

UNICEF guidance for adaptations to community case management of childhood illness in the context of COVID-19 to ensure uninterrupted provision of life-saving services

Version 1 (5 April 2020)

This document is meant for programme managers at national and subnational level, outlining basic considerations for how guidelines and protocols for community case management of childhood illness might have to be adapted in the context of COVID-19. It should be applied in the context of local epidemiology and transmission patterns as well as national guidelines and protocols for containment of COVID-19.

Key recommendations:

- ❖ *The main principle is to maintain as much as possible equitable, quality community case management for childhood illnesses (CCM) while minimizing the risk of COVID-19 transmission in the context of patient care and to protect health workers.*
- ❖ *CCM provides essential life-saving services and as mechanisms and protocols are simplified and aligned to the COVID-19 response, this level of the health-care pyramid needs to be given due priority*
- ❖ *Local epidemiology and transmission patterns as well as regulations and containment measures by national and local authorities will determine the level of adaptation needed.*
- ❖ *Timely care-seeking should be emphasized. **The symptoms of COVID-19 are non-specific and similar to those of illnesses addressed in standard CCM protocols, including cough, fever, diarrhea.** Co-infections can occur and double measures (treatment for common childhood illness combined with care advice and containment measures for COVID-19) are recommended.*
- ❖ *In settings with no or sporadic (closely localized and contained) cases of COVID-19, existing CCM protocols should be adhered to without changes or modifications, unless containment measures such as physical distancing or lockdowns are put in place. The COVID-19 transmission situation should be actively monitored, infection control measures strengthened and modifications to the protocol prepared.*
- ❖ *In settings with clusters or community transmission, risk assessment of all children and caregivers for COVID-19 combined with 'no-touch' or 'low touch' CCM that includes guidance for home care and referral of children with suspected COVID-19 should be initiated.*
- ❖ *Additional protective measures for CHWs are recommended including PPE (at a minimum gloves and ideally gloves and a face mask) and increased access to hand sanitation and reminders on good respiratory hygiene*

Background

The global pandemic of COVID-19, a disease caused by a novel coronavirus, SARS-CoV2, requires precautionary measures and adaptations to health service delivery worldwide.

As trusted members of the community, Community Health Workers (CHWs) have an important role to play ensuring equitable access and providing lifesaving treatments for the major causes of illness and death in children, namely malaria, pneumonia, diarrhea and acute malnutrition (Community Case Management, CCM). In addition, a keystone of CHWs' work includes supporting caregivers and families to make decisions on appropriate and timely care-seeking, adhering to public health advice, and limiting direct and indirect mortality.

In the context of the current pandemic, CHWs will likely also be called upon to provide other valuable services at community level to reduce and stop transmission of COVID-19 including 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, and home management for mild cases of COVID-19.¹

This document provides basic guidance for the adaptation of policies and protocols for community case management of childhood illnesses and conditions with the aim of **a) protecting community health workers, b) maintaining the community's trust in the health system, and c) ensuring uninterrupted continuation of the provision of essential life-saving services**² for children through CCM, given that malaria^{3,4}, pneumonia⁵ and diarrhea⁶, as well as under-nutrition⁷, will continue to be the leading causes of death among children under five but, in certain settings, COVID-19 might be an important differential diagnosis.

COVID-19 in children

The clinical presentation of COVID-19 in children has to be taken into account when adapting CCM guidelines and protocols in areas with localized clusters or widespread community transmission. According to early and limited data, the majority of children with COVID-19 have asymptomatic, mild or moderate disease with the risk for more severe disease being higher in pre-school children and infants.⁸

- ❖ *The symptoms of COVID-19 are unspecific and overlap with symptoms of common childhood illnesses such as malaria, pneumonia, diarrhea.*

¹ DRAFT [UNICEF Internal Guidance on Community-based Programme Support in the Context of the COVID-19 Pandemic](#)

² [COVID-19: Operational guidance for maintaining essential health services during an outbreak](#)

³ <https://www.who.int/news-room/detail/25-03-2020-who-urges-countries-to-ensure-the-continuity-of-malaria-services-in-the-context-of-the-covid-19-pandemic>

⁴ UNICEF [Malaria in Africa](#)

⁵ UNICEF [Pneumonia in Children](#)

⁶ UNICEF [Diarrhoeal disease](#)

⁷ UNICEF [Malnutrition in Children](#)

⁸ [Epidemiological Characteristics of 2143 Pediatric Patients With 2019 Coronavirus Disease in China](#)

COVID-19 symptoms

Symptoms of mild disease include unspecific signs of upper respiratory tract infection, including fever, fatigue, myalgia, cough, sore throat, runny nose, and sneezing. Some cases may have no fever, or have only digestive symptoms such as nausea, vomiting, abdominal pain and diarrhea.

Children with moderate disease present with pneumonia, frequent fever and cough, mostly dry cough, followed by productive cough, some may have wheezing, but no obvious hypoxemia such as shortness of breath. Respiratory symptoms may be accompanied by gastrointestinal symptoms such as diarrhea. Progression to severe disease with hypoxemia may happen within the course of one week.

- ❖ *In areas with community transmission all children with these symptoms might have COVID-19. In the absence of access to rapid diagnostic testing, management and containment measures should be put in place.*
- ❖ *However children might still have other illness and care-seeking and treatment of malaria, pneumonia and diarrhea should continue following local protocol*
- ❖ *A majority of children are expected to have mild disease and can be managed in the community adhering to guidance for home care of COVID-19 patients.⁹*

Planning CCM in the context of COVID-19

- ❖ *Decisions impacting the functionality of community case management should be made in concert with the appropriate Ministry programs, including active engagement from National Malaria Control and Child Health Programmes.*
- ❖ *CHWs and frontline workers should be involved in developing emergency response plans and designing and planning activities with local solutions acceptable to the community.*
- ❖ *Any changes or modifications to the CCM protocols should be guided by the epidemiological scenario and at the direction and containment measures of national and local authorities.*
- ❖ *Where in place, technology/digital solutions for training, supervision, communication/consultations between CHWs and clients should be considered in planning.*

Epidemiological context, local burden and transmission

Each country's health system context, epidemiological context and local burden of COVID-19 and national COVID-19 response plans should inform measures, considering the four epidemiological scenarios below.¹⁰

1. Countries with no cases (no cases);
2. Countries with one or more cases, imported or locally acquired (sporadic cases);

⁹ [Home care for patients with COVID-19 presenting with mild symptoms and management of their contacts](#)

¹⁰ [Operational considerations for case management of COVID-19 in health facility and community](#)

3. Countries experiencing cases clusters in time, geographic location, or common exposure (clusters of cases);
4. Countries experiencing large-scale outbreaks of local transmission (community transmission).

Assessments at local and regional level should inform when and where shifts or adaptations to policies and protocols may be required as the epidemiology may vary significantly within a country and not all regions may need significant policy and protocol modifications.

Due to limitations in testing capacity it is important to assume more widespread presence of COVID-19 in any decision making.

Infection prevention and control (IPC)

Based on available evidence, COVID-19 is transmitted between people through close contact and droplets (even people, including children, who are asymptomatic and people with mild disease can still spread the disease). Preventive and mitigation measures are therefore key to ensure the health and wellbeing of CHWs and the community. It is therefore important to follow recommended best practices in the prevention and control of COVID-19¹¹.

It is important that CHWs be included in projections for COVID-19 personal protective equipment (PPE) and CHW are appropriately trained and supported on the use of PPE^{12, 13, 14} The need for, and type of, PPE recommended may vary by region, community, and the level of transmission. Although it is strongly recommended that all communities be adequately prepared with sufficient PPE, global availability of PPE is highly limited at present. CHWs will likely have less access to PPE and, as a result, CHWs may be more reluctant to provide services. Ministries of Health and partners should proactively anticipate these concerns and strategize a response empowering and enabling CHWs to continue service provision.

Basic principles for IPC by CHWs include:

- Adhere to infection prevention and control measures established by local and national authorities and guided by local epidemiology and transmission. It may not be advisable to implement a 'No Touch' policy at national scale if COVID-19 transmission is limited to certain regions in the country.
- Enable CHWs to communicate IPC measures to community members to reduce fear and stigmatization
- **Avoid any activity that attracts crowds.** Adapt community based services to ensure spatial distancing among clients (minimum 2 m)
- If CHWs conduct household visits or provide services in his/her own house, it is advisable that CHWs identify a well ventilated location outdoors for the consultation instead of entering the house and that they are provided with clear instructions on infection control. In scenarios where lockdowns are ordered CHWs might be among those people that continue to be able to access community members.
- Before, during and after each consultation, the CHWs should practice frequent and appropriate handwashing with soap and clean water or use hand sanitizer (if available and there is no soap or water).

¹¹ [Infection prevention and control during health care when novel coronavirus \(nCoV\) infection is suspected](#)

¹² [Priorities for the Global COVID-19 Response: the Role of Community Health, Community Health Impact Coalition \(CHIC\)](#)

¹³ [Rational use of personal protective equipment \(PPE\) for coronavirus disease \(COVID-19\)](#)

¹⁴ [Advice on the use of masks in the community, during home care and in healthcare settings in the context of the novel coronavirus \(COVID-19\) outbreak](#)

- Sanitation of surfaces and equipment (thermometers, respiratory timers, MUAC tape) with alcohol or soap and water. If available, consider handing out MUAC tapes to caregivers/families and instruct them in using them.
- **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 symptoms¹⁵
- **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).¹⁶ Consult WHO guidance on the indication for use of masks to inform the decision¹⁷.
- In the absence of PPE, consider a '**No touch policy**' (at minimum of 1 m, ideally 2m distance) that focuses on history of symptoms and clinical observation of the sick child may be considered.
- Depending on the local context, certain tasks routinely conducted by CHWs, may be shifted to the caregiver with supervision and guidance from the CHW to minimize direct contact with sick patients.
- CHWs are at increased risk of COVID-19 and therefore transmission to community members which is important in the considerations of IPC measures.

Adaptation of CCM

Settings with no cases or sporadic cases: (see flowchart Annex I)

In settings with no or sporadic (closely localized and contained) cases of COVID-19, existing CCM protocols should be adhered to 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. The COVID-19 transmission situation should be actively monitored and modifications to the protocol prepared. :Limited access to testing especially in rural areas and unknown cases/transmission need to be taken into account.

- ❖ CHWs, other community actors and frontline volunteers should reinforce and support early, prompt and appropriate care seeking for sick children.
- ❖ Community efforts should be intensified for adherence to IPC protocols, especially increased frequency of handwashing with soap and clean water, with priority being given to CHWs providing CCM should supplies be limited.
- ❖ CHWs should be trained on and equipped with key messages on COVID-19 to mitigate the spread of misinformation and stigmatization in their communities that might negatively impact care seeking, and to effectively communicate information on prevention measures.
- ❖ CHWs should be prepared for service delivery modifications, and receive resources to enact those modifications.
- ❖ Encourage provision of CHW services outside of the CHWs or community-member's home in a space where physical distancing is easy to enact.
- ❖ Surveillance mechanisms should be established and CHWs trained on COVID-19 case detection and reporting, early recognition of case clusters and contact tracing.

¹⁵ [Rational use of personal protective equipment \(PPE\) for coronavirus disease \(COVID-19\)](#). Please consult WHO guidance on the indication for use of masks to inform the decision..

¹⁶ [Rational use of personal protective equipment \(PPE\) for coronavirus disease \(COVID-19\)](#)

¹⁷ Advice on the use of masks in the community, during home care and in healthcare settings in the context of the novel coronavirus (COVID-19) outbreak

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

- ❖ *The symptoms of COVID-19 are non-specific and similar to those of illnesses addressed in standard CCM protocols. Especially in areas with high transmission, any child presenting with cough, fever, diarrhea might have COVID-19 and/or any of the common childhood illnesses. Co-infections can occur and double measures (treatment for common childhood illness combined with care advice and containment measures for COVID-19) have to be considered.*
- ❖ *The main principle is to maintain equitable, quality case management for childhood illness 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.*
- ❖ *CHWs are encouraged to work with other community actors to **maintain and encourage timely care-seeking practices** for childhood illness and maintain community trust in the CHWs ability to provide care for their children. This may also help to ease demand on health facility resources.*
- ❖ *Risk assessment/triage for COVID-19, of the child and accompanying caregiver should be added to each patient interaction.¹⁸ (ref to [flowchart](#) in Annex)*
- ❖ *Use standard approach for diagnosis and treatment with adherence to country specific guidance on IPC and the use of PPE.*
 - *Focus on symptom history and observation with physical distancing (at least 2m)*
 - *Reduce touching patients and consider no-touch policies only if PPE is not available*
 - *In the case of no-touch guidance: Engage the caregiver in the assessment of the child to maintain distance.*
 - *Presumptive treatment e.g. for malaria without use of RDTs is a last resort option when the safety of patients and CHWs cannot be assured.*
- ❖ *Children with signs and symptoms of severe disease continue to require referral, some for presumed severe COVID-19. Provide CHWs with information on COVID-19 designated facilities, if established.*
- ❖ *CHWs should be enabled to initiate measures such as notification and referral if the caregiver expresses signs of illness him/herself or of other household members. The safety and care of the child needs to be secured and the child protected from stigmatization.*
- ❖ *In the event of very high COVID-19 patient loads health facilities have the potential to be overwhelmed therefore clear actions and context must be communicated for the continuation (and limits) of community-based services, including referrals, and CHWs equipped with sufficient test kits and medicines.*
- ❖ *CHWs should be capacitated to reduce stigmatization of people with signs of any illness due to fear of COVID-19*
- ❖ *Follow up of children is encouraged as per standard protocol. If done via home visitation this should be adapted as per national protocols, adhering to containment and infection control measures. It is advisable that CHWs identify a well ventilated location outdoors for the consultation instead of entering the house and maintaining distance, wearing PPE if available.*

¹⁸ [Operational considerations for case management of COVID-19 in health facility and community](#)

Proposed CCM protocol adaptations in settings with clusters/community transmission (see [flowchart](#) - will become an Annex)

The flowcharts in Annex I propose a revised flow for assessment, observation and actions taking into account the need for COVID-19 risk assessment, IPC including no-touch measures. The level of measures needs to be adapted based on local transmission and national guidelines and containment measures.

Disease-specific considerations:

Management of fever/Malaria¹⁹

- Fever is a symptom of COVID-19, in some cases combined with cough.
- Confirming malaria infection with a diagnostic test does not rule out that the patient could also be suffering from COVID-19; similarly, having presumed or confirmed COVID-19 does not mean that the individual does not also have malaria infection
- Standard malaria diagnosis and treatment protocols at all levels should be maintained as long as possible including the continued use of rapid diagnostic tests (RDTs) for malaria by CHWs (gloves are required in standard protocols due to handling of blood products; in situations of increased risk of COVID-19 transmission, add a face-mask for protection ([see WHO recommendations on grade, level of face-mask recommended²⁰](#)).
- Pre-referral treatment with rectal artesunate (RAS) using gloves for severe malaria is still recommended as part of CCM modalities in areas where it is being administered. In the absence of PPE, the mother should be guided through providing the RAS.
- At this time, neither mass drug administration nor presumptive treatment of malaria is recommended. As the situation evolves, recommendations may be updated
- In the event that national and local authorities mandate a 'No-Touch Policy,' in highly malaria endemic areas, CHWs should classify suspected malaria cases based on a history of fever, and provide presumptive treatment of malaria with the appropriate antimalarial treatment.
- A clinical response to treatment with ACTs (if infected with malaria) is expected within 48hrs. No response to ACT treatment (absence of fever clearance within 48hrs) virtually excludes malaria as the cause of fever and strengthens the likelihood of other febrile illnesses, including Covid19 and/or other bacterial/virological agents. Therefore, active follow-up of fever cases will be required, and if symptoms have not resolved by 48 hours and the child shows danger signs, referral to the nearest health facility for further investigation is required.

