

COVID Zero: How to end the pandemic in 5 weeks

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CovidZero is an Exit Strategy. It is unlike the usual strategy called “living with the virus,” “mitigation,” “flattening the curve,” or “allowing the disease to become endemic” with or without a vaccine which is passive, reactive, ineffective and massively costly in lives, long term health, and the economy.

CovidZero is proactive with a goal of normal life as it was pre-pandemic by eliminating the virus. We need to do this as fast as possible to save lives, save livelihoods and minimize the time we must take extraordinary actions. It also minimizes the risks from new virus variants that can be more rapidly spreading or resistant to vaccination.

CovidZero is adaptive based upon the local conditions and the strengths and capabilities of the community. Setting the goal and using all available capabilities to get there has been shown to work in Australia, China, New Zealand, Taiwan, Thailand, Vietnam, and Atlantic Canada.

CovidZero is a real world strategy that requires hard work, persistence and collaboration. It is worth doing because the alternative is much worse. Going all out reduces both the health and economic costs.

Key steps are:

- 1) Galvanizing everyone to the CovidZero goal as the primary action is a community action. Everyone should be focused on what can they do to get to CovidZero. This includes support and advocacy by community organizations, social networks, healthcare organizations, businesses, and government.
- 2) Use the strongest possible action to prevent transmission. Start with a 5 week mandatory period with stay at home orders. Only minimal essential services should be allowed using maximal transmission prevention protocols (delivery, curbside pickup, mask wearing, air purification).
- 3) Implement travel restrictions and quarantines. Prevent importing cases into nations, states, communities, neighborhoods, even city blocks through strict travel restrictions. The smaller the local area protected by travel restrictions the faster is the process of getting to zero locally. Then use a Green Zone Exit strategy opening up protected CovidZero areas and connecting them by travel progressively over a few weeks.
- 4) Use rapid community based case identification with supported isolation and quarantines. This prevents family and household transmission, while providing care for individuals who are sick, with testing, contact tracing and coordination by public health and medical organizations. Testing should include symptom based, mass testing, and other methods such as sewage testing.
- 5) Vulnerable individuals and businesses should receive financial and other assistance. This includes employment assurance, mental health and other support by the community, businesses and government. Regular check-ins with individuals and families by the community makes both rapid case identification and other forms of support possible.
- 6) Rapid vaccination of high risk individuals. Focus on disease severity (age and prior conditions) and essential employment needs (healthcare and other essential workers). Mass vaccination may help with transmission prevention and should be used as one of, not the only, tool to do so.

This strategy is robust to social conflict as individual communities can achieve success for themselves. It is robust to individual behavior and doesn't require 100% compliance. Most people care about their families and communities and given the opportunity to get to a clearly desirable goal will do their part, especially if it can be done rapidly.

The opportunity of the CovidZero strategy is to control the virus and to eliminate it locally and progressively in larger areas and return to normal. The rate of decline of cases can be very rapid and economic costs are dramatically lower because of the short period of time of the action. This will save lives and save the economy.

Patience is still required at the end as the number of cases become small so that community transmission stops. Each case has to be treated like a murder as even one case of community transmission can grow exponentially. Still, stopping localized outbreaks with short term action by contact tracing and even localized lockdowns (“fire fighting”) is vastly preferable to living in a burning building.