

COVID-19 Home-Based Quality Care: A Practical Guide for Healthcare Workers

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Role of the Health Worker in Home Management of a Suspected or Confirmed SARS-CoV-2 Infection



Many patients with SARS-CoV-2 infection require hospitalization, but most can be cared for at home if they know how to prevent transmission of the virus to others and healthcare workers can identify the patient's care needs, how to provide them, and when to report the infection to a healthcare center or hospital. For these reasons, it is important that the patient, family members, or household members know how to manage the disease at home step by step.

This guide has been developed for healthcare workers. Its main objective is to facilitate the education of patients, their families, and other members of the household. Note that this guide may require updates based on new science and knowledge around SARS-CoV-2.

The role of the healthcare worker in home management of a patient with suspected or confirmed COVID-19 infection includes the following:

- Educate patients and their families based on current and accurate evidence.
- **Evaluate the patient:** If the patient has symptoms suggestive of COVID-19, decide whether they can be treated at home or should be referred to a health center or hospital.
- Maintain constant communication (to the extent possible) with the patient and/or family.
- Maintain **the privacy and trustworthiness** of those being cared for at home. It is important for the healthcare worker to explain to patients and family members that all information exchanged during the home visit is confidential.
- **Raise awareness** about COVID-19 without increasing the fear of patients, family members, or neighbors.

It is expected that many people will not allow healthcare personnel into their homes. It is important that the healthcare worker insist on the visit, explaining in a respectful manner the reasons for and importance of the visit.

When arriving at a home, the health worker should greet people—especially the patient—by name. The healthcare worker should greet warmly with respect and without harping, speak slowly, provide information in simple words, encourage people to ask questions, and make sure they understand.

The healthcare worker should educate the patient and their caregiver (family or other household member).

When to advise home management?	When to advise hospital management?							
 The patient has mild symptoms: Low-grade fever (less than 38°C) Cough Malaise Nasal discharge Pain when swallowing Diarrhea 	 The patient has moderate or severe symptoms: Difficulty breathing High fever Altered state of consciousness Inability to wake up or stay awake Purple-blue coloration of the lips or fingers 							
• The patient has no comorbidities, such as lung, heart, kidney, or hormonal disease (including diabetes or obesity).	 Frequent vomiting and/or profuse diarrhea If the patient has any of the following: Oxygen saturation of less than 92 percent 							
• The patient does not have an immunosuppressive condition (cancer, detectable HIV).	 using a pulse oximeter Breathing rate above 24 breaths/minutes The patient has a comorbidity. 							
• Transportation to the hospital is unsafe or inaccessible.	 The patient is immunocompromised. The patient is over 60 years of age. 							
The patient refuses to be hospitalized or cared for in a	The patient says they want to be cared for in a triage center or							

How Should We Advise People Whom We Suspect Have Symptoms of COVID-19?



triage center even after

providing them with all necessary information.

Stay at home; go out only if you require medical care.

hospital.



heal

Ask a family member to keep an eye on your health. Isolate yourself in a room separate from the rest of your family.





3 Do not self-medicate. If you have a fever, take acetaminophen. Stay hydrated.





Monitor your symptoms and warning signs. If you detect warning signs, go to the health center or hospital.



Follow the instructions given by community health workers.

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COVID-19 Overview

What Is COVID-19?

It is the infectious disease caused by a new coronavirus: SARS-CoV-2. The first cases of the disease appeared in December 2019 in Wuhan, a city in China's Hubei Province.

Transmission mechanisms

More information related to this virus becomes available every day, including transmission mechanisms. So far, we know that the virus that causes COVID-19 is transmitted from person to person, but it has been proposed that it can also be transmitted through contact with contaminated surfaces.



Direct contact: COVID-19 is transmitted through droplets generated when an infected person coughs, sneezes, or speaks. Those droplets contain the virus, which can be transmitted when it comes into contact with the mucous membranes of the oral or nasal cavity and/or the eyes of a person susceptible to being infected.

Indirect contact: It is also believed that people can acquire COVID-19 by touching a surface or object on which the virus is present and then touching their mouth, nose, or eyes. So far, indirect contact is not believed to be the main transmission form of the virus.



SARS-CoV-2 has been found in the feces of patients with COVID-19, so the possibility of fecal-oral transmission has been suggested but not yet demonstrated.

Although rare, intrauterine transmission of SARS-CoV-2 from mother to child has been demonstrated, both during and immediately after delivery (intrapartum).

Transmission through breast milk has not yet been confirmed. More studies are needed to confirm this contagion route.

How contagious is the virus?

Because the route of transmission is from person to person, it is an easily communicable virus, which poses a challenge for disease control. SARS-CoV-2 can infect people of all ages without exception.

Symptoms



Important: The figure above represents a general overview and includes all age groups. The percentage of asymptomatic people is higher in pediatric populations, which contributes greatly to the transmission of infection in the community—especially through adolescents—when appropriate prevention measures are not taken.

Initially, the patient may develop a **fever**, although not always. Other common symptoms include the following, although not all necessarily appear:



How to Identify Patients with COVID-19 in the Community



- **1.** Identify patients with suspected symptoms of COVID-19 (described previously), especially when the person has been in close contact with a confirmed or suspected case. The symptomatology of COVID-19 can be confused with that of other diseases.
 - When identifying patients with COVID-19, it is important to conduct contact tracing to identify people who may have been in contact with the patient.
- Investigate whether the patient has been in direct contact with someone who had COVID-19.
 "Direct contact" means living or working with someone who has the disease or having been within two meters (six feet) from someone who has the disease without the appropriate minimum protective equipment (use of mask, hand hygiene).
 - It is important to ask what degree of exposure the person has had to another person with COVID-19. "High risk" would involve being in front of a person with COVID-19 without a mask for at least 15 minutes and at a distance of less than two meters (six feet).
- **3.** Make use of diagnostic tests to confirm the infection. The patient should be referred to the nearest health center that offers such tests.

Definitions



Suspected case: A person who has acute signs and symptoms, such as fever, dry cough, sore throat, muscle aches, fatigue (tiredness), and shortness of breath, who during the 14 days before the onset of signs and symptoms would have been in close contact with a confirmed case of SARS-CoV-2 infection or visited any country with confirmed cases.

Confirmed case: A person with a suspected case who has a positive laboratory test for the SARS-CoV-2 virus.





Contact: A person who has been exposed for the previous 2 to 14 days after the onset of symptoms of a probable or confirmed case.

Asymptomatic case: An infected patient (positive SARS-CoV-2 virus laboratory test) who has no symptoms but can transmit the virus to others.

Most asymptomatic people are unaware that they are infected and able to transmit the virus.



