at **(669) 900-6833, Meeting ID 812-8864-4528##**

Disclosures

- No one in a position to control the education content of the activity has any relevant financial disclosures with ineligible companies to disclose.
- What gets said here today may change based on new data and recommendations
 - Knowledge is shared more rapidly through ECHO



Updates in COVID-19

Stephen Schrantz, MD

December 14, 2022

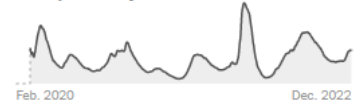
Coronavirus in the U.S.: Latest Map and Case Count

New reported cases

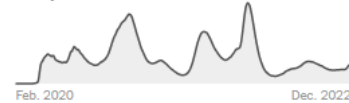
All time Last 90 days



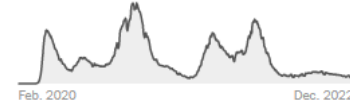
Test positivity rate



Hospitalized

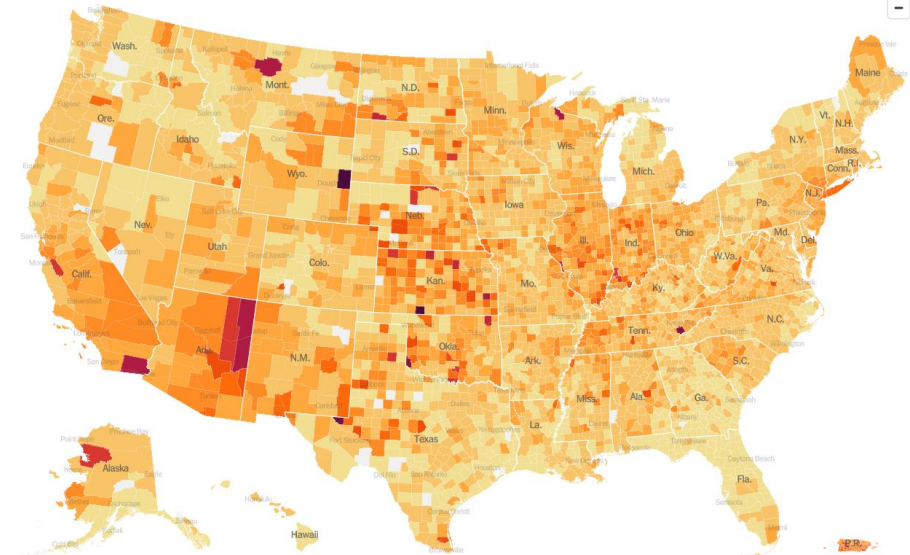


Deaths

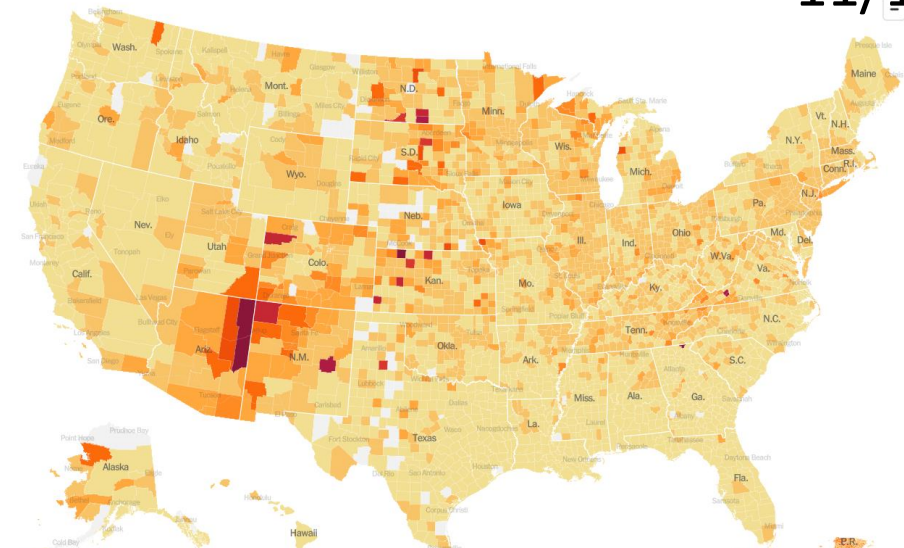


	DAILY AVG. ON DEC. 12	PER 100,000	14-DAY CHANGE
Cases	65,528	20	+56%
Test positivity	12%	—	+25%
Hospitalized	38,331	12	+24%
In I.C.U.s	4,407	1	+21%
Deaths	468	<1	+48%

12/13/22



11/16/22



Daily Update for the United States

Cases

New Cases (Weekly Total)
458,986

Case Trends



Oct 2022 Dec 2022

Deaths

New Deaths (Weekly Total)
2,981

Death Trends



Oct 2022 Dec 2022

Hospitalizations

New Admissions (Daily Avg)
4,947

Admission Trends

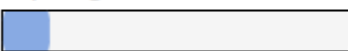


Oct 2022 Dec 2022

Vaccinations

% 5+ with Updated Booster Dose
13.5%

People Age 5+



Total Cases
99,241,649

Total Deaths
1,080,472

Current Hospitalizations
29,854

Total Updated Booster Doses (People 5+)
42,017,288

CDC | Data as of: December 13, 2022 4:06 PM ET. Posted: December 13, 2022 4:59 PM ET

CHICAGO | COVID-19 Summary

Data current as of Dec 13, 2022.
Data are updated M-F at 5:30 p.m., except for City holidays.
All data are provisional and subject to change.

