Home care for patients with suspected novel coronavirus (COVID-19) infection presenting with mild symptoms, and management of their contacts

Interim guidance 04 February 2020

Introduction

WHO has developed this rapid advice to meet the need for recommendations on safe home care for patients with suspected novel coronavirus (COVID-19) infection who present with mild symptoms¹ and on public health measures related to the management of contacts.

This document was adapted from the interim guidance that addressed Middle East respiratory syndrome coronavirus (MERS-CoV) infection that was published in June 2018 (*I*) and is informed by evidence-based guidelines published by WHO, including *Infection prevention and control of epidemic- and pandemic-prone acute respiratory diseases in health care* (2), and based on current information regarding COVID-19 infection.

This rapid advice is intended to guide public health and infection prevention and control (IPC) professionals, healthcare managers and healthcare workers (HCWs) when addressing issues related to home care for patients with suspected COVID-19 infection who present with mild symptoms and when managing contacts. This guidance is based on evidence about COVID-19 infection and the feasibility of implementing IPC measures at home. For the purpose of this document, caregivers refer to parents, spouses, other family members or friends without formal healthcare training.

For COVID-19 disease case definitions, please refer to https://apps.who.int/iris/bitstream/handle/10665/330857/WH O-2019-nCoV-SurveillanceGuidance-2020.3-eng.pdf.

For guidance on IPC at the facility level, please refer to https://www.who.int/publications-detail/infection-prevention-and-control-during-health-care-when-novel-coronavirus-(ncov)-infection-is-suspected.

Home care for patients with suspected COVID-19 infection who present with mild symptoms

In view of the current data on the disease and its transmission, WHO recommends that all patients with suspected COVID-19 infection who have severe acute respiratory infection be triaged at the first point of contact with the healthcare system and that emergency treatment should be started based on disease severity. For those presenting with mild illness, hospitalization may not be required unless there is concern about rapid deterioration (3). If there is only mild

¹ Mild symptoms include low-grade fever; cough; malaise; rhinorrhoea; or sore throat without any warning signs, such as shortness of breath or difficulty in breathing; increased respiratory difficulty, such as sputum or haemoptysis; gastrointestinal symptoms, such as nausea, vomiting, and/or diarrhoea; and without changes in mental status, such as confusion or lethargy.

illness, providing care at home may be considered. Other patients who may be cared for at home include those who are symptomatic but no longer require hospitalization and cases in which an informed decision has been made to refuse hospitalization; home care may also be considered when inpatient care is unavailable or unsafe (e.g., capacity is limited, and resources are unable to meet the demand for healthcare services).

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In any of these situations, patients with mild symptoms¹ and without underlying chronic conditions – such as lung or heart disease, renal failure or immunocompromising conditions that place the patient at increased risk of developing complications – may be cared for at home. This decision requires careful clinical judgment and should be informed by an assessment of the safety of the patient's home environment.²

In cases in which care is to be provided at home, a trained HCW should conduct an assessment to verify whether the residential setting is suitable for providing care; the HCW must assess whether the patient and the family are capable of adhering to the precautions that will be recommended as part of home care isolation (e.g., hand hygiene, respiratory hygiene, environmental cleaning, limitations on movement around or from the house) and can address safety concerns (e.g., accidental ingestion of and fire hazards associated with using alcohol-based hand rubs).

A communication link with a healthcare provider or public health personnel, or both, should be established for the duration of the home care period – that is, until the patient's symptoms have completely resolved. More comprehensive information about the mode of COVID-19 infection and transmission is required to define the duration of home isolation precautions.

Patients and household members should be educated about personal hygiene, basic IPC measures and how to care for the member of the family suspected of having COVID-19 disease as safely as possible to prevent the infection from spreading to household contacts. The patient and the family should be provided with ongoing support and education, and monitoring should continue for the duration of home care. Patients and families should adhere to the following recommendations.

- Place the patient in a well-ventilated single room (i.e., with open windows and an open door).
- Limit the movement of the patient in the house and minimize shared space. Ensure that shared spaces

² A sample checklist for assessing environmental conditions in the home is available in the Annex C of reference 2

(e.g., kitchen, bathroom) are well ventilated (e.g., keep windows open).

