

Guideline

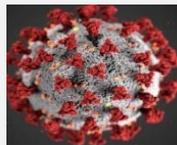
for

Integrated Management of Childhood Illnesses: Facility Case Management



on

COVID-19 RESPONSE



For Facility IMCI Trained Service providers

**IMCI unit
Malawi Ministry of Health
Box 30377
Lilongwe 3**

FACILITY IMCI IN THE CONTEXT OF COVID-19

Background

The Integrated Management of Childhood Illness (IMCI) is an integrated approach to child health that focuses on the well-being of the whole child. It aims at reducing death, illness and disability and to promote improved growth and development among children under 5 years of age. It includes both preventive and curative interventions. It promotes accurate identification of childhood illness.

IMCI as a strategy is being implemented by health workers (nurses and clinicians) at district hospital and health centre levels. As frontline individuals in patient care, health workers have a major responsibility in the management of sick children and sick young infants as well as preventing the spread of COVID-19.

Health workers in the facilities have an important role to play ensuring equitable access and providing life-saving treatments for common childhood illnesses and common causes of childhood deaths. These are malaria, pneumonia, diarrhea, HIV and acute malnutrition. In the context of the Covid-19 disease, health workers are called upon to provide other valuable services to help reduce and stop transmission of COVID-19. Such services include:

- Screening of all sick children at every encounter.
- Surveillance and contact tracing
- Referral of suspected COVID-19 cases (following national protocols)
- Provision of key messages to communities and families regarding care seeking
- Infection prevention and control measures
- Management of children with COVID-19
- Provision of advice on home management of COVID-19 cases.

This guideline is for health workers in public and private facilities at district and health centre levels managing sick children and sick young infants. It provides guidance for case management of childhood illnesses and conditions with the aim of:

- a) Protecting health workers and the community from COVID-19 infection
- b) Maintaining the community's trust in the health system
- c) Ensuring uninterrupted provision of essential life-saving services for children in the health facilities.

The Corona Virus Disease 2019 (COVID-19)

Covid-19 is a new respiratory infection, which started in China has spreading across the world. Corona virus belongs to a group of viruses in the family of Coronaviridae. Corona viruses are a large family of viruses that are known to cause illnesses ranging from common cold to more severe diseases such as Middle East Respiratory Syndrome (MERS) and Severe Acute Respiratory Syndrome (SARS). The virus is found in animals as the reservoir host but can also infect humans (zoonotic). It is transmitted from human to human. The virus has spikes or Glycoproteins on the cell membrane that allows them to attach and infuse into human cells such as lung cells after undergoing mutation. It uses human cells to manufacture more copies of the virus. The copies are then released in the blood circulation destroying other cells of the lung causing shortness of breath and even death.

It spreads through droplets when one is talking, coughing or sneezing; or through getting in direct contact with an infected person by touching or shaking hands with them or through contaminated surfaces. It can also spread through inhalation of the aerosolized virus which can exist in the air for up to three hours. The incubation period is 2-14 days.

Symptoms of COVID-19 include flu-like symptoms i.e. fever, cough, headache, and sore throat; difficulty in breathing, shortness of breath and muscle pain. COVID-19 can only be diagnosed and confirmed through a laboratory test using Reverse Transcriptase Polymerase Chain Reaction (RT-PCR). Currently, there is no specific treatment or vaccine for this disease. However, patients are managed based on the presenting signs and symptoms (symptomatic treatment). The World Health Organization (WHO) recently declared COVID-19 as a global pandemic.

COVID-19 in children

The symptoms of COVID-19 are nonspecific and overlap with symptoms of common childhood illnesses such as malaria, pneumonia and diarrhoea.

COVID-19 symptoms

Symptoms of **mild disease** include nonspecific signs of upper respiratory tract infection like fever, general tiredness, general body pains, cough, sore throat, runny nose and sneezing. Some cases may not have fever, or have only digestive symptoms such as nausea, vomiting, abdominal pain and diarrhea.

Children with **moderate disease** present with pneumonia, frequent fever, cough mostly cough followed by productive cough. Some may have wheezing but no obvious signs of low oxygen such as shortness of breath. Respiratory symptoms may be accompanied by gastrointestinal symptoms such as diarrhoea.

Note: Progression to severe disease with hypoxaemia may happen within the course of one week.

Basic principles for Infection Prevention and Control (IPC) by health workers include:

- Adhere to infection prevention and control (IPC) measures established by authorities and guided by local epidemiology and transmission.
- Make arrangements to provide hand washing facilities to the patients before entering and at the time of leaving the clinic or provide 70% alcohol hand rub.
- It is best if you could reorganize the waiting area to have a separated waiting area for sick children.
- Triage (screening of children, no direct contact): in the absence of PPE, maintain spatial distance of at least 2 meters, triage both caregiver and child for symptoms of Covid-19)
- Try to reduce waiting time for the sick children who are presenting with fever and respiratory tract symptoms. Give them priority without keeping them waiting in the waiting area.

- During the consultation, keep at least one to two meters 2m distance from the patient by placing the chair at that distance.
- If you cannot maintain at least 2m distance, it is advisable to wear goggles/face shield in addition to the surgical facemask.
- Perform necessary examinations only and try to perform the examination steps from behind as much as possible
- Physical examination and performance of tests such as malaria Rapid Diagnostic Tests (RDTs) requires PPE (at a minimum gloves, ideally gloves & mask and if available a medical mask).
- In the absence of PPE, consider a 'No touch policy' (ideally 2m distance) that focuses on history of symptoms and clinical observation of the sick child.
- The health worker and the staff should wear appropriate PPE (goggles, surgical mask, overall).
- Before, during and after each consultation, health workers should practice frequent and appropriate hand washing with soap and clean water or use hand sanitizer (if available and if there is no soap or water).
- Sanitation of surfaces and equipment (thermometers, weighing scales, height boards, respiratory timers, MUAC tape) with alcohol or soap and water.
- Display a notice outside the facility asking patients to kindly wait outside without entering if they have a possible contact history or if they belong to high-risk exposure category, and instead to contact the doctor over the phone. Display notices in appropriate languages with pictures at the entrance and inside the practice to alert, remind and educate patients about the COVID-19, its symptoms and hygienic practices.
- Discontinue the use of toys, magazines, pens and other shared items in the waiting area.
- After each consultation with a patient with respiratory symptoms, disinfect the utensils (stethoscope, thermometer, goggles, phone etc), consultation table.
- **Hand washing is the gold standard and irreplaceable.**

