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# PANDEMIC SPECIAL ORDER

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## I. PURPOSE

This special order provides guidance for implementation of contingency plans, organization of resources, and establishment of departmental protocols that can be used to respond to and help insure continuity of government when the community is affected by a pandemic influenza or similar health emergency.

## II. POLICY

Health care professionals have declared pandemic influenza outbreak and it is highly likely it will affect our community. Should the current Coronavirus disease 2019 (COVID-19) or a mutation thereof spread efficiently between humans, a worldwide pandemic could take place within as little as three weeks. The inevitable shortages of employees and resources make it essential that the department establish plans and take measures in advance to ensure that crucial services are not unreasonably disrupted and that employees are provided with the means to prevent or mitigate the spread of infection.

## III. DEFINITIONS

**Avian Influenza:** Also known as the bird flu, a strain of influenza that naturally occurs among wild birds. It is deadly to domestic poultry. Highly pathogenic avian influenza such as H5N1 has crossed the species barrier to infect humans, but person-to-person spread has thus far been rare, if it has occurred at all, according to some authorities. The potential for it to mutate into a form that is efficiently transmitted between humans who have no immunity has caused it to be closely monitored. There is no human immunity and no vaccine is yet generally available for public consumption.

**Essential Positions and Assignments:** Employees who possess special knowledge, skills, or abilities and whose extended absence would create serious disruptions to a critical government function.

**Coronavirus disease 2019 (COVID-19):** a respiratory illness that can spread from person to person. The virus that causes COVID-19 is a novel coronavirus that was first identified during an investigation into an outbreak in Wuhan, China.

**High-Pathogenicity Avian Influenza (HPAI):** Any form of avian influenza—H5N1 being only one potential form—that demonstrates high efficiency in human-to-human transmission.

**High-Pathogenicity Swine Flu:** Any form of Swine influenza—H1N1 being only one potential form—that demonstrates high efficiency in human-to-human transmission.

**Incubation Period:** Interval between infection and onset of symptoms.

**Influenza:** Referred to as the flu, an acute infectious viral disease marked by inflammation of the respiratory tract, fever, muscular pain, and bowel irritation.

**Isolation:** Separation of infected persons from those who are not infected.

**N95 Respirator:** a respiratory protective device designed to achieve a very close facial fit and very efficient filtration of airborne particles. Note that the edges of the respirator are designed to form a seal around the nose and mouth. Surgical N95 Respirators are commonly used in healthcare settings and are a subset of N95 Filtering Facepiece Respirators (FFRs), often referred to as N95s. They are tested for fluid resistance, filtration efficiency (particulate filtration efficiency and bacterial filtration efficiency), flammability and biocompatibility. They should not be shared or reused.

**NOTICE:** The Centers for Disease Control and Prevention (CDC) does not recommend that the general public wear N95 respirators to protect themselves from respiratory diseases, including coronavirus (COVID-19).

**Novel H1N1 flu or swine flu:** A respiratory infection caused by a specific influenza A virus. The outbreak of what is popularly called swine flu involves a new H1N1 type A influenza strain that's a genetic combination of swine, avian and human influenza viruses. It can spread from human to human.

**Pandemic:** an outbreak of a disease that occurs over a wide geographic area and affects an exceptionally high proportion of the population : a pandemic outbreak of a disease

**Pandemic Influenza:** Occurs when a new influenza virus emerges for which there is little or no immunity among humans, begins to cause serious illness, and then spreads easily from person to person worldwide.

**Quarantine:** Legally enforceable order that restricts movement into or out of the area of quarantine of one person, a large group of people, or community; designed to reduce the likelihood of transmission of contagious disease among persons in and to persons outside the affected area. When applied to all inhabitants of an area (typically a community or neighborhood), the intervention is referred to as a cordon sanitaire (sanitary barrier).

**Seasonal (or Common) Flu:** A respiratory illness that can be transmitted from person to person. Most people have some immunity, and a vaccine is available.

**Social Distancing:** Measures taken to reduce contacts between individuals in order to lower the chance of spreading the disease.

**Strategic National Stockpile:** A national repository of antibiotics, chemical antidotes, antitoxins, life-support medications, IV administration equipment, airway maintenance supplies, and medical and surgical items designed to supplement and resupply state and local public health agencies in the event of a national emergency.

**Voluntary Quarantine:** A request that persons remain at home, ban visitors, wears a mask when in the same room as other members of the household, and sleep in a separate room. These protocols were developed to decrease the risk of transmitting the SARS corona virus during its outbreak in Toronto

and would likely be the primary means of social distancing during an influenza pandemic.

**Volunteer:** Someone who performs a service for the a department without promise, expectation, or receipt of compensation for services rendered.

Volunteers may include unpaid chaplains, unpaid reserve officers, Emergency Services Unit (ESU), unpaid interns, unpaid persons providing administrative support, and unpaid youths involved in a Law Enforcement Explorer post, among others.

## IV. PROCEDURES

### A. Organization

1. **Pandemic Coordination Committee(PCC):** The City Manager of Loveland shall appoint an individual or individuals, as appropriate, to lead and coordinate the City Employees, Loveland Police Department, and the Loveland-Symmes Fire Department in preparation for and response to a pandemic by means of a pandemic coordination committee (hereafter the committee). The committee shall include departmental and interdepartmental personnel who bear directly on plan development and who can make preliminary decisions in the following issue areas:
  - a) Personnel (including volunteers)
  - b) Training
  - c) Equipment and supplies
  - d) Human resources
  - e) Legal
  - f) Public Information Officer
    1. Media relations
    2. Community relations
  - g) Communications
    1. North East Communication Center
    2. Interoffice communications
  - h) Finance
  - i) Public Safety
    1. Loveland Police Department
    2. Loveland-Symmes Fire Dept.
  - j) Public Works Department
2. **Pandemic Coordination Committee(PCC):** The committee shall also identify public and private entities that will have bearing on overall community pandemic response planning and that will interact closely with this department during a pandemic. The committee shall integrate key agencies in the planning process in a manner that will explore problem scenarios and solutions, mutual expectations, and support opportunities. Plans should be drawn up and coordinated in conjunction with the necessary response partners to avoid confusion, misunderstanding of roles and expectations. At a minimum, these response partners include the following:
  - a) State and local public health services
  - b) State occupational safety and health administration (OSHA)
  - c) State and local emergency management agencies
  - d) Medical examiner or coroner
  - e) Urgent care facilities/Clinics
  - f) Volunteer organizations and disaster response teams
  - g) Vendors and service providers for the police department
  - h) State and regional law enforcement agencies
  - i) State department of agriculture

- j) Animal control
- k) Private business sector leaders
- l) The Red Cross
- m) The National Guard

3. The committee will ensure monitoring of updates from public health authorities on changes in the nature or spread of influenza and relay important developments to LEAD Team members and the City Manager.
4. The committee will maintain a detailed pandemic influenza preparation and response plan that includes but need not be limited to issues identified herein. Considering that there will be many unexpected developments during a pandemic, the plan emphasizes flexibility and the need to improvise as appropriate.

## B- Potential New Service Demands

1. The onset of pandemic influenza will inevitably result in new types of requests for service, even as it is experiencing reduced staffing levels and continues to provide routine services. In anticipation of these challenges, the committee shall coordinate with other critical agencies and stakeholders to identify needs, expectations, potential levels of service demands, reasonable alternatives to the use of personnel, and reciprocal means of assistance between public and private sectors, among other factors. Additional public safety responsibilities during a pandemic may include the following:
  - a) Guarding vaccine, establish traffic patterns, and prevent theft
  - b) Providing protective services to Points Of Distribution(PODs), temporary treatment shelters, and triage centers during patient surges
  - c) Assisting with the management of the PODs when they are activated by the health department.
  - e) Providing additional preventive patrol or other measures to targets of opportunity resulting from the emergency (such as pharmacies and supermarkets)
  - f) Providing added security to critical infrastructure components (such as utilities and communication center)
  - g) Providing emergency assistance to Senior-Med/Pedi-Med members and special population groups, (such as the unregistered elderly, the hearing or visually impaired, and non-ambulatory populations)
  - h) Enforcing closure orders, curfews, travel limitations, and restrictions on gatherings
  - i) Enforcing quarantine orders, mandatory isolation orders, and other involuntary restrictions or requirements (such as mandatory vaccination or hospitalization of the ill).
  - j) Arranging for secure disposition of dead bodies during surges in deaths in cooperation with the coroner, funeral homes, and crematoriums
  - k) Policing civil disturbances and disorders related to forced mandatory vaccinations, shortage of therapeutics or medical care, and similar problems
  - l) Arranging for incarceration facilities should mass arrest be necessary or infected persons need isolation during incarceration
  - m) Assisting health care providers and other agencies with security for delivery of essential food and medicine to quarantined areas
  - n) Developing alternative protocols for first responders, investigation of unattended deaths,

## C. General Alternate Staffing Strategies

1. Department supervisors shall consider a number of alternative staffing strategies to help prevent the spread of influenza among employees and to better meet service demands with reduced staff. The following should be considered for systematic and progressive implementation coincident with the progressive seriousness of a pandemic and loss of staff:
  - a) **Telecommuting:** Some employees may be able to perform essential work duties from remote locations, particularly their homes, using telephones and computers linked to the department and the Internet.
  - b) **Flexible / Power shifts:** Some employees presently working only day shifts may be able to perform essential duties during off hours, such as from 16:00 until midnight, or 14:00 – 22:00 thereby reducing the number of persons on duty at the same time.
  - c) **Flex time:** Employees may be given greater latitude in when to report to work or when split shifts may be possible.
  - d) **Paid Time Off:** Liberal leave may be provided to personnel who must care for sick family members who are unable to care for themselves or to select employees when the department is experiencing a high incidence of sick employees and an employee can be excused without unreasonable harm to department operations.
  - e) **Overtime:** Overtime may be authorized in cases where essential employees are unavailable to work due to illness

and other employees may effectively fill in to perform their duties with overtime. Personnel who have recovered from illness and are considered immune may also be used for extended work hours.

