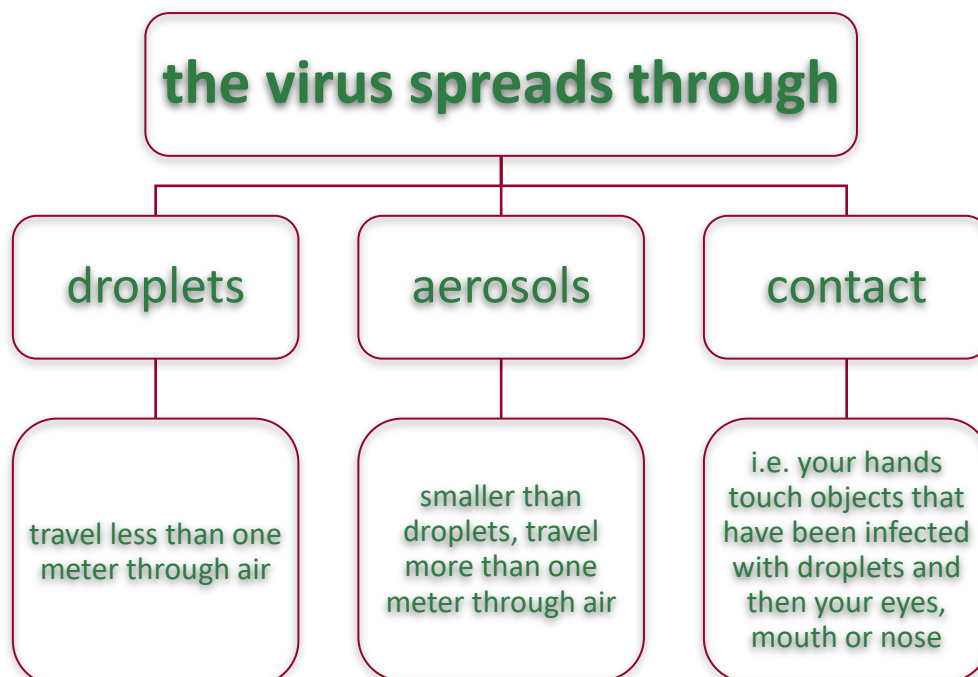# Community based management of Covid-19

Covid-19 causes fear and confusion in many communities, especially in poor and vulnerable ones with poor access to healthcare.

False information published via social media is further exacerbating that situation. However, there is a lot a community can do to contain the virus and care for those affected by it. The basis for both is relevant and reliable information for health care professionals, community health workers and the general public.

Healthcare providers including community health workers play an important role in informing the general public.

Basic Facts about Covid-19

the virus spreads through

droplets

travel less than one meter through air

aerosols

smaller than droplets, travel more than one meter through air

contact

i.e. your hands touch objects that have been infected with droplets and then your eyes, mouth or nose

What reduces the risk of contracting Covid-19

- Fresh air/good ventilation

- Physical distance (2 meters)