- Household members should stay in a different room or, if that is not possible, maintain a distance of at least 1 m from the ill person (e.g., sleep in a separate bed).³
- Limit the number of caregivers. Ideally, assign one person who is in a good health and has no underlying chronic or immunocompromising conditions (3). Visitors should not be allowed until the patient has completely recovered and has no signs and symptoms.
- Perform hand hygiene after any type of contact with patients or their immediate environment (4). Hand hygiene should also be performed before and after preparing food, before eating, after using the toilet and whenever hands look dirty. If hands are not visibly dirty, an alcohol-based hand rub can be used. For visibly dirty hands, use soap and water.
- When washing hands with soap and water, it is preferable
 to use disposable paper towels to dry hands. If these are
 not available, use clean cloth towels and replace them
 when they become wet.
- To contain respiratory secretions, a medical mask⁴ should be provided to the patient and worn as much as possible. Individuals who cannot tolerate a medical mask should use rigorous respiratory hygiene that is, the mouth and nose should be covered with a disposable paper tissue when coughing or sneezing. Materials used to cover the mouth and nose should be discarded or cleaned appropriately after use (e.g., wash handkerchiefs using regular soap or detergent and water).
- Caregivers should wear a tightly fitted medical mask that covers their mouth and nose when in the same room as the patient. Masks should not be touched or handled during use. If the mask gets wet or dirty from secretions, it must be replaced immediately with a new clean, dry mask. Remove the mask using the appropriate technique that is, do not touch the front, but instead untie it. Discard the mask immediately after use and perform hand hygiene.
- Avoid direct contact with body fluids, particularly oral or respiratory secretions, and stool. Use disposable gloves and a mask when providing oral or respiratory care and when handling stool, urine and other waste. Perform hand hygiene before and after removing gloves and the mask.
- Do not reuse masks or gloves.
- Use dedicated linen and eating utensils for the patient; these items should be cleaned with soap and water after use and may be re-used instead of being discarded.
- Clean and disinfect daily surfaces that are frequently touched in the room where the patient is being cared for, such as bedside tables, bedframes and other bedroom furniture. Regular household soap or detergent should be used first for cleaning, and then, after rinsing, regular household disinfectant containing 0.5% sodium hypochlorite (i.e., equivalent to 5000 pm or 1 part bleach⁵ to 9 parts water) should be applied.

- Clean and disinfect bathroom and toilet surfaces at least once daily. Regular household soap or detergent should be used first for cleaning, and then, after rinsing, regular household disinfectant containing 0.5% sodium hypochlorite should be applied.⁵
- Clean the patient's clothes, bed linen, and bath and hand towels using regular laundry soap and water or machine wash at 60–90 °C with common household detergent, and dry thoroughly. Place contaminated linen into a laundry bag. Do not shake soiled laundry and avoid contaminated materials coming into contact with skin and clothes.
- Gloves and protective clothing (e.g., plastic aprons) should be used when cleaning surfaces or handling clothing or linen soiled with body fluids. Depending on the context, either utility or single-use gloves can be used. After use, utility gloves should be cleaned with soap and water and decontaminated with 0.5% sodium hypochlorite solution. Single-use gloves (e.g., nitrile or latex) should be discarded after each use. Perform hand hygiene before and after removing gloves.
- Gloves, masks and other waste generated during at-home patient care should be placed into a waste bin with a lid in the patient's room before being disposed of as infectious waste.⁶
- Avoid other types of exposure to contaminated items from the patient's immediate environment (e.g., do not share toothbrushes, cigarettes, eating utensils, dishes, drinks, towels, washcloths or bed linen).
- When HCWs provide home care, they should perform a risk assessment to select the appropriate personal protective equipment and follow the recommendations for droplet and contact precautions.

Management of contacts

Persons (including caregivers and HCWs) who have been exposed to individuals with suspected COVID-19disease are considered contacts and should be advised to monitor their health for 14 days from the last possible day of contact.

A contact is a person who has had any of the following exposures:

- a healthcare-associated exposure, including providing direct care for patients with COVID-19 disease, working with HCWs infected with the virus that causes COVID-19 disease, visiting patients or staying in the same environment as a patient with COVID-19 disease;
- an exposure through working together in close proximity to or sharing the same classroom with a patient with COVID-19 disease;
- an exposure through traveling with a patient who has COVID-19 disease in any kind of vehicle;
- an exposure through living in the same household as a patient with COVID-19 disease within 14 days after the onset of symptoms in the patient (5).

³ An exception may be made for breastfeeding mothers. Considering the benefits of breastfeeding and the insignificant role of breast milk in the transmission of other respiratory viruses, a mother could can continue breastfeeding. The mother should wear a medical mask when she is near her baby and perform hand hygiene before and after having close contact with the baby. She will also need to follow the other hygiene measures described in this document.

⁴ Medical masks are surgical or procedure masks that are flat or pleated (some are shaped like a cup); they are held in place by strings that tie around the back of the head.

Most household bleach solutions contain 5% sodium hypochlorite. Recommendations on how to calculate the dilution from a given concentration of bleach can be found at https://www.cdc.gov/hai/pdfs/resource-limited/environmental-cleaning-508.pdf.

⁶ The local sanitary authority should adopt measures to ensure that the waste is disposed of at a sanitary landfill and not at an unmonitored open dump.

A way for caregivers to communicate with a healthcare provider should be established for the duration of the observation period. Also, healthcare personnel should review the health of contacts regularly by phone but, ideally and if feasible, through daily in-person visits, so specific diagnostic tests can be performed as necessary.

The healthcare provider should give instructions to contacts in advance about when and where to seek care if they become ill, what is the most appropriate mode of transportation to use, when and where to enter the designated healthcare facility, and which IPC precautions should be followed.

If a contact develops symptoms, the following steps should be taken.

- Notify the receiving medical facility that a symptomatic contact will be arriving.
- While traveling to seek care, the person who is ill should wear a medical mask.
- The contact should avoid taking public transportation to the facility if possible; an ambulance can be called, or the ill contact can be transported in a private vehicle with all of the windows open, if possible.
- The symptomatic contact should be advised to always perform respiratory hygiene and hand hygiene and to stand or sit as far away from others as possible (at least 1 m) when in transit and when in the healthcare facility.
- Any surfaces that become soiled with respiratory secretions or other body fluids during transport should be cleaned with soap or detergent and then disinfected with a regular household product containing a 0.5% diluted bleach solution.

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