

October 2, 2020

## The President is Infected

It is October 2, 2020. Six-plus months into the pandemic, over 7,500,000 cases, and over 213,000 deaths (<https://www.worldometers.info/coronavirus/>). This morning we learned that the President and several members of his staff have been infected. The numbers of those who they may have infected, over the last week, could plausibly be in the hundreds.

This is an economics blog, and your blogger is a teacher. Tests for disease merit some discussion. We depend on tests to determine infection rates and also the validity of the tests themselves. Suppose that we test 1,000 asymptomatic people for COVID-19. Suppose that 950 people do NOT have the disease, and 50 do. The “perfect test” will tell us this. It will find the “right” 50 people who have it (a “sensitivity” rate of 100%), and it will find the “right” 950 people who don’t (a “specificity” rate of 100%). In the perfect world, tests work perfectly.

Our world is not perfect. Policy experts worry most often that healthy people will be thought to be sick – these are called “false positives”. False positives can lead to unneeded treatment, which could be costly. In the case of COVID-19, it means that healthy people must quarantine for 14 days. It is inconvenient, and can be economically costly in terms of missed work, but it is not life-threatening.

Policy experts have traditionally worried less about “false negatives”, that is, people who ostensibly do not have the condition. Why? If they weren’t symptomatic to begin with, then the negative diagnosis will not change their behavior. They were going to keep working, playing, socializing, anyhow, and we are not keeping them from indulging in those activities.

However, we are discovering that some of the so-called “rapid tests” for COVID-19 may have false negative rates between 2% and 29% (equating to sensitivity of 71-98%, <https://www.bmj.com/content/bmj/369/bmj.m1808.full.pdf> ). If so, going to the example above, our perfect test was not so perfect. Taking a false negative rate of 20% for the example above would mean that 10 of the 50 who thought they were “OK”, were NOT OK. They are sick, and they can infect others. It looks like a lot of people were infected this week. False negatives are very harmful when related to infectious diseases.

What makes this much worse, is that there was a group of people (the Trump party) who felt that the laws of epidemiology did not apply to them. Little masking and the continual gathering of big groups in close quarters put themselves, and those who they gathered with, at risk. Senator Mike Lee of Utah tested positive. University of Notre Dame President, the Rev. John I. Jenkins, positive for the coronavirus, just days after [publicly apologizing](#) for not wearing a mask or adhering to social distancing guidelines while at a White House

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ceremony over the past weekend. Over the last several weeks, Notre Dame has publicly scolded its students for going out to parties ... and getting infected.

At this past week's debate, President Trump taunted Vice-President Biden this week for wearing a mask, and engaging in social distancing behavior. What portion of the 213,000 dead Americans could have been saved by appropriate preventive means? Why has the President refused to support these means?

The President is infected. YB joins all Americans in wishing him, and all other infected Americans, full, safe, and complete recoveries from infections that should not have happened.

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