Contact tracing: The act of identifying people who have been in contact with a positive case, questioning their health status, and prescribing quarantine if they are asymptomatic or isolation if they have symptoms.

When performing case tracking

- Take care when asking patients about their contacts. Give them time to remember and list the people with whom they have been in contact when not wearing a mask from two days before they showed symptoms until the time they received a diagnosis of COVID-19.
- People who have been in contact with the positive case should be in isolation if symptomatic and quarantine if asymptomatic.
 - **Symptomatic:** Isolation at home for 13 days from the onset of symptoms.
 - Asymptomatic: Quarantine at home for 14 days from the date of last contact with the infected person. Asymptomatic people should be on the watch for symptoms.¹



The importance of case tracking

- Tracking helps slow the spread of the virus in the community; isolation and quarantine will prevent others from becoming infected and interrupt the chain of transmission.
- It enables healthcare workers to prescribe diagnostic tests of COVID-19 to those contacted.
- It educates those contacted on COVID-19 symptoms and danger signs.

¹ **"Isolation" and "**quarantine" are terms that refer to the separation of people from others to avoid transmission of the virus. Isolation is used when the person already has symptoms; quarantine is used when a person still has no symptoms but has been exposed to a confirmed case and is at risk of being infected.

Care for Patients with Suspected or Confirmed Mild COVID-19 at Home



Care of patients at home involves the following:



At-home isolation

measures



Treatment:

antipyretics and

oxygen therapy



Basic prevention

measures



Identification of warning signs



Identification of the nearest health center in the event medical care is required

1. Isolation Measures at Home

What is isolation?

Isolation is an important measure for reducing the risk of infection at home and/or in the community.

Isolation means that the suspected or confirmed person with COVID-19 should avoid contact with other people for a period of 13 days from the onset of symptoms or 10 days from the diagnostic test for asymptomatic patients.

Before stopping isolation on the thirteenth day, it is important that the patient has been without a fever for the previous three days without the use of antipyretics and respiratory symptoms have improved.

Note: Countries have their own guidelines and protocols on topics such as isolation and quarantine. The recommendations in this guide are generic.

When should a patient be told to initiate isolation?

Isolation is prescribed in two different situations:



1. For a person with suspected mild COVID-19 symptoms



2. For a person *without symptoms* who has a positive diagnostic test for COVID-19 (swab test)

Isolation can be started voluntarily or through recommendation of healthcare personnel.

When isolation is indicated for a sick person, all those with whom they cohabit must be quarantined in a space within the house other than that occupied by the sick person.

Types of masks



For the patient, KN95/N95 is the best option





If the patient does not have one or cannot purchase one, use a surgical mask



For other family members, use a surgical or homemade mask

There are KN95/N95 masks with filters, which have the disadvantage of protecting only the person who uses them because the person can expel infectious droplets through the filter that can infect others. People wearing filter masks should place a surgical mask on top of that mask to protect those around them.

How to Prepare the Patient's Room for Isolation

Prepare a room for the exclusive use of the patient.

If there is no room available for exclusive use, place a bed or mattress for the exclusive use of the patient as far as possible from the rest of the family, at a minimum distance of 3–6 feet.



The patient's room should have its own bathroom.

If this is not possible, the patient may use a common bathroom, but it should be disinfected with a 0.1% chlorine solution after each use.

ould have

Set aside eating utensils and tableware (fork, knife, plate, etc.) for the exclusive use of the patient.

These items may be washed with dishwasher soap.



Do not shake out clothing.

Keep the room and the home well ventilated

(open windows).

ng. Change and wash bedding daily

(bedding should be for the exclusive use of the patient).

Disinfect frequently touched surfaces with a 0.1% chlorine solution or alcohol.

Disinfect doorknobs, light switches, bed, table, remote control, bathroom, and any other item used by the patient at least once daily.



If the patient is allowed to have company, the caregiver should follow recommended biosafety measures (mask and hand hygiene).

Limit to two the number of caregivers. The caregiver should be a family member who is healthy, young, and free from chronic illness.

The caregiver should use a mask when in the same room as the patient, or when at a distance of less than two meters (six feet) from the patient.



Who should NOT take care of the infected person at home?

It is recommended that people with the following conditions not care for COVID-19 patients:

- Adults over 60 years of age
- Patients with chronic kidney disease
- People with chronic obstructive pulmonary disease (COPD)
- Immunocompromised persons (including those who have had transplants of a solid organ)
- People who are obese (body mass index greater than 30 kg/m²)
- Patients with serious heart conditions: heart failure, coronary heart disease, or cardiomyopathies
- People with sickle cell disease
- Patients with type 2 diabetes mellitus
- Pregnant women



• People with other diseases considered at high risk by health personnel

Healthcare personnel will not be permanently present to provide home management, so the caregiver should have enough training to provide the needed care measures.

Caregiver's role in home management of COVID-19 patients:

- Guide/educate the patient with the tools provided by healthcare personnel without increasing fear.
- Be attentive to the presence of alarming signals or those indicating deterioration. Identify and communicate immediately with the nearest healthcare center or call 911 (or the emergency number in your country) when seeing these signs (see Identification of Warning Signs on p. 34).
- Maintain constant communication (as far as possible) with the patient to attend to their needs and answer their doubts, and with health authorities and healthcare workers to communicate the clinical condition of the patient.
- **Provide emotional** support to maintain **the patient's** mental well-being and reduce anxiety and stress.
- Explain to other family or household members the steps for preventing further contagion at home. Be attentive to the presence of symptomatology suggestive of COVID-19 in other household members.
- **Support the patient in treatment and other measures**, such as oxygen administration, oral medications, cleaning and disinfecting the room, and managing waste.

2. Treatment

General tips

- A self-assessment list is recommended to verify symptoms of COVID-19 patients (see Table 1: Self-Assessment Checklist for Non-Emergency Cases, p. 18).
- Prescribe rest.
- Maintain good hydration and electrolyte balance: drink plenty of fluids (no more than two liters/day). Avoid soft or sugary drinks.
- Remember that not all patients with fever and cough necessarily have COVID-19.
- Patients with certain conditions, such as advanced age, comorbidities, compromised immune system, obesity, or pregnancy, may experience severe symptoms. These patients should be referred immediately to a nearby hospital or healthcare center for evaluation.
- Instruct the patient not to self-medicate and use only medicines recommended by a certified healthcare professional.

