

# Residual effects of COVID-19 and impairment within the AMA Guides 5th Edition.

Akron Bar Association

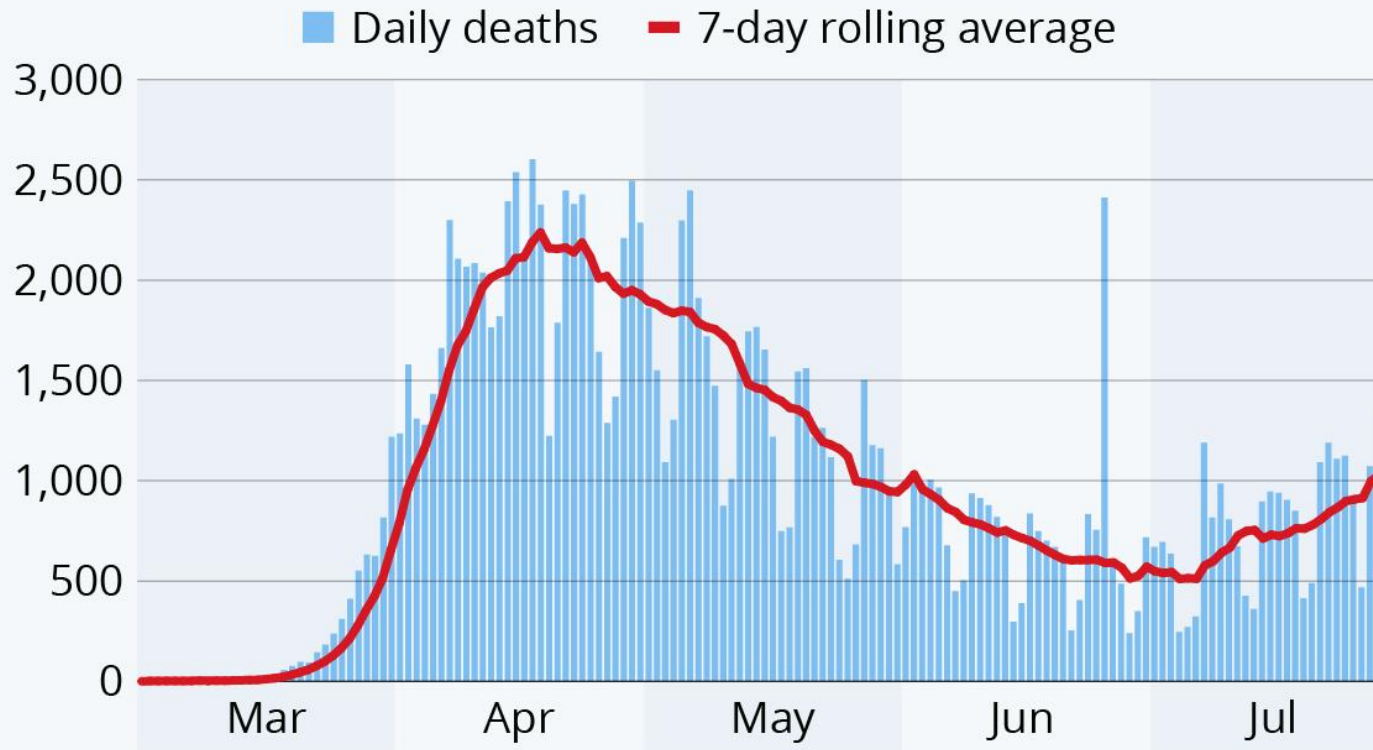
Donato J. Borrillo MD JD

Zoll & Kranz LLC

# Case History

- 56 year-old physician – independent contractor, working in the wound care clinic and hyperbaric medicine department of Sparrow Hospital System, during the months of March through May 2020.
- No significant medical problems, plays beer league hockey on weekends and although overweight considers himself healthy.

## Daily new reported deaths from COVID-19 in the United States\*



\* The June 25 death toll is a data anomaly caused by a change in reporting and was excluded from 7-day average calculations

Source: Johns Hopkins University

- On May 28th, he develops congestion after cutting the lawn
- No fever, no shortness of breath
- On June 2<sup>nd</sup> he works in Toledo and has dinner with his children.

# Case study continued

- Following an hour and half drive, he arrives home on June 2<sup>nd</sup> and experiences fatigue. He falls asleep on the floor in the family room.
- No fever.
- His congestion persists and he develops a cough when speaking.
- He dons a mask, even while at home.

