# Framework for Implementation of COVID-19 Community Mitigation Measures for Low-Resource non-US Settings

Accessible version: https://www.cdc.gov/coronavirus/2019-ncov/global-covid-19/community-mitigation-measures.html

# **Background**

This web page describes goals, guiding principles, and strategies for non-pharmaceutical community mitigation of COVID-19 transmission that can be adopted by a country's ministry of health (MoH), ministry of interior (MoI), sub-national public health authorities, and other implementing partners. This practical framework of action to prepare for and mitigate community transmission of COVID-19 is outlined, with links and references to setting-specific and community-specific guidance. Parts of this framework are relevant for all environments, but the focus is placed on low-resource settings.

# **Community Mitigation**

Community mitigation measures are actions taken to prevent further spread of infectious diseases and protect all people, especially groups of people at <u>increased risk for severe illness</u>, disproportionally affected groups, and essential workers. The goal for using mitigation strategies in countries that are experiencing community transmission of COVID-19 is to decrease transmission overall while minimizing the negative social or economic effects of strategies such as isolation, quarantine, or closing of businesses, schools, and other public, congregate settings.

Governments, individuals, communities, businesses, and healthcare providers contribute to an overall community mitigation strategy to minimize illness and death rates as well as the social and economic impact of COVID-19. Countries should consider community mitigation measures and choose which ones to put in place to prepare for and respond to community transmission of COVID-19.

Signs of ongoing community transmission include:

- Detection of confirmed cases of COVID-19 with no epidemiologic link to known cases.
- More than three generations of local transmission.

Implementation of community mitigation measures is based on:

- Encouraging personal responsibility to follow recommended actions
- Emphasizing government and community responsibility to make sure people have access to information and resources required to follow recommended actions
- Ensuring government, community institutions (schools, places of worship, marketplaces, childcare
  providers), businesses, and households put recommended actions in place, with a focus on actions that
  protect those at increased risk of severe illness, those who are disproportionately impacted, and first
  responders
- Focusing on settings that provide critical infrastructure or services to minimize their risk of disruption
- Minimizing disruptions to daily life, to the extent possible
- Adapting interventions supported by existing public health programs to address immediate community mitigation needs
- Promoting government and community responsibility to pass setting-specific and population-specific policies endorsing recommended actions



cdc.gov/coronavirus

# **Guiding Principles**

- Community mitigation efforts aim to reduce the rate at which people infected with COVID-19 interact with people who are not infected, or to reduce the probability of infection if infected and non-infected people do interact. The risk of spreading COVID-19 increases the more a person interacts with different people and the longer and closer the interaction is.
- Each community is unique. Appropriate mitigation strategies will vary and can be scaled up or down, depending on the epidemiology, community characteristics, and public health capacity.
- Leadership can select appropriate actions to implement after considering all aspects of a community that might be affected. Leadership should especially consider populations most at risk for severe illness and those at greatest risk for the negative social and economic impacts of mitigation strategies to ensure their safety and social wellbeing.
- Implementation of mitigation measures may require legal authorities to be in place. Activated emergency plans that provide additional authorities or coordination mechanisms are critical to implementing recommended mitigation interventions.
- Mitigation strategies also can be scaled up or down, depending on what is feasible, practical, and legal in
  the evolving local situation. Any sign of a cluster of new cases or a reemergence of broader community
  transmission should result in a reassessment of community mitigation strategies and a decision on
  whether and how mitigation might need to change.
- In situations where mandatory quarantine or stay-at-home orders are put in place, governments should identify ways to make sure that people have access to sufficient safety, healthcare, food, water, sanitation and hygiene products, and services.

Vaccination, if it is available, is an important strategy for preventing COVID-19 transmission and illness and should be included as part of a comprehensive COVID-19 mitigation strategy.

