



COVID Local

A Frontline Guide for
Local Decision-Makers

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COVID Local: 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 state, city, and 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 and checklists were developed by a team of deeply experienced experts and former public health officials, in consultation with current state and local officials about the key issues they face. Our focus has been on providing information for both slowing and suppressing the spread of the virus, and also on supporting community needs.

This guide is informed by existing guidance from US 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.

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 and control strategies, depending on the trajectory of the outbreak in any given location. This guide 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. 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 outbreak. 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.

Given that this virus currently has no proven vaccines or treatments, the most important way to limit mortality in the near term is to reduce transmission and 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 New York, 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 is still evolving, it is clear that the disease is many times more dangerous than seasonal flu (which has a fatality rate of approximately 0.1%). Recorded fatality rates in various countries have ranged from more than 10% (e.g. Italy, United Kingdom, and Spain) to low single digits (e.g. China, the United States, and Germany). South Korea, which has the most extensive testing in the world, has recorded a fatality rate of approximately 2%, or 20 times the lethality of seasonal flu.

During the early phase of a community's COVID-19 outbreak, all elements of an initial response strategy should connect to the overarching goal of limiting deaths by reducing overall transmission and minimizing strain on the health system. Rapid and aggressive action can create a positive cycle, in which measures to slow and reduce 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, allows 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.

Once transmission rates have been reduced and the burden on the hospital system has stabilized or declined, it will eventually become possible to consider incrementally relaxing the range of distancing measures put in place to limit transmission. Criteria that should be in place before relaxing social distancing orders within the community are included below along with definitions of progressive phases for re-opening. More detailed advice and guidance for this subsequent phase of the COVID-19 response will be more fully addressed on the web version of this guide.

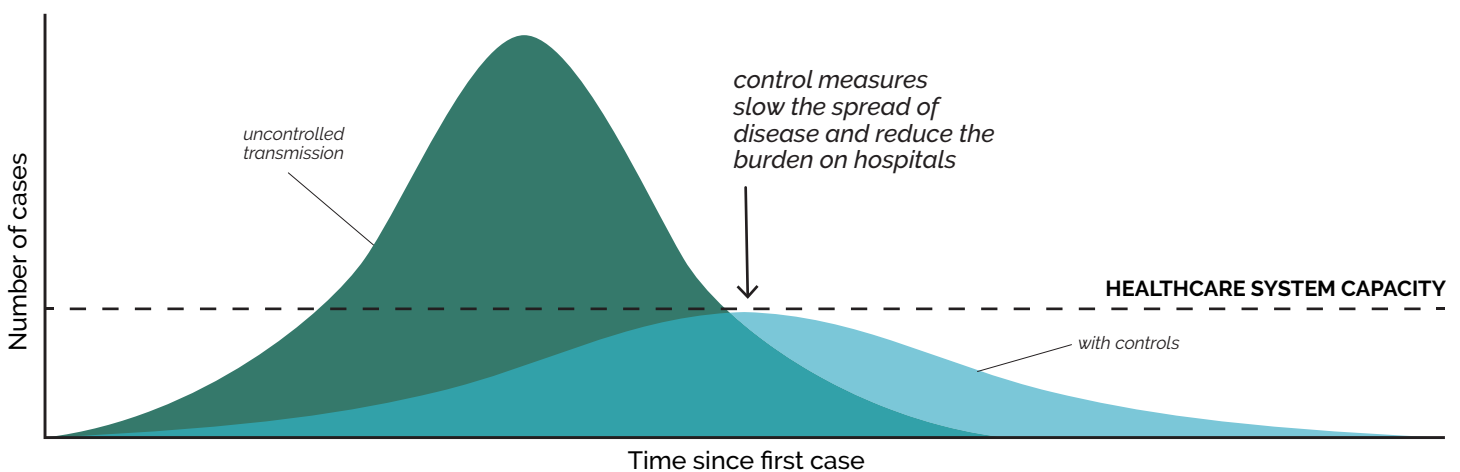


Figure 1. A conceptual overview of the impact of applied control measures in reducing the rate of spread of COVID-19, and how they can, hypothetically, limit the burden on the health system.

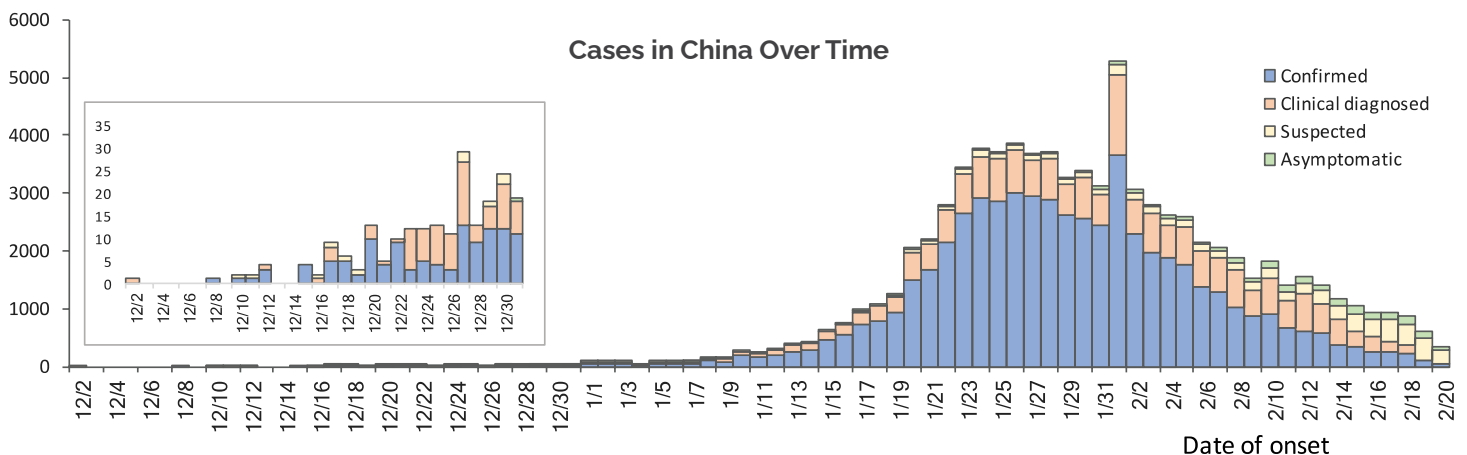


Figure 2. The epidemiologic curve of Covid-19 laboratory confirmed cases, by date of onset of illness, reported in China, as of February 20, 2020. [WHO-China joint mission report on Covid-19¹](https://www.who.int/docs/default-source/coronaviruse/who-china-joint-mission-on-covid-19-final-report.pdf)

Strategic Considerations for Managing COVID-19 in the Community

A community's priorities will vary and evolve depending on the stage of the outbreak. Strategy will shift, depending on where a city is in the course of the outbreak and the number of cases in the community. A community is likely to face several stages 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.

It is important to understand that declines in transmission are reversible, and a community may experience multiple waves of cases. An initial plateauing or decline in cases is not sufficient basis for relaxing social distancing and shelter-in-place measures. Communities that are tracking a decrease in cases may suddenly see an increase in

reported cases due to a variety of factors including, but not limited to, an increase in testing or a change in reporting requirements, a premature relaxation of control measures, and importation of new cases.

Different actions and approaches should be triggered as a community moves along these stages of the outbreak. Knowing which stage 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 stage a community is experiencing.

These stages are specific to this guide and not in reference to the Pandemic Intervals Framework issued by CDC in 2016².

¹ <https://www.who.int/docs/default-source/coronaviruse/who-china-joint-mission-on-covid-19-final-report.pdf>

² <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
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
Reduced community transmission	Burden on healthcare system is decreasing
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

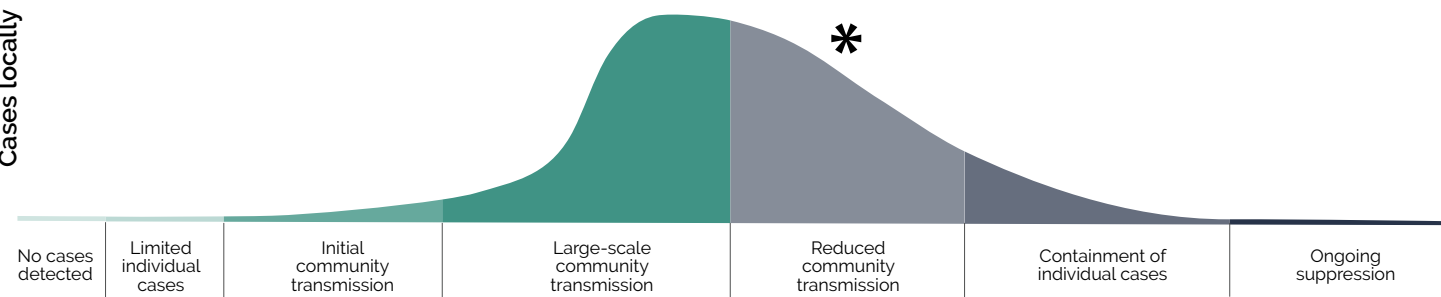


Figure 4. Notional example describing relative spread and number of cases in a community, mapped roughly to the progression described in Figure 3 and roughly corresponding to the spread of COVID-19 as reported in China, shown in Figure 2.