# Case study continued

- On June 3<sup>rd</sup>, his symptoms persist, and he checks into a local hotel – removing himself from family.
- No fever.
- He tests through Sparrow Hospital (drive through) for antibodies (blood), as PCR swab is not indicated in afebrile individual. Antibody negative.

# Case study continued

- On June 4<sup>th</sup> and 5<sup>th</sup>, he self medicates with antibiotic, decongestant, anti-histamine, cough drops (several bags), and remains isolated in the hotel.
- He begins to have shortness of breath and cough.
- He begins to use pillows to prop himself up so that he can breathe..... eventually he is using 6 pillows (fortunately it is a room with two double beds and plenty of pillows)

# Case study continued

- On June 6<sup>th</sup> he decides to go to the hospital
- He feels febrile and has experienced night sweats
- He drives himself to Sparrow Hospital and goes directly to the Emergency Department

# Case study continued



- Fever 102, heart rate 140
- Cough, shortness of breath, fatigue
- Pulse O2 of 92% on room air
- Bilateral pneumonia on CT and infiltrate on CXR
- Admitted to Sparrow COVID unit, 10<sup>th</sup> floor
- Confirmed positive for COVID-19 by nasal swab June 7<sup>th</sup>



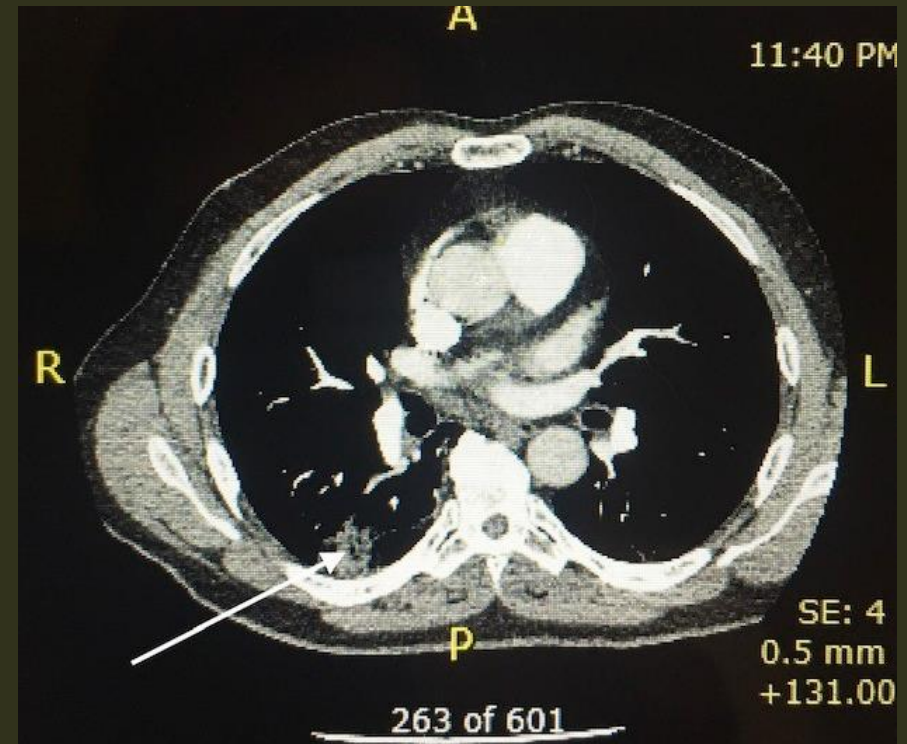
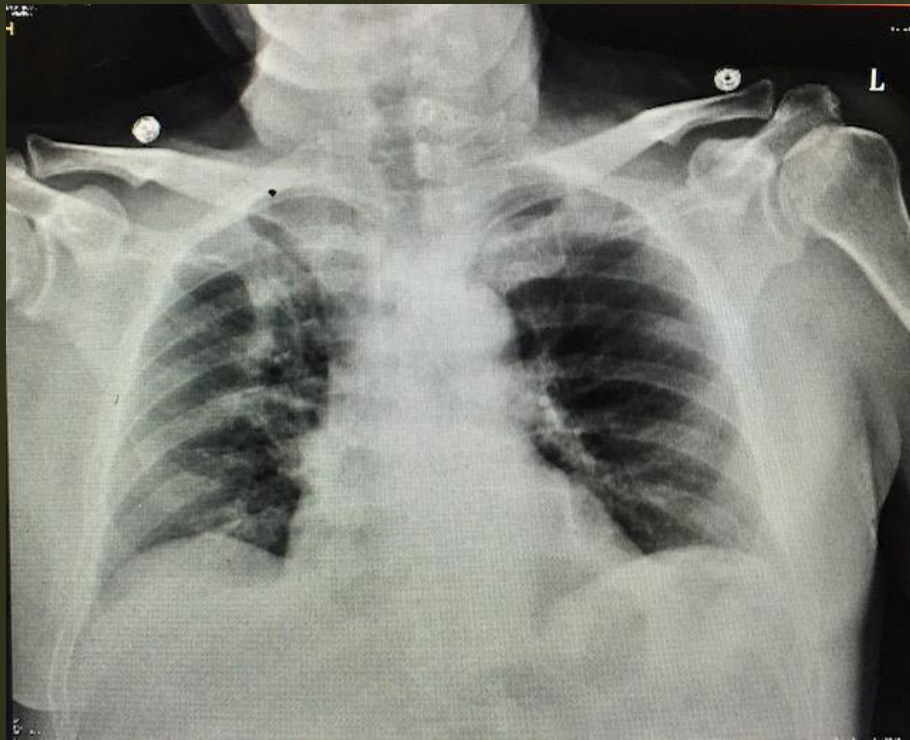
# Case study continued – Sparrow Hospital

