Debunking 10 Myths Surrounding COVID-19:
What We Know and What We Don't

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Introduction

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**Recent articles written by Jason regarding COVID-19:**
- *Empty Dorms Could Help Solve Coronavirus Hospital Shortages (VICE)*
- *Coronavirus Is Bad in the Cities. It Could Be Even Worse Outside of Them (VICE)*
- *Vulnerable Workers Should be Given Paid Leave Before They Become Sick (The Hill)*
COVID-19: The Worst Pandemic in 100 Years

Ten myths

1. Only older people are at risk.
2. If you do not have symptoms, then you can relax social distancing.
3. It is just like the flu.
4. It will likely end when the warm weather comes.
5. I need more than regular soap to protect myself.
6. I don’t really need to wear a mask.
7. Once you have it, you are immune.
8. It affects everyone just the same.
9. It is a “Chinese” disease.
10. Everything will go back to normal after social distancing ends.
Myth 1: Only older people are at risk.

- Yes, older people are at greater risk of becoming seriously ill and dying.
- Wuhan study: people over 64 more than fifty times greater risk of death.
- 95.9% of all reported deaths in Italy were people over 60.
- Half of all coronavirus deaths in Europe were in long-term care facilities.
- In the US, more than 80% of deaths are senior citizens and nursing homes/assisted living facilities have seen outbreaks.
- However…
Myth 1: Only older people are at risk.

Severe Outcomes Among Patients with Coronavirus Disease 2019 (COVID-19) — United States, February 12—March 16, 2020

Weekly / March 27, 2020 / 69(12):343-346

On March 18, 2020, this report was posted online as an MMWR Early Release.

TABLE. Hospitalization, intensive care unit (ICU) admission, and case-fatality percentages for reported COVID-19 cases, by age group — United States, February 12—March 16, 2020

<table>
<thead>
<tr>
<th>Age group (yrs) (no. of cases)</th>
<th>%*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Hospitalization</td>
</tr>
<tr>
<td>0–19 (123)</td>
<td>1.6–2.5</td>
</tr>
<tr>
<td>20–44 (705)</td>
<td>14.3–20.8</td>
</tr>
<tr>
<td>45–54 (429)</td>
<td>21.2–28.3</td>
</tr>
<tr>
<td>55–64 (429)</td>
<td>20.5–30.1</td>
</tr>
<tr>
<td>65–74 (409)</td>
<td>28.6–43.5</td>
</tr>
<tr>
<td>75–84 (210)</td>
<td>30.5–58.7</td>
</tr>
<tr>
<td>≥85 (144)</td>
<td>31.3–70.3</td>
</tr>
<tr>
<td>Total (2,449)</td>
<td>20.7–31.4</td>
</tr>
</tbody>
</table>
Myth 1: Only older people are at risk.
Myth 1: Only older people are at risk.

- Young people with certain underlying conditions may be at greater risk of getting seriously sick.
- Heart disease, lung disease, and diabetes are all complicating factors (CDC)
- Young people who end up in the hospital may be at risk of stroke (New England Journal of Medicine)
Myth 2: If you do not have any symptoms, then you can relax social distancing.

- People spreading disease most likely do not know they have it.
- 25 percent of cases in the United States are asymptomatic, according to the CDC.
- You are most contagious in the days before you show symptoms.
- People with covid-19 infect between two and three other people (whereas with the common flu it is one other person).
Myth 2: If you do not have any symptoms, then you can relax social distancing.
Myth 3: It just like the flu.

- Coronavirus is much more contagious than the seasonal flu.
- Coronavirus is much more serious than the seasonal flu.
- Coronavirus does not, however, appear to threaten children, unlike the seasonal flu.
Myth 3: It just like the flu.

How a virus with a reproduction number (R0) of 2 spreads

Patient 0 infects two people

And they each infect two people

And they each infect two people

Etc.
Myth 4: It will likely end when warm weather comes.

- Evidence out of MIT says covid-19 shows vulnerability to warm climates.
- Pan American Health Organization believes we should know for sure in two weeks.
- Warm weather, however, will only reduce how effectively the virus spreads.
- Warm weather will not eliminate risk.
- Warm weather also may create another public health problem: people who cannot stay at home because of lack of air conditioning.
Myth 5: I need more than regular soap to protect myself.

- CDC, FDA, and chemistry experts recommend regular soap and water.
- Antibacterial soap is unnecessary and has not been shown to be more effective at fighting disease.
- Hand sanitizer must be at least 60 percent alcohol.
Myth 5: I need more than regular soap to protect myself.

- We may think of soap as common, but it is luxury in many places in the world.
- 40 percent of the world does not have access to soap and water at home, according to UNICEF.
- One-third of schools worldwide do not have handwashing facilities.
- 1 in 6 healthcare facilities do not have handwashing facilities nor soap and water.
- The people at risk for a lack of soap and water are also at risk for a lack of other healthcare services to keep them safe, such as trained staff, medical grade oxygen, and ventilation.
Myth 6: I don’t really need to wear a mask.