SUMMARY

CASES

CASES BY ZIP

TESTS

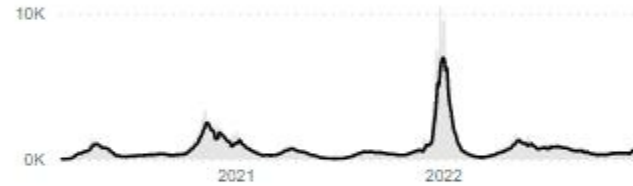
VACCINES

VACCINES BY ZIP

[Learn how to use this dashboard.](#)

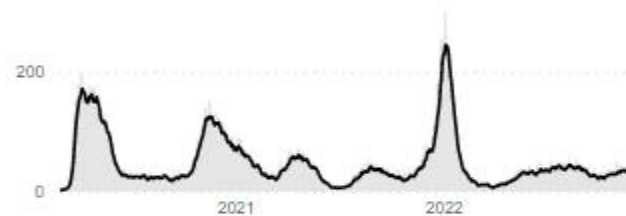
LABORATORY-CONFIRMED CASES

605 ▲ 598 (+1%) 730,126 22.3
Current daily avg Prior week Cumulative Daily rate per 100,000



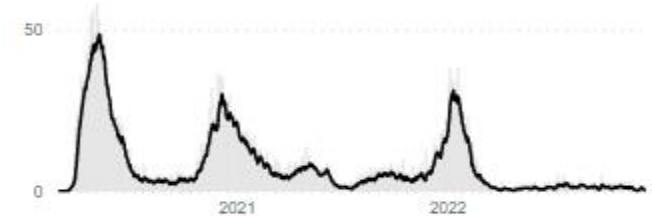
HOSPITALIZATIONS

41 ▲ 35 (+18%) 48,637 1.5
Current daily avg Prior week Cumulative Daily rate per 100,000



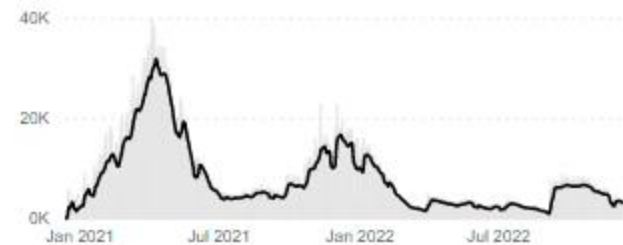
DEATHS

0.29 ▼ 0.86 (-67%) 7,959 0.0
Current daily avg Prior week Cumulative Daily rate per 100,000



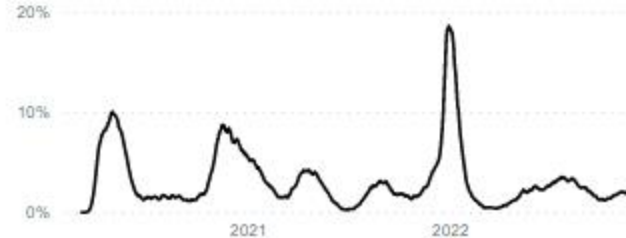
VACCINATIONS ADMINISTERED

3,080 ▼ 5,647,795 71.4% 79.9%
Current daily avg Cumulative Completed series At least one dose



