

COVID-19 FACTS

ABSTRACT

This report is made from official data sources. I'm writing this report as a concerned citizen because by my estimation we are drastically overreacting to COVID-19. In particular, Governor Dewine's mask mandates are unnecessary restrictions on personal liberty by every metric for which there is data to measure. I want to encourage you to look at the data yourself instead of trusting "the experts" whoever they are.

DEATH RATES

Both the CDC and the WHO publish death rate statistics. Let's have a look (**FIG.1**):

	Confirmed Cases	Deaths	Death Rate
WHO	12,768,307	566,654	4.4%
CDC	3,296,599	134,884	4.0%

FIG.1

<https://www.cdc.gov/coronavirus/2019-ncov/cases-updates/cases-in-us.html>

<https://www.who.int/emergencies/diseases/novel-coronavirus-2019>

So around 4%. But COVID-19 affects different people differently. Let's break that down by age and see what we get (**FIG.2 and FIG.3**):

<1	1-4	5-14	15-24	25-34	35-44	45-54	55-64	65-74	75-84	85+
9	7	14	149	795	2,026	5,650	13,808	23,866	30,369	38,048

FIG.2 - Number of deaths by age in the United States.

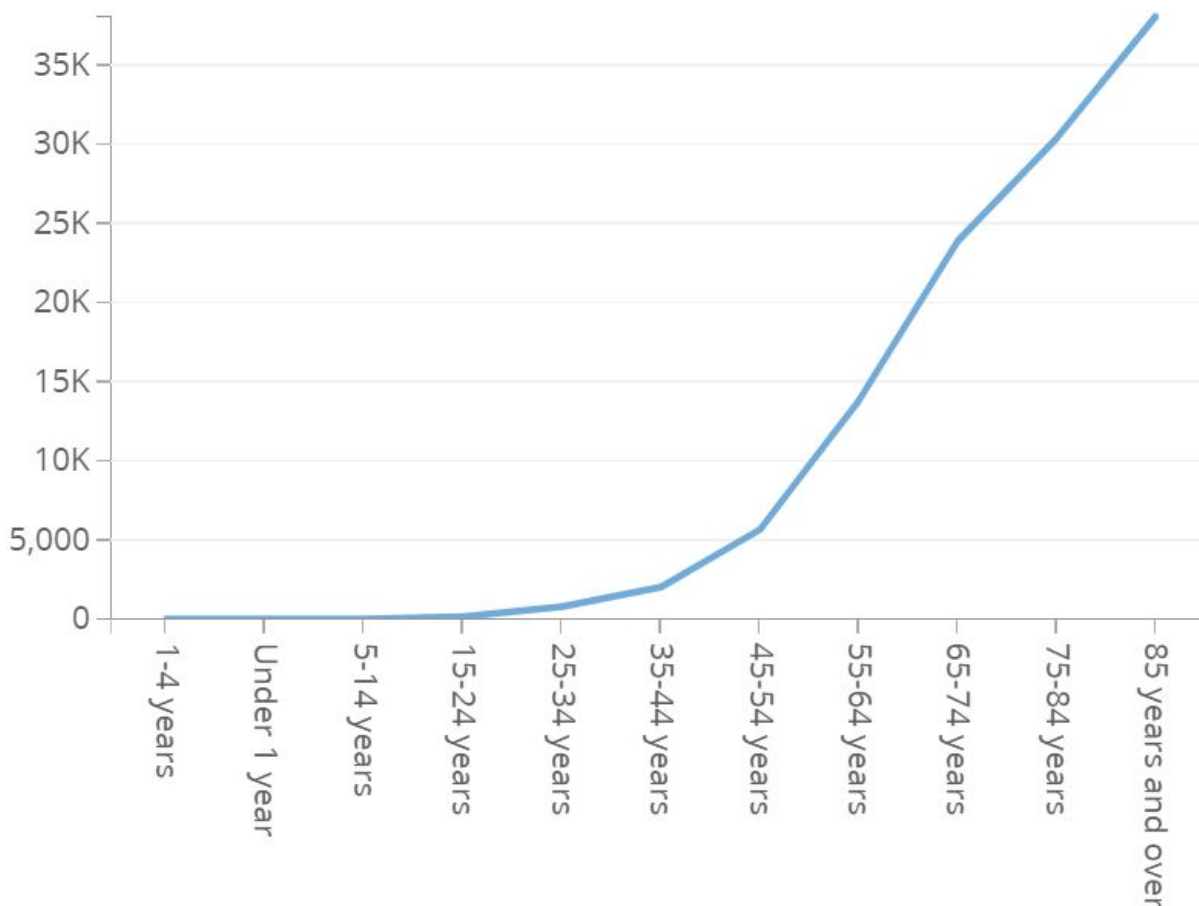


FIG.3

<https://data.cdc.gov/d/9bhg-hcku/visualization>

The report can't be saved as a link but you can check it yourself:

Dimension: Age Group

Measure: COVID-19 Deaths

Filters:

From 2/1/2020-7/13/2020

Sex (Male and Female)

Age group (everything except All Ages)

Axis (far left) > Chart Sorting > Small to Large

Let's use that data to figure out what percent of the deaths can be attributed to each age range. So, for example, nine children less than one year old have died from COVID-19 in the United States. The total number of deaths from COVID-19 in the United States is 134,884. Divide the smaller number by the bigger number to get the ratio: $9/134,884 = 0.0000667$ and multiply that by a hundred to get the percent. So .007% of the COVID-19 deaths went to children under one year old. Here's the rest of the table (**FIG.4**):