*Please note that there may be more than one curve in an outbreak, particularly during suppression when cases may rise again as social distancing or other measures are released. See text above for more discussion.



Key Objectives for Addressing COVID-19 at the Community Level

This guide builds upon existing preparedness and response guidance and 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 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.



KEY OBJECTIVE #2

Understand and contain the real-time spread of COVID-19 in the community through surveillance, testing, contact tracing, and case quarantine and isolation

A pandemic control strategy is grounded in understanding ongoing transmission risk in the community so that the disease can be effectively controlled and contained. This will require continuous disease surveillance, diagnostic testing, contact tracing, isolation, 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 and sustaining local access to testing will be critical as additional laboratory capacity comes online. If diagnostic testing is limited, as a stop-gap, communities can enhance syndromic surveillance and other dynamic surveillance tools, along with contact tracing, to gauge disease activity within the community. Effective testing and contact tracing will require a combination of rapid testing capability, interoperable tools for quickly collecting and analyzing contact tracing data, deployment and management of contact tracing teams, and the provision of adequate capacity and incentives for the effective quarantine of contacts and isolation of infected persons. Contact tracing and testing must also be deployed in concert with other elements of a long term plan to contain and maintain control of community transmission. Other components include iterative cycles of social distancing measures — such as canceling mass gatherings, school closures, incentives for teleworking — and expansion of health care capacity to meet the need.



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 should follow national and state guidance, in addition to considering local risk factors. In general, distancing practices during the early phases of an outbreak should be calibrated to be more aggressive than what observable local conditions might intuitively suggest. Once transmission rates within the community have decreased and the burden on the healthcare system has stabilized or declined, it will become possible to consider incrementally relaxing the range of distancing measures put in place. To avoid increases in community transmission following the lifting of social distancing measures, the "re-opening" of communities must be done in a phased manner with communities achieving specific sets of criteria before moving to the next phase. See below for definitions for the phases of incremental lifting of social distancing measures as well as criteria that should be met before progressing to the next phase of re-opening.



KEY OBJECTIVE #4

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 (examples included below). 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. Experiences from China, Italy, New York City, and elsewhere have demonstrated that COVID-19 cases can overwhelm health facilities and crowd out other critical medical needs. Identifying creative means of surging overall medical capacity as well as 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.



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KEY OBJECTIVE #6**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 ways that are easily accessible by all.



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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.



Phase Definitions for Incremental Implementation (and Relaxation) of Social Distancing Measures

As the COVID-19 pandemic continues, local leaders across the United States are working to bolster public health capacity and take some initial steps to reopen — protecting their communities from the disease and supporting economic recovery and growth. COVID-Local provides decision-makers with easy-to-use metrics for a phased re-opening strategy. These metrics can be used to assess existing response efforts, pinpoint areas for action, and make decisions for moving to the next phase of re-opening. The graphics in the Metrics Overview describe phases and the key metrics associated with each phase under a set of public health categories. The Scorecard can be used to self-assess community progress across all metrics for each Phase.

Phase 1: Maximum social-distancing measures are in place and tailored to the needs of the community to reduce widespread community transmission. Focus is on reducing person-to-person transmission and decreasing the burden on the healthcare system while bolstering preparedness capabilities in anticipation of potential future increases in transmission.

Phase 2: Initial re-opening phase should focus on safely re-opening a limited number of critically important activities that are either low risk, or for which the criticality of the activity merits accepting a moderate degree of transmission risk (with appropriate mitigation). In general, this phase should continue to prohibit gatherings, activities that entail prolonged close contact, and/or prolonged presence in enclosed spaces. Outdoor activities are potentially feasible with appropriate distancing. Telework should continue wherever feasible.

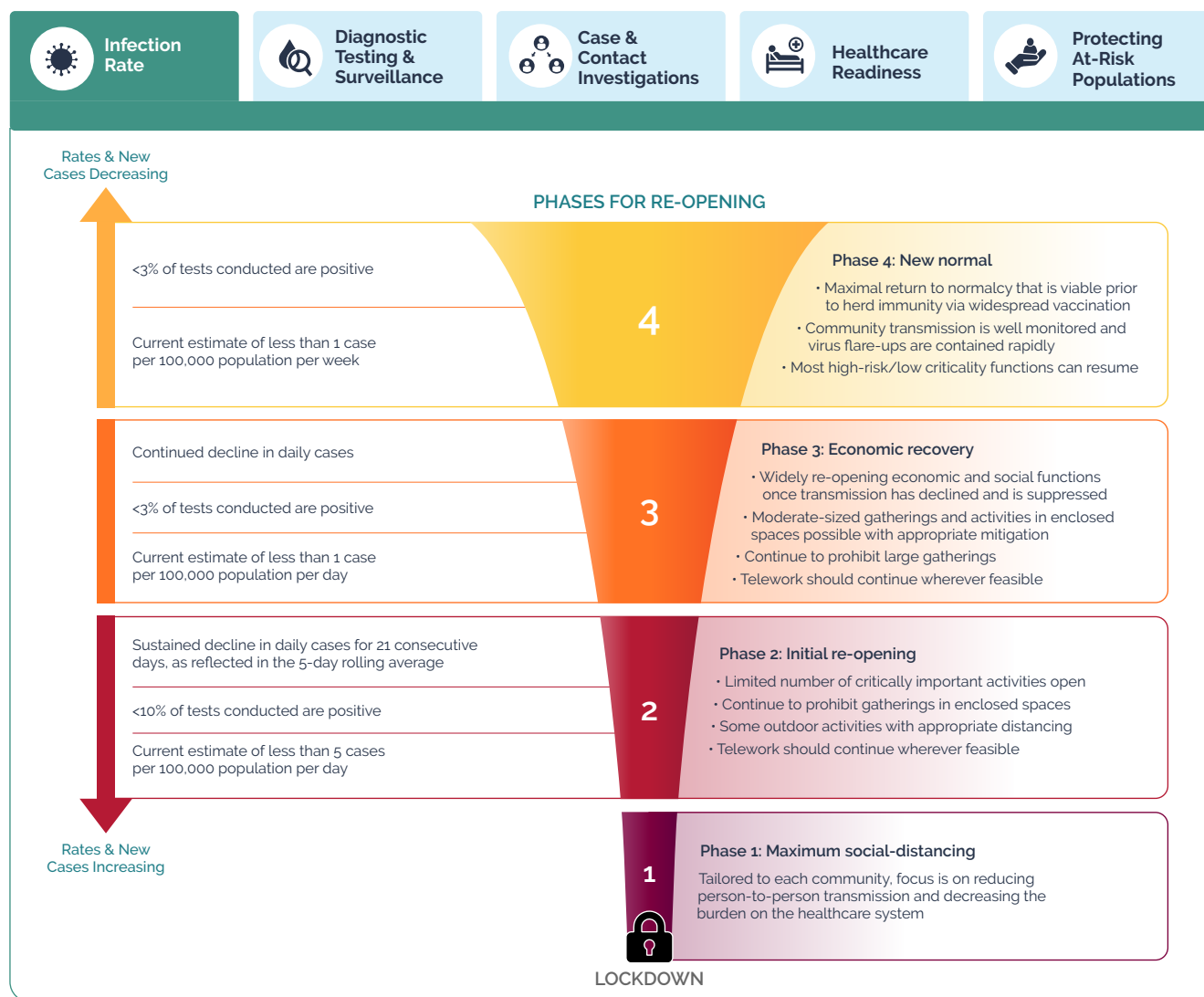
Phase 3: Economic recovery phase should focus on widely re-opening economic and social functions once ambient transmission has declined and is being effectively suppressed. Low levels of community transmission means that functions involving moderate gatherings are possible with appropriate mitigation. Large gatherings continue to pose an excessive risk. However, activities that entail prolonged contact or presence in enclosed spaces are feasible with appropriate mitigation. Telework should continue wherever feasible.

Phase 4: New normal phase represents the maximal return to normalcy that is viable prior to herd immunity via widespread vaccination. Community transmission is well monitored and negligible; virus flare-ups are contained rapidly. Most high-risk/low criticality functions can resume.

