

COVID-19

A Frontline Guide for Local Decision-Makers

Authored by



Jessica Bell, MS

Senior Program Officer, Global Biological Policy and Programs, NTI



Beth Cameron, PhD

Vice President, Global Biological Policy and Programs, NTI Former Senior Director, National Security Council staff Directorate on Global Health Security and Biodefense



Ellie Graeden. PhD

Chief Executive Officer, Talus Analytics



Jeremy Konyndyk, MSFS

Senior Policy Fellow, Center for Global Development; Former Director of Foreign Disaster Assistance, USAID



Matthew Boyce, MS

Senior Research Associate, Georgetown University Center for Global Health Science and Security



Jacob Eckles, MPH

Program Officer, Global Biological Policy and Programs, NTI



Rebecca Katz, PhD MPH

Professor and Director, Center for Global Health Science and Security Georgetown University



Hayley Severance, MPH

Senior Program Officer, Global Biological Policy and Programs, NTI

Contributors

Paul D. Biddinger, MD, FACEP

MGH Endowed Chair in Emergency Preparedness Director, Center for Disaster Medicine and Vice Chairman for Emergency Preparedness, Department of Emergency Medicine, Massachusetts General Hospital, Medical Director for Emergency Preparedness, MGH and Partners Healthcare, Director, Harvard T.H. Chan School of Public Health Emergency Preparedness Research, Evaluation and Practice (EPREP) Program

Dylan George, PhD

Vice President, Technical Staff, In-Q-Tel

Margaret Hamburg, MD

Chair, Board of the American Association for the Advancement of Science; Former Commissioner of the U.S. Food and DrugAdministration

Dan Hanfling, MD

Vice President, Technical Staff, In-Q-Tel

James Lawler, MD

Executive Director, International Programs & Innovation, Global Center for Health Security, and Associate Professor of Medicine, Division of Infectious Diseases, University of Nebraska Medical Center

Jennifer Nuzzo, DrPH, SM

Associate Professor, Johns Hopkins Bloomberg School of Public Health, Senior Scholar, Johns Hopkins Center for Health Security

David Polatty, MA

Professor, U.S. Naval War College Humanitarian Response Program

Nathaniel A. Raymond

Lecturer, Jackson Institute of Global Affairs, Yale University

Eric Toner, MD

Senior Scholar, Senior Scientist, Johns Hopkins Center for Health Security for the Advancement of Science Former Commissioner of the U.S. Food and DrugAdministration

Crystal Watson, DrPH

Senior Scholar, Assistant Professor Johns Hopkins School of Public Health

Ashish K. Jha, MD, MPH

Director, Harvard Global Health Institute, K. T. Li Professor of Global Health, Harvard T.H. Chan School of Public Health, Professor of Medicine, Harvard Medical School



COVID-19: A Frontline Guide for Local Decision-Makers

The COVID-19 pandemic is creating significant disruption to daily life in cities and communities around the world. This guide provides an initial strategic framework for local leaders as they begin planning what will need to be done to reduce the impact of the outbreak in the near term. The guide focuses both on slowing and suppressing the spread of the virus, and also on supporting community needs.

This document is informed by existing guidance from U.S. and global authorities, public health research findings, and lessons observed from countries that have been battling COVID-19 since January 2020. It is intended to complement, but not supplant, advice and guidance from global, federal and local public health and other authorities.

**NOTE: This is a preliminary version of the guide. It will be further refined and developed based on feedback from local end-users as the COVID-19 pandemic continues. This information is available online at: COVID_Local.org.

Please use Chrome or Firefox web-browsers to access the online platform.

Overview for the Guide

COVID-19, caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), can spread explosively if not rapidly addressed. Different cities will face differing risk profiles and require tailored mitigation strategies, depending on the trajectory of the outbreak in any given location. This document is intended to provide leaders and public officials at any state, city, or local level with a support tool to assist in informed strategy and decision-making on how to combat the resulting disease, COVID-19, in their jurisdiction. It is NOT a prescriptive set of instructions; rather it provides context and advice on how to tailor principles of outbreak control strategy, disaster management, and evolving knowledge on COVID-19 dynamics to different local conditions.

Battling a new virus pandemic is a unique public policy challenge: the human and economic costs of daily or weekly inaction grow exponentially. Early in an outbreak, when case counts are low, losing a week of potential action may not dramatically change outcomes. But as an outbreak begins to spread and accelerate, a 1-2-week delay can be the difference between cases in the thousands or cases in the tens of thousands. Research on the 1918-19 influenza pandemic in the United States has found that early, sustained application of measures like social distancing mitigated community-level impact of the outbreak¹. It is beneficial to apply strong measures early on rather than to wait, even if those measures feel intuitively premature at the time. Lessons from Singapore, Hong Kong, and Taiwan during the current pandemic likewise affirm that early and disciplined action can limit or prevent explosive spread. However, state and local leaders must also weigh the public health benefits of disruptive measures against the second-order impacts that those measures may have on the economy, vulnerable populations, and other local factors.

