

Corvid-19 Facts 8/31/2020 Updated

Country	Confirmed cases	New Cases	Deaths
Date <i>These #'s are high (up to 30% higher) as it does not reflect people getting tested more than once</i>	8/31/2020 WHO Began 1/21/2020	Source <u>WHO Reports</u> Alaska <u>Alaska COVID19 Report</u> <i>past 24 Hours</i>	WHO Alaska Report
USA	5,899,504	43,983	181,689
Brazil	3,846,153	41,350	120,462
India	3,621,245	78,512	64,469
Russia	995,319	4,993	17,176
Iran	373,570	1,754	21,462
Sweden	83,958	0	5,821
UK (Britain)	334,471	1,715	41,499
Spain	439,286	0	29,011
Italy	268,218	1,365	35,477
China	90,383	32	4,729
Philippines	217,396	4,265	3,520
Alaska based on 348630 tests (45.9% of populous) 9092 tests Too few are being tested see above note	Instate/out of state 5263 / 862 7 day average of positive testing <i>from 2.05% to 2.22% to 1.82%</i>	Resident/Non-resident 171 / 31	37
18732 tests done 19.5% of Fairbanks tested We are lagging behind the state & nation 590 test see above note	Resident/Non-resident 640 / 48 7 day average of + tests <i>from 1.58% to 1.52% to 1.25%</i>	Resident/Non-resident 33 / 5 <i>Not reported are military bases which do not report to this data base</i>	8
World Wide	25,118,689	264,107	844,312

Reference sites URL: <https://coronavirus-response-alaska-dhss.hub.arcgis.com>
 WHO www.who.int or <https://covid19.who.int/table> is what each state is doing.
https://www.msn.com/en-us/news/us/state-by-state-coronavirus-news/ar-BB13E1PX?fbclid=IwAR0_OBJH7ISyTN3ug_MsOeFnNgB1orTa9OBgijKJ7dhnwIVvHEsptuKkj1c

8/31/2020 Environmental Systems Research Institute, Inc. (Esri) GIS	
World wide (est pop 7.7 Billion)	25,325,617
World wide Deaths	847,847
US Cases (est pop 331,272,237)	6,020,186
US Deaths	183,355

The US has 2.8 hospital beds per 1000 our needs could be 56, China had 4.3, Italy 3.2, South Korea 12.3

Impact of COVID-19 on the US Healthcare system

Estimated US Population 331.3 million **36.4%** have been tested (**120.4 million**)
Estimated 5% of US population will test positive for Covid-19 16.56 million (**6.02 Million**)
we have currently tested **an est. 120.4 million based on 6.02 mill that have tested positive**
discount some of these numbers by 30% to account for multiple testing of same person.
If 8% will require hospitalization of the 16.56 million positive cases, we would need 1.325 million beds. Estimated by the American Hospital Association there are 800,000 staffed beds available.

The USNS Mercy and Comfort added
Of these estimated to be admitted to ICU
The US has 16,000 ICU beds
US could need 299,000beds with ventilators

The Needs
2,000 staffed beds, not ICU
960,000. to ICU beds
we have 68,000-85,000 beds
<16,000 ventilators

Summation: Estimated **needs could be 1.325 million hospitalized beds** for just COVID-19 patients alone. **If positives represents 5% of test run, then approximately 120.4 million have been tested,** we have no idea how many tests have been run or how many multiple tests conducted on the same person, resulting in **6.02 million positive tests run with 183355 deaths, 1776 within past 48 hrs.**

Normal ICU stay 5-7 days, estimated ICU stay for COVID-19 2-3 weeks and they could tie up a ventilator for that length of time also, helping only 1/3 as many patients.

This is why we need to flatten the curve by social spacing and only essential travel.

Expected Death (these are just estimates based on other countries) if 5% of the US Population (16.56 million) test positive and if

- 1% die = 165,600 people
- 2% die = 311,200 people
- 3% die = 496,800 people

6% die = 993,600 people obviously we have passed the 1.325 million positive cases so if 5% of the US population (16.56 million) test positive and 6% of those die = 993,600 deaths if no vaccine, or if 3.09% (511,704) will die, we are 1/3 of the way there in 25 weeks.