Decision makers must be willing to go backwards in phases, if the data and evidence demand.

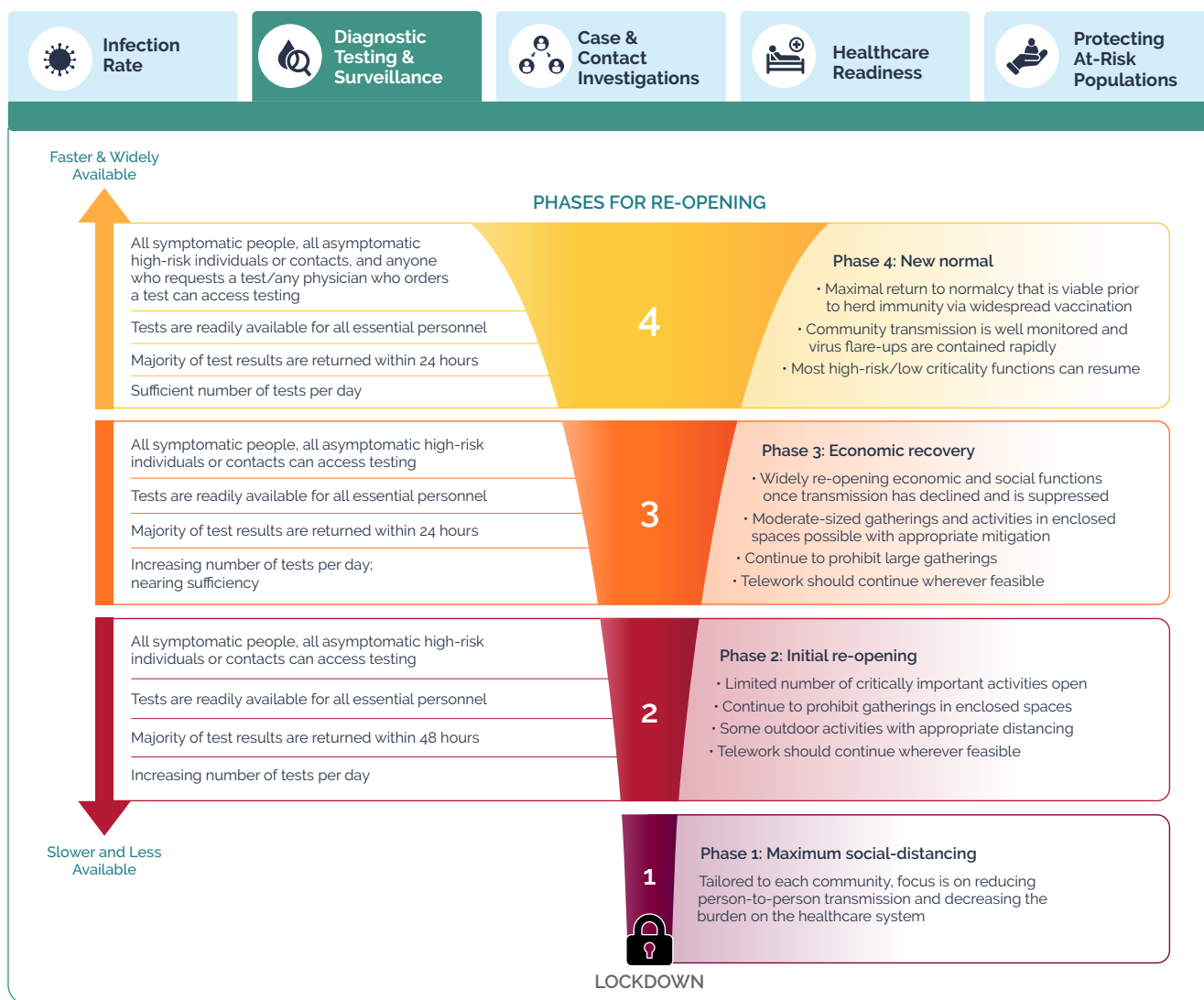


Metrics for Phased Re-opening



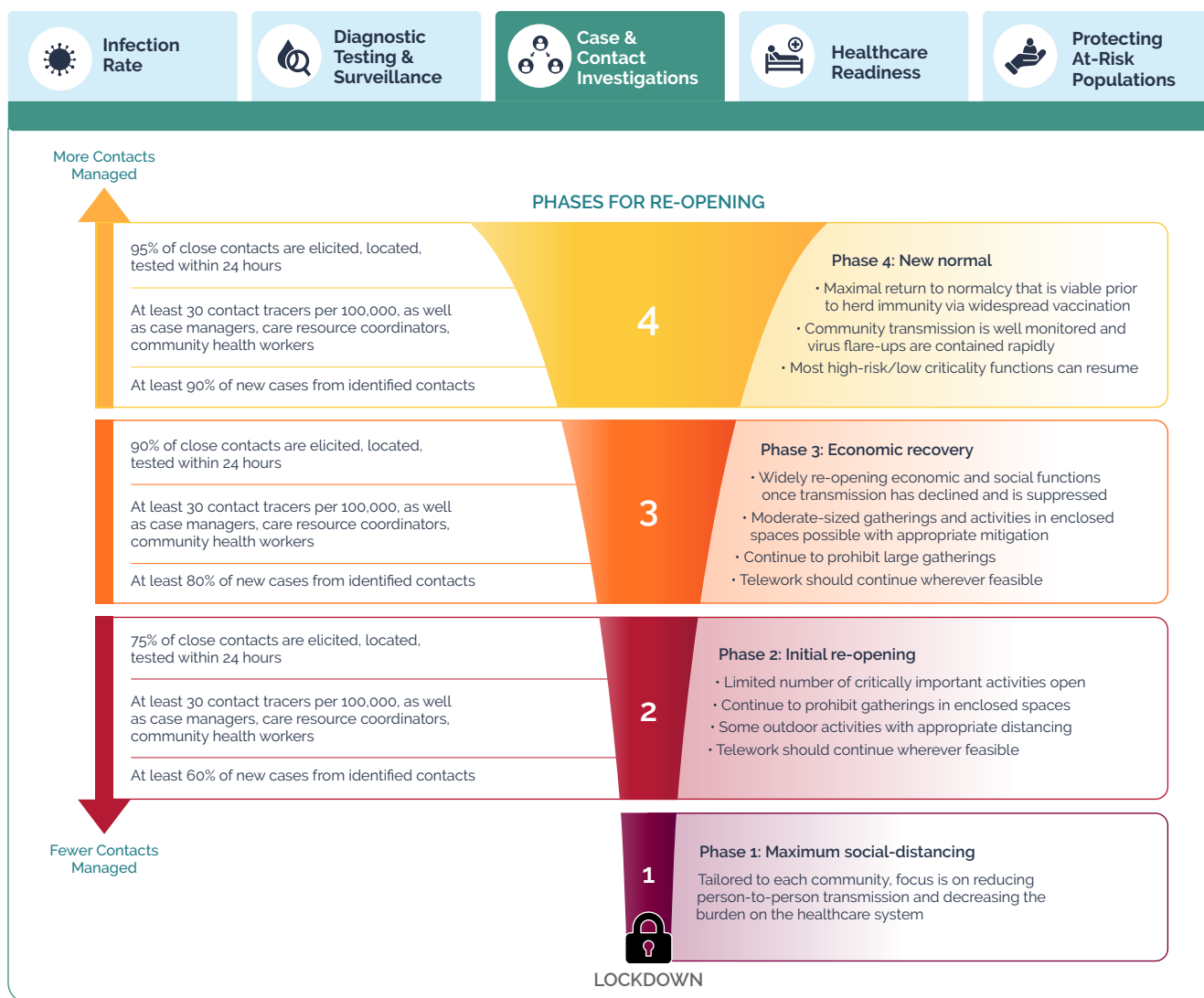


Metrics for Phased Re-opening



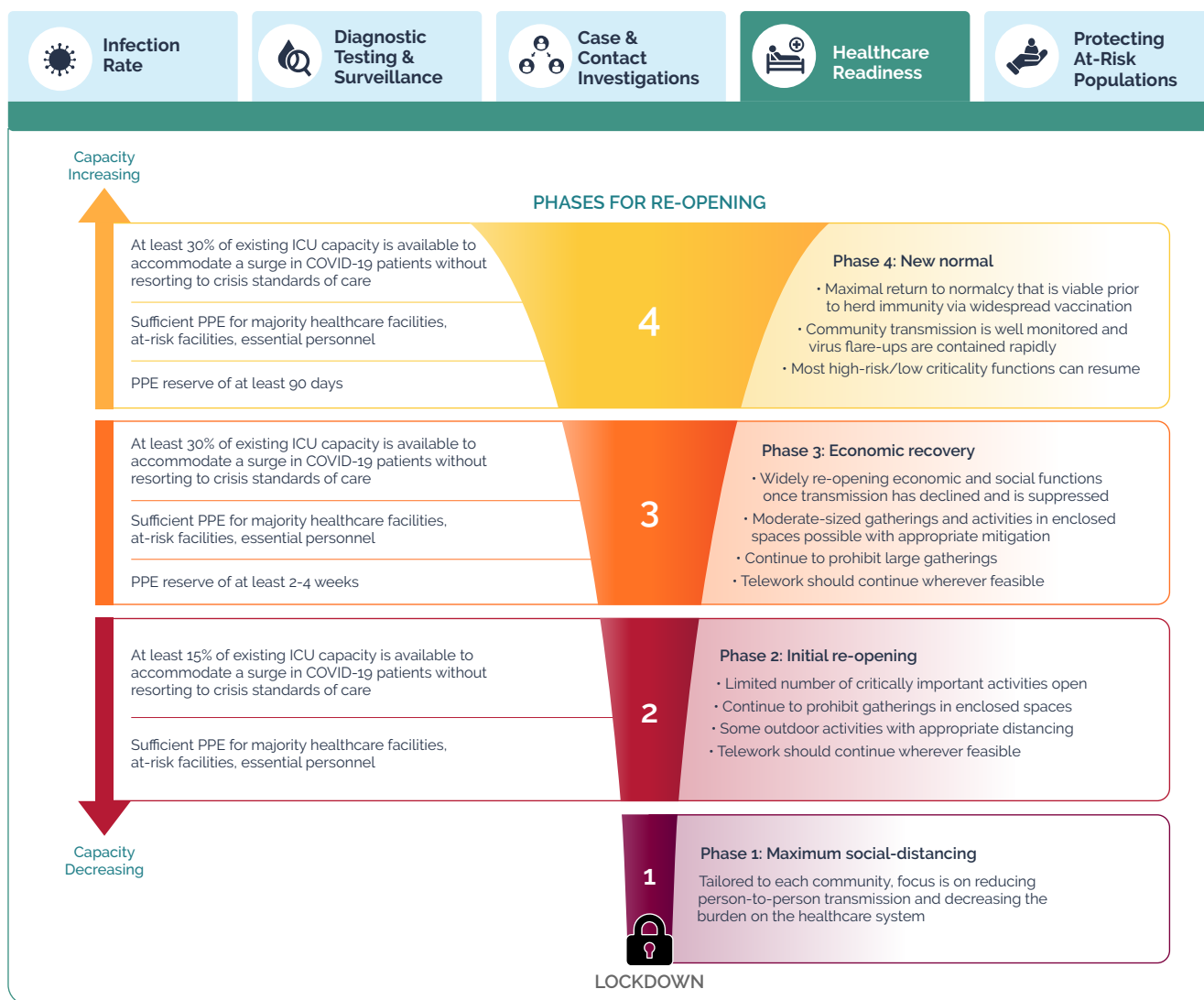


Metrics for Phased Re-opening



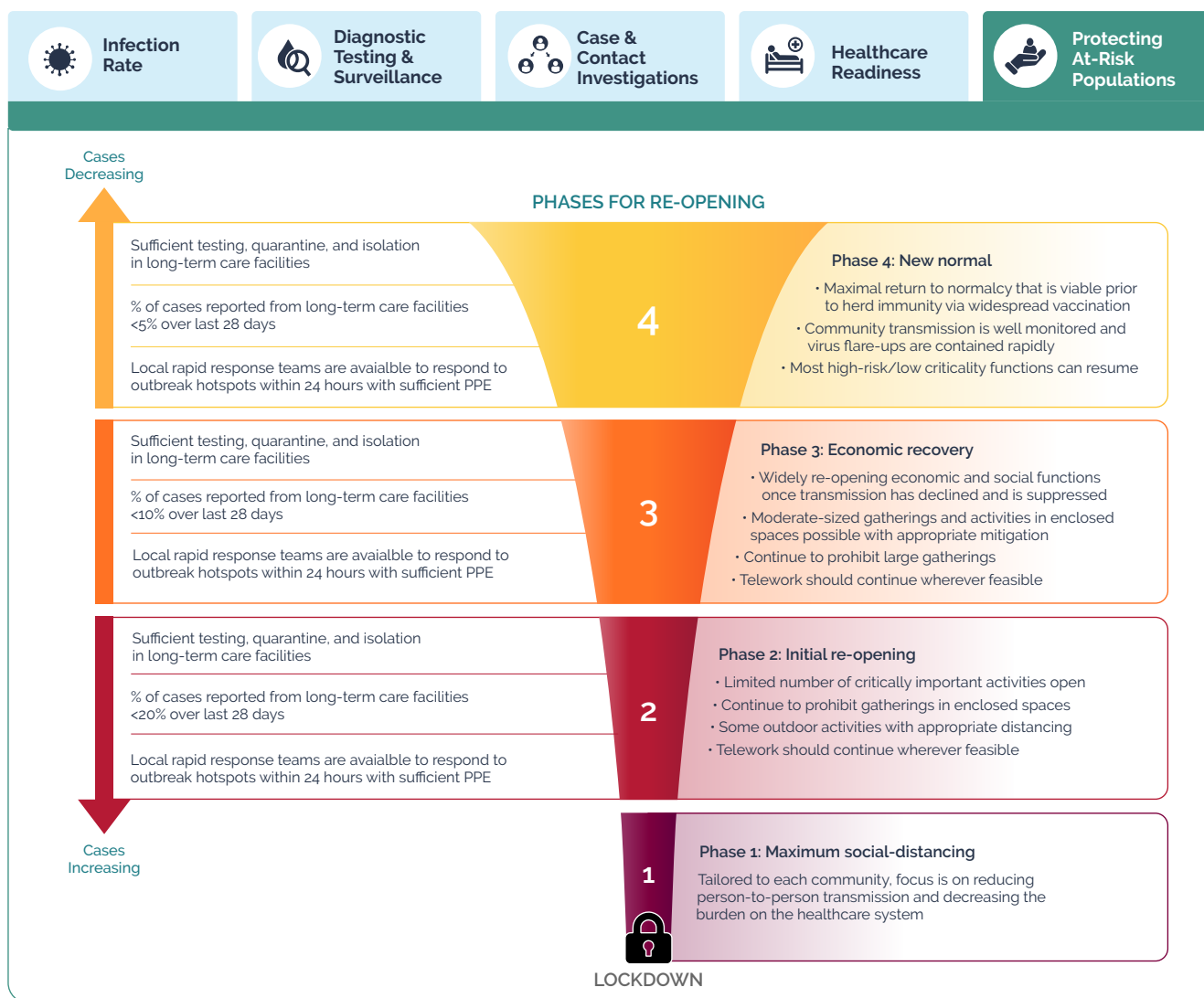


Metrics for Phased Re-opening





Metrics for Phased Re-opening



COVID-Local provides metrics for re-opening to help local leaders determine how best to communicate and understand the key metrics towards re-opening businesses and the community

KEY METRICS	Phase 1	Thresholds To Enter Phase 2	Thresholds To Enter Phase 3	Thresholds To Enter Phase 4
 Infection Rate	Maximum social-distancing	Sustained decline in daily cases for 21 consecutive days, as reflected in the 5-day rolling average New cases <3% of total tests Current estimate of less than 5 cases per 100,000 population per day	Continued decline in daily cases New cases <3% of total tests Current estimate of less than 1 case per 100,000 population per day	New cases <3% of total tests Current estimate of less than 1 case per 100,000 population per week
 Viral Testing & Surveillance	Maximum social-distancing	All symptomatic people, all asymptomatic high-risk individuals or contacts can access testing Tests are readily available for all essential personnel Majority of test results are returned within 48 hours Increasing number of tests per day	All symptomatic people, all asymptomatic high-risk individuals or contacts can access testing Tests are readily available for all essential personnel Majority of test results are returned within 24 hours Increasing number of tests per day; nearing sufficiency	All symptomatic people, all asymptomatic high-risk individuals or contacts, and anyone who requests a test/ any physician who orders a test can access testing Tests are readily available for all essential personnel Majority of test results are returned within 24 hours Sufficient number of tests per day