- f) **Less than full time:** Select employees may be allowed or directed to work reduced hours.
- g) **Reassignment:** Certain civilian or sworn employees may be reassigned to alternate duties (such as assigning qualified ESU members as call takers in the communications to assist with the call surge associated with the pandemic)
- h) **Leave:** The City may cancel vacation leave and other forms of leave with or without pay.
- i) **Cross-training of personnel:** Personnel in the same unit or in similar jobs may be cross-trained to perform the duties of other employees. Training must begin before the onset of a pandemic.
- j) Several alternatives exist that may be used to supplement departmental employees while they are on sick leave during a pandemic. Specific Department strategies are included in the appendix.
- k) **Volunteers:** Community volunteers may be used to staff select positions to include clerical and telephone answering duties. Some of these duties may be conducted from a volunteer's place of residence. Volunteers should be recruited and trained well in advance of their assignment. Plans are also required in advance for the anticipated use of spontaneous volunteers or affiliated disaster service volunteers.
- l) **Auxiliary personnel:** With advance orientation and training, auxiliary personnel may be used to backfill certain full-time civilian positions.
- m) **Private enterprise:** The private sector may be engaged in contracts to perform some specialized functions that cannot be readily addressed by existing employees. These may include such duties as equipment maintenance and logistical support, maintenance or expansion of computer capabilities to meet added demands, or related services needed and available through private contractors.

## E. Public Safety Response Variances

1. During the increased call volume or significantly reduced staffing levels produced during a pandemic, the city shall consider implementation of alternatives to traditional responses to calls for service. These include but are not limited to the following:
  - a) **Prioritization of calls for service:** The department may consider modifications to its call prioritization system that would allow for significantly deferred response, or the use of alternative responses to certain types of calls for service (such as suspension of all responses to nuisance offenses, minor thefts, or burglaries).
  - b) **Differential response to calls for service:** The city may consider expansion of its personnel in the North East Communications Center and the surge of calls taken as a result of the pandemic. It may consider the use of sworn and non-sworn employees and trained civilian volunteers as call takers to answer residents' questions and help guide them to proper agencies for help, or to explain the variances in response that could be different than the expectations of service during normal operation
  - c) **Response Variances:** Variance from normal response policies will be implemented based on the local impact of the pandemic, and the pandemic level established for the City and surrounding areas by the Public Health Department. The City manager along with the Chief of Departments will determine when to implement the response variances and at what level.

# Appendix

## Loveland Police Department

- a. **Specific Staffing Strategies:** The Police Division must be able to staff shift operations 24 hours a day, 7 days a week without exception to fulfill our duty to the public. We must balance the needs of the public with the needs of the employees to be successful in meeting service demands. Staffing strategies that are outside the normal 4 day, 10 hour shift schedule are necessary. These alternate staffing strategies are necessary to not only ensure adequate personnel are on duty, but also to help prevent or minimize the spread of influenza. These strategies must be flexible and fluid to meet the changes in staffing due to potential loss of staff.
- b. **Essential/Non-essential Employees:** All sworn employees are deemed essential employees. Non-sworn essential employees are the Mayor's Court Clerk and the Records Administrator.
- c. **Shift Scheduling:** An alternate staffing strategy for shift scheduling is a 12 hour shift in which officers work 3 shifts on and 3 shifts off. Minimum staffing is 2 officers per shift. Shifts will generally be from 0600 - 1800 and 1800 - 0600. Flexibility in starting and ending times is possible as long as no fewer than 2 uniform officers are on duty at all times.
- d. **Overtime:** The above shift scheduling will necessitate the use of overtime. All sworn employees are deemed essential employees and will be eligible for overtime compensation as needed. Overtime is authorized in cases where essential employees are unavailable to work due to illness and other employees must fill in to maintain minimum staffing levels.
- e. **Administrative Staff – Sworn:** Administrative sworn staff (Police Chief, Deputy Chief, and Detective) will be available for shift staffing as needed. When absentee rate is high enough, the Detective will be reassigned to a 12 hour shift on patrol. The School Resource Officer may also be called upon to staff the patrol assignment on an emergency basis.
- f. **Administrative Staff – Non-Sworn:** On-sworn administrative staff (part time clerk, Records Administrator, Mayor's Court Clerk) may work from home as the need arises to mitigate the spread of influenza in the work place. Each of these employees will be given access to their computer workstations from home via a remote desktop connection. It is also possible to transfer incoming calls for the Police Division to the staff working from home. This will reduce the workload on NECC staff during normal business hours. These employees may also flex their working hours or reduce working hours on a preapproved basis to balance work from home and work at the Safety Center.
- g. **Part time officers:** Part time officers will be assigned to shifts as needed to provide overlap or gap coverage in the schedule. Part time officers are an important staffing resource for the Police Division.
- h. **Leave:** Vacation and compensatory leave time will be cancelled as the absenteeism rate increases or as otherwise directed by the Police Chief to ensure minimum staffing levels.
- i. **Volunteers:** Loveland Citizen Police Academy Alumni (LCPAA) may be used to answer phones or provide other clerical duties as needed. They may be used to deliver paperwork to staff that are working from home. LCPAA volunteers may also be used to assist LPD or LSFD in contacting seniors or other at risk individuals that may need special services.
- j. **Police Explorers:** LPD has a small cadre of police explorers who may be called upon to perform clerical duties as needed. These explorers have already received training in the use of LPD communications as well as other procedural areas and are able to assist LPD officers.
- k. **Mutual Aid:** Mutual aid agreements exist among all neighboring jurisdictions and we will ask for or provide assistance as needed or available. However, internal staffing plans will be made with the assumption that neighboring agencies are experiencing similar staffing issues and will not be able to provide any additional resources. \

## Police Division Pandemic Influenza Operating Protocol Variances

Protocols	Pandemic Severity Index Category 1	Pandemic Severity Index Category 2-3	Pandemic Severity Index Category 4-5
<b>Response to Emergency Calls for Service</b>	Respond to emergency calls under current protocol.	Respond to emergency calls under current protocol. Request mutual aid as needed depending on staffing.	Respond to emergency calls. Prioritize emergency calls as needed.
<b>Response to Service Calls – Non-Emergency Calls including Auto Accidents without injury</b>	Respond as available for routine calls.	Respond only if necessary for an officer to make personal contact with complainant. Reports can be taken over the phone. Non-injury auto accidents reported at Safety Center.	Emergency response only. Non-emergency calls handled by phone.
<b>Response to EMS calls with LSFD</b>	Respond to EMS calls when requested by LSFD or if dispatched to known problem areas.	Respond to known problem areas or when requested by LSFD.	Respond to known problem areas or when requested by LSFD.
<b>Office Operations</b>	All personnel report as normal. Limited personal contact. Use walk up window only.	Essential personnel only. No public access to building. Must use outside phone.	Building restricted to emergency personnel only. Establish secure VPN connection for computer access off site. Telephones forwarded off site.
<b>Reporting</b>	Officers respond and take reports as needed.	Reports taken by telephone except for emergencies (telephone crime reporting).	Reports taken by telephone except for emergencies.
<b>Staffing</b>	Normal staffing of officers and shift assignments for patrol. All non-sick leave cancelled. Supplemental personnel (LCPAA, retired, part-time).	12 hour shifts as needed due to reduced staffing. Patrol function only. All non-sick leave cancelled. Supplemental personnel.	12 hours shifts as needed as well as necessary overtime to staff patrol operations. All non-sick leave cancelled. Supplemental personnel as needed.
<b>Arrest Procedures</b>	Summons or citation in lieu of physical arrest. No prisoners at Safety Center for processing.	Physical arrest as last resort. Transport directly to jail. No prisoners at Safety Center for processing.	Physical arrest as last resort. Transport directly to jail. No prisoners at Safety Center for processing.
<b>Mayor's Court</b>	Continue normal operations. Mayor's Court window at Safety Center open.	Reduce or cancel sessions of Mayor's Court. Mayor's Court window at Safety Center not open to public. Secure lock box on exterior of building to accept pay outs.	Cancel Mayor's Court – continue cases as needed.

## Loveland-Symmes Fire Department

- a. **Specific Staffing Strategies:** The Fire Division must be able to maintain a minimum staff to safely cover shift operations 24 hours a day, 7 days a week without exception to fulfill our duty to the public. We must balance the needs of the public with the needs of the employees to be successful in meeting service demands. Staffing strategies that are outside the normal 24/48 schedule may be necessary to allow employees the flexibility to provide for the community and the needs of their family if impacted by the illness or the closing of schools and child care centers. the Fire Chief may implement alternate staffing strategies as necessary to not only ensure adequate personnel are on duty, but also to help prevent or minimize the spread of influenza. These strategies must be flexible and fluid to meet the changes in staffing due to potential loss of staff.
- b. **Essential/Non-essential Employees:** All full time employees are deemed essential employees.
- c. **Shift Scheduling:** An alternate staffing strategy for shift scheduling is a 12 hour shift to provide flexibility to the personnel who have child care, or family care issues impact an employee such that being away from home for 24 hours becomes impossible.
- d. **Overtime:** Overtime would need to be authorized by the Fire Chief in cases where essential employees are unavailable to work due to illness and other employees must fill in to maintain minimum staffing levels.
- e. **Administrative Staff** – administrative staff will be scheduled to work as determined by the Fire Chief. Duties and Tasks that could be done by telecommuting, or arrangements minimize contact with the public and shift personnel may be implemented
- f. **Part time Employees:** P/T Employees will be assigned to shifts as needed to provide coverage in the schedule
- g. **Leave:** Vacation and Paid Time Off may be cancelled as the absenteeism rate increases or as otherwise directed by the Fire Chief to ensure minimum staffing levels.
- h. **Volunteers:** Emergency Service Unit(ESU) may be used to assist to the level of their certifications and abilities. They may be used to complete or to shuttle paperwork to staff that are working from home. ESU volunteers may also be used to assist LPD or LSFD in contacting seniors or other at risk individuals that may need special services.

# What law enforcement personnel need to know about coronavirus disease 2019 (COVID-19)

**Coronavirus disease 2019 (COVID-19)** is a respiratory illness that can spread from person to person. The outbreak first started in China, but cases have been identified in a growing number of other areas, including the United States.

**Patients with COVID-19** have had mild to severe respiratory illness.

- Data suggests that symptoms may appear in as few as 2 days or as long as 14 days after exposure to the virus that causes COVID-19.
- Symptoms can include fever, cough, difficulty breathing, and shortness of breath.
- The virus causing COVID-19 is called SARS-CoV-2. It is thought to spread mainly from person-to-person via respiratory droplets among close contacts. Respiratory droplets are produced when an infected person coughs or sneezes and can land in the mouths or noses, or possibly be inhaled into the lungs, of people who are nearby.
  - Close contact increases your risk for COVID-19, including:
    - » Being within approximately 6 feet of an individual with COVID-19 for a prolonged period of time.
    - » Having direct contact with body fluids (such as blood, phlegm, and respiratory droplets) from an individual with COVID-19.

