



## COVID-19 Basic Facts

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COVID-19 is a novel virus that belongs to the family of Corona Viruses such as SARS and MERS which have affected humans in the past. COVID-19 was known to infect and transmit between animals but made a leap from animals to human beings appearing in Wuhan, China in December 2019 and then spread to other parts of the world. As the virus is new to humans, we do not have any antibodies or immunity to it. The COVID-19 structurally is a protein with a covering of fat around it which is known, “as the lipid crown”. The virus has the capability of replicating itself and disintegrates naturally. Because of the lipid crown the virus is susceptible to high temperature, alcohol more than 65% proof (i.e. hand sanitizer) and soap which dissolves the lipid crown.

### TRANSMISSION-

1. Droplets (Coughing, Sneezing)
2. Contaminated Surfaces (hence hands are the most common mode of transmission)
3. Stools of people with GI symptoms

The entry to the body is mostly via nose, mouth and perhaps eyes and therefore usually presents with upper respiratory symptoms i.e. sore throat, cough, fever and flu like symptoms.

### VIRUS SURVIVILITY ON THE SURFACES:

Copper	-	3.4 hours
Cardboard	-	8.4 hours
Steel	-	13.1 hours
Plastic	-	15.9 hours

### INCUBATION PERIOD:

Median Incubation Period – 5.1 Days

Symptoms appear within - 11.5 Days

Range – 8.2-15.6 Days

#### SYMPTOMS-

- Flu like symptoms: sore throat, cough, fever and shortness of breath in severe cases
- GI Symptoms: abdomen discomfort, nausea, diarrhea
- Loss of sense of smell, taste

All these symptoms are also seen in infection with other viruses and not unique to COVID-19.

#### TESTING-

1. Lab Testing (MERS- COV2/ COVID 19):

Test being used at the present. Average result report in 5-7 days after testing.

2. Rapid COVID 19 testing:

- a) Abbot – positive result within 3 minutes  
Negative result within 13 minutes
- b) Cepheid – results in 45 minutes

The rapid testing has been approved by FDA and hopefully will be distributed to doctors offices, clinics, urgent cares and emergency rooms within a week.

#### SCREENING FOR TESTING:

1. The Apple COVID 19 app (Interactive app screening for need of testing)
2. Call your physician/healthcare provider
3. Call local urgent care if physician/healthcare provider not available
4. Local hospital emergency department – call only if feeling sick or have shortness of breath.

New York State Corona Virus - Hot Line (1-888-364-3065) - this service screens for need for testing and assigns opportunities for drive by testing sites.

#### METHODS TO DECREASE SPREAD OF INFECTION:

1. Social Distancing:
  - stay home- go out only for essential needs (food supplies, medicine)
  - maintain 6 feet distance with others when in public
2. WASH hands frequently with soap and hot water. Rubbing back, palm, between fingers and under nails. Do not touch faucet with clean hands, use paper towel to shut off water. Avoid touching face as much as possible as face is the port of entry for the virus.

3. Practice good hygiene
4. Wearing mask when in public – jury is still out on benefit of this

#### SELF QUARANTINE:

1. Exposure to COVID-19 Positive person.
    - No Symptoms - Self Quarantine for 14 Days
    - Symptoms - Get tested
  2. Travelled to Quarantined countries.
    - No Symptoms - Self Quarantine for 14 Days
    - Symptoms - Get tested and quarantine as advised
  3. COVID-19 Positive tested and discharged to home Quarantine.
    - Discontinue quarantine after 7 days from appearance of initial symptoms and 3 days fever free without any medication.
- OR
- Two negative COVID tests administered one day apart.

#### TREATMENTS:

1. Symptomatic treatment (i.e. for cough, elevated temperature/fever)
2. Antibiotics:  
Hydroxy Chloroquine and Erythromycin are few of the many drugs under investigation for the treatment of COVID-19. At present time Hydroxy Chloroquine and Erythromycin are FDA approved only as “Compassionate Treatment” for very sick patients
3. The use of Hydroxy Chloroquine and Erythromycin is showing some promise.
4. Antivirals:  
-Many antiviral medications are also under clinical trial for COVID-19 treatment, but none are yet approved.
5. Immunosuppressant and Arthritis drugs are under clinical trials.
6. Serology:  
Use of Convalescents Serum (antibodies from the patient who has been recovered from the disease) is under clinical trial

#### IMMUNITY:

The virus does appear to confer some immunity but unclear how much and for how long

#### VACCINE:

The race to develop a Vaccine is in the full swing but it would take up to a year to year and a half before vaccine will be available for the general public.

#### Disclaimer:

The author has put together the above information from the medical journals and articles and believes it to be based on scientific and medical grounds - however the author cannot attest to the proof. This newsletter is meant as a general guideline for public consumption. The guidelines are expected to change as we learn more about the virus. Please follow your doctor's advice and CDC's guidelines