World wide death rate of positive tests actually 3.35%. The US is at **183355 3.05% of those actually tested positive, that is 48% lower death rate than when we started in 3/2020 , started at 6%. The US deaths represents 21.6% of the world's death numbers vs 23.77% of worldwide confirmed cases.**

To put this in perspective, In comparison to the flu in the US

CDC Estimates. From 2010 to 2016, the flu-related death rate was between 12,000 and 56,000, with the highest season being 2012 to 2013 and the lowest being 2011 to 2012. Most deaths are caused by complications of the flu, including pneumonia or a secondary bacterial infection of the heart or brain. or 2,000 to 9,333 per year. In 2020 in the US has 19 million cases 180,000 hospitalized and **10,000 (0.052%)** have died, typically it is 2% will die, compared to **3.05%** with COVID19. **36.4% (US), 45.9% (Alaska), & 19.5% (Fbks) are still too few to protect us from future outbreaks.** Experts feel that we need either need people to get infected with the virus and develop antibodies or get vaccinated to create immune antibodies to protect us, that we need **>60%** of the population to have positive antibody tests and **preferably 70-90%**, one expert felt they would not feel confident til **>85%** were positive, to give assurance (herd immunity) in order to go without masks and social distancing. NY City seems to have the highest number at 20%. Testing is so important. Currently we are testing at **19.74 Million tests per month.** At this rate to **test everyone once** it will take **16.62 months or over 1.38 years. To test 3 times it would take 49.85 months or 4.15 years**

The Flu (Influenza kills approximately 1-2% of those infected, SARS killed 800 people total, COVID19 appears to **kill 3.05% of those that test positive or 1.53 times (153%) more deadly than the flu** and seems to be **more contagious.** (Seems to spread more readily)

Alaska has 5263 cases so far, 640 in Fairbanks or 1 of every 8 of Alaskans was 1 in 4, with 28 deaths, the first case was transient foreign airline crew member. Interesting, the Source of Alaska’s SARS-Cov2 virus originated not from East Asia by travelers or the west coast (Washington where it was first observed) , but came from the east coast of the US, and they were inoculated first from Europe, accordingly from New York’s Governor and CDC.

Best practice protection is good personal Hygiene do not touch eyes, nose, mouth, wash hands frequently for at least 20-30 seconds, before you touch your face, and observe personal spacing of 6-18 feet. Remove your shoes in your house, frequently clean surface areas, let the cleaner sit 15-20 sec before wiping off. **We are recommending to wear any kind of mask.**

Drug treatment is being researched, but as yet not been verified, only suggested. Best to isolate those sick and isolate those most susceptible (old and preconditioned with risk factors)

Risk factors: Cardiovascular disease (56.6%), Obesity (41.7%), Diabetes (33.8%), age >60, respiratory problems, especially smokers or those who vape, High Blood Pressure

If you have been exposed self isolate for 2-4 weeks

One episode in China, a man tested negative for 27 days before showing symptoms. So Isolation may want to be considered up to 4 weeks not just 2 weeks.

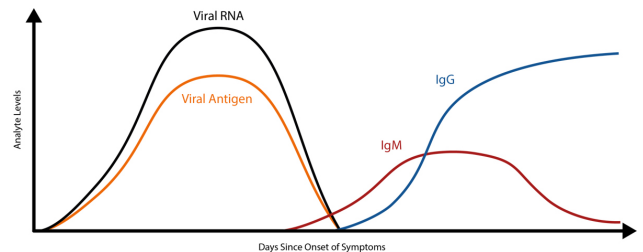
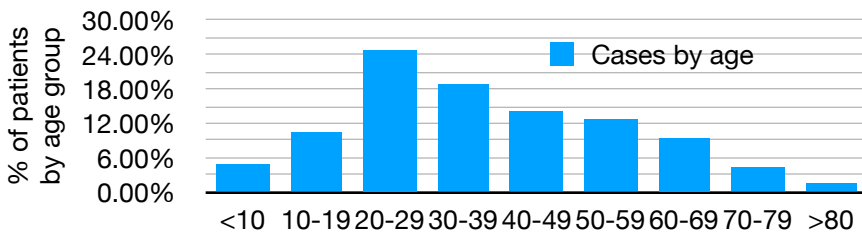
Italy 1 in 10 positive cases admitted to ICU due to Hypoxic failure requiring mechanical ventilation. In NY it was 1 in 7 that required hospitalization, of the 5700 hospitalized 2634 were discharged (79% (2081)) or died (21%(553)), 9 in 10 put on a ventilator died.

Public policy development and education is important.

