

Is COVID-19 the Grim Reaper?

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Caption: Is COVID-19 the Grim Reaper as generally believed, and is it time to take a more aggressive nationwide testing approach to suppress this resurgent virus for once and for all?

Executive Summary

Jobenomics is a bipartisan national grassroots movement focused on getting people back to work and mass-producing startup businesses. Massive numbers of small and nonemployer firms are needed to replace shuttered enterprises and grow the U.S. economy that has been decimated by the COVID-19 pandemic.

Jobenomics happens to know a great deal about the coronavirus. As part of the Jobenomics-Aleph Diagnostics team (<https://alephdiagnostics.com/>), on 5 March 2020, this author hand-carried the world's leading COVID-19 antibody rapid point-of-care test kit to the U.S. Centers for Disease Control and Prevention (CDC) headquarters in Atlanta and has been involved in combating this virus ever since.

Jobenomics also knows a lot about the U.S. economy, small business (the engine of the economy), startup businesses (the seed corn of the economy), and workforce development (the lifeblood of the economy). Today, the U.S. economy is on a sugar high due to government infusion of ten trillion dollars (\$9.97T allocated) to keep the U.S. economy afloat as we recover from the aftermath of a pandemically-induced financial crisis. This level of spending cannot last indefinitely. If we cannot quickly suppress this virus and return people to work, a 1930s level Great Depression, replete with violent social upheaval, is just around the corner.

The politicization of COVID-19 has deepened our divided country to the point of political gridlock and civil insurrection. The Administration is struggling to win a war on two-fronts—the pandemic and opposition politics. These dual fronts are undermining our nation's ability to suppress the coronavirus and restore the livelihoods of working Americans. As stated by President Lincoln before the last civil war, "a house divided against itself cannot stand."

COVID-19 is not the apocalyptic Grim Reaper, as generally believed. As of 1 August 2020, this global pandemic claimed approximately 700,000 lives or 0.01% of the world's population. 1/100th of 1% is such an inconsequential percentage that it hardly seems to qualify as a "pandemic."

The media would have us believe that COVID-19 has the destructive killing power of a level-5 hurricane when it barely deserves tropical storm status. Few people grasp the fact that previous pandemics were between 40-times to 300-times more lethal than this ersatz Grim Reaper. Here is a list of the deadliest pandemics:

30,000,000 HIV/AIDS deaths (1981-Present); 45,000,000 Spanish Flu deaths (1918-1919); 56,000,000 smallpox deaths (1520); and 200,000,000 Bubonic Plague deaths (1347-1351).

As of 1 August 2020, the U.S. COVID-19 death count reached 150,000 or 0.05% of the U.S. population—a relatively low mortality rate. While 150,000 fatalities equate to 3-times the amount of U.S. Vietnam War battle deaths, this death toll is only ¼ the number of annual deaths due to heart disease (647,457) and cancer (599,108). Every life is priceless, but a sound perspective is essential to proper decision-making.

Each year, three million Americans are killed or seriously injured in auto accidents. This statistic is much grimmer than the number of victims claimed by COVID-19 Grim Reaper but deemed acceptable to the way of American life. In the same manner, we need to agree to an "acceptable" balance of COVID-19 lives lost relative to livelihoods destroyed by emotional, mental, and economic distress.

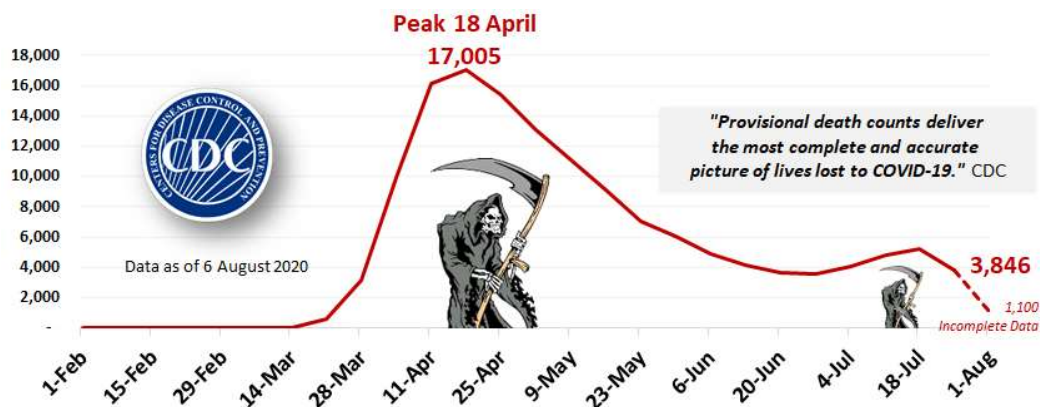
Other countries are suppressing the COVID-19 pandemic. If Americans unite, as we did post-911, we can move past this crisis in short order. To do so, Jobenomics recommends the following:

- The American public needs to focus on further reducing the death toll. The CDC's provisional death count metric is the most important and most reliable in CDC's arsenal of data. Additionally, the American public needs to discern and refute the plethora of politically-spun statistics.
- As many as 180 million Americans could eventually be infected. The majority will experience no or minor symptoms. Consequently, the overreported number of new cases is a misleading metric since the potential figure is likely to be ten times higher than currently reported. Americans should not be afraid of learning who is infected, who may be immune, and who is presently coronavirus free.
- The number of hospitalizations is equally misleading and often sensational. With a few exceptions, hospitals have adequate facilities to cope with COVID patients and have the wherewithal to obtain additional resources as needed. Moreover, the medical community has achieved excellent results in treating COVID-19 victims and reducing fatalities.
- America's most pressing challenge is to abandon its reactive mitigation strategy to favor a more proactive suppression strategy that has proven successful in many other countries, like South Korea and Canada.

The attached 20-page report (free download) discusses each of these extensively researched and footnoted recommendations. The following graphic represents the many exhibits in the attached report, which provides the type of information you need to make informed decisions.

CDC's Provisional COVID-19 Death Counts by Week

Source: CDC COVID-19 Death Data and Resources






As shown, contrary to what the national media wants the American public to believe, the COVID-19 Grim Reaper is a shadow of its former self. While the United States reduced the Reaper's killing power, we should keep vigilant. Hotspots, a second wave, and mutated viruses are likely.

From a grim reaper perspective, the vast majority of deaths claimed by this virus are older and elderly citizens, not the children or the working-age population.

- **Older & Elderly Citizens (age 55+).** This demographic consists of 94.7 million Americans or 29% of the population. If the "Grim Reaper" targets any specific age group, it is the older and elderly demographic that accounts for a **colossal 92.1%** of the deaths reported to the CDC.
- **Prime Working-Age Citizens (age 25 to 54).** This group consists of 128.6 million Americans, or 39% of the population. Prime working-age adults represent **only 7.7%** of the deaths, many of whom have underlying medical conditions or low immune systems caused by genetics and poor lifestyles (smoking, drugs, obesity, etc.). Prime-age workers provide the goods and services necessary for a functioning economy. Without these critical workers and the schools/daycare centers that allow working partners to return to work, our economy will not recover.
- **Youth & Young Adult Deaths (age 24 and younger).** This group consists of 103.2 million Americans, or 39% of the population. COVID-19 deaths for individuals 24 years and younger amount to **only 0.2%** of the fatalities.

President Trump based his Fox News remark that children are "almost immune from this disease" using this CDC data. As shown, only ten pre-school children (1-4 years) died out of a total of 142,164 people, or seven one-thousandth of 1%, which is pretty close to being immune. K-9th graders are only fourteen one-thousandth of 1% as likely to be a COVID-19 fatality. Based on these clinically reported facts, **Facebook and Twitter were wrong** to take down President Trump's video. Both organizations claimed that the President's remark violated their policies on coronavirus-related misinformation. Since Facebook and Twitter have not substantiated their claims, it appears that their actions were politically motivated.

Deaths Involving COVID-19 1 August 2020			
			
All ages	142,164	100.0%	100.0%
Under 1 year	15	0.011%	Youth 0.2%
1-4 years	10	0.007%	
5-14 years	20	0.014%	
15-24 years	225	0.158%	

Many other mainstream media outlets have joined the misinformation fray regarding the COVID-19 risk to children, especially regarding reopening schools. Headlines regarding the need to close daycare centers (21 million children), schools (57 million students), and universities (20 million undergrads) tend to more about the election than our children and their teachers.

Youth deaths due to influenza are 2½ times higher than COVID deaths. So why are we so inclined to shutter schools for COVID but keep them open during flu season? If a student comes down with the flu in class, we don't necessarily need to quarantine the entire school if COVID-19 point-of-care test kits are readily available and provide results in minutes.

As of 6 August 2020, CDC's COVID provisional death count was 144,073. By 29 August, CDC forecasts that the weekly U.S. COVID-19 death count will range between 4,500 to 10,600, resulting in a total death toll between 175,000 to 190,000 fatalities. This prediction is the composite of 31 provided forecasts from leading medical and research. Researchers at the University of Washington's Institute for Health Metrics and Evaluation predict a total death toll of 295,000 by 1 December—the third leading cause of U.S. deaths in 2020.

While each life is precious, the COVID Grim Reaper is likely to claim many more lives until the United States achieves herd immunity. Herd immunity occurs when a large portion of a community (the herd) becomes immune to a disease, making it less contagious.

