

# Workshop Wednesday

# The Mental Health Aspects of Long COVID

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Mountain Plains (HHS Region 8)

MHTTC

Mental Health Technology Transfer Center Network  
Funded by Substance Abuse and Mental Health Services Administration

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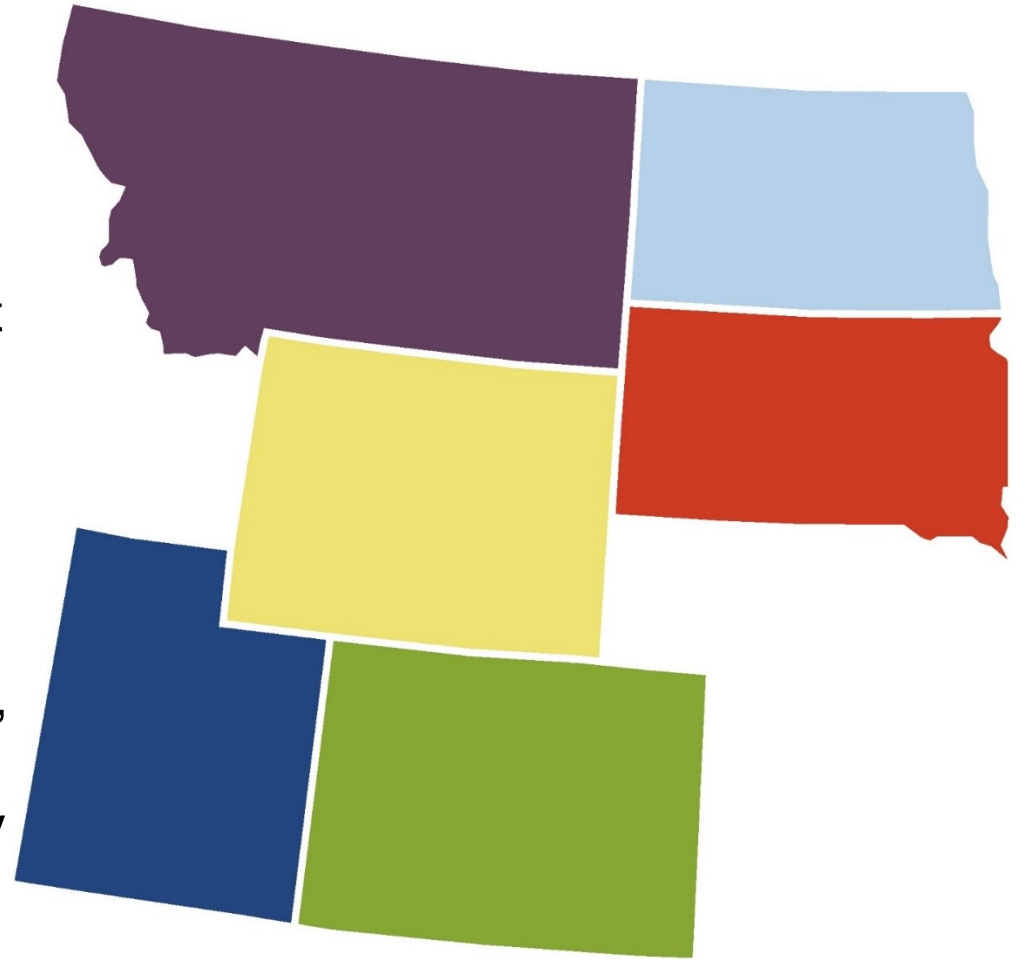
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# The Mountain Plains Mental Health Technology Transfer Center

The Mountain Plains Mental Health Technology Transfer Center (Mountain Plains MHTTC) provides training and technical assistance to individuals who serve persons with mental health concerns throughout Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming).

We belong to the Technology Transfer Center (TTC) Network, a national network of training and technical assistance centers serving the needs of mental health, substance use and prevention providers. The work of the TTC Network is under a cooperative agreement by the Substance Abuse and Mental Health Service Administration (SAMHSA).



# Land Acknowledgement Statement

Today, the University of North Dakota rests on the ancestral lands of the Pembina and Red Lake Bands of Ojibwe and the Dakota Oyate - presently existing as composite parts of the Red Lake, Turtle Mountain, White Earth Bands, and the Dakota Tribes of Minnesota and North Dakota. We acknowledge the people who resided here for generations and recognize that the spirit of the Ojibwe and Oyate people permeates this land. As a university community, we will continue to build upon our relations with the First Nations of the State of North Dakota - the Mandan, Hidatsa, and Arikara Nation, Sisseton-Wahpeton Oyate Nation, Spirit Lake Nation, Standing Rock Sioux Tribe, and Turtle Mountain Band of Chippewa Indians.



