

# Reverse quarantine may be a better option to fight the coronavirus now

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Quarantine is the traditional method to fight the coronavirus, and it can be cost effective at the initial stage. However, for an already spread coronavirus, a reverse quarantine may be a better option. Either strategy can end the pandemic in about two months.

A normal quarantine is to put the infected in isolation. A reverse quarantine is the opposite. In a reserve quarantine, businesses operate as normal, and the infected stays with the population to infect more people until herd immunity is achieved. A reverse quarantine puts the elderly and a small number of people with preexisting conditions in voluntary isolation to protect them from infection.

From an antibody test in an Italian community, herd immunity is achieved with 70% of the population infected in two months, at a cost of 1.73% death rate for the whole population. We know that most of the deaths are for the elderly and patients with preexisting conditions. A German study shows 99.9% of the deaths have preexisting conditions. The majority of

people infected only have mild symptoms, especially for people younger than 20 years. A reverse quarantine puts the elderly and people with preexisting conditions in voluntary isolation to protect them. As a result, the general population can achieve herd immunity with a much lower death rate and a much lower burden on hospitals. The reverse quarantine has minimal adverse impacts on businesses, in contrast with the potential loss of trillions of dollars in wages and business revenues for a normal quarantine.

The government can provide guidelines to help people make their choices. A reasonable estimate is that at least 10% of people need reverse quarantine to make the program effective. The more people choose reverse quarantine, the less the percentage of people need hospitalization, and the less the death rate. If 30% of people choose reverse quarantine, 49% of people need to be infected for herd immunity. If 50% of people choose reverse quarantine, only 35% of people need to be infected for herd immunity.

During the reverse quarantine, people are encouraged to have healthy meals, moderate exercises, warm clothing, and good sleep. The air conditioning temperature is recommended to set at 78 degrees Fahrenheit. A warmer environmental

temperature will help milden the symptoms of an infection. Grocery stores can set the first hour of business for the elderly and vulnerable people, and everyone is required to wear face mask during this protection period in the store.

The reverse quarantine is not something from a textbook but a special option based on the characteristics of the coronavirus now. As the virus mutates, the window of opportunity may disappear. It is important to take the action quickly. A major risk for the virus to stay around us longer is that the virus may become deadly to kids and healthy adults as the Spanish flu did.

The reverse quarantine is a flexible strategy. If a state chooses quarantine, a strict quarantine is necessary. However, under a reverse quarantine, a city, a company, or an individual has the choice to stay normal or to have a reverse quarantine.

At this stage of the coronavirus, it is a better option for the United States to switch from social distancing to a reverse quarantine. Instead of social distancing, healthy people are encouraged to restore normal social, business and recreational activities. Businesses such as casinos and cruise ships can

even have promotions to healthy people to speed up the herd immunity process.

Around the world, each country needs to make a clear and quick decision of either quarantine or reverse quarantine. Working together, we can end the pandemic in about two months. It can save lives and save trillions of dollars to workers and businesses.

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