

Individual, Community and Government Early Outbreak Response Guidelines Version 3

Chen Shen and Yaneer Bar-Yam
New England Complex Systems Institute
March 2, 2020

The Coronavirus outbreak originating in Wuhan has about 20% severe cases and 2% deaths. A typical incubation period is 3 days but it may extend to 14 days, and reports exist of 24 and 27 days. It is highly contagious with an increase from day to day of 50% in new cases (infection rate R_0 of about 3-4) unless extraordinary interventions are made. If it becomes a widespread pandemic or endemic it will change the lives of everyone in the world. It is imperative to act to confine and stop the outbreak and not accept its spread. We provide these guidelines for individual, community and government action.

INDIVIDUAL AND COMMUNITY GUIDELINES

- Take responsibility for your own health and share responsibility for the health of your neighborhood with awareness and discipline
- Practice social distancing
- Avoid touching surfaces in public or shared spaces
- Avoid gatherings
- Avoid direct contact with others, wash hands regularly, and wear masks when in close quarters with others who may be infected
- Cover coughs/sneezes
- Monitor for temperature or other early symptoms of infection (coughing, sneezing, runny nose, sore throat)
- Practice self-isolation if you have early symptoms
- If symptoms continue to develop, arrange for safe transportation to medical facilities following government recommendations; avoid public transportation, wear masks
- In areas of heightened risk provide necessities for members of your community without personal contact; supplies can be left outside doors
- Collaborate with others to create safe zones / safe communities. Discuss safety with family and friends, talk about safety guidelines, know who's following safe guidelines, set shared policies, follow-up and share with each other needs, concerns as well as opportunities.
- Be critical of rumors and don't spread misinformation

COMMUNITY AND GOVERNMENT GUIDELINES

- Where proximate to communities or countries with active infections, set up border checks for symptoms
- Conduct 14 day quarantines for at-risk individuals entering into infection free areas
- In areas of heightened risk coordinate neighborhood teams for community door-to-door monitoring for symptoms using IR thermometers and personal protective equipment (PPEs)
- Neighborhood teams going door to door should also identify individuals who are in need of support services

GOVERNMENT GUIDELINES

- Prepare in advance strategic resources like masks, PPEs, and test kits, and establish distribution routes
- Identify areas where infections are confirmed or suspected

- Stop non-essential transportation between infected and uninfected areas
- Isolate individuals with suspected and confirmed infections separately for care in designated facilities with adequate medical resources, including Personal Protective Equipment (PPE)
- People with symptoms should use a specially designed process to be taken to the designated health facilities for testing, avoiding public transportation or cabs
- Quarantine and test all suspected cases in the vicinity of an identified case
- Promote public awareness:
 - Typical symptoms and possible means of transmission
 - Emphasize its high rate of contagion and usually mild symptoms to encourage individuals to seek medical care
 - Encourage better individual hygiene, including frequent hand washing, wearing masks in public areas and avoiding contact between individuals
- Stop public gatherings
- Pay special attention to prevent or monitor the health of people going in/out of high-density confined facilities like prisons, medical, rehab and assisted living facilities, nursing homes, retirement communities, dorms and hostels.
- Promote Community Responsibilities in infected areas
- In each neighborhood/community, select a group of people whose daily job involves frequent human contact. Monitor their condition daily to help detect infections and prevent contagion
- Engage in communication and distribution of resources to remote areas
- Coordinate with international communities and WHO to share information about case identification, patient travel history, treatments, prevention strategies, and shortages of medical supplies
- Plan for treatment of patients with similar symptoms that are not COVID-19 infected
- In areas with active transmission
 - Close places of worship, universities, schools and corporations
 - Restrict people to homes and provide support for necessities to be delivered without contact
 - Perform door-to-door searches for individuals with early symptoms and needs for services, with necessary PPE precautions, and with community engagement in the effort