<1	1-4	5-14	15-24	25-34	35-44	45-54	55-64	65-74	75-84	85+
0%	0%	0%	.11%	.59%	1.5%	4.12%	10.24%	17.69%	22.51%	28.2%

FIG.4 - percent of COVID-19 deaths by age range in the U.S. (rounded to nearest hundredth)

Okay that gives a more clear picture but we still don't know what the death rate is by age range. For that we're going to use Bayes' Theorem: (**FIG.5**):

$$\frac{(\text{Age range death rate}) \cdot (\text{Population death rate})}{\text{Probability of being in age range}} = \text{Death rate for age range}$$

FIG.5

We know:

- Age range death rate
- Population death rate

And we still need:

- Probability of being in age range

Fortunately, we can get the probability of being in an age range from the U.S. Census:

<5	5-14	15-24	25-34	35-44	45-54	55-64	65-74	75-84	85+
6.1%	12.6%	13%	14%	12.6%	12.6%	12.8%	9.8%	4.8%	1.8%

FIG.6 - Percent of U.S. Population by age range in the U.S. in 2019.

<https://www.census.gov/data/tables/2019/demo/age-and-sex/2019-age-sex-composition.html>

Using the 35-44 age range as an example we get:

$$\frac{.015 \cdot .04}{.126} = .00476 = .47\%$$

Here's the rest of the table (**FIG.7**):

<1	1-4	5-14	15-24	25-34	35-44	45-54	55-64	65-74	75-84	85+
0%	0%	0%	.03%	.17%	.48%	1.3%	3.2%	7.2%	18.76%	62%

FIG.7 - COVID-19 death rates

UNREPORTED CASES

Almost certainly not everyone who has COVID-19 has been tested. But how can we make a good guess about how many unreported cases there are? Well, what about the mild and asymptomatic cases? According to the WHO:

“For COVID-19, data to date suggest that 80% of infections are mild or asymptomatic”

FIG.8

<https://www.who.int/docs/default-source/coronaviruse/situation-reports/20200306-sitrep-46-covid-19.pdf>

That backs up a science magazine research article from May :

“We estimate that 86% of all infections were undocumented”