The MHTTC Network uses affirming, respectful and recovery-oriented language in all activities. That language is:

STRENGTHS-BASED  
AND HOPEFUL

INCLUSIVE AND  
ACCEPTING OF  
DIVERSE CULTURES,  
GENDERS,  
PERSPECTIVES,  
AND EXPERIENCES

HEALING-CENTERED AND  
TRAUMA-RESPONSIVE

INVITING TO INDIVIDUALS  
PARTICIPATING IN THEIR  
OWN JOURNEYS

PERSON-FIRST AND  
FREE OF LABELS

NON-JUDGMENTAL AND  
AVOIDING ASSUMPTIONS

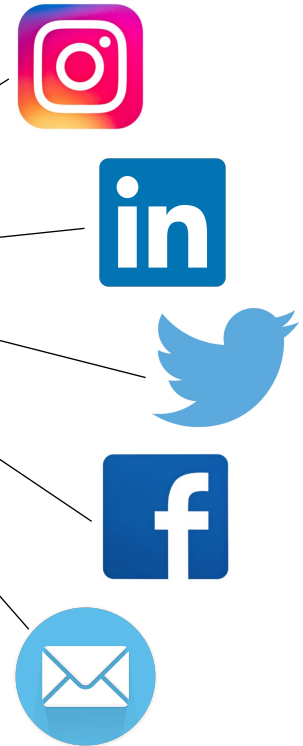
RESPECTFUL, CLEAR  
AND UNDERSTANDABLE

CONSISTENT WITH  
OUR ACTIONS,  
POLICIES, AND PRODUCTS

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- Following the presentation, the participant should:
  1. Identify common symptoms of Long COVID
  2. Understand the “the verdict is still out” on definition, etiology and treatments
  3. Identify similarities with other chronic diseases, including those caused by infectious agents.

(What we won't be discussing in depth today is the impact of “the pandemic” on population mental health).





# Long COVID

- Part of a “Post-COVID” group of conditions, including names such as:
- Post-acute sequelae of COVID-19 (PASC)
- Post-acute COVID-19
- Long-term effects of COVID
- Post-acute COVID syndrome
- Chronic COVID
- Long-haul COVID
- Late sequelae
- and others---weeks to months after initial infection



# Long COVID

- Over 200 symptoms
- How Long is Long? Definitions vary-some reports indicate > 3 weeks after symptoms, some use 2 months, some 3 months in their research.
- In a 2021 Lancet study, time to recovery was > 35 weeks.
  - Primary symptoms after 6 months: fatigue, post-exertional malaise, cognitive dysfunction



# Etiology

- Theories:
  - Inflammation (nervous system and vasculature)
  - Over-activation of the immune response
  - Other