Fever management

- Fever can start within three to five days of the onset of symptoms.
- In case of fever, take acetaminophen at the dose recommended by health professionals:
 - Adults: 500 mg oral every 6 hours •
 - Children: 10–15 mg/kg/dose every 6 hours (usual presentation is 120 mg/5 mL, but the bottle should always be checked)

Cough handling

- Older patients or those with a compromised immune system may cough less. This is an important point because a serious illness could go unnoticed.
- If possible, the patient should be advised to avoid lying on their back, which can affect the effectiveness of the cough reflex.
- Advise the patient to start with simple steps to help the cough. Taking one tablespoon of honey per day could help (except for children under one year of age, for whom honey intake is contraindicated).
- If the cough is distressing, authorized health personnel may recommend an over-the-• counter antitussive available in pharmacies (the antitussive may contain natural products, dextromethorphan, or ambroxol).

Handling respiratory distress

Monitor breathing difficulty (including increasing respiration frequency and oxygen level by means of a pulse oximeter). A blood oxygen level below 92 percent will require the patient to go to a hospital immediately.











- Proper ventilation: Tell the patient and caregiver to keep the room well ventilated and advise the patient to leave the windows and/or doors open (as long as they open to the outside rather than the inside of the house). Using a fan can cause infections to spread; therefore, its use is not recommended.
- Dyspnea (difficulty breathing) causes anxiety, in turn increasing the dyspnea even more. Therefore, authorized healthcare workers may recommend medications they deem appropriate to relieve anxiety.

	Yes	No	Start date
Have you had a fever?			
Have you been in contact with a COVID-19 patient in the last two weeks?			
Do you have the following symptoms?			
Headache			
Nasal discharge (mucus)			
Sore throat			
Diminished ability to taste			
Difficulty in breathing			
Diarrhea			
Muscle and joint pain			
Do you have any chronic conditions?			
Do you have a condition that alters your immune state ("defenses")?			
Are you over 60 years of age?			
Are you pregnant?			
Does your job involve being close to other people?			
Are you a healthcare worker?			

Table 1. Self-Assessment Checklist for Non-Emergency Cases

Action: If you have symptoms and have answered yes to any other question in this table, it is recommended that you contact the nearest health worker.

If you answered yes to having one or more of the symptoms and you are a healthcare worker or your job requires you to be close to other people, notify your immediate boss, go to the nearest healthcare establishment, and begin your isolation.

When isolation is indicated for a sick person, the entire family or household members must be quarantined in a space within the house other than that occupied by the sick person.

Oxygen therapy at home



Oxygen therapy involves artificially providing oxygen when the patient has shortness of breath or saturation has already dropped below 92 percent.

Health or equipment personnel should train the patient, caregiver, and family about how to use medical equipment to provide oxygen therapy at home.

Oxygenation is measured with a device called an **oximeter or pulse oximeter**.

How to use the oximeter or pulse oximeter

Explain the following to the patient and caregiver:

- Make sure the patient is calm and sitting or lying on their back.
- Choose the right sensor: pediatric or adult.
- Confirm that the sensor and equipment are functioning properly before evaluating the patient.
- Determine where the sensor will be placed (a finger—usually the middle of the right hand).
- Make sure there are no elements that could interfere with the oximeter functioning properly, such as creams, nail polish, paints, and so on.
- The red light should always be placed on the nail bed and the part that does not emit light on the nail pulp.
- Avoid any pressure on the measurement site.
- Control the pulse oximeter display: the stability of the curve must have a constant rhythm (waves of the same size).
- Perform the saturation and pulse reading.



Table 2. What to Do and Not Do with the Pulse Oximeter

What to do?	What not to do?						
Data logging							
Record pulse reading and saturation on a control sheet							
Using the pulse oximeter							
• Use the pulse oximeter on the middle finger of the patient's dominant hand or on the same hand where the blood pressure cuff is placed.	 If the skin is damaged or painful to use on the middle finger, use the index finger. Do not use the pulse eximpter if it is wet 						
• Change the position of the pulse oximeter slightly each time it is used to avoid skin damage.	 Do not use immediately after the person has been walking; wait at least 15 minutes 						
• Measurements on the pulse oximeter screen usually change if the hand position changes. Make sure the patient or caregiver is reading it accurately; the caregiver should read the screen if the patient is unable to do so.							
• Use the pulse oximeter for a few minutes three times a day. While the patient is receiving oxygen, monitor saturation at least once an hour or more often if they show increased shortness of breath.							
Wait 4 to 6 seconds for the results to be displayed on the device screen.							
 Keep the patient's oxygen level between 92– 96 percent. 							

What to do?

What not to do?

Maintenance of the pulse oximeter

• Remove the batteries if you plan to store them for an extended period.



- Keep the battery cover closed when using the device.
- Replace the battery after a while (check the manufacturer's instructions).
- Clean the device after each use with a clean cloth or alcohol wipe (paper or cotton cloth and hand sanitizer).
- Do not use the device next to the oxygen source (cylinder) or any other flammable gas.



- Keep the pulse oximeter out of intense light (direct sunlight); the light can affect its operation.
- Do not charge the batteries in the same room with the oxygen source, as it could cause a fire.

General tips:

- Pulse oximeters measure the amount of oxygenated hemoglobin in the blood and also provide a reading of the patient's heart rate. PR represents the pulse rate, and peripheral capillary oxygen saturation, or Sp02, is the oxygen level.
- Pulse oximeters may not provide accurate readings in pregnant women, anemic patients, or those with dark skin, low blood pressure, vascular atrophy, or cold fingers, nor when the patient is agitated or too much pressure is applied to the appliance.
- Pulse oximeters may not provide accurate readings if the patient has artificial nails or is wearing nail polish.
- Pulse oximeters may not provide accurate readings in people with small fingers or decreased blood flow to the limbs, or in patients with carbon monoxide poisoning.

Equipment needed to provide oxygen at home

The following equipment must be available to provide oxygen at home:

- Oxygen source: A steel cylinder that stores oxygen. A flowmeter must be connected to the cylinder to administer the oxygen. Depending on the degree of breathing difficulty and oxygen saturation, the oxygen flow may be increased or decreased. If the patient fails to exceed 92 percent saturation with the maximum input, they should be referred to the nearest hospital.
- Nasal cannula (nasal tips): Must be connected to the flowmeter, which in turn is connected to the oxygen cylinder. It should attach well to the nostrils and fit well behind the patient's earlobes or head.



When to administer oxygen therapy to confirmed or suspected COVID-19 patients at home

- When the patient is finding it harder to breathe (bluish/purple coloration of the lips and difficulty in breathing).
- When the patient has an oxygen saturation below 92 percent.

If the problem persists or gets worse despite the oxygen supply, the next step is to move the patient to the nearest hospital (call 911 or the emergency number in your country).

