

Covid-19 Facts 12/20/2021 Heads up Alaska will be going to a Mon, Wed, Friday update. [underline blue text are links and click on them to get more info Eligibility For Interior Vaccination or Testing sites. See Flyers on MCPFairbanks.com](#)

Country	Confirmed cases	New Cases	Deaths
Date These #'s are high It does not account for some getting tested more than 3 times. correction fact= 3 (most cases)	12/20/2021 WHO Began 1/21/2020 Last update 12/17/2021 3 days ago	Source WHO Reports Alaska Alaska COVID19 Report past 24 Hours Of Concern B.1.1.529 Omicron	WHO Alaska Report back to 3 days per week
USA (1) Really? Exploding	50,415,400	OMG 156,633	799,326
Germany (8) Exploding	6,809,622	16,086	108,352
Brazil (3) Better	22,204,941	0	617,395
India (2) increases	34,746,838	6,563	477,554
Russia (5) having problems	10,241,812	27,022	298,222
UK (Britain) (4) problems	11,361,391	81,959	147,218
Columbia (13)	5,105,285	2,016	129,399
Italy (11) increasing numbers	5,389,155	24,303	135,641
Spain (10) Irregular reports	5,422,169	0	88,667
Iran (9) having big problems	6,170,979	1,968	131,083
Philippines (20)	2,837,555	181	50,675
Sweden (36) Irregular	1,250,885	0	15,231
China (106) Censored	129,678	0	5,698
Worldwide	273,900,334	504,603	5,351,812
Alaska 3,646,311 tests tests (479.78% (159.93%) of populous) 12,736 tests in update 3 days ago	Instate/out of state 149,591 / 5,471 7 day positivity rate last 3 days from 3.34% to 3.38% to 3.41%	Resident/Non-resident 418 / 5 in past 3 days to begin updates only 3 days per week	Begin 3 day per week updates 915
FNSB 269,883 tests done 281.13% (93.71%) tested We are lagging behind the state & nation 1,023 test in update 3 days, ago 3 day per week	Resident/Non-resident 17,081 / 426 7 day positivity rate last 1 days 4% to 4% to 4% Goal Positivity <5%	Resident/Non-resident 42 / 2 in 3 days. Not reported are military bases which do not report to this data base.	108
SE Fairbanks Matsu Borough positivity rates	peak 33.33% on 3/23/21 peak 22% on 10/22/21	0% to 0% to 0% today 6% to 6% to 6% today past 2 days	Positivity Rates (see vaccination rates below)

If you go to our website MCPFairbanks.com under Health Information you can find Reference links URL: [Alaska's current state](#) , [current AK](#) , [How are Deaths Reported](#) , [How we calculate COVID19 deaths](#) , [WHO Weekly summary](#) or [WHO daily Data Report](#) , [How is each state is doing?](#) [MAP of states](#), [Which state is doing poorly?](#) [Are you required to get a test?](#) [Positivity Rate by state](#), [Progress of vaccination](#) , [Eligibility](#), [Battle against COVID](#)

12/20/2021		Environmental Systems Research Institute, Inc. (Esri) GIS
World wide (est pop 7.8 Billion)		275,170,911
World wide Deaths		5,358,810
US Cases (est pop 331,272,237)		50,970,391
US Deaths 400,000+ deaths will we see 500,000 by 3/31/2021? When will we hit 1 million? May 2022?		807,023

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Medical Center Pharmacy

Current worldwide concern are South Africa, Hungary, Austria, Germany, France, Spain, Netherlands, Belgium, UK, and Canada.

Impact of COVID-19 on the US Healthcare system

Estimated US Population 331.3 million **307.98% (102.66%)** have been tested (**1.019 Billion tests have been run**)

Estimated 5% of US population will test positive for Covid-19 16.56 million (**currently 51 Million (15.4%) that have tested positive vs Alaska (19.68%) we have currently tested an set 1.019 Billion based on 51 million that have tested positive discount some of these numbers by 67% 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 US has 2.8 hospital beds per 1000 our needs could be 56, China had 4.3, Italy 3.2, South Korea 12.3

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 1.019 Billion 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 51 million positive tests run with 807,023 total deaths with 1,613 deaths in the past 3 days, ave 5,099/day. In AK, with 149,591 positive cases 19.68% of Alaska, 3,204 hospitalizations, and 915 deaths. Hospitalization rate is 2.14% of those that test positive, Death Rate 0.63% overall or 28.56% of those hospitalized. Those >60 y/o represent 15% of positive cases, yet represent 80% of deaths. 866,465 vaccines given equal approximately 408,921 (53.81%) completed series and 457,544 (60.20%) vaccinated once of population.