## To protect yourself from exposure

- **If possible, maintain a distance of at least 6 feet.**
- **Practice proper hand hygiene.**  
Wash your hands with soap and water for at least 20 seconds. If soap and water are not readily available and illicit drugs are NOT suspected to be present, use an alcohol-based hand sanitizer with at least 60% alcohol.
- Do not touch your face with unwashed hands.
- Have a trained Emergency Medical Service/Emergency Medical Technician (EMS/EMT) assess and transport anyone you think might have COVID-19 to a healthcare facility.
- Ensure only trained personnel wearing appropriate personal protective equipment (PPE) have contact with individuals who have or may have COVID-19.
- Learn your employer's plan for exposure control and participate in all-hands training on the use of PPE for respiratory protection, if available.

## Recommended Personal Protective Equipment (PPE)

Law enforcement who must make contact with individuals confirmed or suspected to have COVID-19 should follow CDC's Interim Guidance for EMS. <https://www.cdc.gov/coronavirus/2019-ncov/hcp/guidance-for-ems.html>.

Different styles of PPE may be necessary to perform operational duties. These alternative styles (i.e., coveralls) must provide protection that is at least as great as that provided by the minimum amount of PPE recommended.

The minimum PPE recommended is:

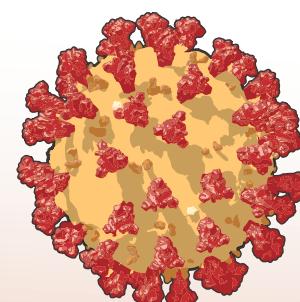
- A single pair of disposable examination gloves,
- Disposable isolation gown or single-use/disposable coveralls\*,
- Any NIOSH-approved particulate respirator (i.e., N-95 or higher-level respirator), and
- Eye protection (i.e., goggles or disposable face shield that fully covers the front and sides of the face).

\*If unable to wear a disposable gown or coveralls because it limits access to duty belt and gear, ensure duty belt and gear are disinfected after contact with individual.

## If close contact occurred during apprehension

- Clean and disinfect duty belt and gear prior to reuse using a household cleaning spray or wipe, according to the product label.
- Follow standard operating procedures for the containment and disposal of used PPE.
- Follow standard operating procedures for containing and laundering clothes. Avoid shaking the clothes.

For law enforcement personnel performing daily routine activities, the immediate health risk is considered low. Law enforcement leadership and personnel should follow CDC's Interim General Business Guidance. Search "Interim Guidance for Businesses" on [www.cdc.gov](http://www.cdc.gov).



## LSFD Pandemic Influenza Suggested EMS Operating Protocol Variances

The “Sample Pandemic Influenza EMS Dispatch Protocol” is for illustrative purposes only. It is one example of how resources may be reallocated within the system during an influenza pandemic utilizing the Pandemic Severity Index. EMS planners should consider other factors, including community mitigation strategies that will impact how resources will be used.

These factors may include:

1. Increased Demand for Services
2. Reduction of EMS / Dispatch Workforce
3. Healthcare Facility Bed Availability

Sample Protocols	Pandemic Severity Index Category 1	Pandemic Severity Index Category 2-3	Pandemic Severity Index Category 4-5
<b>Triage</b> (Occurs at NECC and On-Scene)	Determine whether to implement triage and treatment protocols that differentiate between non-infected and potentially infected patients based on CDC case definition.	Triage would focus on identifying and reserving immediate treatment for individuals who have a critical need for treatment and are likely to survive. The goal would be to allocate resources in order to maximize the number of lives saved.	Using screening algorithm to ensure only severe get response
<b>Treatment</b>	Ambulatory patients will be redirected to alternate care sites within or outside of the hospital.	Treatment protocols maybe modified to enable and encourage patients to receive care at home.  Consider provision of antiviral prophylaxis if effective, feasible, and quantities sufficient.	Certain lifesaving efforts may have to be discontinued.  Provision of antiviral prophylaxis if effective, feasible, and quantities sufficient.
<b>Equipment</b>	Prudent use of equipment Implementation of strict PPE/infection control protocols for patients meeting case definition established by CDC during the response phase of a 9-1-1 call.	Selective criteria in place for priority use.  Some scarce and valuable equipment, such as ventilators, may not be used without staff available who are trained to operate them.	Strict criteria in place for equipment use. Some scarce and valuable equipment, such as ventilators, may not be used without staff available who are trained to operate them.
<b>Transportation</b>	Non-urgent and ambulatory victims may have to walk or self-transport to the nearest facility or hospital.	Emergency medical services may transport victims to specific quarantine or isolation locations and other alternate care sites.	Only severe cases transported via ambulance
<b>Destination</b>	Alternate care sites will be used for triage and distribution of vaccines or other prophylactic measures, as well as for quarantine, minimum care, and hospice care.	Ambulatory and some non-ambulatory patients may be diverted to alternate care sites (including non-medical space, such as cafeterias within hospitals, or other non-medical facilities)	Emergency department access may be reserved for immediate-need patients.

## LSFD Pandemic Influenza EMS Dispatch Protocol

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These factors may include:

1. Increased Demand for Services
2. Reduction of EMS / Dispatch Workforce
3. Healthcare Facility Bed Availability

Dispatch Priority Level (should match vendor or call center based dispatch protocol / tiered algorithm)	Response (Standard Operating Mode)	Pandemic Severity Index Category 1	Pandemic Severity Index Category 2-3	Pandemic Severity Index Category 4-5
<b>Classification 1</b> Confirmed/Suspected Cardiac Arrest (Non Breather Unresponsive per 911 call)	Closest AED Unit; Closest 1 <sup>st</sup> Responder; Closest ALS Ambulance	Closest 1st Responder; Closest BLS ambulance if ALS unit not available	Closest AED Unit (HOT); Closest 1st Responder if available	Closest AED Unit if available (HOT)
<b>Classification 2</b> Life Threatening Emergency/Potentially Life Threatening/Confirmed Unstable Patient(s)	Closest 1st Responder; Closest ALS Ambulance	Closest 1st Responder; Closest ALS Ambulance if available; BLS ambulance if ALS unit not available	Closest 1st Responder; Closest Ambulance available (ALS or BLS)	Closest 1st Responder if available; Closest Ambulance available (ALS or BLS)
<b>Classification 3</b> Non-Critical/Currently Stable Patient(s) Requiring ALS Assessment	Closest ALS Ambulance	Closest Ambulance available (ALS or BLS)	Closest Ambulance available (ALS or BLS)	Refer to Alternate call center or suggest self transport
<b>Classification 4</b> BLS Assessment for unknown/possibly dangerous scenes	Closest 1st Responder (HOT); Closest BLS Ambulance	Closest 1st Responder Closest BLS Ambulance if available	Closest 1st Responder	Closest 1st Responder
<b>Classification 5</b> BLS Treatment	BLS Ambulance	BLS Ambulance	Alternate call center (such as Poison Control Center, Nurse advice line, health care call center, etc.)	Alternate call center (such as Poison Control Center, Nurse advice line, health care call center, etc.)
<b>Classification 6</b> Non Ambulance Care	Alternate call center (such as Poison Control Center, Nurse advice line, healthcare call center, etc.)	Alternate call center (such as Poison Control Center, Nurse advice line, health care call center, etc.)	Alternate call center (such as Poison Control Center, Nurse advice line, health care call center, etc.)	Alternate call center (such as Poison Control Center, Nurse advice line, health care call center, etc.)

# Healthcare Professional Preparedness Checklist

## For Transport and Arrival of Patients With Confirmed or Possible COVID-19



Front-line healthcare personnel in the United States should be prepared to evaluate patients for coronavirus disease 2019 (COVID-19). The following checklist highlights key steps for healthcare personnel in preparation for transport and arrival of patients with confirmed or possible COVID-19.

Stay up to date on the latest information about signs and symptoms, diagnostic testing, and case definitions for [coronavirus disease](#) 2019.

### Review your infection prevention and control policies and CDC [infection control recommendations for COVID-19](#) for:

- Assessment and triage of patients with acute respiratory symptoms
- Patient placement
- Implementation of Standard, Contact, and Airborne Precautions, including the use of eye protection
- Visitor management and exclusion
- Source control measures for patients (e.g., put facemask on suspect patients)
- Requirements for performing aerosol generating procedures
- Be alert for patients who meet the [persons under investigation \(PUI\)](#) definition
- Know how to report a potential COVID-19 case or exposure to facility infection control leads and public health officials.
- Know who, when, and how to seek evaluation by occupational health following an unprotected exposure (i.e., not wearing recommended PPE) to a suspected or confirmed [coronavirus disease](#) 2019 patient.
- Remain at home, and notify occupational health services, if you are ill.
- Know how to contact and receive information from your state or local public health agency.

## **Summary of Changes to the Guidance:**

**Updated March 10, 2020**

- Updated PPE recommendations for the care of patients with known or suspected COVID-19:
  - Based on local and regional situational analysis of PPE supplies, facemasks are an acceptable alternative when the supply chain of respirators cannot meet the demand. During this time, available respirators should be prioritized for procedures that are likely to generate respiratory aerosols, which would pose the highest exposure risk to HCP.
    - Facemasks protect the wearer from splashes and sprays.
    - Respirators, which filter inspired air, offer respiratory protection.
  - When the supply chain is restored, facilities with a respiratory protection program should return to use of respirators for patients with known or suspected COVID-19. Facilities that do not currently have a respiratory protection program, but care for patients infected with pathogens for which a respirator is recommended, should implement a respiratory protection program.
  - Eye protection, gown, and gloves continue to be recommended.
    - If there are shortages of gowns, they should be prioritized for aerosol-generating procedures, care activities where splashes and sprays are anticipated, and high-contact patient care activities that provide opportunities for transfer of pathogens to the hands and clothing of HCP.
- Included are considerations for designating entire units within the facility, with dedicated HCP, to care for known or suspected COVID-19 patients and options for extended use of respirators, facemasks, and eye protection on such units. Updated recommendations regarding need for an airborne infection isolation room (AIIR).
  - Patients with known or suspected COVID-19 should be cared for in a single-person room with the door closed. Airborne Infection Isolation Rooms (AIIRs) (See definition of AIIR in appendix) should be reserved for patients undergoing aerosol-generating procedures (See Aerosol-Generating Procedures Section)
- Updated information in the background is based on currently available information about COVID-19 and the current situation in the United States, which includes reports of cases of community transmission, infections identified in healthcare personnel (HCP), and shortages of facemasks, N95 filtering facepiece respirators (FFRs) (commonly known as N95 respirators), and gowns.
  - Increased emphasis on early identification and implementation of source control (i.e., putting a face mask on patients presenting with symptoms of respiratory infection).