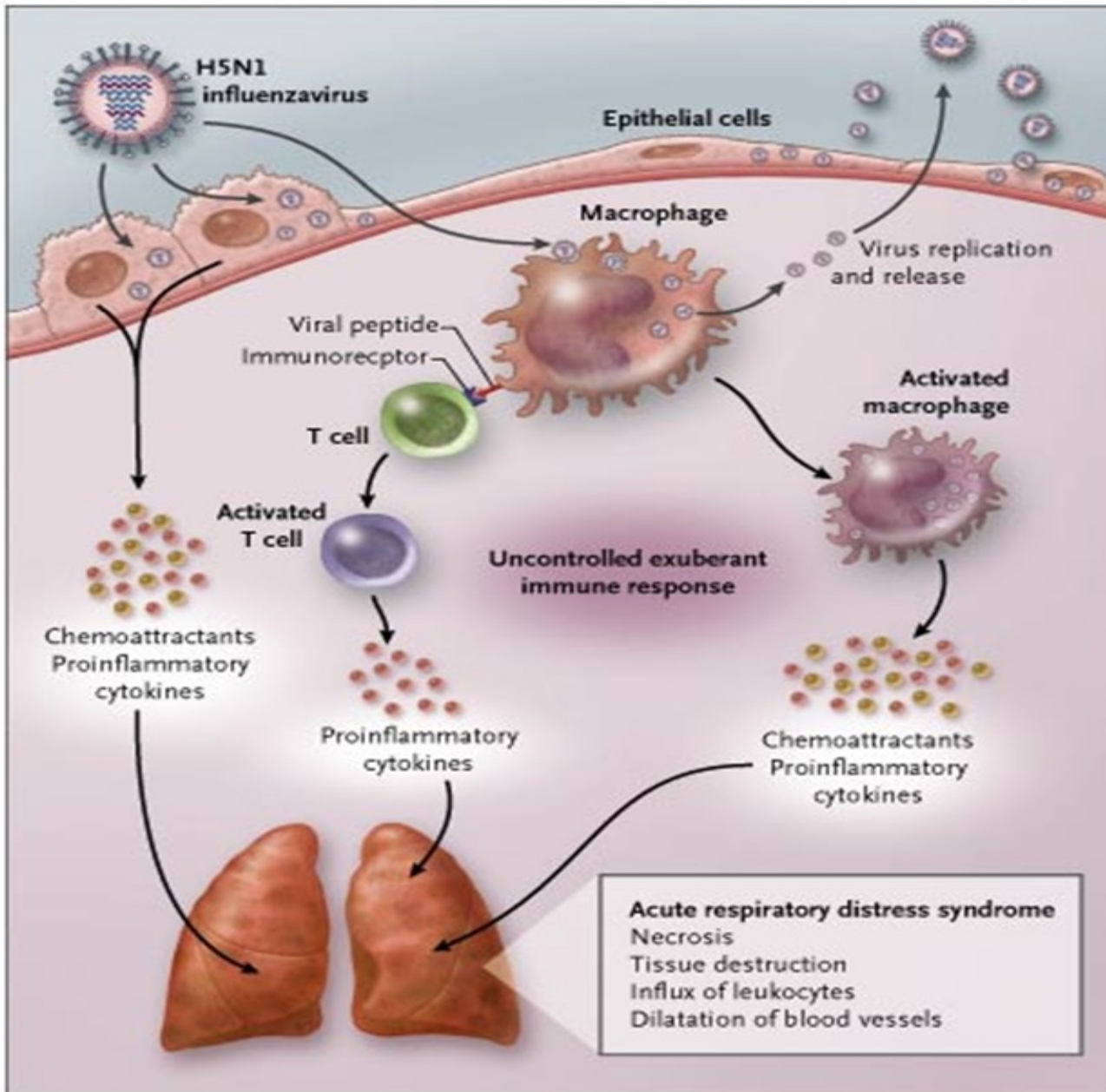
# Estimates

- 10-30% of individuals might experience Long-COVID after exposure
- Can occur after asymptomatic exposure or mild symptoms.

# Cytokine Storm

Illustration from a different virus, but same issue...

In children, we see a Multi-system inflammatory syndrome (MIS-C)





# Multi-Organ

- Particularly,
  - Pulmonary
  - Cardio-vascular (postural orthostatic tachycardia syndrome-POTS); myocarditis
  - Renal (kidney)
  - Gastro-intestinal (diarrhea)
  - Nervous system (both central and peripheral)





# Increased Risk for Long COVID

- Women > Men
- Older
- More severe primary infection/hospitalization
- Asthma
- Type 2 diabetes
- Presence of the following in blood:
  - Epstein Barr Virus (re-activation)
  - SARS-CoV-2 genetic material (i.e., a high viral load)
  - Particular auto-antibodies
  - Low levels of certain immunoglobulins (IgM; IgG3\*)



# Issues and Overlaps

- An evolving science
- Psychosocial impacts of COVID-19
- Medical Co-morbidities impacting mental health
- Exacerbation of prior / underlying psychiatric issues
- Neuro-Psychiatric impacts of the virus



# Frequent Cause of Mental Health Problems

- ICU experience- Post-Traumatic Stress Disorder
- Isolation, financial losses, etc...
- Loss-of others, loss of good health Prolonged Grief (disorder is new to DSM 5-TR)
- Unresolved pain or fatigue, loss of taste, smell, etc...
- Associated with increases in anxiety, depression



# Common Neuropsychiatric Symptoms

- “Brain Fog” (cognitive impairment)
- Mood changes
- Impaired Daily Function
- Insomnia
- Fatigue



## CNS

- “He lacked his old quickness of grasp”
- Felt his home was filled with French spies
- “He was never the same after”
- He was having a “nervous and spiritual breakdown in the middle of the (meetings)”