Management of respiratory illness/pneumonia

- Cough is a hallmark of COVID-19 in adults, often in combination with fever but can be caused by other viral/bacterial agents. It also occurs in some - but not all - COVID-19 positive children.
- In settings with COVID-19 transmission any child presenting with cough might have COVID-19 and/or acute respiratory infection of another origin.
- CHWs should continue to classify and treat suspected pneumonia as per national protocol based on fast breathing.
- Respiratory rate counting, using age specific cutoffs and respiratory rate timers will be impacted by distancing rules if no PPE available. Ensure a well lit location for better visibility and ask the caregiver to lift the child's clothing and count the respiratory rate.
- Amoxicillin (in dispersible tablet form) is the WHO-UNICEF recommended treatment for childhood pneumonia and should be given as per standard CCM protocol.

¹⁹ Malaria Program Guidance in the Context of COVID-19 Pandemic. WHO

²⁰ [Advice on the use of masks in the community, during home care and in healthcare settings in the context of the novel coronavirus \(COVID-19\) outbreak](#)

- Children with chest indrawing should receive urgent referral to the nearest health facility.

Management of diarrhea

- Children with diarrhea and vomiting, especially in combination with respiratory symptoms, might have COVID-19.
- CHWs should continue to provide oral rehydration therapy (ORS) and zinc to all children with a history of frequent stools, defined as three or more loose stools in the past 24 hours.

Management of acute malnutrition

Treatment of acute malnutrition by CHWs is not part of the 'traditional' integrated CCM (iCCM) package. However, growing evidence has demonstrated that with minimal training, CHWs are able to appropriately treat acute malnutrition in the community and that this approach can lead to early admissions and improved discharge outcomes²¹. A number of countries have already adopted this into their national iCCM protocols. In light of COVID-19, country teams should initiate necessary discussion with Ministries of Health and national coordination platforms/nutrition clusters on context-specific simplifications of treatment protocols for child wasting, including treatment of acute malnutrition by CHWs.

- As a result, and in light of COVID-19 implications, efforts should be initiated to build the capacity of CHWs to provide treatment for uncomplicated wasting at the community level where it is not already part of standard CCM protocol. This will require conversations with MOH at national level and on-the-job training for CHWs in simplified treatment protocols and approaches for wasting.
- During assessment, in order to adhere to distancing guidelines and in the absence of PPE, caregivers should be actively included in the assessment and guided by the CHW to perform MUAC.
- If MUAC tapes have to be re-used, they should be sanitized after each use with alcohol or soap and water. If possible consider providing each family with a MUAC tape.
- Reduce exposure by shifting to MUAC only for anthropometric measurements and encourage caregivers to carry out MUAC and oedema assessments under the supervision of a CHW.²²
- Use simplified (e.g., MUAC and oedema only) or expanded admission criteria (<120mm or <125mm MUAC and/or oedema)
- Adopt simplified RUF dosage (e.g., 1 sachet/day for uncomplicated moderate wasting, and 2 sachets/day for uncomplicated severe wasting)
- Reduce the frequency of follow-up visits to once per month for children with uncomplicated severe or moderate wasting by increasing the take-home ration of RUFs and other nutrition commodities. If all services are temporarily suspended, distribute RUFs/nutrition commodities for up-to 8 weeks. Whenever possible, establish links between these households and existing social protection systems.

²¹Lopez-Ejeda N, Charle-Cuellar P, G. B. Ale´ F, Alvarez JL, Vargas A, Guerrero S (2020) Bringing severe acute malnutrition treatment close to households through community health workers can lead to early admissions and improved discharge outcomes. PLoS ONE 15(2): e0227939. <https://doi.org/10.1371/journal.pone.0227939>

²²Blackwell, N. et.al. (2015) Mothers Understand And Can do it (MUAC): a comparison of mothers and community health workers determining mid-upper arm circumference in 103 children aged from 6 months to 5 years. (Arch Public Health. 2015 May 18;73(1):26. <https://pubmed.ncbi.nlm.nih.gov/25992287/>)

- Maintain frequency of provision of specialised nutrition foods or other preventative supplementation to children and PLW to 1 per month adhering to recommended hygiene and safety measures, avoiding any mass groupings of people.

Additional guidance on the management of child wasting in the context of COVID-19 can be found [here](#).

Small and sick newborn care and advise on breastfeeding

- ❖ In the currently proposed flowchart, sick newborns under the age of 2 months should continue to be referred to the health facility for further assessment and management.

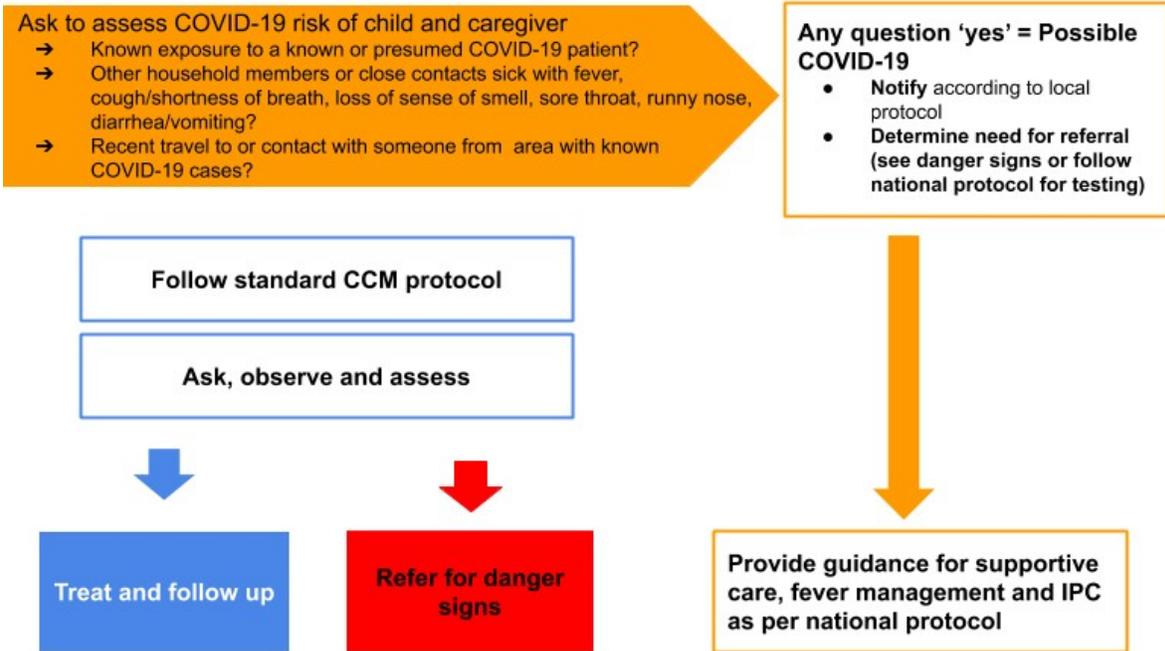
CHWs should use the opportunity of home visits to provide important information on breastfeeding to mothers with presumed or confirmed COVID-19 (e.g. identified during risk assessment when presenting their child for CCM or during home visits)

- ❖ Infants born to mothers with suspected, probable or confirmed COVID-19 infection, should be fed according to standard infant feeding guidelines, while applying necessary precautions for IPC.
 - Breastfeeding should be initiated within 1 hour of birth.
 - Exclusive breastfeeding should continue for 6 months with timely introduction of adequate, safe and properly fed complementary foods at age 6 months, while continuing breastfeeding up to 2 years of age or beyond.
- ❖ As with all confirmed or suspected COVID-19 cases, symptomatic mothers who are breastfeeding or practising skin-to-skin contact or kangaroo mother care should practise respiratory hygiene, including during feeding (for example, use of a medical mask when near a child if with respiratory symptoms), perform hand hygiene before and after contact with the child, and routinely clean and disinfect surfaces which the symptomatic mother has been in contact with.
- ❖ Breastfeeding counselling, basic psychosocial support and practical feeding support should be provided to all pregnant women and mothers with infants and young children, whether they or their infants and young children have suspected or confirmed COVID-19.

Annex I: Settings with no/sporadic cases [careful consideration of epidemiologic context including asymptomatic and unknown cases]

Assessment and treatment of sick children at community level during COVID-19 outbreak in settings with no transmission/sporadic cases

- Consider the presence of asymptomatic COVID-19 cases that can transmit
- Consider distancing, PPE and protocol adaptations as per national guidelines [see algorithm for settings with local transmission]
- Increase adherence to IPC protocols and equip CHWs with supplies for handwashing before and after each consultation
- Enable CHWs to provide basic messages and perform basic risk assessment for COVID-19

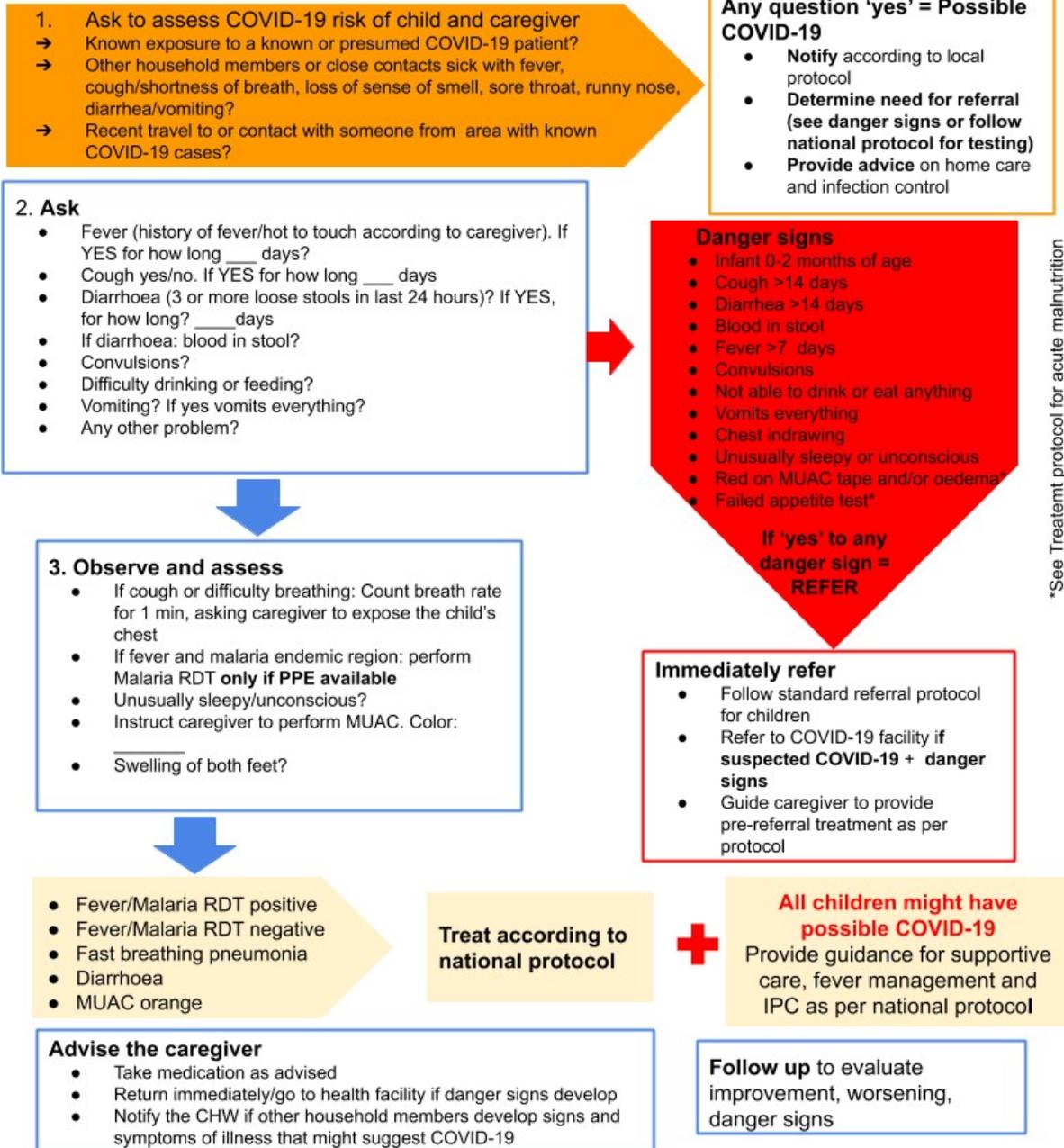


Annex II: Settings with clusters/community transmission

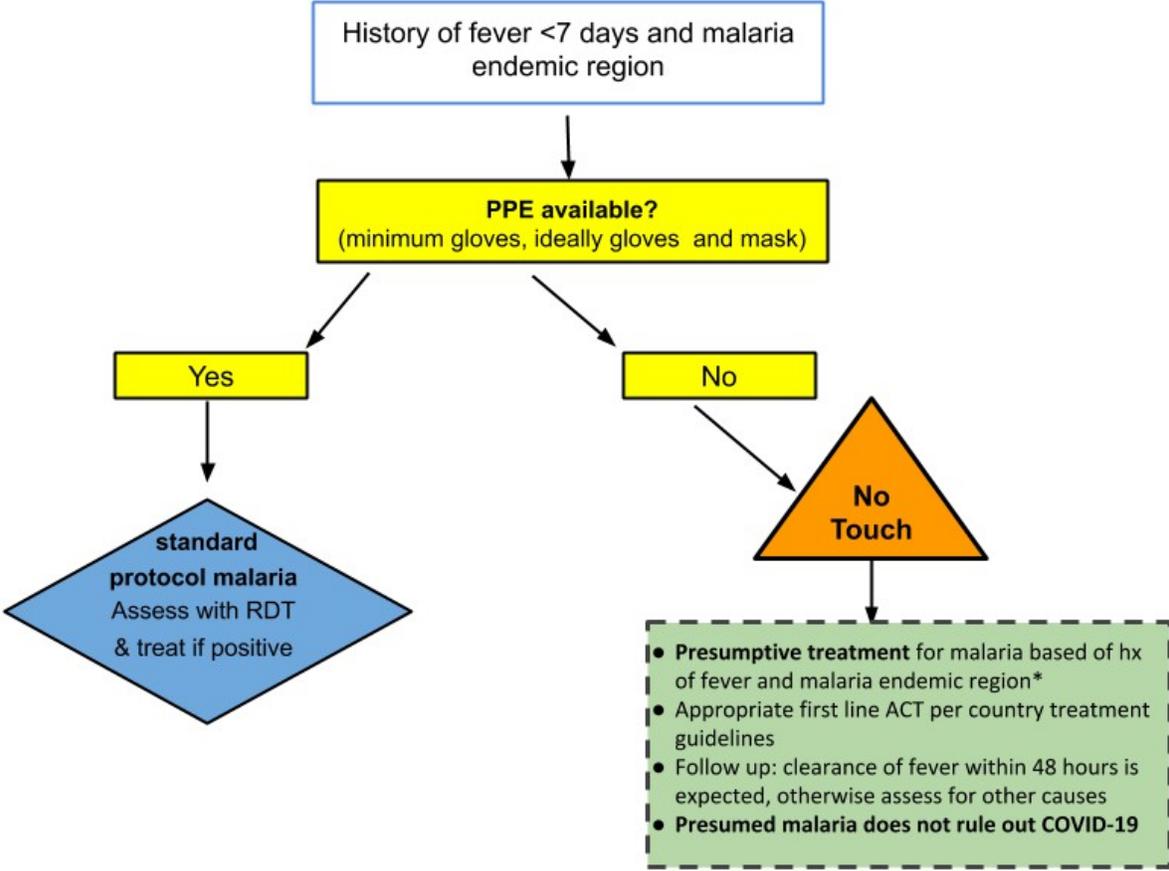
Assessment and treatment of sick children at community level during COVID-19 outbreak in settings with clusters or community transmission