There are two ways to generate COVID-19 herd immunity—vaccines and infection. Infectious disease experts at The Johns Hopkins University explain that about 70% of the population needs to be immune to this coronavirus before herd immunity can work.

While vaccines are currently on the horizon, they should not be considered the primary solution to ending this pandemic. According to Dr. Fauci, the White House infectious disease expert, the chances for a highly effective vaccine are "not great," but a 50% rate would be considered a win. From a Jobenomics-Aleph Diagnostics perspective, an integrated vaccination/suppression testing strategy seems to be the only viable solution at this point in the pandemic.

The U.S. approach to dealing with the COVID pandemic is essentially a **mitigation strategy** that is not working. Mitigation strategies focus on slowing down transmission but not necessarily stopping epidemic with the protection of vulnerable groups and reducing peak healthcare demand. Slowing the infection spread is generally achieved via testing of mainly symptomatic cases, social distancing, mask-wearing, personal hygiene, and implementing stay-at-home quarantines. Had the coronavirus followed its cousin's seasonal path, the influenza virus, mitigation might have been the proper U.S. strategy. Unfortunately, this virus is not seasonal, and outbreaks are frequent.

A **suppression strategy** involves a comprehensive approach to testing, contact tracing, and supported isolation (TTSI). Suppression-level TTSI programs reduce uncertainty and fear, allowing people to feel freer to resume normal activities while still observing pandemic protocols, like mask-wearing. Suppression-level testing requires large-scale testing, including proactive testing of asymptomatic people (infected individuals who appear healthy) in vulnerable populations (e.g., the elderly) and high-risk environments (e.g., workplaces). The time to implement a proactive suppression strategy is now, before the advent of the flu season. There are plenty of state-of-the-art antibody, molecular, and antigen tests available now to start a nationwide effort.

The biggest obstacle holding back a nationwide suppression-level testing program is a national willingness to do so. We are a divided nation more interested in what separates us rather than our collective prosperity.

The second biggest obstacle is the preference for Made-in-America. While the FDA does not track foreign-produced pharmaceuticals, experts estimate that 80% of the U.S. pharmaceutical drug supply comes from China. While Made-in-America is ideal for critical items, it is folly to believe we can accomplish this in a few months after decades of exporting our technology overseas.

Rather than restricting Chinese-made pharmaceuticals, we should work with the Chinese to export their technology and create joint ventures to manufacture in the United States. This type of confidence-building effort is precisely what the Jobenomics-Aleph Diagnostics team has negotiated with leading Chinese pharmaceutical companies for co-producing test kits and devices in the United States.

Note: Download the entire 28-page "[Is COVID-19 the Grim Reaper?](#)" report to access source and footnoted data. Also, download other Jobenomics economic, community, small business, and workforce development efforts in the [Jobenomics Library](#).

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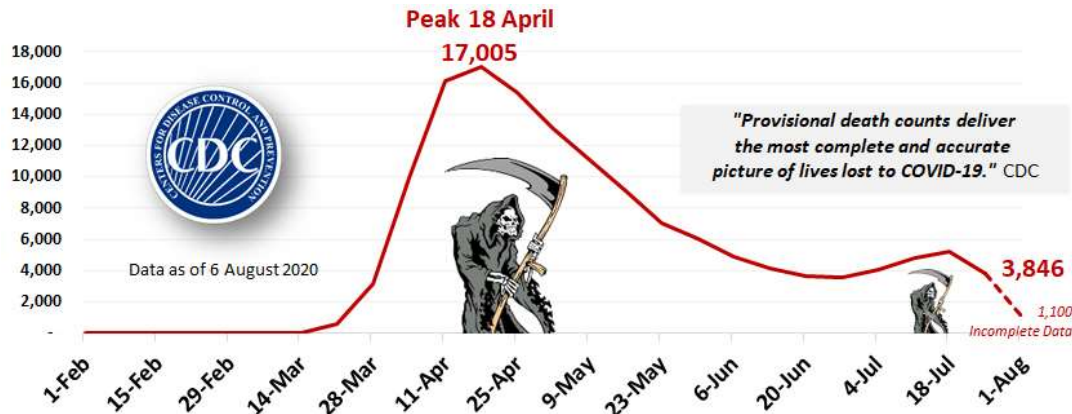
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Death Counts

The Centers for Disease Control and Prevention (CDC) is a U.S. federal agency under the Department of Health and Human Services. CDC's bases its provisional counts for coronavirus disease 2019 (COVID-19) deaths on mortality data submitted to the National Center for Health Statistics (NCHS). It is important to note that it can take several weeks for death records to reach the NCHS. According to the CDC, provisional death counts deliver the most complete and accurate picture of lives lost to COVID-19.

CDC's Provisional COVID-19 Death Counts by Week

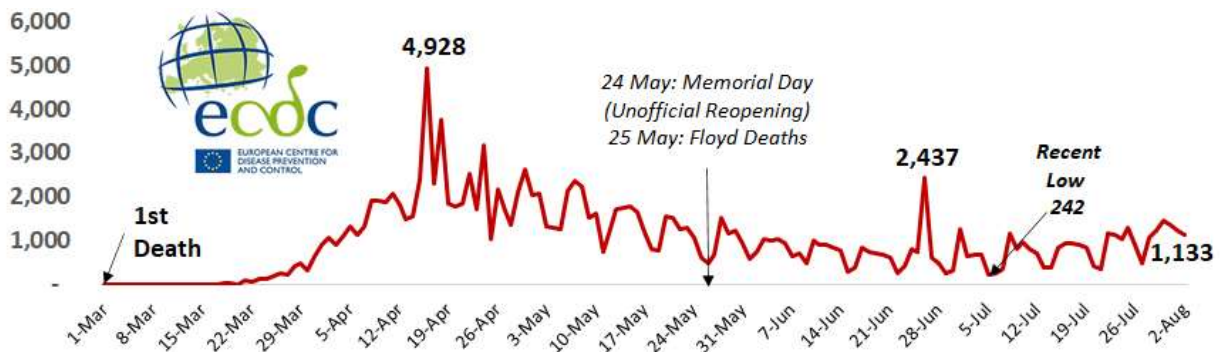
Source: CDC COVID-19 Death Data and Resources¹



As shown, COVID-19 **weekly** death count peaked at 17,005 on 18 April 2020 and has been on a downward trend to 3,846 as of 25 July 2020 (latest complete data). To many Americans, this downward trend comes as a bit of a shock given the amount of media covering the harmful effects associated with the reopening of American businesses, schools, religious and community institutions, and recreational facilities. Contrary to what the American public has been lead to believe, the COVID-19 Grim Reaper is a shadow of its former self and hopefully will vanish as new diagnostics, treatments, and vaccines become available.

ECDC's U.S. COVID-19 Death Count by Day

Source: European Centre for Disease Prevention and Control (ECDC)²



¹ CDC, Centers for Disease Control and Prevention, National Center for Health Statistics, Daily Updates of Total by Week and State, Table 1. Deaths involving coronavirus disease 2019 (COVID-19), pneumonia, and influenza reported to NCHS by week ending date, United States. Week ending 2/1/2020 to 7/25/2020, retrieved 2 August 2020, <https://www.cdc.gov/nchs/nvss/vsrr/covid19/index.htm>

² European Centre for Disease Prevention and Control, 2 Aug 2020, <https://www.ecdc.europa.eu/en/covid-19-pandemic>

The other leading Center for disease control is the European Centre for Disease Prevention and Control (ECDC). This ECDC graph depicts U.S. COVID-19 deaths by **day**. The shape of the line is roughly the same as the CDC weekly line but shows a slight upward trend over the last several weeks.

As of 6 August 2020, CDC's COVID provisional death count was 144,073. By 29 August, CDC forecasts that the weekly U.S. COVID-19 death count could range between 4,500 to 10,600, resulting in a total death toll between 175,000 to 190,000 fatalities.³ This prediction is the composite of 31 provided forecasts from leading medical and research institutions.

Researchers at the University of Washington's Institute for Health Metrics and Evaluation predict a total death toll between 228,271 (assuming universal mask-wearing) and 391,723 (assuming mandate easing) for an average of 295,011 dead by 1 December 2020⁴. In terms of comparison, 295,011 fatalities would be the third leading cause of U.S. deaths (followed by heart disease [647,457] and cancer [599,108])⁵, 4-times the annual rate of drug overdoses, and 8-times the average number of influenza deaths over the last nine flu seasons.

As morbid as it may seem, understanding how viruses kill is necessary when dealing with reducing the number of fatalities and flattening the so-called "curve" to avoid overloading the U.S. health care system. According to a Scientific American report⁶, influenza and coronaviruses kill by causing the body to destroy itself by trying to heal itself. After entering the body (usually through the touching of the eyes, nose, or mouth), the virus begins to rapidly replicate itself, causing a strong response from the body's immune system. A large viral "hoard" triggers a corresponding massive immune response (white blood cells, antibodies, and inflammatory molecules) to eliminate the threat.

This enormous response also causes collateral damage to the healthy tissue harboring the virus, which often produces hypoxia and respiratory. People with prior respiratory issues (such as smoking, pulmonary disease, and age-related deterioration) are especially vulnerable. Compromised respiratory systems and weakened immune systems make individuals susceptible to secondary infections and pneumonia that lead to death.