FIG.9

<https://science.sciencemag.org/content/368/6490/489/tab-pdf>

DEATH RATES REVISITED

Let's recalculate the death rates in **FIG.4** to account for the number of unreported cases. I'm going to go with 80% (**FIG.8**) as the number of unreported COVID-19 cases. To do the rest of the calculations we first have to calculate the total number of COVID-19 cases based on the percent that go unreported (**FIG.10**):

$$(\text{total})(1-.8)=\text{confirmed}$$

$$\text{total}=\text{confirmed}/.2$$

$$\text{total} = 3,296,599/.2$$

$$\text{total} = 16,482,995$$

FIG.10

Next, let's recalculate the death rates (**FIG.11** and **FIG.12**):

	Cases	Deaths	Death Rate
CDC adjusted to include unreported	16,482,995	134,884	.82%

FIG.11

<1	1-4	5-14	15-24	25-34	35-44	45-54	55-64	65-74	75-84	85+
0%	0%	0%	.01%	.03%	.1%	.27%	.66%	1.48%	3.85%	12.85%

FIG.12 - COVID-19 death rates

COMPARISON TO OTHER ILLNESSES

How much worse is COVID-19 than other illnesses? Let's compare the COVID-19 death rate with pneumonia deaths over the same time period:

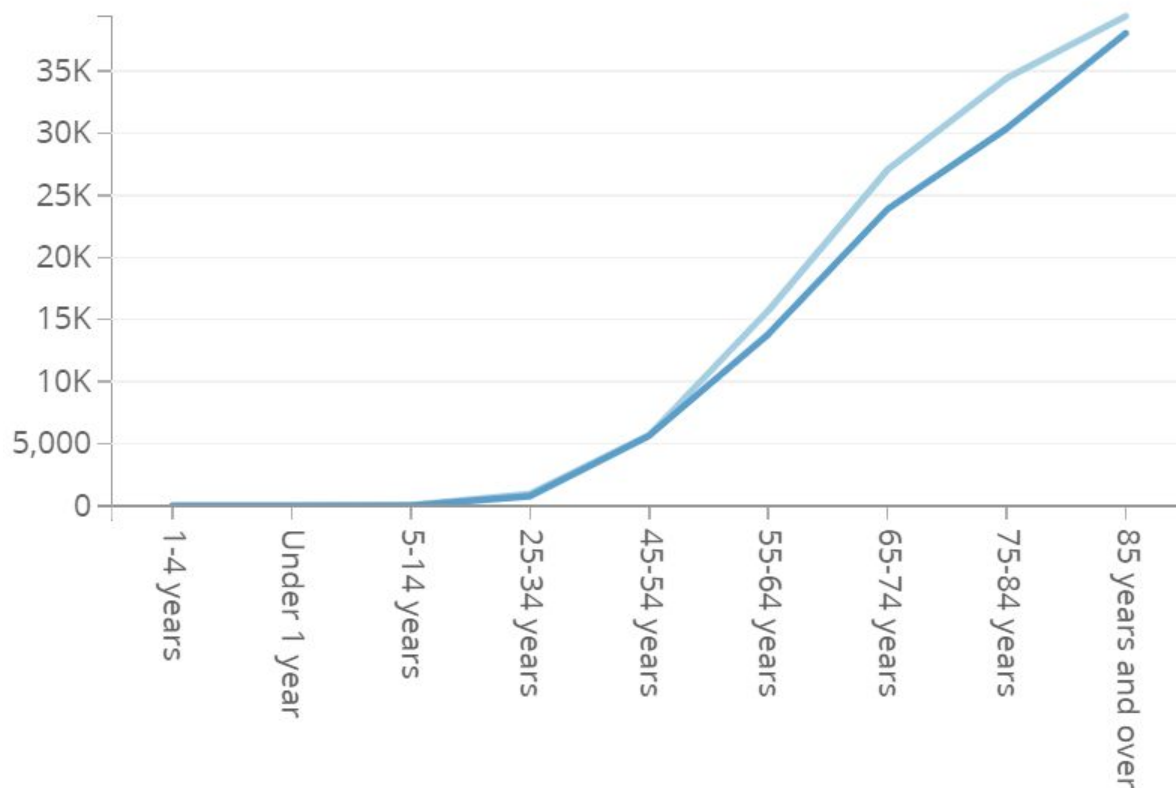


FIG.13 - COVID-19 deaths vs Pneumonia deaths. COVID-19 is the line on the bottom.