CASE MANAGEMENT

Disease situation categories

Malawi like any other country has been affected by COVID-19. This disease situation has been classified by World Health Organization into four categories:

1. Countries with no cases (no cases);
2. Countries with one or more cases, imported or locally acquired (sporadic cases);
3. Countries experiencing cases in clusters, geographic location, or common exposure (clusters of cases);
4. Countries experiencing large-scale outbreaks of local transmission (community transmission).

1. In settings with no cases or sporadic cases

Health workers should continue using the existing IMCI protocols, without changes or modifications, unless containment measures such as physical distancing or lockdowns are put in place that may require low- or no-touch protocols. This is because the level of transmission is minimal.

2. Communities with localized clusters (e.g. urban centers or regional transportation hubs)

In this category the level of transmission is high. Cases can be identified from catchment areas or particular geographical location. IMCI protocols will be slightly modified. The main principle is to maintain equitable, quality case management for childhood illnesses while identifying children with possible COVID-19 as much as possible and minimizing the risk of COVID-19 transmission in the context of patient care.

3. Large-scale outbreaks of COVID-19 local transmission (community transmission)

In this category there is wide spread transmission of the infection in a particular country. IMCI protocols will be modified. The modification includes revised flow of assessment, observation and actions taking into account the need for COVID-19 risk assessment, IPC including no-touch measures.

Case definitions of Covid-19 and advice on initial management of patients

The present recommendation is to isolate and test all clinically/epidemiologically suspected cases of COVID-19.

All patients with medical/surgical, obstetrics/gynecological or paediatric conditions should receive the usual standards of care in keeping with clinical status, in a designated area. Management of these patients should NOT be delayed under any circumstances pending COVID-19 test result.

All confirmed cases once stable should be transferred to a designated COVID-19 Treatment Centre.

Clinically Suspected Case:

- A. A person with ACUTE RESPIRATORY ILLNESS (with cough, shortness of breath , sore throat; one or more of these) with a history of FEVER (at any point of time during this illness), returning to Malawi from ANY COUNTRY within the last 14days.

OR

B. A person with ACUTE RESPIRATORY ILLNESS (with cough, shortness of breath, sore throat, one or more of these) AND having been in **close-contact** with a confirmed or suspected COVID-19 case during the last 14 days prior to onset of symptoms.

Close-contact: A person staying in an enclosed environment for >15 minutes (e.g. same household/workplace/social gatherings/travelling in same vehicle) or who had direct physical contact.

OR

C. A person with ACUTE RESPIRATORY ILLNESS (with cough, shortness of breath, sore throat; one or more of these) with a history of fever (at any point of time during this illness) with a **history of travel to or residence in a location designated as an area of high transmission of COVID-19** disease as defined by the Epidemiology Unit, MoH, during the 14 days prior to symptom onset.

OR

D. A patient with acute pneumonia (not explainable by any other aetiology) regardless of travel or contact history as decided by the treating Consultant.

- Management of such patients should NOT be delayed under any circumstances.
- Patients should receive the standards of care in keeping with the known underlying cause in a designated area (ETU/isolation unit/designated respiratory unit/designated ward-HDU/ICU).
- A sample for the PCR test obtained and sent (not the patient) to a designated laboratory.
- Once the result is available, if positive, the patient (once stable) can be transferred to a designated COVID-19 treatment center.

OR

E. A patient with fever and in respiratory distress as evident by RR>30 per minute, SpO₂ <90% on room air, regardless of travel or contact history and without a definable cause, as decided by the treating Consultant.

- Management of such patients should NOT be delayed under any circumstances.
- Patients should receive the standards of care in keeping with the clinical condition in a designated area (isolation unit/designated respiratory unit/designated ward-HDU/ICU).
- A sample for the PCR test obtained and sent (not the patient) to a designated laboratory.
- Once the result is available, if positive, the patient (once stable) can be transferred to a designated COVID-19 treatment center.

OR

F. Any person irrespective of the presence of symptoms, with an epidemiological link to a confirmed COVID-19 case who needs testing, as decided by Epidemiology Unit.

Confirmed Case:

A person with laboratory confirmation of COVID-19 infection, irrespective of clinical signs and symptoms.

Disposition of cases:

Disposition of suspected cases

- All patients fitting to the above suspected case definitions (A, B, C) should be admitted and transferred by ambulance to the closest designated hospital (refer updates on the list of designated hospitals) for confirmatory testing and management. This should be done only after stabilizing the patient and in prior consultation with the respective designated hospital, adhering to necessary infection prevention and control (IPC) precautions.

- In case of D and E, patient should be managed in the same hospital in a designated area (isolation unit/designated respiratory unit/designated ICU). A sample for the PCR test obtained and sent (not the patient) to the designated laboratories. Once the result is available, if positive, the patient (once stable) can be transferred to a designated COVID-19 treatment center. In case of F, all COVID-19 positive individuals will be admitted to a designated treatment facility.

Disposition of confirmed cases

All confirmed cases should be transferred to a COVID-19 Treatment Centre.

ASSESSMENT OF SICK CHILDREN IN THE CONTEXT OF COVID 19.

All sick children must be assessed following the IMCI guidelines and Infection Prevention & control (IPC) measures. Some modifications may be applied depending on availability of Personal Protective Equipment (PPE).

