

## Allergy & Asthma Network Upcoming Webinars



**EPR-4 vs. GINA –  
Asthma Care Differences,  
Overlap & Challenges in  
2021**

February 10<sup>th</sup>  
3:00 PM ET



**COVID-19:  
New Approaches to  
Prevention & Treatment  
for Allergy & Asthma  
Patients**

February 17<sup>th</sup>  
4:00 PM ET



**Sleep Issues:  
The Effect of Allergies,  
Asthma & Related  
Conditions**

February 25<sup>th</sup>  
4:00 PM ET

Look for more information at [Allergyasthmanetwork.org](https://Allergyasthmanetwork.org)



## The Long-Haul Consequences of COVID-19: Asthma, Allergies and All Conditions

February 4, 2021

### OUR SPEAKERS



**Dr. Purvi  
Parikh**



**Tonya  
Winders**

- Clinical Assistant Professor of Medicine NYU Langone School of Medicine & Director, Allergy and Asthma Association, Murray Hill
- National Spokesperson, Allergy & Asthma Network

- President & CEO, Allergy & Asthma Network
- President, Global Allergy & Airways Patient Platform

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## PROGRAM OUTLINE

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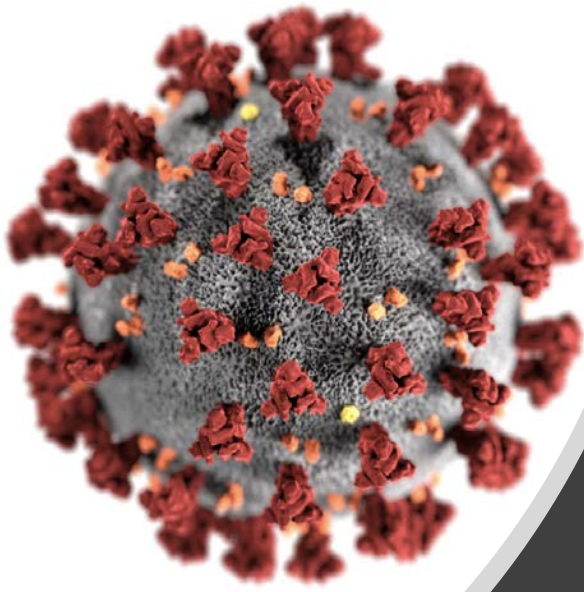
- Current State of COVID-19
- A Look Back at COVID-19
- Long-Haul Consequences of COVID-19



## Poll Question



- **We'd like to know who is with us today!**
- **What category best describes you? (we have a limited number of answers or would offer more!)**



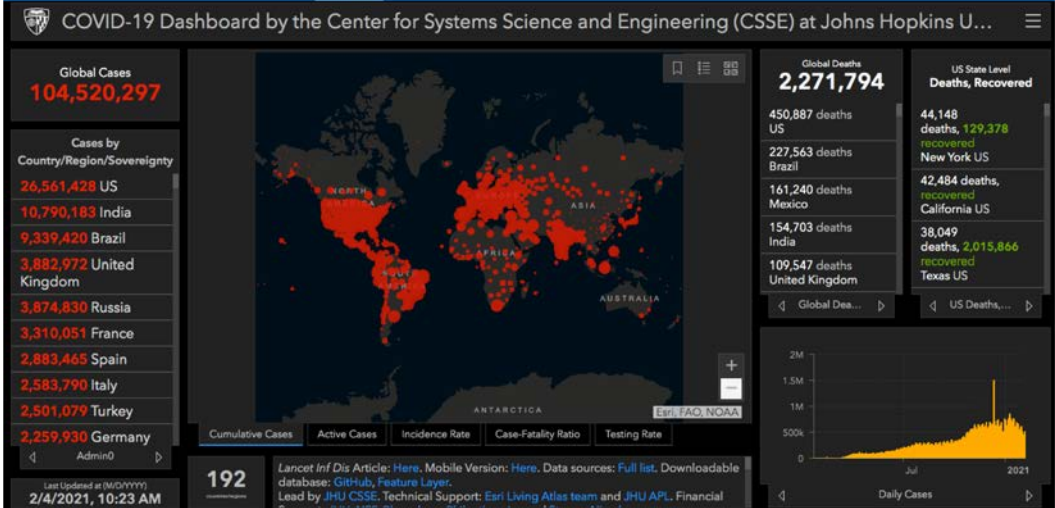
# Current State of COVID-19

February 2021

*Tonya Winders*

## Johns Hopkins Global Map

February 4<sup>th</sup> – 10:23 AM



COVID-19 Dashboard by the Center for Systems Science and Engineering (CSSE) at Johns Hopkins U...