<https://data.cdc.gov/d/9bhg-hcku/visualization>

The report can't be saved as a link but you can check it yourself:

Dimension: Age Group

Measure1: Pneumonia Deaths

Measure2: COVID-19 Deaths

Filters:

From 2/1/2020-7/13/2020

Sex (Male and Female)

Age group (everything except All Ages)

Axis (far left) > Chart Sorting > Small to Large

So more people died from Pneumonia than COVID-19 between February and July of 2020. How does Pneumonia stack up against the other big killers? Let's see (**FIG.14**):

Leading Causes of Death (2017)

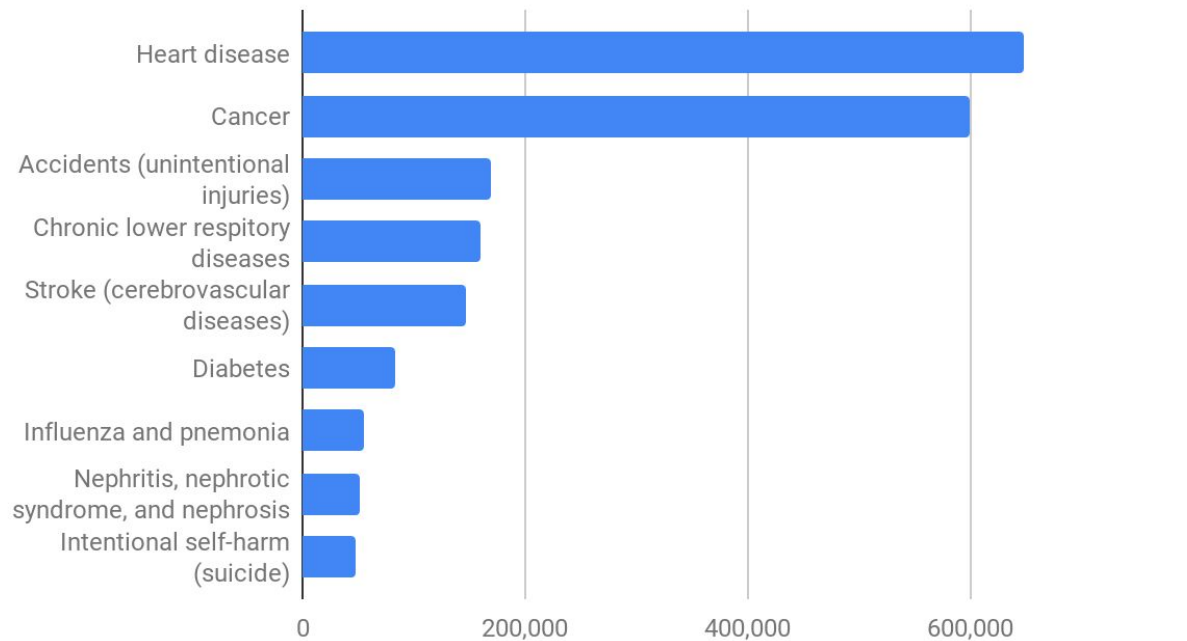


FIG.14 - Leading causes of death in the U.S. in 2017.