Check for general danger signs

Start with screening for COVID-19. Ask if any exposure to COVID-19 patient, any household member/close contact with COVID-19 signs, and if any recent travel/ contact with a person from COVID -19 area. If yes to any one of them, then it is a COVID-19 suspect. If none applies then that one is not a suspect. The assessment and management will depend on whether the patient is a COVID-19 suspect or not and the availability of PPE (gloves and mask). If PPE is not available, observe 2-metre distance (no touch) and check for general danger signs. Classify and manage the patient accordingly. If PPE is available, put on gloves and face mask then assess as usual. Refer to annex 1 for assessment and management of general dangers signs.

Assess for cough or difficult breathing

The assessment and management will depend on whether the patient is a COVID-19 suspect or not and the availability of PPE (gloves and mask). If PPE is not available, observe 2-metre distance (no touch) and assess for cough or difficulty breathing. Classify and manage the patient accordingly. If PPE is available, put on gloves and face mask then assess as usual. Refer to annex 2 for assessment and management of cough and difficulty breathing.

Assess for diarrhoea

The assessment and management will depend on whether the patient is a COVID-19 suspect or not and the availability of PPE (gloves and mask). If PPE is not available, observe 2-metre distance (no touch) and assess for diarrhoea. Classify and manage the patient accordingly. If PPE is available, put on gloves and face mask then assess as usual. Refer to annex 3 for assessment and management of a child with diarrhoea in the context of COVID-19.

Assess for fever

The assessment and management will depend on whether the patient is a COVID-19 suspect or not and the availability of PPE (gloves and mask). If PPE is not available, observe 2-metre distance (no touch) and assess for fever. Classify the patient clinically without mRDT and manage accordingly. If PPE is available, put on gloves and face mask then assess as usual. Checking MRDT will require use of PPE and strict IPC measures. Refer to annex 4 for assessment and management of a child with fever in the context of COVID-19.

Assess for ear problem

The assessment and management will depend on whether the patient is a COVID-19 suspect or not and the availability of PPE (gloves and mask). If PPE is not available, observe 2-metre distance (no touch) and assess for ear problem. Classify and manage the patient accordingly. If PPE is available, put on gloves and face mask then assess as usual. Refer to annex 5 for assessment and management of a child with ear problem in the context of COVID-19

Check for acute malnutrition

The assessment and management will depend on whether the patient is a COVID-19 suspect or not and the availability of PPE (gloves and mask). If PPE is not available, observe 2 metre distance (no touch) and check for acute malnutrition. Use the caregiver when looking for signs of malnutrition. Classify and manage the patient accordingly. If PPE is available, put on gloves and face mask then assess as usual. Refer to annex 6 for assessment and management of acute malnutrition in the context of COVID-19

Check for anaemia

The assessment and management will depend on whether the patient is a COVID-19 suspect or not and the availability of PPE (gloves and mask). If PPE is not available, observe 2-metre distance (no touch) and use the caregiver to assist in checking for anaemia. Classify and manage the patient accordingly. If PPE is available, put on gloves and face mask then assess as usual. Refer to annex 7 for assessment and management of anaemia in the context of COVID-19

Check for HIV infection

The health care provider must ensure that there is privacy when asking questions related to HIV Infection. It is important for health workers to always observe 2-metre distance when checking for HIV in the context of COVID-19. Checking for HIV does not require touching hence no touch approach should be applied.

Check immunizations, vitamin A and deworming status

Health care providers must wear PPEs or observe 2-metre distance when checking for immunizations in the context of COVID-19. Follow/Check SOPs in context of COVID-19 on EPI in annex 8.

Assess other problems

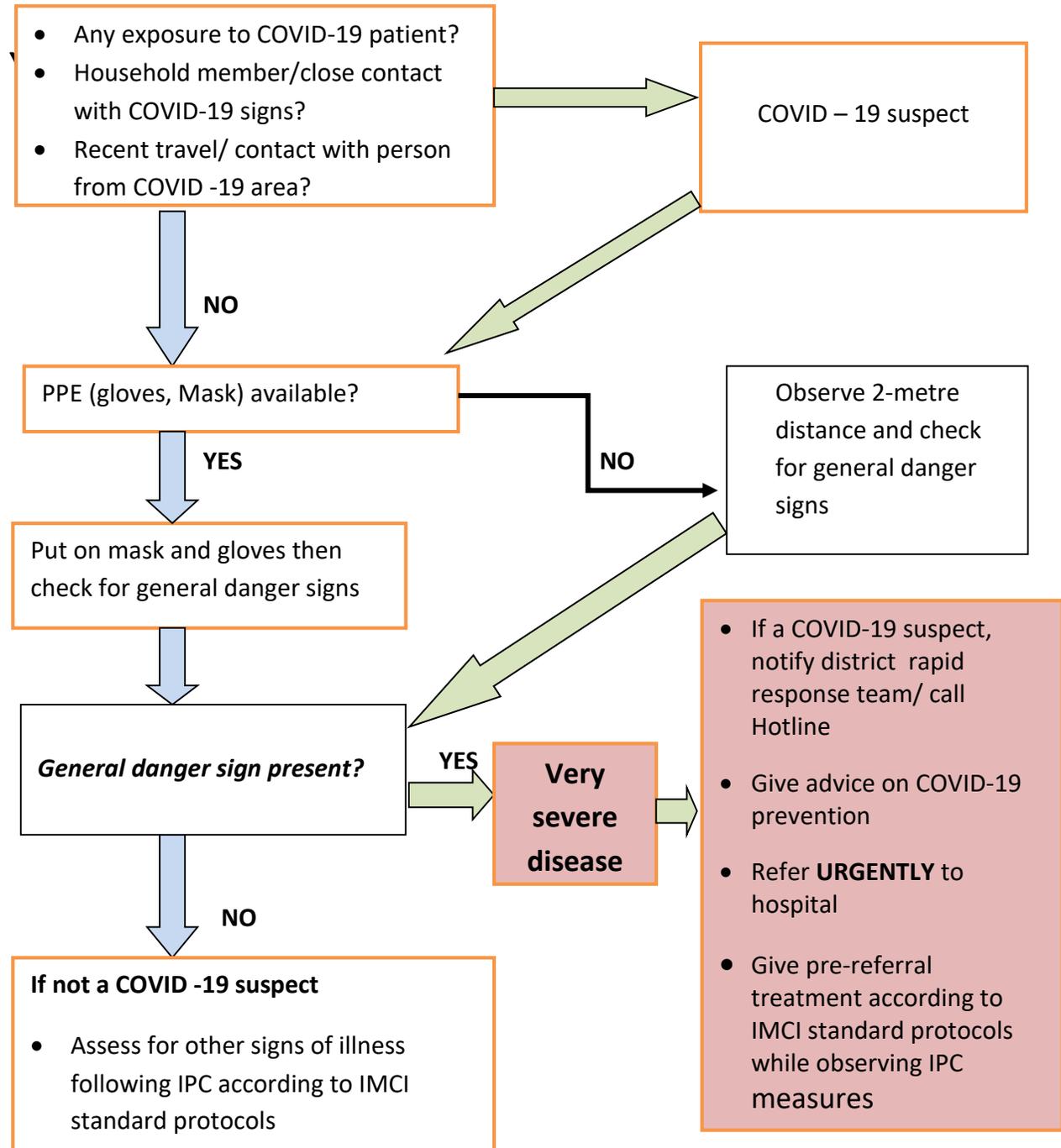
Always assess the child for any other problem that can affect the health of both mother and child. Always use PPE when assessing other problems or observe a distance of 2-metre. IPC measures should always be observed.