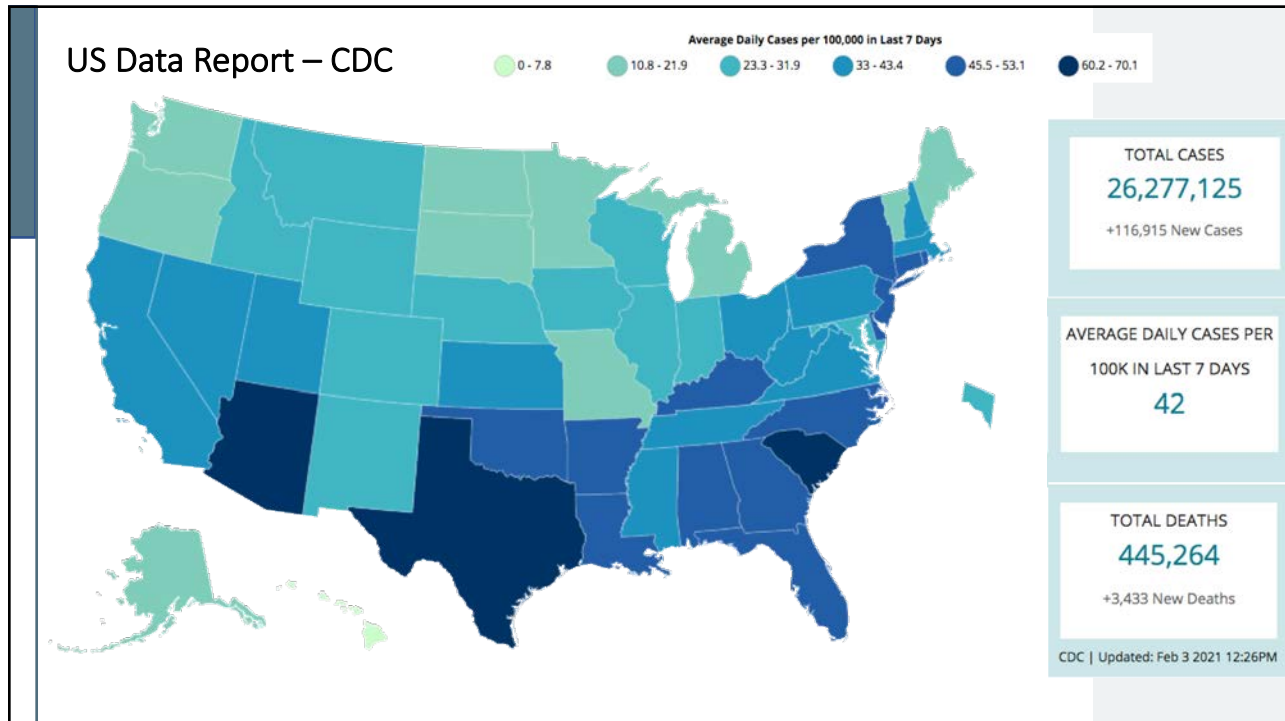
Global Cases	Global Deaths	US State Level Deaths, Recovered
<b>104,520,297</b>	<b>2,271,794</b>	US: 44,148 deaths, 129,378 recovered
US: 26,561,428	US: 450,887 deaths	New York US: 42,484 deaths, recovered
India: 10,790,183	Brazil: 227,563 deaths	California US: 38,049 deaths, 2,015,866 recovered
Brazil: 9,339,420	Mexico: 161,240 deaths	Texas US: 109,547 deaths, recovered
United Kingdom: 3,882,972	India: 154,703 deaths	
Russia: 3,874,830	United Kingdom: 109,547 deaths	
France: 3,310,051		
Spain: 2,883,465		
Italy: 2,583,790		
Turkey: 2,501,079		
Germany: 2,259,930		

192

Lancet Inf Dis Article: [Here](#). Mobile Version: [Here](#). Data sources: [Full list](#). Downloadable database: [GitHub](#), [Feature Layer](#). Lead by JHU CSSE. Technical Support: [Esri Living Atlas team](#) and [JHU APL](#). Financial