<https://www.cdc.gov/nchs/fastats/leading-causes-of-death.htm>

THE CURVE

COVID-19 Deaths

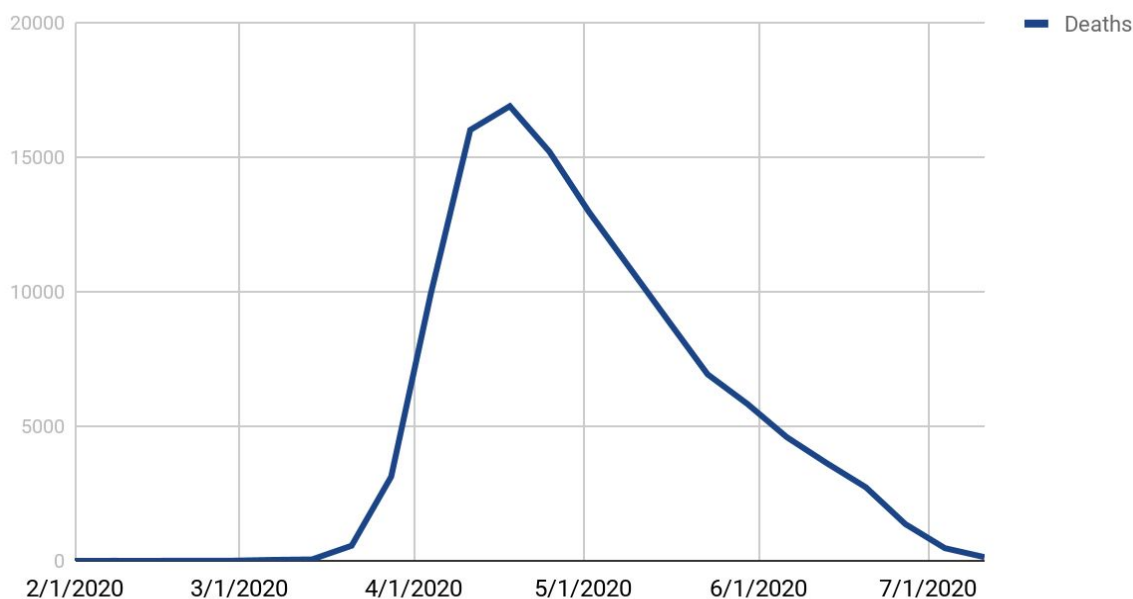


FIG.15 - All deaths involving COVID-19 in the U.S.

<https://www.cdc.gov/nchs/nvss/vsrr/covid19/index.htm>

LOCKDOWN AND THE ECONOMY

The Coronavirus Aid, Relief, and Economic Security (CARES) Act cost \$2 trillion dollars. At the same time at least 20 million people were forced to file unemployment claims because of the COVID-19 lockdowns. That means a lot of people lost their health insurance.

<https://home.treasury.gov/policy-issues/cares>

<https://www.bls.gov/news.release/pdf/empst.pdf>

PUBLIC SCHOOLS

The death rate for children is 0% (**FIG.4** and **FIG.12**). How much long term damage is being caused by keeping our nation's youth away from school and their friends? I don't know. I would

guess a lot. At the very least 21 million low-income children participated in the National School Lunch Program on a typical day in the 2017-2018 school year.

<https://frac.org/programs/national-school-lunch-program>

CENSORSHIP AND THE MEDIA

What does censorship have to do with COVID-19? A lot. While the media is cramming misinformation down our throats tech companies are censoring dissenting voices. This creates an environment where there are no truths but the approved truths. Garbage pseudoscience that fits the agenda is promoted while fact-based research that goes against the agenda is deleted from social media and filtered out of search queries.

<https://www.whitehouse.gov/presidential-actions/executive-order-preventing-online-censorship/>

MAKE YOUR VOICE HEARD

Ohio COVID-19 hotline (you can voice your concerns here)	833-427-5634 Press 1 twice to talk to a person.
Governor DeWine's contact form	https://governor.ohio.gov/wps/portal/gov/governor/contact

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