Allergy & Asthma Network
Upcoming Webinars

EPR-4 vs. GINA –
Asthma Care Differences,
Overlap & Challenges in 2021
February 10th
3:00 PM ET

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

Sleep Issues:
The Effect of Allergies,
Asthma & Related
Conditions
February 25th
4:00 PM ET

Look for more information at Allergyasthmanetwork.org
The Long-Haul Consequences of COVID-19: Asthma, Allergies and All Conditions
February 4, 2021

OUR SPEAKERS

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

Tonya Winders
President & CEO, Allergy & Asthma Network
President, Global Allergy & Airways Patient Platform
PROGRAM OUTLINE

• 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!)
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

New Cases by Day

A Look Back at COVID-19
A Snapshot Look at 2019 – 2020

Tonya Winders
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.”

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<th>Number of Daily Cases in US (CDC)</th>
<th>24,971</th>
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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.”

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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”

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<th>72,363</th>
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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”

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<th>Number of Daily Cases in US (CDC)</th>
<th>42,364</th>
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September 22, 2020
- General news – “Amy Coney Barrett Emerges as Trump’s Favorite for Supreme Court”
- Health news – “4th 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”

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

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<thead>
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<th>PHASE 1</th>
<th>PHASE 2</th>
<th>PHASE 3</th>
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- 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
“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
  o Young
  o Old
  o Otherwise healthy people
  o Those with other conditions
  o Those that were hospitalized
  o Patients with very mild symptoms

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
Most Confusing Symptom

- **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

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

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

Manifestations beyond the pulmonary system

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.

- 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 17th
  • 4:00 PM ET
The Long-Haul Consequences of COVID-19: Asthma, Allergies and All Conditions
Allergyasthanetwork.org