Source: 1 Markel H, Lipman HB, Navarro JA, et al. Nonpharmaceutical Interventions Implemented by US Cities During...

Given that this virus currently has no proven vaccines or treatments, the most important way to limit mortality in the near term is to avoid over-burdening the health system with a high volume of critical COVID-19 cases.

COVID-19 cases requiring medical intervention are in addition to the existing healthcare demand, and experience from China and Italy shows that unchecked spread of the virus has the potential to rapidly and abruptly overwhelm health systems. While the world's understanding of COVID-19 remains imperfect, initial evidence from China showed that the mortality rate ranged between 7 to 58 times as fatal as seasonal flu, depending on the timing of the response and the burden placed on the hospital system. In the epicenter of Wuhan, where delayed action meant hospitals became overwhelmed, the World Health Organization estimated that average mortality was 5.8%2, while in other areas of China that had more warning and took drastic measures to suppress transmission, mortality was only 0.7% (seasonal flu mortality is roughly 0.1%). Evidence from China and elsewhere also shows that the disease is most dangerous to the elderly and to people with pre-existing medical complications; these high-risk groups died at much higher than average rates.

All elements of an initial response strategy should connect to the overarching goal of limiting deaths by minimizing strain on the **health system.** Rapid and aggressive action can create a positive cycle, in which measures to slow spread will reduce the critical case volume, which will in turn limit pressures on intensive care units, delay peak case volume, and keep mortality under control. A slower infection rate means a less stressed health care system. Delayed action, in contrast, will allow the disease to spread widely, generating a sudden surge in critical cases and eroding care quality and worsening mortality rates. The difference between these scenarios may be as little as days or weeks; in the US at large, the daily new-case count increased ten-fold between March 12 and March 19.

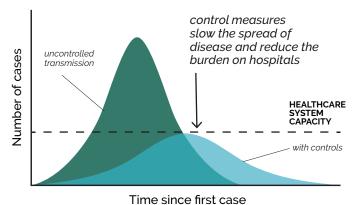


Figure 2. A conceptual overview of the impact of applied control measures in reducing the rate of spread of COVID-19, and how they can, hypothetically, limit the burden on the health system.

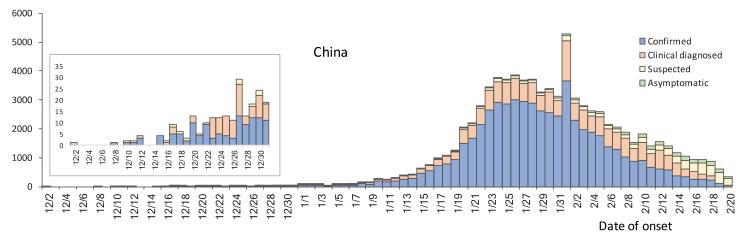


Figure 1 The epidemiologic curve of Covid-19 laboratory confirmed cases, by date of onset of illness, reported in China, as of February 20, 2020. WHO-China joint mission report on Covid-19

² Report of the WHO-China Joint Mission on Coronavirus Disease 2019 (COVID-19). https://www.who.int/docs/default-source/coronaviruse/who-china-joint-mission-on-covid-19-final-report.pdf

Strategic Considerations for Managing COVID-19 in Your Community

A community's strategic posture, trade-offs, and priorities will vary and evolve depending on the stage of the outbreak. Strategy and priorities will shift depending on where a city is in the course of the outbreak and the number of cases in their community. A community is likely to face several phases as the outbreak progresses, which may occur in quick succession and build on one another. Not all communities will experience each of these steps discretely but may experience them in rapid succession or "skip" steps in the process, especially early in the outbreak. A community may experience multiple waves of virus if control measures are relaxed prematurely.

Different actions and approaches should be triggered as a city moves along these phases of transmission. Knowing which phase a community is currently experiencing will be challenging early in an ongoing outbreak, especially if diagnostic testing is not widely available. Outbreaks develop quickly and information will be imperfect or incomplete. Decision-making may need to progress on a no-regrets basis before having clear evidence of which phase a community is experiencing. Given the growing evidence of widespread community transmission in the United States, all communities in this country should be preparing with the expectation that they will be at level 3 - large-scale community transmission - within the next month.

These phases are specific to this guide and not in reference to the Pandemic Intervals Framework issued by CDC in 2016³.