Perhaps, the most significant difference between the corona and influenza viruses is that COVID-19 tends to produce blood clotting. Blood clots typically compromise the lungs (pulmonary embolisms), the brain (strokes), and the heart (heart attacks). The reason for this phenomenon is scientifically unknown but has inspired several novel medical treatments, including the use of antiviral drugs, blood-thinners, blood plasma, and supplemental oxygen. Regarding supplemental oxygen treatments, Jobenomics is working with a leading U.S. pulmonologist, Dr. Linares, who invented a way to super-oxygenate water that can significantly increase the oxygen content in the bloodstream.⁷

As shown below, CDC's Provisional COVID-19 Death Counts not only includes COVID-19 but coronavirus-like illnesses like pneumonia and influenza that are associated with respiratory causes of death

³ CDC, Centers for Disease Control and Prevention, Forecasts of COVID-19 Deaths, updated 6 August 2020, <https://www.cdc.gov/coronavirus/2019-ncov/covid-data/forecasting-us.html>

⁴ University of Washington's Institute for Health Metrics and Evaluation, COVID-19 Projections, <https://covid19.healthdata.org/united-states-of-america>

⁵ CDC, Centers for Disease Control and Prevention, National Center for Health Statistics, Leading Causes of Death, 2017, <https://www.cdc.gov/nchs/fastats/leading-causes-of-death.htm>


⁶ Scientific American, How Does the Flu Actually Kill People? 18 December 2017, <https://www.scientificamerican.com/article/how-does-the-flu-actually-kill-people/>

⁷ SuperWater HyOx, Proprietary Patent Pending CFZ Technology, <https://www.superwaterhyox.com/>

U.S. Pneumonia, Influenza & COVID-19 Death Counts by Age⁸

2/1/2020 to 8/1/2020 (As of 5 August 2020)

Source: CDC COVID-19 Death Data and Resources

Age Group	Deaths from All Causes 	"Respiratory" Deaths Involving Pneumonia, Influenza & COVID-19	Percent of Respiratory Deaths Relative To All Deaths	Population Of Age Group	Death Rate Per Million (1,000,000) In Each Age Group (Number)	Death Rate per Million (1,000,000) In Each Age Group (Percentage)
All ages	1,590,944	235,992	14.8%	327,167,434	721	0.07%
Under 1 year	8,832	109	1.2%	3,848,208	28	0.003%
1–4 years	1,690	104	6.2%	15,962,067	7	0.001%
5–14 years	2,611	150	5.7%	41,075,169	4	0.0004%
15–24 years	16,353	522	3.2%	42,970,800	12	0.001%
25–34 years	33,993	1,983	5.8%	45,697,774	43	0.004%
35–44 years	48,090	4,489	9.3%	41,277,888	109	0.01%
45–54 years	89,394	11,553	12.9%	41,631,699	278	0.03%
55–64 years	206,614	29,527	14.3%	42,272,636	698	0.07%
65–74 years	313,626	49,832	15.9%	30,492,316	1634	0.16%
75–84 years	385,341	62,857	16.3%	15,394,374	4,083	0.41%
85 years and over	484,400	74,866	15.5%	6,544,503	11,440	1.14%

From 1 February through 1 August 2020, COVID-19, influenza, and pneumonia caused 235,992 respiratory deaths in the United States, which represents 14.8% of all U.S. deaths over this half-year period. As depicted, the number of fatalities increases significantly as people age. Young people tend to be more active, have healthier lifestyles and immune systems. The elderly are more fragile and susceptible to the consequences of respiratory illnesses and infections. This table also shows the death rate per million for each age group. For the most senior and fragile age group (85+), the death rate per million people is 11,440 compared to 4 for children aged 5-14 years.

According to the CDC Director, Dr. Redfield, "Next fall and winter, we're going to have two viruses circulating, and we're going to have to distinguish between which is flu and which is the coronavirus."⁹ Dr. Redfield's concern is that the so-called second wave of the coronavirus will overlap with the 2020-2021 flu season, which usually starts in the fall. The first wave began in March 2020 following the end of the 2019-2020 flu season.¹⁰

According to Dr. Maragakis, Johns Hopkins Health System's Senior Director of Infection Prevention, based on the behavior of previous pandemics, a second wave of the coronavirus could happen this fall (22 September through 31 December 2020). For example, the 2009 H1N1 and 1918 Spanish flu epidemic began with a mild wave of infections in the spring, followed by a massive surge of cases in the fall. First-waves start with a small

⁸ CDC, Centers for Disease Control and Prevention, National Center for Health Statistics, Daily Updates of Total by Week and State, , retrieved 6 August 2020, https://www.cdc.gov/nchs/nvss/vsrr/covid_weekly/index.htm

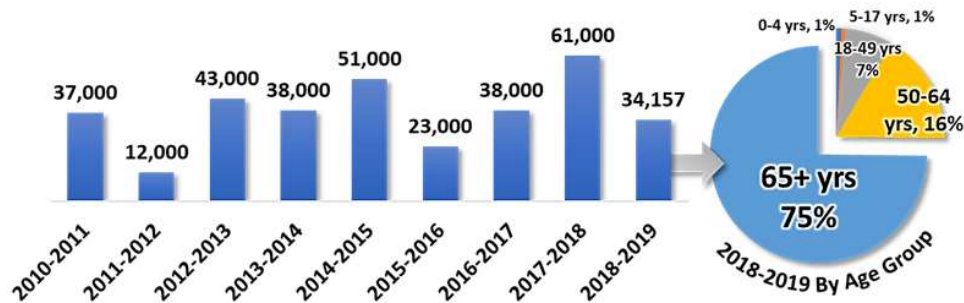
⁹ CNBC, US officials prepare for 'two viruses' next fall: coronavirus and the flu, 22 April 2020, <https://www.cnbc.com/2020/04/22/trump-says-cdc-directors-coronavirus-warning-was-totally-misquoted.html>

¹⁰ The Jobenomics-Aleph Diagnostics team is working on importing and manufacturing (in the USA) Microfluidic Lab-On-A-Chip (LOC) test kits and analyzers that can tell the difference between influenza and a coronavirus (see <https://alephdiagnostics.com/>).

number of infected people and take longer to spread than second-waves that often begin with numerous asymptomatic and symptomatic carriers spread across more extensive areas.¹¹

Estimated Influenza Deaths Per Season

Source: CDC Disease Burden of Influenza¹²



This chart shows the number of CDC's estimated influenza deaths covering 2010-2011 through the 2018-2019 flu season (2019-2020 data is not yet available). Annual flu deaths ranged from 12,000 to 61,000 for an average of 37,462 deaths per season. During the same period, the average number of hospitalizations was 446,729, medical visits were 13,313,372, and symptomatic illnesses were 28,646,765. The number of asymptomatic (i.e., producing or showing no symptom) illnesses is unknown. Also shown is the death count percentage by age group for the latest flu season CDC data.

U.S. COVID-19 Death Counts by Age 2/1/2020 to 8/1/2020 (As of 5 August 2020)

Age Group	Deaths involving Pneumonia, Influenza, or COVID-19	Deaths Involving Pneumonia & Influenza	Deaths involving COVID-19	Percent of COVID-19 Deaths Relative To All "Respiratory" Deaths
All ages	226,718	91,139	135,579	59.8%
Under 1 year	103	89	14	14%
1-4 years	102	93	9	9%
5-14 years	147	128	19	13%
15-24 years	497	295	202	41%
25-34 years	1,863	871	992	53%
35-44 years	4,259	1,705	2,554	60%
45-54 years	11,056	4,129	6,927	63%
55-64 years	28,220	11,572	16,648	59%
65-74 years	47,736	19,383	28,353	59%
75-84 years	60,428	24,622	35,806	59%
85 years and over	72,307	28,252	44,055	61%


¹¹ John Hopkins Medicine, First and Second Waves of Coronavirus, Dr. Lisa Lockerd Maragakis,

<https://www.hopkinsmedicine.org/health/conditions-and-diseases/coronavirus/first-and-second-waves-of-coronavirus>

¹² CDC, Centers for Disease Control and Prevention, Influenza (Flu), Disease Burden of Influenza, Table 1: Estimated Influenza Disease Burden, by Season — United States, 2010-11 through 2018-19 Influenza Seasons. retrieved 1 Aug 2020, <https://www.cdc.gov/flu/about/burden/index.html#:~:text=CDC%20estimates%20that%20influenza%20has,61%2C000%20deaths%20annually%20since%202010>

As shown above, young Americans less than 25 years of age are more prone to die from influenza and pneumonia than older adults who are more susceptible to the ravaging effects of COVID-19. During the six months from 1 February through 25 July 2020, 59.8% of the U.S. respiratory deaths were due to COVID-19 and 40.2% to influenza and pneumonia, both of which have highly related kill mechanisms.