2/4/2021, 10:23 AM

Daily Cases



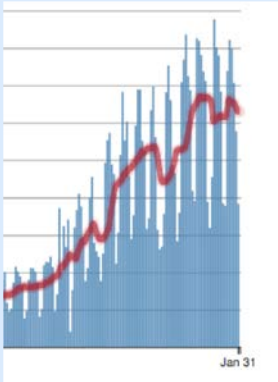




### In the News

- Travel restrictions tightening
  - Brazil, UK, Ireland, 26 countries in Europe
- Dr. Anthony Fauci said double-masking is a logical strategy to stop the spread of COVID-19
- New strains of COVID-19 a concern

## In the News



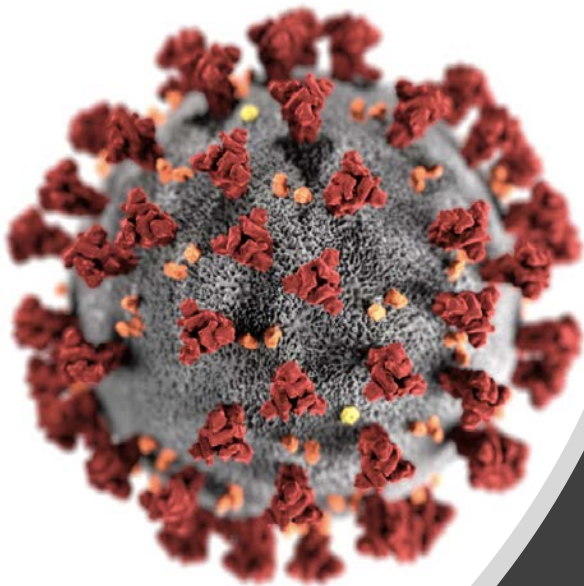
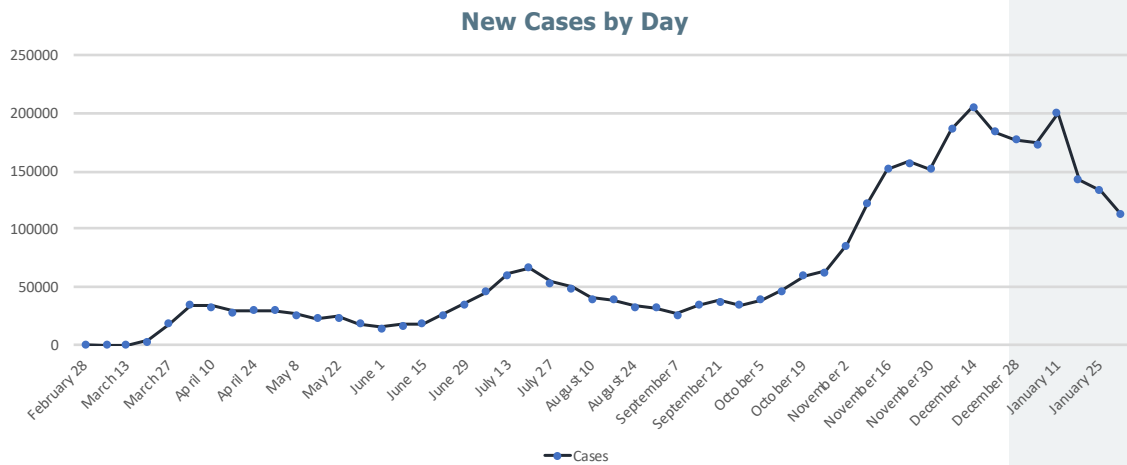
- January 2021 – Highest number of COVID deaths in a month
- Study suggests COVID-19 survivors experience more intense side effects from vaccine
  - People who have had COVID-19 may need only one shot
- More Americans have received the COVID-19 vaccine than have tested positive for the virus

