Is the Coronavirus Lockdown Costing More Lives than It's Saving?

By Alex Berezow, PhD — May 27, 2020

The COVID-19 lockdown is responsible for both the loss of economic activity and human lives. Two independent groups of researchers concluded that the lockdown may be costing more lives than it saves.

Two independent groups have arrived at the conclusion that the COVID-19 lockdown is doing more harm than good. Specifically, the lockdown is taking more life than it's saving. How is it possible to make a determination like that?

Like any other model or epidemiological analysis, it's neither easy nor automatically accurate. Just because a number can be generated doesn't mean it's correct. As always, a lot of assumptions are made, many of which may end up being wrong. If some key assumptions are wrong, then the model will give a wrong answer.

Having said all that, this sort of analysis is incredibly important because it attempts to quantify the costs and benefits of public health policies. The relevant issue from the first and more influential analysis is a concept known as "years of potential life lost" (YPLL), which requires a bit of explaining.

The death of a child is tragic, whereas the death of an elderly person is sad but not tragic. Why? Because the child had a long life in front of her that was cut short. What about the death of a middle-aged person? Well, it's somewhere between tragic and sad. YPLL tries to quantify what we
all know instinctively to be true: All deaths are not equal.

To determine YPLL, scientists determine the age of death (say, 65 years old) and simply subtract it from the life expectancy (say, 75 years old). In this case, the YPLL = 10 years or 10 "life-years." If another person dies at age 72, the YPLL = 3. Combined, these two people had a YPLL of 13 life-years. (Note that it is not possible to get a negative YPLL score if a person lives beyond the life expectancy.) In this example, the death of a single baby (YPLL = 75) is just as bad as the deaths of three 50-year-olds (3 x 25 = 75), five 60-year-olds (5 x 15 = 75), fifteen 70-year-olds (15 x 5 = 75), or seventy-five 74-year-olds (75 x 1 = 75).*

Coronavirus Lockdown Is Costing More Life-Years than It Saves

Using this concept, a group of researchers described in an article for The Hill [2] that the coronavirus lockdown is costing more life-years than it saves. The entire article is worth reading, but here's the gist: Economic downturns are associated with suicides and drug overdoses. Also, while stress from unemployment might not kill you right away, it can exacerbate illnesses, such as cardiovascular disease. Some people, like potential stroke victims, aren't going to the hospital when they ought to be. Worse, some cancer patients are not receiving chemotherapy, and many new cases aren't being diagnosed. The authors conclude:

"Based on the expected remaining lifetimes of these COVID-19 patients, and given that 40 percent of deaths are in nursing homes, the disease has been responsible for 800,000 lost years of life so far. Considering only the losses of life from missed health care and unemployment due solely to the lockdown policy, we conservatively estimate that the national lockdown is responsible for at least 700,000 lost years of life every month, or about 1.5 million so far — already far surpassing the COVID-19 total." [Emphasis added]

Another group from Swansea University [3], using a completely different method that examines networks, concluded that "short, intensive lockdowns... could actually cost more lives."

Are the authors right? It's hard to say. But the results are certainly worth considering, and they absolutely refute the notion that the only cost to a lockdown is economic.

*Note: These calculations can be made a lot more complicated by using various kinds of weighted metrics. Regardless of how complex the algorithm, the underlying concept is the same.