U.S. COVID-19 Death Counts by Age 2/1/2020 to 8/1/2020 (As of 5 August 2020)

Age Group	Deaths Involving COVID-19			Deaths from All Causes	Pecent of COVID-19 Deaths Relative To All Deaths	Population of Age Group	COVID-19 Death Rate per Million (1,000,000) In Each Age Group (Number)	COVID-19 Death Rate per Million (1,000,000) In Each Age Group (Percentage)
								
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35–44 years	2,728	1.9%		48,090	5.7%	41,277,888	66	0.007%
45–54 years	7,299	5.1%		89,394	8.2%	41,631,699	175	0.02%
55–64 years	17,583	12.4%	Older & Elderly 92.0%	206,614	8.5%	42,272,636	416	0.04%
65–74 years	29,870	21.0%		313,626	9.5%	30,492,316	980	0.10%
75–84 years	37,495	26.4%		385,341	9.7%	15,394,374	2,436	0.24%
85 years+	45,845	32.2%		484,400	9.5%	6,544,503	7,005	0.70%

This table examines the respiratory death count from a COVID-19 perspective. As compared to 14.8% of all US deaths for the combined COVID-19/influenza/pneumonia death count, the COVID-19 death count amounted to 8.9% of all deaths or 435 people per 1,000,000 citizens (0.04%).



It is noteworthy that children aged 1 to 14 years have less than 1 in 1,000,000 chance of dying from the virus. A person 85+ has a 7,005 in a 1,000,000 chance of dying, which is immensely higher but still less than 1% (precisely 0.70%) per million.

The vast majority of deaths claimed by this virus are for older and elderly citizens, not the children nor the working-age population. The most remarkable and least understood data is highlighted in green. As calculated by the CDC:

- **Older & Elderly Citizens (age 55+).** This demographic consists of 94.7 million Americans or 29% of the population. If the "Grim Reaper" targets any specific age group, it is the older and elderly demographic that accounts for a **colossal 92.1%** of the deaths reported to the CDC.
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Many other mainstream media outlets have joined the misinformation fray regarding the COVID-19 risk to children, especially as it relates to reopening schools. Headlines regarding the need to close daycare centers (21 million children), schools (57 million students), and universities (20 million undergrads) tend to more about the election than our children and their teachers.

Youth deaths due to influenza are 2½ times higher than COVID deaths. So why are we so inclined to shutter schools for COVID but keep them open during flu season? If a student comes down with the flu in class, we don't necessarily need to quarantine the entire school if COVID-19 point-of-care test kits are readily available and provide results in minutes.

Based on this empirical CDC data, to reduce the number of deaths, American decision-makers should adopt a strategy that focuses mainly on **older and elderly citizens**. The recent (14 July) decision by the Federal government to provide COVID-19 rapid point-of-care (POC) test kits (tests that can provide results in less than 15-minutes) to all skilled nursing facilities in the country is a step in the right direction. On 31 July, Admiral Giroir, Assistant Secretary for Health, stated that U.S. facilities in hotspots received 1 million rapid POC test kits with an additional 600,000 on the way. According to Giroir, there are 15,400 U.S. nursing homes and the goal of conducting up to 5 million tests per month (60 million per year).¹³

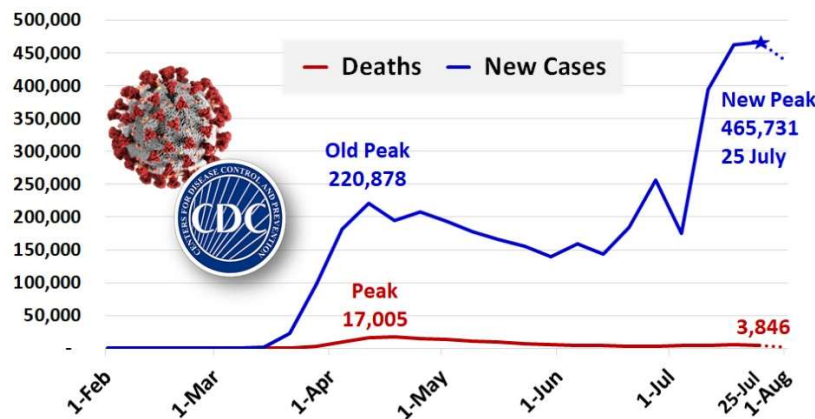
¹³ Skilled Nursing News, Federal Government Will Send Point-of-Care COVID-19 Testing Units, Kits to All Nursing Homes in U.S., 14 July 2020, <https://skillednursingnews.com/2020/07/federal-government-will-send-point-of-care-covid-19-testing-units-kits-to-all-nursing-homes-in-u-s/>

New Cases

Jobenomics contends that the number of new cases is an overreported and weak metric that should be used more as a footnote than a headline.

COVID-19 New Cases & Deaths by Week

Source: CDC New U.S. Cases¹⁴



This table depicts the weekly death count compared to the weekly number of new cases. From the beginning of the pandemic until mid-April 2020, both the number of deaths and new cases followed an upward trend. Starting in mid-April, both metrics began a downward trend until mid-June. At this point, the death rate continued downward (mainly due to better medical treatment), but the number of new cases skyrocketed. The primary reasons for this explosion of new cases include increased testing, lax preventative practices (masks, hand washing, social distancing), and the reopening of businesses, schools, religious and community institutions, and recreational facilities.

While 465,731 new cases in a single week seem like a huge amount, it pales in size compared to the potential real number of U.S. COVID-19 cases. **Jobenomics believes that the coronavirus will eventually infect as many as half of all Americans (180 million citizens)**, but the majority will experience no or only minor symptoms.

The overreported number of new cases is a misleading metric since the potential figure is likely to be ten times higher than currently reported. **Americans should not be afraid of learning who is infected, who may be immune, and who is presently coronavirus free.** As will be discussed later, Jobenomics firmly asserts that large-scale testing is the only way that America can suppress this pandemic.

- On 11 March 2020, Angela Merkel, the Chancellor of Germany, announced to the German people that the pandemic might reach an extraordinary scale and that **"60 to 70 percent of the (German) population will be infected."**¹⁵
- On 22 March 2020, Andrew Cuomo, New York Governor, warned that the coronavirus's spread could last as long as **nine months**, with up to **80% of the (New York state) population getting the virus.**¹⁶

¹⁴ CDC, Coronavirus Disease 2019 (COVID-19), Cases in the U.S., 29 July 2020, <https://www.cdc.gov/coronavirus/2019-ncov/cases-updates/cases-in-us.html>

¹⁵ The New York Times, Merkel Gives Germans a Hard Truth About the Coronavirus, Published 11 March 2020 And Updated 21 July 2020, <https://www.nytimes.com/2020/03/11/world/europe/coronavirus-merkel-germany.html>

Most New Yorkers breathed a sigh of relief and thought they dodged a bullet when the infection receded in April. However, the virus's resurgence in July caught most people off guard since it was supposed to die off in hot weather. The so-called second wave of the coronavirus may arrive within Cuomo's 9-month window (mid-November), potentially surging to a new high in association with the influenza season.

- On 21 July 2020, a team of doctors published a JAMA study (The Journal of the American Medical Association), which stated the real number of cases were an **average of 10-times higher** than the number of reported new cases.

This cross-sectional study performed serologic (antibody) testing from persons of all ages from 23 March through 12 May 2020. Antibody testing can tell if an asymptomatic individual is infected before symptoms appear and whether an individual has post-infection antibodies. The doctors analyzed samples from San Francisco, Connecticut, South Florida, Louisiana, Minneapolis-St Paul, Minnesota, Missouri, New York City, New York state, Philadelphia, Pennsylvania, Utah, and western Washington State.

Quoting the study's findings, "**6 to 24 times more infections** were estimated per site with seroprevalence than with coronavirus disease 2019 (COVID-19) case report data."¹⁷

- Suppose one uses the lowest reported JAMA finding of 6-times real versus actual. In that case, the total number of U.S. infections could cause 145 million (6 x 465,731 weekly new cases x 52 weeks in a year) Americans to become infected, a number close to the Jobenomics' estimate of 180 million.
- As dire as this may sound, many (if not most) of these 145 million infected Americans may never know that they had the virus since they did not experience any symptoms or that the symptoms were so mild that the infected person never sought testing.
- On the other hand, asymptomatic individuals are infectious as sick patients. Experts estimate that asymptomatic carriers cause an average of 44% of all COVID-19 infections.¹⁸ Asymptomatic carriers socializing in large crowds were likely the spark that generated the new hotspots in the sunshine states.