Distancing and PPE (gloves and face mask) or no touch protocol in place

- Hold visitation outside, if possible, consider phone-based visitations/consultations
- Wash hands before and after each visitation
- Keep min. 1 m distance from caregiver and child
- Low-touch: Focus on ASK and OBSERVE
- Perform Malaria RDT only if PPE (gloves and face mask) available
- Instruct the caregiver to perform MUAC and lift the child's clothes for assessment of breathing and provide pre-referral treatment



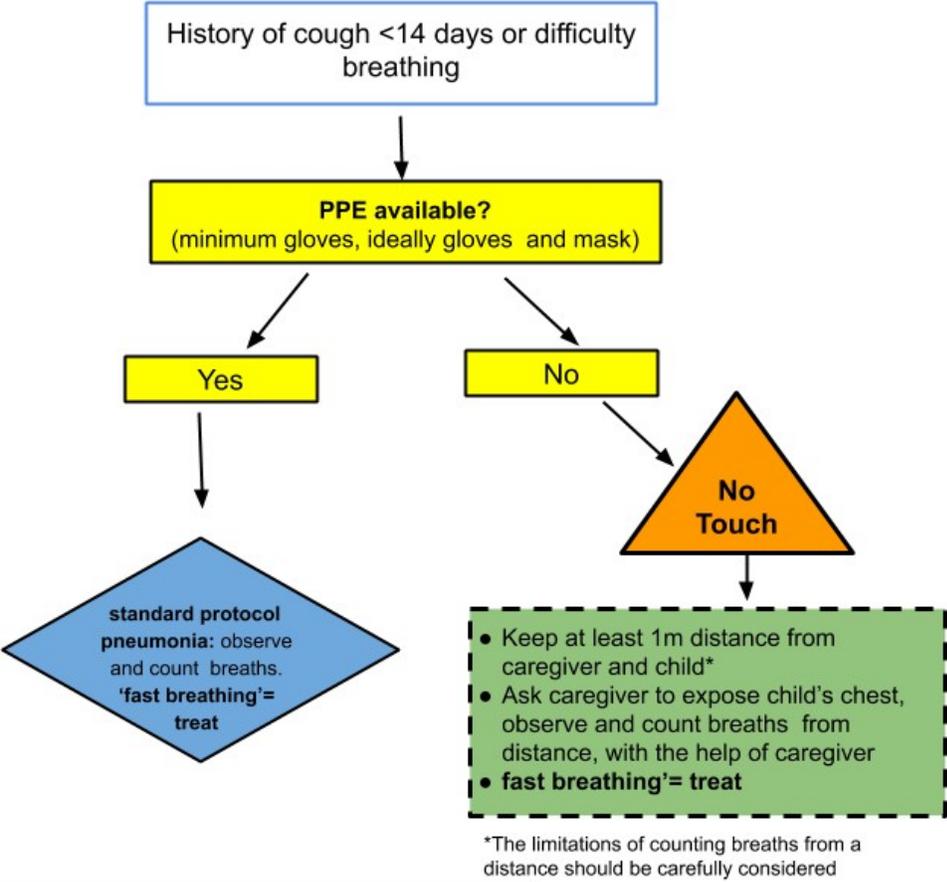
Assess and treat for malaria in a setting with cluster/community transmission



*Presumptive treatment for malaria without RDT should be the last resort option

- All children with fever might have COVID-19 (including those with positive RDT)**
- (Home) Care and IPC according to national guidelines
 - Care seeking for danger signs
 - Supportive care and fever management
 - Follow up: lack of improvement to ACTs within 48 hours increases the possibility of COVID-19
 - **Positive RDT doesn't rule out COVID-19; Negative RDT doesn't rule out COVID-19.**
 - **Negative RDT = investigate other potential causes of fever (eg. pneumonia)**
 - Presumed malaria does not rule out COVID 19

Assess and treat for Pneumonia in a setting with clusters/community transmission

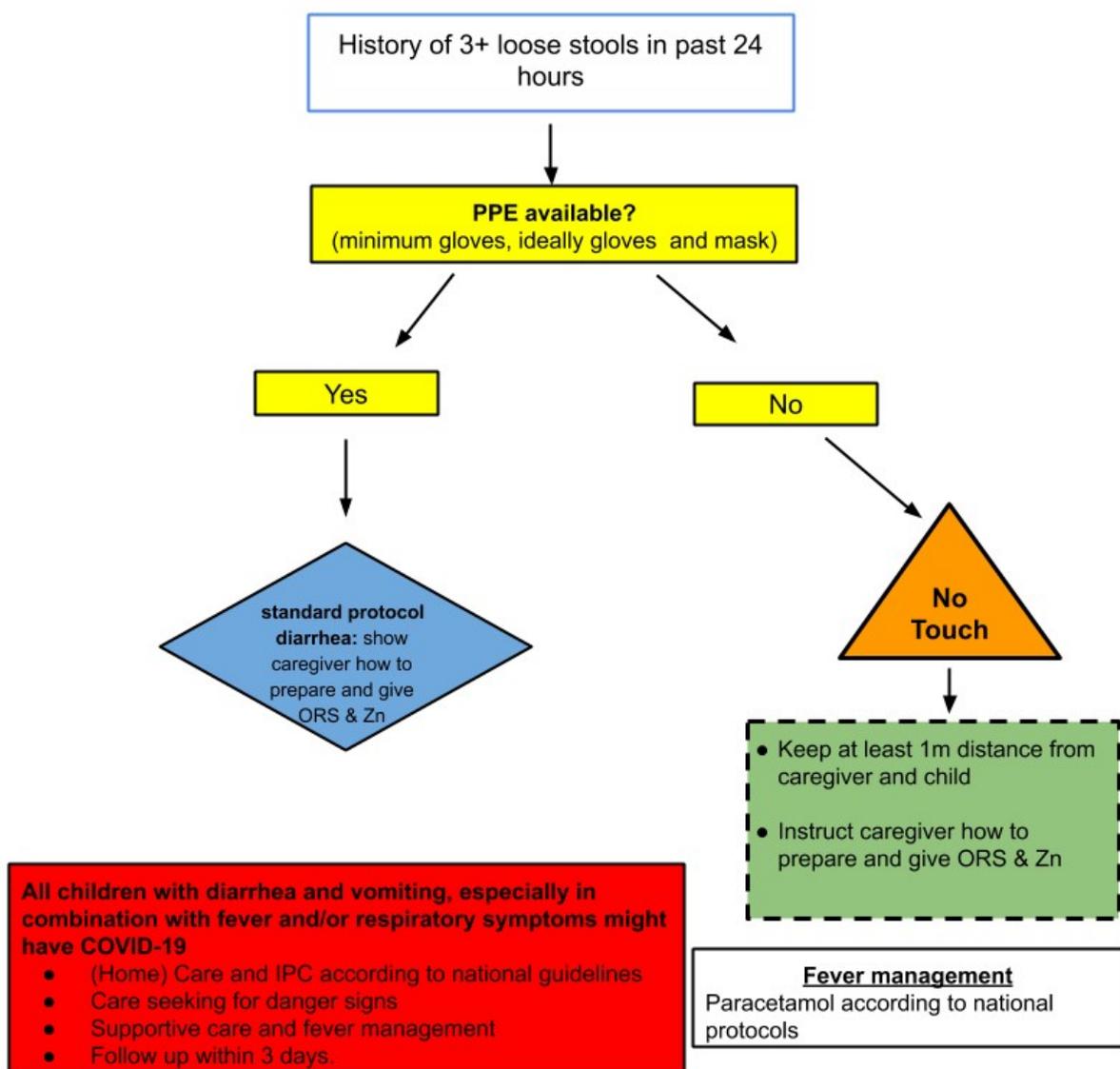


All children with cough with or without fever might have COVID-19

- (Home) Care and IPC according to national guidelines
- Care seeking for danger signs
- Supportive care and fever management
- Follow up. Lack of improvement within 48 hours increases the possibility of COVID-19 or other cause

Fever management
Paracetamol according to national protocols

Assess and treat for diarrhoea in setting with cluster/community transmission



Fever treatment with paracetamol

Indicated in children with

- Cough and fever
- Fever and malaria RDT negative
- Presumed or confirmed COVID-19

Children <12 months:

Syrup 120mg/5ml, 10/15 mg/kg, 4 times a day

Age 2 - 4 months: 50 mg (2ml)

Age 4 - 12 months: 60 mg (2.5 ml)

Children 1 year and older:

500 mg tablets, 4 times a day

Age 1 up to 3 years: ¼ tablet

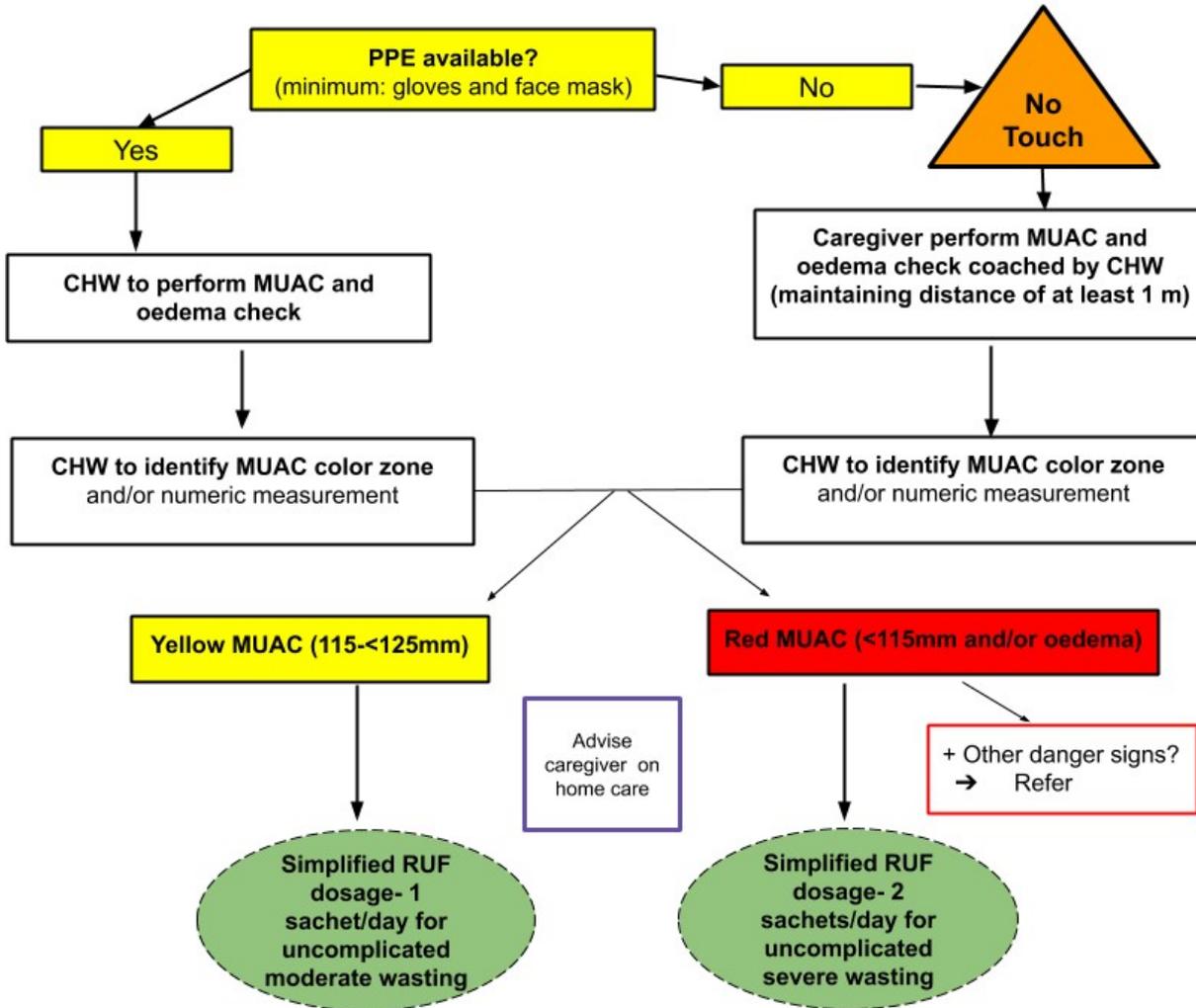
Age 3 up to 5 years: ½ tablet

Age 5 to 14 years: 1 tablet

Age 15 years or more: 1 to 2 tablets

Assess and treat for acute malnutrition in settings with cluster/community transmission

Where national protocols do not yet allow for treatment of acute malnutrition by CHWs, approval will need to be sought at national level and capacity and approach for training of CHWs considered.



Follow-up: Reduce the frequency of follow-up visits to once per month for children with uncomplicated severe or moderate wasting by increasing the take-home ration of RUFs and other nutrition commodities. If all services are temporarily suspended, distribute RUFs/nutrition commodities for up-to 8 weeks.

Nutrition Information Management, Surveillance and Monitoring in the Context of COVID-19

Brief No. 3

14 April 2020

BACKGROUND & INTRODUCTION

To support implementers on how to prepare for and respond to the COVID-19 pandemic, a series of evidence-based guidance briefs will be produced and updated as new information and evidence emerges. This Brief is meant to provide **broad recommendations** specific to nutrition information management, surveillance and monitoring in the context of COVID-19. A core set of specific indicators tracking COVID-19 and its impact on nutrition program delivery and performance will be made available in due course.

Malnutrition and other co-morbidities (for example HIV, tuberculosis) are considered a risk factor for complications in people with COVID-19, due to a compromised immune system.¹ Available evidence on COVID-19 infections, indicates that children generally present milder symptoms than older groups; however, we do not know yet how it will affect wasted children. It is reasonable to assume that such children are at higher risk of COVID-19 related complications.² Further, while the relative risk of COVID-19 complications may be lower for children from Europe and/or high income countries, we do not yet know how it will affect children in regions where the prevalence of child undernutrition specifically wasting and micronutrient deficiencies is high, such as Africa with 6.4% (5.4–7.5) and South Asia at 14.3% (10.4–19.3) of global acute malnutrition.³ The nutritional status of the population in these countries - including the prevalence of child stunting, wasting, and micronutrient deficiencies - is also expected to deteriorate further in the coming months due to the socio-economic impact of COVID-19.

As a nutrition community, we need to continue to develop our understanding on practical solutions for the sustained collection, interpretation, analysis and management of nutrition-related data for surveillance and monitoring of the nutrition situation and relevant nutrition programmes in the context of COVID-19. Nutrition data and information are critical to determine the nutritional status of populations. While recognizing the risk of COVID-19 being transmitted during data collection of nutrition information, the surveillance and monitoring of nutrition programmes should continue where possible while exploring innovative approaches to collect vital information without causing any unintended harm and provide adequate and timely information for response planning. Documenting and disseminating these lessons and emerging evidence will be key to implementing the most appropriate and effective responses in the face of this pandemic.