Patients under the age of 18 ideally should not be managed at home with oxygen. On suspicion of infection, patients should always be evaluated at a healthcare facility immediately.

Recommendations for managing patients with oxygen therapy at home are as follows:

- Perform hand hygiene before and after positioning the nasal tips.
- Administer the amount of oxygen recommended by health personnel.
- Ensure that the patient always wears a mask, even if using a nasal cannula.
- Prevent the oxygen source (steel cylinder) from falling to the ground.

Benefits of oxygen therapy at home

- Decreases the number of hospitalized patients.
- Allows the positive COVID-19 patient or someone suspected of being infected to be closer to their support system, which will help with psychosocial rehabilitation.
- Decreases costs incurred from inpatient care.

How to administer oxygen therapy at home to positive patients and/or those suspected of having COVID-19

Follow the steps below for home oxygen therapy (from the American Lung Association).

The following basic equipment is required:

- Thermometer: tape or digital
- Pulse oximeter: for people who are able to purchase one

Explain the following, step by step, to the patient and caregiver:



Step 1: Determine the amount of oxygen needed per minute

- Authorized medical personnel will advise on the amount of oxygen per minute.
- Instruct the patient and caregiver not to increase the oxygen flow without consulting authorized medical personnel.
- Instruct the patient and caregiver to continuously monitor the blood oxygen level with the pulse oximeter. Stop the oxygen flow when the patient no longer has difficulty breathing.

• Oxygen is usually supplied in cylinders or via oxygen concentrators.

Step 2: Verify the supply

- Wash your hands or use an antiseptic before touching the oxygen source.
- Check the pressure gauge of the cylinder to learn whether it has enough oxygen.
- Check the flowmeter and make sure it works properly.
- If using a humidifier, be sure to keep the container with water filled halfway. You must wash the humidifier at least once a week or as directed by medical staff or the production company. You can wash it with water and bleach (chlorine) and let it dry before refilling.

Step 3: Connect the cannula to the oxygen source and nose



- Connect the nasal cannula to the flowmeter.
- Place the nasal cannula in the nostrils with support around the head or earlobes (see image).
- Check the tube thoroughly and make sure it is not bent.
- Connect the tube to the mask if directed to do so by authorized medical personnel.

Step 4: Set the oxygen flow

- Mildly affected patients are usually advised to receive three to five liters of oxygen per minute. However, the amount should be determined by authorized medical personnel, depending on the level of oxygen in the blood.
- Set the flowmeter to the amount of oxygen per minute.
- Never change the oxygen flow unless it is recommended by authorized medical personnel.
- To make sure oxygen flows properly, place the cannula in a cup of clean water and look for water bubbles.



Step 5: Monitor

- Use the pulse oximeter to continuously monitor **the patient's** blood oxygen level. If the oxygen level is less than 92 percent, contact medical staff immediately.
- Keep the patient's mouth moist by using lip lubricants.
- Family and friends should know the patient is using oxygen so they can help in an emergency.
- Call medical staff immediately if the patient's lips turn blue, shortness of breath increases, or the patient is drowsy or confused.





• Keep the patient active in the isolation room by having them walk for 15 to 20 minutes every 3 hours.

Step 6: Keep equipment clean

- Wash the nasal cannula and humidifier water bottle at least once a week.
- Wash them with soap/chlorine, rinse with warm water, and let dry. Use clean water for the humidifier container.
- Replace the cannula (nasal tips) every 2–4 weeks.
- COVID-19 cases usually recover over the course of 2–3 weeks.

Step 7: Safety recommendations

- Keep the oxygen cylinder upright.
- Do not store the cylinder in an enclosed place, such as a cabinet or trunk.
- Do not use a cannula more than 15 meters long and be careful not to trip over it.
- Close the oxygen cylinder when it is not in use. Never leave the cannula or mask on the floor or bed with oxygen flowing.
- If using an oxygen concentrator, never connect other devices to the same outlet. Keep the hub away from the wall or curtains and never place clothing or anything else on the hub.
- Do not use air fresheners as long as the oxygen source is open. Remove flammable elements from the room (creams, Vaseline, or any oil-based liquid).



- Do not use alcohol-based hand antiseptic while handling oxygen equipment. Let hands dry completely before handling the equipment.
- Keep the oxygen cylinder away from heat and flames. Do not smoke, cook, or use electrical appliances, such as hair dryers, near the oxygen source.
- Keep a fire extinguisher in the room.
- It is always a good idea to have a back-up cylinder. Be sure to use government-approved cylinders.

Handling anxiety or agitation

- Talk to the patient and understand the reason for the anxiety. The health worker or a household member should support the patient in helping to reduce anxiety and agitation.
- Talk to family or household members to ensure adequate lighting and ongoing mental support at home (see page 39: Mental Health).
- The health worker must establish a line of communication with the patient, their family, or household members.





Breathing exercises for recovering patients

In the recovery phase, all patients should be advised to perform breathing exercises.

Figure 1. Breathing Exercises



Adapted from Castilla-La Mancha Health Service (SESCAM) in Spain.



3. Implementation of Basic Prevention Measures

The following are recommendations for home care:



Hand hygiene



Respiratory

hygiene and

proper use of the mask

Food preparation



Disinfecting

surfaces



Waste management



3.1 Hand hygiene



After coughing or sneezing



Before and after eating



After using the bathroom



After touching household items (doorknobs, remote control, telephones, chargers, etc.)



Before and after putting on your mask



Before, during, and after food preparation



After cleaning the patient's room

(includes removing trash, disinfecting surfaces, cleaning the toilet)



Family member: upon arriving home

Important: patients in isolation should not leave the home.

Figure 2. When to Practice Hand Hygiene

Patients, family members, and/or household members

If your hands are visibly dirty, you need to wash them with soap and water. Use disposable paper towels to dry your hands. If you do not have any paper towels, you can use clean cloth towels. If there is no water, use gel alcohol.

Figure 3. Washing Hands with Soap and Water OR SING "HAPPY BIRTHDAY" FOUR TIMES 1 2 3 3 6



Figure 4. Disinfecting Hands with Alcohol-Based Products

20-30 seconds

Place a sufficient amount of the product on the palm of your hand to cover the entire surface to be disinfected.



OR SING "HAPPY BIRTHDAY" TWO TIMES UNTIL HANDS ARE COMPLETELY DRY

Rub your hands together for at least 20 seconds. If you do not have a watch, you can sing Happy Birthday two times from beginning to end.



process.



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3.2 Respiratory hygiene and the correct use of masks

The patient should practice adequate respiratory hygiene:

- Cover the nose and mouth with a disposable handkerchief when coughing or sneezing.
- Use a trash can to discard the tissues or used toilet paper.
- Practice hand hygiene after contact with respiratory secretions.