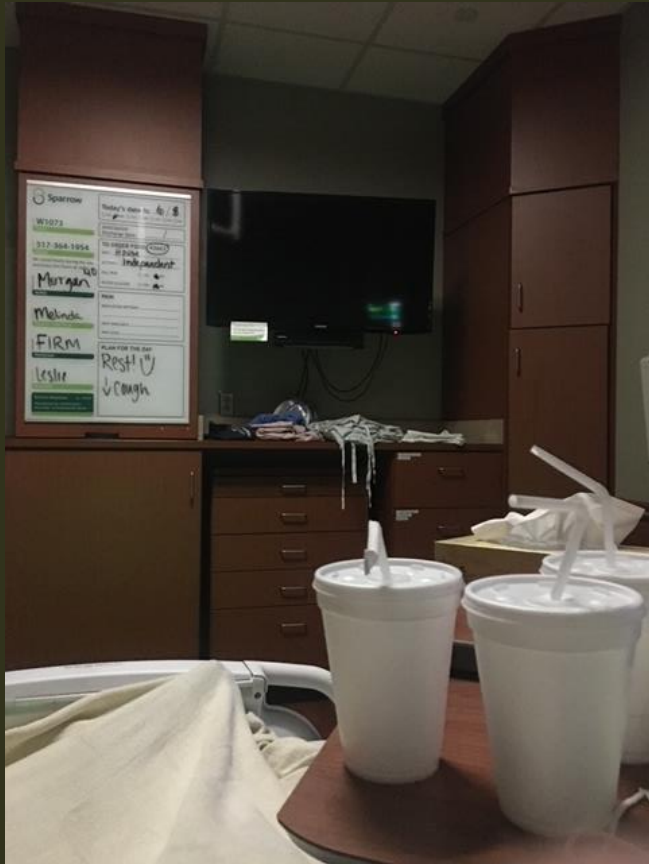
COVID-19 by the Sparrow Numbers	
Total Inpatient & ER Test	7,114
Negative	6,692
Positive	309
Pending	113
Admitted Positive Patients	7
Patients in Critical Care	0
Patients on Ventilators	0
Caregivers Negative	1,139
Caregivers Positive	43
Caregivers Pending	5
Patients Discharged	134
Deaths	29
Doubling time is 46 days	

Continue to wash your hands, stay 6 feet apart, wear your PPE and as the weather has been so nice, your sunscreen, too. Thanks for all you do.



# Case study continued







Linda S. Vail, MPA, Health Officer

June 11, 2020

Donato Borillo  
1015 Fox Hills Drive  
East Lansing, MI 48823

RE: COVID19 home isolation/quarantine completed

To whom it may concern:

This letter confirms that Donato Borillo is no longer under home isolation/quarantine for 2019 Novel Coronavirus (COVID-19). Please be advised that the above person has completed the home isolation/quarantine from May 28, 2020 to June 11, 2020 in coordination with the Ingham County Health Department.