- Hand and surface hygiene

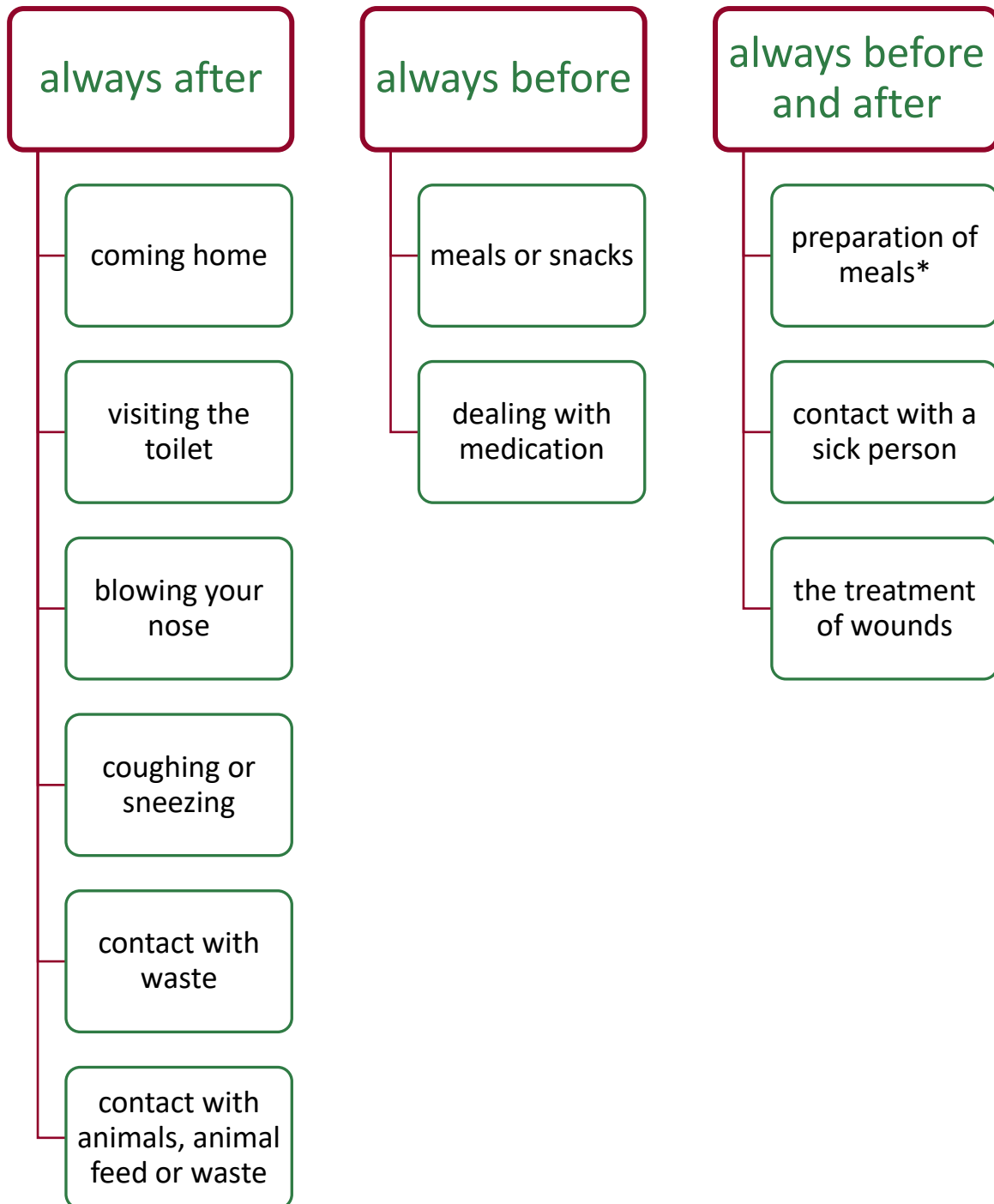- Masks that cover nose and mouth

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Health care providers should educate their patients about these facts so that they can protect themselves.

Hand hygiene is the most effective way to protect yourself from contracting.

So, here is some advice health care providers can give to their patients:

When should you wash your hands?

always after
- coming home
- visiting the toilet
- blowing your nose
- coughing or sneezing
- contact with waste
- contact with animals, animal feed or waste

always before
- meals or snacks
- dealing with medication

always before and after
- preparation of meals*
- contact with a sick person
- the treatment of wounds

*when processing raw meat, you should wash hands even in between

How to identify probable cases of Covid-19

Covid-19 shares symptoms with a common cold, influenza and allergic reactions. Only a test can show for sure if a person is infected with Covid-19. However, beware: A test can be false negative if the sample is not taken correctly.

But some symptoms can help detect a suspected case:

Does the patient have fever?

Does the patient suffer from myalgia?

Does the patient have a dry cough?

Does the patient report loss of smell?

Does the patient also suffer from shortness of breath?

If a patient answers all four questions with yes, the patient most likely has Covid-19.

Additionally, you should ask questions about the patient's behaviour.
If the patient reports potentially risky behaviour (lack of hand hygiene or physical distance, stay in a risk area) he or she has probably contracted SARS-Cov2.

This is as close as you can get to a diagnosis without a test.

But even if a patient shows only one of the above mentioned symptoms the patient might suffer from Covid-19. Only a doctor should decide if a different explanation of the symptoms imposes itself. Therefore, you should advise the patient to be tested if possible and to self-isolate as much as possible for 14 days unless tested negative.

How to deal with a probable or suspected case of Covid-19

Most patients develop only mild or moderate symptoms.
They can safely be cared for at home, if a few precautions are taken.

Here are the most important points patients and their families should follow when they create the setting for home-based care.

- **All household members need to be quarantined, i.e. no one should go out for shopping or work.**

- **Isolate all family members with Covid-19 or its symptoms in a separate, well - ventilated room.**

- **Chose one member of the household to care for sick family members.**
  Ideally, the person should be young and healthy and should have no underlying chronic condition (high blood pressure, diabetes, HIV, TB).
  Medical training is not necessary.
  The caregiver should wear a mask and gloves when in direct contact with a sick person.

- **Keep shared spaces in your home as well ventilated as possible.**

- **Sick family members should have their own eating utensils and bedlinen.**

- **Sick family members should have a separate waste bag that should be closed and go into unsorted garbage.**

Physical distance and masks further reduce the transmission within the household.

The following advice might be helpful for patients and their families.