# **Community Settings and Population Groups to Consider**

National and subnational leadership can target community mitigation measures for priority community settings and population groups. Examples of specific settings and populations that may require special considerations and planning include:

# Settings

- Households (urban and rural)
- Informal settlements
- Camps for people who are displaced
- Populations experiencing homelessness
- Schools or childcare providers
- Workplaces (formal and informal)
- Community gathering points (formal and informal, including public water sources, transport hubs, marketplaces, places of worship)
- Prisons and other closed settings (orphanages, institutions for people with physical disabilities or mental health concerns)

# **Population Groups**

- Populations that are unsheltered or experiencing homelessness
- Critical infrastructure workforce (water vendors, food market operators, sanitation workers)
- Teachers and educators
- Caregivers for the elderly or medically fragile
- Healthcare workers
- Groups at higher risk for severe outcomes

# **Factors to Consider when Determining Community Mitigation Strategies**

# **Epidemiology**

- Level of transmission and disease dynamics
- Number, setting (e.g. schools, workplaces), and source (e.g. community gathering points, events) of outbreaks
- Impact of outbreaks on delivery of healthcare or other critical infrastructure or services
- Epidemiology of COVID-19 in surrounding communities, districts, provinces, and neighboring countries

# **Community Characteristics**

- Size of community and population density
- Level of community engagement and public support for public health initiatives
- Size and characteristics of disproportionately affected populations
- Access to healthcare
- Access to potable water and sanitation
- Transportation (e.g. public, walking)
- Planned large events or mass gatherings
- How connected the community is to other communities or countries (e.g. transportation hub, market or industrial center)

#### **Healthcare Capacity**

- Healthcare workforce
- Number of healthcare facilities (including ancillary facilities)
- Volume of testing activity (based on protocols and eligibility for testing)
- Capacity to provide intensive care
- Availability of personal protective equipment

# **Public Health Capacity**

- Public health workforce
- Testing capacity (materials, equipment, staff)
- Availability of resources to implement mitigation strategies
- Ability to monitor and evaluate implementation and impact of strategies
- Available support from other government agencies and partner organizations

# **Transmission Scenarios**

Countries or subnational areas will have to respond rapidly to one or more of the following transmission scenarios:

- No cases
- One or more cases, imported or locally detected (sporadic cases)
- Clusters of cases all linked by time, geographic location, AND common exposures
- Larger outbreaks of local transmission (community transmission)

Global experience with COVID-19 has demonstrated that in many regions with seemingly low levels of COVID-19 transmission, aggressive testing strategies focused on people with symptoms of respiratory infections may reveal additional underlying community transmission. Such a scenario may result in a rapid progression to substantial, uncontrolled transmission in the community. It is critical that countries prepare aggressively for future transmission scenarios, even if they are currently experiencing minimal community transmission. Once cases are identified, ministries of health, subnational public health authorities, and other implementing partners should be prepared to respond rapidly to varying levels of disease spread. Transmission scenarios, adopted by the World Health Organization (WHO), are outlined below:

Level of Community Transmission	Community characteristics and description	Level of Mitigation
Scenario 1: No active cases	No new cases detected for at least 28 days (two times the maximum incubation period) in the presence of a robust surveillance system. This implies a near-zero risk of infection for the general population.	Low mitigation (providing guidance and educational materials, updating mitigation and prevention strategies)
Scenario 2: Imported or sporadic cases	Cases detected in the past 14 days are all imported, sporadic (e.g., laboratory-acquired or zoonotic), or linked to imported or sporadic cases, and there are no clear signals of further locally acquired transmission. This implies minimal risk of infection for the general population.	Moderate mitigation (encouraging physical distancing and source control measures in public places, initiating contact tracing activities)
Scenario 3: Clusters of cases	Cases detected in the past 14 days are predominantly limited to well-defined clusters that are not directly linked to imported cases, but which are all linked by time, geographic location, and common exposures. Several unidentified cases are assumed to be in the area. This implies a low risk of infection to others in the wider community if exposure to these clusters is avoided.	Moderate mitigation (encouraging physical distancing and source control measures in public places, initiating contact tracing activities)
Scenario 4: Community Transmission Level 1	Low incidence of locally acquired, widely dispersed cases detected in the past 14 days, with many of the cases not linked to specific clusters.  Transmission may be focused on certain population subgroups. This implies low risk of infection for the general population.	Significant mitigation (mask mandates in public places, schools closed or virtual instruction, only essential businesses open)
Level 2	Moderate incidence of locally acquired, widely dispersed cases detected in the past 14 days.  Transmission is less focused in certain population subgroups. This implies moderate risk of infection for the general population.	Significant mitigation (mask mandates in public places, schools closed or virtual instruction, only essential businesses open)