## Coronavirus Disease 2019 (COVID-19)

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

This guidance applies to all first responders, including law enforcement, fire services, emergency medical services, and emergency management officials, who anticipate close contact with persons with confirmed or possible COVID-19 in the course of their work.

Updated March 10, 2020

## Summary of Key Changes for the EMS Guidance:

- Updated PPE recommendations for the care of patients with known or suspected COVID-19:
  - Facemasks are an acceptable alternative until the supply chain is restored. Respirators should be prioritized for procedures that are likely to generate respiratory aerosols, which would pose the highest exposure risk to HCP.
  - Eye protection, gown, and gloves continue to be recommended.
    - If there are shortages of gowns, they should be prioritized for aerosol-generating procedures, care activities where splashes and sprays are anticipated, and high-contact patient care activities that provide opportunities for transfer of pathogens to the hands and clothing of HCP.
  - When the supply chain is restored, fit-tested EMS clinicians should return to use of respirators for patients with known or suspected COVID-19.
- Updated guidance about recommended EPA-registered disinfectants to include reference to a list now posted on the EPA website.

## Background

Emergency medical services (EMS) play a vital role in responding to requests for assistance, triaging patients, and providing emergency medical treatment and transport for ill persons. However, unlike patient care in the controlled environment of a healthcare facility, care and transports by EMS present unique challenges because of the nature of the setting, enclosed space during transport, frequent need for rapid medical decision-making, interventions with limited information, and a varying range of patient acuity and jurisdictional healthcare resources.

When preparing for and responding to patients with confirmed or possible coronavirus disease 2019 (COVID-19), close coordination and effective communications are important among 911 Public Safety Answering Points (PSAPs)—commonly known as 911 call centers, the EMS system, healthcare facilities, and the public health system. Each PSAP and

EMS system should seek the involvement of an EMS medical director to provide appropriate medical oversight. For the purposes of this guidance, "EMS clinician" means prehospital EMS and medical first responders. When COVID-19 is suspected in a patient needing emergency transport, prehospital care providers and healthcare facilities should be notified in advance that they may be caring for, transporting, or receiving a patient who may have COVID-19 infection.

Updated information about COVID-19 may be accessed at <https://www.cdc.gov/coronavirus/2019-ncov/index.html>. Infection prevention and control recommendations can be found here: <https://www.cdc.gov/coronavirus/2019-nCoV/hcp/infection-control.html>. Additional information for healthcare personnel can be found at <https://www.cdc.gov/coronavirus/2019-nCoV/guidance-hcp.html>.

### **Case Definition for COVID-19**

CDC's most current case definition for a person under investigation (PUI) for COVID-19 may be accessed at <https://www.cdc.gov/coronavirus/2019-nCoV/clinical-criteria.html>.

## **Recommendations for 911 PSAPs**

Municipalities and local EMS authorities should coordinate with state and local public health, PSAPs, and other emergency call centers to determine need for modified caller queries about COVID-19, outlined below.

Development of these modified caller queries should be closely coordinated with an EMS medical director and informed by local, state, and federal public health authorities, including the city or county health department(s), state health department(s), and CDC.

## **Modified Caller Queries**

PSAPs or Emergency Medical Dispatch (EMD) centers (as appropriate) should question callers and determine the possibility that this call concerns a person who may have signs or symptoms and risk factors for COVID-19. The query process should never supersede the provision of pre-arrival instructions to the caller when immediate lifesaving interventions (e.g., CPR or the Heimlich maneuver) are indicated. Patients in the United States who meet the appropriate criteria should be evaluated and transported as a PUI. Information on COVID-19 will be updated as the public health response proceeds. PSAPs and medical directors can access CDC's [PUI definitions here](#).

Information on a possible PUI should be communicated immediately to EMS clinicians before arrival on scene in order to allow use of appropriate personal protective equipment (PPE). PSAPs should utilize medical dispatch procedures that are coordinated with their EMS medical director and with the local or state public health department.

PSAPs and EMS units that respond to ill travelers at US international airports or other ports of entry to the United States (maritime ports or border crossings) should be in contact with the CDC quarantine station of jurisdiction for the port of entry (see: [CDC Quarantine Station Contact List](#)) for planning guidance. They should notify the quarantine station when responding to that location if a communicable disease is suspected in a traveler. CDC has provided job aids for this purpose to EMS units operating routinely at US ports of entry. The PSAP or EMS unit can also call CDC's Emergency Operations Center at (770) 488-7100 to be connected with the appropriate CDC quarantine station.

## **Recommendations for EMS Clinicians and Medical First Responders**

EMS clinician practices should be based on the most up-to-date COVID-19 clinical recommendations and information from appropriate public health authorities and EMS medical direction.

State and local EMS authorities may direct EMS clinicians to modify their practices as described below.

## Patient assessment

- If PSAP call takers advise that the patient is suspected of having COVID-19, EMS clinicians should put on appropriate PPE before entering the scene. EMS clinicians should consider the signs, symptoms, and risk factors of COVID-19 (<https://www.cdc.gov/coronavirus/2019-nCoV/clinical-criteria.html>).
- If information about potential for COVID-19 has not been provided by the PSAP, EMS clinicians should exercise appropriate precautions when responding to any patient with signs or symptoms of a respiratory infection. Initial assessment should begin from a distance of at least 6 feet from the patient, if possible. Patient contact should be minimized to the extent possible until a facemask is on the patient. If COVID-19 is suspected, all PPE as described below should be used. If COVID-19 is not suspected, EMS clinicians should follow standard procedures and use appropriate PPE for evaluating a patient with a potential respiratory infection.
- A facemask should be worn by the patient for source control. If a nasal cannula is in place, a facemask should be worn over the nasal cannula. Alternatively, an oxygen mask can be used if clinically indicated. If the patient requires intubation, see below for additional precautions for aerosol-generating procedures.
- During transport, limit the number of providers in the patient compartment to essential personnel to minimize possible exposures.

## Recommended Personal Protective Equipment (PPE)

- EMS clinicians who will directly care for a patient with possible COVID-19 infection or who will be in the compartment with the patient should follow Standard, Precautions and use the PPE as described below. Recommended PPE includes:
  - N-95 or higher-level respirator or facemask (if a respirator is not available),
    - N95 respirators or respirators that offer a higher level of protection should be used instead of a facemask when performing or present for an aerosol-generating procedure
  - Eye protection (i.e., goggles or disposable face shield that fully covers the front and sides of the face). Personal eyeglasses and contact lenses are NOT considered adequate eye protection.
  - A single pair of disposable patient examination gloves. Change gloves if they become torn or heavily contaminated, and isolation gown.,
    - If there are shortages of gowns, they should be prioritized for aerosol-generating procedures, care activities where splashes and sprays are anticipated, and high-contact patient care activities that provide opportunities for transfer of pathogens to the hands and clothing of EMS clinicians (e.g., moving patient onto a stretcher).
- When the supply chain is restored, fit-tested EMS clinicians should return to use of respirators for patients with known or suspected COVID-19.
- Drivers, if they provide direct patient care (e.g., moving patients onto stretchers), should wear all recommended PPE. After completing patient care and before entering an isolated driver's compartment, the driver should remove and

dispose of PPE and perform hand hygiene to avoid soiling the compartment.

- If the transport vehicle does **not** have an isolated driver's compartment, the driver should remove the face shield or goggles, gown and gloves and perform hand hygiene. A respirator or facemask should continue to be used during transport.
- All personnel should avoid touching their face while working.
- On arrival, after the patient is released to the facility, EMS clinicians should remove and discard PPE and perform hand hygiene. Used PPE should be discarded in accordance with routine procedures.
- Other required aspects of Standard Precautions (e.g., injection safety, hand hygiene) are not emphasized in this document but can be found in the guideline titled [Guideline for Isolation Precautions: Preventing Transmission of Infectious Agents in Healthcare Settings](#).

## Precautions for Aerosol-Generating Procedures

- If possible, consult with medical control before performing aerosol-generating procedures for specific guidance.
- An N-95 or higher-level respirator, instead of a facemask, should be worn in addition to the other PPE described above, for EMS clinicians present for or performing aerosol-generating procedures.,
- EMS clinicians should exercise caution if an aerosol-generating procedure (e.g., bag valve mask (BVM) ventilation, oropharyngeal suctioning, endotracheal intubation, nebulizer treatment, continuous positive airway pressure (CPAP), bi-phasic positive airway pressure (biPAP), or resuscitation involving emergency intubation or cardiopulmonary resuscitation (CPR)) is necessary.
  - BVMs, and other ventilatory equipment, should be equipped with HEPA filtration to filter expired air.
  - EMS organizations should consult their ventilator equipment manufacturer to confirm appropriate filtration capability and the effect of filtration on positive-pressure ventilation.
- If possible, the rear doors of the transport vehicle should be opened and the HVAC system should be activated during aerosol-generating procedures. This should be done away from pedestrian traffic.

## EMS Transport of a PUI or Patient with Confirmed COVID-19 to a Healthcare Facility (including interfacility transport)

If a patient with an exposure history and signs and symptoms suggestive of COVID-19 requires transport to a healthcare facility for further evaluation and management (subject to EMS medical direction), the following actions should occur during transport:

- EMS clinicians should notify the receiving healthcare facility that the patient has an exposure history and signs and symptoms suggestive of COVID-19 so that appropriate infection control precautions may be taken prior to patient arrival.
- Keep the patient separated from other people as much as possible.
- Family members and other contacts of patients with possible COVID-19 should **not** ride in the transport vehicle, if possible. If riding in the transport vehicle, they should wear a facemask.
- Isolate the ambulance driver from the patient compartment and keep pass-through doors and windows tightly shut.
- When possible, use vehicles that have isolated driver and patient compartments that can provide separate ventilation to each area.

