COVID-19 Deaths: Sweden vs. the United States

Ian Feinhandler, Ph.D. May 4, 2020 (updated May 7, 2020)

SUMMARY: Some analyses have pointed to the success of the Swedish model at containing the spread of COVID-19; these arguments tend to be based on poor readings of the data. Other analyses have praised the Swedish model for minimizing economic contraction, even if the consequence has been a higher death toll; these arguments are based on a clearer understanding of the data, but lead to a difficult calculus in which deaths from COVID-19 must be weighed against an economic contraction likely to dwarf previous recessions – and the suffering associated therein.

A superficial examination of Figure 1 suggests that while the death rate in Sweden looks relatively flat, the U.S. death rate appears to be growing exponentially; this has led some observers to conclude that Sweden is doing much better than the U.S. at containing the spread of the virus.

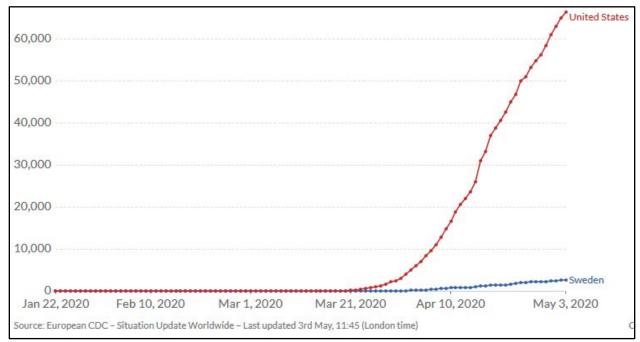


Figure 1. Total Deaths from COVID-19, Sweden vs. United States (Jan 22-May 2, 2020).

Source: https://ourworldindata.org/covid-deaths?country=USA+SWE

However, the graph in Figure 1 does not control for population; if the Y-axis on the graph were between 0 and 3,000 (a more suitable scale given the total population of Sweden) then we would see exponential growth in the deaths in Sweden as well. In fact, when you control for population, the death rate in Sweden has increased more rapidly than in the U.S. (see Figure 2). Figure 2 illustrates the importance of comparing death rates as opposed to total deaths. As of May 2, 2020, Sweden has experienced 26.1 deaths per 100,000 people, while the U.S. has experienced 20.2 deaths per 100,000 people (see Table 1). Sweden's death rate from COVID-19 is 29.2% higher than that of the U.S.

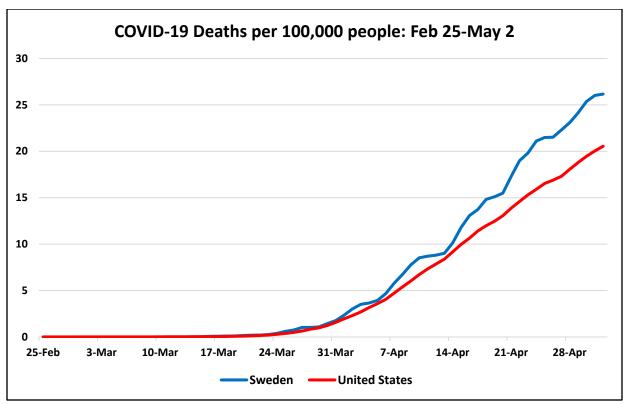


Figure 2. Death Rate in Sweden vs. the United States, measured by number of deaths per 100,000 people in the population (Feb 25-May 2, 2020).

Data Source: https://ourworldindata.org/covid-deaths?country=USA+SWE
Data on total deaths converted to rate and graphed by Ian Feinhandler.

Country	Population	COVID-19 Deaths	Deaths per 100,000
Sweden	10,200,000	2,669	26.1
U.S.	328,200,000	66,385	20.2

Table 1. COVID-19 Deaths: Sweden vs. the United States.

COVID-19 Deaths Data: https://ourworldindata.org/covid-deaths?country=USA+SWE
Population Data: https://www.cia.gov/library/publications/the-world-factbook/

What explains the fact that Sweden has a death rate 29% higher than the United States?

I am not an epidemiologist, so this question falls outside my area of expertise, but perhaps it is because Sweden is a slightly older country than the U.S. (see Table 2). Most data indicate that the elderly are more likely to die from COVID-19. In New York City, for example, 70% of those who died from COVID-19 were 65 or older, while in Italy, where the median age is 46.5, about 90% of those who died from COVID-19 were 65 or older.

¹ https://www.worldometers.info/coronavirus/coronavirus-age-sex-demographics/

² https://www.statista.com/statistics/1105061/coronavirus-deaths-by-region-in-italy/

Country	Population	Median Age	% Age 65 and Older
Sweden	10,200,000	41.1	20.6
U.S.	328,200,000	38.5	16.9

Table 2. Demographic Data: Sweden vs. the United States.

Data Source: https://www.cia.gov/library/publications/the-world-factbook/

A second explanation focuses on the minimal restrictions imposed on the population by the Swedish government. Sweden did not issue a lockdown and did not close most businesses and schools.³ As a consequence, Sweden may be poised for a rapid economic recovery from this crisis. Meanwhile, how are we here in the United States to assess the untold suffering of those who have lost work as a result of our shutdown? Since the start of the crisis six weeks ago, 30 million Americans have filed for unemployment, but the real number of those without work is likely higher.⁴ How many will fall below the poverty line, suffer food insecurity, or not be able to afford basic medical care? A report by the Brookings Institute released on May 6 finds that 20% of American households are facing food insecurity. What will be the long-term cost of declining government revenue and rising expenditures for unemployment and other pandemic-related spending? On May 4, the U.S. government announced plans to borrow a record \$3 trillion in the second quarter – five times the previous quarter record set during the 2008 fiscal crisis.⁶ As the national debt approaches \$25 trillion – 25% more than our GDP – it will eventually slow income growth, increase interest rates, and burden future generations with debt. We are already discussing budget cuts at my academic institution; how will the coming cuts to education impact the lives of children and those who teach them? How many aging workers are now postponing retirement? What is the psychological toll of the radical uncertainty in the economy? How will a shrinking GDP impact American foreign policy and our allies who depend upon us to defend them against expansionist revisionist states? It is a savage arithmetic, but when we compare our approach to Sweden's, how do we weigh the additional lives saved by an economic shutdown against its enormous cost?

³ https://www.nationalreview.com/2020/05/coronavirus-crisis-sweden-refused-lockdown-other-countries-following/

⁴ https://www.businessinsider.com/us-unemployment-likely-higher-than-jobless-claims-show-coronavirus-jobs-2020-5

⁵ https://www.brookings.edu/blog/up-front/2020/05/06/the-covid-19-crisis-has-already-left-too-many-children-hungry-in-america/

⁶ https://www.bbc.com/news/business-52537938

⁷ https://www.crfb.org/papers/why-should-we-worry-about-national-debt