IMPORTANT: A mask alone will not protect against COVID-19. Hand hygiene, physical distancing (ideally 2 meters/6 feet), and surface disinfection are also important.

A person who has COVID-19 or someone with suspected symptoms ideally should wear a surgical or KN95/N95 mask. These masks should be changed at least once a day. If it is not possible to change the mask daily, the following "wait and reuse" strategy should be used.

For N95/KN95 and surgical masks only:

Designate a mask for each day of the week (from Monday through Sunday). Use each mask only once during each seven-day period to eliminate the virus before the next use.



Place the mask in **its own bag** after each use. The bag can be either paper or plastic.



Week 5: New masks



Cloth masks should be washed with soap and water at the end of the day and allowed to dry in the sun.



Patients should cover their mouth and nose when sneezing and coughing. Those who are intolerant of the continued use of the medical mask should practice respiratory hygiene strictly, using disposable paper masks or bandanas. All disposable material must be thrown into a bag designated for the patient in the house. If a bandana is used, it should be washed with soap and water.

Caregivers should wear a medical mask when visiting the patient or entering the patient's room and should not use wet, dirty, or damaged masks. Used masks should be thrown into the bag assigned for disposable patient materials.

Masks with filters have the disadvantage of protecting only the person who uses them infectious droplets can be expelled through the filter and infect other people. People using a filter mask should always place a surgical mask on top of it to protect those around them.

Important information related to cloth masks:

Not all fabric masks have the same capacity for filtering particles. The best fabric masks are those with the following characteristics:

- Have at least three layers of fabric:
 - The inner layer of the mask is made of cotton or some other fabric mixed with cotton. . Cotton is preferred for the inner layer because it is absorbent.
 - The outermost layers are made of a hydrophobic or water-repellent material, such as polypropylene or polyester.
- Made of a non-elastic fabric or one that does not stretch easily •
- Made of a fabric that withstands high temperatures and is durable •
- Fit well on the face •
- Made of a thick fabric that does not show the fibers of the material when looking at it in the sun

Figure 5. Homemade, No-Sew Mask

1. Fold the bandana in half

2. Fold the upper portion down and the lower portion up



3. Place rubber bands or hairbands 6 inches apart





4. Fold the sides toward the middle and tuck them in







Putting on All types of masks



Adapted from the World Health Organization.

3.3 Preparing food



The following recommendations should be followed in performing proper food handling and preparation:

- It is important that the person who makes household purchases is neither the patient nor the caregiver. Ideally, it should be someone who has not been in contact with the patient.
- Wash your hands with soap before and after preparing food.
- Before consuming them, wash all vegetables and fruits with soap and plenty of water. Start by washing the less dirty vegetables and fruits.
- Avoid eating foods that have not been prepared at home, as well as those that may not have been prepared with appropriate biosecurity measures.
- Contaminated waste must be placed in a double plastic bag to prevent the contents from dispersing during storage and transfer.



3.4 Recommendations for washing clothes

Although it has not been shown that a healthy person can become infected through clothing, neither has it been disproven; thus, the following measures are recommended:

- Wear masks when handling dirty laundry—either that of the sick person or other members of the household. Do not shake dirty laundry because doing so could spread particles into the air.
- Dirty clothes used by the patient should be placed in plastic bags or sealed until they are washed.
- Ideally, you should wash dirty clothes with hot water. It is recommended that contaminated clothing be placed in a bucket of hot water for about 20 minutes.
- Use water and common detergent to wash clothes.
- The patient's clothes should not be mixed with the family's clothing; wash them separately.
- Clothes should be dried in the sun or in an electric dryer.



3.5 Surface disinfection

The virus has been shown to stay for several days on various surfaces and could represent a source of infection for others (indirect transmission). For that reason, it is important to keep surfaces clean, especially those in the patient's room and bathroom.

It is recommended that surfaces with which patients come in contact, such as a bedside table, bed, toilet, or other furniture, be disinfected. Chlorine can be used at a dilution of 0.1 percent, or 1,000 parts per million (ppm). If secretions, such as blood, vomiting, or sputum, are present, disinfecting surfaces with a more concentrated solution (5,000 ppm, or 0.5 percent) is recommended. Table 3 explains how to dilute chlorine appropriately.

Commercial Presentation of Chlorine	Parts of Water to Chlorine to Obtain a Concentration of 1,000 ppm (0.1%)	Parts of Water to Chlorine to Obtain a Concentration of 5,000 ppm (0.5%)
3%	35 mL per liter of drinking water	170 mL per liter of drinking water
3.5%	30 mL per liter of drinking water	145 mL per liter of drinking water
4%	25 mL per liter of drinking water	125 mL per liter of drinking water
4.5%	22 mL per liter of drinking water	110 mL per liter of drinking water
5%	20 mL per liter of drinking water	100 mL per liter of drinking water

Table 3. How to Prepare a Liter of Disinfectant Solution with Chlorine and Drinking Water at Home²

Important:

- Wear gloves, a mask, and eye protection while preparing the solution.
- Do not mix the solution with detergent or other chemicals.
- The water to be chlorinated should be clear and clean.
- Store the solution in an opaque bottle and without exposure to the sun.
- Change the solution every day.

3.6 Patient waste management

Wear a mask and gloves when handling the patient's bodily wastes: urine, feces, vomit, and other substances.

The procedure for waste management using three bags is as follows:

- 1. Place the debris into the first plastic bag.
- 2. Insert the first bag into a second one.
- 3. Set the second bag next to the exit area of the room.
- 4. Then insert the second bag into a third bag, along with other household waste.
- 5. This third bag should be deposited exclusively in the dumpster or any other collection system established in the community.
- 6. After the procedure, wash your hands with soap and water.

² Drinking water: water suitable for human consumption, without restrictions for drinking or preparing food.

4. Identification of Warning Signs (indications to go to a healthcare establishment immediately)



Patients and their family or household members should know that if any of the following warning signs are present, they should immediately return to a health center or hospital:

- Shortness of breath
- Cyanosis (purple-blue lips or fingers), even when the patient is on oxygen
- Oxygen saturation of less than 92 percent
- Chest tightness
- Frequent vomiting
- Altered state of consciousness (irritability in infants, lethargy in adults)

5. Establishing a Communication Link between the Health Worker/Healthcare Establishment and the Patient/Caregiver



Patients, family members, or household members, including the caregiver, should be provided with the contact phone numbers for healthcare facilities and teleconsultation staff (if available). Healthcare facilities must also maintain a telephone number for patients and their family/household members for regular follow-up.