- Close the door/window between these compartments before bringing the patient on board.
- During transport, vehicle ventilation in both compartments should be on non-recirculated mode to maximize air changes that reduce potentially infectious particles in the vehicle.
- If the vehicle has a rear exhaust fan, use it to draw air away from the cab, toward the patient-care area, and out the back end of the vehicle.
- Some vehicles are equipped with a supplemental recirculating ventilation unit that passes air through HEPA filters before returning it to the vehicle. Such a unit can be used to increase the number of air changes per hour (ACH) (<https://www.cdc.gov/niosh/hhe/reports/pdfs/1995-0031-2601.pdf> ).
- If a vehicle without an isolated driver compartment and ventilation must be used, open the outside air vents in the driver area and turn on the rear exhaust ventilation fans to the highest setting. This will create a negative pressure gradient in the patient area.
- Follow routine procedures for a transfer of the patient to the receiving healthcare facility (e.g., wheel the patient directly into an examination room).

## Documentation of patient care

- Documentation of patient care should be done after EMS clinicians have completed transport, removed their PPE, and performed hand hygiene.
  - Any written documentation should match the verbal communication given to the emergency department providers at the time patient care was transferred.
- EMS documentation should include a listing of EMS clinicians and public safety providers involved in the response and level of contact with the patient (for example, no contact with patient, provided direct patient care). This documentation may need to be shared with local public health authorities.

## Cleaning EMS Transport Vehicles after Transporting a PUI or Patient with Confirmed COVID-19

The following are general guidelines for cleaning or maintaining EMS transport vehicles and equipment after transporting a PUI:

- After transporting the patient, leave the rear doors of the transport vehicle open to allow for sufficient air changes to remove potentially infectious particles.
  - The time to complete transfer of the patient to the receiving facility and complete all documentation should provide sufficient air changes.
- When cleaning the vehicle, EMS clinicians should wear a disposable gown and gloves. A face shield or facemask and goggles should also be worn if splashes or sprays during cleaning are anticipated.
- Ensure that environmental cleaning and disinfection procedures are followed consistently and correctly, to include the provision of adequate ventilation when chemicals are in use. Doors should remain open when cleaning the vehicle.
- Routine cleaning and disinfection procedures (e.g., using cleaners and water to pre-clean surfaces prior to applying an EPA-registered, hospital-grade disinfectant to frequently touched surfaces or objects for appropriate contact

times as indicated on the product's label) are appropriate for severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) in healthcare settings, including those patient-care areas in which aerosol-generating procedures are performed.

- Products with EPA-approved emerging viral pathogens claims are recommended for use against SARS-CoV-2. Refer to [List N](#) on the EPA website for EPA-registered disinfectants that have qualified under EPA's emerging viral pathogens program for use against SARS-CoV-2.
- Clean and disinfect the vehicle in accordance with standard operating procedures. All surfaces that may have come in contact with the patient or materials contaminated during patient care (e.g., stretcher, rails, control panels, floors, walls, work surfaces) should be thoroughly cleaned and disinfected using an EPA-registered hospital grade disinfectant in accordance with the product label.
- Clean and disinfect reusable patient-care equipment before use on another patient, according to manufacturer's instructions.
- Follow standard operating procedures for the containment and disposal of used PPE and regulated medical waste.
- Follow standard operating procedures for containing and laundering used linen. Avoid shaking the linen.

## Follow-up and/or Reporting Measures by EMS Clinicians After Caring for a PUI or Patient with Confirmed COVID-19

EMS clinicians should be aware of the follow-up and/or reporting measures they should take after caring for a PUI or patient with confirmed COVID-19:

- State or local public health authorities should be notified about the patient so appropriate follow-up monitoring can occur.
- EMS agencies should develop policies for assessing exposure risk and management of EMS personnel potentially exposed to SARS-CoV-2 in coordination with state or local public health authorities. Decisions for monitoring, excluding from work, or other public health actions for HCP with potential exposure to SARS-CoV-2 should be made in consultation with state or local public health authorities. Refer to the [Interim U.S. Guidance for Risk Assessment and Public Health Management of Healthcare Personnel with Potential Exposure in a Healthcare Setting to Patients with Coronavirus Disease 2019 \(COVID-19\)](#) for additional information.
- EMS agencies should develop sick-leave policies for EMS personnel that are nonpunitive, flexible, and consistent with public health guidance. Ensure all EMS personnel, including staff who are not directly employed by the healthcare facility but provide essential daily services, are aware of the sick-leave policies.
- EMS personnel who have been exposed to a patient with suspected or confirmed COVID-19 should notify their chain of command to ensure appropriate follow-up.
  - Any unprotected exposure (e.g., not wearing recommended PPE) should be reported to occupational health services, a supervisor, or a designated infection control officer for evaluation.
  - EMS clinicians should be alert for fever or respiratory symptoms (e.g., cough, shortness of breath, sore throat). If symptoms develop, they should self-isolate and notify occupational health services and/or their public health authority to arrange for appropriate evaluation.

# EMS Employer Responsibilities

The responsibilities described in this section are not specific for the care and transport of PUIs or patients with confirmed COVID-19. However, this interim guidance presents an opportunity to assess current practices and verify that training and procedures are up-to-date.

- EMS units should have infection control policies and procedures in place, including describing a recommended sequence for safely donning and doffing PPE.
- Provide all EMS clinicians with job- or task-specific education and training on preventing transmission of infectious agents, including refresher training.
- Ensure that EMS clinicians are educated, trained, and have practiced the appropriate use of PPE prior to caring for a patient, including attention to correct use of PPE and prevention of contamination of clothing, skin, and environment during the process of removing such equipment.
- Ensure EMS clinicians are medically cleared, trained, and fit tested for respiratory protection device use (e.g., N95 filtering facepiece respirators), or medically cleared and trained in the use of an alternative respiratory protection device (e.g., Powered Air-Purifying Respirator, PAPR) whenever respirators are required. OSHA has a number of [respiratory training videos](#) .
- EMS units should have an adequate supply of PPE.
- Ensure an adequate supply of or access to EPA-registered hospital grade disinfectants (see above for more information) for adequate decontamination of EMS transport vehicles and their contents.
- Ensure that EMS clinicians and biohazard cleaners contracted by the EMS employer tasked to the decontamination process are educated, trained, and have practiced the process according to the manufacturer's recommendations or the EMS agency's standard operating procedures.

## Additional Resources

The EMS Infectious Disease Playbook, published by the Office of the Assistant Secretary for Preparedness and Response's Technical Resources, Assistance Center, Information Exchange (TRACIE) is a resource available to planners at <https://www.ems.gov/pdf/ASPR-EMS-Infectious-Disease-Playbook-June-2017.pdf>  .

Page last reviewed: March 10, 2020

Content source: [National Center for Immunization and Respiratory Diseases \(NCIRD\), Division of Viral Diseases](#)

## Public Works & Engineering

### Pandemic Influenza Protocol

Job Functions (Priority)	Standard Operations	Response during Pandemic Influenza
1. Water Operations	1 Person/Day to Run Water Plant	Use 1 of 4 Cross-Trained Personnel w/ water licenses
2. Water Line Repairs	Typical crew of 2-3 men required	Use 2 of 7 cross-trained personnel; flex time or overtime may be possible
3. Road Salting & Snow Plowing	Crews vary, based on Storms	15 Cross-trained personnel; little/no contact with others required; 3 phases of priority routes established & routinely operated
4. Other Emergency Call-Outs (i.e. Down Trees in Roads, Traffic Signals Out, etc.)	Respond with Appropriate Crews	15 Cross-trained personnel; may require overtime; may be able to substitute some responses with police officers to set barricades or direct traffic; may be able to contract with private enterprises
5. Trash Collection from Parks	1 person/Day	Many Cross-trained personnel; may be able to use other positions, contract labor, or volunteers; flex time allowed
6. Construction Management & Inspections, Grant Coordination	Engineer performs tasks	Use cross-trained PW employee for performing inspections; Flex time & telecommuting possible for other aspects; may postpone most
7. Other PW Crew Duties (Park, grounds & facility maintenance; street sweeping; vehicle repairs; brush/leaf	Perform with appropriate crews	Many Cross-trained personnel; may be able to use other positions, contract labor, or volunteers; flex time allowed ; able to postpone tasks
8. Right-of-Way Permit Process	Engineer performs tasks	Use cross-trained PW employee; Flex time, post-poning & telecommuting
9. Design Plan Review	Engineer performs tasks	Flex time & telecommuting possible

## **CDC SUPPORTING DOCUMENTS**

# What you need to know about coronavirus disease 2019 (COVID-19)

## What is coronavirus disease 2019 (COVID-19)?

Coronavirus disease 2019 (COVID-19) is a respiratory illness that can spread from person to person. The virus that causes COVID-19 is a novel coronavirus that was first identified during an investigation into an outbreak in Wuhan, China.

## Can people in the U.S. get COVID-19?

Yes. COVID-19 is spreading from person to person in parts of the United States. Risk of infection with COVID-19 is higher for people who are close contacts of someone known to have COVID-19, for example healthcare workers, or household members. Other people at higher risk for infection are those who live in or have recently been in an area with ongoing spread of COVID-19. Learn more about places with ongoing spread at <https://www.cdc.gov/coronavirus/2019-ncov/about/transmission.html#geographic>.

## Have there been cases of COVID-19 in the U.S.?

Yes. The first case of COVID-19 in the United States was reported on January 21, 2020. The current count of cases of COVID-19 in the United States is available on CDC's webpage at <https://www.cdc.gov/coronavirus/2019-ncov/cases-in-us.html>.

## How does COVID-19 spread?

The virus that causes COVID-19 probably emerged from an animal source, but is now spreading from person to person. The virus is thought to spread mainly between people who are in close contact with one another (within about 6 feet) through respiratory droplets produced when an infected person coughs or sneezes. It also may be possible that a person can get COVID-19 by touching a surface or object that has the virus on it and then touching their own mouth, nose, or possibly their eyes, but this is not thought to be the main way the virus spreads. Learn what is known about the spread of newly emerged coronaviruses at <https://www.cdc.gov/coronavirus/2019-ncov/about/transmission.html>.