¹⁶ The New York Times, New York's governor just warned that the coronavirus' spread could last as long as 9 months, with up to 80% of the population getting the virus, 22 March 2020, <https://www.businessinsider.com/coronavirus-cuomo-stay-at-home-orders-could-last-for-months-2020-3>

¹⁷ JAMA Network, Seroprevalence of Antibodies to SARS-CoV-2 in 10 Sites in the United States, March 23-May 12, 2020, 21 July 2020, https://jamanetwork.com/journals/jamainternalmedicine/fullarticle/2768834?guestAccessKey=7a5c32e6-3c27-41b3-b46c-43c4a38bbe00&utm_source=For_The_Media&utm_medium=referral&utm_campaign=ftm_links&utm_content=tfl&utm_term=072120

¹⁸ World Health Organization, Transmission of SARS-CoV-2: implications for infection prevention precautions, SARS-CoV-2 infected persons without symptoms can also infect others, 9 July 2020, <https://www.who.int/news-room/commentaries/detail/transmission-of-sars-cov-2-implications-for-infection-prevention-precautions>

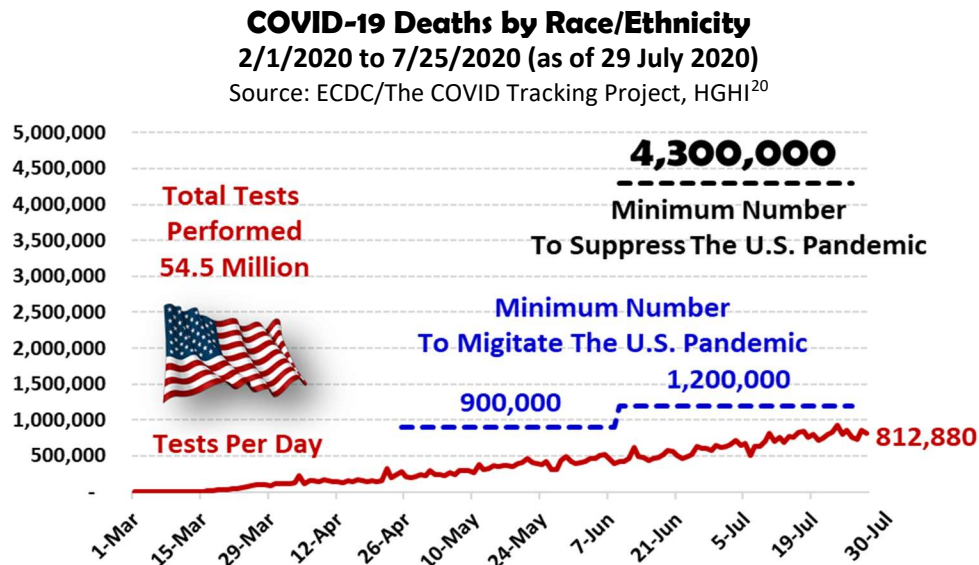


In summary, emphasis on the ever-increasing number of new cases is unwarranted and unnecessarily harmful to American wellbeing and the economy. Americans need to accept the fact that the coronavirus could become as ubiquitous as the common cold virus and that the COVID-19 mortality rate is far less (0.04% or 435 out of 1,000,000) than anyone expected. Americans also need to reject the politicization of the coronavirus. Our nation is already divided enough with sensationalized reporting on a common cause that should unify us.

Mitigation Versus Suppression Testing

According to the Harvard Global Health Institute (HGHI), "**America's testing infrastructure is collapsing.**" Jobenomics agrees. Mass community-wide testing with rapid test kits (results in minutes) is being used by other countries to effectively suppress COVID-19 hotspots and conduct contact tracing to identify and quarantine infected individuals.

The United States centralized lab approach is not working. Per HGHI, "In many states, it now takes 10-15 days to get test results—rendering these tests useless as a tool to prevent transmission and bring the pandemic under control."¹⁹



The United States has conducted 59 million COVID-19 tests and is averaging over 800,000 tests per day. While this sounds like a lot of testing, it is insufficient to suppress the coronavirus pandemic. From an HGHI perspective, the United States needs 1,200,000 tests per day to **mitigate** the virus's increase and 4,300,000 daily tests to **suppress** the virus and return the country to a sense of normalcy.²¹

The U.S. approach to dealing with the COVID pandemic is essentially a **mitigation strategy**. According to the CDC, community mitigation activities are actions that people and communities can take to slow the spread of a new virus before a vaccine or therapeutic drug becomes widely available.²² Mitigation strategies focus on slowing down transmission but not necessarily stopping epidemic with the protection of vulnerable groups and reducing peak healthcare demand. Slowing the spread of the infection is generally achieved via testing symptomatic cases, limiting testing to around ten tests for each confirmed new case, social distancing, mask-wearing, personal hygiene, and implementing stay-at-home quarantines.

¹⁹ Harvard Global Health Institute, Time to Radically Rethink Testing, 29 July 2020, <https://globalhealth.harvard.edu/> and <https://globalhealth.harvard.edu/time-to-radically-rethink-testing/>

²⁰ The COVID Tracking Project, <https://covidtracking.com/api/us/daily.csv>

²¹ Harvard Global Health Institute, New Testing Targets, <https://globalhealth.harvard.edu/new-testing-targets-as-covid-19-outbreaks-grow-more-severe-most-u-s-states-still-fall-far-short-on-testing/>, and NPR, As Coronavirus Surges, How Much Testing Does Your State Need To Subdue The Virus? 30 June 2020, <https://www.npr.org/sections/health-shots/2020/06/30/883703403/as-coronavirus-surges-how-much-testing-does-your-state-need-to-subdue-the-virus>

²² CDC, Implementation of Mitigation Strategies for Communities with Local COVID-19 Transmission, 27 May 2020, <https://www.cdc.gov/coronavirus/2019-ncov/community/community-mitigation.html>

Had the coronavirus followed its cousin's seasonal path, the influenza virus, mitigation might have been the proper U.S. strategy. Unfortunately, this virus is not seasonal, and outbreaks are frequent. **Mitigation-level testing is insufficient** to deal with the plethora of unanticipated and recurring episodes occurring across the entire United States.

Many countries (such as China, South Korea, and Australia) adopted a proactive **suppression strategy** involving a comprehensive and integrated approach to testing, contact tracing, and supported isolation (TTSI). According to HGHI, suppression-level testing allows a state or community to quickly find and isolate new cases before they lead to a more extensive outbreak, to keep new case levels near zero.

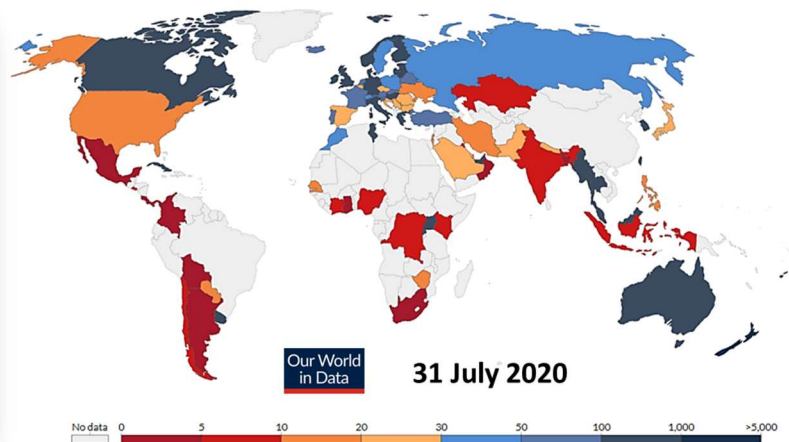
Suppression-level TTSI programs help reduce uncertainty and fear, allowing people to feel freer to resume normal activities while still observing pandemic protocols, like mask-wearing. Suppression-level testing requires large-scale testing, including proactive testing of asymptomatic people (infected individuals who appear healthy) in vulnerable populations (e.g., the elderly) and high-risk environments (e.g., workplaces).

The Jobenomics-Aleph Diagnostics team not only agrees with HGHI but advocates large-scale testing of entire communities (cities, institutions, businesses, and recreational venues) to suppress the pandemic and extinguish hotspots. Mass screening and contract tracing are critical tools in opening and restoring local, state, and national economies. New Delhi (India) conducted a large-scale screening effort in July 2020 for its entire population (29 million) to suppress hotspots across the metropolitan area.²³ During a June 2020 outbreak in Wuhan, the Chinese tested the whole population (11 million) in 10 days.²⁴ Considering the recent upturn of infections in the USA, government officials would be wise to adopt similar procedures.

Tests Conducted Per New Case of COVID-19

Source: Oxford University, Our World in Data.org²⁵

	Tests per Confirmed Case		
	1-Apr	9-May	31-Jul
USA	6	10	12
Australia	33	1,251	165
South Korea	95	530	175
Italy	No Data	22	105
Canada	18	18	104
Mexico	11	3	2
UK	8	20	235
Russia	184	18	47
China	No Data	No Data	No Data
Brazil	No Data	No Data	No Data



²³ Medical Press, New Delhi plans mass screening effort as virus cases surge, 25 June 2020, https://medicalxpress.com/news/2020-06-delhi-mass-screening-effort-virus.html?campaign_id=154&emc=edit_cb_20200626&instance_id=19810&nl=coronavirus-briefing®i_id=121720090&segment_id=31998&te=1&user_id=ec01a61d5b601b400fb3cb50c62899ed

²⁴ BBC News, Coronavirus: China's plan to test everyone in Wuhan, 8 June 2020, <https://www.bbc.com/news/world-asia-china-52651651>