 Case & Contact Investigations	Maximum social-distancing	75% of close contacts are elicited and located within 48 hours At least 30 contact tracers per 100,000, as well as case managers, care resource coordinators, community health workers % of contacts reached vs. elicited	90% of close contacts are elicited, located, tested within 24 hours At least 30 contact tracers per 100,000, as well as case managers, care resource coordinators, community health workers % of contacts reached vs. elicited	95% of close contacts are elicited, located, tested within 24 hours At least 30 contact tracers per 100,000, as well as case managers, care resource coordinators, community health workers % of contacts reached vs. elicited
 Healthcare Readiness	Maximum social-distancing	At least 15% of existing ICU capacity is available to accommodate a surge in COVID-19 patients without resorting to crisis standards of care Sufficient PPE for majority healthcare facilities, at-risk facilities, essential personnel	At least 30% of existing ICU capacity is available to accommodate a surge in COVID-19 patients without resorting to crisis standards of care Sufficient PPE for majority healthcare facilities, at-risk facilities, essential personnel PPE reserve of at least 2-4 weeks	At least 30% of existing ICU capacity is available to accommodate a surge in COVID-19 patients without resorting to crisis standards of care Sufficient PPE for majority healthcare facilities, at-risk facilities, essential personnel PPE reserve of at least 90 days
 Protecting At-Risk Populations	Maximum social-distancing	Sufficient testing, quarantine, isolation in long-term care facilities % of cases reported from long-term care facilities <20% over last 28 days	Sufficient testing, quarantine, isolation in long-term care facilities % of cases reported from long-term care facilities <10% over last 28 days	Sufficient testing, quarantine, isolation in long-term care facilities % of cases reported from long-term care facilities <5% over last 28 days