## What are the symptoms of COVID-19?

Patients with COVID-19 have had mild to severe respiratory illness with symptoms of

- fever
- cough
- shortness of breath

## What are severe complications from this virus?

Some patients have pneumonia in both lungs, multi-organ failure and in some cases death.

## How can I help protect myself?

People can help protect themselves from respiratory illness with everyday preventive actions.

- Avoid close contact with people who are sick.
- Avoid touching your eyes, nose, and mouth with unwashed hands.
- Wash your hands often with soap and water for at least 20 seconds. Use an alcohol-based hand sanitizer that contains at least 60% alcohol if soap and water are not available.

## If you are sick, to keep from spreading respiratory illness to others, you should

- Stay home when you are sick.
- Cover your cough or sneeze with a tissue, then throw the tissue in the trash.
- Clean and disinfect frequently touched objects and surfaces.

## What should I do if I recently traveled from an area with ongoing spread of COVID-19?

If you have traveled from an affected area, there may be restrictions on your movements for up to 2 weeks. If you develop symptoms during that period (fever, cough, trouble breathing), seek medical advice. Call the office of your health care provider before you go, and tell them about your travel and your symptoms. They will give you instructions on how to get care without exposing other people to your illness. While sick, avoid contact with people, don't go out and delay any travel to reduce the possibility of spreading illness to others.

## Is there a vaccine?

There is currently no vaccine to protect against COVID-19. The best way to prevent infection is to take everyday preventive actions, like avoiding close contact with people who are sick and washing your hands often.

## Is there a treatment?

There is no specific antiviral treatment for COVID-19. People with COVID-19 can seek medical care to help relieve symptoms.

For more information: [www.cdc.gov/COVID19](http://www.cdc.gov/COVID19)



**If you are sick with COVID-19 or suspect you are infected with the virus that causes COVID-19, follow the steps below to help prevent the disease from spreading to people in your home and community.**

## Stay home except to get medical care

You should restrict activities outside your home, except for getting medical care. Do not go to work, school, or public areas. Avoid using public transportation, ride-sharing, or taxis.

## Separate yourself from other people and animals in your home

**People:** As much as possible, you should stay in a specific room and away from other people in your home. Also, you should use a separate bathroom, if available.

**Animals:** Do not handle pets or other animals while sick. See [COVID-19 and Animals](#) for more information.

## Call ahead before visiting your doctor

If you have a medical appointment, call the healthcare provider and tell them that you have or may have COVID-19. This will help the healthcare provider's office take steps to keep other people from getting infected or exposed.

## Wear a facemask

You should wear a facemask when you are around other people (e.g., sharing a room or vehicle) or pets and before you enter a healthcare provider's office. If you are not able to wear a facemask (for example, because it causes trouble breathing), then people who live with you should not stay in the same room with you, or they should wear a facemask if they enter your room.

## Cover your coughs and sneezes

Cover your mouth and nose with a tissue when you cough or sneeze. Throw used tissues in a lined trash can; immediately wash your hands with soap and water for at least 20 seconds or clean your hands with an alcohol-based hand sanitizer that contains at least 60% alcohol covering all surfaces of your hands and rubbing them together until they feel dry. Soap and water should be used preferentially if hands are visibly dirty.

## Avoid sharing personal household items

You should not share dishes, drinking glasses, cups, eating utensils, towels, or bedding with other people or pets in your home. After using these items, they should be washed thoroughly with soap and water.

## Clean your hands often

Wash your hands often with soap and water for at least 20 seconds. If soap and water are not available, clean your hands with an alcohol-based hand sanitizer that contains at least 60% alcohol, covering all surfaces of your hands and rubbing them together until they feel dry. Soap and water should be used preferentially if hands are visibly dirty. Avoid touching your eyes, nose, and mouth with unwashed hands.

## Clean all "high-touch" surfaces every day

High touch surfaces include counters, tabletops, doorknobs, bathroom fixtures, toilets, phones, keyboards, tablets, and bedside tables. Also, clean any surfaces that may have blood, stool, or body fluids on them. Use a household cleaning spray or wipe, according to the label instructions. Labels contain instructions for safe and effective use of the cleaning product including precautions you should take when applying the product, such as wearing gloves and making sure you have good ventilation during use of the product.

## Monitor your symptoms

Seek prompt medical attention if your illness is worsening (e.g., difficulty breathing). **Before** seeking care, call your healthcare provider and tell them that you have, or are being evaluated for, COVID-19. Put on a facemask before you enter the facility. These steps will help the healthcare provider's office to keep other people in the office or waiting room from getting infected or exposed.

Ask your healthcare provider to call the local or state health department. Persons who are placed under active monitoring or facilitated self-monitoring should follow instructions provided by their local health department or occupational health professionals, as appropriate. When working with your local health department check their available hours.

If you have a medical emergency and need to call 911, notify the dispatch personnel that you have, or are being evaluated for COVID-19. If possible, put on a facemask before emergency medical services arrive.

## Discontinuing home isolation

Patients with confirmed COVID-19 should remain under home isolation precautions until the risk of secondary transmission to others is thought to be low. The decision to discontinue home isolation precautions should be made on a case-by-case basis, in consultation with healthcare providers and state and local health departments.



For more information: [www.cdc.gov/COVID19](http://www.cdc.gov/COVID19)

**If you are sick with COVID-19 or suspect you are infected with the virus that causes COVID-19, follow the steps below to help prevent the disease from spreading to people in your home and community.**

## Stay home except to get medical care

You should restrict activities outside your home, except for getting medical care. Do not go to work, school, or public areas. Avoid using public transportation, ride-sharing, or taxis.

## Separate yourself from other people and animals in your home

**People:** As much as possible, you should stay in a specific room and away from other people in your home. Also, you should use a separate bathroom, if available.

**Animals:** Do not handle pets or other animals while sick. See [COVID-19 and Animals](#) for more information.

## Call ahead before visiting your doctor

If you have a medical appointment, call the healthcare provider and tell them that you have or may have COVID-19. This will help the healthcare provider's office take steps to keep other people from getting infected or exposed.

## Wear a facemask

You should wear a facemask when you are around other people (e.g., sharing a room or vehicle) or pets and before you enter a healthcare provider's office. If you are not able to wear a facemask (for example, because it causes trouble breathing), then people who live with you should not stay in the same room with you, or they should wear a facemask if they enter your room.

## Cover your coughs and sneezes

Cover your mouth and nose with a tissue when you cough or sneeze. Throw used tissues in a lined trash can; immediately wash your hands with soap and water for at least 20 seconds or clean your hands with an alcohol-based hand sanitizer that contains at least 60% alcohol covering all surfaces of your hands and rubbing them together until they feel dry. Soap and water should be used preferentially if hands are visibly dirty.

## Avoid sharing personal household items

You should not share dishes, drinking glasses, cups, eating utensils, towels, or bedding with other people or pets in your home. After using these items, they should be washed thoroughly with soap and water.

## Clean your hands often

Wash your hands often with soap and water for at least 20 seconds. If soap and water are not available, clean your hands with an alcohol-based hand sanitizer that contains at least 60% alcohol, covering all surfaces of your hands and rubbing them together until they feel dry. Soap and water should be used preferentially if hands are visibly dirty. Avoid touching your eyes, nose, and mouth with unwashed hands.

## Clean all "high-touch" surfaces every day

High touch surfaces include counters, tabletops, doorknobs, bathroom fixtures, toilets, phones, keyboards, tablets, and bedside tables. Also, clean any surfaces that may have blood, stool, or body fluids on them. Use a household cleaning spray or wipe, according to the label instructions. Labels contain instructions for safe and effective use of the cleaning product including precautions you should take when applying the product, such as wearing gloves and making sure you have good ventilation during use of the product.

## Monitor your symptoms

Seek prompt medical attention if your illness is worsening (e.g., difficulty breathing). **Before** seeking care, call your healthcare provider and tell them that you have, or are being evaluated for, COVID-19. Put on a facemask before you enter the facility. These steps will help the healthcare provider's office to keep other people in the office or waiting room from getting infected or exposed.

Ask your healthcare provider to call the local or state health department. Persons who are placed under active monitoring or facilitated self-monitoring should follow instructions provided by their local health department or occupational health professionals, as appropriate. When working with your local health department check their available hours.

If you have a medical emergency and need to call 911, notify the dispatch personnel that you have, or are being evaluated for COVID-19. If possible, put on a facemask before emergency medical services arrive.

## Discontinuing home isolation

Patients with confirmed COVID-19 should remain under home isolation precautions until the risk of secondary transmission to others is thought to be low. The decision to discontinue home isolation precautions should be made on a case-by-case basis, in consultation with healthcare providers and state and local health departments.



For more information: [www.cdc.gov/COVID19](http://www.cdc.gov/COVID19)

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

## Background

When a novel virus with pandemic potential emerges, nonpharmaceutical interventions, which will be called community mitigation strategies in this document, often are the most readily available interventions to help slow transmission of the virus in communities. Community mitigation is a set of actions that persons and communities can take to help slow the spread of respiratory virus infections. Community mitigation is especially important before a vaccine or drug becomes widely available.

The following is a framework for actions which local and state health departments can recommend in their community to both prepare for and mitigate community transmission of COVID-19 in the United States. Selection and implementation of these actions should be guided by the local characteristics of disease transmission, demographics, and public health and healthcare system capacity.

## Goals

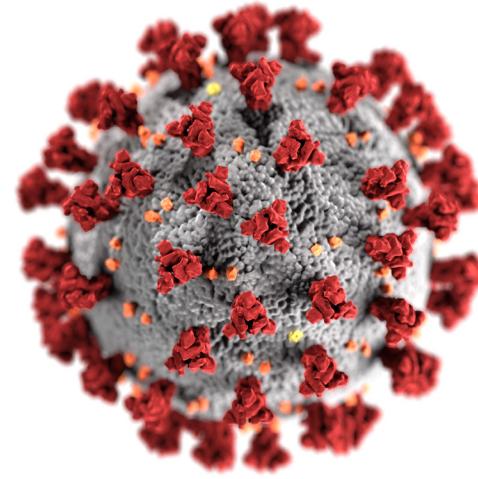
The goals for using mitigation strategies in communities with local COVID-19 transmission are to slow the transmission of disease and in particular to protect:

- Individuals at increased risk for severe illness, including older adults and persons of any age with underlying health conditions (See Appendix A)
- The healthcare and critical infrastructure workforces

These approaches are used to minimize morbidity and mortality and the social and economic impacts of COVID-19. Individuals, communities, businesses, and healthcare organizations are all part of a community mitigation strategy. These strategies should be implemented to prepare for and when there is evidence of community transmission. Signals of ongoing community transmission may include detection of confirmed cases of COVID-19 with no epidemiologic link to travelers or known cases, or more than three generations of transmission.