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 we are now at 29.137 million positive (8.8%) 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 we are at 38.176465 million 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, but we are 11.5% of the population, we know 1.65% die or 631,809 people.

World wide death rate of positive tests actually 1.95% This has dropped. The US is at 807,023 1.58% of those actually tested positive, that is 70% lower death rate than when we started in 3/2020 , started at 6%. But we are slipping Death % have gone from 1.67 to 1.82% to 1.59%. There are 7.8 Billion people in the world 331.3 million live in the US (4.2% of the world's population) 15.40% have tested positive. The US deaths represents 15.06% of the world's death numbers and 18.52% of worldwide confirmed cases we should be at 4.2%. Interesting the US has access to the greatest health care in the world, yet experienced 1 death of 7 deaths worldwide or 15% of the worlds death yet represent only 4.2% of the population. What are we doing wrong?

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 1.58% with COVID19. 307.98% (US), 479.78% (Alaska), & 281.13% (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 >65% 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 51.26 Million tests per month. At this rate to test everyone once it will take 6.40 months or over 0.67 years. To test 3 times it would take 19.20 months or almost 2 years still from now

The Flu (Influenza kills approximately 1-2% of those infected (1.6% positivity in Alaska zero deaths for flu), SARS killed 800 people total, COVID19 appears to kill 1.58% (805,410) of those that test positive (15% of US COVID) or 20% less deadly than the flu and seems to be more contagious. (Seems to spread more readily) Flu rates dropped from 300 to single digits this year note the start of mask wearing impacted flu numbers.

Alaska has 149,591 so far 17,081 in Fairbanks or 1 of every 9 of Alaskans, and with 108 of 915 deaths 1 in 8, 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. Currently 41 Variants known, only 15 of major concern in the US. (Europe's (china's)) Primary, plus an Ohio variant (COH.20G/501Y), California, UK (B.1.1.7), (7) South African (1.351), South African (Omicron B.1.1.529), India (Delta), Delta-Plus, Peru (Lambda(C.37)), Mu (Columbia) and (2) Brazil (P.1) Omicron, we have seen 7, Europe's (China) variant, UK, India (delta) now representing 96% of new tests, now Omicron, Alaska so far, the last 6 in particular as they have a 50% increase in transmissibility vs 20% in the others over the China variant, the delta variant is 50% more transmissible than the UK (B.1.1.7) version, Mu(Columbia), now Omicron (twice that of Delta). For the latest in [Variance issues in Alaska](#)

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, 2 in the wings. 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.

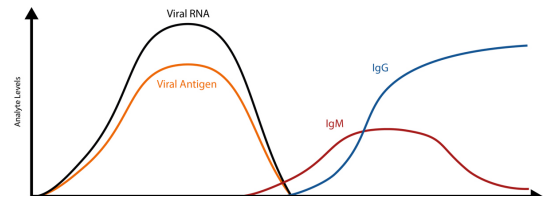
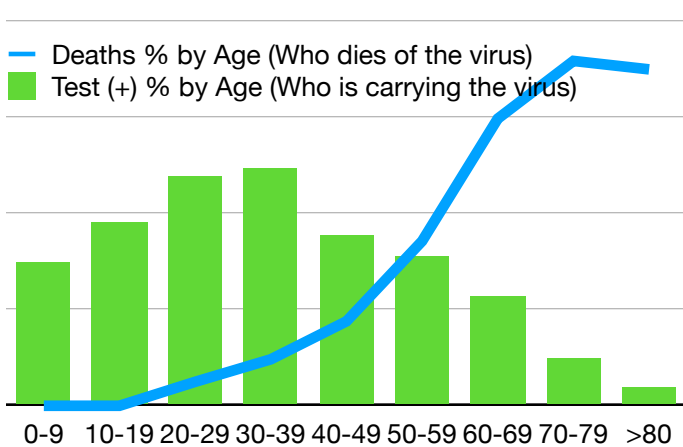
One episode in China, a man tested negative for 27 days before showing symptoms. So Isolation may want to be considered up to 4 weeks not just 10-14 days.