Level 3	<b>High incidence</b> of locally acquired, widely dispersed cases in the past 14 days. Transmission is widespread and not focused in population subgroups. This implies high risk of infection for the general population.	Significant mitigation (mask mandates in public places, schools closed or virtual instruction, only essential businesses open)
Level 4	<b>Very high incidence</b> of locally acquired, widely dispersed cases in the past 14 days. This implies very high risk of infection for the general population.	Stay-at-home orders or shelter-in-place measures

# **Community Mitigation Activities by Epidemiologic Scenario**

# **Community Action Plans**

Community action plans can be developed by a wide variety of community groups (faith organizations, residential units, businesses) to provide setting-specific guidance to community members for various transmission scenarios. This includes planning for the provision of services and supplies when close contact and group gatherings are not allowed, limiting travel and related measures.

#### **During All Transmission Scenarios**

• Create setting-specific action plans in case of illness in the community or disruption of daily activities due to COVID-19 (physical distancing, securing supplies, special considerations for populations at high risk).

#### During Scenarios 2, 3, and 4

- Implement the established action plan and adjust as needed, based on the epidemiologic situation.
- Provide guidance for provision of services and supplies to people at increased risk of severe disease (medical care, food, and water) while limiting close contact and group gatherings.
- Establish screening (for temperature, respiratory symptoms, loss of taste or smell, exposure history) of persons entering community settings.
- Limit nonessential travel (personal and work-related).
- Limit social gatherings or community events and adapt to disruptions in routine activities (school, work, business closures) according to guidance from local officials.

#### During Scenario 4 (All Levels)

- Cancel nonessential travel and nonessential gatherings.
- Limit or restrict the number of people allowed to visit community settings (e.g. marketplaces, transportation hubs).
- Provide services and supplies to people required to shelter in place (medical care, food, and water) while limiting close contact or group settings and exposures.

#### **Personal Protective Measures**

The best way to prevent illness is to avoid being exposed to the virus that causes COVID-19 by using <u>personal protective measures</u> such as hand washing, mask use, physical distancing, and ventilation. Provide guidance on how to <u>wear a face mask</u> and <u>wash hands properly</u>, and inform the community how to safely attend small gatherings and large events. Governments should encourage community members to continue practicing personal protective measures during all transmission scenarios.

#### **During All Transmission Scenarios**

• Provide guidance on protective measures (hand washing, mask use, physical distancing, and ventilation).

#### During Scenarios 2, 3, and 4

- Implement physical distancing measures, including reducing large gatherings and altering schedules to reduce crowding.
- Provide guidance on source control measures (face masks) and consider requiring the use of source control in public settings.
- Provide guidance on proper ventilation in indoor settings to reduce risk of transmission.
- Encourage both small and large gatherings to be held outdoors when possible.
- Provide guidance on <a href="https://www.home-based.care">home-based.care</a> for sick individuals.

# Water, Sanitation, Hygiene (WASH) and Cleaning

While the virus that causes COVID-19 is primarily spread through respiratory droplets, transmission may still occur through touching shared surfaces. It is important for community members to have continuous, safe access to clean water for the purposes of washing hands and cleaning surfaces at all stages of transmission. At stages of minimal transmission, supplies should be procured, and guidance should be shared with the community to ensure access to needed public goods and facilities for washing hands and cleaning surfaces. Handwashing and cleaning practices should be implemented in both <u>public</u> and <u>private</u> settings.