General advice to the caregivers given by health workers.

- Promote using face masks among people who are under quarantine, immunocompromised patients, care givers of the immunocompromised patients, all the patients with respiratory symptoms and fever.
- Frequent hand washing with soap and water following correct hand washing techniques. When soap and water is not accessible, use 70% alcohol hand rub.
- Maintain social distancing by keeping a minimum of 1-metre distance between two people.
- Advise all people against leaving their homes
- Avoid touching face, eyes, nose and mouth
- Maintain coughing etiquette to protect respiratory hygiene.
- Avoid crowded places and public transport as much as possible. If unavoidable, choose transport with minimal congestion.
- Avoid social gatherings.
- Drink adequate water and liquids to maintain good hydration.
- Consume foods containing vitamin C and zinc to ensure good immunity.

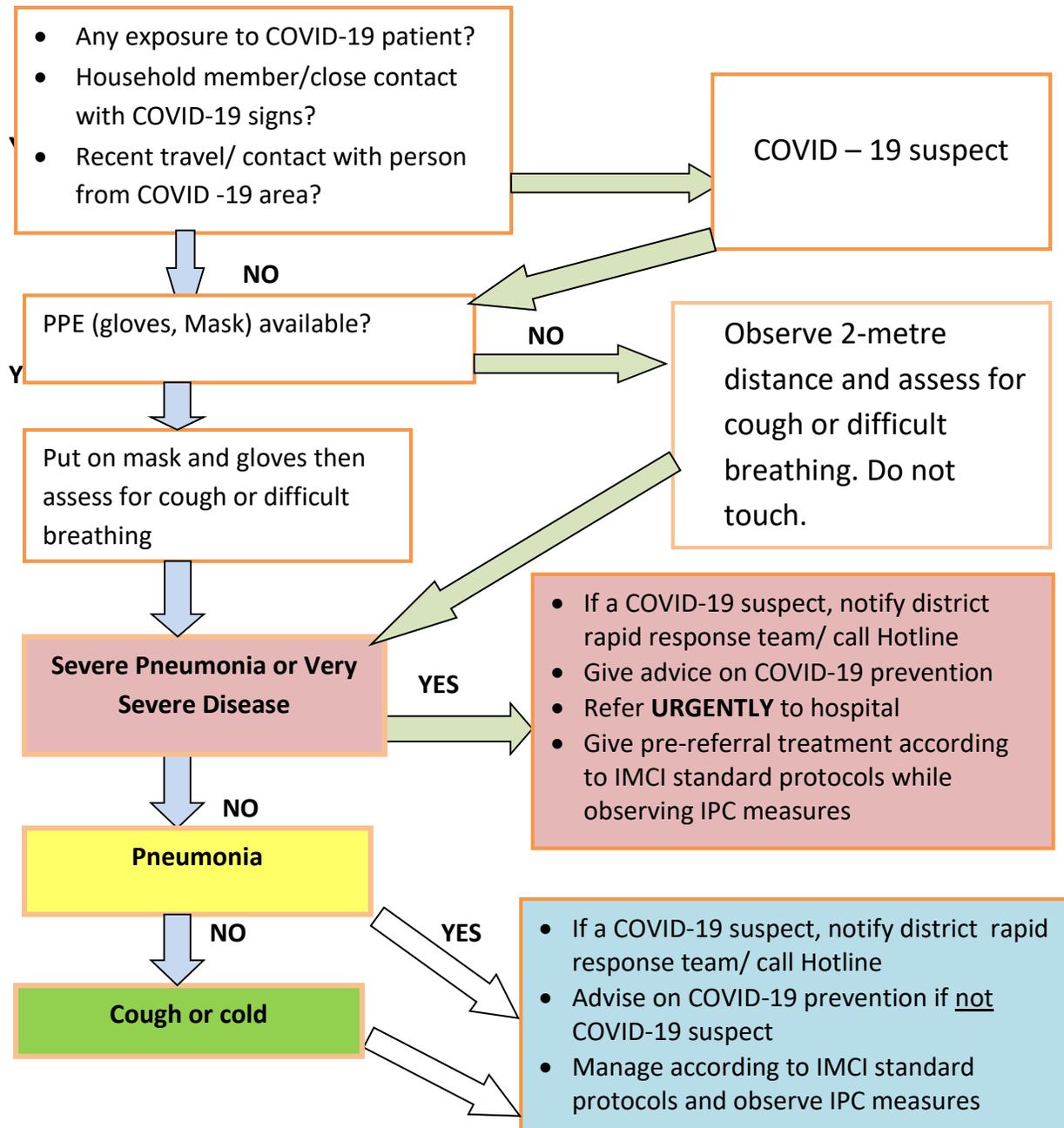
Annex 1: CHECK FOR GENERAL DANGER SIGNS

Start with assessment for COVID-19



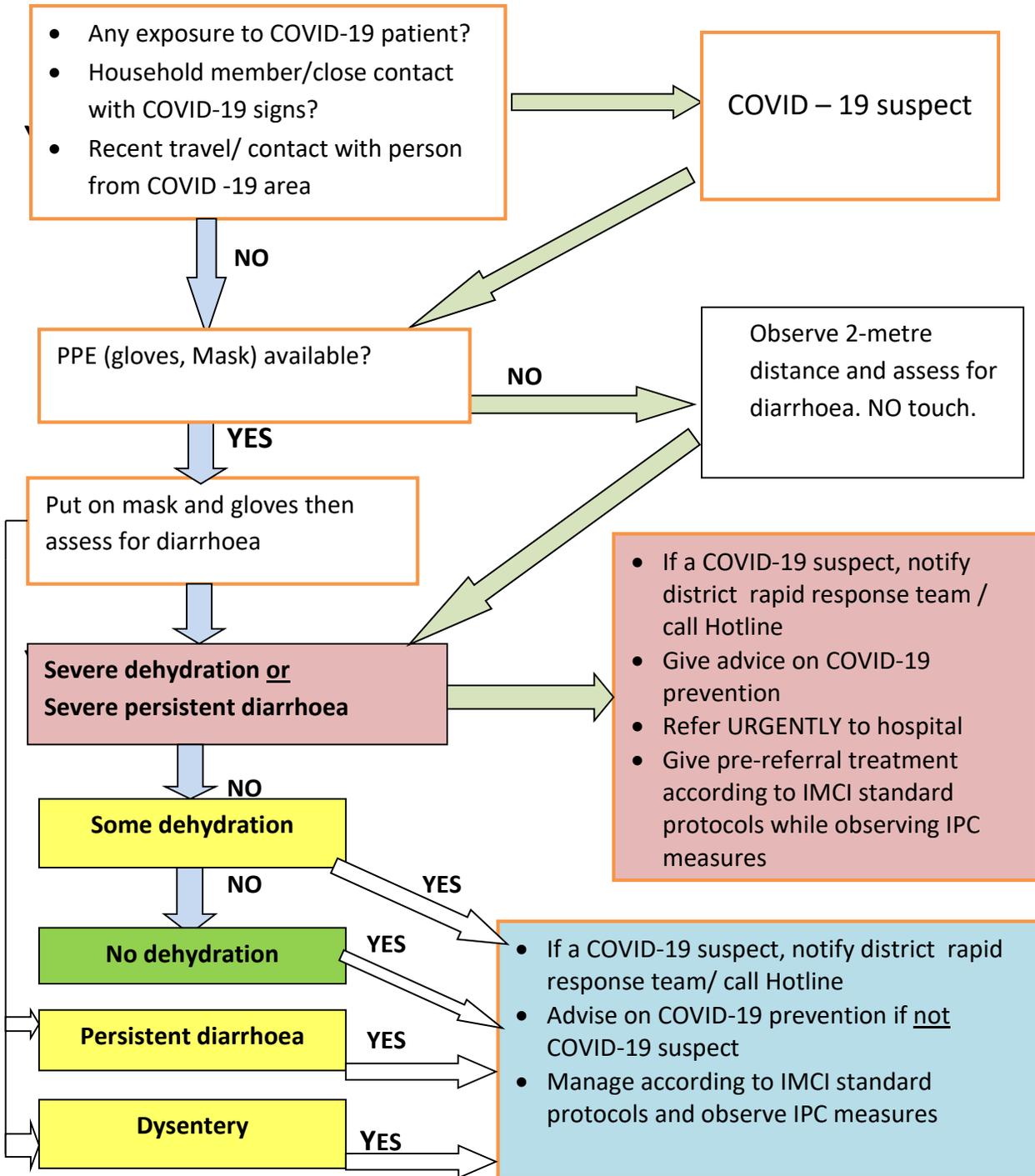
Annex 2: ASSESS COUGH OR DIFFICULT BREATHING