Considerations for Special Populations



Pregnancy and COVID-19

Few cases of intrauterine transmission of the virus have been reported during childbirth or immediately after birth.

In addition to the prevention measures detailed previously, healthcare workers should consider the following measures specifically for pregnant women:

- Pregnant women should not care for patients with confirmed COVID-19 or suspected cases.
- The clinical history of a pregnant patient should be known.
- It is important to check the health status of the fetus and the mother via diagnostic tests.
- A pregnant woman with a positive COVID-19 diagnosis or suspected case should remain in isolation at home as long as her symptoms are mild.
- The patient should receive adequate hydration and rest, and take acetaminophen in case of fever. The use of anti-inflammatory painkillers should be avoided.
- Symptoms such as fever, tiredness, shortness of breath, pneumonia, or delayed recovery may be signs that the patient is developing a lung infection that requires attention from health personnel. The patient should be advised to go to prioritized hospitals for appropriate and timely care.

What health workers should do to provide assistance at home if a pregnant woman is suspected of having or tests positive for COVID-19:

- The patient should be provided with quality care during home monitoring.
- It is important that health personnel maintain pregnant **patients'** privacy and demonstrate reliability and credibility when these patients are suspected of having or test positive for COVID-19.
- Any pregnant woman who tests positive or is suspected of having COVID-19 has the right to have a positive and safe experience during childbirth, including being educated about her situation and staying in communication with the health team.

Risk factors for a positive or suspected pregnant COVID-19 patient being managed at home:

According to the World Health Organization, there currently is no evidence that a pregnant woman has an increased risk of serious illness or that the fetus is at risk. However, there are always risks, such as the following:

- Premature birth
- Premature rupture of membranes
- Obstetric complications

It is important to note that any pregnant woman who has tested positive for COVID-19 and is being assisted at home should receive advice and information related to the potential risk of adverse effects. Any pregnant woman who has recovered from COVID-19 should be instructed to attend routine prenatal and fetal growth monitoring.

Breastfeeding and COVID-19

To date, transmission of the SARS-CoV-2 virus through breastfeeding remains unproven.

Every mother who tests positive or is suspected of having COVID-19 and is being managed at home should stay with her baby, practice skinto-skin contact, and breastfeed as long as the following measures are taken:

- Wash hands or use an alcohol-based solution before and after breastfeeding the baby
- Keep a mask on when breastfeeding or caring for the child
- Practice respiratory hygiene and hand hygiene after sneezing; sneeze on a disposable handkerchief or flexed arm
- Clean and disinfect surfaces with which the mother has been in contact
- Bathe daily

Pediatric Patients and COVID-19

The clinical course is usually benign in children, and cases of severe illness are rare; attention should be paid to warning signs, however.

Most cases can be handled at home with strict supervision by caregivers. It is important to know that children with chronic diseases—such as congenital heart disease, cancer, chronic kidney disease, or immune system disruption—are at increased risk of complications.

Practical care tips for pediatric patient management are as follows:

- Keep children at home.
- If children are over two years of age, they should wear a mask; ensure that the size and fit of the mask are adequate.
- Explain the importance of hand hygiene and encourage children to practice it frequently. Teach them to sing Happy Birthday twice when they wash their hands so they are washing for a long enough period.

Recommendations for immunization programs in the context of the COVID-19 pandemic are available at <u>https://www.paho.org/en/documents/immunization-program-context-covid-19-pandemic-version-2-24-april-2020</u>.

• Remind caregivers and others that health centers remain open despite the pandemic. It is important to attend scheduled vaccination appointments. Vaccines are free in most places.





- For safe vaccination, caregivers should know how to access health centers in compliance with recommended prevention measures:
 - Only one family member should accompany the child.
 - Both the caregiver and child should use a mask, except if the child is under two years of age.
- There are currently no known medical contraindications against vaccination of COVID-19 patients. It is recommended to postpone vaccination until the complete resolution of the disease.

Children and adolescents contribute to virus transmission in the community.

Children represent 12 percent of the COVID-19 cases in the United States, at the time of writing. Children and adolescents generally have mild or asymptomatic infections, meaning that the infection may go unnoticed. This fact is important because, despite the lack of symptoms, adolescents in particular contribute greatly to transmission in the larger community if appropriate prevention measures are not taken.

The World Health Organization has warned that young people are becoming important contributors to the spread of the new coronavirus in many countries because of their risky behaviors and failure to take prevention measures, such as gathering in crowded places, not wearing a mask, and not practicing proper hand hygiene.

Patients at High Risk of Severe COVID-19

Advanced age and the presence of comorbidity have been associated with a high risk of serious illness.

Risk steadily increases as age increases, but it is not only those over 60 who have an increased risk of serious illness. Specific conditions that increase a person's risk of experiencing a severe case of COVID-19 are as follows:

- People with renal disease
- People with chronic obstructive pulmonary disease (COPD)
- Immunocompromised persons (including those who have had transplants of a solid organ, detectable HIV, or cancer)
- People who are obese (body mass index greater than 30 kg/m²)
- People with serious heart conditions: heart failure, coronary heart disease, or cardiomyopathies
- People with sickle cell disease
- People with type 2 diabetes mellitus
- People over 60 years of age





Solidarity Strategies for Patients with Confirmed or Suspected COVID-19 Cared for at Home

The COVID-19 pandemic has caused many people to find ways to help those with the disease. All of these actions can have a positive impact on patients. They can be implemented by doctors, nurses, psychologists, social workers, and community health volunteers, and can consist of the following:

- Promoting solidarity and empathy in the community, thus reducing stigmatization
- Managing psychological support through professional care to reduce anxiety
- Educating patients on the care they should receive at home
- Training family members or those who will care for patients about the care they should receive at home

Mental Health

Factors influencing mental health and domestic violence during the COVID-19 pandemic are as follows:

- Fear of getting sick and dying
- Feelings of helplessness, boredom, loneliness, and depression due to isolation
- Avoidance of health centers for fear of becoming infected while receiving care
- Fear by those who have had COVID-19 that they will become reinfected or relapse
- Impairment of the physical and mental health of vulnerable people
- Misinformation

Some of the strategies to improve stress and anxiety are as follows:

- Patients should maintain a healthy lifestyle: proper diet, exercise, housework, or other activities, such as singing, dancing, and so on.
- Patients should avoid watching or listening to disturbing news that may cause stress or anxiety.
- Health personnel should transmit simple data and truthful, clear, and concise information. Allow patients to establish communication for social purposes while isolated by letting them use phones, video calls, or social media to interact with family and friends.