# COVID physical symptoms often associated with psychiatric symptoms:

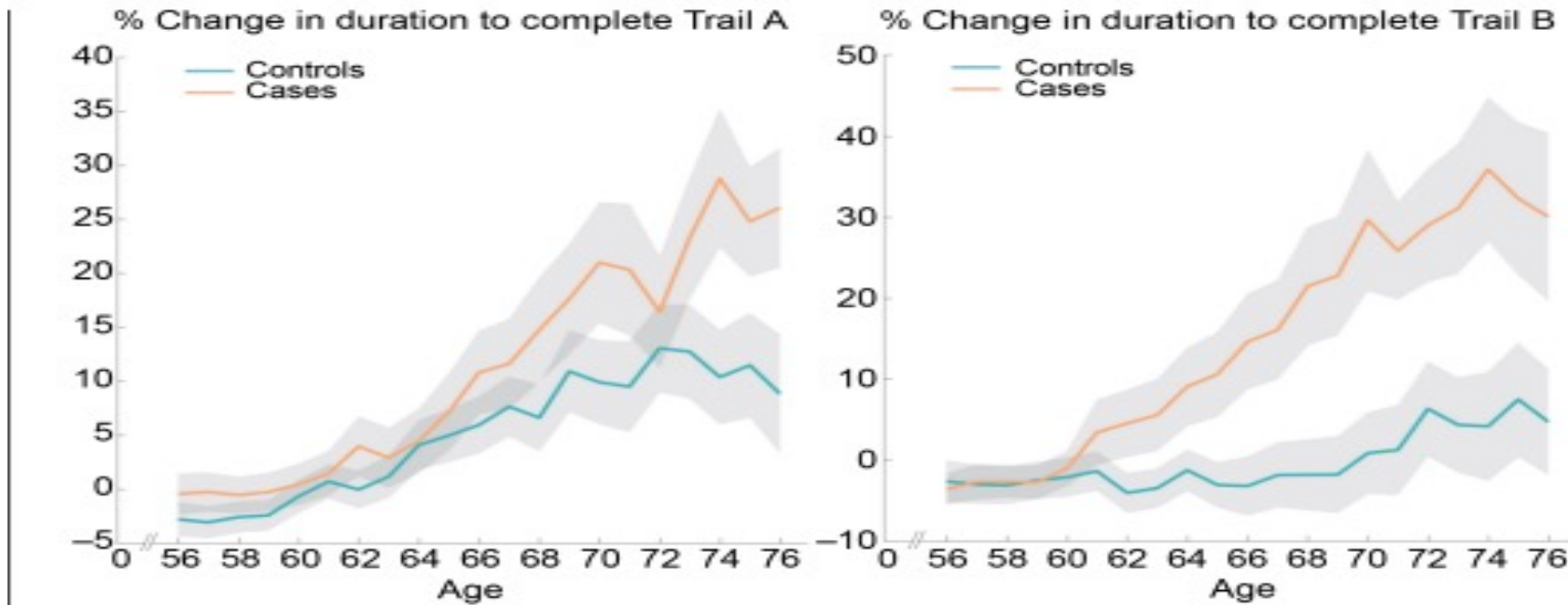
- Dyspnea (trouble breathing)
- Tachycardia
- Chest discomfort
- Pain
- Lightheadedness
- Muscle weakness





# Neuropsychological Testing

## Trail Making Test---Visual Attention; Mental Flexibility; Processing Speed; Motor Speed



**Fig. 3 | Percentage longitudinal change for SARS-CoV-2 positive participants and controls, in the duration to complete Trails A and B of the UK Biobank Trail Making Test.** Absolute baseline (used to convert longitudinal change into percent change) estimated across the 785 participants. These curves were created using a 10-year sliding window across cases and controls (standard errors in grey).



# Similarities to Certain Other Diseases

- Myalgic Encephalomyelitis/chronic fatigue syndrome (ME/CFS)
- Many other post-viral syndromes
  - Severe Acute Respiratory Syndrome (SARS)
  - Middle East Respiratory Syndrome (MERS)



# Treatment

- PREVENTION:
- Following Public Health Recommendations
- Vaccination
- Anti-viral treatment upon exposure
- Early intervention (monoclonal antibodies, antivirals, etc...)
- OT/PT/RT
- Mental Health Treatment
- Post-COVID-19 Recovery Programs\*



# Re: Mental Health Therapies

- Many evidence-based therapies, such as:
  - Acceptance and Commitment Therapy (ACT)
  - Cognitive Behavioral Therapy (CBT)
  - Group Therapy
  - Peer Support



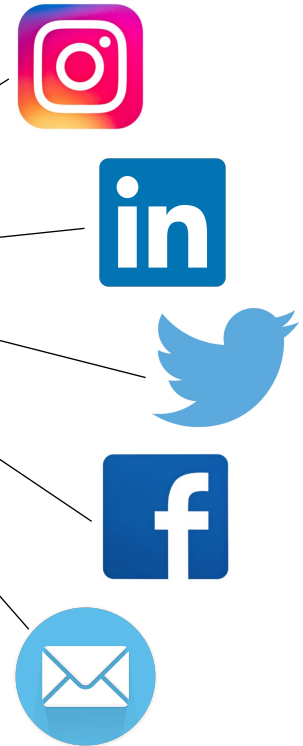
# Questions? Comments?



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# Thank You for Joining Us!

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