Start with assessment for COVID-19



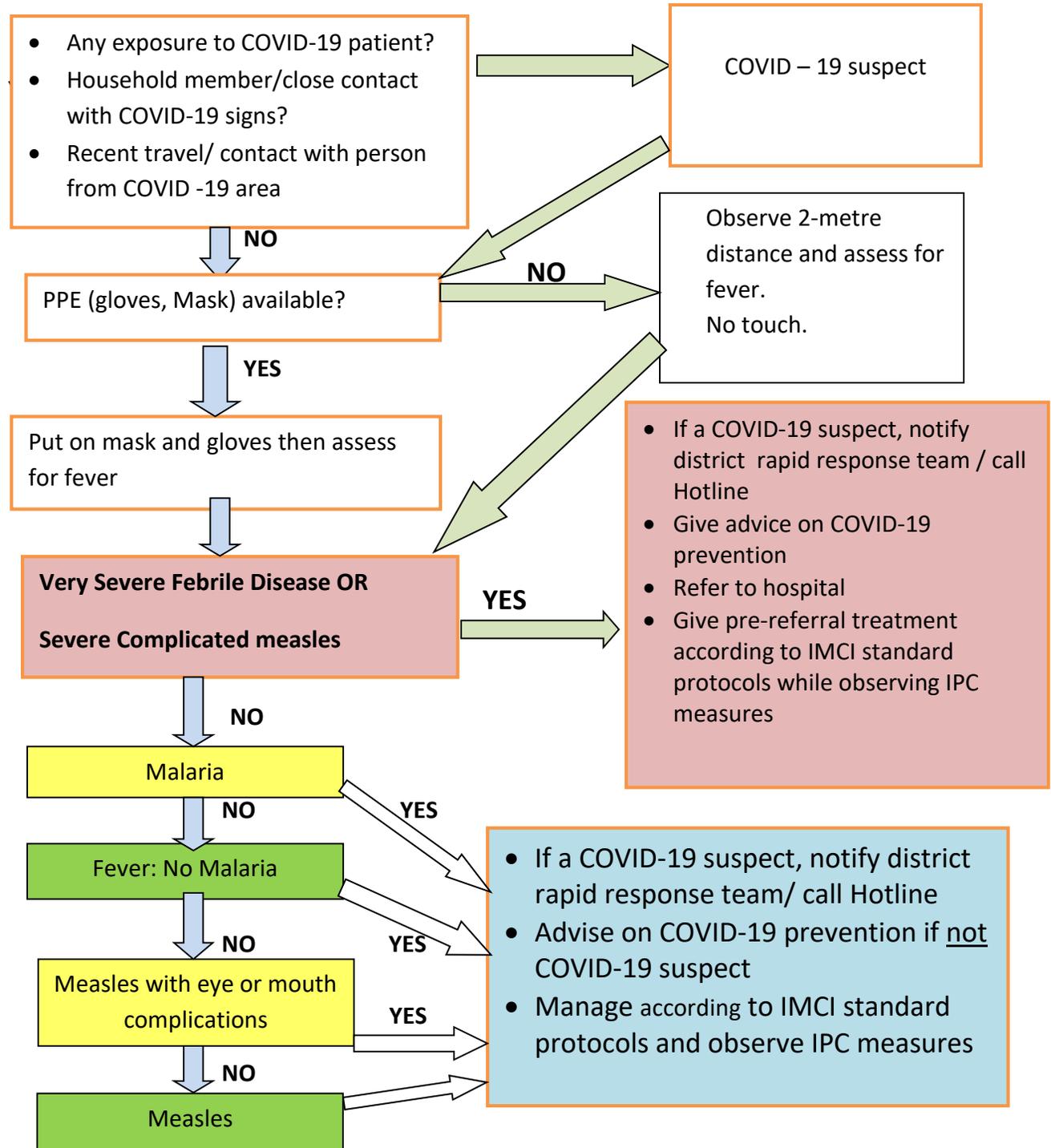
Annex 3: ASSESS FOR DIARRHOEA

Start with assessment for COVID-19



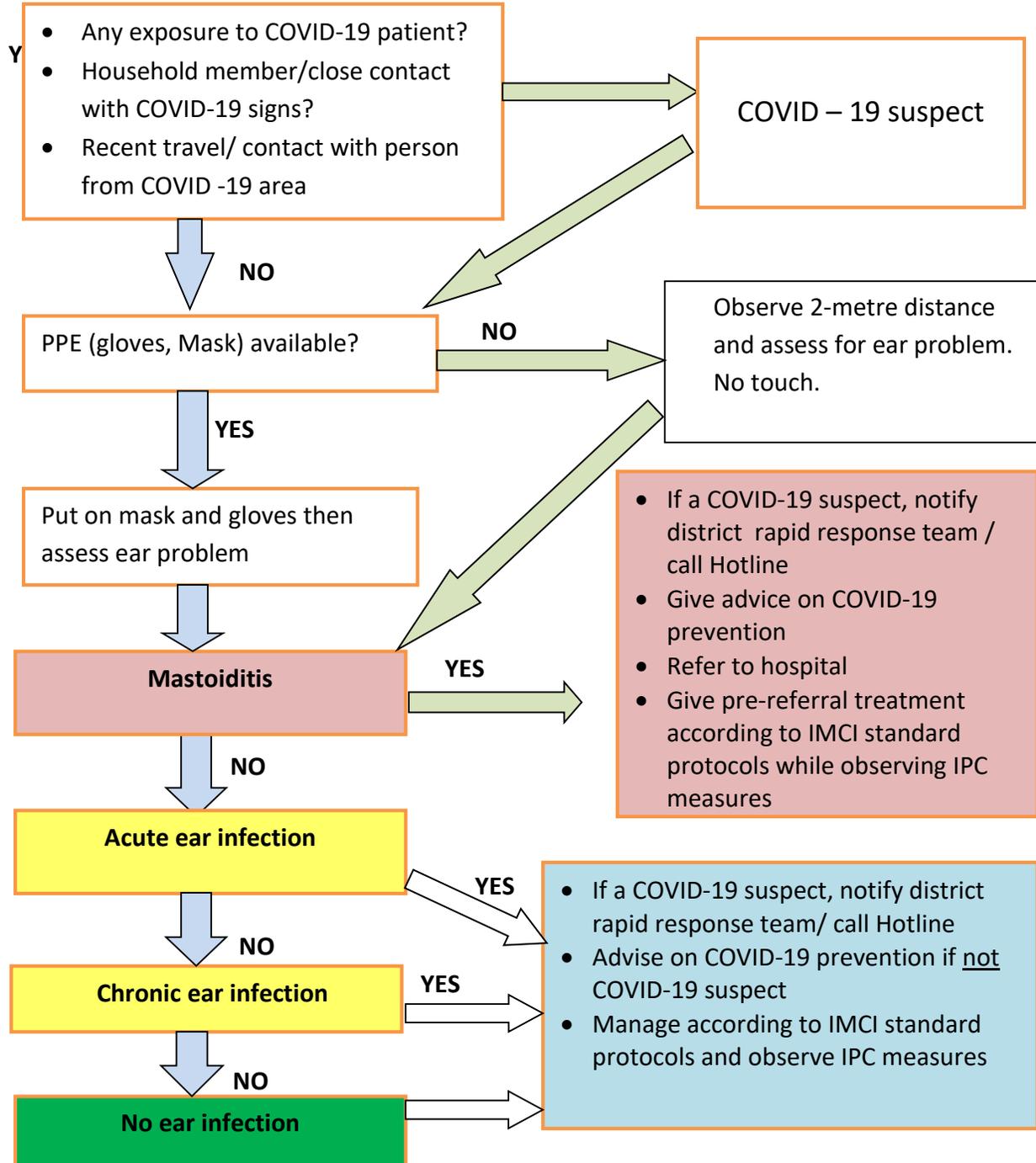
Annex 4: ASSESS FOR FEVER

Start with assessment for COVID-19



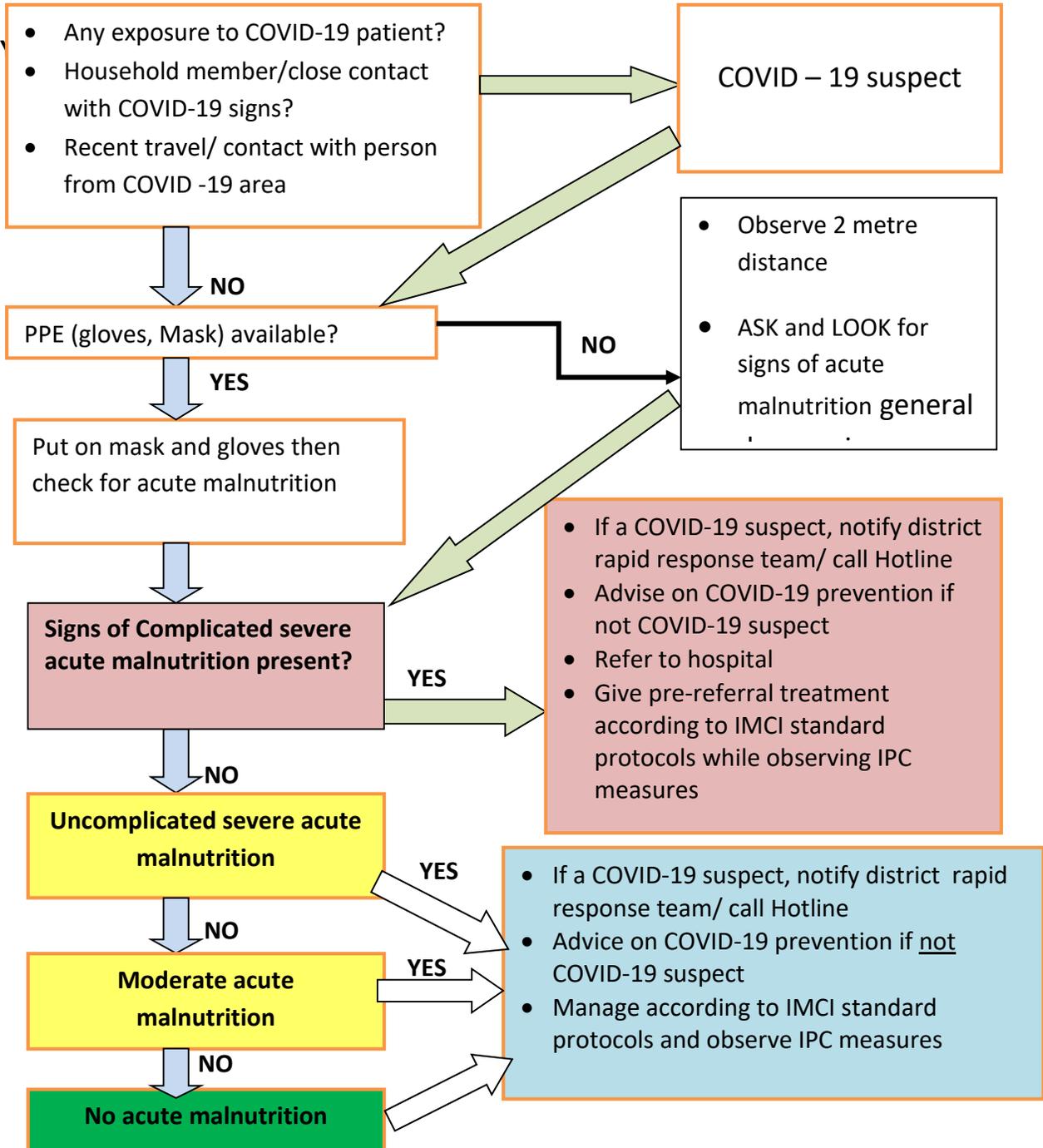
Annex 5: ASSESS FOR EAR PROBLEM

Start with assessment for COVID-19



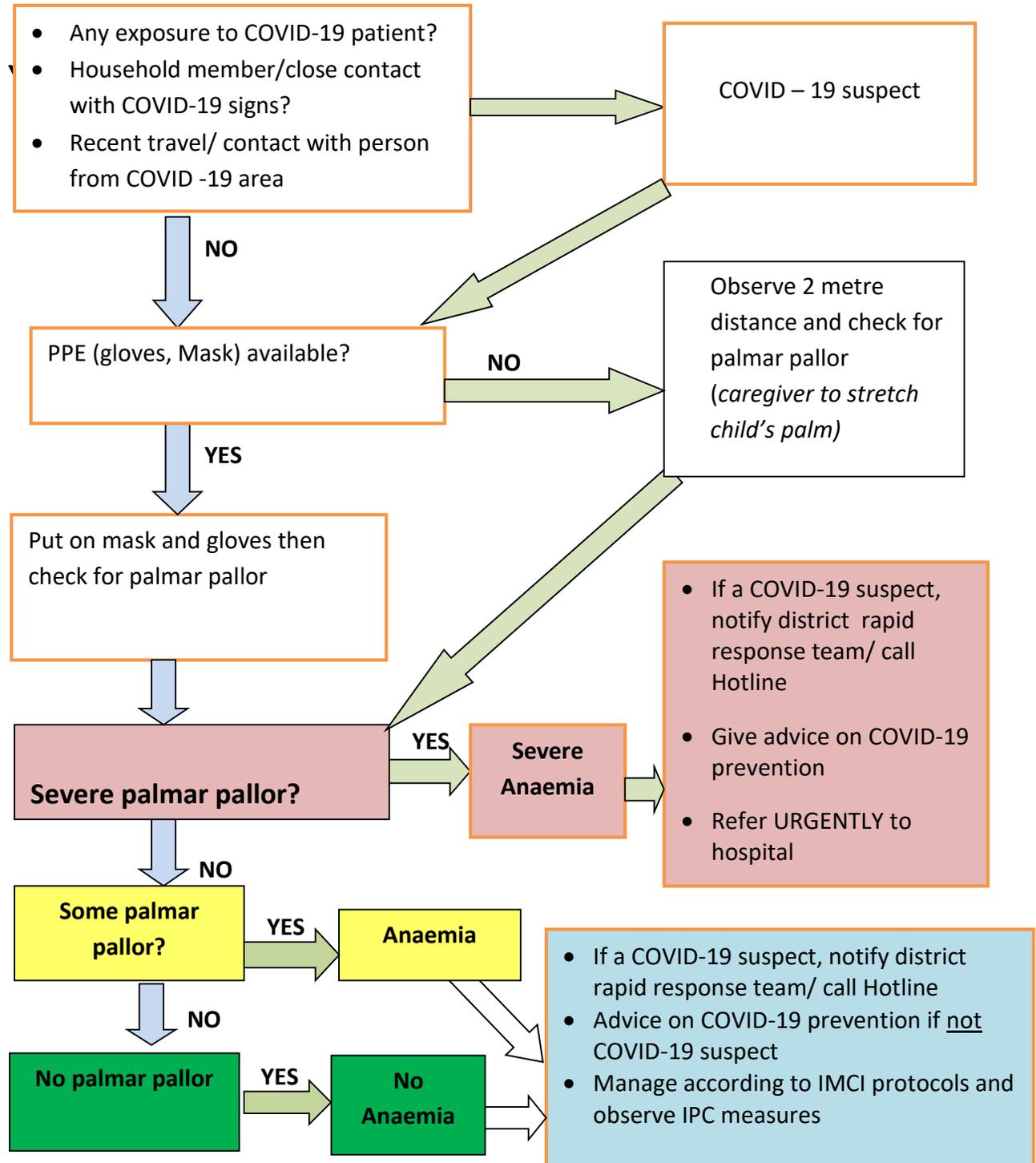
Annex 6: CHECK FOR ACUTE MALNUTRITION

Start with assessment for COVID-19



Annex 7: CHECK FOR ANAEMIA

Start with assessment for COVID-19



Annex 8: SOPs for EPI

**ADDITIONAL IMMUNIZATION STANDARD OPERATING PROCEDURES IN THE
CONTEXT OF COVID-19 PANDEMIC**

APRIL, 2020

**MINISTRY OF HEALTH
Expanded Programme on Immunization (EPI)**

1.0 BACKGROUND

Immunization is one of the most cost-effective ways of reducing infant and childhood illnesses and deaths. This is achieved through vaccinating children against vaccine-preventable diseases like measles and polio. It is against this background that immunization services remain an essential public health service even during this COVID-19 pandemic and ought to continue undisrupted to prevent vaccine-preventable diseases (VPDs). This additional standard operating procedure handbook is designed to prevent transmission of COVID-19 to both health care workers and the public.