1 Action Against Hunger COVID-19: The Impact of the Outbreak <https://www.actionagainsthunger.org.uk/blog/coronavirus-impact-outbreak> accessed 23 March 2020

2 UNICEF and Global Nutrition Cluster (2020) [Risk of COVID-19 complication in children affected by wasting](#).

3 UNICEF, WHO, World Bank (2020) [Joint Child Malnutrition Estimates 2020 Edition](#)

KEY MESSAGES & PRIORITY ACTIONS

Maintain Physical Distancing and Use Alternative Ways for Data Collection:

1. In line with overall guidance to limit the spread of COVID-19 calls for minimal physical contact, avoid data collection activities that involve close contact between individuals. This includes mass screenings, household visits, population-based surveys (i.e. coverage, SMART, MICS, DHS, etc.) that involve in-person interaction until coordination mechanisms or governments deem safe to do so;
2. Map out existing digital platforms and data systems, connectivity and their use across the country to determine which platforms could be easily adapted for remote data collection and reporting of nutrition-related data during COVID-19 pandemic;
3. Initiate necessary discussions with Ministries of Health, national sector/cluster coordination bodies and possibly the private sector such as Mobile Network Operators on the use of remote data collection procedures (i.e. web-based surveys, phone calls) to capture information from communities and caregivers on the monitoring of children's nutritional status and identification of undernourished children;
4. Initiate efforts to build capacity of community health workers to collect nutrition data on malnutrition at the community level using virtual training methods on no-touch assessments, mobile data collection or web-based surveys as examples;
5. Initiate discussions on potential options to track the number of undernourished children and other vulnerable population groups in the context of COVID-19, for example using mobile technology for interviews or sharing self-screening data through SMS etc.;

Ensure Coordination of Nutrition Information Activities:

6. Maintain a national nutrition information working group⁴ if already in place in collaboration with the Ministries of Health and national sector/cluster coordination bodies to provide coordinated leadership regarding nutrition information, surveillance and monitoring activities. If one does not exist, ensure key nutrition indicators are integrated into Health information working group discussions. This working group should work closely with all stakeholders to address arising information needs and challenges, provide technical oversight, ensure compliance with recommended guidance and implement innovative methods to ensure data and information is easily available for decision making. This should be done with links between regional and global partners to maintain technical standards and provide dissemination and exchange of data and information;
7. Continue to ensure participation with existing Nutrition in Emergency fora, Nutrition Cluster meetings, Health and Food Security Cluster meetings, disease surveillance working groups, HMIS working group, national COVID-19 coordination team, etc. to ensure that nutrition information needs are well integrated into all processes;
8. Coordinate with relevant systems (Food, Health, WASH, Education and Social Protection) on the utilization and aggregation of nutrition-related data;
9. Building on the existing nutrition monitoring framework, the NIS TWG⁴ or equivalent should develop a workplan for the collection, analysis and reporting of additional nutrition indicators related to monitoring COVID-19, indicating required resources;

Maximize Utilization of Existing Data and Information Systems:

10. Ensure the continued utilization of existing nutrition information available from previous population-based representative surveys, coverage surveys, facility-based surveys, sentinel sites and administrative data into a centralized database to facilitate its utilization for trend analysis, situation analysis, triangulation with relevant sectors;

⁴ Nutrition Information System Technical Working Group [NIS TWG Generic ToRs](#).

11. Conduct or update nutrition situation analyses with existing data and information to understand the nutritional status of the population or specific vulnerable groups, existence and performance of current programmes. This analysis will be useful for nutrition programmes to identify and prioritize programme needs, determine critical data gaps, and avoid duplication of efforts;
12. Discuss with Ministries of Health and national sector/cluster coordination bodies on increasing the use of data from sentinel sites and other relevant routine systems that are already in place (i.e. Disease Early Warning Systems – DEWS, Health Management Information System – HMIS, Famine Early Warning Systems Network – FEWS NET);
13. Limit establishing new indicators that will be neither easy to collect nor interpret. Build on existing indicators that are already collected in existing systems making adaptations as needed. Consider using other indicators as a proxy for required information needs;

Make Information and Reports Relevant and Easily Accessible:

14. In consultation with stakeholders, consider information needs and adjust reporting frequency as required. The adapted reporting processes should capture the required

POTENTIAL ADAPTATIONS TO NUTRITION INFORMATION MANAGEMENT, SURVEILLANCE AND MONITORING IN THE CONTEXT OF COVID-19

With disruption in routine data collection through population-based surveys and other nutrition assessments during the time of “physical distancing”, there will be a need to find innovative ways of tracking the number of cases of malnutrition and monitoring service delivery. This includes providing support to maintain the functioning of the routine data systems (e.g HMIS, sentinel sites), and explore the applicability and use of mobile technology, web-based surveys or e-health platforms.

Existing, relevant nutrition information still serves as a valuable input for nutrition situation analyses and potential contributing factors/predictors in the context of COVID19. It is essential to have knowledge of the nutrition situation in your context, the key contributing factors, existing programmes and their performance and coverage. As data collection options become limited due to physical distancing measures, historical trends and the most recent programme data can be used as proxy indicators to inform on interruption of key nutrition services and project programme needs. This information is critical in planning and implementation of programmes. Consider the latest data available on the following areas and ensure it is easily accessible to all:

(i) Nutrition Outcomes: prevalence of wasting, stunting, overweight, micronutrient deficiencies etc.

(ii) Contributing Factors: infant and young child feeding practices, dietary intake (Minimum Dietary Diversity, Minimum Meal Frequency) for children, morbidity, access to health and WASH services, household food security, feeding and care practices etc.

(iii) Existing programmes and available data: point coverage and performance data of nutrition and related programmes, i.e. CMAM data, IYCF counselling, immunization, micronutrient supplementation, social protection, etc.

The table below gives a summary of general recommendations for consideration in the context of COVID19. These recommendations must be used in line with in-country guidelines issued in relation to COVID19. Where there are no mobility restrictions in place, preparatory measures should be considered. When partial or full mobility restrictions are in place, these adaptations should be made.

	No Population Mobility Restriction	Partial or Full Population Mobility Restrictions
Routine Systems (data collection at facility- and community-levels, surveillance)	<p>(a) Provide additional support to the HMIS (and the routine nutrition information within it) to ensure the continuation of functioning of the system, this may include remote/virtual training, supporting additional capacity for data reporting at facility-level and beyond.</p> <p>(b) Ensure data sharing and its utilization are done between sectors, platforms and routine systems (aforementioned EWS, HMIS, sentinel sites). Explore the use of innovative methods for reporting and information sharing to avoid using a paper-based process.</p> <p>(c) Share resources and guidance on secondary data analyses and its utilization.</p>	<p>(a) Where applicable, ensure monitoring and tracking of nutrition service delivery such as SAM admissions using innovative approaches e.g mobile technology.</p> <p>(b) Identify relevant indicators that have been collected systematically over time and use them as a proxy to monitor the disruption of nutrition services.</p> <p>(c) Continue to provide remote support to routine information systems (i.e. HMIS, sentinel sites, etc).</p>
Surveys, assessments	<p>(a) Suspend all household-level/population-based surveys in line with government directives put in place;</p> <p>(b) Initiate discussions to explore the use of innovative ways to collect proxy or nutrition-specific data through mobile technology, web-based surveys and other applications using non-conventional methods that limit physical interaction;</p> <p>(c) Increase in-country capacity to analyze and utilize secondary data trend and situation analyses.</p>	<p>(a) Suspend all household-level/population-based surveys in line with government directives put in place.</p> <p>(b) Explore phone/web-based surveys to collect critical nutrition information.</p>

KEY CONSIDERATIONS ONLY FOR CIRCUMSTANCES/CONTEXTS WHERE COUNTRIES DETERMINE THE NEED TO COLLECT DATA THROUGH IN-PERSON INTERACTIONS (CONTRARY TO AFOREMENTIONED POINTS)

All necessary precautions must be enforced to avoid potential transmission of COVID-19 between the data collectors and communities. For household visits, screenings, anthropometric measurements, a specific training on necessary Infection, Prevention and Control (IPC) measures⁵ should be conducted and include the following steps:

1. Make sure any data collectors stay at home when presenting any COVID-19 symptoms;
2. Thoroughly wash the anthropometric equipment – with soap⁶ for height boards and electronic scales (to avoid the use of Salter scales & hanging pants) and with chlorine⁷ for MUAC tapes after every use and between measurements;
3. Ensure physical safe distance as per recommendations of separation between mothers/caregivers and their children until their measurements can be taken;

5 WHO (2020) Clinical management of severe acute respiratory infection (SARI) when COVID-19 disease is suspected. Interim Guidance, March 13th 2020 (World Health Organization p. 5)

6 Instructions for making soapy water in [English](#) or in [French](#).

7 Instructions for making wash solution using 0.05% chlorine solution in [English](#) or in [French](#).

4. Ensure data collectors wear masks⁸ and gloves when taking measurements. If masks are not being used, then data collectors should cover their mouth and nose with flexed elbow or tissue when coughing or sneezing, and they should dispose of used tissue immediately;
5. Re-consider the positioning of the data collectors when reading the measurements (i.e. to read the measurement from behind the individual whilst MUAC measurements are being done to potentially reduce risk of droplet exposure);
6. Train data collectors on how to practice IPC measures when taking measurements;
7. Thoroughly disinfect or wash (for at least 20 seconds) the data collectors' hands/gloves between measurements;
8. Disinfect frequently-touched surfaces and objects.

Data collectors can also consider using this opportunity to train the mothers/caregivers on how to take MUAC measurements of their children; the MUAC tape would then be given after measurements to facilitate any eventual referral or general monitoring of their children's nutritional status.

NEXT STEPS

- 1) Organization of a specific webinar dedicated to this brief with the following asks for countries:
 - Technological options to be considered for nutrition information management, monitoring and surveillance in the context of COVID-19;
 - Identification of priority areas for support and any outstanding issues relating to nutrition information based on feedback from countries;
 - Potential proxy indicators to assess the nutrition situation during this pandemic.
- 2) Dissemination of recommended core set of COVID-19 related indicators to monitor at country-

8 WHO (2020) [Advice on the use of masks in the context of COVID-19](#)

USEFUL RESOURCES AND GUIDANCE

1) KEY DATA RESOURCES:

Type of Data	Name	Sources
Population Surveys	UNICEF Nutrition Databases	https://data.unicef.org/topic/nutrition/child-nutrition/
	UNICEF-WHO-The World Bank Joint Malnutrition Estimates	https://www.who.int/nutgrowthdb/estimates/en/
	UNICEF Multiple Indicator Cluster Surveys (MICS) Surveys	https://mics.unicef.org/surveys
	Demographic Health Surveys (DHS) Surveys	https://www.statcompiler.com/en/
Programme Data	UNICEF Nutridash	https://www.unicefnutridash.org/
	State of Acute Malnutrition	https://acutemalnutrition.org/
	The Global BreastFeeding Collective	https://www.unicef.org/breastfeeding/
	Global Database on the Implementation of Nutrition Actions (GINA)	https://www.who.int/nutrition/gina/en/

2) USEFUL GUIDANCE

Global Nutrition Cluster

- [Coordination](#)
- [GNC Information Management Tool kit](#)
- [Nutrition In Emergencies](#) – with briefs from the Global Technical Assistance Mechanism and Technical Rapid Response Team, Wasting, IYCF-E and Health and Nutrition Facility and Systems Management
- [Cross-cutting and other sectors](#)
- [Other COVID-19 guidance](#) – Medical and COVID-19 case management; Protection, Gender & GBV, Disabilities; Food, livelihoods, cash; Sensitization & IEC Materials

Updated Survey Guidance in the Context of COVID-19

- [Standardized Monitoring and Assessment of Relief and Transitions \(SMART\) Methodology](#)
- [Multiple Indicator Cluster Surveys \(MICS\)](#)
- [SPHERE Standards](#)

Additional Guidance

- [District Health Information Management Systems \(DHIS\)](#)
- [Global Nutrition Monitoring Framework: Operational Guidance for Tracking Progress in Meeting Targets for 2025](#)
- [IPC Tools and Classification for Acute Malnutrition](#)
- [Management of Severe Acute Malnutrition in Children: Working Towards Results at Scale](#)
- [Nutrition Information Systems Review](#) by Action Against Hunger UK with a particular focus on innovations that support collection, analysis and dissemination of nutrition data
- [UNHCR's Standard Expanded Nutrition Surveys \(SENS\)](#)
- [WHO Indicators for assessing infant and young child feeding practices](#)



Community-based health care, including outreach and campaigns, in the context of the COVID-19 pandemic

Interim guidance
May 2020



World Health
Organization



**CORONAVIRUS
DISEASE**
SIGNS & SYMPTOMS

- Fever
- Dry cough
- Difficulty in breathing
- Tiredness

For more information, call Ministry of Health, South Sudan
TOLL-FREE NUMBER **6666**

unicef
for every child

© World Health Organization and the United Nations Children's Fund (UNICEF), 2020

This joint report reflects the activities of the World Health Organization (WHO) and the United Nations Children's Fund (UNICEF)

Some rights reserved. This work is available under the Creative Commons Attribution-NonCommercial-ShareAlike 3.0 IGO licence (CC BY-NC-SA 3.0 IGO; <https://creativecommons.org/licenses/by-nc-sa/3.0/igo>).

Under the terms of this licence, you may copy, redistribute and adapt the work for non-commercial purposes, provided the work is appropriately cited, as indicated below. In any use of this work, there should be no suggestion that WHO or UNICEF endorses any specific organization, products or services. The unauthorized use of the WHO or UNICEF names or logos is not permitted. If you adapt the work, then you must license your work under the same or equivalent Creative Commons licence. If you create a translation of this work, you should add the following disclaimer along with the suggested citation: "This translation was not created by the World Health Organization (WHO) or the United Nations Children's Fund (UNICEF). Neither WHO nor UNICEF are responsible for the content or accuracy of this translation. The original English edition shall be the binding and authentic edition".

Any mediation relating to disputes arising under the licence shall be conducted in accordance with the mediation rules of the World Intellectual Property Organization (<http://www.wipo.int/amc/en/mediation/rules>).

Suggested citation. Community-based health care, including outreach and campaigns, in the context of the COVID-19 pandemic. World Health Organization and the United Nations Children's Fund (UNICEF), 2020. Licence: CC BY-NC-SA 3.0 IGO.

Cataloguing-in-Publication (CIP) data. CIP data are available at <http://apps.who.int/iris>.

Sales, rights and licensing. To purchase WHO publications, see <http://apps.who.int/bookorders>. To submit requests for commercial use and queries on rights and licensing, see <http://www.who.int/about/licensing>.

Third-party materials. If you wish to reuse material from this work that is attributed to a third party, such as tables, figures or images, it is your responsibility to determine whether permission is needed for that reuse and to obtain permission from the copyright holder. The risk of claims resulting from infringement of any third-party-owned component in the work rests solely with the user.

UNICEF and WHO Photographs. UNICEF and WHO photographs are copyrighted and are not to be reproduced in any medium without obtaining prior written permission. Permissions may be granted for one-time use in a context that accurately represents the real situation and identity of all human beings depicted. UNICEF and WHO photographs are not to be used in any commercial context; content may not be digitally altered to change meaning or context; assets may not be archived by any non-WHO or non-UNICEF entity. Requests for permission to reproduce UNICEF photographs should be addressed to UNICEF, Division of Communication, 3 United Nations Plaza, New York 10017, USA (email: nyhqdoc.permit@unicef.org). Requests for permission to reproduce WHO photographs should be addressed to: http://www.who.int/about/licensing/copyright_form/en/

General disclaimers. The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of WHO or UNICEF concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement.

The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by WHO or UNICEF in preference to others of a similar nature that are not mentioned. Errors and omissions excepted, the names of proprietary products are distinguished by initial capital letters.

All reasonable precautions have been taken by WHO and UNICEF to verify the information contained in this publication. However, the published material is being distributed without warranty of any kind, either expressed or implied. The responsibility for the interpretation and use of the material lies with the reader. In no event shall WHO or UNICEF be liable for damages arising from its use.

WHO/2019-nCoV/Comm_health_care/2020.1

Photo credits:

Cover page: top left, Flickr CC BY-NC-ND 2.0/UN Women/Ploy Phutpheng; top right, iStock-1197856264; bottom left, Flickr CC BY-NC-ND 2.0/MedGlobal Org; bottom right, © UNICEF/UNI317957/Chol.

Page 2, © UNICEF/UNI319147/Romenzi.

Page 3, Flickr CC BY-NC-ND 2.0/MedGlobal Org.

Page 4, © UNICEF/UNI313686/Ojo.

Page 5, © UNICEF/UNI321775/Frank Dejongh.

Page 10, Flickr CC BY-NC-ND 2.0/UN Women/Ploy Phutpheng.

Page 14, Flickr CC BY-NC-ND 2.0/UN Women/Ploy Phutpheng.

Page 18, © UNICEF/UNI319135/Romenzi.

Page 19, © UNICEF/UNI319151/Romenzi.

Page 23, © UNICEF/UNI317998/Choufany.

