

Please, Don't Intentionally Infect Yourself. Signed, an Epidemiologist.

Here are seven reasons your “coronavirus party” is a bad idea.

By Greta Bauer

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As the coronavirus continues to spread, epidemiologists like me are starting to field a remarkable question: Would people be better off if they just contracted the virus and got it over with? I've heard rumblings about people avoiding physical distancing or hosting a version of “chickenpox parties,” where noninfected people mingle with an infected person in an effort to catch the virus.

For some, it is part of a “herd immunity strategy” to build population immunity by infecting younger people who seem to have mild cases of Covid-19. Others are frustrated with staying home. There are also those who hope they could better protect their loved ones, serve their communities or return to work if they could develop immunity.

While frustration, fear and solution-seeking are normal responses to this new global risk, there are seven clear reasons choosing to get intentionally infected would be a really horrible idea right now.

It is all about how much we just don't know yet.

1. Immunity isn't a sure thing

We have not yet established that those who recover from this infection indeed develop long-term immunity. Herd immunity projections depend completely on such a sustained immune response, and we haven't found out whether that even exists. We all sincerely hope it does, but we won't know for certain until we study recovered patients over time.

2. Reinfection could be possible

There are documented cases where people who appear to recover from the virus test positive again, which calls even short-term immunity into question. These apparent cases of reinfection may actually be remission and relapse, or false test results. However, researchers need more time to figure out what is happening with these patients, and the implications.

What's more, even if it is determined that reinfection cannot occur shortly after recovery, it could still happen later if immunity is only seasonal. If reinfection is indeed possible, we need to know whether it will result in disease that is milder or more severe. While antibodies to a previous infection generally reduce risk the second time around, for some viruses, such as dengue fever, they can lead to severe and even fatal disease.

3. The virus could continue living inside you

We don't know that recovered patients actually clear the virus from their bodies. Many viruses can remain in reservoirs, parts of the body where they hang out quietly, and re-emerge to cause disease later in life. For example, chickenpox can come back as shingles, and hepatitis B can lead to liver cancer years later. We now know that in some patients, detectable virus can be found in feces and even blood after apparent recovery. Does the coronavirus remain in the body, or are these just residual bits of virus?

4. Even the young can be hospitalized

Hospital beds and equipment are urgently needed right now for Covid-19 patients. People shouldn't kid themselves that because they are young they will not be hospitalized if infected. In the United States, the C.D.C. has estimated that about one in every five or six people aged 20 to 44 with confirmed Covid-19 has required hospitalization. Avoidable hospitalizations take valuable resources away from others who were not able to avoid infection.

5. Survivors could suffer long-term damage

While early reports focused almost exclusively on the risk of death, we do not yet fully understand the other effects of Covid-19. We do know that previously healthy people are being left with potentially long-term lung and heart damage.

6. A 'mild' case is hardly mild

As more patients recount enduring painful coughing, disorientation and difficulties breathing, people are coming to understand that the 80 percent to 85 percent of cases considered mild are not necessarily "mild" in its usual sense. Researchers and health care professionals use the term "mild" to describe Covid-19 cases not requiring hospitalization. While "mild" can be truly mild, it can also include pneumonia, and be brutal and scary.

7. There's no shortcut to immunity

Herd immunity requires a high proportion of a population to be immune (the actual percentage varies for different infections), but we want to get there slowly or, ideally, through vaccines. Right now, too many people are getting sick through non-intentional spread, burdening hospitals and leading to severe illness and death. It is far too early to think about intentional infection as a strategy.

Slowing down the spread of the coronavirus won't just save lives in the coming few months; it also gives us time to study treatments, and to expand or reconfigure hospital services for Covid-19 patients. This means that those who get sick later may benefit from better care, including effective medications. Of course, it also gives us more time to improve testing accuracy and capacity, and to develop a vaccine.

We need to keep in mind that the science is moving fast right now. It is unprecedented to see such an intensive effort internationally being put into studying one disease.

While it is hard to be patient, the best way out of this will likely be much clearer to us in a month or two than it is now. In the meantime, it is important that we don't take unnecessary risks with unknown consequences. If we can avoid infection, we need to do exactly that.

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