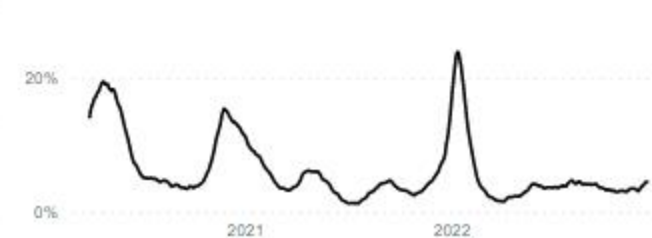
EMERGENCY ROOM VISITS

2.4% ▼ 2.6%
Current daily avg Prior Week



HOSPITAL BEDS IN USE

4.6% ▲ 4.1%
Current daily avg Prior Week



Chicago's COVID-19 Risk Level is **MEDIUM**

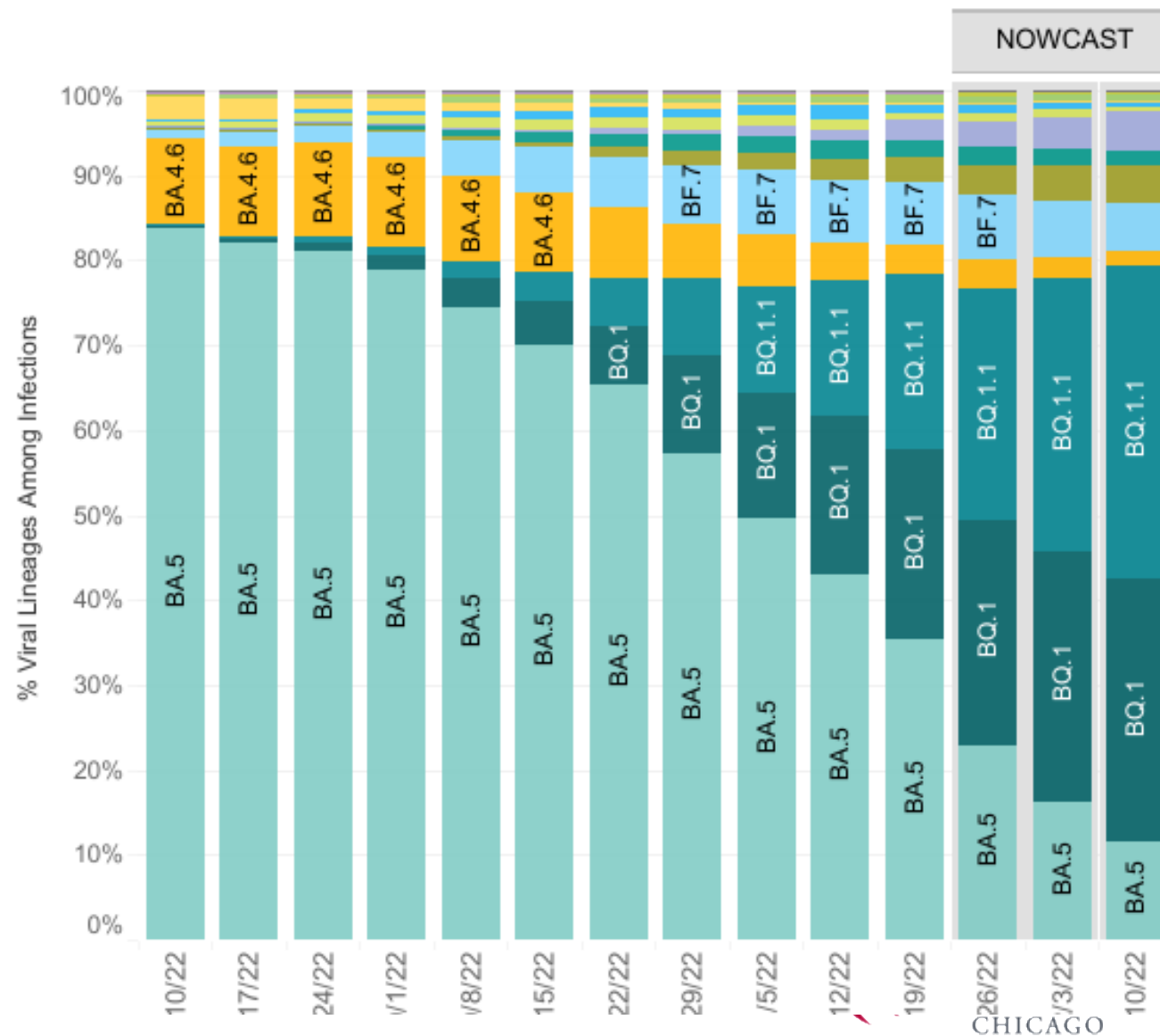


United States: 12/4/2022 – 12/10/2022 NOWCAST

USA

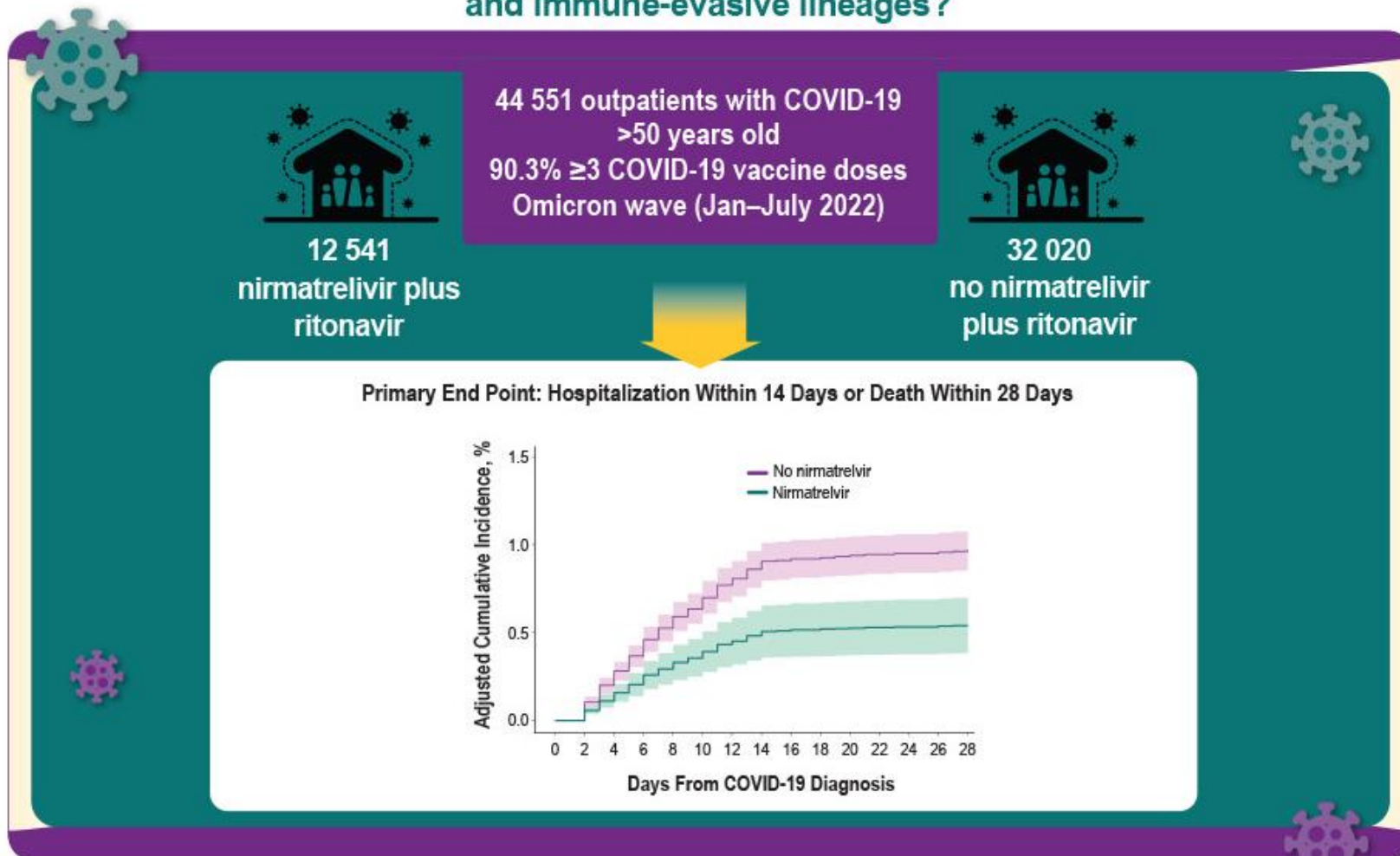
WHO label	Lineage #	US Class	%Total	95%PI	
Omicron	BQ.1.1	VOC	36.8%	34.1-39.6%	
	BQ.1	VOC	31.1%	29.0-33.4%	
	BA.5	VOC	11.5%	10.3-12.7%	
	BF.7	VOC	5.7%	5.0-6.5%	
	XBB	VOC	4.7%	2.6-8.1%	
	BN.1	VOC	4.3%	3.8-4.9%	
	BA.5.2.6	VOC	1.7%	1.4-2.0%	
	BA.4.6	VOC	1.6%	1.4-1.9%	
	BF.11	VOC	0.8%	0.6-1.0%	
	BA.2	VOC	0.7%	0.5-1.1%	
	BA.2.75	VOC	0.6%	0.5-0.7%	
	BA.2.75.2	VOC	0.4%	0.3-0.5%	
	BA.4	VOC	0.0%	0.0-0.0%	
	BA.1.1	VOC	0.0%	0.0-0.0%	
	B.1.1.529	VOC	0.0%	0.0-0.0%	