Implementation is based on:

- Emphasizing individual responsibility for implementing recommended personal-level actions
- Empowering businesses, schools, and community organizations to implement recommended actions, particularly in ways that protect persons at increased risk of severe illness
- Focusing on settings that provide critical infrastructure or services to individuals at increased risk of severe illness
- Minimizing disruptions to daily life to the extent possible



## Guiding principles

- Each community is unique, and appropriate mitigation strategies will vary based on the level of community transmission, characteristics of the community and their populations, and the local capacity to implement strategies (Table 1).
- Consider all aspects of a community that might be impacted, including populations most vulnerable to severe illness and those that may be more impacted socially or economically, and select appropriate actions.
- Mitigation strategies can be scaled up or down depending on the evolving local situation.
- When developing mitigation plans, communities should identify ways to ensure the safety and social well-being of groups that may be especially impacted by mitigation strategies, including individuals at increased risk for severe illness.
- Activation of community emergency plans is critical for the implementation of mitigation strategies. These plans may provide additional authorities and coordination needed for interventions to be implemented (Table 2).
- Activities in Table 2 may be implemented at any time regardless of the level of community transmission based on guidance on from local and state health officials.
- The level of activities implemented may vary across the settings described in Table 2 (e.g., they may be at a minimal/moderate level for one setting and at a substantial level for another setting in order to meet community response needs).
- Depending on the level of community spread, local and state public health departments may need to implement mitigation strategies for public health functions to identify cases and conduct contact tracing (Table 3). When applied, community mitigation efforts may help facilitate public health activities like contact tracing



For more information: [www.cdc.gov/COVID19](http://www.cdc.gov/COVID19)

**Table 1. Local Factors to Consider for Determining Mitigation Strategies**

Factor	Characteristics
Epidemiology	<ul style="list-style-type: none"><li>• Level of community transmission (see Table 3)</li><li>• Number and type of outbreaks (e.g., nursing homes, schools, etc.)</li><li>• Impact of the outbreaks on delivery of healthcare or other critical infrastructure or services</li><li>• Epidemiology in surrounding jurisdictions</li></ul>
Community Characteristics	<ul style="list-style-type: none"><li>• Size of community and population density</li><li>• Level of community engagement/support</li><li>• Size and characteristics of vulnerable populations</li><li>• Access to healthcare</li><li>• Transportation (e.g., public, walking)</li><li>• Planned large events</li><li>• Relationship of community to other communities (e.g., transportation hub, tourist destination, etc.)</li></ul>
Healthcare capacity	<ul style="list-style-type: none"><li>• Healthcare workforce</li><li>• Number of healthcare facilities (including ancillary healthcare facilities)</li><li>• Testing capacity</li><li>• Intensive care capacity</li><li>• Availability of personal protective equipment (PPE)</li></ul>
Public health capacity	<ul style="list-style-type: none"><li>• Public health workforce and availability of resources to implement strategies</li><li>• Available support from other state/local government agencies and partner organizations</li></ul>

**Table 2. Community mitigation strategies by setting and by level of community transmission or impact of COVID-19**

Factor	Potential mitigation activities according to level of community transmission or impact of COVID-19 by setting		
	None to Minimal	Minimal to moderate	Substantial
<b>Individuals and Families at Home</b> "What you can do to prepare, if you or a family member gets ill, or if your community experiences spread of COVID-19"	<ul style="list-style-type: none"> <li>• Know where to find local information on COVID-19 and local trends of COVID-19 cases.</li> <li>• Know the signs and symptoms of COVID-19 and what to do if symptomatic: <ul style="list-style-type: none"> <li>» Stay home when you are sick</li> <li>» Call your health care provider's office in advance of a visit</li> <li>» Limit movement in the community</li> <li>» Limit visitors</li> </ul> </li> <li>• Know what additional measures those at high-risk and who are vulnerable should take.</li> <li>• Implement personal protective measures (e.g., stay home when sick, handwashing, respiratory etiquette, clean frequently touched surfaces daily).</li> <li>• Create a household plan of action in case of illness in the household or disruption of daily activities due to COVID-19 in the community. <ul style="list-style-type: none"> <li>» Consider 2-week supply of prescription and over the counter medications, food and other essentials. Know how to get food delivered if possible.</li> <li>» Establish ways to communicate with others (e.g., family, friends, co-workers).</li> <li>» Establish plans to telework, what to do about childcare needs, how to adapt to cancellation of events.</li> </ul> </li> <li>• Know about emergency operations plans for schools/workplaces of household members.</li> </ul>	<ul style="list-style-type: none"> <li>• Continue to monitor local information about COVID-19 in your community.</li> <li>• Continue to practice personal protective measures.</li> <li>• Continue to put household plan into action.</li> <li>• Individuals at increased risk of severe illness should consider staying at home and avoiding gatherings or other situations of potential exposures, including travel.</li> </ul>	<ul style="list-style-type: none"> <li>• Continue to monitor local information.</li> <li>• Continue to practice personal protective measures.</li> <li>• Continue to put household plan into place.</li> <li>• All individuals should limit community movement and adapt to disruptions in routine activities (e.g., school and/or work closures) according to guidance from local officials.</li> </ul>

Factor	Potential mitigation activities according to level of community transmission or impact of COVID-19 by setting		
	None to Minimal	Minimal to moderate	Substantial
<b>Schools/childcare</b> "What childcare facilities, K-12 schools, and colleges and universities can do to prepare for COVID-19, if the school or facility has cases of COVID-19, or if the community is experiencing spread of COVID-19"	<ul style="list-style-type: none"> <li>• Know where to find local information on COVID-19 and local trends of COVID-19 cases.</li> <li>• Know the signs and symptoms of COVID-19 and what to do if students or staff become symptomatic at school/childcare site.</li> <li>• Review and update emergency operations plan (including implementation of social distancing measures, distance learning if feasible) or develop plan if one is not available.</li> <li>• Evaluate whether there are students or staff who are at increased risk of severe illness and develop plans for them to continue to work or receive educational services if there is moderate levels of COVID-19 transmission or impact. <ul style="list-style-type: none"> <li>» Parents of children at increased risk for severe illness should discuss with their health care provider whether those students should stay home in case of school or community spread.</li> <li>» Staff at increased risk for severe illness should have a plan to stay home if there are school-based cases or community spread.</li> </ul> </li> <li>• Encourage staff and students to stay home when sick and notify school administrators of illness (schools should provide non-punitive sick leave options to allow staff to stay home when ill).</li> <li>• Encourage personal protective measures among staff/students (e.g., stay home when sick, handwashing, respiratory etiquette).</li> <li>• Clean and disinfect frequently touched surfaces daily.</li> <li>• Ensure hand hygiene supplies are readily available in buildings.</li> </ul>	<ul style="list-style-type: none"> <li>• Implement social distancing measures: <ul style="list-style-type: none"> <li>» Reduce the frequency of large gatherings (e.g., assemblies), and limit the number of attendees per gathering.</li> <li>» Alter schedules to reduce mixing (e.g., stagger recess, entry/dismissal times)</li> <li>» Limit inter-school interactions</li> <li>» Consider distance or e-learning in some settings</li> </ul> </li> <li>• Consider regular health checks (e.g., temperature and respiratory symptom screening) of students, staff, and visitors (if feasible).</li> <li>• Short-term dismissals for school and extracurricular activities as needed (e.g., if cases in staff/students) for cleaning and contact tracing.</li> <li>• Students at increased risk of severe illness should consider implementing individual plans for distance learning, e-learning.</li> </ul>	<ul style="list-style-type: none"> <li>• Broader and/or longer-term school dismissals, either as a preventive measure or because of staff and/or student absenteeism.</li> <li>• Cancellation of school-associated congregations, particularly those with participation of high-risk individuals.</li> <li>• Implement distance learning if feasible.</li> </ul>

Factor	Potential mitigation activities according to level of community transmission or impact of COVID-19 by setting		
	None to Minimal	Minimal to moderate	Substantial
<p><b>Assisted living facilities, senior living facilities and adult day programs</b></p> <p>“What facilities can do to prepare for COVID-19, if the facility has cases of COVID-19, or if the community is experiencing spread of COVID-19”</p>	<ul style="list-style-type: none"> <li>• Know where to find local information on COVID-19.</li> <li>• Know the signs and symptoms of COVID-19 and what to do if clients/residents or staff become symptomatic.</li> <li>• Review and update emergency operations plan (including implementation of social distancing measures) or develop a plan if one is not available.</li> <li>• Encourage personal protective measures among staff, residents and clients who live elsewhere (e.g., stay home or in residences when sick, handwashing, respiratory etiquette).</li> <li>• Clean frequently touched surfaces daily.</li> <li>• Ensure hand hygiene supplies are readily available in all buildings.</li> </ul>	<ul style="list-style-type: none"> <li>• Implement social distancing measures: <ul style="list-style-type: none"> <li>» Reduce large gatherings (e.g., group social events)</li> <li>» Alter schedules to reduce mixing (e.g., stagger meal, activity, arrival/departure times)</li> <li>» Limit programs with external staff</li> <li>» Consider having residents stay in facility and limit exposure to the general community</li> <li>» Limit visitors, implement screening</li> </ul> </li> <li>• Temperature and respiratory symptom screening of attendees, staff, and visitors.</li> <li>• Short-term closures as needed (e.g., if cases in staff, residents or clients who live elsewhere) for cleaning and contact tracing.</li> </ul>	<ul style="list-style-type: none"> <li>• Longer-term closure or quarantine of facility.</li> <li>• Restrict or limit visitor access (e.g., maximum of 1 per day).</li> </ul>