## Poll Question



- **Have you had COVID-19 since it was first identified in December 2019?**

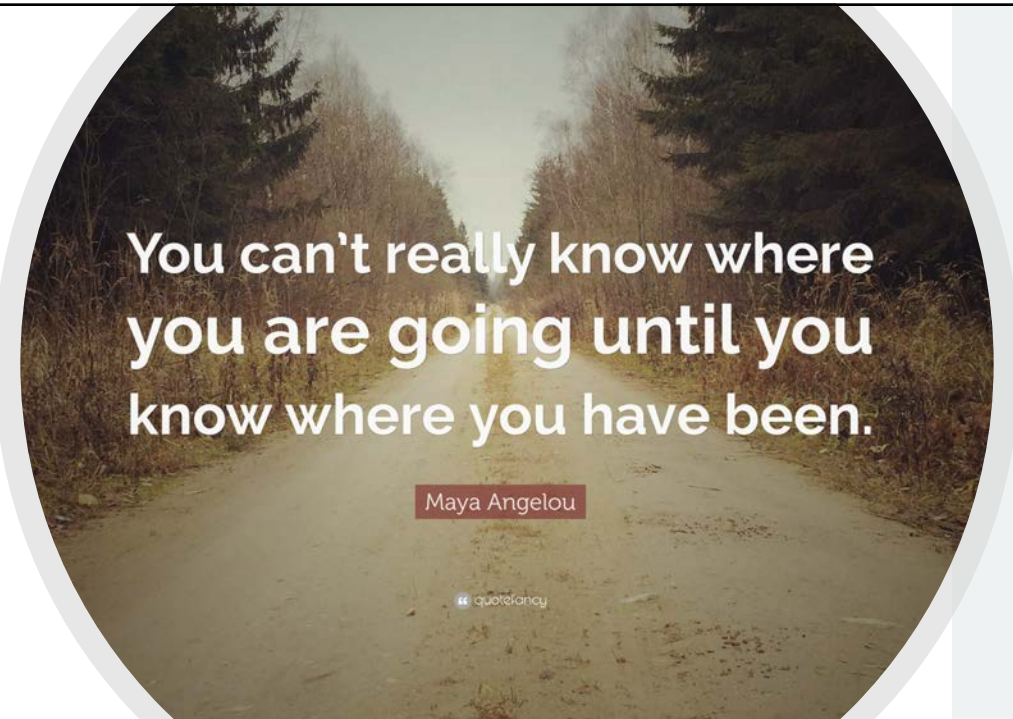
# COVID-19 Cases in US by Date Reported



## A Look Back at COVID-19

A Snapshot Look at 2019 – 2020

*Tonya Winders*



You can't really know where  
you are going until you  
know where you have been.

Maya Angelou

quoteancy

## Background

December 31, 2019

- Wuhan Municipal Health Commission reported a cluster of cases of pneumonia in Wuhan, Hubei Province
- Later identified as a novel coronavirus

**COVID-19**

**CO = Corona**

**VI = Virus**

**D = Disease**

**19 = 2019**



## Headlines – 1 year ago today February 4, 2020

- General news – “Waiting for an Iowa Winner”
- Health news – “Beijing Sees ‘Major Test’ as Doors to China Close and Coronavirus Deaths Surpass SARS”

Number of Daily Cases in US (CDC)

Not yet tracked - 0

## March 11, 2020

- General news – “Talks Begin on Stimulus Plan as Trump Plays Down Virus Threat”
- Health news – “WHO Makes the Assessment that COVID-19 Can be Characterized as a Pandemic”

Number of Daily  
Cases in US (CDC)

162

## April 7, 2020

- General news – “CDC Extends ‘No Sail’ Order for Cruise Ships”
- Health news – “NY Announces 800 Coronavirus Deaths in One Day”

Number of Daily  
Cases in US (CDC)

22,071

## May 25, 2020

- General news – “The Impact of George Floyd’s Death”
- Health news – “The World Health Organization says it will temporarily drop hydroxychloroquine from its global study into experimental COVID-19 treatments.”

Number of Daily  
Cases in US (CDC)

24,971

## June 24, 2020

- General news – “Baseball Finally Has a Plan to Play”
- Health news – “Fauci: Citing ‘Disturbing Surge’, Tells Congress the Virus is Not Under Control.”

Number of Daily  
Cases in US (CDC)

38,004

## July 16, 2020

- General news – “What Black Lives Matter Has Revealed About Small-Town America”
- Health news – “A Resurgence of the Virus, and Lockdowns, Threatens Economic Recovery”

Number of Daily  
Cases in US (CDC)

72,363

## August 16, 2020

- General news – “As Colleges Move Classes Online, Families Rebel Against the Cost”
- Health news – “‘We’re Clearly Not Doing Enough’: Drop in Testing Hampers Coronavirus Response”

Number of Daily  
Cases in US (CDC)

42,364

## September 22, 2020

- General news – “Amy Coney Barrett Emerges as Trump’s Favorite for Supreme Court”
- Health news – “4<sup>th</sup> Largest US School District to Allow Students Back in Classrooms”