How Long does Covid-19 stay on objects

Air	up to 3 hours
Copper	4 hours
Cardboard (Amazon Box)	24 hrs
Plastic surfaces/Stainless Steel	72 hours
Mucosal surfaces	unknown

Alaska COVID19 Patients by Age



Project outward

Exhalation can spray spittle (droplets)	1.5 m (4.9 ft)
Coughing	2 m (6.6 ft)
Sneeze	6 m (19.7 ft)

Development of immune response

Early viral testing tests to see if you currently have the virus.

Later antibody testing tells us if you have been exposed and survived. But does not tells us if you have immunities to the virus. We will need to have both tests done in order to open the community.

Viral Antigen and Viral RNA tells us you have the disease and can spread the disease and can or are currently sick.

IgM (short term) and IgG (long term antibodies) tells us you have experienced the virus or had the vaccine, and got over it. You may be resistant if your antibody levels are high enough. We have tested currently 45.9% of the Alaskan population and over little over 36.4% of the US population, discount these numbers by 30% to reflect multiple testing

of the same person. To be safe, we need at least 25% to see if we are making progress, 60% to barely qualify to be safe, and 70-90% to be assured we will not see a second wave of sickness. Some experts will not feel safe til we are at 85%.

Three types of clinical laboratory COVID-19 or SARS-CoV-2 tests are being developed: Molecular Gene sequencing (current method), Viral antigen (testing parts of the virus), Host antibody tests (serology). They detect the virus in different ways.

Mask & Mask Usage: N95 filter out 95% of the particles in the air 3 microns in size or larger. Mold sizes are about 10-12 microns in size. Bacteria are larger, so is dust Gas molecules and viruses are smaller. PM2.5 are 2.5 microns in size.

Viruses can be 1 micron in size, 0.3 micron in size, or 0.1 microns in size, so they **will pass right through. We recommend wearing any mask, the mask may provide up to 5 times the protection over wearing no mask at all.** It still **does not protect** the wearer from contracting the infection, it **can inhibit** the spreading, something is **better than nothing at all.**

Remember there is a clean side (the side towards you) and a dirty side, the side to the contaminated air is dirty. If you are COVID positive then this is reversed. When handling the mask, do not touch the dirty side and then touch your face, Wash properly your hands first after touching the dirty side before touching your face. If you are infected the dirty side is the inside surface of the mask.

Wash your homemade mask in hot water wash >133F (for at least 10 minutes) and rinse to sanitize with high heat >133F Plus and a weak bleach or peroxide (not Both) the mask. Daily if possible. If you are a frontline health care provider with a homemade fabric mask 2 hours. Do not touch the dirty side.

Alcohol solutions should be 60-80% alcohol 70% is optimal. **Keep wet and rub 30 seconds,** or Happy Birthday song sung 3 times.

Hydrogen peroxide diluted to 2% or 4 teaspoonful per quart of water (20ml per 946ml) Bleach the same ratio **Vinegar and ammonia are good cleaning agents, not disinfectants.**

Do not mix any of these agents together, toxic fumes can result.

Disinfectants, in order to be effective, should remain on the applied surface, to be cleaned moist (**wet**) for **30 seconds to 4 minutes** depending on material. Caution may dissolve glue or adhesives or bleach and discolor items, check with manufacturers. Do not let it get inside electronic devices. UV (10 minutes), UV light only kills where it can see.

Myths

Taking hot baths, using colloidal silver, eating garlic soup, gargling with bleach are not proven to be effective. We have already seen using chloroquine taking the wrong form in the wrong dose can be fatal, one death and one critically injured. (see Arizona couple after listening to the president)

We have heard of all kinds of cures. To date there is no curative or preventative treatments, only supportive therapy.

At this point there is **no proof** that Quinine, zinc, Hydroxychloroquine, Chloroquine, or Vitamin C works. As they say wives-tale at best, irresponsible reporting most likely. We have seen no information that they work, ineffective dosing issues, over-dosing issues, permanently killing the senses of smell or taste, inappropriate usage, cardiac arrhythmias, and death from the usage of these agents have been reported.

The virus may die out with heat of summer, or cold weather, this is a myth

There are a couple of studies that show the virus can withstand 98F

We know the body tries to use 104F to potential our immune system, to kill viruses.

Taking NSAID, Aspirin, Ach-Inhibitors, Arb's and you get the COVID-19 infection are not contraindicated and no clinical evidence that says you should stop any of these classes of medications. It would be misguided and ill advised if you did so

In other words, Unless your doctor makes changes, keep taking your medications unless told to do otherwise.