Factor	Potential mitigation activities according to level of community transmission or impact of COVID-19 by setting		
	None to Minimal	Minimal to moderate	Substantial
<b>Workplace</b> "What workplaces can do to prepare for COVID-19, if the workplace has cases of COVID-19, or if the community is experiencing spread of COVID-19"	<ul style="list-style-type: none"> <li>• Know where to find local information on COVID-19 and local trends of COVID-19 cases.</li> <li>• Know the signs and symptoms of COVID-19 and what to do if staff become symptomatic at the worksite.</li> <li>• Review, update, or develop workplace plans to include: <ul style="list-style-type: none"> <li>» Liberal leave and telework policies</li> <li>» Consider 7-day leave policies for people with COVID-19 symptoms</li> <li>» Consider alternate team approaches for work schedules.</li> </ul> </li> <li>• Encourage employees to stay home and notify workplace administrators when sick (workplaces should provide non-punitive sick leave options to allow staff to stay home when ill).</li> <li>• Encourage personal protective measures among staff (e.g., stay home when sick, handwashing, respiratory etiquette).</li> <li>• Clean and disinfect frequently touched surfaces daily.</li> <li>• Ensure hand hygiene supplies are readily available in building.</li> </ul>	<ul style="list-style-type: none"> <li>• Encourage staff to telework (when feasible), particularly individuals at increased risk of severe illness.</li> <li>• Implement social distancing measures: <ul style="list-style-type: none"> <li>» Increasing physical space between workers at the worksite</li> <li>» Staggering work schedules</li> <li>» Decreasing social contacts in the workplace (e.g., limit in-person meetings, meeting for lunch in a break room, etc.)</li> </ul> </li> <li>• Limit large work-related gatherings (e.g., staff meetings, after-work functions).</li> <li>• Limit non-essential work travel.</li> <li>• Consider regular health checks (e.g., temperature and respiratory symptom screening) of staff and visitors entering buildings (if feasible).</li> </ul>	<ul style="list-style-type: none"> <li>• Implement extended telework arrangements (when feasible).</li> <li>• Ensure flexible leave policies for staff who need to stay home due to school/childcare dismissals.</li> <li>• Cancel non-essential work travel.</li> <li>• Cancel work-sponsored conferences, tradeshows, etc.</li> </ul>

Factor	Potential mitigation activities according to level of community transmission or impact of COVID-19 by setting		
	None to Minimal	Minimal to moderate	Substantial
<b>Community and faith-based organizations</b> "What organizations can do to prepare for COVID-19, if the organization has cases of COVID-19, or if the community is experiencing spread of COVID-19"	<ul style="list-style-type: none"> <li>• Know where to find local information on COVID-19 and local trends of COVID-19 cases.</li> <li>• Know the signs and symptoms of COVID-19 and what to do if organization members/staff become symptomatic.</li> <li>• Identify safe ways to serve those that are at high risk or vulnerable (outreach, assistance, etc.).</li> <li>• Review, update, or develop emergency plans for the organization, especially consideration for individuals at increased risk of severe illness.</li> <li>• Encourage staff and members to stay home and notify organization administrators of illness when sick.</li> <li>• Encourage personal protective measures among organization/members and staff (e.g., stay home when sick, handwashing, respiratory etiquette).</li> <li>• Clean frequently touched surfaces at organization gathering points daily.</li> <li>• Ensure hand hygiene supplies are readily available in building.</li> </ul>	<ul style="list-style-type: none"> <li>• Implement social distancing measures:               <ul style="list-style-type: none"> <li>» Reduce activities (e.g., group congregation, religious services), especially for organizations with individuals at increased risk of severe illness.</li> <li>» Consider offering video/audio of events.</li> </ul> </li> <li>• Determine ways to continue providing support services to individuals at increased risk of severe disease (services, meals, checking in) while limiting group settings and exposures.</li> <li>• Cancel large gatherings (e.g., &gt;250 people, though threshold is at the discretion of the community) or move to smaller groupings.</li> <li>• For organizations that serve high-risk populations, cancel gatherings of more than 10 people.</li> </ul>	<ul style="list-style-type: none"> <li>• Cancel community and faith-based gatherings of any size.</li> </ul>

Factor	Potential mitigation activities according to level of community transmission or impact of COVID-19 by setting		
	None to Minimal	Minimal to moderate	Substantial
<p><b>Healthcare settings and healthcare provider (includes outpatient, nursing homes/long-term care facilities, inpatient, telehealth)</b></p> <p>“What healthcare settings including nursing homes/long-term care facilities, can do to prepare for COVID-19, if the facilities has cases of COVID-19, or if the community is experiencing spread of COVID-19”</p>	<ul style="list-style-type: none"> <li>Provide healthcare personnel ([HCP], including staff at nursing homes and long-term care facilities) and systems with tools and guidance needed to support their decisions to care for patients at home (or in nursing homes/long-term care facilities).</li> <li>Develop systems for phone triage and telemedicine to reduce unnecessary healthcare visits.</li> <li>Assess facility infection control programs; assess personal protective equipment (PPE) supplies and optimize PPE use.</li> <li>Assess plans for monitoring of HCP and plans for increasing numbers of HCP if needed.</li> <li>Assess visitor policies.</li> <li>Assess HCP sick leave policies (healthcare facilities should provide non-punitive sick leave options to allow HCP to stay home when ill).</li> <li>Encourage HCP to stay home and notify healthcare facility administrators when sick.</li> <li>In conjunction with local health department, identify exposed HCP, and implement recommended monitoring and work restrictions.</li> <li>Implement triage prior to entering facilities to rapidly identify and isolate patients with respiratory illness (e.g., phone triage before patient arrival, triage upon arrival).</li> </ul>	<ul style="list-style-type: none"> <li>Implement changes to visitor policies to further limit exposures to HCP, residents, and patients. Changes could include temperature/symptom checks for visitors, limiting visitor movement in the facility, etc.</li> <li>Implement triage before entering facilities (e.g., parking lot triage, front door), phone triage, and telemedicine to limit unnecessary healthcare visits.</li> <li>Actively monitor absenteeism and respiratory illness among HCP and patients.</li> <li>Actively monitor PPE supplies.</li> <li>Establish processes to evaluate and test large numbers of patients and HCP with respiratory symptoms (e.g., designated clinic, surge tent).</li> <li>Consider allowing asymptomatic exposed HCP to work while wearing a facemask.</li> <li>Begin to cross train HCP for working in other units in anticipation of staffing shortages.</li> </ul>	<ul style="list-style-type: none"> <li>Restrict or limit visitors (e.g., maximum of 1 per day) to reduce facility-based transmission.</li> <li>Identify areas of operations that may be subject to alternative standards of care and implement necessary changes (e.g., allowing mildly symptomatic HCP to work while wearing a facemask).</li> <li>Cancel elective and non-urgent procedures</li> <li>Establish cohort units or facilities for large numbers of patients.</li> <li>Consider requiring all HCP to wear a facemask when in the facility depending on supply.</li> </ul>

**Table 3. Potential mitigation strategies for public health functions**

Public health control activities by level of COVID-19 community transmission		
None to Minimal	Minimal to Moderate	Substantial
<p>Evidence of isolated cases or limited community transmission, case investigations underway, no evidence of exposure in large communal setting, e.g., healthcare facility, school, mass gathering.</p> <ul style="list-style-type: none"><li>• Continue contact tracing, monitor and observe contacts as advised in guidance to maximize containment around cases.</li><li>• Isolation of confirmed COVID-19 cases until no longer considered infectious according to guidance.</li><li>• For asymptomatic close contacts exposed to a confirmed COVID-19 case, consideration of movement restrictions based on risk level, social distancing.</li><li>• Monitoring close contacts should be done by jurisdictions to the extent feasible based on local priorities and resources.</li><li>• Encourage HCP to develop phone triage and telemedicine practices.</li><li>• Test individuals with signs and symptoms compatible with COVID-19.</li><li>• Determine methods to streamline contact tracing through simplified data collection and surge if needed (resources including staffing through colleges and other first responders, technology etc.).</li></ul>	<p>Widespread and/or sustained transmission with high likelihood or confirmed exposure within communal settings with potential for rapid increase in suspected cases.</p> <ul style="list-style-type: none"><li>• May reduce contact tracing if resources dictate, prioritizing to those in high-risk settings (e.g., healthcare professionals or high-risk settings based on vulnerable populations or critical infrastructure).</li><li>• Encourage HCP to more strictly implement phone triage and telemedicine practices.</li><li>• Continue COVID-19 testing of symptomatic persons; however, if testing capacity limited, prioritize testing of high-risk individuals.</li></ul>	<p>Large scale community transmission, healthcare staffing significantly impacted, multiple cases within communal settings like healthcare facilities, schools, mass gatherings etc.</p> <ul style="list-style-type: none"><li>• May reduce contact tracing if resources dictate, prioritizing to those in high-risk settings (e.g., healthcare professionals or high-risk settings based on vulnerable populations or critical infrastructure).</li><li>• Encourage HCP to more strictly implement phone triage and telemedicine practices.</li><li>• Continue COVID-19 testing of symptomatic persons; however, if testing capacity limited, prioritize testing of high-risk individuals.</li></ul>

## Appendix A: Underlying medical conditions that may increase the risk of serious COVID-19 for individuals of any age.

- **Blood disorders** (e.g., sickle cell disease or on blood thinners)
- **Chronic kidney disease** as defined by your doctor. Patient has been told to avoid or reduce the dose of medications because kidney disease, or is under treatment for kidney disease, including receiving dialysis
- **Chronic liver disease** as defined by your doctor. (e.g., cirrhosis, chronic hepatitis) Patient has been told to avoid or reduce the dose of medications because liver disease or is under treatment for liver disease.
- **Compromised immune system (immunosuppression)** (e.g., seeing a doctor for cancer and treatment such as chemotherapy or radiation, received an organ or bone marrow transplant, taking high doses of corticosteroids or other immunosuppressant medications, HIV or AIDS)
- **Current or recent pregnancy** in the last two weeks
- **Endocrine disorders** (e.g., diabetes mellitus)
- **Metabolic disorders** (such as inherited metabolic disorders and mitochondrial disorders)
- **Heart disease** (such as congenital heart disease, congestive heart failure and coronary artery disease)
- **Lung disease** including asthma or chronic obstructive pulmonary disease (chronic bronchitis or emphysema) or other chronic conditions associated with impaired lung function or that require home oxygen
- **Neurological and neurologic and neurodevelopment conditions** [including disorders of the brain, spinal cord, peripheral nerve, and muscle such as cerebral palsy, epilepsy (seizure disorders), stroke, intellectual disability, moderate to severe developmental delay, muscular dystrophy, or spinal cord injury].