Please remember there is an ongoing community transmission of the virus. All persons are expected to follow the Governor's directions for social distancing and self-quarantine until told otherwise.

If you have any questions regarding the status of this individual, you may contact:  
Ingham County Health Department Communicable Disease at 517-887-4308.

Sincerely,

Shoyinka Adenike M.D.,  
MPH Medical Director  
Ingham County Health Department

Communicable Disease Control

500 S. Cedar Street • Lansing, MI 48909-7661 • P: 517-887-4308 • F: 517-887-4379  
hd.ingham.org • Ingham County is an Equal Opportunity Employer

- Discharged from hospital on June 10<sup>th</sup>
- Continued self-isolation
- "Released" by Ingham County Health into the community on June 11<sup>th</sup>
- Contact tracing
  - Sparrow Employee Health
  - State of Michigan
  - Ingham County
- On father's day tested negative PCR and antibody positive 180 units/ml.





*I helped fill the #MissingTypes.*



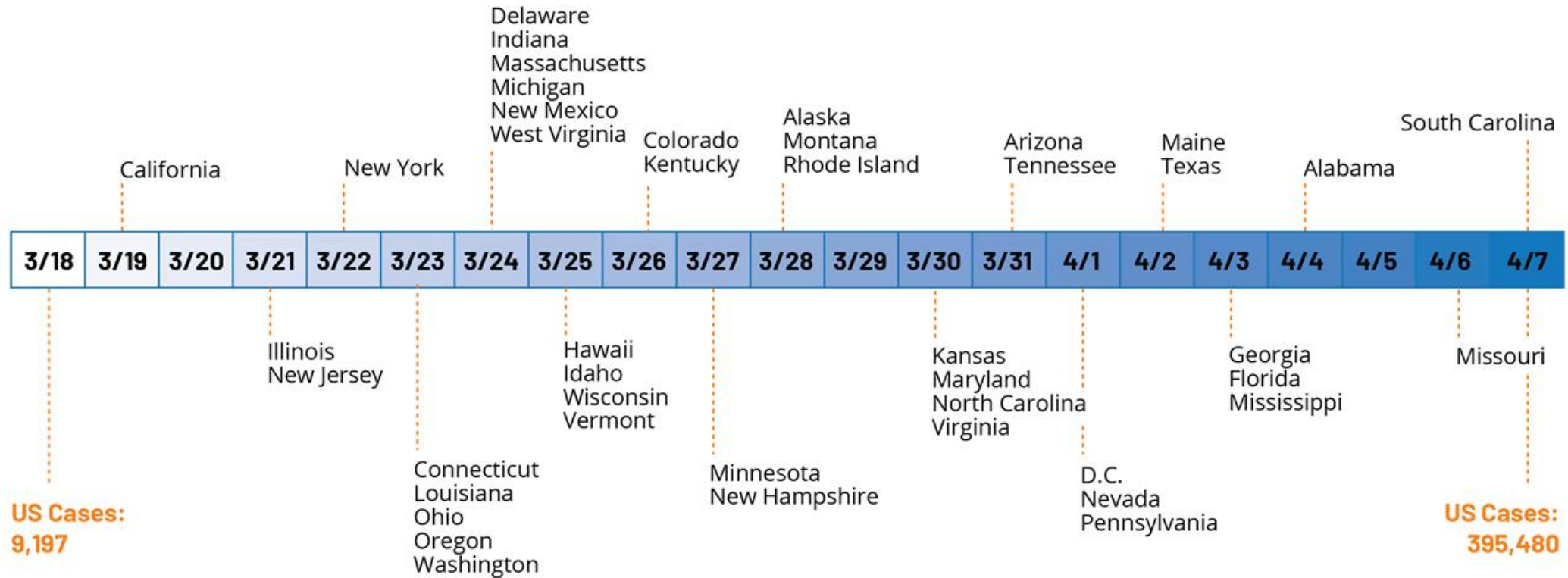
American  
Red Cross



# Building your case; is it work related?

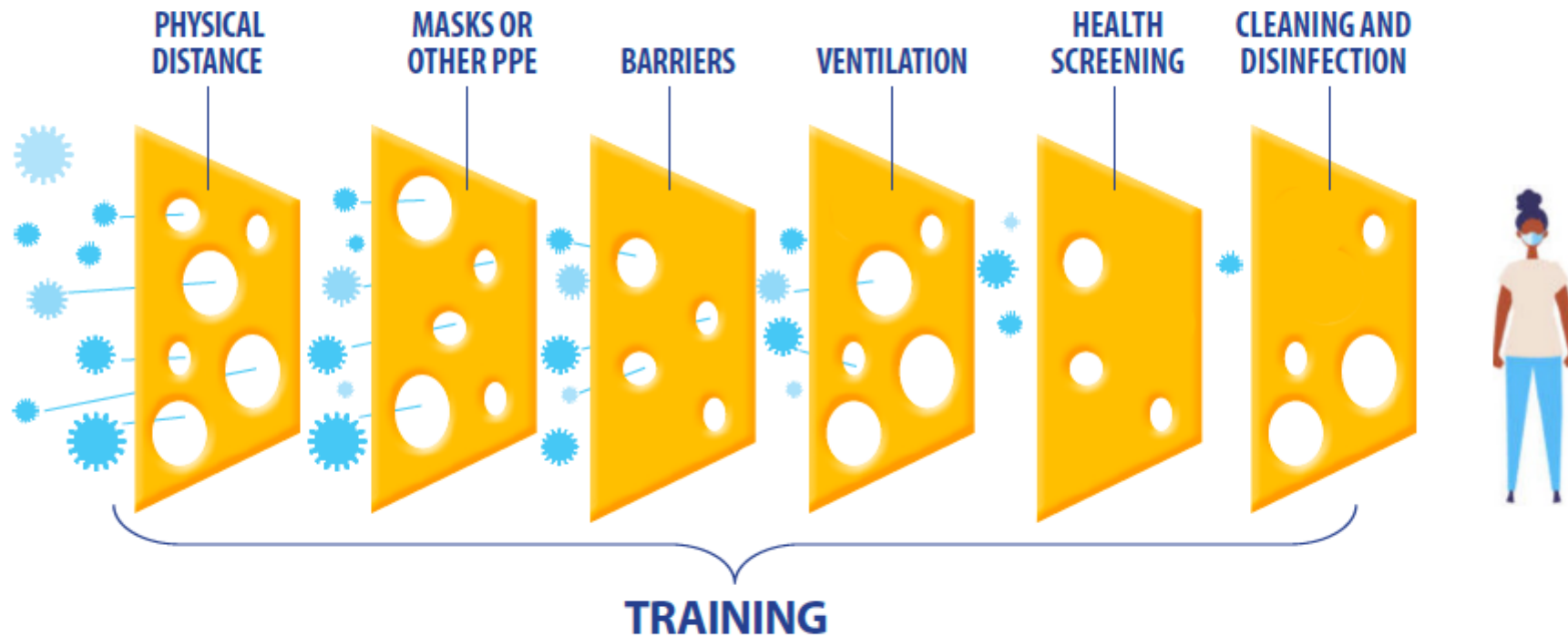
- Essential worker
- Adherence to CDC guidelines
- Timeline
- Cause of death
- Refusing the covid vaccine

# When State Stay-at-Home Orders Due to Coronavirus Went into Effect



SOURCE: KFF, State Data and Policy Actions to Address Coronavirus,  
<https://www.kff.org/health-costs/issue-brief/state-data-and-policy-actions-to-address-coronavirus/#note-3-10> and state government websites.