³ https://www.cdc.gov/flu/pandemic-resources/national-strategy/intervals-framework.html

Local stages of outbreak		Burden on healthcare system
	No cases detected	No burden on healthcare system
	Limited individual cases	No burden on healthcare system
	Initial community transmission	Initial burden on healthcare system
	Large-scale community transmission	Moderate to high burden on healthcare system
	Flattening the curve	Burden on health care system remains high
	Containment of individual cases	Low burden on healthcare system
	Ongoing suppression	No burden on healthcare

Figure 3. Description of the progression of the outbreak in local communities, as marked by number of cases and burden on the healthcare system

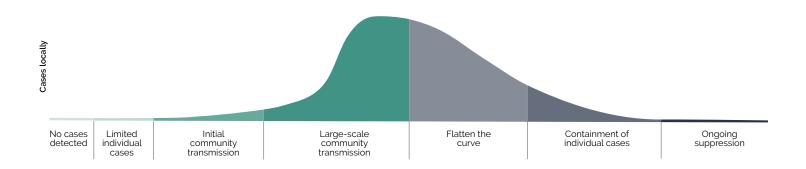


Figure 4. Notional example describing relative spread and number of cases in a community, mapped roughly to the progression described in Figure 3 and roughly corresponding to the spread of COVID-19 as reported in China, shown in Figure 1.



Key Objectives for Addressing COVID-19 at Community Level

This guide builds upon existing preparedness and response highlights components of preparedness and response most critical for local decision-makers as they mitigate negative impacts of the COVID-19.

The guide below provides local leaders with key questions to ask, answer, and track as they initiate COVID-19 preparedness and response.



KEY OBJECTIVE #1

Activate an Emergency Operations Center (EOC) and establish a whole-of-community incident management structure

Controlling a pandemic outbreak is a multi-disciplinary and whole-of-society endeavor, and the leadership and management structure must reflect that. Activating an Emergency Operations Center, as would occur in a natural disaster or other homeland security crisis, is a best practice used in previous large-scale novel outbreaks. The FOC should host a whole-ofcommunity incident management structure, drawing on existing local emergency response plans and capacities where possible. Using an EOC enables a community to streamline communication, planning, decision-making, and operational coordination across a wide range of community leaders and stakeholders, including communication and alignment with higherlevel (state/federal) EOC processes and decision cycles. The EOC should also have liaisons to, or representatives from, other levels of government, public health officials, civil society, religious leaders, the business community, academia, and others.



KEY OBJECTIVE #2

Understand the real-time spread of COVID-19 in your community

A pandemic control strategy is grounded in understanding transmission risk in the community. This requires disease surveillance, diagnostic testing, and reporting systems that ensure up-to-date information on local spread is available to inform strategy-setting and daily tactical decision-making. This may be difficult where limited testing supplies and/or shortages of personal protective equipment prevent sufficient testing. Scaling up local access to testing will be critical as additional laboratory capacity comes online. As a stop-gap, communities can enhance syndromic surveillance and other dynamic surveillance tools to gauge disease activity within the community.



KEY OBJECTIVE #3

Slow and reduce transmission

Slowing and limiting transmission within a community is central to reducing the near-term human cost of the outbreak and ensuring that hospitals will be able to maintain lifesaving and life sustaining care. It can also be highly disruptive, as social distancing measures must become more aggressive in proportion to the exponential spread of the virus. Determinations on the best means of limiting transmission will depend on local factors, but in general should be calibrated to be more aggressive than what observable local conditions might intuitively suggest.



Focus protection on high-risk groups

COVID-19 poses extreme risks to older populations and those with complicating health conditions. Each local context is unique and each local EOC should create a commonly agreed upon and regularly reassessed list of particularly vulnerable populations and sites. Attention must be paid to the needs of these populations, and the facilities where they may reside or gather. Reducing transmission among these groups through targeted support measures can help protect them while also alleviating pressure on healthcare systems.



KEY OBJECTIVE #5

Reinforce and expand health system surge capacity to sustain healthcare operations and avoid high mortality

The mortality risk posed by COVID-19 can grow substantially if a health system becomes overwhelmed with critical cases. Identifying creative means of expanding critical care capacity will be urgent as case counts grow. Urgent action should be taken to minimize the risk of transmission within health settings (nosocomial transmission). Telehealth consultations, including the use of telemedicine oversight of critically ill patients in the emergency department and intensive care units, should be considered as an option to triage cases as well as manage patient care.



KEY OBJECTIVE #6 Expand risk communication

Expand risk communication and community engagement

Public officials have an obligation to accurately and transparently relay risk information, even (or perhaps especially) when it is alarming. Community trust can make or break an outbreak response, because the effectiveness of social distancing and other interventions hinges on community compliance. Risk communication should follow best practices to mobilize informed action rather than inducing panic. A set of Critical Information Requirements (CIRs) for leaders/decision makers should be set by an EOC, updated daily, and help feed a set of Public Information Requirements (PIRs) that should be communicated to affected populations in a way that is easily accessible online.



KEY OBJECTIVE #7 Mitigate economic and social

consequences of the COVID-19 pandemic

Pandemic outbreaks can cause enormous social and economic disruption. These disruptions are damaging in their own right but can be particularly problematic if they create economic disincentives to cooperating with social distancing measures. Mitigating these disruptions can help to reduce the human cost of the outbreak, beyond the immediate toll of the disease itself. Leaders should also pay careful attention to the impact that both the outbreak itself, and the measures to control it, may have on vulnerable populations.