Page 24, Flickr CC BY-NC-ND 2.0/World Bank/Henitsoa Rafalia.

Page 25, Flickr CC BY-NC 2.0/U.S. Pacific Fleet/Jordan E. Gilbert.

Page 27, © UNICEF/UNI320547/Tesfaye.

Page 31, © UNICEF/UNI325806/Abdul.

Page 35, © UNICEF/UNI323496/Ryeng.

Page 37, © UNICEF/UNI321582/Fazel.

Design: Annovi Design.

Community-based health care, including outreach and campaigns, in the context of the COVID-19 pandemic

Interim guidance
May 2020



Table of Contents

Overview	2
Part 1. Community-based health care	4
Maintaining essential health services and strengthening the COVID-19 response	5
National and subnational contexts	5
Community-based delivery of essential health services	6
Strengthen the COVID-19 response in the community	8
Community Engagement and Communication	8
Adapting key health system functions in the pandemic context	10
Community health workforce	10
Supply chain	11
Health information systems	12
Infection prevention and control	14
Screening for COVID-19 infection	15
Additional infection prevention and control precautions	15
Part 2. Life course stages and disease-specific considerations	18
Key considerations across the life course	19
Family planning	19
Maternal and newborn health	20
Children and adolescents	21
Older people	22
Community case management of acute illness in childhood in the context of COVID-19	23
Detection, prevention and management of chronic illness	27
HIV	27
Tuberculosis	28
Mental health conditions	28
Noncommunicable diseases	29
Outreach activities and campaigns for prevention	31
Vaccination	31
Neglected tropical diseases	32
Malaria	33
Nutrition	35
References	37



Overview

The COVID-19 pandemic is challenging health systems across the world. Rapidly increasing demand for care of people with COVID-19 is compounded by fear, misinformation and limitations on the movement of people and supplies that disrupt the delivery of frontline health care for all people. When health systems are overwhelmed and people fail to access needed services, both direct mortality and indirect mortality from preventable and treatable conditions increase (1-3). Decision-makers will need to make difficult choices to ensure that COVID-19 and other urgent, ongoing public health problems are addressed while minimizing risks to health workers and communities. As established at the 2018 [Astana](#) Global Conference on Primary Health Care, the community level is an integral platform for primary health care, key to the delivery of services and essential public health functions, and to the engagement and empowerment of communities in relation to their health. This community-based platform, with its distinct capacities for health care delivery and social engagement, has a critical role to play in the response to COVID-19 and is essential to meeting people's ongoing health needs, especially those of the most vulnerable.

Existing delivery approaches will need to be adapted as the risk-benefit analysis for any given activity changes in the context of a pandemic. Certain activities may need to be anticipated in areas where COVID-19 transmission has not yet begun, modified where an alternative mode of delivery is safe or temporarily suspended where the risk of COVID-19 transmission is high. Where appropriate, in-person encounters should be limited through the use of alternative delivery mechanisms, such as mobile phone applications, telemedicine and other digital platforms. Specific adaptations will depend on the context, including the local overall disease burden, the COVID-19 transmission scenario, and the local capacity to deliver services safely and effectively.

Decisions should be aligned with relevant national and subnational policies and should be re-evaluated at regular intervals as the outbreak evolves. Taking a comprehensive and coordinated approach to community-based activities provides an opportunity to strengthen the resilience of the community-based platform into early recovery and beyond.

This guidance addresses the specific role of community-based health care (see Box 1) in the pandemic context and outlines the adaptations needed to keep people safe, maintain continuity of essential services and ensure an effective response to COVID-19. It is intended for decision-makers and managers at the national and subnational levels and complements a range of other guidance, including that on priority public health interventions, facility-based care, and risk communication and community engagement in the setting of the COVID-19 pandemic. National policies and capacities for community health services vary widely. Some of the activities discussed in this guidance may require skills, equipment and supplies that are only available at primary care facilities in some settings. Adaptation of this guidance to resource context will be essential to avoid placing unrealistic expectations on local community health care teams.

Part 1 of this document outlines basic principles and practical recommendations that support decision-making to:

- ensure the continuity of select essential services that can be delivered safely at the community level;
- leverage and strengthen the community platform as an integral part of primary health care to ensure an effective COVID-19 response;
- protect health workers and communities through infection prevention and control (IPC) measures.

Part 2 contains sections addressing COVID-19 in the context of different life course phases and highlights disease-specific considerations for adapting community-level activities.

Box 1. Community-based health care

Community-based health care includes services delivered by a broadly defined community health workforce, according to their training and capacity, encompassing a range of health workers, lay and professional, formal and informal, paid and unpaid, as well as facility-based personnel who support and supervise them and provide outreach services and campaigns. Where applicable, specific occupational groups and their roles are highlighted.

In every community, there are local actors, relationships and processes that intersect with the health sector and are central to delivering high-quality, people-centred health care and to building health system resilience. Relevant actors include local authorities, faith leaders and nongovernmental organizations (NGOs) and community groups, such as women's, scouting and youth groups. As trusted members of the community, the community health workforce usually has strong ties with these groups.



Part Community-based health care





Maintaining essential health services and strengthening the COVID-19 response

National and subnational contexts

Different areas, even within the same country, may require different approaches to designating essential services and to engaging the community health workforce in maintaining these services and responding directly to the COVID-19 pandemic. Decision-makers must balance the benefits of different activities with the risks they pose for transmission of the virus to health workers or from health workers to others. The local disease burden, the COVID-19 transmission pattern and the baseline capacity for service delivery at the community and facility levels will impact the risk–benefit analysis for any given activity, and communities’ distinct care-seeking patterns should also inform adaptations.

In settings where high-burden endemic diseases have signs and symptoms overlapping with the COVID-19 case definition (such as those of malaria), public health messaging will need to be adapted to ensure that people do not delay seeking care for potentially life-threatening illnesses. In addition, where, how and from whom communities seek health care may vary significantly by context. Private sector providers and NGOs, including faith-based organizations, are important stakeholders and key service providers in some communities. Rapid assessments at the national and subnational levels should guide strategic choices about policy and protocol changes and response action, taking into account that pre-existing gaps in health services delivery and system functions may be exacerbated during the outbreak. When they are well-informed and coordinated, adaptations made in the pandemic context have the potential to strengthen both facility-based primary care and its integration with the community-based platform into the early recovery period and beyond.

Community-based delivery of essential health services

To meet ongoing population health needs and mitigate the negative impacts of the COVID-19 outbreak, nationally agreed primary care programmes need to ensure capacity for preventing morbidity and mortality through the community-based delivery of [essential services](#) (4), including:

- preventing communicable disease through delivery of vaccines, chemoprevention, vector control and treatment;
- avoiding acute exacerbations and treatment failures by maintaining established treatment regimens for people living with chronic conditions;
- taking specific measures to protect vulnerable populations, including pregnant and lactating women, young children and older adults;
- managing emergency conditions that require time-sensitive intervention and maintaining functioning referral systems.

National and subnational processes for identifying essential services, coordinating with COVID-19 response planning and optimizing the health care workforce and service delivery should incorporate relevant community-based activities and include consultation with relevant community health workforce representatives.

Populations across the life course

There are distinct considerations for people at different stages in the life course with regard to the risks associated with COVID-19 infection, overall health service priorities and the implications of public health measures and other social changes associated with the pandemic. Specific considerations examined by stage of the life course are addressed in a dedicated section in Part 2.

Outreach and campaign-based prevention services

Community-based prevention activities include outreach services (an extension of facility-based primary care services used to reach the underserved), campaigns (supplementary activities to routine services used to achieve high population coverage) and outbreak responses (used to curb an emerging health threat). While these activities are life-saving, they may also increase the risk of COVID-19 transmission within communities and between health workers and communities. The decision to continue, modify or postpone these activities should take into account the impact on COVID-19 transmission, the speed of disease resurgence and the consequences of withholding the intervention. For example, if insecticide-treated net (ITN) distribution campaigns are discontinued in areas where malaria is highly endemic, there will likely be a near-term increase in cases and deaths; the COVID-19 transmission risks associated with ITN distribution can be minimized by switching from group distribution to door-to-door delivery and then leaving ITNs at the door to a house. If ITNs are to be delivered at sites such as health facilities, large gatherings should be avoided, and all physical distancing measures should be applied. Activities that rely on large-scale gatherings, such as mass vaccination campaigns, will need to be suspended where COVID-19 transmission is established, although oral vaccines delivered in monodose vials, such as for cholera and polio, could be safely self-administered or administered by a caregiver during a home visit while a health worker monitors from 1 m away. However, outbreaks of vaccine-preventable diseases (VPDs) create immediate health needs and require a risk–benefit assessment on an event-by-event basis (see Part 2).

Maintaining therapies for chronic disease

While face-to-face routine monitoring visits for people with a stable chronic disease can likely be temporarily suspended, ensuring the continuity of treatment regimens through alternative provision methods is essential to mitigate the risk of life-threatening acute exacerbations, such as diabetic crisis, heart attack, psychosis or the emergence or re-emergence of clinical symptoms and treatment resistance in the case of chronic infectious diseases such as tuberculosis (TB) or HIV infection (see Part 2). Replenishment procedures should be adapted

to avoid medicine and supply shortages and to allow people to obtain needed resources without undue risk to themselves or others. Where supply levels permit, consider dispensing multiple months of treatment for patients with chronic conditions (see Part 2).

Time-sensitive conditions and community-based acute care

Most acute and emergency care services will need to continue throughout the COVID-19 pandemic because of their highly time-sensitive nature and potential to avert death and disability across all phases of the life course. Ensuring that the community health workforce is trained and equipped to address acute conditions is critical, as restrictions on movement, recommendations to limit in-person encounters in facilities and fears about the safety of facility-based care will increasingly shift acute care to the community setting. The community-based health workforce is likely to face expanding numbers of acutely ill patients, including people with respiratory compromise from COVID-19 and those with other emergency conditions indirectly related to the pandemic context: interruptions in therapies for chronic conditions contribute to acute exacerbations (such as severe asthma or heart attacks), while decreased access and delayed care-seeking result in later and more severe presentations (such as sepsis that has evolved from a localized infection or shock in the setting of injury or pregnancy-related bleeding).

Simple, inexpensive and effective first aid and acute care can be safely administered by individual community members and community health workers with appropriate training, including those organized into community-based first aid responder (CFAR) programmes. Such programmes use rota systems and people trained in first aid who can be called on 24 hours per day to attend the scene of acute illness or injury to deliver basic care. In many settings, these programmes overlap with and complement other case-management programmes, and they may also be linked to volunteer ambulance services, such as those run by Red Cross and Red Crescent Societies. In many settings, in addition to providing care onsite, CFARs accompany patients to ensure their safe transport to facility-based care.

Ensuring early recognition, rapid treatment and timely referral for acute conditions maximizes the impact of subsequent interventions and often mitigates the need for them. Robust community-based acute and emergency care can help avoid excess morbidity and mortality during and after the COVID-19 pandemic, facilitating a return to comprehensive service delivery and thus building a more resilient system.

KEY ACTIONS:

- ⑥ **Review community health service interventions and delivery channels and identify essential services and delivery channels that need to be maintained**, linking these processes with national or subnational planning.
- ⑥ **Define nonessential services that can be interrupted or postponed and identify triggers** for their phased resumption and catch-up strategies that can be used during early recovery.
- ⑥ **Modify community-level service delivery to avoid large gatherings of people.**
- ⑥ **Update registers of vulnerable households** (for example, those with pregnant or lactating women, newborns or older people; or people living with [disabilities](#) (5), or chronic conditions), and monitor such households to ensure continuity of care and establish social safety nets.
- ⑥ **Adapt diagnosis and treatment protocols** and train and equip the community health workforce to screen for COVID-19 symptoms, recognize danger signs and appropriately activate notification and referral pathways.
- ⑥ **Create a roster of community members trained in first aid and acute care**, and strengthen or create an organized CFAR system with 24-hour coverage that can be activated by mobile phone.
- ⑥ **Monitor the utilization of essential health services in the community by liaising regularly with the community health workforce.**

Strengthen the COVID-19 response in the community

The community health workforce can be leveraged to strengthen the COVID-19 response because they are trusted members of the community with important links to the facilities, leaders and organizations that are key contributors to an effective response.

KEY ACTIONS:

- ⑥ **Ensure that community-based activities are incorporated into national response plans**, and engage networks of community service providers (including NGOs, private health providers and volunteers) to support response efforts in a coordinated manner.
- ⑥ **Identify context-relevant ways** for the community health workforce to contribute to the COVID-19 response; these might include screening, making referrals, providing support for home care, staffing community-based isolation centres, and engaging in surveillance, contact tracing, risk communication and community engagement (see Part 2).
- ⑥ **Establish protocols** for community-based COVID-19 screening using standard [case definitions](#) (6), recognizing danger signs and making appropriate referrals. Prepare home-to-hospital protocols and adapt community-level referral and counter-referral protocols for suspected cases of COVID-19.

Community Engagement and Communication

As outlined in the [Astana](#) 2018 document, systematic engagement and communication with individuals and communities are essential to maintain trust in the capacity of the health system to provide safe, high-quality essential services and to ensure appropriate care-seeking behaviour and adherence to public health advice (7).¹ [Communication and engagement strategies](#) for COVID-19 should include all dimensions of community-based health care and aim to facilitate optimal care-seeking, health behaviours and home care practices. Communities will rely on local health facilities, and trusted community actors, including local media, for information. It is important to ensure that they have up-to-date, accurate and contextualized information in the local language.

Communication should focus on building trust, reducing fear, strengthening collaboration and promoting the uptake of public health measures and essential services.

Key topics for communication include:

- **[COVID-19 transmission](#), public health actions to reduce the risk of transmission and risk factors associated with severe illness** (8). Consider developing hotlines, implementing question and answer (Q & A) sessions and leveraging digital platforms where available to dispel harmful myths, curb the spread of misinformation, reduce stigma associated with COVID-19 and support the reintegration of recovered COVID-19 patients into the community;
- **continued care-seeking for essential services**, how care can be sought safely and any changes in service delivery settings or points of care;
- **self-care and family care practices in the home**, which should be provided to all members of the household to address their health needs and avoid reinforcing traditional gender roles;
- **home care for people with mild to moderate COVID-19 symptoms**, according to national guidance (9); share information about who to contact and where to seek care in case the patient has danger signs;

¹ In this document, communication and community engagement encompass social and behaviour-change communication strategies, as well as health promotion, health education, community mobilization and community engagement. This section complements guidance already published as [Risk communication and community engagement \(RCCE\) action plan guidance: COVID-19 preparedness and response](#) (7).

- **the role of the community health workforce as trusted actors** in protecting the community;
- **mental health and psychosocial well-being**, addressing the increased risks of domestic [violence](#) against women (10), children, adolescents, persons with disabilities and older people, and providing information about accessible services. Community resources may help to identify trusted family, friends and neighbours who can keep in touch with and support persons subjected to violence.

The community health workforce and broader community support will become increasingly important in the COVID-19 context as stay-at-home measures have been reported to decrease care-seeking for essential services and to increase violence, the use of alcohol and other substances, addictive behaviours and stress-related conditions.

KEY ACTIONS:

- ⑥ **Engage stakeholders and the community in designing and implementing communication plans, strategies and materials.** [Include vulnerable populations](#) (11), such as women, children, adolescents, older people, people with [disabilities](#) (5) and people living with HIV.
- ⑥ **Engage with community stakeholders to identify and address barriers to access** caused by stay-at-home policies, the suspension of public transport, concerns about infection and other factors.
- ⑥ **Engage women's, parents', and adolescent and youth groups** to ensure there is effective, targeted peer outreach.
- ⑥ **Coordinate with and provide resources for community governance committees** so they can offer strategic guidance for the delivery of community-based health services, act as a conduit for community feedback and contribute to oversight of the community health workforce (12).
- ⑥ **Establish or reinforce existing mechanisms for communities to hold health authorities accountable, including those in the private sector**, to ensure the equitable allocation of resources and to improve the responsiveness and quality of [service delivery](#) (13).
- ⑥ **Avoid community-level mobilization approaches that entail large gatherings of people.**
- ⑥ **Use existing digital platforms** for teleconsultations and to disseminate information and alerts to communities. Identify **inclusive delivery mechanisms** for people with disabilities.
- ⑥ **Leverage trusted community resources, such as primary care facilities, local authorities, influencers and [religious leaders](#)** (14), to promote the dissemination of helpful information, including about safe worship and burial practices, the need to avoid gathering, to prevent and reduce fear and stigma, and to provide reassurance to people in their communities.



