

**Long Covid  
Prognosis**  
Leonard Hock, DO, CMD

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**Long Covid, The Whole Story**

- Buffalo Springfield
- 1967
- “Something happening here, what it is ain't exactly clear.”

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**What is Long Covid**

- Symptoms that occur after Covid infection\*
  
- What symptoms?
  
- How long after?

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**Names**

- Long Covid
- Post Covid
- Post Covid Condition, PCC
- Post Covid Syndrome, PCS
- Post Acute Sequelae of Covid, PASC
- And others

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**Post Acute Sequelae of Covid**

- Disease
- Condition
- Syndrome
- Entity

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**Symptoms**

- Fatigue
- Shortness of breath
- Brain fog
- Loss of taste and smell
- Muscle aches
- And, 200 others

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### How Long After

- CDC: Greater than 4 weeks after acute infection\*
- WHO: Greater than 3 months after acute infection\*

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### How Long After?

- Symptoms that last or occur after acute stage\*
- Symptoms that persist 30, 60, 90 days or longer.
- May improve in weeks, or not.

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### Long Covid Groups or Types

- Neurologic Symptoms
  - Anosmia, Brain fog, depression, fatigue
- Respiratory Symptoms
  - Shortness of breath, chest pain, fatigue
- Systemic/inflammatory, Abdominal Symptoms
  - Myalgias, GI disorders, fatigue

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**Possible Causes**

- Reduced Immune System response
- Reinfection of the virus\*
- Inflammation reaction
- Deconditioning due to illness and bedrest
- Post Traumatic Stress Disorder

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**A Different Thing**

- “Not just one thing, not just one condition”
- “Overlapping entities”
- “Potentially different causes”
- “Different set of risk factors and outcomes”
- “Multifaceted disease affecting every organ”
- per Admiral Rachel Levine, HHS

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**Severity of Illness**

- Postulated that more severe acute illness leads to higher likelihood of Long Covid
- Modest symptoms non hospitalized can still lead to long lasting symptoms
- Non symptomatic, testing positive, can have long lasting symptoms

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- “While most people with post-Covid conditions have evidence of infection or Covid-19 illness, in some cases, a person with post-Covid conditions may not have tested positive for the virus or known they were infected.”
- CDC, “What you need to know” July 2021

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**Diagnosis**

- Symptomatic
- Subjective
- No laboratory or radiographic tests
- No physical exam findings that are conclusive
- No objective findings

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**Consequences of Long Covid**

- Debility, physical and cognitive
- Irritating to incapacitating
- 10%, 20%, 30% or more of acute Covid patients develop long Covid
- LTC residents, age and fragility, at risk
- “4 million people unable to work.” Harvard

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***Caring for the Ages, Aug. 2022***

- LTC seeing “new”
- Heart and lung problems
- Accelerated frailty
- Functional decline
- Prolonged delirium
- Unusual skin manifestations

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***Caring for the Ages, Aug. 2022***

- “not rehabbing as expected”
  - Dr. Diane Sanders-Cepeda
- 45.4% of those over 65 had 26 conditions attributed to post Covid.

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***Caring for the Ages, Aug. 2022***

- “Covid 19 survivors in LTC have been found to have poorer outcomes related to malnutrition, weight loss, and frailty compared to the non infected.” Akber Mithani, MD

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**What to do?**

- Keep a watchful eye
- Document their symptoms
- Document and/or report your observations
- Address what you can
- Use ICD-10 code; U09.9
  - Billable post Covid code

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**Thank you**

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