Activate an Emergency Operations Center and establish a whole-of-community incident management structure

Controlling a pandemic outbreak is a multi-disciplinary and whole-of-society endeavor, and the leadership and management structure must reflect that. Activating an Emergency Operations Center, as would occur in a natural disaster or other homeland security crisis, is a best practice used in previous large-scale novel outbreaks. The EOC should host a whole-of-community incident management structure, drawing on existing local emergency response plans and capacities where possible. Using an EOC enables a community to streamline communication, planning, decision-making, and operational coordination across a wide range of community leaders and stakeholders, including communication and alignment with higher-level (state/federal) EOC processes and decision cycles. The EOC should also have liaisons to, or representatives from, other levels of government, public health officials, civil society, religious leaders, the business community, academia, and others.

Priority Actions

- Activate local Emergency Operations Center and connect to state/federal EOCs
- Designate an empowered Incident Manager
- Organize EOC functional units/teams around major operational priorities
- Establish liaisons to key government partners (state, federal) and community stakeholders

Operational Requirements

- 1. Have you activated your Emergency Operations Center (EOC) and established a whole-of-community incident management structure?
- 2. Have functional teams in the EOC been organized around defined operational priorities (such as the key actions identified in this document)?
- 3. Does the EOC have designated liaisons with all relevant government, community, and private sector stakeholders, including:
 - a. Other state, local, and federal officials involved in the response?

KEY ACTION #1 (CONTINUED)

Activate an Emergency Operations Center and establish a whole-of-community incident management structure

Operational Requirements (continued)

- b. Healthcare coalitions, including hospitals, public health, EMS and other key elements of the health and medical sector?
- c. Civil society groups, religious institutions, and other community leaders?
- d. Appropriate representation from all departments and agencies?
- 4. Has the EOC identified the critical workers/sectors in your community (healthcare, utilities, transport, food supply, etc.)?
- 5. Have you developed a process to support the health and wellbeing of personnel assigned to work in the EOC?
 - a. As quarantines and self-isolation requirements expand, do you have a clear process for transitioning to a virtual EOC for non-essential personnel who still need to be engaged, as well as those who may be infected?
- 6. Have you designated a response coordinator and do they have the authority to:
 - a. Bring issues directly to you for rapid resolution?
 - b. Link with scientific and health experts to provide guidance based on the latest research?
- 7. Do you have a Continuity of Government plan to ensure continued essential services? (Example here: https://whitehouse.gov1.info/continuity-plan/)

Additional Considerations

- 8. Is there a clearly delineated process by which health and medical stakeholders advance resource requests to the jurisdictional EOC?
- 9. What key communications systems and technologies are needed in your EOC?

KEY ACTION #1 (CONTINUED)

Activate an Emergency Operations Center and establish a whole-of-community incident management structure

Additional Considerations (continued)

- 10. Do you have a plan in place to build and maintain over a prolonged period a common operating picture to share situational awareness with all key partners?
- 11. What declarations or legal/regulatory guidance has been implemented and how do they impact the decisions that need to be made?
- 12. Is there a process in place to ensure that timely, accurate risk communications are available and coordinated with all jurisdictional agencies?
- 13. Are public health information specialists integrated into the Joint Information System?
- 14. Have key stakeholders shared their continuity/contingency plans with the EOC?
- 15. Do personnel need refresher training on Incident Command System (ICS) concepts?
- 16. Has the EOC planned for potential attrition of first responders by establishing a continuity of operations plan to replace and supplement critical personnel?

Resources

Emergency Operations Center Assessment Checklist

National Response Framework, Fourth Edition

"Incident Command System Primer for Public Health and Medical Professionals: Appendix B: Incident Command System Primer for Public Health and Medical Professionals"

EOC Skill Sets User Guide (FEMA)

What Is An Incident Action Plan? (DHHS)

National Incident Management System: ICS Resource Center (FEMA)

FEMA LifeLines (FEMA)

Surge Capacity Logistics

2017-2022 Health Care Preparedness and Response Capabilities (ASPR)



Understand the real-time spread of COVID-19 in your community

A pandemic control strategy is grounded in understanding transmission risk in the community. This requires disease surveillance, diagnostic testing, and reporting systems that ensure up-to-date information on local spread is available to inform strategy-setting and daily tactical decision-making. This may be difficult where limited testing supplies and/or shortages of personal protective equipment prevent sufficient testing. Scaling up local access to testing will be critical as additional laboratory capacity comes online. As a stop-gap, communities can enhance syndromic surveillance and other dynamic surveillance tools to gauge disease activity within the community.

