

Considerations for quarantine of individuals in the context of containment for coronavirus disease (COVID-19)

Interim guidance
19 March 2020



On 30 January 2020, the WHO Director-General determined that the outbreak of coronavirus disease (COVID-19) constitutes a Public Health Emergency of International Concern.¹ As the outbreak continues to evolve, Member States are considering options to prevent introduction of the disease to new areas or to reduce human-to-human transmission in areas where the virus that causes COVID-19 is already circulating.

Public health measures to achieve these goals may include quarantine, which involves the restriction of movement, or separation from the rest of the population, of healthy persons who may have been exposed to the virus, with the objective of monitoring their symptoms and ensuring early detection of cases. Many countries have the legal authority to impose quarantine. Quarantine should be implemented only as part of a comprehensive package of public health response and containment measures and, in accordance with Article 3 of the International Health Regulations (2005), be fully respectful of the dignity, human rights and fundamental freedoms of persons.²

The purpose of this document is to offer guidance to Member States on implementing quarantine measures for individuals in the context of the current COVID-19 outbreak. It is intended for those who are responsible for establishing local or national policy for the quarantine of individuals and for ensuring adherence to infection prevention and control (IPC) measures.

This document is informed by current knowledge of the COVID-19 outbreak and by considerations undertaken in response to other respiratory pathogens, including the severe acute respiratory syndrome coronavirus (SARS-CoV), the Middle East respiratory syndrome (MERS)-CoV and influenza viruses. WHO will continue to update these recommendations as new information becomes available.

Quarantine of persons

The quarantine of persons is the restriction of activities of or the separation of persons who are not ill but who may have been exposed to an infectious agent or disease, with the objective of monitoring their symptoms and ensuring the early detection of cases. Quarantine is different from isolation, which is the separation of ill or infected persons from others to prevent the spread of infection or contamination.

Quarantine is included within the legal framework of the International Health Regulations (2005), specifically:

- Article 30 – Travellers under public health observation;
- Article 31 – Health measures relating to entry of travellers;
- Article 32 – Treatment of travellers.²

Member States have, in accordance with the Charter of the United Nations and the principles of international law, the sovereign right to legislate and to implement legislation, in pursuit of their health policies, even if this involves the restriction of movement of individuals.

Before implementing quarantine, countries should properly communicate such measures to reduce panic and improve compliance.¹

- Authorities must provide people with clear, up-to-date, transparent and consistent guidelines, and with reliable information about quarantine measures.
- Constructive engagement with communities is essential if quarantine measures are to be accepted.
- Persons who are quarantined need to be provided with health care; financial, social and psychosocial support; and basic needs, including food, water, and other essentials. The needs of vulnerable populations should be prioritized.
- Cultural, geographic and economic factors affect the effectiveness of quarantine. Rapid assessment of the local context should evaluate both the drivers of success and the potential barriers to quarantine, and they should be used to inform plans for the most appropriate and culturally accepted measures.

When to use quarantine

Introducing quarantine measures early in an outbreak may delay the introduction of the disease to a country or area or may delay the peak of an epidemic in an area where local transmission is ongoing, or both. However, if not implemented properly, quarantine may also create additional sources of contamination and dissemination of the disease.

In the context of the current COVID-19 outbreak, the global containment strategy includes the rapid identification of laboratory-confirmed cases and their isolation and management either in a medical facility³ or at home.⁴

WHO recommends that contacts of patients with laboratory-confirmed COVID-19 be quarantined for 14 days from the last time they were exposed to the patient.

For the purpose of implementing quarantine, a contact is a person who is involved in any of the following from 2 days before and up to 14 days after the onset of symptoms in the patient:

- Having face-to-face contact with a COVID-19 patient within 1 meter and for >15 minutes;
- Providing direct care for patients with COVID-19 disease without using proper personal protective equipment;
- Staying in the same close environment as a COVID-19 patient (including sharing a workplace, classroom or household or being at the same gathering) for any amount of time;
- Travelling in close proximity with (that is, within 1 m separation from) a COVID-19 patient in any kind of conveyance;
- and other situations, as indicated by local risk assessments.⁵

Recommendations for implementing quarantine

If a decision to implement quarantine is taken, the authorities should ensure that:

- the quarantine setting is appropriate and that adequate food, water, and hygiene provisions can be made for the quarantine period;
- minimum IPC measures can be implemented;
- minimum requirements for monitoring the health of quarantined persons can be met during the quarantine period.

Ensuring an appropriate setting and adequate provisions.

The implementation of quarantine implies the use or creation of appropriate facilities in which a person or persons are physically separated from the community while being cared for.

Appropriate quarantine arrangements include the following measures.

- Those who are in quarantine must be placed in adequately ventilated, spacious single rooms with en suite facilities (that is, hand hygiene and toilet facilities). If single rooms are not available, beds should be placed at least 1 metre apart.
- Suitable environmental infection controls must be used, such as ensuring adequate air ventilation, air filtration systems, and waste-management protocols.
- Social distance must be maintained (that is, distance of at least 1 metre) between all persons who are quarantined.
- Accommodation must provide an appropriate level of comfort, including:
 - provision of food, water, and hygiene facilities;

- protection for baggage and other possessions;
 - appropriate medical treatment for existing conditions;
 - communication in a language that those who are quarantined can understand, with an explanation of their rights, services that will be made available, how long they will need to stay and what will happen if they get sick; additionally, contact information for their local embassy or consular support should be provided.
- Medical assistance must be provided for quarantined travellers who are isolated or subject to medical examinations or other procedures for public health purposes.
 - Those who are in quarantine must be able to communicate with family members who are outside the quarantine facility.
 - If possible, access to the internet, news, and entertainment should be provided.
 - Psychosocial support must be available.
 - Older persons and those with comorbid conditions require special attention because of their increased risk for severe COVID-19.

