"Herd immunity" seems to be gaining ground in the White House as a coronavirus strategy. The idea is to protect the vulnerable population, while letting the virus run its course among the rest. The disease then dies out because so many people are immune. What could possibly go wrong?

In theory, this idea would work, *if* having a mild or asymptomatic case gives long-term immunity, and *if* the vulnerable can be fully protected. We're not positive about the first assumption. No one know yet how long immunity might last, or whether getting a mild case always results in immunity .

The real problem, however, is that we can't ensure that vulnerable individuals will be protected. Fifteen percent of the U.S. population is over 65. According to the CDC, people 65-75 are five times as likely to be hospitalized and ninety times as likely to die as young adults. Ten percent of the U.S. population are diabetic, another risk factor. A third of American adults are obese, and one in thirteen is classified as grossly obese. These are all risk factors for COVID. There's some overlap between these groups. It's clear, however, that we would have to isolate a fifth to a quarter of the population from exposure. That's a tall order.

Letting most of the population get the virus is how you get herd immunity. Unless you can effectively prevent the disease from spreading to vulnerable groups, a lot of people will die. When you consider that we've had 180,000 deaths despite some serious shutdowns and social distancing requirements, it seem obvious that we'd have a lot more deaths if we gave up those precautions.

Given the number of vulnerable individuals and the difficulty of effectively isolating them, the herd immunity strategy would come with a heavy cost.The *Washington Post* estimates that "even if both the herd immunity threshold and the fatality rate proved to be toward the lower end of current estimates — with 40 percent needing to be infected and a 0.5 percent fatality rate — the country could still expect 656,000 deaths to achieve herd immunity." About one-fifth of hospitalized patients die. Thus, a 0.5% fatality rate would mean about 2.5% of the population was hospitalized. These estimates are on the low end, so the real numbers could well be much higher.

A survivable infection is basically Nature's way of giving you immunity — the natural equivalent of vaccination. So think of the herd immunity strategy as equivalent to vaccinating 40-60% of the population. For every thousand people who get "Nature's vaccine," five will die and twenty-five will be hospitalized, some for very lengthy periods. That's a thousand times the death rate from polio vaccine. Even Trump's FDA wouldn't

approve a vaccine that killed five out of a thousand individuals. In essence, however, that's the path that Trump seems attracted to.

The herd immunity strategy has been tried before. It was tried in Britain until the government realized that the cost was unacceptable. It's also been utilized in Sweden, which has struggled economically even while having high infection and death rates. If herd immunity allowed the economy to run full steam, maybe there would be an economic argument for tolerating the death toll. Even that benefit, however, seems to be illusory.

In other words, this is a strategy with dubious economic benefits and an extraordinary toll in human lives. Just perfect.