Priority Actions

- Assess sufficiency of existing diagnostic testing capacity and initiate plans to expand
- Consider analyzing data from influenza-like-illness (ILI) tracking as a proxy for COVID-19 incidence
- Link COVID-19 testing and surveillance data to EOC
- Assess current level and trajectory of COVID-19 spread in the community

Operational Requirements

- 1. Does your EOC have accurate real-time picture of the trajectory of the outbreak within your community for each of the following:
 - a. New daily cases?
 - b. Proportion of new cases from beyond known contacts of existing cases? (this is a proxy for degree of community spread)
 - c. Total active cases being managed in the health system?
 - d. Number of people under isolation or quarantine?

KEY ACTION #2 (CONTINUED)

Understand the real-time spread of COVID-19 in your community

Operational Requirements (continued)

- 2. Are you conducting contact tracing and monitoring of close contacts for confirmed cases?
 - a. Do you have a plan to transition to limited tracing if case volume surpasses a manageable threshold?
- 3. How close is testing to fully meeting medical demand and wider public demand?
 - a. Are sufficient test kits available?
 - b. Are health providers able to test all whom they think need diagnosis?
 - c. Are there localized trade-offs between using scarce PPE for testing vs treatment or other priorities?
 - d. Is it possible for those with symptoms to self-identify and safely access diagnostic tests without exposing others?
 - e. Is there an existing plan or timeline for expanding availability?
 - f. Does your testing strategy allow for detection of asymptomatic and/or mild cases?
- 4. Is there a lag time for receiving laboratory and clinical data? Have you identified and implemented actions can be taken to reduce the lag?
- 5. Are health care providers in your area analyzing data on Influenza-Like Illnesses as a proxy for COVID19?

Additional Considerations

- 6. Can your EOC receive notice of all cases tested in your community from both public and private health facilities?
- 7. Are you receiving disaggregated information about cases in vulnerable populations?

KEY ACTION #2 (CONTINUED)

Understand the real-time spread of COVID-19 in your community

Additional Considerations (continued)

- 8. Are you redirecting public health personnel to highest yield interventions as test cases grow?
- 9. Do you have a plan in place to assess the effectiveness of inbound traveler screening taking into account the resources required?

Resources

Principles of Epidemiology in Public Health Practice, Third Edition an Introduction to Applied Epidemiology and Biostatistics. Lesson 6: Investigating an Outbreak.

World Health Organization Surveillance Technical Guidance (note: includes a template for epi line listings)

World Health Organization Global COVID-19 Clinical Characterization Case Record Form and new data platform for anonymized COVID-19 clinical data (note: cities do not need to enroll, but this resource includes a checklist of key COVID-19 epi considerations)

Implementation of Mitigation Strategies for Communities with Local COVID-19 Transmission

Fever Screening

Continuity of Government - 2020



Slow and reduce transmission

Slowing and limiting transmission within a community is central to reducing the near-term human cost of the outbreak and ensuring that hospitals will be able to maintain lifesaving and life sustaining care. It can also be highly disruptive, as social distancing measures must become more aggressive in proportion to the exponential spread of the virus. Determinations on the best means of limiting transmission will depend on local factors, but in general should be calibrated to be more aggressive than what observable local conditions might intuitively suggest.

Priority Actions

- Clearly outline local social distancing guidelines to the community
- Establish criteria for critical and non-critical activities
- Assess and mitigate secondary impact of social distancing measures

Operational Requirements

- 1. Does the community have defined thresholds for when to impose or lift measures for social distancing, shelter-in-place, mandatory/enforced quarantine?
- 2. Have you issued community guidance on self-quarantine?
- 3. Is there a plan to incentivize interventions that can slow community spread of disease?
 - a. Do you have the legal authority to implement the interventions planned to slow transmission social distancing, quarantine, isolation measures?
 - b. Is there a process in place for addressing noncompliance (e.g., fines, criminal charges, etc.)?
- 4. Have you engaged small businesses and corporations as partners in the response effort?

KEY ACTION #3 (CONTINUED)

Slow and reduce transmission

Operational Requirements (continued)

- a. Have you addressed concerns about providing paid sick leave and/or work from home policies to discourage disease spread?
- b. Have you coordinated messaging with businesses in your area regarding measures to slow spread in your community?
- 5. Do you have clear criteria and urgent engagement strategies to determine when to close schools, recommend changes to local businesses, and protect critical services and infrastructure?
- 6. Have you engaged school leadership (public and private) for the following:
 - a. Establishing clear criteria for when to recommend cancelling schools and for how long?
 - b. Maintaining clear and open lines of communication with school and district leadership?
 - c. Developing and testing remote teaching and learning methods in case they are needed?
 - d. Putting mechanisms in place to care for children who need additional resources and to incentivize all children to stay at home, if school is cancelled?
 - e. Providing low-income families with meals?
 - f. Addressing similar requirements for cancellations of aftercare and extracurricular activities provided by the school(s) or district(s)?
- 7. Has your community established guidance criteria or official limitations on gatherings consistent with current public health guidance (as of this date it is 10 people or above)?