Number of Daily Cases in US (CDC)

49,940

## October 20, 2020

- General news – “Early Voting Underway”
- Health news – “Long-term Heart Damage Likely in Some COVID-19 Survivors, Review Finds”

Number of Daily Cases in US (CDC)

61,073

## November 14, 2020

- General news – “Trump Supporters Protest Election Results”
- Health news – “Long Lines for Testing Again”

Number of Daily Cases in US (CDC)

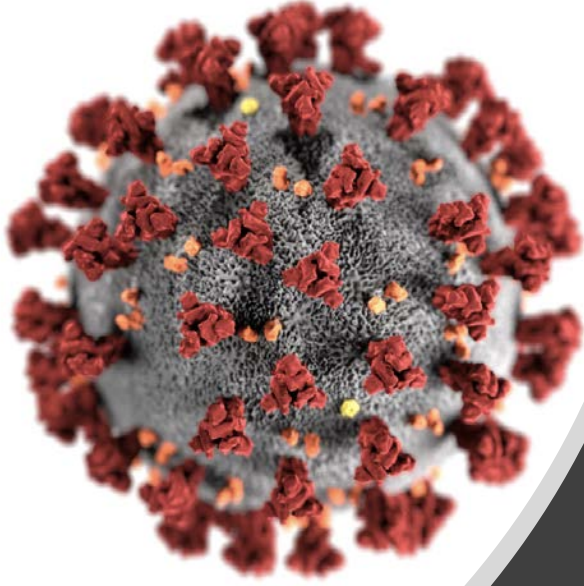
197,622

## December 16, 2020

- General news – “Biden to Get COVID-19 Vaccine in Public Next Week”
- Health news – “Pfizer to Complete First COVID-19 Vaccine Shipments in US”

Number of Daily Cases in US (CDC)

248,095



# Long-Haul Consequences of COVID-19

What's Ahead for COVID Patients?

*Dr. Purvi Parikh*

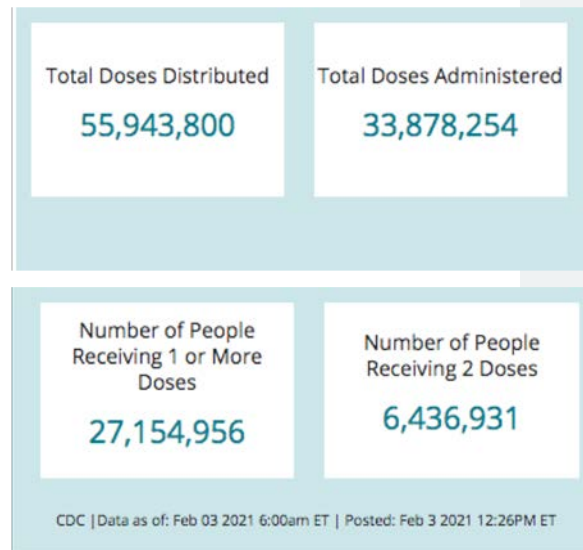
## A Quick Look at Vaccinations

# Coronavirus Vaccine Tracker

By Carl Zimmer, Jonathan Corum and Sui-Lee Wee Updated Feb. 3, 2021

PHASE 1	PHASE 2	PHASE 3	AUTHORIZED	APPROVED	ABANDONED
36	25	20	7	3	4
Vaccines testing safety and dosage	Vaccines in expanded safety trials	Vaccines in large-scale efficacy tests	Vaccines in early or limited use	Vaccines approved for full use	Vaccines abandoned after trials

## CDC – Overall US COVID-19 Vaccine Distribution & Administration



## “Long-haulers”

Name given to patients that have in theory recovered from the worst impacts of COVID-19 and have tested negative – yet –

**THEY STILL HAVE SYMPTOMS**

There seems to be no consistent reason for this to happen

## “Long-haulers”

- 10% of COVID-19 patients become “Long-haulers”
- Can affect anyone
  - Young
  - Old
  - Otherwise healthy people
  - Those with other conditions
  - Those that were hospitalized
  - Patients with very mild symptoms



10%

Why does it matter to talk about the “Long-Haul” for some COVID-19 patients?