Possible settings for quarantine include hotels, dormitories, other facilities catering to groups, or the contact's home. Regardless of the setting, an assessment must ensure that the appropriate conditions for safe and effective quarantine are being met.

When home quarantine is chosen, the person should occupy a well-ventilated single room, or if a single room is not available, maintain a distance of at least 1 metre from other household members, minimize the use of shared spaces and cutlery, and ensure that shared spaces (such as the kitchen and bathroom) are well ventilated.

Minimum infection prevention and control measures.

The following IPC measures should be used to ensure a safe environment for quarantined persons.

1. Early recognition and control

- Any person in quarantine who develops febrile illness or respiratory symptoms at any point during the quarantine period should be treated and managed as a suspected case of COVID-19.
- Standard precautions apply to all persons who are quarantined and to quarantine personnel:
 - Perform hand hygiene frequently, particularly after contact with respiratory secretions, before eating, and after using the toilet. Hand hygiene includes either cleaning hands with soap and water or with an alcohol-based hand rub. Alcohol-based hand rubs are preferred if hands are not visibly dirty; hands should be washed with soap and water when they are visibly dirty.

- Ensure that all persons in quarantine are practicing respiratory hygiene and are aware of the importance of covering their nose and mouth with a bent elbow or paper tissue when coughing or sneezing and then immediately disposing of the tissue in a wastebasket with a lid and then performing hand hygiene.
- Refrain from touching the eyes, nose and mouth.
- A medical mask is not required for persons with no symptoms. There is no evidence that wearing a mask of any type protects people who are not sick.

2. Administrative controls

Administrative controls and policies for IPC within quarantine facilities include but may not be limited to:

- establishing sustainable IPC infrastructure (for example, by designing appropriate facilities) and activities;
- educating persons who are quarantined and quarantine personnel about IPC measures. All personnel working in the quarantine facility need to have training on standard precautions before the quarantine measures are implemented. The same advice on standard precautions should be given to all quarantined persons on arrival. Both personnel and quarantined persons should understand the importance of promptly seeking medical care if they develop symptoms;
- developing policies to ensure the early recognition and referral of a suspected COVID-19 case.

3. Environmental controls

Environmental cleaning and disinfection procedures must be followed consistently and correctly. Cleaning personnel need to be educated about and protected from COVID-19 and ensure that environmental surfaces are regularly and thoroughly cleaned throughout the quarantine period.

- Clean and disinfect frequently touched surfaces – such as bedside tables, bed frames and other bedroom furniture – daily with regular household disinfectant containing a diluted bleach solution (that is, 1-part bleach to 99 parts water). For surfaces that cannot be cleaned with bleach, 70% ethanol can be used.
- Clean and disinfect bathroom and toilet surfaces at least once daily with regular household disinfectant containing a diluted bleach solution (that is, 1-part bleach to 99 parts water).
- Clean clothes, bed linens, and bath and hand towels using regular laundry soap and water or machine wash at 60-90 °C (140–194 °F) with common laundry detergent, and dry thoroughly.
- Countries should consider implementing measures to ensure that waste is disposed of in a sanitary landfill and not in an unmonitored open area.
- Cleaning personnel should wear disposable gloves when cleaning surfaces or handling clothing or linen soiled with body fluids, and they should perform hand hygiene before putting on and after removing their gloves.

Minimum requirements for monitoring the health of quarantined persons.

Daily follow up of persons who are quarantined should be conducted within the facility for the duration of the quarantine period and should include screening for body temperature and symptoms. Groups of persons at higher risk of infection and severe disease may require additional surveillance owing to chronic conditions or they may require specific medical treatments.

Consideration should be given to the resources and personnel needed and rest periods for staff at quarantine facilities. This is particularly important in the context of an ongoing outbreak, during which limited public health resources may be better prioritized for health care facilities and case-detection activities.

Respiratory samples from quarantined persons, irrespective of whether they have symptoms, should be sent for laboratory testing at the end of the quarantine period.

References

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2. Key considerations: quarantine in the context of COVID-19. In: Social Science in Humanitarian Action: A Communication for Development Platform [website]. New York: UNICEF, Institute of Development Studies; 2020 (<https://www.socialscienceinaction.org/resources/february-2020-social-science-humanitarian-action-platform/>), accessed 29 February 2020).
3. World Health Organization. [Clinical management of severe acute respiratory infection \(SARI\) when COVID-19 disease is suspected](#). (accessed 16 March 2020).
4. World Health Organization. [Home care for patients with COVID-19 presenting with mild symptoms and management of their contacts: interim guidance](#), 17 March 2020. Geneva: World Health Organization; 2020 (accessed 17 March 2020).
5. World Health Organization. [Global Surveillance for human infection with coronavirus disease \(COVID-19\): interim guidance](#).

6. World Health Organization. [Advice on the use of masks in the community, during home care and in health care settings in the context of COVID-19: interim guidance](#),

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WHO continues to monitor the situation closely for any changes that may affect this interim guidance. Should any factors change, WHO will issue a further update. Otherwise, this interim guidance document will expire 2 years after the date of publication.

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