KEY ACTION #3 (CONTINUED)

Slow and reduce transmission

Additional Considerations

- 8. Are you regularly engaging with key community, civil society, business, and religious leaders to promote active cooperation and incentivize compliance with social distancing measures?
- 9. Do you have a specific mechanism for engaging public safety sector to assist, incentivize or enforce social distancing if necessary?
- 10. Have you engaged utility providers, transportation managers, waste management, and other critical infrastructure?
 - a. Do you have plans in place to ensure essential services continue in the event of a large number of absences?
 - b. Do you have plans in place to ensure that other critical infrastructure continues to operate? If so, are you coordinating with the judicial system?
- 11. Does your EOC have a list of all upcoming major conferences, sporting events, concerts, rallies, or other events where large numbers of people may gather?
 - a. Have your health officials conducted a risk assessment for these events?
 - b. Are you in contact with event organizers ahead of time?
 - c. Have you identified thresholds for cancellations?
- 12. Have you determined the support options available for populations, such as essential workers, who may face obstacles to complying with social distancing guidance?
- 13. For areas of intense community transmission, have you considered mandatory quarantine? Have you worked with the appropriate authorities to enforce quarantine measures?

KEY ACTION #3 (CONTINUED)

Slow and reduce transmission

Resources

Non-Pharmaceutical Interventions (NPIs): Actions to Limit the Spread of the Pandemic in Your Municipality (PAHO)

Supplemental Resources from CDC / PAHO Presentation (flu related but has some carry-over relevance; includes communications resources but is somewhat dated)

Information about Social Distancing (SCVHHS Public Health Department)

Implementation of Mitigation Strategies for Communities with Local COVID-19 Transmission (CDC)

Responding to community spread of COVID-19 (WHO)

Non-pharmaceutical public health measures for mitigating the risk and impact of epidemic and pandemic influenza (WHO)

CDC Community Mitigation Framework

CDC Guidance for School Settings

CDC guidance on COVID-19 and mass gatherings

White House Guidelines (As of 16 March 2020)



Focus protection on high-risk groups

COVID-19 poses extreme risks to older populations and those with complicating health conditions. Each local context is unique and each local EOC should create a commonly agreed upon and regularly reassessed list of particularly vulnerable populations and sites. Attention must be paid to the needs of these populations, and the facilities where they may reside or gather. Reducing transmission among these groups through targeted support measures can help protect them while also alleviating pressure on healthcare systems.

Priority Actions

- Establish a comprehensive list of facilities that house high-risk populations (assisted living facilities, seniors' communities, prisons, detention centers, etc)
- Assess facilities' infection prevention and hygiene practices
- Address identified vulnerabilities (PPE, training, infection control practices, etc)
- Establish guidance to minimize exposure of high risk groups (such as limiting outside visit to high-risk facilities)

Operational Requirements

- 1. Has a comprehensive list been compiled of high-risk populations and sites where they congregate? Including:
 - a. Long-term care facilities?
 - b. Other elder homes and communities?
 - c. Prisons?
 - d. Shelters?
 - e. Undocumented populations?
 - f. Other high density housing where high-risk populations may reside?

KEY ACTION #4 (CONTINUED)

Focus protection on high-risk groups

Operational Requirements (continued)

- 2. Have those facilities' infection prevention and hygiene practices been assessed and verified?
- 3. Have high-risk facilities received guidance and site-visits to ensure compliance with policies for infection prevention, to include sufficient access to PPE?
- 4. Has visitor access been restricted to facilities with high-risk groups?
- 5. Are there additional strategies to protect the safety and well-being of high-risk and underserved populations?

Additional Considerations

- 6. Have you been in contact with regulatory authorities for these facilities?
- 7. Are high-risk populations able to access support while self-quarantined?
- 8. Have sufficient resources been allocated toward protecting high-risk populations as part of your larger response plan, weighing the benefits of this approach with other resource intensive, but potentially less effective practices as community transmission increases such as traveler screening and contact tracing?

Resources

U.S. CDC Interim Guidance for Homeless Shelters

World Health Organization protocol for assessment of potential risk factors for COVID-19 infection among health care workers in a health care setting

<u>CDC / King County Guidance for Community Mitigation</u> (includes information on nursing and long-term care facilities)



Reinforce and expand health system surge capacity to sustain healthcare operations and avoid high mortality

The mortality risk posed by COVID-19 can grow substantially if a health system becomes overwhelmed with critical cases. Identifying creative means of expanding critical care capacity will be urgent as case counts grow. Urgent action should be taken to minimize the risk of transmission within health settings (nosocomial transmission). Telehealth consultations, including the use of telemedicine oversight of critically ill patients in the emergency department and intensive care units, should be considered as an option to triage cases as well as manage patient care.