Adapting key health system functions in the pandemic context

This section addresses select health system functions for which strategic adaptations are needed to ensure a robust COVID-19 response and safe ongoing delivery of essential services at the community level.

Community health workforce

Adapting roles and responsibilities for the [community health workforce in the context of the COVID-19 pandemic](#) can include developing new approaches to existing activities and reassigning existing workers or recruiting additional workers (15). In the setting of such changes, it is important to avoid burnout, attrition, lapses in service delivery, reductions in quality and increases in infection risk. Since the availability of referral services may be limited in the context of increasing demands on the health system, all health workers should be prepared to take on additional responsibilities related to the initial management of [key life-threatening syndromes](#) (16). Where the COVID-19 context necessitates workload modifications, reassignment or recruitment, care should be taken to adequately resource, train, equip and supervise all health workers, leveraging digital solutions if available. Timely remuneration and reasonable working conditions will promote the retention of the community health workforce during the COVID-19 response and beyond.

To ensure the occupational safety and health of the community health workforce, all health staff should be provided with adequate personal protective equipment (PPE) and trained in its use and safe disposal.

Work in the COVID-19 context may result in [stigmatization](#) (17), and health workers may need [mental health and psychosocial support](#), and particular consideration should be given to gender issues (18). Older workers and those with high-risk conditions should be assigned to duties that do not put them at additional risk.

KEY ACTIONS:

- ⑥ **Ensure that the community health workforce is included in workforce assessments associated with the COVID-19 response.** Create or leverage existing databases of workers with different skills to fill critical gaps; ensure these are updated regularly. Identify qualified workers, including unemployed and retired workers, who could be part of a surge cohort (ensuring protections as above).
- ⑥ **Clearly define roles for the community health workforce in the context of the COVID-19 response** and involve that workforce in planning and decision-making.
- ⑥ **Ensure that the community health workforce and other critical personnel** (for example, those who are part of the supply chain) are classified as essential and exempted from movement restrictions.
- ⑥ **Recognize and remunerate the community health workforce supporting the COVID-19 response** with payments and non-performance-based incentives; coordinate remuneration with partners and stakeholders.
- ⑥ **Quantify training needs and invest in rapid, remote training** on new COVID-19 roles and tasks and adaptations to existing activities. Leverage digital solutions to modify training modalities, including e-health learning platforms.
- ⑥ **Modify supportive supervision and communication modalities** as needed (including by using digital solutions) to ensure the timely dissemination of information and access to clinical decision support to reinforce newly acquired skills while strengthening referral linkages among the community health workforce, facilities and district health management teams.
- ⑥ **Ensure that health workers have sufficient phone credit** or are compensated for the credit they use to engage with clients, access information, seek advice from supervisors, send data and receive payments using mobile phones.
- ⑥ **Ensure the safety and health of all health workers** by providing PPE appropriate to the tasks performed, protecting against violence and harassment and offering psychosocial support.

Supply chain

In the pandemic context, with its associated impacts on care-seeking and access, there may be an increased reliance on primary care services and the community health workforce and increased utilization of medicines and supplies at the community level. [Strengthening supply chains](#), anticipating interruptions and preparing mitigation strategies are critical to maintaining the availability of essential medicines and supplies (15). Strategies should address (a) commonly used supplies, (b) any medicines or other necessary products that are at risk for constraint due to increased demand and (c) supply and distribution mechanisms that reduce the number of visits to health facilities to replenish supplies.

Where stock is available in the country, allocating at least 1 month of essential supplies at the community level, assuming safe, secure storage is possible, may help to reduce disruptions due to transportation delays. If supplies are sufficient and if storage conditions allow, larger quantities can be dispensed. When supplies are constrained, more frequent deliveries may be needed, and it will be important to have a plan to minimize exposure at health facilities. Options may include establishing secure pick-up locations with timed appointments or secure drop-off zones where access is restricted to necessary personnel. For inventory management, additional flexibility may be required and, where feasible, electronic systems should be used.

Similarly, to mitigate the transmission risk, if medicines cannot be delivered to homes, each pick-up location should include physical barriers, such as plastic screens, to protect patients and staff. If possible, hand sanitizer or handwashing stations should be available at all pick-up locations for clients to use. To the extent possible, people should pick up products at windows or counters at the perimeter of the facility, and queue-management measures, such as distancing and advance scheduling, should be used. Adapted and expedited procedures may be required in certain areas to pre-position supplies, and special considerations apply to urban and periurban areas, informal settlements and other densely populated settings where there may be widespread community transmission.

Information about stocks and safe storage capacity at the national and subnational levels should inform these strategic choices, and when needed, rapid assessments should be conducted electronically or by phone. Where possible, resources should be designated specifically for use by the community health workforce to ensure continuity of care for people with acute or chronic conditions.

KEY ACTIONS:

- ⑥ **Develop supply and distribution strategies** for medicines and other health commodities that may be in short supply or are likely to be in high demand, taking into account safety and security.
- ⑥ **Adapt replenishment procedures to avoid community shortages**, limiting facility encounters through multimonth dispensing, if supplies permit
- ⑥ **As supply levels allow, consider pre-positioning** a buffer supply of at least a 1 month (and ideally longer) of essential resources for community-level service delivery. Designate resources specifically for use by the community health workforce, and anticipate increased resource needs.
- ⑥ **Coordinate the assessment, ordering and distribution of essential medicines, supplies (including PPE) and equipment** with partners and community stakeholders.
- ⑥ **Ensure that pharmacies, health posts and other relevant public and private community-based entities are included in capacity assessments** for the production and distribution of essential resources.
- ⑥ **Ensure that community-based pathways for medicine stock and distribution are included** in electronic systems for order management, assessments and planning, if possible.
- ⑥ **For those making or accepting deliveries and when dispensing medicine or supplies, avoid excessive contact inside a health facility**; for patients with chronic conditions, schedule medicine pick up via text (SMS) message or phone and maintain distance between patients while they wait.
- ⑥ **Consider using reverse logistics to reposition supplies** based on the transmission scenario and feasibility in the local context.

Health information systems

Community data are needed to monitor and maintain essential health services and to inform public health actions that can slow and stop COVID-19 transmission. As diagnostic technologies become widely available, surveillance strategies will change.

In settings where the community health workforce depends on paper forms² to collect data, alternative solutions should be explored that do not require the workforce to appear in person to submit data to a health facility.

² Ideally, data would be integrated within existing health information systems, but for the COVID-19 pandemic there may be a need for parallel COVID-19-specific information channels, since it takes time to integrate new indicators into existing systems.

If a mobile network is available, data could be called in to supervisors or facilities, or photos could be submitted to capture monthly reports. In situations in which technology cannot be leveraged, the workforce should be involved in creating a process for aggregating data at the community level and identifying appropriate pathways to ensure that data reach the health facility. The usual accountability mechanisms that increase contact, such as requiring confirmatory signatures, should be suspended. The timeliness and quality of the reporting of community data will likely decline during the pandemic, and programmes should consider prioritizing a limited set of indicators that is based on existing community data.

KEY ACTIONS:

- ⑥ **Strengthen community-based surveillance for COVID-19** to identify early warnings and ensure early case identification and immediate action, according to national guidance (19). Invest in adapted approaches in hotspots to mitigate transmission.
- ⑥ **Incorporate data collected by the community health workforce** into the health information management system (15). Use data to produce dashboards to inform transmission scenarios, and identify COVID-19 hotspots and disruptions in logistics and service delivery.
- ⑥ **Collect and monitor data on COVID-19 infections and deaths in the community health workforce** that are disaggregated by gender, age and tasks performed.
- ⑥ **Use community data to monitor the utilization of essential health services** for COVID-19 infections and for other priority health conditions (for example, measles) in order to mitigate outbreaks, especially if services are postponed or care-seeking declines (15).
- ⑥ **Engage the community health workforce in establishing a community alert system**, and use context-appropriate technology, if feasible.
- ⑥ **Leverage existing investments in digital platforms**³ for data collection, real-time monitoring and for obtaining feedback from the community (20).
- ⑥ **In the absence of community meetings, establish a remote digital mechanism to ensure two-way feedback** for data and for interpreting surveillance information. Support communities in using their data for decision-making, collecting community feedback (for example, questions and information about beliefs, rumours and concerns) and acting on data to inform changes in services and community engagement actions.
- ⑥ **Ensure the community health workforce has sufficient access to data collection tools (whether paper or digital, as relevant)**, including disease surveillance and death notification forms and registers, providing at least 1 month of buffer supply and anticipating a surge in cases. Where possible, adapt existing register forms.

³ Such digital platforms include, for example, SMS text messaging, UNICEF's RapidPro, IntraHealth's mHero, Dimagi's CommCare, U-Report, and community health toolkit coronavirus alert applications.



Infection prevention and control

In order to keep health workers and communities safe, initial screening and [appropriate IPC measures](#) should be incorporated into all community-based health care activities (21). Adherence to the use of standard precautions for all patients at all times should be strengthened, particularly regarding hand hygiene, surface and environmental cleaning and disinfection, and the appropriate use of PPE. Which additional IPC measures are needed will depend on the local COVID-19 transmission scenario and the type of contact required by the activity. Physical distancing should be implemented as much as possible.

Logistics planning, budgeting and [supply-chain](#) and waste management for PPE and hand hygiene supplies should address the needs of the community-based health workforce (22). Potential shortages in PPE must be addressed proactively, and clear guidance must be provided on how to adapt essential activities and services in the absence of PPE.

In the setting of the COVID-19 pandemic, the following standard IPC precautions should be strengthened during all health care encounters.

- Hand hygiene: Using [WHO's 5 moments](#) approach, always clean hands before and after direct patient contact, after the risk of exposure to body fluids and after interactions with the environment (for example, after touching surfaces) (23). Hand hygiene includes cleansing hands either with an alcohol-based hand rub (if hands are not visibly dirty) or with soap and water and drying them with a single-use or clean towel, if available.

- Use of gloves: Gloves are required only if direct contact with blood or other body fluids is expected, including secretions or excretions, mucous membranes or broken skin (for example, while performing a rapid diagnostic test [RDT] for malaria or during certain antenatal and postnatal examinations).
- Equipment and surfaces: Equipment and surfaces should be cleaned with water and soap or a detergent, followed by a disinfectant; safe waste management protocols must be followed.
- Medical masks: Whether medical masks should be used depends on the task performed (for example, if splashes are expected) and the context and transmission scenario (Table 1).

Furthermore, the community health workforce should ensure that patients and workforce members adhere to respiratory hygiene, and when sneezing or coughing cover their nose and mouth with a tissue or bent elbow, and then dispose of the tissue safely in a bin (ideally, one with a lid).

Screening for COVID-19 infection

[Screening for COVID-19](#) should be done in all settings where it is indicated by the transmission scenario or local policy, or both, as part of every health care encounter (24). Screening for COVID-19 involves evaluating risk using a set of questions, and **PPE is not required for screening if a physical distance of at least 1 m can be maintained**. Where this distance cannot be ensured, health workers should wear a medical mask and eye protection.

Screening should include assessments of:

- COVID-19 exposure risk (that is, contact with a suspected or confirmed COVID-19 case or other people with COVID-like symptoms in the household, personal travel to or contact with travellers from an area with known cases);
- symptoms as described in COVID-19 case definitions for adults and children.

For people whose screening is negative, the health care visit can continue. No mask is required if a distance of at least 1 m can be maintained and there is no direct contact.

People whose screening is positive are considered suspected COVID-19 cases, and the local system for isolation and management, must be activated according to national protocols. WHO recommends that all people with suspected or confirmed COVID-19 infection should be isolated and cared for in a health care facility or dedicated community isolation facility. Where isolation in a facility is not feasible, people with no symptoms (that is, those who are asymptomatic or presymptomatic) or mild symptoms can be [managed at home](#), as long as there is strict adherence to IPC measures and precautions and advice is given about when to seek care (9). This situation might apply, for example, when it is not feasible to separate young children from their caregivers.

Note that a positive result on screening does not necessarily preclude delivering care, as long as it can be done safely. When a patient is suspected to have COVID-19 infection, health care workers should only deliver care that allows them to maintain a distance of at least 1 m or they should use the IPC precautions and protections required according to the standards for specific activities in the setting of a positive screening (Table 1, Interaction with a person with suspected or confirmed COVID-19).

Additional infection prevention and control precautions

This section discusses the use of additional IPC precautions when a health care worker is in contact with people with suspected or confirmed COVID-19 and when essential services are delivered in settings where there is widespread community transmission.

In addition to using standard precautions for all patients, contact and droplet precautions should be used when care is provided to a person with suspected or confirmed COVID-19. Contact and droplet precautions include the use of a medical mask, gown, gloves and eye protection. These precautions should be taken by the community health workforce and any other individuals, including family members, involved in supporting a

person with suspected or confirmed COVID-19. In the context of widespread community transmission, some additional precautions, such as wearing a medical mask, may also be considered when community health workers provide essential routine services. In addition, the community health workforce together with other community actors have key roles to play in ensuring that basic IPC measures are implemented and in advising and supporting community members during quarantine and home care.

Table 1 gives examples of the precautions to be taken and the PPE required in the community health setting in the context of widespread community transmission of COVID-19. It is important to note that beyond these examples, standard precautions should be used at all times and for all patients.

Table 1. Examples of health care activities and appropriate infection prevention and control precautions in the context of community transmission of COVID-19

Activity	Type of precautions and personal protective equipment
Home visit (for example, for antenatal or postnatal care, or care for a person with tuberculosis, HIV or another chronic condition)	<ul style="list-style-type: none"> • If feasible, conduct home visits outside in a well-ventilated space and keep a distance of at least 1 m. • Perform hand hygiene frequently and while providing care, according to WHO's recommendations on the 5 moments for hand hygiene. • Wear gloves only if exposure is expected to blood, body fluids, secretions, excretions, mucous membranes or broken skin. • Consider wearing a medical mask when in direct contact or when a distance of at least 1 m cannot be maintained.
Outreach activities and campaigns	<p>When no direct contact is involved (for example, during the distribution of insecticide-treated nets)</p> <ul style="list-style-type: none"> • Maintain distance of at least 1 m. • No screening required. • No PPE required. • Perform hand hygiene frequently. <p>When direct contact is involved (for example, delivering vaccinations)</p> <ul style="list-style-type: none"> • Perform hand hygiene between each patient. • Consider wearing a medical mask.
Community case management of acute illness in children	<ul style="list-style-type: none"> • Perform hand hygiene according to WHO's recommendations on the 5 moments for hand hygiene. • PPE needs depend on the outcome of screening. • If the patient is not suspected to have COVID-19: wear a medical mask and gloves for a malaria rapid diagnostic test, as per standard protocol. • If the patient is suspected to have COVID-19: wear full PPE (medical mask, eye protection, gloves, gown). <ul style="list-style-type: none"> – If full PPE is not available, use the modified distance community case management protocol, which maintains distance and does not involve direct contact.
Any activity involving direct physical contact with a person with suspected or confirmed COVID-19	<ul style="list-style-type: none"> • Perform hand hygiene according to WHO's recommendations on the 5 moments for hand hygiene. • Wear a medical mask. • Wear a gown. • Wear gloves. • Wear eye protection.
Any activity not involving physical contact (including entering the room of a person with suspected or confirmed COVID-19, but not providing direct care)	<ul style="list-style-type: none"> • Perform hand hygiene according to the WHO recommendations on the 5 moments for hand hygiene. • Wear a medical mask. • Maintain distance of at least 1 m. • When possible, conduct interviews outdoors, with the patient also wearing a medical mask, if tolerated.