“Long-haulers” have not been taken seriously enough

Urgent need for dedicated research

People can’t work or function as they normally have

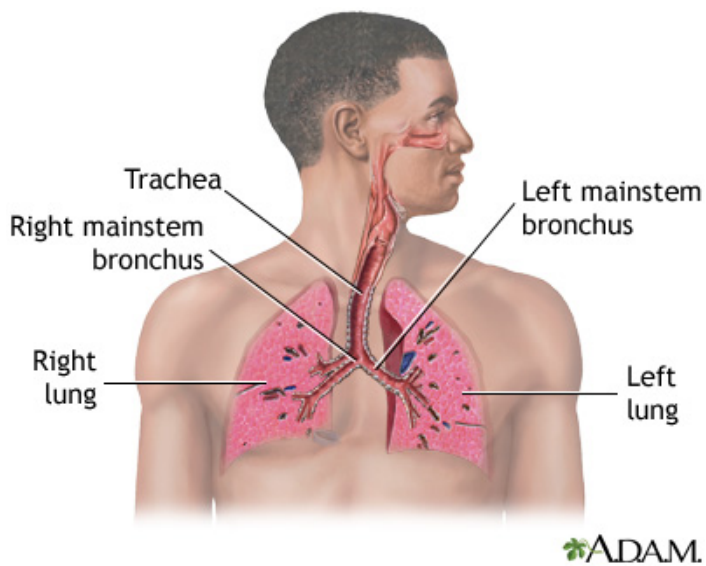
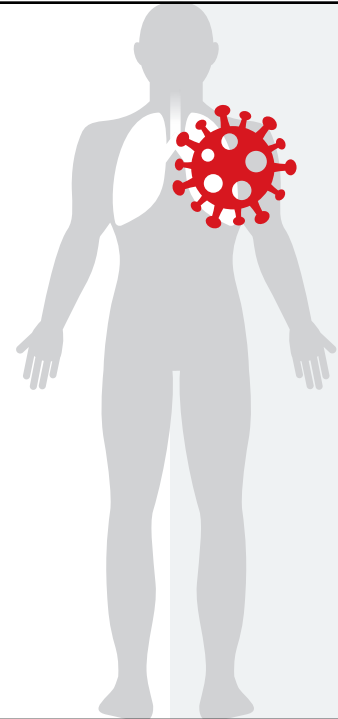
## Long-term Health Consequences of COVID-19

We have seen the acute phase

Long-term consequences remain largely unclear –  
6 months later 75% still experience at least one symptom

Full spectrum of post-COVID-19 characteristics are  
unknown

Some of the picture is emerging – one study – 50% unable  
to work full-time, 88% cognitive issues/memory loss



### Persisting Symptoms

- Coughing
- Ongoing, sometimes debilitating, fatigue
- Body aches
- Joint pain
- Shortness of breath
- Loss of taste and smell — even if this didn't occur during the height of illness
- Difficulty sleeping
- Headaches
- Brain fog

ADAM.

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## Most Confusing Symptom

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- **Brain fog** - most confusing symptom for long haulers Report being unusually forgetful, confused or unable to concentrate even enough to watch TV
- Can happen to people who were in an intensive care unit for a while, but it's relatively rare. However, it is happening to a variety of patients, including those who weren't hospitalized.
- Some people have reported feeling better for days or even weeks then relapsing. For others, it's a case of just not feeling like themselves.



## Theories

One common theory about patients with long-term COVID-19 symptoms is that the virus possibly remains in their bodies in some small form.

Another theory is their immune systems continue to overreact even though the infection has passed.



## Newly Published Study

*Huang, C. et.al., 6-month consequences of COVID\_19 in patients discharged from hospital: a cohort study, Lancet (397) 10270, January 16, 2021*

6 months after hospitalization from COVID-19 – most patients experienced at least one symptom

Fatigue or muscle weakness  
Sleep difficulties  
Anxiety or depression

More severely ill patients:  
Increased risk of pulmonary diffusion abnormality  
Fatigue or muscle weakness  
Anxiety or depression

Consistent with SARS survivors

## Newly Published Study

*Huang, C. et.al., 6-month consequences of COVID\_19 in patients discharged from hospital: a cohort study, Lancet (397) 10270, January 16, 2021*

Organ manifestations beyond the pulmonary system

Renal dysfunctions observed  
Newly diagnosed diabetes  
Venous thromboembolic diseases  
Cardiovascular events (heart)  
Cerebrovascular events (stroke)  
Persistent kidney impairment could lead to kidney injury or the need for dialysis