Priority Actions

- Track hospital occupancy rates (overall and critical care) in real time and project future occupancy requirements based on trend
- Ensure hospitals have activated emergency plans and initiated measures to reduce elective or non-urgent medical activities
- Track PPE availability at critical facilities in real time and identify alternate PPE sources
- Initiate plans for surge expansion of critical treatment capacity
- Initiate plans to separate screening and intake of potential COVID-19 cases from general health care intake
- Track exposure and infections of health workers and assess impact on system capacity

Operational Requirements

- 1. Are healthcare facilities in your community able to provide care to all those who need it?
 - a. Do you have a process in place to continually assess the level of demand on hospitals and understand the risk of those facilities becoming overwhelmed?

KEY ACTION #5 (CONTINUED)

Reinforce and expand health system surge capacity to sustain healthcare operations and avoid high mortality

Operational Requirements (continued)

- b. Do your local healthcare facilities have a current emergency operations plan and has it been shared with the EOC?
- c. Do healthcare and EMS providers in your area have sufficient PPE on hand to meet immediate needs? Projected needs?
- d. Are telehealth capabilities available and supported by internet connections?
- 6. Where you have identified instances of exposure or infection of health care workers, have you conducted reviews of infection/prevention control protocols been conducted in the facility where the exposure occurred?
- 7. Have alternate sites of care been established with surge capabilities for five to ten times the normal number of pneumonia and influenza admissions at peak flu season?
- 8. Have you recommended that facilities reschedule and reprioritize non-emergency care?
- 9. Have treatment centers established separate triage lines for patients with influenza-like illness and/or upper respiratory infection?
- 10. Are specific plans in place to expand hospital capacity to:
 - a. Expand critical care/ICU capacity, including additional ventilator capacity?
 - b. Provide prescription medications for two to three months for all patients, eliminating co-pay penalties and insurance restrictions?
 - c. Offer mail-order or other remote refill mechanisms?
 - d. Triage patients to preserve hospital resources for those most acutely ill?
 - e. Govern crisis standards of care plans focused on the decisions that will govern scarce resource allocation?
 - f. Surge healthcare workforce, including in the event that medical staff are infected?

KEY ACTION #5 (CONTINUED)

Reinforce and expand health system surge capacity to sustain healthcare operations and avoid high mortality

Operational Requirements (continued)

- g. Develop processes for emergency credentialing of providers (doctors and nurses)?
- h. Provide rapid training to bolster medical surge capacity?
- i. Sustain corpse management, avoid morgue overflow, and meet resource requirements, including medical examiner capacity?
- j. Provide wellness and mental health support in times of crisis?
- k. Provide family support resources to healthcare workers to avoid staff distraction?
- 11. Are facilities continually reassessing:
 - a. PPE supply and predicted usage rates?
 - b. Critical care capacity?
 - c. Ventilator and oxygen capacity?
 - d. Thresholds for triggering/expanding crisis standards of care plans?

Additional Considerations

- 12. Do local triage and infection prevention/control protocols reflect the risk from COVID-19?
- 13. Have hospitals established relationships with state/local public health labs, commercial labs, and academic reference labs to establish testing protocols?
- 14. Have you determined whether facilities have developed plans to extend limits on existing PPE stocks?
- 15. Has your state established communication with federal Medicare and Medicaid authorities to establish waivers or other necessary protocols to extend care?

KEY ACTION #5 (CONTINUED)

Reinforce and expand health system surge capacity to sustain healthcare operations and avoid high mortality

Additional Considerations (continued)

- 16. Have facilities put into place measures for critical supplies including:
 - a. Arranging for alternate suppliers?
 - b. Expanding inventories, while avoiding excessive hoarding?
 - c. Using the conserve, reuse, recycle approach?
 - d. Engaging the private sector to assist in supply and logistics chain strengthening?
- 17. Have additional staff been hired and trained (could include leveraging academic medical centers for training and reaching out to volunteer staff, non-practicing health care professionals, or advanced medical and nursing students)?
- 18. Have professionals been cross-trained for out-of-scope-practices (i.e. pharmacists, nurse practitioners, physicians who specialize in less relevant areas)?

Resources

<u>Interim Guidance for Emergency Medical Services (EMS) Systems and 911 Public Safety Answering</u>
Points (PSAPs) for COVID-19 in the United States

<u>Interim Infection Prevention and Control Recommendations for Patients with Confirmed Coronavirus</u>
<u>Disease 2019 (COVID-19) or Persons Under Investigation for COVID-19 in Healthcare Settings</u>

Strategies for Optimizing the Supply of N95 Respirators

World Health Organization Training for Infection Prevention and Control (IPC) for Novel Coronavirus (COVID-19)

Crisis Standards of Care



Expand risk communication and community engagement

Public officials have an obligation to accurately and transparently relay risk information, even (or perhaps especially) when it is alarming. Community trust can make or break an outbreak response, because the effectiveness of social distancing and other interventions hinges on community compliance. Risk communication should follow best practices to mobilize informed action rather than inducing panic. A set of Critical Information Requirements (CIRs) for leaders/decision makers should be set by an EOC, updated daily, and help feed a set of Public Information Requirements (PIRs) that should be communicated to affected populations in a way that is easily accessible online.