United States: 9/4/2022 – 12/10/2022



CHICAGO

Does nirmatrelvir plus ritonavir (Paxlovid) reduce risk for hospitalization or death among outpatients with COVID-19 in the setting of prevalent SARS-CoV-2 immunity and immune-evasive lineages?



The overall risk for hospitalization or death was already low (1%) after an outpatient diagnosis of COVID-19, but nirmatrelvir plus ritonavir reduced this risk further.

Walgreens Launches Free Paxlovid Delivery Services with DoorDash & Uber

- Eligible patients must have a Paxlovid prescription from a healthcare provider. After the pharmacy has filled the prescription and before it gets picked up, individuals can go online to select Same Day Delivery by visiting [Walgreens.com/PrescriptionDelivery](https://www.walgreens.com/PrescriptionDelivery), the Walgreens app or by calling their store



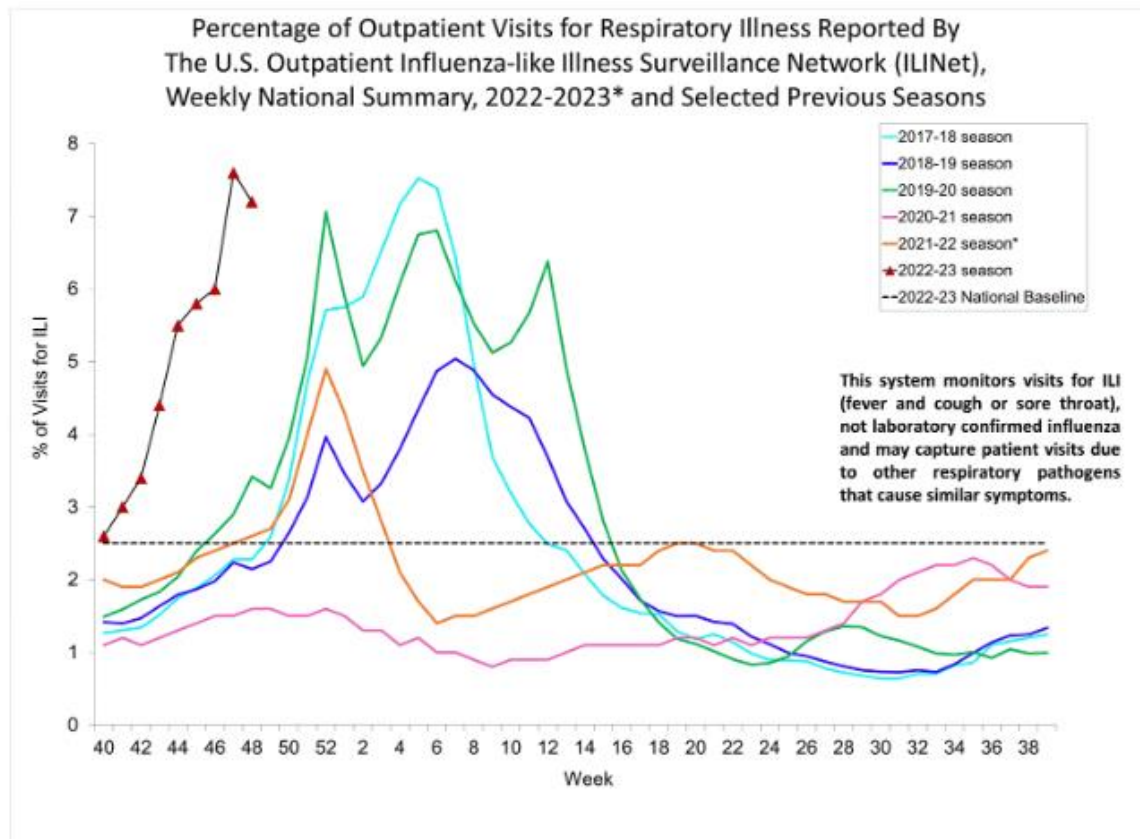
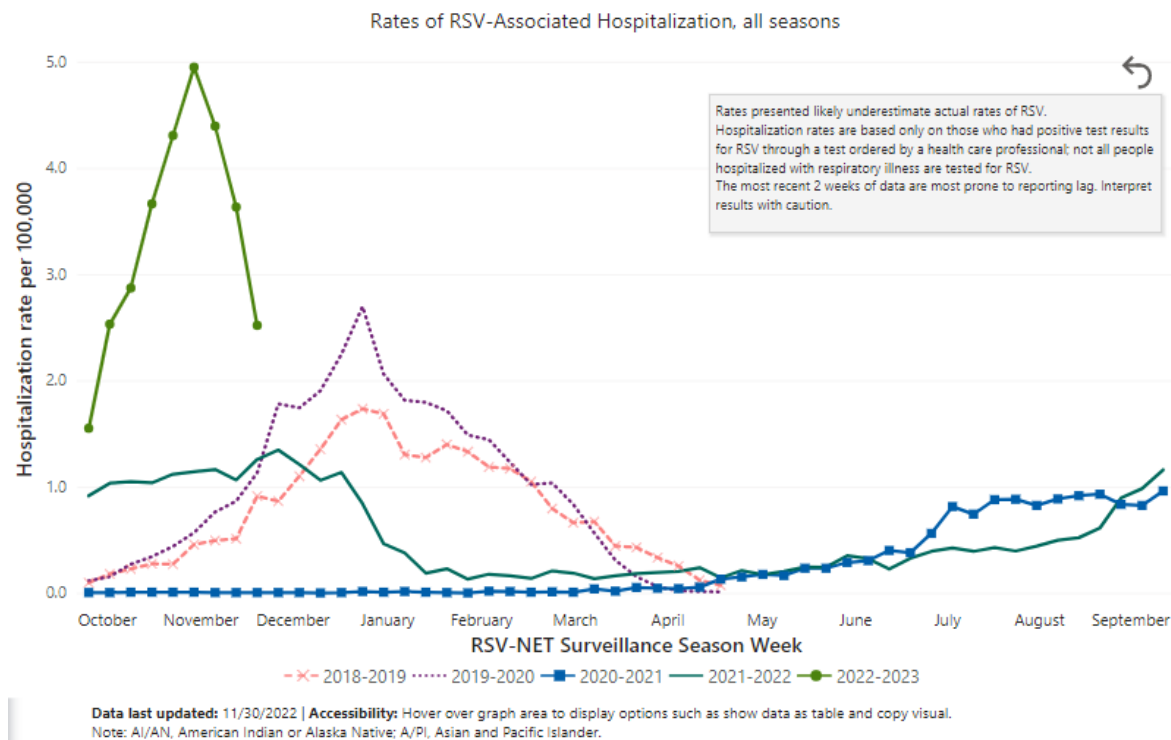
The “Tri-demic”

- Influenza, RSV and SARS CoV-2 are all circulating presently
- The cumulative hospitalization rate in the FluSurv-NET system is higher than the rate observed in week 48 during every previous season since 2010-2011
- RSV continues to be a historic levels, but is declining
- The only real way to “know” is to test

• RARELY •• SOMETIMES ••• OFTEN

Symptoms ▾	Cold	Flu	Covid-19	R.S.V.
<input type="checkbox"/> Cough	•••	•••	•••	•••
<input type="checkbox"/> Difficulty breathing	•	•	•••	••
<input type="checkbox"/> Fatigue	••	•••	•••	•
<input type="checkbox"/> Fever	•	•••	••	••
<input type="checkbox"/> Headaches	••	•••	•••	••
<input type="checkbox"/> Muscle pain or body aches	••	•••	••	•
<input type="checkbox"/> New loss of taste or smell*	•	•	••	•
<input type="checkbox"/> Runny or stuffy nose	•••	••	••	•••
<input type="checkbox"/> Sneezing	•••	••	••	••
<input type="checkbox"/> Sore throat	•••	••	•••	•
<input type="checkbox"/> Vomiting or diarrhea	•	••	••	•
<input type="checkbox"/> Wheezing	•	•	•	•••

*A stuffy nose may temporarily decrease the ability to taste or smell but it does not cause a sudden, complete loss of these senses. • Source: Centers for Disease Control and Prevention