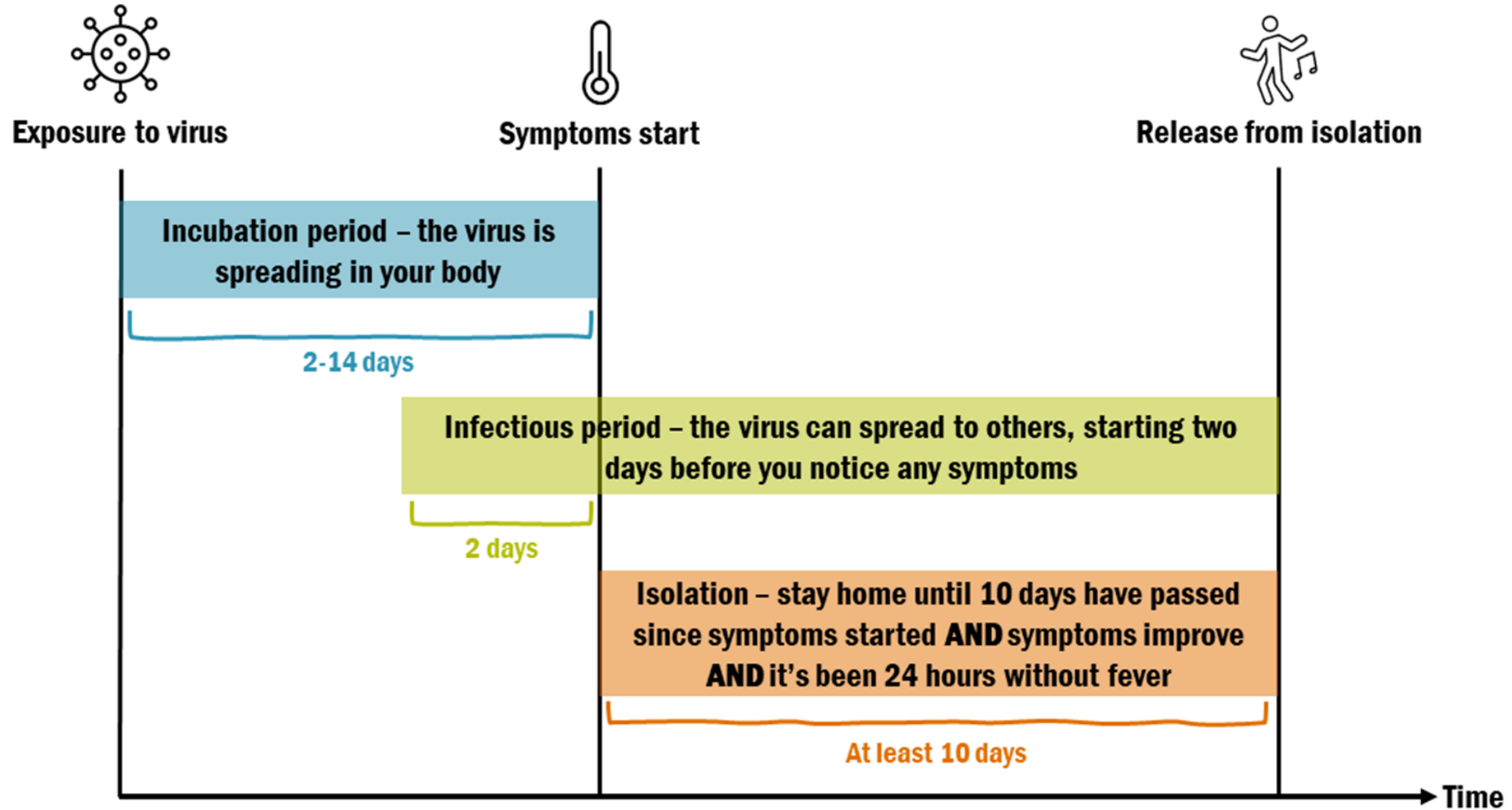
# SLOW THE SPREAD OF COVID-19 AT WORK



**No single protective layer can prevent the spread.  
The more safeguards, the better.**