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 added (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 (droplets in air, sneeze/cough)	up to 3 hours	
Copper	4 hrs	
skin (SARS-COV2)	9.04 hrs	(Influenza virus 1.82 Hrs)
droplets on skin (sneeze)	11 hours	
Cardboard (Amazon Box)	24 hrs	
Plastic surfaces/Stainless Steel	72 hour	



Updated graph numbers.

Project outward

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

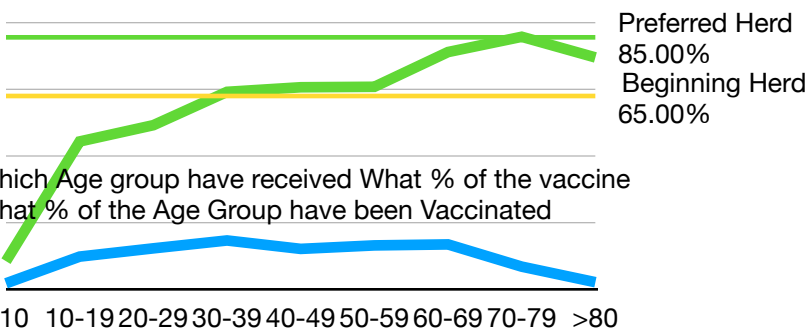
Development of immune response

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 if you 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. [Current View of antibodies/immunity](#). We have tested currently **479.78% (159.93%)** of the Alaskan population and over little **over 307.98%**

Vaccination in Alaska by Age



(102.66%) of the US population, discount these numbers by 67% 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%](#). See bottom of last page to see how and where in Alaska do we and each of the boroughs stack up, compared to other states and the nation.

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. So are smoke particles & air pollution in Fairbanks.

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 ver 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.

Mask usage: 5/13/21 While the CDC has changed it's recommendations for those who have gotten vaccinated to go mask free, except on Mass Transportation such as buses and airline, or when in crowded situations, like concerts.

Those that have not been vaccinated are still advised need to wear a mask, they are now the population at risk.

The risk has now increased for those non-vaccinated folks. They no longer have the masked people in the community to protect them. While those who have been vaccinated will not get sick or as sick. They can still pass, much more easily without the masks, the virus to those who have not been vaccinated to make them sick.

Therefore, it is even **more imperative** that those that have not been vaccinated, wear a mask to protect themselves, or get vaccinated. The sea of those with the potential to have the virus now are those <12 y/o of age, those > 12y/o who have not been vaccinated, or those who have been vaccinated and are transitory carriers. Currently, this is about 50% of the US population and about 60% of the Alaskan population. And about 80% of all children under 18y/o at this moment.

Conflict	Combat Death	Past 3 days
Revolutionary War	8,000	
Civil War	214,938	
World War I	53,402	
World War II	291,557	
Korean Conflict	33,686	
Vietnam	47,424	
Gulf War	149	
Afghanistan	1,833	
Iraq	3,836	
1918 Flu	675,000	
9/11 deaths	2,977	
COVID19 deaths from 1/20/2020 to 12/20/2021	807,023	1,613

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, but 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 past-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, Ivermectin, or Vitamin C or D works. As they say wives-tale at best, irresponsible reporting most likely. We have seen no information that they work. There have been 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 at show the virus can withstand 98F. We know the body tries to use up to 104F to potentiate 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.

Vaccine Myths and Fake information: There are no microchips, tracking devices, fetus tissue, at all in the vaccines. Vaccines will not and can not change your DNA., It can not change the fertility of men or women. It seems to be safe to the fetus and pregnant women. You should continue to wear a mask til we get to Herd Immunity levels, but can remove masks if you are outdoors, but not at concerts where you are close together. You should still get vaccinated complete series) even if you got COVID. If you have some of the co-morbidities, it is important that you do get vaccinated, the side effects of the vaccine will be milder and survivable than getting COVID. When you have questions, ask a pharmacist or your doctor.