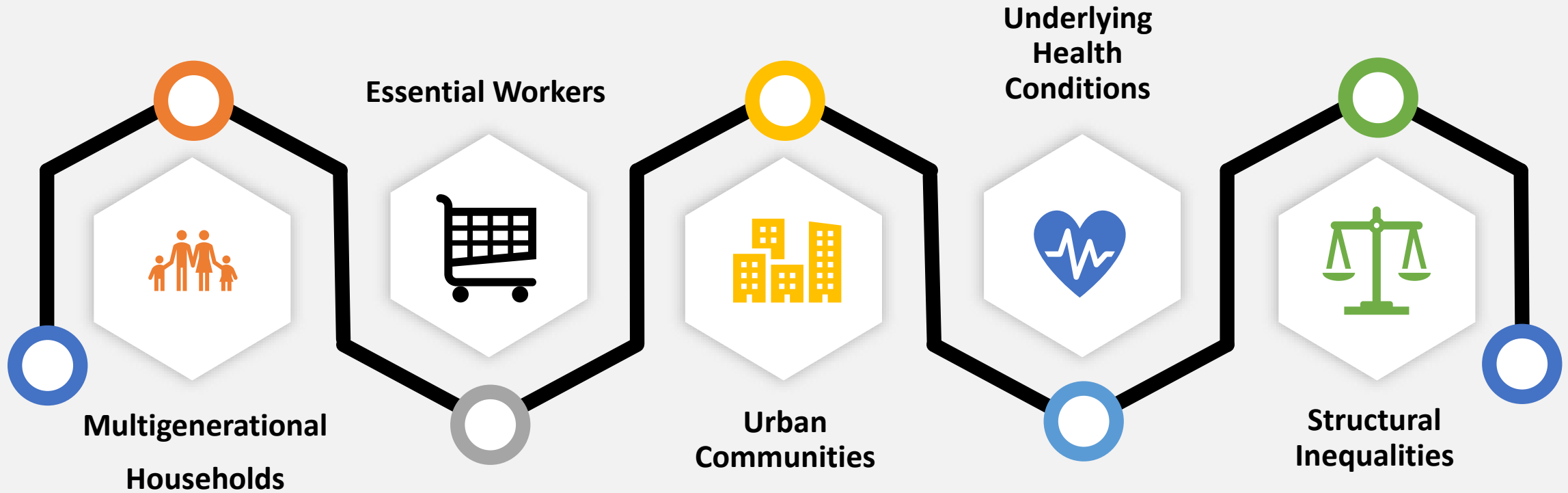
Mental Health in the Time of COVID-19

Daniel Yohanna, MD
Associate Professor of Psychiatry,
Interim Chair, Department of Psychiatry and Behavioral Neuroscience
University of Chicago Medicine
December 14, 2022

The Problem: as of 12/14/2022

- Worldwide an estimated 654,692,749 people have been infected with the COVID-19
 - 6,661,628 died
- In the U.S. 101,413,047 have been infected (the most of any country in the world)
 - 1,110,510 have died (the most of any country in the world)
 - Johns Hopkins [Coronavirus COVID-19 \(2019-nCoV\) \(arcgis.com\)](https://arcgis.com)
- New strains of the virus have been detected in 33 countries
- 80% vaccinated; 68% of US adults fully vaccinated (two)
- **But it has not been affected everyone uniformly in the U.S.**

FACTORS IN COVID-19 INFECTIONS



Mental Health for Patients

- Psychiatric Complications in the Population
 - 40% of respondents in June 2019 report depression or anxiety(31%), traumatic stress (26%), ↑SUD (13%), or SI (11%)
 - Elevated in Black, Hispanic, essential workers, unpaid adult caregivers, and those with preexisting psychiatric disorders (Czeisler 2020 CDC)
 - Many COVID-19 survivors will be left traumatized by their ICU experience
 - One in five COVID-19 patients are diagnosed with a mental illness within three months 29% with depression (Vindegaard 2020)
 - Over half of those who respond to postal questionnaire following treatment on ICU in the UK reported significant symptoms of anxiety, depression or PTSD. When symptoms of one psychological disorder are present, there is a 65% chance they will co-occur with symptoms of one of the other two disorders.
 - Depression following critical illness is associated with an increased mortality risk in the first 2 years following discharge from ICU
- Neurologic Complications (Varatharaj 2020)
 - Of 125 patients with complications 62% have Cerebrovascular events, 31% had Mental Status changes
 - Stroke> altered mental status: delirium>psychosis> affective disorders

Mental Health for Health Care Workers (HCWs)

- Psychiatric Complications in Health Care Workers
 - Health care workers 2 years after SARS outbreak elevated rates of smoking, drinking, absenteeism, presenteeism. (Lance 2008)
 - 20% of ICU workers will have PTSD after 2 months exposure
 - Burnout is increasing. Over 50% of physicians report being burned out
 - 78% of psychiatrists in No. America had high burnout score; 16.1% had PHQ-9 \geq 10 (Summers 2020)
 - In all HCWs 23.2% with anxiety, 22.8% with depression, 38.9% with insomnia (Pappa 2020)

Disaster: An event that requires **resources** beyond the capability of a community and requires a multi-institutional response

FEMA Jul 28, 2006

Trauma: An event that requires coping resources beyond the capability of an individual

Stress: A state in which the body devotes coping resources in response to an environmental challenge

Burnout: A depressive like state, usually in reference to the workplace, and originally describing healthcare workers without sufficient resources.