- **If possible, family members with Covid-19 or its symptoms should always maintain a distance of two meters and wear a mask whenever they are in the same room as other family members.**

- **Limit the movement of people with Covid-19 or its symptoms in the house and minimize their presence in shared spaces as much as possible.**

- **If space at home is limited, focus on separating family members who are 60 years and older or have a preexisting condition from the sick family member.**

If housing conditions in a community are very restricted, isolating all suspected and probable cases in a separate shelter may be an option.

Besides the above-mentioned precautions, general cleanliness can help prevent transmission between members of the same household.

The starting point is a basic understanding of how Covid 19 can spread at home:

- **Through hands**

- **Through frequently touched objects and surfaces**
  - **Door handles, light switches,**
  - **Handles, switches and dials of appliances (fridge, TV, oven)**
  - **Bathroom surfaces, toilet and tab handles**
  - **Food preparation surfaces**

- **Through sponges and cleaning cloths**

Here are some basic prevention measures health care providers can encourage in every household:

1. **Wash your hands frequently with soap and water.**
2. **Clean the above-mentioned objects and surfaces regularly. Soap or household detergents are sufficient.**
3. **Change sponges or cleaning cloths regularly and wash them with laundry soap at a temperature of at least 60 degrees.**

Since someone who has contracted Covid-19 can infect others before the first symptoms appear, these measures are helpful even without a suspected or probable case of Covid-19.

Households with a suspected or probable case of Covid-19 should take special precautions when dealing with laundry:

- Soak laundry with laundry soap or household detergent (bleach)
- Use warm water – ideally between 60-90°C (140 – 194 °F) if possible.
  For face masks, 60° C is the minimum temperature.
  Use a stick to stir the laundry in order not to scald your hands
- Wash your hands immediately after handling dirty clothing and avoid touching your face.
- Dry laundry completely
- Disinfect laundry basket with household disinfectant
- Wash your hands before folding the laundry
- Ironing provides additional disinfection

Caring for people suffering from Covid-19 or its symptoms

So far, no specific therapy against the virus has proven beneficial for the majority of mild cases.

However good care can alleviate the symptoms and support the body in overcoming the infection.

Caring for people suffering from COVID-19 or its symptoms - nutrition

A healthy and diverse diet can help the body fight the virus.

It should contain:

Carbohydrate	Proteins	Vitamins	Fat

A soup can be an option.

A chicken stock with vegetables contains all the necessary elements.

Caring for people suffering from COVID-19 or its symptoms – hydration

Patients suffering from fever and general body malaise should drink a lot.

Patients who have difficulty breathing should not drink more than 2 liters/day unless they are thirsty.

Caring for people suffering from COVID-19 or its symptoms – medication

Classic painkillers that also inhibit inflammations can help alleviate symptoms like fever and headache.

Paracetamol, Ibuprofen and Aspirin are equally safe and effective.

Caring for people suffering from COVID-19 or its symptoms – relief in case of shortness of breath:

- **Keep the room well ventilated so that the patient gets fresh air**

- **Encourage the patient to frequently change his/her position to relieve areas previously compressed by body weight and make them available for oxygenation again.**
  Patients who tolerate lying on their stomach may find relief in that position since the pneumonia caused by Covid-19 especially affects the back part of the lungs.

- **Bubble bottle exercise to expand the alveoli/air sacs.**
  How it works:
  Take a soda-bottle and a straw.
  Fill the bottle with water up to a height of 5 cm and put the straw in the bottle.
  Encourage the patient to take a deep breath and exhale through the straw as long as possible 5-10 times in a row.
  Repeat the exercise several times a day.
  In hospital settings, it can make oxygen-therapy more effective.

Caring for people suffering from COVID-19 or its symptoms – relief in case of a panic attack due to shortness of breath:

- **Talk to the patient reassuringly and soothingly.**

- **Bring the patient to a window.**

- **Create an airflow that the patient can feel**
  for example by waving with a banana leaf.
  (If you do this, you should absolutely wear a mask and open
  the windows. Keep this intervention as short as possible).

- **In a hospital setting, provide oxygen.**

Caring for people suffering from COVID-19 or its symptoms – progress monitoring

For the majority of patients symptoms get better within the first week.
If this is not the case, there is a risk that the patient will experience a more serious progression.

Community health workers should revisit the patient after seven days.
If they see the following alarm signs, they should refer the patient to a hospital.

- **Fever that lasts for more than 7 days**

- **High respiratory rate (>20-25/min)**

- **General deterioration of symptoms**

- **Change of consciousness**

For mild cases, no special rehabilitation measures are needed.

However, in some cases symptoms and physical limitations may last for weeks or months.

Healthcare providers should educate their patients about that fact and encourage them that they will eventually get better.

They can encourage them to do mild exercise.

They can advise them to continue the bubble bottle exercise if shortness of breath persists.