- Understand that patients may have feelings of repentance, resentment, loneliness, helplessness, or depression; recognize that these feelings should be expected after what the person has been through and that they are not to blame.
- Patients should avoid caffeine after noon. Caffeine can stay in the body for many hours and affects sleep long after the last consumption.
- Patients should avoid alcohol; it is a depressant and can reduce sleep.

If support is required, call emergency service.



Domestic Violence

During the pandemic, anxiety and stress, coupled with confinement, have led to increased reports of domestic violence. It is important to identify, advise possible domestic violence victims, and encourage them to report these cases to the relevant authorities.

To reduce the risk of domestic violence during confinement, community health personnel should ask about it and help victims

reveal their situation. Health personnel should also offer first-hand assistance and medical treatment, which includes listening with empathy without making any judgments.

It is important to suggest that patients use mental health services through mobile telephone and telemedicine to safely address violence against women.

Here are some phrases that can be used to introduce the topic:

- "Many women have experienced problems with their husband or partner."
 - "I've seen women who have experienced problems at home like yours."

Below are some questions that can be asked to find out more about this issue. If the person answers "**yes**" to any of these statements, support should be offered:

- "Are you afraid of your husband or partner?"
- "Did your husband (or partner) or anyone else person at home ever threaten to hurt you? If so, when did it happen?"
- "Is your husband or someone at home intimidating or insulting you?"
- "Does your husband (or partner) try to control you—for example, by not allowing you to have money or leave the house?"
- "Has your husband (or partner) forced you to have sex or other sexual contact that you did not want?"
- "Has your husband (or partner) threatened to kill you?"

In case of domestic violence, call your local emergency number. Add city name and numbers in the table.

City	Phones

Palliative Care and COVID-19

For various reasons, not everyone will be able to be cared for in hospitals (low physical mobility of the patient, transportation to the hospital is insecure or inaccessible, the patient refuses to seek medical attention). Relatives should provide care at home so the patient is comfortable and deals with their illness in the best possible way, without suffering. For palliative care, contact relevant departments in your city.

Vaccines for COVID-19

The pharmaceutical industry currently is working hard to find a vaccine for COVID-19. A vaccine will be a fundamental pillar in prevention; however, other important measures should not be eliminated, such as hand hygiene, face mask use, isolation of patients with confirmed or suspected infection, and physical distancing.

There are international organizations that ensure the safety of people who receive vaccines by establishing that publicly available vaccines must meet a number of requirements, including safety and effectiveness.

Because of the global emergency, the approval process for COVID-19 vaccines has been accelerated but important steps are not eliminated. All vaccines must meet all safety and efficacy requirements. All eligible people are encouraged to take government-approved vaccines.

Recommended Actions When a Loved One Dies at Home

Call 911 (or the emergency number in your country) to report the death of the person suspected of or confirmed as having COVID-19 so health authorities at regional and forensic medicine levels are notified immediately.

Keep the body in isolation until regional health and forensic medicine personnel arrive so the appropriate body management procedures are applied:

- The relevant office will identify the body. In the event that staff from that institution are not present, identification must be carried out by **the locality's** medical personnel.
- In the room where the death occurred, authorities will place the body in a bag and immediately thereafter in a coffin.

After removal of the body, the patient's room and bathroom should be disinfected with a 0.1 percent chlorine solution. There is no need to burn the **person's clothing**; they can be washed as recommended in this document (see Recommendations for washing clothes, p. 32).

For more information on this topic, please refer to **your country's g**uidelines for handling of corpses and corpses in cases of COVID-19 (when available).

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Annexes

The following annexes are intended to be printed and handed over to patients during health worker visits or sent to them electronically.

Annex 1. Where to Rent or Buy Supplies to Provide Oxygen Therapy at Home

Rental and filling of oxygen cylinders	Inputs such as flowmeters, cannula (nasal tips), masks, humidifiers, pressure gauges
• INFRA	Shops for sale of medical supplies
Gaspro	
Hondugas	

This is an example from Honduras. Please look for oxygen suppliers in your country.

Annex 2. Recommendations for Home Isolation

Prepare a room for the exclusive use of the patient.

If there is no room available for exclusive use, place a bed or mattress for the exclusive use of the patient as far as possible from the rest of the family, at a minimum distance of 3–6 feet.



The patient's room should have its own bathroom.

If this is not possible, the patient may use a common bathroom, but it should be disinfected with a 0.1% chlorine solution after each use.

ould have

Set aside eating utensils and tableware (fork, knife, plate, etc.) for the exclusive use of the patient.

These items may be washed with dishwasher soap.



Do not shake out clothing.

Keep the room and the home well ventilated

(open windows).

Change and wash bedding daily (bedding should be

for the exclusive use of the patient).

Disinfect frequently touched surfaces with a 0.1% chlorine solution or alcohol.

Disinfect doorknobs, light switches, bed, table, remote control, bathroom, and any other item used by the patient at least once daily.



If the patient is allowed to have company, the caregiver should follow recommended biosafety measures (mask and hand hygiene).

Limit to two the number of caregivers. The caregiver should be a family member who is healthy, young, and free from chronic illness.

The caregiver should use a mask when in the same room as the patient, or when at a distance of less than two meters (six feet) from the patient.



Annex 3. Handwashing Practices



After coughing or sneezing



Before and after eating

Before, during,

and after food

preparation

When to Wash Your Hands



After using the bathroom



After cleaning the patient's room

(includes removing trash, disinfecting surfaces, cleaning the toilet)



After touching household items (doorknobs, remote control, telephones, chargers, etc.)



Family member: upon arriving home

Important: patients in isolation should not leave the home.



Before and after putting on your mask

Washing Hands with Soap and Water



OR SING "HAPPY BIRTHDAY" FOUR TIMES



Rinse your hands well with clean water.



together. Be sure to lather the backs of hands, between fingers, and



Rub hands together for at least 40 seconds. If you do not have a watch, you can sing Happy Birthday 4 times from beginning to end. You should see a large amount of soapsuds.

Avoid touching your eyes, nose, and mouth with unwashed hands.

Disinfecting with Alcohol-Based Products

towel or allow hands to

dry in the air, without

shaking them.

20-30 seconds



Rub your hands together for at least 20 seconds. If you do not have a watch, you can sing Happy Birthday two times from beginning to end.



Let your hands dry without making any sudden movements to speed up the process.

OR SING "HAPPY BIRTHDAY" TWO TIMES

UNTIL HANDS ARE COMPLETELY DRY



Annex 4. How to Reuse Masks

A person who has COVID-19 or someone with suspected symptoms ideally should wear a surgical or KN95/N95 mask. These masks should be changed at least once a day. If it is not possible to change the mask daily, the following "wait and reuse" strategy should be used.

