

1. Mark your confusion.
2. Show evidence of a close reading.
3. Write a 1+ page reflection.

How Long Will Schools Need to Stay Closed? A Pandemic Expert Weighs In

The good news: Closing schools helps slow the spread of pandemics.

The bad news: They may need to stay closed for months.

Source: Tim Dickinson, *Rolling Stone*, March 26, 2020

As American parents scramble to educate their kids at home amid the coronavirus pandemic, it's worth asking: How effective are school shutdowns at halting the spread of the disease?

Dr. Isaac Chun-Hai Fung is an infectious-disease epidemiologist Georgia Southern University, and he's published science demonstrating how lengthy school shutdowns can lessen the severity of viral outbreaks. In a 2015 study modeling a potential influenza pandemic, Fung and his co-authors found that closing schools can slow the spread of disease, delay the peak of the outbreak and even reduce the total number of cases.

Under one scenario his team studied, assuming a highly contagious influenza outbreak, "school closure for 84 days could delay the peak for approximately 60 days." This kind of delay is helpful — giving the health system time to brace itself for the full impact of an outbreak, and potentially giving the medical community a head start on developing a vaccine or other treatments that can lessen the reach and severity of the disease.

Rolling Stone reached out to Fung to ask him how this research can inform the current response to the coronavirus outbreak. His short answer is that schools should not reopen quickly, because, we would simply experience "another wave of the epidemic."

[Fung's emailed response is presented here as a Q&A for clarity and readability.]

Rolling Stone: Does the math from your flu study inform how long our schools should stay closed? Is 84 days a reasonable guide post?

Dr. Isaac Fang: To answer your question briefly, the concept as explained in my pandemic flu paper will apply to this COVID-19 pandemic — but the exact number or percentage of predicted cases will not, because influenza and SARS-CoV-2 [the coronavirus] are two different viruses.

The key message of my paper is not necessarily how quickly we shut down schools. It is the duration of school closure that matters. Whenever we relax social distancing measures, we will see a bounce-back of the cases, unless we are able to completely block all transmission chains and have driven the case number to zero — i.e., extinction of the virus, as in the case of SARS in 2003.

So the notion that America should re-open quickly, to save the economy even if the virus is uncontrolled, that's not based on good epidemiology?

To save the U.S. economy, we must control this disease first. That is what China is going to achieve — even if they have already suffered a great deal economically due to COVID-19. That is why [Narendra] Modi asks the whole of India to stay home for three weeks. That is also what Boris Johnson asks the British people to do now. The Americans should take heed.

Is complete control of the virus achievable?

The key question we should ask our political leaders is: What goal do they want to archive against the COVID-19 epidemic.

Do they want to achieve: A) a complete block to all transmission chains and to drive the virus to extinction, as in the SARS epidemic in 2003? Or B) a slow-down of the spread of the epidemic, so that we can either "flatten" the curve or delay the peak or both, so that our healthcare system will not be overwhelmed and hopefully wait until we have a vaccine available to the majority of people on earth, or C) protection of the elderly and the medically fragile and a reduction in mortality.

For countries that seem to have driven the epidemic to nearly zero local transmission, as in parts of mainland China today, they have to be always vigilant for imported cases that happen daily. And the economic costs remains huge — for example the loss of tourism-related businesses.

Is that the only option? It seems like most officials in the U.S. are talking about option B, “flatten the curve.”

We may be able to achieve goal B and thereby achieve goal C at the same time, if we implement social distancing measures at a magnitude that is large enough to reduce local transmission, and for a duration that is long enough. What I fear is that the majority of Americans may be willing to stay home for 2 to 4 weeks, but not more than that. They will then petition their political leaders to reopen schools, and ask businesses to reopen their offices, restaurants and bars. Then, we are going to see another wave of the epidemic soon after.

If the economy reopens, is C — protect the frail and the elderly — still an achievable option?

At the very least, we need to achieve goal C, which will mean that for a very long period of time, the elderly and the medically fragile (such as young kids with leukemia, or young adults with some underlying medical conditions, or people who are immunosuppressed) are going to stay self-isolated for a very long period of time.

If other people in the society decide to resume their business soon — and thereby experience a large epidemic, and many people will be infected — they should be aware that they are putting a large number of old and medically fragile people at risk. Then, we need to find ways to reduce the harm that will be done to the elderly and the medically fragile. For example, we cannot visit the elderly at their nursing homes. We need to find ways to provide economic support to adults with medical conditions because if they go to work, they will put themselves at great risk. We need to find ways to educate kids who have cancer or who are immunosuppressed, because while other kids may be infected and have very mild symptoms, kids with cancer or otherwise immunosuppressed will be at great risk if the epidemic sweeps through their schools.

How do you assess America’s response so far?

Here in the USA, we are not achieving either A, B or C. The public health officials obviously want to achieve both B and C. However, I wonder if the magnitude of social distancing recommendations made by our political leaders, at all levels, are strong enough to achieve B and/or C.

How do you see that playing out?

I think that most Americans are psychologically not prepared for the calamity that is sweeping through their country right now. This lack of imagination, the failure to recognize what happened in China, Iran and Italy, can also happen here, will cost America dearly. Imagine what would happen to the U.S. economy if New York City becomes Wuhan or Milan. And it seems to me that it is going to happen very soon.

Possible Response Questions:

- What are your thoughts and/or predictions about the closing of your school? Explain.
- Pick a word/line/passage from the article and respond to it.
- Discuss a “move” made by the writer in this piece that you think is good/interesting. Explain.