INDICATORS OF PROGRESS

1 Activation of an emergency operations center (EOC) with an incident command structure to manage local response efforts.

- | | | |
|--|-----|----|
| a. Is there a clearly designated and empowered incident manager? | yes | no |
| b. Are there clearly designated organizational units in the EOC aligned with principal operational priorities (e.g. testing, hospital capacity, crisis communication, protection of high-risk populations, etc)? | yes | no |

2 Community is able to rapidly identify all infected individuals, isolate them, and quickly and effectively quarantine and trace their contacts.

- | | | |
|---|-----|----|
| a. Is the percentage of positive diagnostic tests relative to the total number of tests declining, and is that number low enough (e.g. 3 %) to indicate that testing is identifying most cases? | yes | no |
| b. Are most new cases from identified contacts? | yes | no |
| c. Are accurate diagnostic tests broadly available in the community with timely results (e.g. 24 hours)? | yes | no |
| d. Have contract tracing teams been trained? | yes | no |
| e. Have contact tracing teams been deployed sufficient to meet demand (e.g. 5 tracers for each positive case)? | yes | no |
| f. Are there specific, interoperable methods deployed in the community for obtaining and managing data collection and integration for diagnostic testing and tracing? | yes | no |

2 Availability and accessibility of COVID-19 diagnostic testing throughout the community

- | | | |
|--|-----|----|
| a. Is COVID-19 diagnostic testing available to all experiencing symptoms within 24 hours? n the community meeting medical demand? | yes | no |
| b. Are COVID-19 diagnostic test results returned within 24 hours? | yes | no |
| c. Can healthcare workers, first responders, essential service providers, and those at greater risk, always access COVID-19 diagnostic testing, <i>whether or not they are experiencing symptoms</i> ? | yes | no |

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INDICATORS OF PROGRESS (CONTINUED)

- | | | |
|---|-----|----|
| d. Can healthcare workers, first responders, others at high-risk, be regularly tested (e.g. every 2-3 days), <i>whether or not they are experiencing symptoms</i> . | yes | no |
| e. Are there shortages in the diagnostic testing supply chain – including equipment, supplies, reagents, and staffing? | yes | no |
| f. Are serological (antibody), as well as diagnostic tests available? | yes | no |

2 Existence of an accurate understanding of the COVID-19 transmission trend within the community

- | | | |
|--|-----|----|
| a. Does community leadership have an accurate understanding of the level of COVID-19 transmission? | yes | no |
| b. Does the general public in the community have an accurate understanding of the status of COVID-19 transmission through daily updates? | yes | no |

3 Implementation of infection, prevention, and control measures to prevent disruptions in critical services, including:

- | | | |
|----------------------------------|-----|----|
| a. Food supply and distribution? | yes | no |
| b. Critical infrastructure? | yes | no |
| c. Water supply? | yes | no |
| d. Waste management? | yes | no |
| e. Electricity? | yes | no |

4 Institute protective measures for facilities serving high-risk populations

- | | | |
|--|-----|----|
| a. Has a comprehensive list of facilities that house high-risk populations been compiled? | yes | no |
| b. Have those facilities' infection prevention and hygiene practices been assessed and verified? | yes | no |
| c. Have all identified vulnerabilities at those facilities been addressed? | yes | no |

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INDICATORS OF PROGRESS (CONTINUED)

5 Availability of critical care/intensive care treatment capacity in the community

- | | | |
|---|-----|----|
| a. Can approximate anticipated bed needs be projected over the next two weeks? | yes | no |
| b. Are the hospitals in the community able to meet current and projected demand for critical care/intensive care unit capacity? | yes | no |
| c. Are measures being implemented to expand critical care/intensive care unit capacity? | yes | no |
| d. Are local health care facilities separating intake for patients with COVID-19, or who may have COVID-19, from those needing other types of care? | yes | no |

5 Sufficient and available supply of personal protective equipment (PPE) for:

- | | | |
|--|-----|----|
| a. Critical care units? | yes | no |
| b. Testing centers? | yes | no |
| c. Assisted living centers and other facilities housing high-risk populations? | yes | no |
| d. Emergency management agencies, EMTs and other frontline responders? | yes | no |
| e. State and local strike teams for localized outbreak response? | yes | no |

6 Implementation of a crisis communication strategy, including scheduled updates and clear lines of communication with critical stakeholders

yes no



KEY OBJECTIVE #1

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. Has the Emergency Operations Center (EOC) been activated and has the whole-of-community incident management structure been established? (Resources available [here](#), [here](#), and [here](#))
2. Have functional teams in the EOC been organized around defined operational priorities (such as the key actions identified in this guide)? (Resources available [here](#) and [here](#))
3. Does the EOC have designated liaisons with all relevant government, community, and private sector stakeholders, including: (Resources available [here](#), [here](#), and [here](#))

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KEY OBJECTIVE #1 (CONTINUED)

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

Operational Requirements (continued)

- a. Other state, local, and federal officials involved in the response?
 - 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 the community (healthcare, utilities, transport, food supply, etc.)? (Resources available [here](#), [here](#), and [here](#))
-
5. Is there a process to support the health and wellbeing of personnel assigned to work in the EOC? (Resource [here](#))
- a. As quarantines and self-isolation requirements expand, is there a clear process for transitioning to a virtual EOC for non-essential personnel who still need to be engaged, as well as identifying alternates for those who may be infected?
-
6. Has a response coordinator been designated and do they have the authority to: (Resources available [here](#) and [here](#))
- a. Bring issues directly to leadership for rapid resolution?
 - b. Link with scientific and health experts to provide guidance based on the latest research?
-
7. Is there a Continuity of Government plan to ensure continued essential services? (Example [here](#))
- a. Do essential businesses such as healthcare facilities or facilities serving vulnerable populations have continuity plans to ensure continued service?
-

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KEY OBJECTIVE #1 (CONTINUED)

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

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 the EOC?
10. Is there 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?

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KEY OBJECTIVE #1 (CONTINUED)

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

Resources

[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](#)

[ICS Organizational Structure and Elements](#)

[Incident Action Planning Process “The Planning P”](#)

[Standardized Reporting Forms](#)

[Framework for a Public Health Emergency Operations Centre](#)

[EOC Skillsets User Guide](#)

- [What Is an Incident Action Plan?](#)

[National Incident Management System: ICS Resource Center](#)

[FEMA LifeLines](#)

[Surge Capacity Logistics](#)

[2017-2022 Health Care Preparedness and Response Capabilities](#)



KEY OBJECTIVE #2

Understand and contain the real-time spread of COVID-19 in the community through surveillance, testing, contact tracing, and case quarantine and isolation

A pandemic control strategy is grounded in understanding ongoing transmission risk in the community so that the disease can be effectively controlled and contained. This will require continuous disease surveillance, diagnostic testing, contact tracing, isolation, 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 and sustaining local access to testing will be critical as additional laboratory capacity comes online. If diagnostic testing is limited, as a stop-gap, communities can enhance syndromic surveillance and other dynamic surveillance tools, along with contact tracing, to gauge disease activity within the community. Effective testing and contact tracing will require a combination of rapid testing capability, interoperable tools for quickly collecting and analyzing contract tracing data, deployment and management of contact tracing teams, and the provision of adequate capacity and incentives for the effective quarantine of contacts and isolation of infected persons. Contact tracing and testing must also be deployed in concert with other elements of a long term plan to contain and maintain control of community transmission. Other components include iterative cycles of social distancing measures — such as canceling mass gatherings, school closures, incentives for teleworking — and expansion of health care capacity to meet the need.