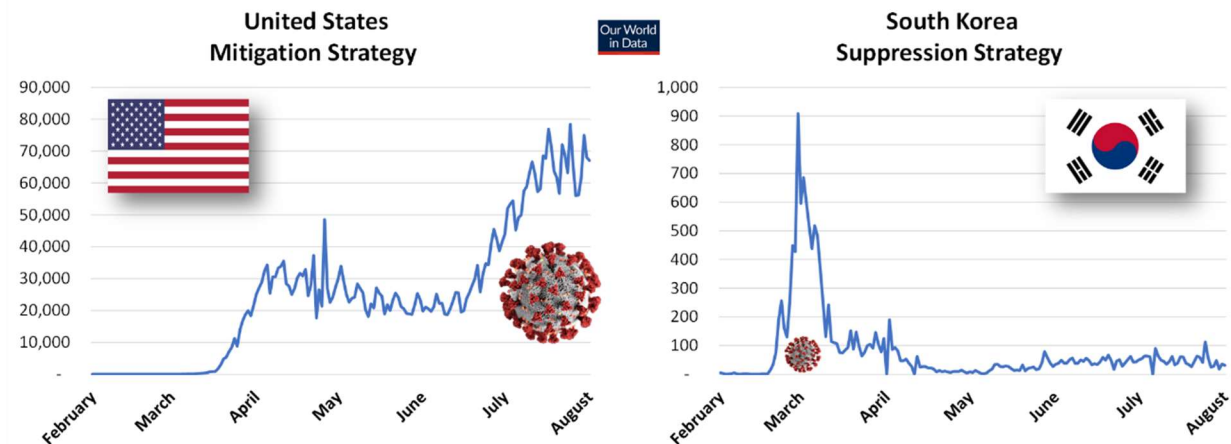
²⁵ University of Oxford, Oxford Martin Programme on Global Development, Our World in Data.org, Tests conducted per new confirmed case of COVID-19, <https://ourworldindata.org/grapher/tests-per-confirmed-case-daily-smoothed>

This table of selected countries and a world map comes from Europe's most prestigious COVID-19 research university, Oxford. It examines the rolling 7-day average of the number of daily tests for each new confirmed COVID-19 case by reporting countries worldwide. China is the most notable non-reporting nation. As shown on the table, the United States maintained mitigation-level testing around ten tests per confirmed case since most pandemics. Like South Korea, other countries implemented suppression-level testing methodologies and have made significant strides in subduing the spread of COVID-19.²⁶

Mitigation and Suppression Efforts in the United States & South Korea

New Cases from 1 February to 1 August 2020

Source: Oxford University, Our World in Data.org

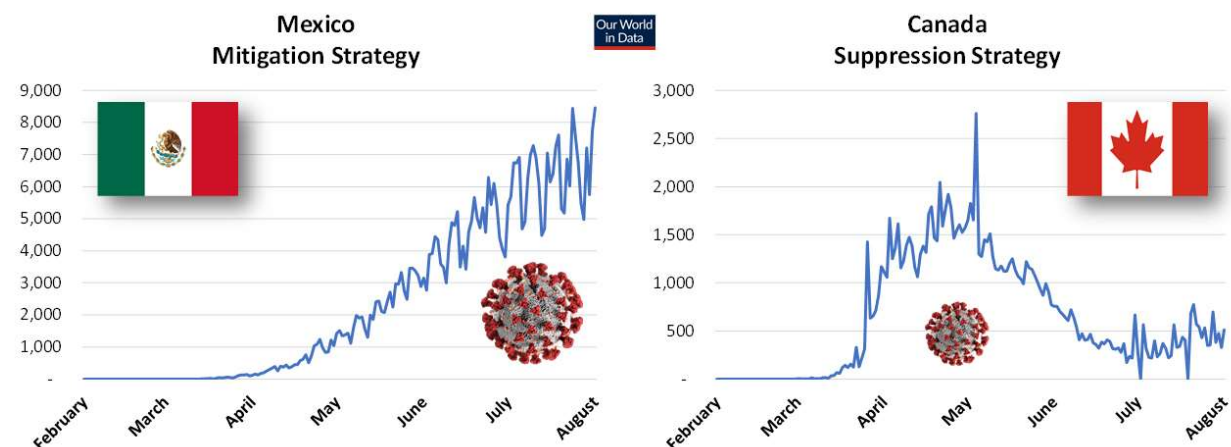


These graphs show the difference between the U.S. mitigation strategy and South Korea's suppression strategy.

Mitigation and Suppression Efforts in Mexico & Canada

New Cases from 1 February to 1 August 2020

Source: Oxford University, Our World in Data.org



These are the strategies of our closest neighbors. Like the USA, Mexico's mitigation-level testing strategy is not working. (Note: the Jobenomics-Aleph Diagnostics team works with Mexican officials to implement suppression-level testing strategies in Sonora and Oaxaca). Canada was an early adopter of suppression-level TTSI programs and quickly suppressed its pandemic. Unfortunately, in July, infections spiked in many Canadian

²⁶ University of Oxford, Oxford Martin Programme on Global Development, Our World in Data.org, <https://ourworldindata.org/coronavirus-testing> and <https://github.com/owid/covid-19-data/tree/master/public/data>

communities. Concerned by the resurgence of the virus, the Canadian government placed stricter tourist and immigration restrictions with particular emphasis on Americans who the Canadians perceive as a substantial source (carriers) of the infection.

In summary, it is time for America to rethink its COVID-19 testing strategy and implement more suppression-level TTSI programs. It is also time for all Americans to adapt their thinking to a new normal and get serious about combating this pandemic. We let our guard down after the April 2020 peak and suffered the consequences of a resurgent virus. Shame on us if we make the same mistakes in the future since this virus is not going away anytime soon.

Contact Tracing

Contact tracing is paramount to controlling the spread of COVID-19. Health departments use contact tracing to prevent the spread of infectious diseases.

For the most part, contact tracing involves identifying infected individuals (called "cases" by the CDC) and individuals with whom they interact (contacts). In countries with mitigation strategies, these contacts are notified of exposure and asked to quarantine themselves voluntarily. In countries with suppression strategies, contact tracing involves mandatory testing and involuntary confinement as required. Like China, authoritarian nations have an earlier job of applying hard-nosed suppression-level TTSI programs than democratically-led countries.

COVID-19 Contact Tracing by Country

1/12/2020 to 8/8/2020

Source: Oxford University, Our World in Data.org²⁷



These two maps (January and August 2020) depict the status of contact tracing programs worldwide.

- As of 12 January 2020, only China and Slovakia (a Chinese ally) had comprehensive COVID-19 contact tracing programs. For some unexplained reason, the only other country with limited tracing was Canada.
- As of 2 August 2020, over half the world has comprehensive COVID-19 contact tracing programs. North America, Central Africa, and Northwest South America either have limited or no tracing efforts.

In summary, anyone who comes into close contact (e.g., within 6-feet per social distancing recommendations) with a COVID-19 person is at risk of becoming infected themselves and others. Contact tracing helps prevent further transmission of the virus by quickly identifying and informing people who may be contagious, so they can take steps not to infect others. Unfortunately, the U.S. contact tracing efforts are underperforming in comparison with other countries. The only way to implement a more robust contact tracing program is to associate it with a suppression-level TTSI program, as discussed in the previous section.

²⁷ University of Oxford, Oxford Martin Programme on Global Development, Our World in Data.org, Which countries due COVID-19 contact tracing? 2 August 2020, <https://ourworldindata.org/grapher/covid-contact-tracing?year=2020-01-12>

Herd Immunity: Vaccines Versus Testing

Herd immunity occurs when a large portion of a community (the herd) becomes immune to a disease, making it less contagious. There are two ways to generate COVID-19 herd immunity—vaccines and infection. Infectious disease experts at The Johns Hopkins University explain that about 70% of the population needs to be immune to this coronavirus before herd immunity can work.²⁸

- **Vaccines.** Vaccines create immunity without causing illness or resulting in complications. Vaccines eradicated pandemics like smallpox (56 million deaths) but are less effective on influenza. On the other hand, a large percentage of the U.S. population object to vaccinations for a wide variety of reasons. Some of these reasons include vaccines not being useful for the flu, myths, misinformation, potential side effects especially for children and the unborn, distrust of the government, religious objections, and vaccines are not worth the safety risks.
- **Infection.** While it is too early to know if recovered COVID-19 patients will be immune to reinfection, recovered patients in previous pandemics and epidemics exhibited high immunity levels. It will also be interesting to determine if asymptomatic patients with minor symptoms can acquire a level of protection necessary for herd immunity.

From a Jobenomics perspective, vaccines are currently worth the risk but are not the only path to herd immunity. Those individuals and parents who object to being vaccinated should submit to a regime of COVID-19 testing until the pandemic subsides. According to Dr. Fauci, The White House infectious disease expert, the chances for a highly effective vaccine are "not great," but a 50% rate would be considered a win. From a Jobenomics-Aleph Diagnostics perspective, a dual vaccination/suppression testing strategy seems to be the only viable solution at this point in the pandemic.

²⁸ John Hopkins Bloomberg School of Public Health, What is Herd Immunity and How Can We Achieve It With COVID-19?, By Gypsyamber D'souza And David Dowdy, 10 April 2020, <https://www.jhsph.edu/covid-19/articles/achieving-herd-immunity-with-covid19.html>

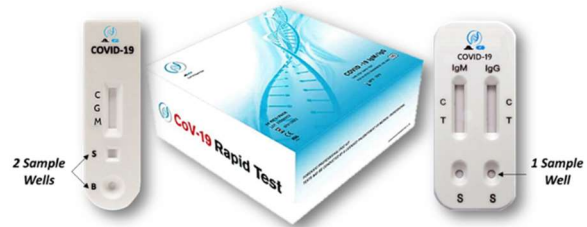
Layered Suppression Testing Approach

Jobenomics-Aleph Diagnostics team advocates a **layered suppression testing approach** using a combination of self-test kits, rapid test point-of-care kits, and centralized laboratories. This layered approach would also promote and incorporate the plethora of next-generation suppress-level TTSI programs, technologies, and devices.