# **During All Transmission Scenarios**

- Identify mechanisms to supply water, soap, and cleaning supplies to the public.
- Identify communities at risk and ensure supply chains to support handwashing measures.
- Provide guidance on cleaning frequently touched surfaces and the importance of ensuring water, soap, and cleaning supplies are readily available.

#### During Scenarios 2, 3, and 4

- Prioritize availability of handwashing and cleaning supplies to the public.
- Provide guidance for establishing handwashing stations.
- Require every person to wash their hands before entering community settings.
- Require thorough cleaning of community settings.
- Provide guidance on how to clean a home when someone is sick.

# **Contact Tracing**

Contact tracing helps contain an outbreak by identifying those people who may have been exposed to a sick individual. Necessary adaptations to contact tracing programs will depend on the setting and will need to adapt to best suit the current epidemiology as the outbreak evolves. Contact tracing may be most feasible when there are few cases or a limited number of clusters. As cases rise, contact tracing resources may need to be directed towards high-priority settings. Community trust is critical for contact tracing to be successful. Community buy-in, ownership, and active participation are essential to successfully implementing contact tracing for COVID-19. Below are considerations for when to implement contact tracing efforts.

#### **During All Transmission Scenarios**

- Train and recruit staff to conduct contact tracing activities.
- Develop guidance for monitoring close contacts and implementing quarantine and isolation.
- Identify methods to optimize contact tracing through simplified data collection, monitoring, and additional staffing.

- Conduct contact tracing and managing and monitoring of contacts as advised in MoH guidance.
- Monitor close contacts through culturally appropriate and community-based efforts.
- Isolate laboratory-confirmed COVID-19 cases until <u>cases are no longer considered infectious.</u>

#### During Scenario 4 (all Levels)

• Prioritize contact tracing activities and resources for high-risk settings (critical infrastructure, populations at risk for severe disease).

# **Schools and Workplaces**

Schools and workplace settings are at risk for COVID-19 transmission due to people from different households interacting for prolonged periods of time. Modifying <u>activities in schools</u> and workplaces should be considered to keep community members safe while still meeting essential educational and economic needs. Precautions that can support mitigation of COVID-19 transmission should be implemented, including mask use, increased ventilation, physical distancing, and moving activities to outdoor settings when possible.

#### **During All Transmission Scenarios**

- Educate community members on the need to stay home from school or work when they feel ill with any type of symptoms.
- Educate administrators on the need for sick leave allowance and provision of distance learning or working from home, if possible.

# During Scenarios 3 and 4

- Provide guidance to implement short-term closures (for cleaning, disinfecting, and contact tracing, as needed).
- Instruct administrators to implement distance learning or work from home arrangements, when possible, for people at increased risk of severe illness or those with close family or household members at increased risk of severe illness.

#### During Scenario 4 (all Levels)

- Instruct administrators to implement broader or longer-term closures.
- Direct administrators to implement extended distance learning and work-from-home arrangements, when possible, or ensure appropriate physical distancing between staff at workplaces deemed essential.
- Direct administrators to ensure flexible leave or work schedules for those who need to stay home due to school closures, childcare dismissals, or to care for elderly or ill persons.

# **Resources**

#### CDC Resources:

• <u>Science Brief: Background Rationale and Evidence for Public Health Recommendations for Fully Vaccinated People | CDC</u>

#### WHO Resources:

- Critical preparedness, readiness and response actions for COVID-19 | WHO
- Home care for patients with COVID-19 presenting with mild symptoms and management of their contacts | WHO
- Risk communication and community engagement in response to COVID-19 | WHO
- Considerations in adjusting public health and social measures in the context of COVID-19 | WHO