PRIORITY ACTIONS

- **Determine community, local, state, and regional barriers to achieving widespread molecular testing and contact tracing for COVID-19. Understand and urgently fill gaps**
- **Track influenza-like-illness (ILI) and COVID-19-like illness (CLI)**
- **Develop a protocol for broad diagnostic testing in the community. If tests are limited, include all symptomatic persons, close contacts, healthcare workers, first responders, essential service providers, and other at-risk individuals**
- **Develop a protocol for regular testing of healthcare workers, first responders and critical infrastructure employees**

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KEY OBJECTIVE #2 (CONTINUED)

Understand and contain the real-time spread of COVID-19 in the community through surveillance, testing, contact tracing, and case quarantine and isolation

PRIORITY ACTIONS (CONTINUED)

- **Develop sentinel surveillance and testing sites in at-risk locations serving older individuals, lower-income individuals, racial and ethnic minorities including Native Americans**
- **Link COVID-19 testing and surveillance data to the local EOC**
- **Identify, hire, and train contact tracing workforce**
- **Develop a plan for follow up on positive tests including recommendations for isolation and treatment**
- **Identify and deploy a unified platform for entering cases and integrating any other technologies and data collected for contact tracing**
- **Identify capacity for quarantine and isolation of all contacts for positive and symptomatic cases, including for those who should be separated from other household contacts and those who are currently in long-term care settings, prisons, or are currently homeless**
- **Conduct and document formal risk assessment based on current level and trajectory of COVID-19 spread in the community**

Operational Requirements

1. Does the community have clear plans, with metrics, for implementing, continuing, adjusting, or lifting social distancing measures incorporate benchmarks based on surveillance, testing, and contact tracing? (Resources available [here](#), [here](#), and [here](#))

Surveillance: Is the community conducting active surveillance for COVID-19? Has a comprehensive surveillance system been implemented to monitor new cases in the community? (Resources available [here](#))

2. Does the EOC have an accurate real-time picture of the trajectory of the outbreak within the community? (Resources [here](#) and [here](#))

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KEY OBJECTIVE #2 (CONTINUED)

Understand and contain the real-time spread of COVID-19 in the community through surveillance, testing, contact tracing, and case quarantine and isolation

Operational Requirements (continued)

3. Are health care providers in the area analyzing syndromic data on Influenza-Like Illnesses and Severe Acute Respiratory Illnesses as a proxy for COVID19?

Widespread, Rapid Testing: Can testing in the community fully meet medical demand and wider public demand? (Resources available [here](#), [here](#), [here](#), [here](#), and [here](#))

4. Is testing widely available for all those who need it, including all with symptoms, at high-risk, and those who are close contacts of infected persons? (Resources available [here](#) and [here](#))
 - a. Are test results returned rapidly (24 hours)?
5. Is same-day, point-of-care testing available for all patients exhibiting COVID-19 symptoms? Including: (Resources available [here](#) and [here](#))
 - a. Hospitalized patients?
 - b. Health care workers, first responders, essential service providers, and others in at-risk settings such as long-term care facilities?
 - c. People who have had contact with infected persons (positive test or symptomatic person)?
 - d. Symptomatic persons in outpatient settings (such as doctors' offices)?
6. Are sufficient test kits available?
7. Have an overview of the supply chain for test kits, laboratory capacity to conduct testing, supplies (e.g. nasal swabs, test reagents) been conducted?
 - a. Is there a plan and a specific timeline to fill identified gaps?
8. Is guidance available for how to follow-up with and treat those who test positive? (Resources available [here](#), [here](#), and [here](#))
 - a. Is there a reporting structure to ensure medical providers are rapidly notified of results and have a clear plan to communicate to patients?

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KEY OBJECTIVE #2 (CONTINUED)

Understand and contain the real-time spread of COVID-19 in the community through surveillance, testing, contact tracing, and case quarantine and isolation

Operational Requirements (continued)

- b. Is data being reported up the chain from health care facilities/testing sites to local health officials? From local officials to both State and/or Federal officials?

- 9. Are sentinel testing sites operating in locations serving older individuals, lower-income individuals, racial and ethnic minorities including Native Americans? (Resource available [here](#))

- 10. Has serological testing been incorporated to begin to determine how many people may have been exposed? (Resource available [here](#))

- 11. Have laboratory testing priorities been established and are they being implemented? (Resource available [here](#))
 - a. Is there a lag time for receiving laboratory and clinical data? Have actions been identified and implemented to reduce the lag?

- 12. Are there localized trade-offs between using scarce PPE for testing vs. treatment or other priorities? (Resource available [here](#))

Contact Tracing: Is the public health workforce conducting contact tracing and monitoring of close contacts for confirmed cases?

(Resources available [here](#), [here](#), [here](#), [here](#), [here](#), [here](#), [here](#), [here](#), and [here](#))

- 13. Has a cadre of contact tracers been hired, trained, and deployed with the ability to trace most cases in the community?
 - a. Has long-term funding been identified for contact tracing staff?

- 14. Do training materials and implementation plans for contact tracers include actions and requirements associated with:
 - a. Testing
 - b. Investigation and elicitation

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KEY OBJECTIVE #2 (CONTINUED)

Understand and contain the real-time spread of COVID-19 in the community through surveillance, testing, contact tracing, and case quarantine and isolation

Operational Requirements (continued)

- c. Tracing
 - d. Quarantine or isolation
 - e. Follow-up
-

15. Is there a system in place to support data collection and tracking of contact tracing efforts available to the tracing teams?
- a. If technological or data collection tools are being used, have security requirements been defined and are protocols in place to ensure privacy and security of the data?
 - b. Is there a data sharing plan in place for who and how access to the data will be managed?
-

Quarantine and Isolation: Are there housing options available for those requiring quarantine, but who cannot be at home? (Resources available [here](#) and [here](#))

16. Is there a plan in place to follow up with inbound travelers to assess their COVID-19 status and to provide guidance on self-isolation or quarantine, as needed? (Resources available [here](#) and [here](#))
-
17. Have public messaging and communication efforts been updated to include contact tracing and testing guidance? (Resources available [here](#), [here](#), [here](#), and [here](#))
-

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KEY OBJECTIVE #2 (CONTINUED)

Understand and contain the real-time spread of COVID-19 in the community through surveillance, testing, contact tracing, and case quarantine and isolation

Additional Considerations

18. Can the EOC receive notice of all cases tested in the community from both public and private health facilities? (Resources [here](#) and [here](#))

Is data disaggregated by:

- a. Vulnerable population status?
 - b. Sex?
 - c. Age?
 - d. Healthcare worker status?
 - e. Underlying condition status?
-

19. Are public health personnel being redirected to highest yield interventions as case counts grow?
-

20. Is there a method to assess the effectiveness of inbound traveler screening, taking into account the resources required?
-

Resources

[Contact Tracing: Part of a Multipronged Approach to Fight the COVID-19 Pandemic](#)

[Digital Contact Tracing Tools for COVID-19](#)

[Protocol to Investigate non-seasonal influenza and other emerging acute respiratory diseases, Annex 4: Contact tracing and monitoring procedures](#)

[Introduction to Public Health Surveillance](#)

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

[Framework for a Public Health Emergency Operations Centre](#)

[World Health Organization Surveillance Technical Guidance](#)

(Note: includes a template for epi line listings)

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KEY OBJECTIVE #2 (CONTINUED)

Understand and contain the real-time spread of COVID-19 in the community through surveillance, testing, contact tracing, and case quarantine and isolation

Resources (continued)

[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)

[World Health Organization Global COVID-19 Clinical Characterization Case Record Form and new data platform for anonymized COVID-19 clinical data](#)

[Fever Screening](#)

[Continuity of Government – 2020](#)

[Contact Investigation \(Airport\) Reporting a PUI or Confirmed Case](#)

[A Coordinated, National Approach to Scaling Public Health Capacity for Contact Tracing and Disease Investigation](#)

[Making Contact: A Training for COVID-19 Contact Tracers](#)

[Public Health Recommendations for Community-Related Exposure](#)

[US CDC COVID-19 Contact Tracing Training Guidance and Resources](#)

[Example Framework: Community Tracing Collaborative](#)

[Example: Contact Tracing Script](#)

[COVID-19 Community Tracing Collaborative Media and Outreach Approach](#)

[A National COVID-19 Surveillance System: Achieving Containment](#)

[COVID Act Now](#)

[COVID-19 Tracker](#)

[Thresholds States Must Meet To Control Coronavirus Spread and Safely Reopen](#)

[Evaluating and Testing Persons for Coronavirus Disease 2019 \(COVID-19\)](#)

[ICD-10-CM Official Coding and Reporting Guidelines](#)