Today, certified laboratories conduct approximately half of all COVID-19 testing. Rapid test point-of-care kits are responsible for the other half. Jobenomics predicts that the vast majority of tests will be done remotely by cloud-based point-of-care and self-test kits.

• Test Kits.

- **Self-test kits** are widely available in Asia but prohibited in the United States due to government reporting and oversight requirements. A COVID-19 self-test kit would operate like a commercially-available (online, pharmacy, prescription) insulin or pregnancy test kit. Note: the Jobenomics-Aleph Diagnostics team hand-carried and delivered the leading Chinese COVID-19 self-test to CDC Headquarters in Atlanta. CDC gave this kit to the FDA that subsequently required Aleph Diagnostics to repackage, import, and distribute to sell the product as a rapid test POC kit.
- RT-POC kits are **rapid test** (RT) kits that usually deliver results in less than 15 minutes and are administered by a medical professional or qualified healthcare aid at the **point-of-care** (POC). Point-of-care centers include places like drive-up testing centers, doctor's offices, nursing homes, and pharmacies. The exhibit shown are examples of an Aleph Diagnostics RT-POC kit.
- The CDC conducted almost all of the COVID-19 **lab tests** in the early part of the pandemic. As patient demands increased, other federal, state, and commercial laboratories were incorporated to reduce CDC's testing backlog. On 27 March, President Trump unveiled the Abbott Lab's Quick COVID-19 that allowed doctor's offices to begin lab testing. On 31 July, the National Institutes of Health (NIH) awarded contracts worth \$245 million to seven biomedical diagnostic companies for new lab-based and point-of-care tests that could significantly increase the number, type, and availability of tests by millions per week as early as September 2020.



- **Plethora Of Next-Generation Technologies And Devices.** The type of suppression-level technologies and devices needed to achieve NIH's goals include next-generation sequencing, CRISPR, integrated microfluidic chips (Aleph Diagnostics' operational Microfluidic Lab-on-a-Chip system shown), nucleic acid, and viral antigen tests.

According to the NIH, these "tests must provide accurate, quick results with as few false negatives and false positives as possible. Testing must also be inexpensive, user-friendly,





widely accessible in a variety of settings and locations, as well as being able to detect people who are asymptomatic."²⁹

In conclusion, the time to implement an aggressive COVID-19 suppression-level testing program is now, before the upcoming flu season begins. There are plenty of state-of-the-art antibody, molecular, and antigen tests available now to start a nationwide effort. The Jobenomics-Aleph Diagnostics team alone is authorized to import, distribute, and sell in quantity (25 million per week) some of the world's leading RT-POC test kits.

The biggest obstacle holding back a nationwide suppression-level testing program is our government's (federal, state, and local) willingness to do. A second obstacle is a preference for American made products. While the FDA does not track foreign-produced pharmaceuticals, experts estimate that 80% of the U.S. pharmaceutical drug supply comes from China. While Made-in-America is our ultimate goal for critical items, it is folly to believe we can accomplish this in a few months after decades of exporting our technology overseas.

Rather than restricting Chinese-made pharmaceuticals, we should work with the Chinese to export their technology and create joint ventures to manufacture in the United States. This type of confidence-building effort is precisely what the Jobenomics-Aleph Diagnostics team has negotiated with leading Chinese pharmaceutical companies for co-producing test kits and devices in the United States.

²⁹ National Institutes of Health, Rapid Acceleration Of Diagnostics (RADx), <https://www.nih.gov/research-training/medical-research-initiatives/radx>

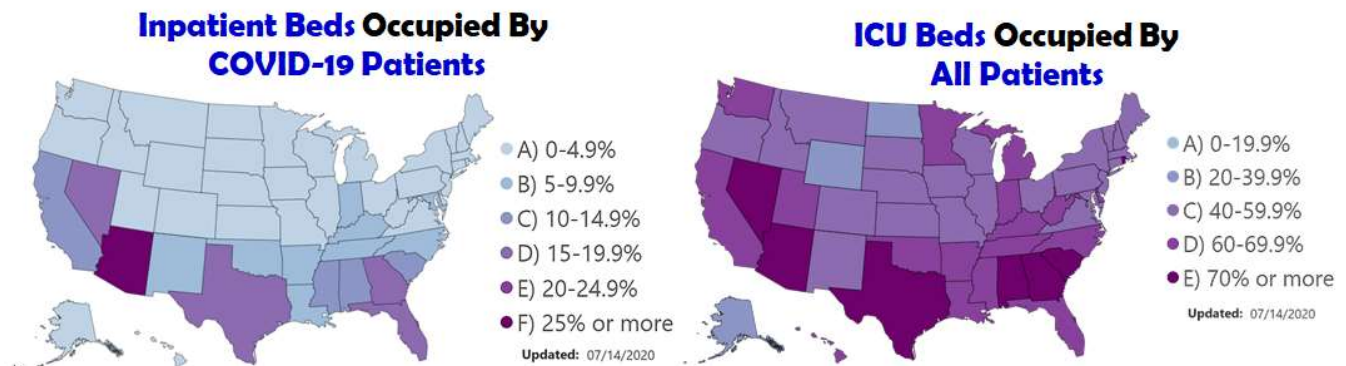
Hospitalization

Jobenomics contends that the hospitalization rate issue was pertinent at the advent of the pandemic due to intense (and rightful) media coverage of New York Governor Cuomo's daily briefing regarding the probability of overrunning the available number of hospital beds. In the beginning, hospital utilization was a legitimate and paramount concern, with visions of critically ill patients stacked up in hallways awaiting emergency triage. The Federal government responded by sending military hospital ship into the port of New York City and building deployable COVID units in Central Park and auditoriums. Fortunately, these emergency facilities were not needed.

Unfortunately, coverage of potential hospital shortages continues to dominate headlines. Media coverage of ICU bed shortages was largely unfounded in new hotspots, like Texas and Arizona, where ICU beds were in short supply.

State Representative Estimates for Hospital Bed Utilization

Source: CDC Current [Acute Care](#) Hospital Capacity Estimates – Snapshot³⁰



These two maps are CDC's estimates of hospital capacity. Nationwide, the CDC reports that the number of occupied inpatient beds is 63% for all patients, with only 8% by COVID-19 patients. Acute-care hospital ICU bed occupancy by all patients stands at 61%. As shown on the maps, Arizona's acute-care hospital system is currently under the most stress.

The map on the left depicts the percentage of inpatient beds occupied by COVID-19 patients. Except for Arizona, most states are less than 5% occupied, as shown in light blue.

The map on the right shows the number of ICU beds occupied by all patients. Hospitals have enough spare capacity to handle even the recent Southern hotspots (CA, AZ, NV, TX, GA, FL, as shown in darker colors). It is also important to note that these maps represent only acute-care facilities, not all hospitals, emergency shelters, or nursing homes.

As of 30 July, the CDC database estimates that AZ hospital inpatient bed occupancy (all patients) is 78%, the number of patients in an AZ inpatient care location who have suspected or confirmed COVID-19 is 25.6%. AZ

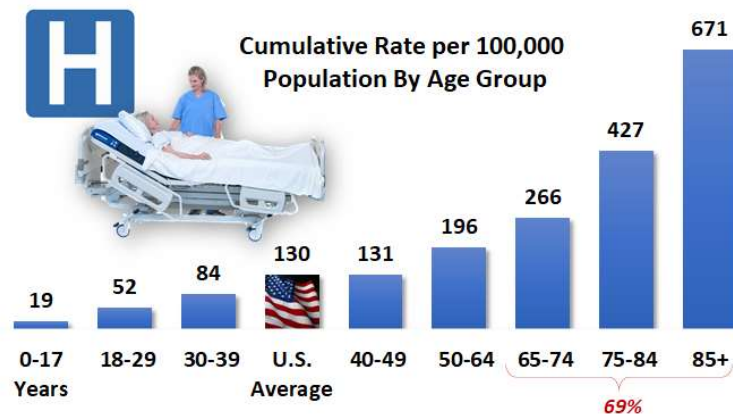
³⁰ CDC, Hospital Capacity– Snapshot, 14 July 2020, <https://www.cdc.gov/nhsn/covid19/report-patient-impact.html>

ICU bed occupancy (all patients) is 80.4%.³¹ These figures indicate, while stressed, Arizona's acute care system can handle a little more before implementing emergency facilities.

In summary, the U.S. acute care hospital system handles the COVID-19 crisis, and additional facilities are available as needed. Americans need to shift focus from hospital utilization to first-line healthcare providers. These professionals have been fighting this virus for six months, and relief is not foreseeable soon.