Traumatic Stress + Burnout = Compassion Fatigue

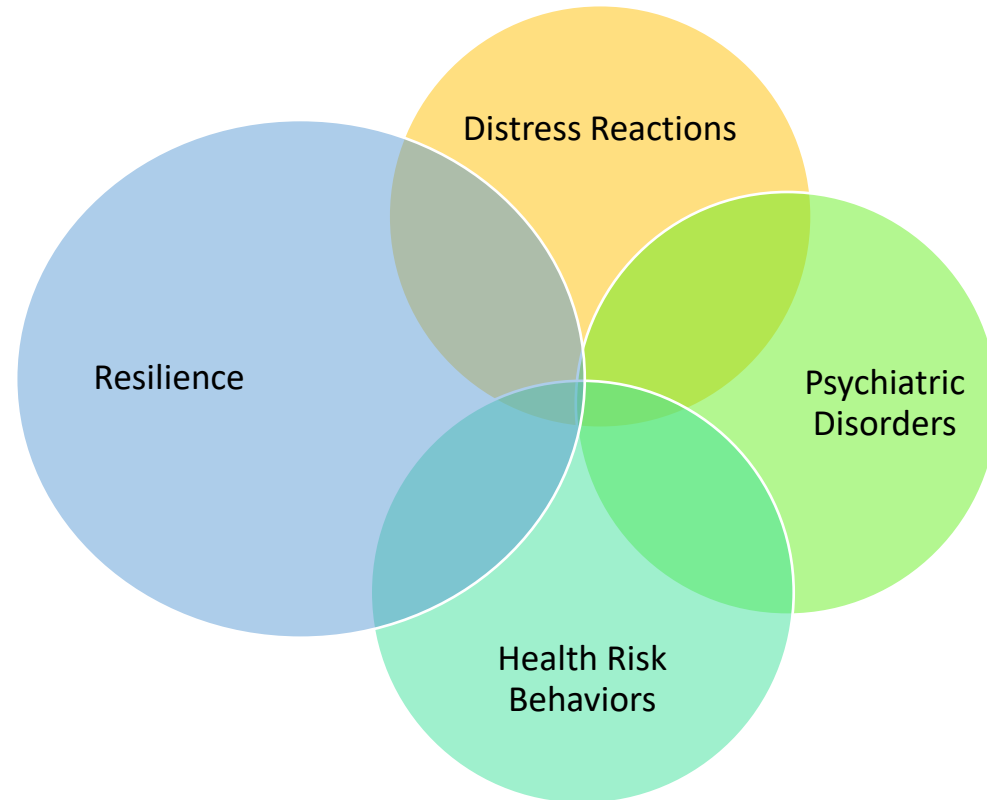
Burnout

- **Emotional depletion**: feeling frustrated, tired of going to work, hard to deal with others at work. Question#1: *“I feel burned out from my work”*
- **Detachment/cynicism**: being less empathic with patients/others, detached from work, seeing patients as diagnoses/objects/sources of frustration
- **Low personal achievement**: experiencing work as unrewarding, “going through the motions”
- **Depersonalization**: thoughts and feelings seem unreal or not belonging to oneself
Question#2: *“I have become more callous toward people since I took this job”*
- Measured by Maslach Burnout Inventory. 22 questions, 7-point Likert scale but 2 questions above have most significant impact at once per week or more

Compassion Fatigue

- **Compassion Fatigue:** Secondary traumatic stress related breakdown in the ability to give compassionate care to another person
 - **Cognitive:** poor concentration, perfectionism, preoccupation with trauma, self-harm thoughts
 - **Emotional:** anxiety, guilt, shutdown, numbness
 - **Behavioral:** withdrawn, irritable
 - **Spiritual:** questioning the meaning of life
 - **Personal relations:** withdrawal, decreased interest in intimacy
 - **Somatic:** shock, swearing, somatic complaints
 - **Work performance:** low morale, low motivation, avoiding tasks, detachment

Responses to a Disaster



- Sleep difficulties
- Decreased Sense of Safety
- Physical (Somatic) Symptoms
- Irritability, Anger
- Distraction, Isolation

- Depression
- PTSD
- Anxiety
- Complex Grief

- Alcohol, Tobacco, Rx meds
- Family Distress
- Interpersonal Conflict/Violence
- Disrupted Work/Life Balance
- Restricted Activities/Travel

What is Resilience?

- The capacity to withstand stress and catastrophe.
- The ability to work through emotions and effects of stress and painful events.
- A product of developmental, cognitive, and affective psychological processes.

Creating Resilience



Stay informed but monitor how often. Unplug. Avoid reading the comments sections after online articles or blog posts. Limit your exposure to triggers.



Restore the well that is you. Rest, relax, engage in energizing activities.



Let others replenish the well. Ask for help. Seek nurturing from those who love and understand you.



Stay spiritually grounded. Prayer, mindfulness - connect with whatever your higher power may be.



Remember your body. Relax, meditate, exercise, eat well, sleep, and BREATHE. Avoid or minimize use of tobacco, alcohol, drugs, and caffeine.



Be intentionally kind and gentle with yourself and those around you. Laugh, practice random acts of kindness, speak positively to yourself and others.

Community Resiliency Model (CRM)

My thanks to Dr. Linda Grabbe and Jordan Murphy. Trauma Resource Institute



***Traumatic/Stressful Event
or
Stressful/Traumatic
Reminders***

Stuck in High Zone

*Edgy
Irritable
Mania
Anxiety & Panic
Angry outbursts
Pain*

*Depression/Sadness
Isolated
Exhaustion/Fatigue
Numbness*

Stuck in Low Zone

***Resilient
Zone***

Graphic adapted from an original graphic of Peter Levine/Heller, original slide design by Genie Everett/Adapted by Elaine Miller-Karas

Community & Trauma Resiliency Skills

- Community Resiliency Model: www.ichillapp.com
- Tracking
 - Find comfort in your body
- Resourcing
 - What gives you pleasure and strength. Describe it
- Grounding
 - Find a comfortable position; “Mindfulness”; 3-minute exercise
- Gestures
 - Self-calming or self-soothing movements
- Shift and Stay
 - Shift attention away from uncomfortable sensations using above skills. Stay there

Conclusion: What is Resilience?