[Guidance-Proposed Use off Point-of-Care Testing Platforms for SARS-CoV-2](#)

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KEY OBJECTIVE #2 (CONTINUED)

Understand and contain the real-time spread of COVID-19 in the community through surveillance, testing, contact tracing, and case quarantine and isolation

Resources (continued)

[COVID-19 Serology Surveillance Strategy](#)

[Interim Guidelines for Collecting, Handling, and Testing Clinical Specimens from Persons for Coronavirus Disease 2019 \(COVID-19\)](#)

[Interim Coronavirus Disease 2019 \(COVID-19\) Guidance for Hotels Providing Isolation and Quarantine Housing](#)

[Planning Guide for Local Governments Setting up Assessment and Recovery Locations for COVID-19](#)

[Strategies for the surveillance of COVID-19](#)

[Optimize PPE Supply](#)

[Interim Guidance for Laboratories](#)



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 should follow national and state guidance, in addition to considering local risk factors. In general, distancing practices during the early phases of an outbreak should be calibrated to be more aggressive than what observable local conditions might intuitively suggest. Once transmission rates within the community have decreased and the burden on the healthcare system has stabilized or declined, it will become possible to consider incrementally relaxing the range of distancing measures put in place. To avoid increases in community transmission following the lifting of social distancing measures, the “re-opening” of communities must be done in a phased manner with communities achieving specific sets of criteria before moving to the next phase. See below for definitions for the phases of incremental lifting of social distancing measures as well as criteria that should be met before progressing to the next phase of re-opening.

PRIORITY ACTIONS

- **Clearly outline local social distancing guidelines to the community, implement, and maintain them**
- **Establish criteria for essential and non-essential activities**
- **Assess and mitigate secondary impact of social distancing measures**
- **Develop plans for gradually relaxing social distancing efforts when criteria are met [see metrics above page 11-17]**

Operational Requirements

1. Does the community have defined thresholds for when to impose or lift measures for social distancing, including stay-at-home orders, non-essential business closures, and curfews? (Resources available [here](#) and [here](#))

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KEY OBJECTIVE #3 (CONTINUED)*Slow and reduce transmission***Operational Requirements (continued)**

-
2. Has community leadership issued guidance on self-isolation and quarantine, including how, when, and where to seek help? (Resource available [here](#))
 - a. Have standards for quarantine and isolation release been established and communicated?
 3. Have small businesses and corporations been engaged as partners in the response effort? (Resource available [here](#))
 - a. Have concerns about providing paid sick leave and/or work-from-home policies to discourage disease spread been addressed?
 - b. Has messaging with businesses been coordinated in the area regarding measures to slow spread in the community?
 - c. Is there a plan to exclude employees with high-risk exposures from work or mitigate transmission potential if allowed to return to duty?
 4. Has school leadership (public and private) been engaged on the following: (Resource available [here](#))
 - 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)?
-

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KEY OBJECTIVE #3 (CONTINUED)*Slow and reduce transmission***Operational Requirements (continued)**

-
5. Is there a plan to incentivize interventions that can slow community spread of disease?
 - a. Is there a process in place for addressing noncompliance (e.g., fines, criminal charges, etc.)?

 6. Does the EOC have a list of all upcoming major conferences, sporting events, concerts, rallies, or other events where large numbers of people may gather? (Resource available [here](#))
 - a. Has the 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)?

 7. Have health officials conducted a risk assessment for these events?

 8. Have community leaders encouraged the public to adhere to best practices to reduce transmission including: (Resource available [here](#))
 - a. Proper hand washing?
 - b. Avoiding close contact?
 - c. Staying home if sick?
 - d. Covering coughs and sneezes?
 - e. Wearing face coverings in public?
 - f. Cleaning and disinfecting?

 9. Once community transmission begins to sustainably decrease, is there a plan for re-opening and reintegrating the community following the relaxation of stay-at-home orders? Does the plan consider the criteria and phasing approach recommended in this guide? (Resource available [here](#))
-

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KEY OBJECTIVE #3 (CONTINUED)*Slow and reduce transmission***Operational Requirements (continued)**

10. Have the steps to manage future community transmission events been identified? (Resource available [here](#))
 - a. What resources are available for expanding health care and/or fortifying the health care system?
 - b. What sort of plans and procedures can be put in place to prevent diseases from spreading in the community?
 - c. Has the community convened an accounting of lessons learned, pulling in the various sectors that were involved or should have been involved? This could include public and private entities.

Additional Considerations

11. Are key community, civil society, business, and religious leaders regularly engaged to promote active cooperation and incentivize compliance with social distancing measures?
12. If a state of emergency has been declared, does the community have plans in place to enforce curfews, quarantines, goods rationing, and other measures while protecting the well-being of the public to the greatest extent possible?
 - a. Is there a specific mechanism for engaging public safety sector to assist, incentivize or enforce social distancing if necessary?
13. Does the community have plans in place to ensure essential services continue in the event of a large number of absences? (Resource available [here](#))
 - a. Have utility providers, transportation managers, waste management, and other critical infrastructure been engaged?
 - b. Have plans been put in place to ensure that other critical infrastructure continues to operate?

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KEY OBJECTIVE #3 (CONTINUED)*Slow and reduce transmission***Resources**

[Non-Pharmaceutical Interventions \(NPIs\):](#)

[Actions to Limit the Spread of the Pandemic in Your Municipality \(PAHO\)](#)

[National coronavirus response: A road map to re-opening, American Enterprise Institute](#)

[Social Distancing, Quarantine, and Isolation: Keep Your Distance to Slow the Spread](#)

[Interim Guidance for Businesses and Employers to Plan and Respond to Coronavirus Disease 2019 \(COVID-19\)](#)

- [Supplemental Resources from CDC / PAHO Presentation](#)

[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 Interim Guidance](#)

[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 \(As of 16 March 2020\)](#)

[Guidance on the Essential Critical Infrastructure Workforce, Department of Homeland Security](#)

[Preventing Getting Sick, CDC](#)



KEY OBJECTIVE #4

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 (examples included below). 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 and supply needs**
- **Address identified vulnerabilities (PPE, training, infection control practices, visitors, staffing levels, etc.)**
- **Establish guidance to minimize exposure of high-risk groups (such as limiting outside visit to high-risk facilities)**
- **Focus on the particular needs of marginalized populations, including the homeless and undocumented migrants**

Operational Requirements

1. Has a comprehensive list been compiled of high-risk populations and sites where they congregate? Including:
 - a. Homeless populations? (Resources [here](#) and [here](#))
 - b. Long-term care facilities?
 - c. Other elder homes and communities? (Resource [here](#))
 - d. Home-care resources?
 - e. Prisons? (Resource [here](#))

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KEY OBJECTIVE #4 (CONTINUED)*Focus protection on high-risk groups***Operational Requirements (continued)**

- f. Shelters?
 - g. Places of worship? (Resource [here](#))
 - h. Undocumented populations? (Resources [here](#) and [here](#))
 - i. Other high-density housing where high-risk populations may reside?
-
2. Have those facilities' infection prevention and hygiene practices been assessed and verified?
-
3. Do these facilities currently have the capacity and appropriate protocol for timely reporting infectious diseases?
-
4. Have high-risk facilities received guidance and site-visits to ensure compliance with policies for infection prevention, to include sufficient access to PPE?
 - a. Have regulatory authorities been involved in the assessments of these facilities?
-
5. Has visitor access been restricted to facilities with high-risk groups?
-
6. Are there additional strategies to protect the safety and well-being of high-risk and underserved populations?
-

Additional Considerations

-
7. Have community and health leaders been in contact with regulatory authorities for these facilities?
-
8. Are high-risk populations able to access support while self-quarantined?
-
9. In vulnerable facilities where confirmed cases were identified have procedures been developed for disinfecting and have standards been established for re-opening these facilities?