PPE: personal protective equipment.

KEY ACTIONS:

- ⑥ **Develop and disseminate standard operating procedures for IPC** that include the community health workforce and are informed by the transmission scenario and local guidance and protocols.
- ⑥ **Define IPC precautions depending on the activity or service being delivered, and include information about who requires PPE and what type is required** to inform quantification and distribution and to ensure continued availability and the rational use of supplies.
- ⑥ **Ensure that the community health workforce is included in the national policy on the use of PPE.**
- ⑥ **Ensure adequate access to and supplies for hand hygiene and the disinfection of equipment and the environment.**
- ⑥ **Designate a district-level health care officer trained in IPC** to be in charge of supervising IPC activities at primary care facilities and in the community.
- ⑥ **Incorporate screening for COVID-19** into the essential services provided by the community health workforce as per local guidance and protocols.
- ⑥ **Ensure thorough training for all users of standard and additional (transmission-based) IPC precautions, including how to properly wear, remove, use and dispose of PPE,** and consider how to limit direct contact between health care providers and patients and how to deliver health services using physical distancing where possible, especially in areas with widespread community transmission.

Part 2. Life course stages and disease-specific considerations





The following sections address key considerations for specific life course stages and disease-specific programmes. These sections should be read together with the general sections in Part 1, as they are complementary and do not repeat the material covered there.

Key considerations across the life course

Services for sexual and reproductive health; maternal, newborn, and child and adolescent health; and the health of older people will require modifications as access to and the availability of essential services shifts during the COVID-19 outbreak. The sections below support programme managers and other stakeholders in safely adapting select services based on risk assessments. Providing ongoing support for [self-care](#) and family care practices will be important in sustaining community-based health services (25).

Family planning

- Support trained community health workers to continue providing counselling at the community level about contraceptive options in contexts in which these services are usually provided.⁴ Users' preferences for contraceptive methods may change in the setting of the COVID-19 pandemic, based on potential disruptions of supply chains and limitations on access to health care facilities.
- Determine whether the community health workforce includes health workers who are appropriately trained to safely provide family planning services and information (that is, information about contraception, the

⁴ The distribution, promotion of supplies and implementation are to be undertaken by the respective UN agencies according to the assigned UN mandate.

prevention of unsafe abortion and sexually transmitted infections [STIs]) if access to health facilities is reduced during the COVID-19 pandemic. Where appropriate, offer digital decision support tools to assist the community health workforce to safely provide contraception (26).

- Increase the availability of methods that do not require the direct supervision of health workers through pharmacies and other channels.

Maternal and newborn health

- Facility-based maternal and newborn health services, including antenatal care ([ANC](#)), [childbirth](#) and postnatal care ([PNC](#)) and the management of maternal and neonatal complications should continue to be prioritized throughout the pandemic (27-29).
- In pregnant or postnatal women with mild COVID-19 not requiring hospitalization, routine ANC or PNC can be provided through alternative delivery platforms (such as, telemedicine, mobile phone, home visits) or can be postponed until after the period of self-isolation, provided this is in accordance with national guidelines and recommendations of the health care team.
- Focus community efforts on promoting care-seeking, addressing concerns about the potential risks of COVID-19 transmission at health facilities and supporting self-care and family care practices.
 - If service delivery is modified to restrict ANC or PNC visits in health facilities, then adapt birth preparedness and complication readiness plans at every ANC and PNC contact to take into account changes to services.
- Ensure that ANC, childbirth and PNC services in the community are provided by [skilled health personnel](#), including professional community midwives, who should have access to appropriate PPE and IPC strategies (30).
 - Engage trained [lay health workers](#) to support basic ANC or PNC through home visits, ensuring that they use IPC measures, including PPE, depending on context and tasks performed (31).
 - Prioritize ANC contacts for women with high-risk pregnancies, women with signs of depression, women who are underweight or overweight, adolescent girls, other vulnerable groups and for low-risk women during the third trimester (from 28 weeks).
 - Prioritize PNC contacts for women and babies during the first week after birth and to follow up on babies born preterm or with low birth weight.
- Maintain maternity waiting homes where they exist, ensuring that appropriate [IPC guidance](#) is followed in the context of COVID-19 (32).
- If access to facilities for births is restricted due to COVID-19:
 - ensure that home births are assisted by skilled health professionals, including professional community-based midwives, and ensure that the health professionals are associated with a facility, authorized and fully equipped to attend home births;
 - provide [clean birth kits](#) (33) to pregnant women and to [skilled health personnel](#) (30) who attend home births;
 - ensure that someone who can obtain assistance in case of complications stays with the mother and newborn for a minimum of 24 hours;
 - ensure that women and families are aware that women should receive respectful care, have a labour companion present, mothers and their newborns should remain together, mothers should practise skin-to-skin contact and maintain early and exclusive breastfeeding;
 - consider training community health workers to safely implement procedures for newborns, such as eye care, infant vitamin K administration and vaccination, if feasible;
 - ensure that skilled health personnel can provide follow up in the community for small and sick newborns, support kangaroo mother care for babies born weighing less than 2000 g, and support breastfeeding or breast milk feeding where home birth or early hospital discharge is needed;

- ensure that women and their families know where to register the baby if there was a home birth.
- Clarify information regarding the risks for pregnant and breastfeeding women and their newborns in relation to COVID-19 and address any fears about maintaining breastfeeding and skin-to-skin practices.
- Encourage the mother to express breast milk while applying appropriate IPC measures if she has a severe illness that prevents her from caring for her infant or from continuing direct [breastfeeding](#) (34).
- Ensure that all pregnant and lactating women continue to receive nutritional care as part of their ANC and PNC. After the baby is born, continue counselling about infant and young child feeding, as well as offering lactation support.
- Continue to supply all pregnant women during ANC contacts with [iron and folic acid supplements](#) and calcium supplements in populations with low calcium intakes (27). Where food distribution is significantly interrupted and in populations with a high prevalence of nutritional deficiencies, the use of multiple [micronutrient supplements](#) that include iron and folic acid may be considered for pregnant and lactating women (35).
- In situations in which ANC, PNC and community contacts are periodic, offer 2–3 months of micronutrient supplements, ITNs and family planning methods.
- Support mothers and caregivers in using appropriate newborn care practices, including hygiene practices and caregiver handwashing.
- Identify appropriately trained workers to provide mental health and psychosocial support to, parents and caregivers who may need to be separated from the newborn and for parents of newborns with complications.
- Where feasible, provide virtual support to pregnant women and parents via established support groups.

Children and adolescents

(See also the Section Community case management of acute illness in childhood in the context of COVID-19.)

- Consider replacing health promotion visits with teleconsultations and telecounselling.
- [Provide information to families](#) (36) on coping, [positive parenting](#) (37), responsive caregiving and early stimulation, feeding, and protecting children from abuse and violence, which is reported to be increasing in the setting of confinement measures.
- Share ideas for home-based [activities](#) that are safe and entertaining, provide learning opportunities, and help children adapt to the changes associated with the pandemic (38).
- Support the capacity of the community health workforce to identify and respond to signs of stress, isolation or poor mental health in parents and children and to refer families to suitable psychosocial support services.
- Help parents identify relevant social protection mechanisms available to them to mitigate stress due to economic hardship. Pregnant and parenting adolescents may be most vulnerable.
- Continue to provide [iron supplements](#) (39) or [multiple micronutrient powders](#) (40) for children in populations with a high prevalence of anaemia. Consider delaying distribution in areas where the provision of supplements is recommended for only 3–6 months of the year, while monitoring for deterioration in diet.
- Ensure that children and [adolescents have](#) accurate information about COVID-19 and how to protect themselves. Improve adolescents' health literacy related to the COVID-19 pandemic and general health to ensure that they are knowledgeable about their own health and know where and when to obtain health services in times of crisis (41).
- Involve adolescents in planning for service provision in their community in times of crisis and involve them in appropriate aspects of service provision, such as peer-to-peer support.

Older people

- Recognize [non-specific signs and symptoms](#) of COVID-19 in older people, including fatigue, reduced alertness, reduced mobility, diarrhoea, loss of appetite, delirium and the absence of fever (42).
- Reach out (for example, by phone or telehealth connection) to older people who have [additional risk factors](#) (6) for developing severe illness from COVID-19, such as those with chronic lung disease, cardiovascular disease including hypertension, immunodeficiency including HIV, diabetes, renal disease, liver disease, chronic neurological or neuromuscular disease, malignancy, or undernutrition.
- Advise older people to have at home, if possible, at least 2 weeks of critical medicines and supplies. Provide repeat prescriptions and mechanisms for delivering refills.
- Discuss advanced care planning and the possibilities of palliative care, including end-of-life care, to allow informed, inclusive and autonomous decisions, if appropriate.
- Follow up (for example, by phone or with a home visit) if the older person fails to attend appointments.
- Recognize that older people, particularly those in isolation and with impairments (such as visual impairment, hearing loss, cognitive decline or dementia), may become more [anxious, angry and stressed](#) (18).
 - Adapt communication (verbal and written) to [older people with impairments](#) so that information is accessible and clearly understood (5).
 - Provide practical advice in a clear, concise, respectful and calm way, and repeat simple facts as frequently as needed.
 - Be mindful that wearing a mask prevents lip reading and decreases vocal clarity for those with [hearing loss](#) (43).
- Ensure that assistive devices are provided, such as wheelchairs and walkers, to those older people who need them, and communicate the importance of ensuring that these are disinfected before and after use.
- Ensure that older people who live alone or are institutionalized have access to nutritious food. Consider individual preferences and underlying [physical limitations](#) when ensuring this access (such as problems with chewing, swallowing or digestion) (44).
- Engage the [community health workforce](#) to help older persons who depend on care (45).
- Discuss with the older person and their household an alternative plan to ensure [continuity of care](#) in case the main caregiver is unavailable (46):
 - identify alternative caregivers and prepare a readily available care plan for handover;
 - identify possible facilities (such as long-term care facilities, community centres) for short-term admissions.

Key documents for life course considerations

- [COVID19 measures for ANC, childbirth, PNC and breastfeeding](#) (47)
- [Child and adolescent health and parenting in the time of COVID-19](#) (37)
- [COVID-19 resources for adolescents and youth](#) (48)
- [Questions and answers about COVID-19 for youth](#) (49)
- Ways to [support young children and their families during the COVID-19 response](#) (50).



Community case management of acute illness in childhood in the context of COVID-19

Continued care-seeking for sick children should be encouraged for the management of major causes of childhood illness as an essential community-based service in the context of COVID-19, including for malaria, pneumonia, diarrhoea and wasting⁵.

Adaptations to standard protocols for [integrated community case management \(iCCM\)](#) are necessary and should be nuanced, depending on the transmission of COVID-19 at national and subnational levels and the availability of PPE. The adaptations should be in accordance with national guidance for COVID-19 and made with engagement from national child health, malaria control and nutrition programmes (51).

The symptoms of COVID-19 in children are non-specific and overlap with symptoms of common childhood illnesses, especially pneumonia caused by other viral and bacterial pathogens, and malaria. This must be taken into account in the context of iCCM. Many children with **COVID-19 may have [non-specific symptoms](#)** such as fever, fatigue, cough or difficulty breathing. Rarely, children may present with diarrhoea and vomiting as the only signs.

⁵ The assessment of acute malnutrition by community health workers may not universally be a part of a country's traditional integrated community case management package. However, some countries have established community nutrition programmes that provide ready-to-use therapeutic food for management of children who have mid-upper arm circumference measurements in the red zone but have no medical complications.

All sick children in the community should be assessed and treated as per iCCM guidelines. However, children with fever or respiratory symptoms or cough or shortness of breath, or a combination of these, may have COVID-19, particularly in settings with community transmission, and coinfections may occur.

If screening for COVID-19 has been implemented in settings with community transmission, community health workers delivering iCCM should be trained in national screening protocols and should know the [definition of suspected cases of COVID-19](#), which may be based on a combination of symptoms, local epidemiology and other factors, such as an assessment of exposure risk.

The iCCM protocol should be completed for all children, irrespective of screening result, and treatment should be initiated as per iCCM national guidelines, but ensuring that IPC precautions are used as appropriate (Fig. 1).

After the iCCM assessment is completed and the child is treated, the local protocol for COVID-19 should be activated for all children suspected to have COVID-19. This protocol may include referral for isolation, testing or treatment, or a combination of these. Children with danger signs should be referred according to the local COVID-19 protocol.

Community health workers delivering iCCM should:

- **maintain distance** of at least 1 m, except when performing a malaria RDT or measuring mid-upper arm circumference (MUAC). Visits should be held outside or in a well-ventilated space, and gatherings of people should be avoided;
- **screen all children** for COVID 19 if protocols for screening at the community level have been activated. Ideally, screening is done for both the caregiver and the child and includes inquiring about symptoms as well as possible exposure to COVID-19 in the household or beyond;
- **implement standard precautions for IPC**, including hand hygiene, using WHO's [my 5 moments for hand hygiene protocol](#), routine cleaning and disinfection of materials and surfaces and respiratory etiquette;
- **use PPE.** Ideally, all community health workers should be provided with PPE. The type of PPE required in settings with community transmission depends on the outcome of the COVID-19 screening;
 - **in children who are not suspected to have COVID-19**, wearing a medical mask is the minimum required when in close or direct contact with the child; gloves are required when performing a malaria RDT;
 - **in children who are suspected to have COVID-19**, full PPE (that is, mask, eye protection, gown and gloves) should be used if available (see Box 2), and standard iCCM protocols should be followed, given that direct physical contact between the community health worker and the child may be required to perform a malaria RDT, measure MUAC and to press both feet to test for oedema;

Box 2. Use full personal protective equipment when physical contact may occur with a person suspected to have COVID-19

WHO recommends that full PPE (that is, a medical mask, gloves, eye protection and a gown) should be worn for all interactions that involve direct physical contact with patients suspected or confirmed to have COVID-19. It is important to ensure that community health workers performing community case management are equipped with sufficient quantities of PPE and have been trained how to use it.



- **if full PPE is not available**, a modified distance iCCM protocol, which allows the community health worker to maintain distance and does not involve direct contact, should be implemented with children who are suspected to have COVID-19 -
 - community health workers should maintain a distance of at least 1 m throughout the visit and avoid direct contact with the child;
 - hand hygiene should be performed before and after each visit;
 - malaria RDTs should not be performed, and, in children with fever, malaria treatment should be given on a presumptive basis;
 - community health workers should ask the caregiver to hold up the child's clothing and then they should count the respiratory rate from 1 m away to ensure there is no contact;
 - community health workers should guide the caregiver to measure the MUAC and check for oedema;
 - community health workers should guide the caregiver to provide the first dose of treatment or any pre-referral treatment.

Due to the overlap between symptoms of COVID-19 and those of common childhood illnesses, a significant number of children may be identified as suspected to have COVID-19 during screening. Those identified as suspected cases will require isolation according to local protocols (see Box 3), but other causes of acute symptoms should be evaluated and treated as needed.

Box 3. Recommendations on isolation for patients suspected to have COVID-19

WHO recommends that all patients suspected to have COVID-19 in all settings should be isolated to prevent ongoing transmission of disease. The recommended location for isolation is in a health facility or if that is not available, then they can be isolated in a repurposed community facility or at home.