As of 12/21/20, DHSS was aware of 11 reports regarding possible allergic reactions from Alaska's hospitals to CDC: Bartlett Regional Hospital (8), Providence Alaska (2) and Fairbanks Memorial Hospital (1). Two were identified as anaphylaxis and one of those resulted in hospitalization for ongoing monitoring. In the other three cases, symptoms were mild and not considered anaphylaxis. the hospitalized patient has been discharged and is doing well. The CDC said there appears to be no obvious geographic clustering of these reactions, nor was a specific production lot involved. People who experience anaphylaxis after the first dose should not receive a second dose, according to CDC recommendations.

For being one of the first states in that nation to start vaccinating, those <16y/o, we have slowed down vaccinations to where we are now way behind. More people are getting sick more frequently. Soon we will have more deaths. Due to vaccination resistance, Alaska has pushed itself into near last place, in the nation, as to when we will reach "herd immunity". This is the date when we can safely remove our masks and other restrictions.

Check our website www.MCPFairbanks.com for the 13 testing sites in the interior of Alaska.

Who is eligible now? All Alaskans >5 y/o, can receive the Pfizer vaccine and those >16 y/o can receive all of the other vaccines, all visitors can get vaccinated. Johnson and Johnson, has been reinstated, but I would caution not to give it to women 12-50 years old. Booster available >16y/o. For details about eligibility, to find a provider visit covidvax.alaska.gov. for vaccination sites or call 1-907-646-3322 for questions covid19vaccine@alaska.gov 9 am – 6:30 pm Monday - Friday and 9 am-4:30 pm Saturday and Sunday. You may be put on hold, but you will not need to leave a message for a return phone call if you call within business hours. Keep these tips in mind when scheduling. checkout our website www.MCPFairbanks.com Please keep these tips in mind when scheduling. Be sure to keep and save your proof of vaccination cards as you may need it for travel purposes in the future.

Gao Fu, the director of the China Centers for Disease Control, admitted on 4/10/2021 that the country's vaccines don't exactly give Covid-19 a knockout blow. One study from Brazil found that the vaccine from the Chinese company Sinovac was 50.4% effective, compared to Pfizer's 97%. Fu said the government is looking for ways to boost effectiveness. Post Delta Expansion (November) without the booster effectiveness rates for Pfizer and Moderna mRNA was down to 18.4% the booster brought it back up to 90%.

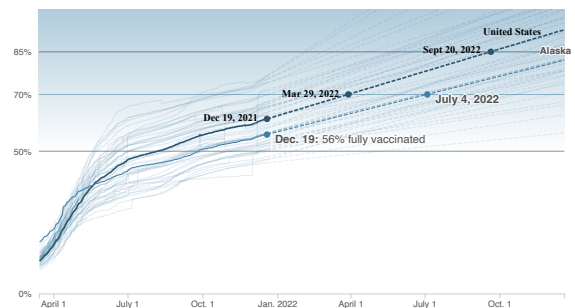
Many Alaskans live with underlying health concerns

You can not change your age but you can affect change with other risk factors. Nov. 17, 2020 for more information check out [Alaska DHSS Insights](#)

Epidemiologists within the Section of Chronic Disease Prevention and Health Promotion analyzed reports from about 8,500 randomly-selected Alaska adults who participated in the annual [Behavioral Risk Factor Surveillance System \(BRFSS\)](#) telephone survey between 2016 and 2018. About 67% of Alaska adults — two out of three — have at least one of the following ongoing health concerns that have been shown to increase chances for serious illness from COVID-19:

- 46% of Alaska adults are current or former smokers
- 32% have obesity BMI >30.0
- 8% have type 1 or type 2 diabetes
- 6% have chronic obstructive pulmonary disease (COPD)
- 5% have heart disease or have had a heart attack
- 2% have chronic kidney disease

Older age and other health concerns can lead to COVID-19 complications



The CDC lists other factors that increase chances for serious illness from COVID-19 infection. **Age is one of them.** Even in the absence of any other risk factors, older age increases someone's chances of serious health problems related to COVID-19. In Alaska, about 15% of adults are ages 65 years or older. If you consider older age and underlying health conditions, 71% of Alaska adults are at increased risk for serious illness from COVID-19.