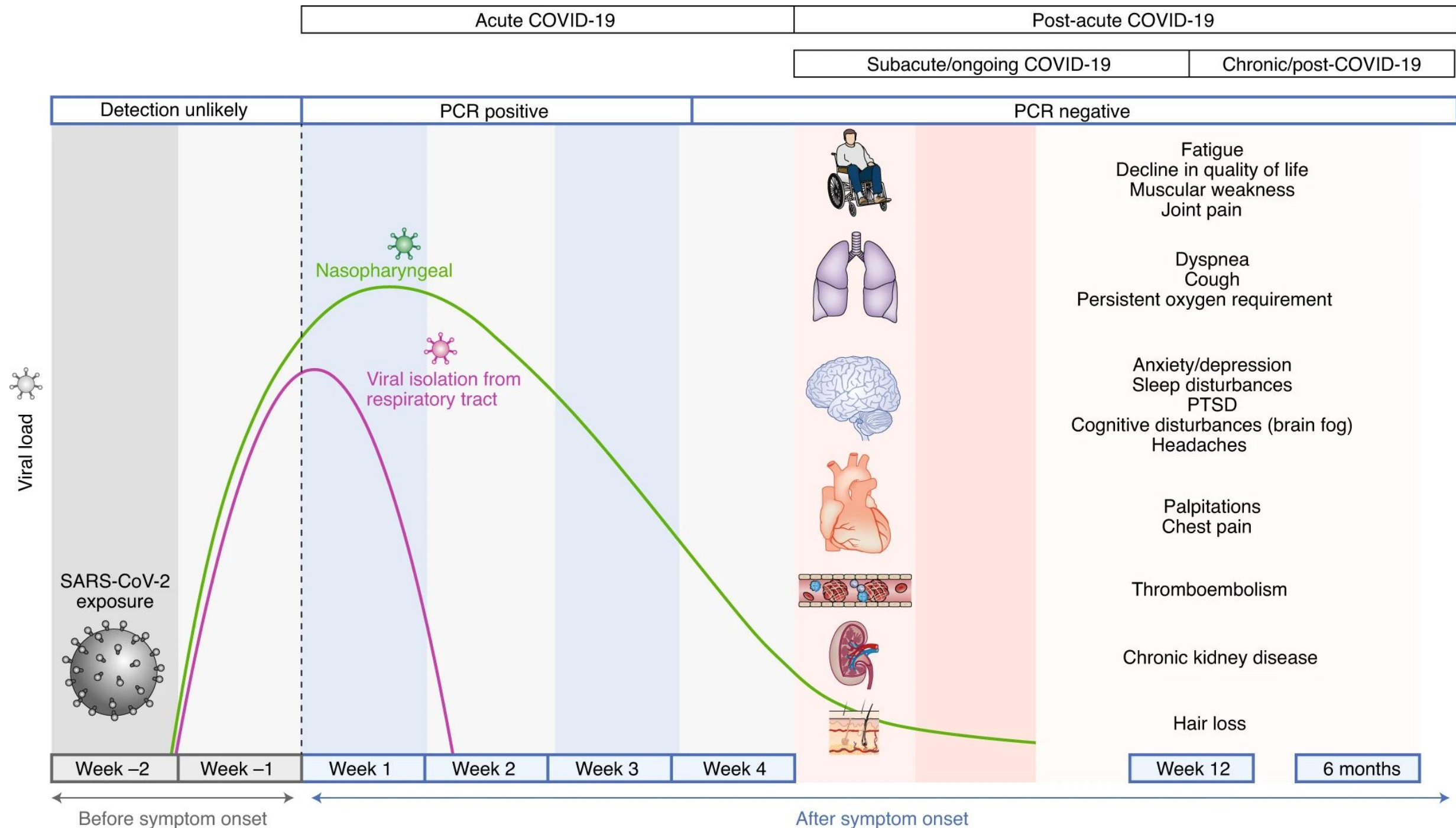
# Timeline for People with COVID-19 who have Symptoms



August 2020

Learn more at [healthvermont.gov/contact-tracing](https://healthvermont.gov/contact-tracing)

