

# Sane and safe: Forced social distancing to prevent human-to-human transmission of COVID-19

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## Abstract

The current outbreak of COVID-19, originating from the city of Wuhan in China and ultimately involving over 200 countries, is now a global concern. Evidence indicates that COVID-19 spread to humans from wild animals, causing severe respiratory tract infections in humans; the typical symptoms of COVID include cough, high-grade fever, sore throat, and difficulty in breathing. The infection spreads from human to human via droplets. Therefore, social or physical distancing can reduce spread within communities. Asymptomatic spread can also occur during family gatherings or in the workplace; thus, we must enforce physical distancing as much as possible to reduce the spread of cases.

## Introduction

COVID-19 is believed to spread mostly via close contact between individuals within communities. The coronavirus, which causes the COVID-19 disease, is a type of RNA virus that can result in symptoms ranging from those of a mild common cold to those of severe pneumonia.

Droplet transmission occurs when respiratory droplets generated via coughing, sneezing, or talking come into contact with susceptible mucosal surfaces, such as the eyes, nose, and mouth.<sup>1</sup> Transmission may also occur indirectly via contact between contaminated fomites, hands, and mucosal surfaces. Respiratory droplets are large and unable to remain suspended in the air; thus, they are usually only dispersed over short distances.<sup>2</sup> There are general principles that can help prevent the spread of the coronavirus, which include washing hands often with soap and water for at least 20 seconds, using an alcohol-based hand sanitizer, and cleaning and disinfecting frequently touched objects and surfaces in the home. It is imperative to cover one's nose and mouth when coughing or sneezing with a tissue and to then throw the tissue into a bin and washing one's hands. Many countries are now adopting measures such as "stay-home days," public health emergencies, family preparedness plans, and rapid medical response to control the pandemic. Currently, scientists are attempting to develop rapid diagnostic methods. To date, the most effective methods of control appear to be self-isolation,

contact tracing, quarantining of exposed persons, workplace measures, closing borders to travelers, and social distancing.<sup>3</sup> Because this virus spreads via close contact between individuals within communities, lowering overall morbidity and mortality rates will reduce burdens on the health care system.

## Social Distancing

Coronavirus is primarily transmitted via droplets from the mouths and noses of infected people when they cough or sneeze, which can land on surfaces and the hands of others. Measures such as isolation and quarantine can break the cycle of spread, and social distancing measures have served as essential components of public health responses to influenza pandemics in the past.<sup>4</sup>

High-risk groups include individuals over 70 years old; those who have underlying health conditions such as diabetes, hypertension, asthma, heart disease, kidney or liver disease, and cancer; patients on steroids or undergoing chemotherapy; and those who are pregnant. These high-risk groups should limit face-to-face interactions with friends and family. Social distancing is an essential infection control measure for reducing transmissions from infected people to susceptible individuals. It involves increasing physical distances between people and reducing the frequency of community gatherings, such as attending schools and universities as well as overcrowding in the workplace.<sup>5</sup>

Social and physical distancing is one of the primary components of public health response to the coronavirus pandemic. Precautionary measures should be taken to prevent the virus from entering closed communities, which can result in mass outbreaks. China has demonstrated this effectively by establishing a lockdown in the city of Wuhan, which has controlled the spread of coronavirus, whereas Italy delayed this measure and is now facing high morbidity and mortality rates.

Singapore has also shown promising results in combatting the H1N1 pandemic. Social distancing along with other efforts such as disease surveillance, symptomatic treatment, home quarantine, and infection control all worked to reduce the impact of the pandemic.<sup>6</sup>

Forced social distancing is required for public compliance and cooperation to ensure the effective implementation of safety measures. As mentioned previously, people can catch the coronavirus if they breathe in droplets from an infected person. These droplets can land on objects and surfaces from which a person can become infected by touching these objects or surfaces and subsequently touching their eyes, nose, or mouth. People visiting patients in hospitals are at high risk as well, as these droplets exist on many surfaces. Thus, it is imperative to restrict visitors in hospitals and primary health care facilities to reduce and delay the magnitude of the outbreak.<sup>7,8</sup>

Social distancing practices can help prevent the spread of the virus, as reducing social contact, refraining from handshakes and hugs, maintaining a distance of 1 meter from one another, closing schools and public places, and avoiding mass gatherings (such as weddings and funerals) can delay transmission and reduce the extent of an outbreak. Literature has reported that workplace social distancing has previously reduced influenza transmissions.<sup>9</sup> Other sources of spread in communities should be closed as well, including shopping malls, entertainment outlets, sports and religious centers, restaurants, and supermarkets. Avoidance of public transport and altering travel times to avoid rush hour can also help. Additional places that should take precautionary measures include nursing homes, prisons, and drug rehabilitation centers.<sup>10</sup>

Social distancing measures can help reduce the transmission of coronavirus (COVID-19). Contact with someone who is displaying

symptoms of coronavirus (COVID-19) should be avoided. These symptoms include high-grade fever, cough, and shortness of breath. One should stay at home and call a health helpline for further advice if one develops these symptoms. Various studies prove that these methods have displayed efficacy in preventing influenza pandemics.<sup>11</sup>

Responsible citizens should follow Ministry of Health guidelines, avoid overcrowding in public areas, and refrain from attending unnecessary social gatherings, especially events with large numbers of people or crowds. Separation from people one lives with is recommended to the extent to which it is possible.<sup>12</sup> Social distancing may cause anxiety and depression. To combat this, people should take time to focus on personal health training, raise physical activity levels, and maintain healthy dietary habits. Literature on the coronavirus has also reported asymptomatic spreading of the disease in communities.<sup>13</sup> Technology can be used to finish work, attend meetings, and engage with co-workers online. However, social distancing can lead to the spread of unhealthy rumors, misinformation, and myths via social media.

Physical distancing of at least one meter is the first step to preventing the coronavirus, followed by isolation if required. Self-isolation is mandatory when a person experiences fever, cough, or other COVID-19 symptoms. Staying at home even when someone is asymptomatic will reduce the chance of virus spread. These measures secure physical distance between people and reduce contact with contaminated surfaces.<sup>14</sup>

Many countries are now practicing a combination of social distancing of the entire population, home isolation of cases, household quarantine of family members, and possible school and university closures.<sup>15,16</sup> The civic duty of individuals is to understand the gravity of the situation and its effects on politics, business, and public health while facing the coronavirus pandemic. Health care professionals must follow evidence-based management guidelines and update their knowledge frequently. Community support for health officials is effective and mandatory to break the cycle of infection; however, this may lead to economic shutdowns or lockdowns across the entire country.<sup>17,18</sup>

This paper's recommendation is to watch, read,

or listen to national news for updates on the spread of COVID-19 in one's community. Infection control measures among health care professionals and educational programs on isolation precautions can further enhance

citizens' levels of knowledge and practices to reduce infection transmission risks. Health care professionals should always practice proper self-care to ensure their own safety and prevent the spread of infection within their communities.

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