- As of April 3, CDC guidance is for everyone to wear a mask in public.
- We do not have testing capacity to understand who has the virus.
- We ought to behave as if we have the virus and are asymptomatic.
- Masks are about protecting other people from us.
- We need to combine wearing masks with other social distancing and hygiene measures.
- Do not touch the front of the mask.
- If you are wearing gloves, assume your hands are contaminated from the gloves when you remove them.
Myth 6: I don’t really need to wear a mask.

### Face Mask Differences

<table>
<thead>
<tr>
<th>Type</th>
<th>Protection</th>
<th>Appropriate for</th>
<th>Use Guidelines</th>
<th>Reuse</th>
<th>Fabrication</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Homemade Cloth Mask</strong></td>
<td>May protect the wearer and those around them from large droplets coming from coughs or sneezes</td>
<td>For community members following use guidelines</td>
<td>Wearers should practice physical distancing, handwashing, and avoid touching their faces</td>
<td>Can be reused when properly cleaned.*</td>
<td>Can be easily made at home using breathable materials such as cotton or cotton blend</td>
</tr>
<tr>
<td><strong>Clinical Mask</strong></td>
<td>Resistant to fluids and will filter small particles</td>
<td>For frontline health workers</td>
<td>Health workers should follow institutional protocol</td>
<td>Health workers should follow institutional protocol</td>
<td>Must be made using medical-grade polypropylene following fabrication guidelines</td>
</tr>
<tr>
<td><strong>N95 Respirator</strong></td>
<td>Filters 95% of very small particles when tightly fitted</td>
<td>For frontline health workers. Community use is discouraged so more masks are available for healthcare workers.</td>
<td>Requires professional fit-testing to be fully effective</td>
<td>Extended use or reuse requires following CDC guidelines</td>
<td>Manufactured using specialized materials and processes</td>
</tr>
</tbody>
</table>

*Cleaning instructions for homemade cloth masks
- To wash, launder the mask often in your washing machine in HOT water using soap or detergent that leaves no residue.
- Dry on HOT in your dryer.
Myth 7: Once you have it, you are immune.

- We do not have a study yet that shows having antibodies to covid-19 means you cannot get it again.
- The hope is that having the disease once will mean you cannot get it again and cannot transmit it to others.
- That would mean people who had covid-19 could potentially be hired to work in healthcare settings.
- We do not know enough yet to issue immunity passports.
Myth 7: Once you have it, you are immune.

WHO continues to review the evidence on antibody responses to SARS-CoV-2 infection.\textsuperscript{2-17} Most of these studies show that people who have recovered from infection have antibodies to the virus. However, some of these people have very low levels of neutralizing antibodies in their blood,\textsuperscript{4} suggesting that cellular immunity may also be critical for recovery. As of 24 April 2020, no study has evaluated whether the presence of antibodies to SARS-CoV-2 confers immunity to subsequent infection by this virus in humans.
Myth 8: It affects everyone just the same.

- People who are poor tend to be sicker than people who are not.
- People who are poor or lower income tend to be less able to access healthcare and more likely to work in jobs that exposes them to risk.
- Diseases prey on the poor, and covid-19 is no different.
- We ought to consider an approach that makes a preferential option for the poor, based on need not ability to pay.
- With more than 25 million unemployed and healthcare still often linked to employment, the virus will likely spread among these vulnerable people and their families.
Myth 8: It affects everyone just the same.

COVID-19 Could Push Half A Billion People Into Poverty

Additional people in poverty due to a 20% income drop caused by a COVID-19 recession*

- East Asia & Pacific: 239.8m
- South Asia: 128.8m
- Latin American & Caribbean: 54.3m
- Middle East & North Africa: 44.9m
- Sub Saharan Africa: 44.6m
- Europe & Central Asia: 30.5m
- Other High Income: 4.7m

Total: 547.6m

* Poverty level - people earning below $5.50 per day
Source: Oxfam
Myth 9: It is a “Chinese” disease.

- The reason why coronavirus has spread is not only because of biological reasons.
- The reason why coronavirus has spread is also because of a lack of staff, stuff, space, and systems.
- Diseases do not respect human borders.
- Man-made policies, such as deporting people who may have been exposed, to countries with fewer than fifteen ventilators, such as Haiti, are just as important as the natural origin of the disease.
- Calling covid-19 “the Chinese coronavirus” makes less sense than calling it “the lack of personal protective equipment virus” or “the lack of testing virus.”
Myth 10: Everything will go back to normal after social distancing ends.

- There is concern that the success of social distancing will undermine how effective the public believes it is.
- We can count, imperfectly, the number who have died, but we cannot count how many lives are being saved.
- What we are seeing is normal, the way we have constructed our society.
- It is normal for the people cooking food in restaurants to not have health insurance or for the person who is homeless to not have access to soap and sanitary living conditions.
- It is normal for the person coughing next to you on the subway to not be able to afford the copay to see their doctor.
- If we decide we are okay with that, we ought to get used to this.
Resources:
continuingstudies.stanford.edu/covid-19-webinar

Recording will be sent via email along with Q&A transcripts.