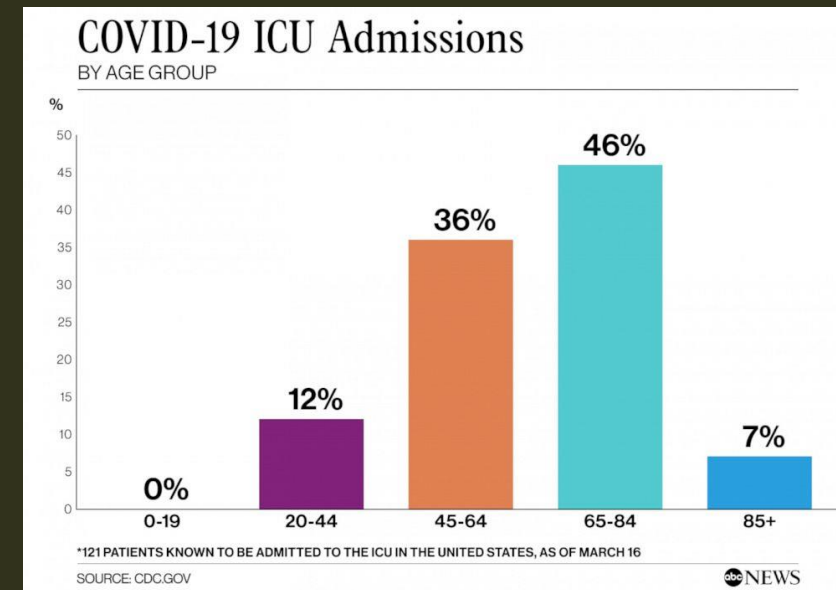
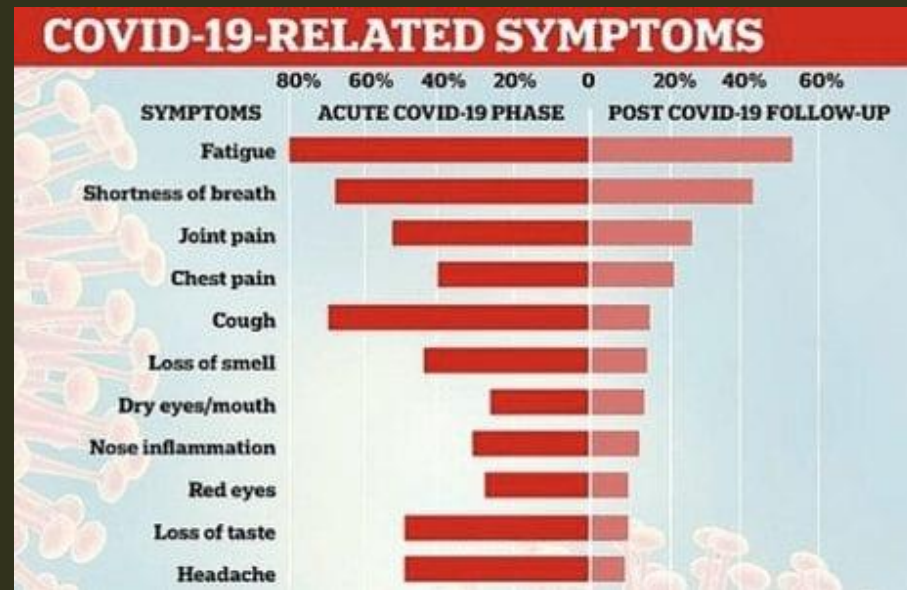






# COVID-19 (coronavirus): Long-term effects

- COVID-19 symptoms can sometimes persist for months.
- Most people recover completely within a few weeks. But some, even those with mild disease — continue to experience symptoms after their initial recovery.
- Older people and those with serious medical conditions are the most likely to experience lingering COVID-19 symptoms. These include:
  - Fatigue
  - Cough
  - Shortness of breath
  - Headache
  - Joint pain



# COVID-19 (coronavirus): Long-term effects

- Although COVID-19 is seen as a disease that primarily affects the lungs, it can damage many other organs as well:
  - Heart. Imaging tests taken months after recovery from COVID-19 have shown lasting damage to the heart muscle, even in people who experienced only mild COVID-19 symptoms. This may increase the risk of heart failure or other heart complications in the future.
  - Lungs. The type of pneumonia often associated with COVID-19 can cause long-standing damage to the tiny air sacs (alveoli) in the lungs. The resulting scar tissue can lead to long-term breathing problems.
  - Brain. Even in young people, COVID-19 can cause strokes, seizures and Guillain-Barre syndrome — a condition that causes temporary paralysis. COVID-19 may also increase the risk of developing Parkinson's disease and Alzheimer's disease.
  - Blood clots and blood vessel problems. COVID-19 can make blood cells more likely to clump up and form clots. While large clots can cause heart attacks and strokes, much of the heart damage caused by COVID-19 is believed to stem from very small clots that block tiny blood vessels (capillaries) in the heart muscle. Other organs affected by blood clots include the lungs, legs, liver and kidneys. COVID-19 can also weaken blood vessels, which contributes to potentially long-lasting problems with the liver and kidneys.

# COVID-19 (coronavirus): Long-term effects

- Problems with mood and fatigue. People who have severe symptoms of COVID-19 often have to be treated in a hospital's intensive care unit, with mechanical assistance such as ventilators to breathe. Simply surviving this experience can make a person more likely to later develop post-traumatic stress syndrome, depression and anxiety.
- The National Institutes of Health refer to long-term COVID-19 symptoms as PASC, which stands for post-acute sequelae of SARS-CoV-2. More common terms are post-COVID syndrome, long COVID or long-term COVID. People living with post-COVID syndrome are sometimes known as “long haulers.”



QUESTIONS?

419-466-5512

[donato@borrillo.net](mailto:donato@borrillo.net)