Cumulative COVID-19-Associated Hospitalization Rates 3/1/2020 to 7/25/2020 (as of 31 July 2020)

Source: CDC Hospitalizations³²



The COVID-19-Associated Hospitalization Surveillance Network (COVID-NET) received reports of a total of 42,403 laboratory-confirmed COVID-19-associated hospitalizations between 1 March and 25 July 2020.³³

- The overall cumulative hospitalization rate was 130 per 100,000 population. Senior citizens (65+) collectively occupied 69% of all hospital beds.
- Among 10,687 hospitalized adults with information on underlying medical conditions, 90.8% had at least one reported underlying medical condition. The most-reported conditions were hypertension, obesity, chronic metabolic disease, and cardiovascular disease.
- Among 222 hospitalized children with underlying conditions, 52.3% had at least one reported underlying medical condition. Most reported were obesity, neurologic disorders, and asthma.
- Minority overall age-adjusted rates hospitalization rates exceeded Whites by a factor of 5.3-times for Native Americans, 4.7-times for Blacks and Hispanics, and 1.3-times for Asian and Pacific Islanders.

The hospitalization rates for Native Americans, Blacks, and Hispanics are disconcerting. The standard answer by many activists revolves around systemic racism. Medical and healthcare professionals point to crowded urban environments, high exposure to crowds contact during work (healthcare works, servers, drivers), lack of access to medical facilities, lax preventative measures (masks, social distancing), and weak immune systems (malnutrition, obesity, smoking).

³¹ CDC, Current Hospital Capacity Estimates, Downloadable Dataset, Arizona Data, 30 July 2020, https://www.cdc.gov/nhsn/covid19/report-patient-impact.html#anchor_1594393649

³² CDC, Coronavirus Disease 2019 (COVID-19), Cases in the U.S., 29 July 2020, <https://www.cdc.gov/coronavirus/2019-ncov/cases-updates/cases-in-us.html>

³³ CDC, Coronavirus Disease 2019 (COVID-19), Key Updates for Week 30, ending July 25, 2020, Hospitalizations, <https://www.cdc.gov/coronavirus/2019-ncov/covid-data/covidview/index.html#hospitalizations>

While hospitalization rates for Native Americans, Blacks, and Hispanics are excessively high, Jobenomics suggests that our primary focus at this point in the pandemic should be on reducing minority death rates as opposed to dealing with hospitalization rates.

COVID-19 Deaths by Race/Ethnicity 2/1/2020 to 7/25/2020 (as of 29 July 2020)

Source: CDC NCHS³⁴

Race/Ethnicity	COVID-19 Deaths Number	COVID-19 Deaths Percentage	% of U.S. Population <i>(U.S. Census Bureau)</i>	Δ
White	70,822	52.2%	60.1%	-7.9%
Black	30,413	22.4%	13.4%	9.0%
Hispanic	24,910	18.4%	18.5%	-0.1%
Asian	6,462	4.8%	5.9%	-1.1%
All Others	2,972	2.2%	2.1%	0.1%
	135,579	100%	100%	

Over half (52.2%) of all COVID-19 deaths involve Whites. Since the U.S. population is 60.1% White, Whites are dying at a lower percentage rate (-7.9%) in proportion to their demographic. Surprisingly, the same variance exists with other major minority groups. Blacks are the major exception. As highlighted in red in the table, Blacks have a 9% higher death rate in proportion to their population.

African-American community leaders lead two dozen Jobenomics city chapters located in predominantly Black urban communities. These leaders suggest that ethnology (characteristics, culture, and history of various groups, and the differences and relationships between them) is a leading factor why Blacks are dying at a higher rate than other major ethnic groups.

Minorities have a greater tendency to distrust institutional establishments and tend to wait longer before seeking medical help. A recent Wall Street Journal article, entitled "Covid-19 Vaccine Trials Have a Problem: Minority Groups Don't Trust Them," states that the lack of participation in clinical trials is a weighty issue for communities that need vaccines the most.³⁵

The lack of access to medical care and insurance coverage exacerbates early therapeutic intervention for minorities. The longer a person, especially an elderly individual with underlying medical conditions, waits to get COVID-19 treatment (such as blood thinners, viral drugs, supplement oxygen, ventilation), the higher the likelihood of death.

As such, the Jobenomics-Aleph Diagnostics team is leading an effort to educate minority leaders on community-wide early diagnosis via COVID-19 antibody testing (that can identify the infection before an individual shows symptoms of the virus). Jobenomics has a direct-care program that can mobilize minority healthcare professionals and aids in providing remote testing, telehealth counseling, and in-home support

³⁴ CDC, National Center for Health Statistics, Deaths involving coronavirus disease 2019 (COVID-19) by race and Hispanic origin group and age, by state, 29 July 2020, <https://data.cdc.gov/NCHS/Deaths-involving-coronavirus-disease-2019-COVID-19/ks3g-spdg>

³⁵ Wall Street Journal, Covid-19 Vaccine Trials Have a Problem: Minority Groups Don't Trust Them, 5 August 2020, <https://www.wsj.com/articles/covid-19-vaccine-trials-have-a-problem-minority-groups-dont-trust-them-11596619802>

services for shut-ins and quarantined patients. Finally, in addition to a wide range of suppression testing kits, Aleph Diagnostics is working with a publicly-owned Chinese company jointly developing and manufacturing (in the USA) mobile testing centers based on China's success of similar units, as shown.

Chinese Mobile Suppression Testing Unit

Source: Aleph Diagnostics



Concluding Thoughts

As of this writing, one of America's most pressing challenges involves finding a balance between lives and livelihoods. While each life is precious, the COVID Grim Reaper is likely to claim many more lives until the United States achieves herd immunity. Even with a stockpile of new vaccines and antiviral drugs, the Reaper will mutate or go dormant to delay its eventual demise. Consequently, the American public should accept the premise that our immediate future will include coronaviruses and associated protocols.

Each year, three million Americans are killed or seriously injured in auto accidents.³⁶ This statistic is much grimmer than the number of victims claimed by COVID-19 Grim Reaper but deemed acceptable to maintain the way of American life. In the same manner, we need to collectively agree on an "acceptable" balance between the number of COVID-19 lives lost and the extent of livelihoods destroyed to emotional, mental, and economic distress.

COVID Money Tracker: Policies Enacted To Date As of 6 August

Source: Committee for a Responsible Federal Budget³⁷

Actions	Allowed	Distributed	Major Programs
	\$Trillions		
Federal Reserve	\$5.80	\$2.20	Asset purchases (\$2.1T), Emergency lending programs and facilities (\$2.0), Liquidity measures (\$1.6T)
Legislative (Congress)	\$3.70	\$2.20	CARES Act (\$2.2T), Paycheck Protection Program and Health Care Enhancement Act (\$0.8T)
Administrative (White House)	\$0.47	\$0.41	Delay tax to July 15 (~\$300B), Expansion of advanced payments to health providers (~100B), other actions (~\$70B)
	\$9.97	\$4.81	

The U.S. economy is currently on a sugar high due to a colossal COVID-response stimulus package approaching ten trillion dollars (\$9.97T allowed and \$4.81T distributed³⁸). This spending level can not last much longer and probably will be depleted soon. Unless American collective action suppresses the COVID-19 Grim Reaper, a 1930s level Great Depression, replete with violent social upheaval and massive bankruptcies, is just around the corner.

It is time for all Americans to adapt their thinking to a new normal and get serious about combating this pandemic. It is also time for America to rethink its COVID-19 testing strategy and implement more suppression-level TTSI (testing, contact tracing, and supported isolation) programs. We let our guard down after the April 2020 peak and suffered the consequences of a resurgent virus. Shame on us if we make the same mistakes in the future since this virus is not going away anytime soon.

³⁶ CDC, Public Health Professionals Gateway, Motor Vehicle Injury, <https://www.cdc.gov/publichealthgateway/didyouknow/topic/vehicle.html>

³⁷ University of Oxford, Oxford Martin Programme on Global Development, Our World in Data.org, Which countries due COVID-19 contact tracing? 2 August 2020, <https://ourworldindata.org/grapher/covid-contact-tracing?year=2020-01-12>

³⁸ Committee for a Responsible Federal Budget, COVID Money Tracker, updated 6 August 2020, <http://www.crfb.org/project/covid-money-tracker>



About Jobenomics

Jobenomics deals with the economics of business and job creation. The non-partisan Jobenomics National Grassroots Movement's goal is to facilitate an environment that will create 20 million net new middle-class U.S. jobs within a decade. The Movement has reached an estimated audience of 30 million people. The Jobenomics website contains numerous books and materials on how to mass-produce small businesses and jobs and valuable content on economic and industry trends. For more information, see Jobenomics.com.

About Aleph Diagnostics

Aleph Diagnostics Inc. (AD, <https://alephdiagnostics.com/>) is a U.S.-based early-stage In Vitro Diagnostics Company on the front end of the fight to combat the ravaging effects of the coronavirus. AD joined forces with global partners to deliver innovative products to detect acute and chronic infection in infected, symptomatic, and asymptomatic populations. Almost half of all transmissions occur during the asymptomatic stage before showing signs of the virus.

AD technology will be essential in putting people back to work, providing post-pandemic influenza/COVID-19 antibody testing solutions to mitigate future outbreaks, and keeping people working. AD's COVID-19 Antibody Test Kits are in use worldwide with over 100+ million Point of Care (POC) tests—the most significant usage of any company. AD's global partners have a manufacturing capacity of 25 million test kits per week and customs agreements to rapidly ship (7 to 10 days) by air freight to any major American city.