1. A supportive social network
2. Social capital: mentors, role models past and present
3. Viewing oneself as a survivor rather than victim; grit; tenacity
4. Facing one's fears and minimizing avoidance: acceptance of negative emotions as normal
5. Using emotion regulation skills: self soothing, distraction, mindfulness, acceptance, interpersonal skills
6. Positive emotions: compassion, forgiveness, gratitude, joy, empathy, love, humor
7. Meaning making pro-social activities as an altruistic gift; living by one's values
8. Physical activities, sleep hygiene, good nutrition, and avoidance of high-risk activities

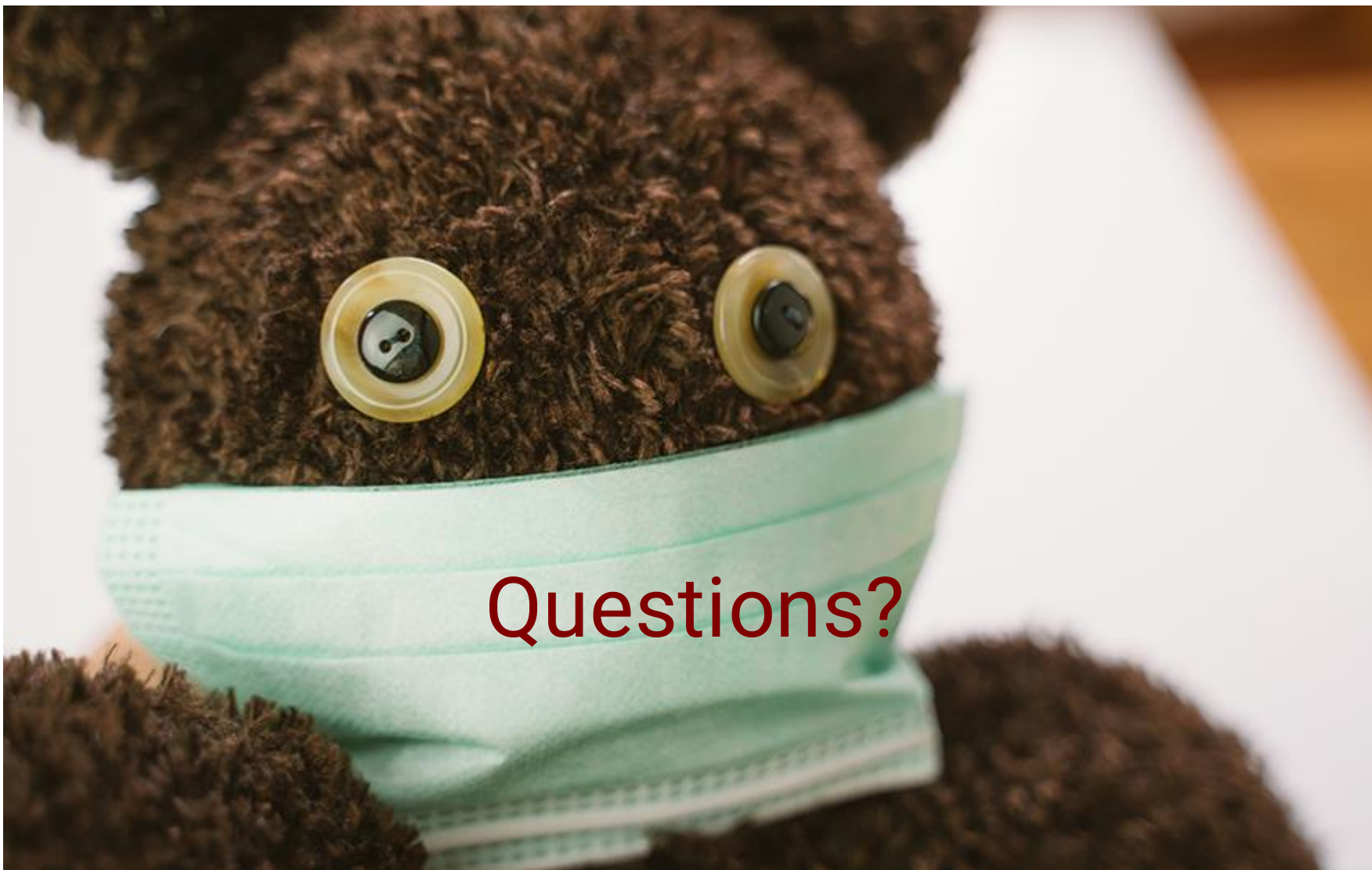
Psychiatric Symptoms Post Vaccination

- 14 cases published describing psychiatric side effects within 10 days of vaccination
 - Altered MS: for example disorientation
 - Psychosis: hallucinations
 - Mania
 - Depression
 - Functional neurological disorders: catatonia, facial paralysis arm or leg weakness

Post Vaccine Psychiatric Symptoms

- Vaccines increase in pro-inflammatory cytokines
 - Can cause a cytokine storm
 - NMDA receptor hypofunction which increases dopamine and possibly psychotic symptoms
 - Other theory is this is an NMDA encephalitis
- Less likely with mRNA vaccine
- Occurs mostly in young to middle-aged adults

(Balasubramanian 2022)



What topics are of interest to you?

CME credits

You can claim CME credits for all IVAC Adult Learning Collaborative sessions between October-December 2022 together. Attendance will be sent out next week.

Next Session: Wednesday, February 1st

For any questions, email us at
kshwest@peds.bsd.uchicago.edu