This estimate is likely an undercount, given that **strong evidence links other known health concerns with severe COVID-19 illness.** Those health concerns include currently having cancer and sickle cell disease, as well as having had an organ transplant. The BRFSS survey does not measure the number of Alaska adults with those conditions.

There is some evidence that **other conditions also may increase chances of serious COVID-19 illness.** Two of those problems include high blood pressure and asthma. Those conditions affect a significant number of Alaska adults. Almost 1 out of 3 Alaska adults (31%) has ever had high blood pressure, according to recent BRFSS data. About 9% of Alaska adults have current asthma.

COVID Long Haulers Symptoms: Symptoms that linger long after the recovery from the infection if you did not die from the virus. This includes, but not limited to:

Lack or minimized ability to taste or smell
Shortness of breath
labored breathing
inability to walk short distances
cough
headaches

Brain fog, impaired cognitive processes
Inability to remember, confusion, or read text messages
lapses in memory
inflammation of organs systems
fever/chills

fatigue/inability to stay awake
sore throat
congestion or runny nose
nausea/vomiting diarrhea
body and muscle aches
pains

Current Conditions: New cases are up, positivity rates are up dramatically. Non-Vaccinate persons represent 90% of all recent hospitalizations and 95% of deaths. Delta Variants represent 91.6% of tests with Omicron one the horizon in Alaska and 95% in other parts of the US. Alaska, we have gone from 0% Delta variant in Early June, to 96% Delta currently, Fairbanks is poorly protected with only a 66% vaccination rate. 29-31% of covid patients suffer with long haulers symptoms for 6-18 months or longer after recovery. Currently, Children make up 14.3% of all COVID cases use to be 7%, 2.4% are hospitalized, 0.01% die. In Alaska, We are seeing the Vaccines become less effective, down from 97% to 18.9% effective against the Delta Variant, and in Israel down to 32%. In the west, short term exposure to Forest Fire 2.5 micron particles, increased the likelihood of COVID infections and death. (caution this may have implications in our high 2.5PM season). The unvaccinated are creating a pool to create more variants/resistance. Unvaccinated are 45 times more likely to be symptomatic, In the US over the weekend of 9/11-9/12 1 in 5 deaths worldwide was in the US. What are we doing wrong?

Borough	1 st dose	completed	Booster
Kodiak Island Borough	72%	68%	23%
Aleutian East Borough	95%	86%	24%
Juneau City and Borough	83%	78%	33%
Yukon-Koyuk Census Area	83%	76%	30%
Sitka City and Borough	82%	78%	36%
Nome Census Area	82%	77%	28%
Skagway Municipality	82%	77%	33%
Kusilvak Census	80%	74%	22%
Bethel Census Area	80%	73%	26%
Yakutat Plus Hoonah-Angoon	79%	76%	37%
Bristol Bay Plus Lake and Peninsula	77%	70%	30%
Denali Borough	75%	66%	25%
Anchorage Municipality	75%	66%	22%
Aleutians West Census Area	74%	64%	15%
Haines Borough	72%	68%	28%

Vaccinations have been approved for ages 5-17 y/o (Pfizer) and For all adults >18 y/o (Pfizer, Moderna, and J&J). Booster shots have been approved for Pfizer and Moderna (6 months after the 2nd injection), and J&J 2 months after the first injection Check with Provider for cautions with J&J and Moderna. **With The FNSB at a 66% vaccination rate. That means 34% of the population is un-vaccinated.** Based on that, if heard that the weatherman predicted a 34% chance of rain, **Would you plan an outdoor event without tents or would you leave your home without a rain jacket? Would you continue wearing a mask or get vaccinated.** Vaccine Coverage Ranked: [State by state](#) , [Expected Herd Immunity Achievement Date based on current vaccination Rates. From Safest community to less safe.](#) Highest to Lowest. Latest report was 12/20/2021 **Alaska (29): Completed: 53.81%** **One shot: 60.20%** **Booster: 18.03%** South Dakota(27): 56.4% Missouri(39): 52.6% US Population: 61.4%

North Slope Borough	42%	39%	14%
SE Fbks	39%	35%	11%

