

Information on the Coronavirus Pandemic

3/21/2020

Fr. Tom Metzger

I'm sharing this information, which is a combination of input from three MD's:

- Dr. Jeffrey Brenner, MD, United Healthcare, whose area is Specialized Healthcare for Vulnerable People, during a conference call hosted by Faith in Indiana
- Dr. Tom Whitten, MD, an OLG parishioner, in a text about the pilgrimage in Italy next fall – which probably won't happen. He and three Whitten kids are part of the group of 19.
- Dr. Bryan Sharpe, MD, also an OLG parishioner, who has been posting things on FB and who graciously shared about a half hour of his time with me today on the phone.

These three docs all come at the situation from a different angle but are all pretty much in broad agreement. Here's what I have learned;

How infectious is Covid-19 (Coronavirus)?

- Compared to seasonal flu: On average, each person with the flu infects 1.3 other people. Any ratio over 1:1 is considered an epidemic. Covid19's rate is between 1:2 and 1:2.5.
- Incubation time for flu is about 4 days before symptoms appear. For Covid-19, incubation is anywhere from 1-14 days, average 5. "Viral shedding," takes place before the symptoms appear.
- Hospitalization rates: For flu, 2%; for C-19, 19%. This is based on early global data. Italy's rate, in the mid to high 20's, brings this average up.
- Case fatality (death rate): For flu, the death rate is 0.1%. For C19, it is as high as 8% in Italy. South Korea has been very successful in battling the virus. Most estimates place the fatality rate at between 1% and 2% there. Prior to the virus spreading in Italy, it was about 3-5%. With more research, there is hope that it will hover at about 1-2%. (Bear in mind, this is 1-2% of those infected, but there are/will be many more infected than with the flu.)
- This virus is called "novel" not just because it's new but because the human race has never seen anything like it in history, on a scale as great as this. We do not yet have any ability in our bodies to create the antibodies we need to fight off the virus, so it is VERY easy to contract.

Projections:

- There was a big "pivot" a few days ago due to the most recent studies, including one at Johns Hopkins.
- Likely scenarios (Brenner):
 - 60-70% of the population is infected with the virus, which eventually will cause the virus to taper off due to "herd immunity." [Sharpe says maybe closer to 50%] This number (50/60-70%) is projected if we DO practice strict social distancing. It would be much higher if not. [Again, if we look at OLG, we can assume that at least 50% of our parishioners will be infected (or as many as 70%). Of these, 20% will be hospitalized.]
 - Vaccination: Lots of promising headlines mention vaccination possibilities but it should be noted that vaccines have to be tested to make sure that they are effective AND that they don't do more harm than the virus itself would do. So we are talking months if at all. [Sharpe: Long shot – 12-18 months for a safe and effective vaccine to be developed.]

- Sharpe: We want to do social distancing so that we keep the infection rate lower (down to 50-70%) and enable healthcare facilities to prepare for the outbreak, which will come.
- Currently, in terms of the number of cases and hospitalization rate, the U.S. is on the same trajectory as Italy, Iran, and Germany. This is true mainly because of high rates on the two coasts. This is why hospitals and healthcare facilities are taking what seem like extreme measures here. The outbreak will travel from the coasts inland.
- How long will this last?
 - Sharpe: Social distancing will continue to be a necessity until the summer, at the earliest.
 - Brenner: Six months quarantine.
 - Whitten: An epidemiology study from Great Britain, simply put, if we do what is asked of us and stay put, contact trace, isolate and quarantine, we will lower the death toll in America from 2 million to 1 million. Another study out of Columbia University in the last couple of days suggest that we can take that number down to about 400,000. These measures will flatten the curve, meaning, spread out the time that people get really sick so as not to overwhelm the health system as greatly as it would if we do nothing. Once the measures are lifted, the virus spreads again. The good news is that once a person is infected, most likely there will be immunity. All that together means that we will be in the thick of this for about a year. Hopefully at that time we will have a vaccine. There is an outside chance that the virus could peter out like other coronaviruses, SARS and MERS, did in the past two decades. *[Note: These numbers (1 to 2 million deaths) equate to between 0.3% and 0.6% of the US population, which doesn't sound so bad until you realize that if our parish population is, say, 5000, that means that between 15 and 30 people will die of the C-19 virus. I think my math is right on that. And I don't know exactly how many members we have.]*
 - My opinion, which means nothing: Social distancing will become more mandatory and less optional. I'm not sure how that will work but we need to plan for that.
 - What does Social Distancing really mean? <https://www.npr.org/sections/health-shots/2020/03/17/817251610/its-time-to-get-serious-about-social-distancing-here-s-how>
It is not just about keeping yourself safe from the virus but also about keeping others safe from you if you have the virus. My rules of thumb are:
 - Assume every person I come into contact with has the virus.
 - OR: Assume I unknowingly have the virus and could infect every person I come into contact with.
 - So, in a strange way, social distancing is about love of neighbor.

Treatment:

Just as there is no vaccine, there is no medicine that kills the virus. The treatment is the same as for any other respiratory illness: Supportive care which treats the symptoms, especially respiratory support. This is why ventilators are so important.

Where can I get good information?

Press conferences seem to be a mixed bag with contradictory claims sometimes coming from people who are trying to get out a unified message. News outlets may have their own slants on the information as well, so the best places to go are the following:

- World Health Organization: <https://www.who.int/> and <https://www.who.int/emergencies/diseases/novel-coronavirus-2019/advice-for-public/myth-busters>
- Center for Disease Control: <https://www.cdc.gov/>
- Indiana State Department of Health: <https://www.in.gov/coronavirus/>