## Newly Published Study

*Huang, C. et.al., 6-month consequences of COVID\_19 in patients discharged from hospital: a cohort study, Lancet (397) 10270, January 16, 2021*

Manifestations  
beyond the  
pulmonary  
system

Risk of anxiety or depression as an important psychological complication and impaired pulmonary diffusion capacities were higher in patients with more severe illness



## Post COVID Lungs

- Seeing dense scarring in the lungs of most post-COVID patients
- Worse than "smoker's lungs"
  - Seeing lung collapse
  - Clots forming
  - Shortness of breath lingers
- In symptomatic (close to 100% of the time) and asymptomatic patients (70 – 80% of the time)



## X-rays of the Lungs



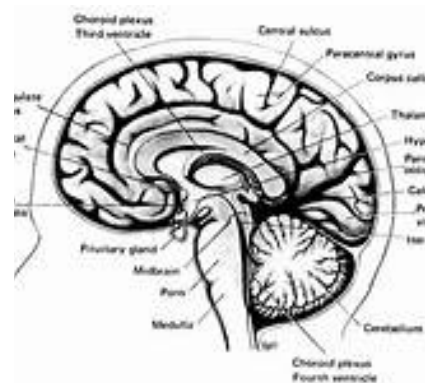
X-rays of a normal lung, a smoker's lung and a COVID patient's lung.

DR. BRITTANY BANKHEAD-KENDALL VIA CBS DALLAS

- Lasting changes remain following COVID-19

## COVID-19 & the Brain

- Patients experiencing wide range of symptoms from effects on the brain:
  - Confusion
  - Loss of smell or taste
  - Life-threatening strokes
- Patients in their 30s & 40s:
  - Possible life-threatening neurological changes due to strokes
  - Hyperactive blood-clotting?
- No definitive known reason - yet



## COVID-19 & the Brain

- Variety of conditions related to the brain
  - Patients are also having peripheral nerve issues, such as Guillain-Barré syndrome, which can lead to paralysis and respiratory failure.
- Confusion
  - Loss of consciousness
  - Seizures
  - Stroke
  - Loss of smell and taste
  - Headaches
  - Trouble focusing
  - Changes in behavior



## UK Study

- 1/3 of COVID-19 patients end back in hospital in 5 months
- One in 8 die of complications from the illness
- Developed heart problems, diabetes, chronic liver & kidney conditions
- Higher risk of problems developing in various organs in people younger than 70

Death is not the only COVID-19 outcome that matters -

- Seeing an increased level of risk in people for other illnesses
- Young and old people
- We will need to follow up with COVID-19 patients over time



## Questions that Remain

“Why one person and not the other?”

“Why do some seniors die with COVID-19 and others survive?”

“Why do some young people have severe issues – need a lung transplant and others seem to recover fully?”

## Permanent Damage?

The answers are not clear.

We need more time. We need to follow patients over time.

We need longitudinal research.

## Poll Question



- **If you have had COVID-19, do you have persistent symptoms?**

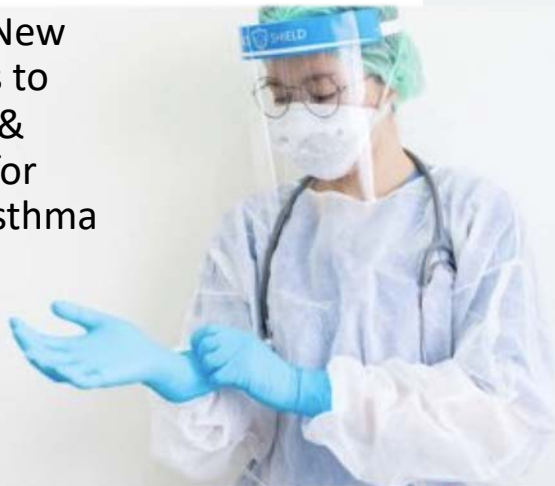
# TIME FOR QUESTIONS



Record your questions in the question box  
We'll get to as many as we can!

## JOIN US FOR OUR NEXT COVID-19 WEBINAR

- COVID-19: New Approaches to Prevention & Treatment for Allergy & Asthma Patients
- February 17<sup>th</sup>
- 4:00 PM ET





The Long-Haul Consequences of COVID-19:  
Asthma, Allergies and All Conditions  
[Allergyasthmanetwork.org](http://Allergyasthmanetwork.org)