

Immune Support for patients with suspected COVID-19

As ND's are supporting more people with suspected COVID-19, I want to reassure you about a few things. Although what is heard on the news can be scary, most cases are mild and resolve on their own. In Colorado, we have a greater than 98% chance of recovery from the virus.

Currently, no one is being tested for COVID-19 unless they are sick enough to be admitted to the hospital. That leaves many wondering if they have a common cold, the flu or COVID-19. Some have found this video helpful since symptoms can be nondescript as well as wax and wane. <https://youtu.be/pC72CebOXD0>

Typical symptoms and their progression:

- Runny nose, tickle in the throat and/or sore throat, fatigue which progresses to
- Body aches & pains and extreme fatigue and fever of 99 deg F or higher
- By day 8, pneumonia can develop in some cases but mild back pain at the level of the lower lung is more common. Not everyone gets pneumonia
- Nausea, vomiting, diarrhea

Testing: The Colorado Department of Public Health and Environment is asking that tests be made available for health care workers and hospitalized patients. To test for COVID-19, a nasopharyngeal swab (like a long Q-tip) is inserted through the nose to the back of the throat to collect the fluid there. If the person has the virus, it will be seen in the fluid collected. This tests for the virus itself.

For those who believe they have had COVID-19 but have not been tested, an antibody test has been developed and is in the last stages of the approval process. This test will measure antibodies (not virus itself) to see if there is active disease or past exposure. This test may still be a couple weeks away.

Isolation or Quarantine: To slow the spread of the virus and “flatten the curve” people have been asked to isolate or quarantine so as not to overwhelm our healthcare system. Please isolate if you have the virus or are sick and suspected of having it. Quarantine if you are not sick but have been in contact with someone who is/was.

Isolation: This entails staying away from people for at least 7 days from the time that symptoms first appeared AND your symptoms have improved AND you have had 3 full days without a fever and are not taking fever reducing medicines.

Quarantine: This entails staying at home and not going anywhere for 14 days after exposure to the sick person. More detailed information is available at: <https://covid19.colorado.gov/isolation-and-quarantine>

The virus is very contagious and only a few viral particles appear to be necessary to transfer the disease. The virus enters the body via mucus membranes so it is important to wash hands and not touch your face. These two things help remove the virus from your hands and avoid entry through the mouth or nose. There are no known pharmaceutical treatments or vaccines currently available although a combination of Plaquenil and Azithromycin are being investigated for treatment.

Currently, the immune system is our main resource for combating the virus. Outcome depends on the immune response. A robust but balanced immune response results in mild disease and a good outcome. Poor outcomes occur from a cytokine storm where the immune system over responds or an under response that allows the virus free reign.

The protocols below are a collection of things to do and things to take that we know support a balanced immune response. The COVID-19 virus is new, and we don't have clinical trials or significant research to know if the things listed below will help. However, we know they help for other viruses and infections.

Prevention: These things prevent infection or support a balanced immune response. I've also included why they are useful for those who like to know!

Intervention	Mechanism of action
Things to do:	
Avoid people/cover coughs	Avoids exposure
Wash hands/Disinfect surfaces	Soap and disinfectants degrade the viral envelope thereby killing it
Avoid touching face	Reduces risk of viral entry via mucus membranes in nose or mouth
End showers with a cold spray	Increases Cytotoxic T-Cells and NK cells that kill viruses
Meditate on feelings of love	Decreases IL-6 (inflammation)
Walk outside in the sunshine	Reduces anxiety & increases Vitamin D, reduces risk of pneumonia
Gargle with salt water (1 tsp in 8oz H ₂ O)	Inhibits microbial growth in the throat
Sinus rinse 1 tsp salt ¼ tsp baking soda in 8 oz. distilled water)	Washes viruses and bacteria out of the nasal cavity, salt inhibits microbial growth.
Things to take:	
Melatonin 1 mg nightly	Reduces risk of cytokine storm and respiratory distress
Vitamin C (2,000 mg daily)	Supports T-cells and regenerates NK cells that fight viruses
Probiotics (Lactobacillus & Bifidobacteria)	Regulates inflammatory response by increasing T-regs
Zinc (15 – 30 mg.)	Reduces risk of pneumonia
Vitamin D (5,000 iu's daily)	Increases immune response on skin and in mouth killing viruses on contact
Garlic (raw is best)	Antimicrobial and has an affinity for the lung
Herbs – Echinacea, Elderberry, Astragalus, Ashwagandha, Goldenseal, Oregon Grape.	Varying mechanisms include balancing the immune response, killing viruses, reducing inflammation, reducing respiratory infections

Supportive care: If an individual is sick or has symptoms like those listed above, **do the things listed in the “prevention”** section as well as those listed below. They may help shorten the length of illness, reduce the risk of a poor outcomes or make the individual more comfortable.

Intervention	Mechanism of action
Things to do:	
Pulse Ox (get at drug store or online)	Measures Oxygen in the blood. If <85%, then go to the hospital
Isolate	Avoids exposing others
Hot Epsom salt baths with eucalyptus essential oil. After, rub body with cold wash rag. (cold mitten friction)	Stimulates fever & Increases Cytotoxic T-Cells and NK cells that kill viruses. Eucalyptus supports the respiratory system, Epsom salts provide magnesium for muscle pain.
Tepid bath with Epsom salts	Lowers fever and provides magnesium for muscle pain
Steam showers	Opens airway, reduces shortness of breath
Menthol ointment on chest	Opens airway, reduces shortness of breath
Lay back over bolster to open chest	Opens chest
Warming Socks	Stimulates blood and lymph flow, stimulates immunity
Things to take:	
Potassium – in foods or supplement	Reduces risk of hypokalemia
Mg+/Heating pads for muscle pain	Muscle relaxant
Homeopathic Byronia – 30c	Dry, painful cough, sharp stiches in the chest, worse deep breath, must hold chest to cough
Homeopathic Lycopodium 30c	Short, rattling breathing worse lying on back. Cough is dry and tickles. Chest burns, expectoration is greenish/yellow.
Homeopathic Eupatorium 30c	Aching like bones are broken, tremendous pain, thirsty for cold drinks
Herbal cough remedies – Coltsfoot, Khella, Lobelia, Osha, Mullein leaf.	Varying mechanisms including demulcents, antispasmodic, expectorating, antimicrobial.

The body is a healing machine and the most amazing thing on the planet! Giving it love and support will only serve you especially during times of stress and disruption. My hope is that you find these things helpful and they keep you healthy and safe.