For N95/KN95 and surgical masks only:

Designate a mask for each day of the week (from Monday through Sunday). Use each mask only once during each seven-day period to eliminate the virus before the next use. M F S Su

Place the mask in its own bag after each use. The bag can be either paper or plastic.



Week 5: New masks



Cloth masks should be washed with soap and water at the end of the day and allowed to dry in the sun.



IMPORTANT: A mask alone will not protect against COVID-19. Hand hygiene, physical distancing (ideally 2 meters/6 feet), and surface disinfection are also important.

Annex 5. What to Do and Not Do with the Pulse Oximeter

What to do?	What not to do?						
Data logging							
Record pulse reading and saturation on a control sheet							
Using the pulse oximeter							
 Use the pulse oximeter on the middle finger of the patient's dominant hand or on the same hand where the blood pressure cuff is placed. Change the position of the pulse oximeter slightly each time it is used to avoid skin damage. Measurements on the pulse oximeter screen usually change if the hand position changes. Make sure the patient or caregiver is reading it accurately; the caregiver should read the screen if the patient is unable to do so. Use the pulse oximeter for a few minutes three times a day. While the patient is receiving oxygen, monitor saturation at least once an hour or more often if they show increased shortness of breath. Wait 4 to 6 seconds for the results to be displayed on the device screen. Keep the patient's oxygen level between 92–96 percent. 	 If the skin is damaged or painful to use on the middle finger, use the index finger. Do not use the pulse oximeter if it is wet. Do not use immediately after the person has been walking; wait at least 15 minutes. 						
Maintenance of the pulse oximeter							
 Remove the batteries if you plan to store them for an extended period. Keep the battery cover closed when using the device. Replace the battery after a while (check the manufacturer's instructions). 	 Do not use the device next to the oxygen source (cylinder) or any other flammable gas. Do not look at the infrared light of the pulse oximeter because it may damage your eyes. Keep the pulse oximeter out of intense 						
Clean the device after each use with a clean cloth or alcohol wipe (paper or cotton cloth and hand sanitizer).	 light (direct sunlight); the light can affect its operation. Do not charge the batteries in the same room with the oxygen source, as it could cause a fire. 						

General tips:

- Pulse oximeters measure the amount of oxygenated hemoglobin in the blood and also provide a reading of the patient's heart rate. PR represents the pulse rate, and peripheral capillary oxygen saturation, or SpO2, is the oxygen level.
- Pulse oximeters may not provide accurate readings in pregnant women, anemic patients, or those with dark skin, low blood pressure, vascular atrophy, or cold fingers, nor when the patient is agitated or too much pressure is applied to the appliance.
- Pulse oximeters may not provide accurate readings if the patient has artificial nails or is wearing nail polish.
- Pulse oximeters may not provide accurate readings in people with small fingers or decreased blood flow to the limbs, or in patients with carbon monoxide poisoning.

Annex 6. Self-Assessment Checklist for Non-Emergency Cases

	Yes	No	Start date
Have you had a fever?			
Have you been in contact with a COVID-19 patient in the last two weeks?			
Do you have the following symptoms?			
Headache			
Nasal discharge (mucus)			
Sore throat			
Diminished ability to taste			
Difficulty in breathing			
Diarrhea			
Muscle and joint pain			
Do you have any chronic conditions?			
Do you have a condition that alters your immune state ("defenses")?			
Are you over 60 years of age?			
Are you pregnant?			
Does your job involve being close to other people?			
Are you a healthcare worker?			

Action: If you have symptoms and have answered yes to any other question in this table, it is recommended that you contact the nearest health worker.

If you answered yes to having one or more of the symptoms and you are a healthcare worker or your job requires you to be close to other people, notify your immediate boss, go to the nearest healthcare establishment, and begin your isolation.

Identification of Warning Sign

Patients and their family or household members should know that if any of the following warning signs are present, they should immediately return to the health center or hospital:

- Shortness of breath
- Cyanosis (purple-blue lips or fingers), even when the patient is on oxygen
- Oxygen saturation less than 92 percent
- Chest tightness
- Frequent vomiting
- Altered state of consciousness (irritability in infants, lethargy in adults)

Annex 7. Breathing Exercises for Recovery Patients



Adapted from Castilla-La Mancha Health Service (SESCAM) in Spain.

Annex 8. Resources for Home Oxygen Therapy

								APP	ROXIM	ATE HO	URS OF	CONTIN	iuous l	JSE				
Size	Сар.	m ³	Liter	1 LPM	2 LPM	3 LPM	4 LPM	5 LPM	6 LPM	7 LPM	8 LPM	9 LPM	10 LPM	11 LPM	12 LPM	13 LPM	14 LPM	15 LPM
	370 Pa	9,72	9.723,60	162	81	54	40	32 ½	27	23 1⁄4	20 ¼	18	16 ¼	15	13 ½	12 ½	11 ½	10
İ	220 Pa	5,78	5.781,60	96 ½	48 ¼	32	24	19 ¼	16	14	12	10 ½	9 1⁄2	8 1⁄2	8	7 1⁄2	7	6 1⁄2
i	110 Pa	2,89	2.890,80	48 ¼	24	16	12	9 1⁄2	8	7	6	5 1⁄2	5	4 ½	4	3 1⁄2	3 ¼	3
i	50 Pa	1,31	1.314,00	22	11	7 ¼	5 1⁄2	4 ½	3 1⁄2	3 1⁄4	3	2 ³ ⁄4	2 1⁄2	2 1⁄4	2	1 ³ ⁄4	1 1⁄2	1 1⁄4
İ	23 Pa	0,60	604,44	11	5	3 1⁄2	2 1/2	2	1 3⁄4	1 1⁄2	1 1⁄4	1	3⁄4					

Duration of Oxygen Cylinders for Hospital or Home Use

Note: LPM = Liter per minute (refers to the flow of the amount of oxygen through the tube to the patient per month); Pa = Pascal

Annex 9. Breastfeeding and COVID-19

To date, transmission of the SARS-CoV-2 virus through breastfeeding remains unproven.

Every mother who tests positive or is suspected of having with COVID-19 and is being managed at home should stay with her baby, practice skin-to-skin contact, and breastfeed as long as the following measures are taken:

- Wash hands or use an alcohol-based solution before and after breastfeeding the baby
- Keep a mask on when breastfeeding or caring for the child
- Practice respiratory hygiene and hand hygiene after sneezing; sneeze on a disposable handkerchief or flexed arm
- Clean and disinfect surfaces with which the mother has been in contact
- Bathe daily



For more information, contact:

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