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KEY OBJECTIVE #4 (CONTINUED)*Focus protection on high-risk groups***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](#)

[CDC / King County Guidance for Community Mitigation \(includes information on nursing and long-term care facilities\)](#)

[Built for Zero: Community Solutions – Homeless Populations](#)

[Reproductive Health in Crisis Situations](#)

[Q&A on COVID-19, HIV and antiretrovirals \(WHO\)](#)

[Quick Reference for the Minimum Initial Service Package \(MISP\) for Sexual and Reproductive Health \(SRH\)](#)

[Strategic Considerations for Mitigating the Impact of COVID-19 on Key Population-Focused HIV Programs](#)

[Rights in the time of COVID-19 — Lessons from HIV for an effective, community-led response](#)

[Preparedness, prevention and control of COVID-19 in prisons and other places of detention \(2020\)](#)

[COVID-19 HIV Prevention, Treatment, Care and Support for People who Use Drugs and are in Prisons](#)

[Prisons and custodial settings are part of a comprehensive response to COVID-19](#)

[Handbook for public health capacity-building at ground crossings and cross-border collaboration](#)

[Coronavirus disease \(COVID-19\) technical guidance: Humanitarian operations, camps and other fragile settings](#)

[Management of ill travelers at Points of Entry \(international airports, seaports, and ground crossings\) in the context of COVID-19](#)

[The Lives and Livelihoods of Many in the LGBTQ Community are at Risk Amidst COVID-19 Crisis](#)

[How to use WHO risk assessment and mitigation checklist for Mass Gatherings in the context of COVID-19](#)

[Practical considerations and recommendations for religious leaders and faith-based communities in the context of COVID-19](#)

[Mental health and psychosocial considerations during the COVID-19 outbreak](#)



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. Experiences from China, Italy, New York City, and elsewhere have demonstrated that COVID-19 cases can overwhelm health facilities and crowd out other critical medical needs. Identifying creative means of surging overall medical capacity as well as 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**
- **Identify alternate PPE purchasing and manufacturing sources**
- **Initiate plans for surge expansion of critical treatment capacity**
- **Work with health officials to establish clear criteria to prioritize patients for care and establish referral systems for severe cases**
- **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**
- **Initiate plans to screen employees daily for signs and symptoms of illness**
- **Establish daily operational communication to discuss current case volume (suspected and confirmed), assess hospital census, and staffing needs**

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KEY OBJECTIVE #5 (CONTINUED)

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

Operational Requirements

1. Are healthcare facilities in the community able to provide care to all those who need it? (Resource available [here](#))
 - a. Is there a process in place to continually assess the level of demand on hospitals and understand the risk of those facilities becoming overwhelmed? Does this process feed into a state or federal plan to access and allocate PPE to the community? Are there alternate, quality-controlled, procurement or manufacturing options available (see resources below)? (Resources available [here](#), [here](#), and [here](#))
 - b. Do local healthcare facilities have a current emergency operations plan, and has it been shared with the EOC?
 - c. Do healthcare and EMS providers have sufficient PPE on hand to meet immediate needs? Projected needs?
 - d. Are telehealth capabilities available and supported by internet connections?
2. Following laboratory-confirmation of SARS-CoV-2 (COVID-19) in patients or employees, has an exposure and contact-tracing review been performed? Have those exposed been notified and have employees with high-risk exposures been considered for exclusion from work for 14 days? (Resource available [here](#))
 - a. Are priority testing capabilities available for healthcare workers?
3. 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? (Resource available [here](#))
4. Have facilities rescheduled and reprioritized non-emergency care?
5. Have treatment centers established separate triage lines for patients with influenza-like illness and/or upper respiratory infection?

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KEY OBJECTIVE #5 (CONTINUED)

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

Operational Requirements (continued)

6. Are specific plans in place to expand hospital capacity to:
 - a. Expand critical care/ICU capacity/extracorporeal membrane oxygenation, 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. Utilize the electronic medical record system for proactive infection control measures such as triggers for isolation precautions based off screening questions or tests being performed?
 - f. Cohort inpatient units for suspected or confirmed COVID-19 patients?
 - g. Govern crisis standards of care plans focused on the decisions that will govern scarce resource allocation?
 - h. Surge healthcare workforce, including in the event that medical staff are infected?
 - i. Develop processes for emergency credentialing of providers (doctors and nurses)?
 - j. Provide rapid training to bolster medical surge capacity?
 - k. Sustain corpse management, avoid morgue overflow, expedite issuance of death certificates, and meet resource requirements, including medical examiner capacity?
 - l. Safely manage waste?
 - m. Provide wellness and mental health support in times of crisis?
 - n. Provide family support resources to healthcare workers to avoid staff distraction?
-

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KEY OBJECTIVE #5 (CONTINUED)

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

Operational Requirements (continued)

7. Are facilities continually reassessing:
 - a. Occupancy rates?
 - b. PPE supply and predicted usage rates?
 - c. Critical care capacity?
 - d. Ventilator and oxygen capacity?
 - e. Thresholds for triggering/expanding crisis standards of care plans?

Additional Considerations

8. Do local triage and infection prevention/control protocols reflect the risk from COVID-19?
9. Have response protocols been established and implemented for suspect cases and persons under investigation? (Resource available [here](#))
 - a. Do response protocols include steps toward release from isolation or quarantine?
10. Are environmental controls in place, such as negative pressure rooms, access-controlled entry points, and sterile processing?
11. Have hospitals established relationships with state/local public health labs, commercial labs, and academic reference labs to establish testing protocols?
12. Have hospitals established relationships with funeral homes, crematoria, etc., to manage an anticipated surge in deaths?

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KEY OBJECTIVE #5 (CONTINUED)

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

Additional Considerations (continued)

13. Have facilities put into place measures for critical supplies including:
 - a. Arranging for alternate suppliers?
 - b. Expanding inventories, while avoiding excessive hoarding?
 - c. Centralized inventories to mitigate unnecessary usage?
 - d. Using the conserve, reuse, recycle approach to extend use and re-use of PPE? (Resource available [here](#))
 - e. Expanded fit-testing capabilities for N95 respirators?
 - f. Engaging the private sector to assist in supply and logistics chain strengthening?
14. 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)?
15. Have professionals been cross-trained for out-of-scope-practices (i.e. pharmacists, nurse practitioners, physicians who specialize in less relevant areas)?
16. Are there plans to re-purpose non-critical staff to assist with operational tasks?
17. Have healthcare facilities developed procedures for disinfecting and re-opening the portions of their facilities dedicated to the triaging and care of suspect and confirmed COVID-19 patients?

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KEY OBJECTIVE #5 (CONTINUED)

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

Resources

[Alliance PPE Supplier Spreadsheet](#)

[USFDA surgical N95 whitelist](#)

[USFDA KN95 whitelist](#)

[Interim Guidance for Emergency Medical Services \(EMS\) Systems and 911 Public Safety Answering Points \(PSAPs\) for COVID-19 in the United States](#)

[Interim Infection Prevention and Control Recommendations for Patients with Confirmed Coronavirus Disease 2019 \(COVID-19\) or Persons Under Investigation for COVID-19 in Healthcare Settings](#)

[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](#)



6

KEY OBJECTIVE #6

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 ways that are easily accessible by all.

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. Is community leadership regularly and effectively communicating with various sectors of government and non-governmental organizations (policy, education, etc.) to discuss ongoing activities? (Resource available [here](#))
2. Is community leadership communicating with the people who live and work in the community on a routine basis?
 - a. Have the most effective communication methods been identified?
 - b. Can critical communications reach everyone?
 - c. Is there an emergency alert systems in place and tested?
 - d. Is there an effective way to dispel disinformation or misinformation?

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KEY OBJECTIVE #6 (CONTINUED)*Expand risk communication and community engagement***Operational Requirements (continued)**

3. Have trusted spokespeople been identified and assigned to relay important, fact-based messages to the community? (Resource available [here](#))
4. Have continuity of communications plans been reviewed for the EOC and first responders in the event that mobile communications are disrupted/crash?
5. Has a set of critical information requirements for leaders and decision makers been established? Does it help feed public information requirements easily accessible online?

Additional Considerations

6. Are 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 the community?
8. Is there 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 existing emergency coordination and emergency public information structures been activated?

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KEY OBJECTIVE #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](#)

[USA CDC – Qualities of an Effective Spokesperson](#)



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.

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. Is there a strategy in place to ensure medications are available to those that need them? (Resource available [here](#))
2. In the event of a stay-at-home social distancing order, is the community able to provide the necessary resources (e.g., food, medical care, other necessities) to the affected populations? (Resource available [here](#))

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KEY OBJECTIVE #7 (CONTINUED)

Mitigate economic and social consequences of the COVID-19 pandemic

Additional Considerations

3. Are there mechanisms in place to support neighborhood food distribution and door-to-door service provision?
 - a. Are community maps accurate and updated?
 - b. Are there designated sub-sections for door-to-door distribution across the community?
4. Is there a proactive plan for economic recovery following disruptions due to business closures and cancellation/postponements of events?
5. Are there plans in place to mitigate the challenges of social distancing, quarantine, and/or isolation on at-risk populations? (Resource available [here](#))
6. Are there plans or procedures to request assistance from other jurisdictions or levels of government to provision essential services if the normal departments become unable to?
7. Are mutual aid agreements in force? (Resource available [here](#))
8. Does the 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](#)

[USA CDC – PUBLIC HEALTH MUTUAL AID AGREEMENTS – A MENU OF SUGGESTED PROVISIONS](#)

[European CDC – Considerations relating to social distancing measures in response to COVID-19](#)