2.0 OBJECTIVE

To provide guidance during the immunization session and ensure prevention of transmission of Corona virus-19 among the population.

3.0 REQUIREMENTS AT AN IMMUNISATION SESSION

- | | | |
|--------------------------------|--------------|----------------------------|
| a) Bucket with a tap and basin | b) Aprons | c) Hand Sanitizer/hand rub |
| d) Gloves | e) Water | f) Chlorine |
| g) Masks | h) Hand Soap | |

4.0 PROCEDURE

- a) Clients should wash hands with soap or chlorinated water on arrival at the Immunization session.
- b) Outreach clinic with high turn up should be split to accommodate less than 100 clients per session (Reduce the number of villages to turn to a scheduled clinic session).
- c) Maintain a social distance of 1meter between clients while sitting for health talk and when queuing for vaccination.
- d) Give health talk and vaccinate the clients as soon as they arrive to avoid over-crowding.
- e) Health workers must wash hands with soap or chlorinated water before the Immunization session, use hand rub between each child, wash hands with soap or chlorinated water when one feels that the hands are contaminated and after the Immunization session.
- f) Health workers must always be in PPE while administering Immunizations

- g) Health workers must ensure that all furniture and immunizations equipment are cleaned and disinfected thoroughly.
- h) Sick children/caregivers with cough or flu-like symptoms should be isolated and managed promptly.
- i) A health worker with cough or flu-like symptoms should not administer Immunization services.
- j) Clients must wash hands with chlorinated water or soap after the Immunization session.
- k) Health workers must ensure that all solid and liquid waste is disposed of safely in line with health care waste management guidelines.

Acknowledgements.

Dr Dan Namarika – Secretary for Health, Dr Charles Mwansambo – Chief of Health Services, Dr Storn Kabuluzi – Director of Preventive Health Services, Rudi Thetard, Wezi Kalumbi – USAID-ONSEHealth, Texas Zamasiya, Steve Macheso – Unicef, Gomezgani Jenda – Save the Children, Charles Mulilima, Whyte Mpezeni, Robert Bwaluzi, Angella Chabuka, Sofie Chirwa – IMCI master trainers, Ernest Kaludzu, Newton Temani, and Humphreys Nsona – IMCI unit, Sylvester Kathumba, Janet Guta Dr Mike Chisema and the EPI technical working group team for support rendered.