Priority Actions

- Establish a regular briefing rhythm to inform community leaders and members
- Provide balanced and measured information; explicitly communicate uncertainty; do not sugar-coat bad news or over-promise potential progress
- Engage with community, business, religious, and other civil society leaders to equip them to be credible sources of information for their stakeholders

Operational Requirements

- 1. Are you regularly and effectively convening with, including by phone, and can you rapidly contact the various sectors of your government and non governmental organizations (policy, education, etc.) to discuss ongoing activities?
- 2. Are you communicating with the people who live and work in your community on a routine basis?
 - a. Have you identified the most effective communication methods?
 - b. Can you reach everyone?
 - c. Do you have emergency alert systems in place and tested?
 - d. Do you have an effective way to dispel disinformation or misinformation?

KEY ACTION #6 (CONTINUED)

Expand risk communication and community engagement

Operational Requirements (continued)

- 3. Have you identified and assigned trusted spokespeople to relay important, fact-based messages to the community?
- 4. Have you reviewed/revisited your continuity of communications plans for the EOC and first responders in the event that mobile communications are disrupted/crash?
- 5. Have you established a set of critical information requirements for leaders and decision makers that help feed public information requirements easily accessible online?

Additional Considerations

- 6. Are your community engagement efforts specifically reaching peripheral or marginalized populations, including undocumented populations? Are there established and tailored messages and mechanisms for communicating with affected or at-risk populations?
- 7. Are materials available in multiple languages, including American Sign Language and braille-based, and accessible for all populations in your community?
- 8. Do you have a strategy in place for designating sources of accurate/timely information, monitoring and addressing people's perceptions, beliefs, and sources of misinformation or disinformation?
- 9. Have you activated your existing emergency coordination and emergency public information structures?

KEY ACTION #6 (CONTINUED)

Expand risk communication and community engagement

Resources

Interim US Guidance for Risk Assessment and Public Health Management of Persons with Potential Coronavirus Disease 2019 (COVID-19) Exposures: Geographic Risk and Contacts of Laboratory-confirmed Cases

World Health Organization COVID-19 risk communication package for healthcare facilities

World Health Organization guide for preventing and addressing social stigma associated with COVID-19

Best Practices in Public Health Risk and Crisis Communication

Communicating risk in public health emergencies

TEPHINET Risk Communication Training

WHO Public Health for Mass Gatherings: Key Considerations



Mitigate economic and social consequences of the COVID-19 pandemic

Pandemic outbreaks can cause enormous social and economic disruption. These disruptions are damaging in their own right but can be particularly problematic if they create economic disincentives to cooperating with social distancing measures. Mitigating these disruptions can help to reduce the human cost of the outbreak, beyond the immediate toll of the disease itself. Leaders should also pay careful attention to the impact that both the outbreak itself, and the measures to control it, may have on vulnerable populations.

Priority Actions

- Establish mechanisms to address impacts of the pandemic on vulnerable populations (e.g. food insecure families reliant on school lunch programs)
- Assess and mitigate impact of social distancing measures on key workforce sectors (health care, public services, etc)
- Assess second-order impacts of social distancing measures on local economy
- Assess impact of business closures on local tax revenues and advocate for state/federal support to ensure continuity of government operations
- Identify and work to mitigate economic disincentives to social distancing measures

Operational Requirements

- 1. Do you have a strategy in place to ensure medications are available to those that need them?
- 2. In the event of a mass quarantine, are you able to provide the necessary resources (e.g., food, medical care, other necessities) to the affected populations?

KEY ACTION #7 (CONTINUED)

Mitigate economic and social consequences of the COVID-19 pandemic

Additional Considerations

- 3. Do you have mechanisms in place to support neighborhood food distribution and door-to-door service provision?
 - a. Are your maps accurate and updated?
 - b. Are there designated sub-sections for door-to-door distribution across the community?
- 4. Do you have a proactive plan for economic recovery following disruptions due to business closures and cancellation/postponements of events?
- 5. Do you have plans in place to mitigate the challenges of social distancing, quarantine, and/or isolation on at-risk populations?
- 6. Do you have plans or procedures to request assistance from other jurisdictions or levels of government to provision essential services if your departments become unable to?
- 7. Are your mutual aid agreements in force?
- 8. Does your community have plans in place to ensure caregivers are allowed to take time off due to lack of childcare if schools/daycares are cancelled, including by providing family care leave?

Resources

U.S. National Response Framework

FEMA's Continuity Guidance Circular, March 2018

ADDITIONAL RESOURCES

Resources

CDC: US Guidance for Risk-assessment (key objective #5)

CDC: Health Departments

CDC: Publications

CDC: Preventing Spread in Communities (landing page)

CDC website on Nonpharmaceutical interventions