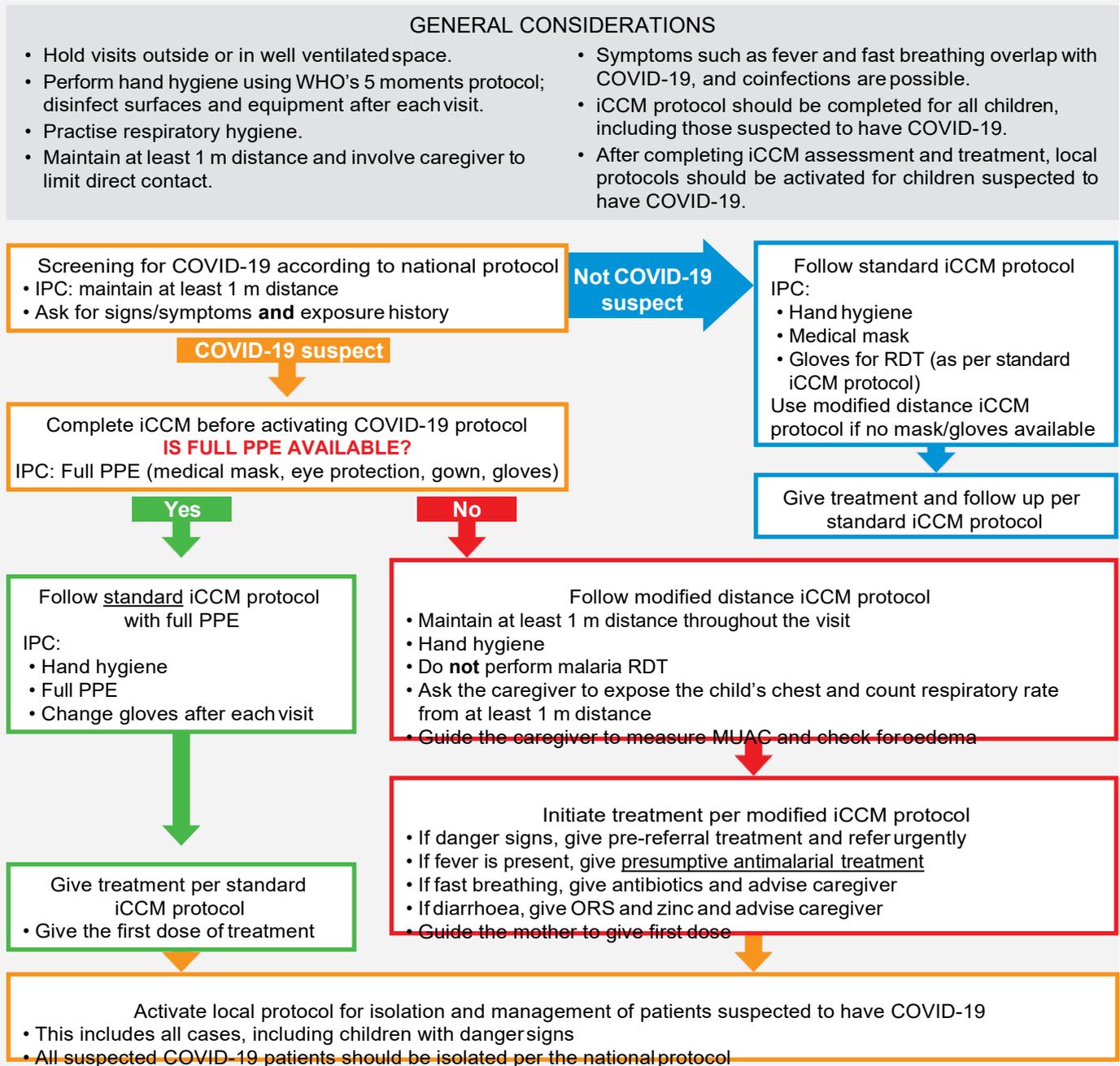
If isolation is to occur at home, then clear instructions about the precautions to be taken should be given to the caregiver or family member accompanying the patient.

Appropriate, nurturing care for children needs to be ensured in isolation facilities.



Fig. 1 Assessment and treatment of sick children at community level during COVID-19 outbreak

Context: community transmission, when screening for COVID-19 has been activated



iCCM: integrated community case management; IPC: infection prevention and control; MUAC: mid-upper arm circumference; ORS: oral rehydration salts; PPE: personal protective equipment; RDT: rapid diagnostic test.



Detection, prevention and management of chronic illness

HIV

Overview

The nature of the interaction between COVID-19 and HIV or viral hepatitis is not known, although HIV, viral hepatitis and STIs particularly affect vulnerable populations, families affected by TB and children with malnutrition. During the COVID-19 pandemic, communities and community-based services will play important roles in facilitating the continuation of essential prevention, testing and treatment services for HIV, viral hepatitis and STIs and in ensuring that people are not further marginalized through stigma and discrimination.

Specific considerations

Patient-centred outreach and community-based care may be preferred over facility-based services when COVID-19 control measures limit movement and visits to clinics. These patient-centred services include:

- recommending and providing access to condoms for prevention of HIV, STIs and hepatitis B and C viruses (HBV, HCV);
- providing harm reduction programming for people who inject drugs, including access to needle and syringe programmes and referral and support for opiate-substitution therapy;

- providing immunization against HBV, including a timely birth dose;
- preventing mother-to-child transmission of HIV, syphilis and HBV;
- providing HIV testing, including through the expansion of self-testing;
- testing donated blood for HBV, HCV, HIV and syphilis;
- providing referral for treatment and support for adherence.

Some commodities may be provided through community distribution points, pharmacies, grocery stores and vending machines; in some settings, they may be provided over the internet and via the postal system. Supplies can also be provided in larger quantities to last for longer periods.

Prevention interventions that involve mass gatherings will need to be temporarily delayed during the COVID-19 response. Community theatre and education events, film festivals and similar activities will need to be suspended.

Tuberculosis

Overview

Integrated community-based TB service delivery has been shown to contribute effectively to reaching all people affected by TB and comorbidities. WHO's [operational guidance for the ENGAGE-TB approach](#) provides advice on integrating community-based TB services into existing health programmes (52). During the COVID-19 pandemic, communities and community-based services will play important roles in supporting the delivery of TB services while ensuring that affected communities are not further marginalized through stigma and discrimination.

Specific considerations

- Infection control measures to prevent coinfection with TB and COVID-19 should be in place before engaging community health care workers in any health-related activity (53).
- Where facility-based TB services are not recommended or feasible, community capacity must be built to deliver [community-based TB services](#) (54) that require profiling, training for assigned tasks and proper supervision. Key TB services that should be maintained with community support include ensuring access to diagnosis (for example, through client referral and the safe collection and transport of sputum samples); using infection control measures in households; supporting treatment adherence, including for preventive treatment; providing psychosocial support; making referrals for the management of adverse effects; and implementing household contact tracing.
- Patient-centred outpatient and community-based care should be prioritized over facility-based TB treatment. Measures must be implemented to prevent stigmatization of and discrimination against patients and community health care workers.
- Use digital health tools in the community to speed the delivery of patient-centred care and services, such as peer-to-peer support, delivery of video-based treatment support and the provision of general social support.
- Continue engaging community actors to monitor any challenges that patients may have in accessing TB services and care in the COVID-19 context and to propose context-specific and locally tailored solutions for TB services.

Mental health conditions

Overview

COVID-19 has an impact on mental and brain health and is likely a risk factor for mental, neurological and substance use (MNS) disorders. Examples of COVID-19-related mental, neurological and behavioural manifestations are anxiety, depression, sleep problems, delirium, agitation, encephalopathy, alcohol use,

gaming and domestic violence. The stress associated with the COVID-19 emergency may exacerbate pre-existing MNS disorders. Older adults with these conditions are among the most vulnerable.

People with severe MNS disorders are at risk of human rights violations and are often neglected during major emergencies. People with COVID-19 and MNS disorders should receive medical care without discrimination that is equal to care delivered to other people with COVID-19. Similarly, enforced physical isolation of people with COVID-19 and MNS disorders should not last longer than that of other people with COVID-19.

Specific considerations

- Care for people with MNS disorders, including psychological interventions, should be delivered remotely (for example, through telehealth methods) when possible. There should be no face-to-face services for mild mental disorders (such as mild depression) or face-to-face activities that aim solely to promote mental well-being (such as mindfulness groups).
- The decision to initiate or continue face-to-face treatment for people with a mental disorder of moderate severity (such as moderate depression) should be taken on a case-by-case basis (for example, prenatal and postnatal depression are priorities even when the depression is not severe).
- The community workforce should be kept up to date about where to refer people with acute symptoms of severe MNS disorders (such as acute mania, psychosis, severe depression, delirium, overdose or substance withdrawal).
- Maintenance medical treatment for chronic MNS disorders should continue (for example, psychotropics for epilepsy and schizophrenia or opioid agonist maintenance treatment for drug dependence).
- Protection and care for people with MNS disorders in community residential facilities requires (a) preventing COVID-19 from entering and spreading in such facilities (32) and (b) ensuring that residents receive care for both COVID-19 and MNS conditions and that they continue to receive social support from significant others.
- Beyond clinical care, depression, anxiety and other symptoms of stress in the community may be addressed in a number of ways, including providing (a) accurate, consistent, understandable and empathic risk communication about COVID-19; (b) population messages on positive coping; (c) activities that enhance social connectedness; and (d) psychological interventions remotely (for example, through digital health approaches) that teach people how to self-manage these symptoms.

Noncommunicable diseases

Overview

Each year, 16 million people die prematurely before the age of 70 from noncommunicable diseases (NCDs), including cardiovascular disease, chronic respiratory disease (for example, asthma and chronic obstructive pulmonary disease), diabetes and cancer. People living with or affected by NCDs, people with certain lifestyle choices (such as smoking) and people with other risk factors (such as obesity) are more vulnerable to becoming severely ill with COVID-19 and to mortality as a result of COVID-19. Disruption of treatment for NCDs due to COVID-19 poses significant health challenges. However, the community health workforce and other community actors can contribute to the solutions for NCDs; these include providing continuing care to avoid disease progression and to prevent complications and acute exacerbations.

Specific considerations

- Offer information to people living with NCDs and to people with other risk factors so they are aware of their risk and can take measures to prevent COVID-19 infection. Information should also be provided about what actions can be taken, including where people with NCDs and suspected COVID-19 can seek care.

- Provide clear instructions on early warning and danger signs, as well as when and where to seek care for acute exacerbations, such as of asthma or a diabetic crisis. Ensure that children with NCDs are given age-appropriate information and that their parents are also given clear information.
- Help people living with NCDs to plan their health care, monitor and manage their condition, secure sufficient quantities of medicines and adhere to treatment. Some treatments can be shifted from hospital to home with telemedicine support provided by someone with appropriate expertise. In extreme circumstances, the treatment of some subacute life-threatening conditions may be amenable to short delays, and interim community-based interventions can be considered.
- Strategies should be identified that allow people with chronic NCDs to avoid health care facilities unless they have acute symptoms or other urgent needs. Providing remote prescription renewals, mobile pharmacies or medication dispensing units could help serve people with chronic NCDs in the community.
- If possible, people with chronic NCDs can engage in self-monitoring, such as by taking their blood pressure and monitoring their glucose levels, or be supported by remote monitoring, or a combination of these.



Outreach activities and campaigns for prevention

Vaccination

Overview

Immunizations are an essential health service that protects individuals from VPDs. By providing immunizations, individuals and communities remain protected and the likelihood of an outbreak of a VPD decreases.

Preventing a VPD outbreak saves lives, requires fewer resources than an outbreak response, and reduces the burden on a health system strained by the COVID-19 pandemic. While sustaining immunization systems, countries should respect the principle of do no harm and work to limit transmission of COVID-19 while providing immunization services.

Specific considerations

Fixed-site immunization services should be implemented while ensuring that physical distancing measures are maintained, as well as appropriate infection control precautions (for example, ensure that health workers are protected, appropriately handle injection waste, and safeguard the public).

- The [appropriateness of implementing outreach or mobile services](#) (55) for vaccine delivery, as well as activities requiring community interaction for VPD surveillance, must be assessed in the local context and be adapted to ensure the safety of health workers and the community.

- Strategies for delivering [immunizations through outreach](#), such as house-to-house strategies, should not increase the transmission of COVID-19; if there is a risk that they will, they should be temporarily suspended (55).
- Based on current understanding of COVID-19 transmission and the recommended prevention measure of physical distancing, **it is advisable to temporarily suspend mass vaccination campaigns where community-based COVID-19 transmission has begun.**
 - Vaccination campaigns can be implemented in areas where COVID-19 transmission is not yet occurring.
 - Countries should monitor and re-evaluate at regular intervals the necessity for delaying mass vaccination campaigns.
- During a VPD outbreak, **the decision to conduct outbreak response mass vaccination campaigns requires conducting a risk-benefit assessment on an event-by-event basis**, and this assessment must factor in the health system’s capacity to effectively conduct a safe and high-quality mass campaign in the context of the COVID-19 pandemic. The assessment should weigh the risks of a delayed response against the risks associated with an immediate response, both in terms of morbidity and mortality from the VPD and the potential impact of further transmission of COVID-19.
 - If an outbreak response [vaccination campaign is pursued](#), stringent measures are required to ensure the use of standard and COVID-19 IPC strategies, manage injection waste, protect health workers and safeguard the public (56).
 - If an outbreak response vaccination campaign is delayed, a periodic assessment based on local VPD morbidity and mortality, as well as regional and international epidemiology, will be required to evaluate the risk of further delay and to inform the response strategy when the implementation of mass vaccination is feasible.

Neglected tropical diseases

Overview

WHO recommends five main strategies to address the burden of neglected tropical diseases (NTDs): preventive chemotherapy, individual case management, integrated vector management, veterinary public health, and the water, sanitation and hygiene (WASH) framework. Several NTD interventions underlie each strategy and these use community-based approaches to deliver services to populations where NTDs are endemic (Table 2). Each activity has distinct risk-benefit considerations in the pandemic context.

Table 2. Strategies recommended by WHO to address neglected tropical diseases

Strategy	Community-based interventions
Preventive chemotherapy	Mass treatment of entire or targeted population groups in endemic areas (for example, treatment for lymphatic filariasis, onchocerciasis, schistosomiasis, soil-transmitted helminthiasis, trachoma, yaws) or treatment of limited population groups (for example, healthy contacts of leprosy cases)
Individual case management	Active case-finding campaigns aimed at case detection, management or follow up, or a combination of these (for example, for Buruli ulcer, Chagas disease, dracunculiasis, human African trypanosomiasis, leishmaniasis, leprosy, lymphatic filariasis, trachomatous trichiasis, yaws)
Vector control	Distribution of insecticide-treated nets (for example, to control Chagas disease and cutaneous leishmaniasis), and the use of indoor residual spraying, source reduction and chemical-based vector control for <i>Aedes</i> mosquitoes, and the use of molluscicides
Veterinary public health	Mass vaccination of animals (for example, for dogs against rabies)
Water, sanitation and hygiene	Community education and social mobilization activities

In addition, community-based surveys for mapping or monitoring and evaluation purposes are core activities of NTD programmes and are comparable to community-based interventions in terms of logistics and the mobilization of health workers; therefore, they are also included in this guidance.

Specific considerations

- Community-based surveys, mass treatment and active case finding should be temporarily suspended. Countries should monitor and re-evaluate at regular intervals the necessity for delaying these activities.
- Community-based vector control and veterinary public health interventions should continue with strict precautions (hand hygiene, respiratory etiquette, physical distancing) observed by all participants in areas where there is no community transmission of COVID-19.
- In areas with community transmission, only essential activities should be continued. For vector control, essential activities should be interpreted as source reduction of vector breeding sites in and around houses. In areas that are affected by dengue and under stay-at-home measures due to COVID-19, families could work together for 30 minutes every week to get rid of potential mosquito breeding sites, clean roof gutters and ensure that all water storage containers are covered. For veterinary public health, the maintenance of mass animal vaccination campaigns, where required, and euthanasia of rabid animals should be regarded as essential. When handling and caring for animals, basic hygiene measures should always be implemented; these include handwashing before and after handling animals, their food, or supplies.
- Community-based WASH activities should continue, with amendments to include key information about preventing COVID-19 in settings where there are no cases of COVID-19. In settings where COVID-19 transmission is occurring, WASH messages should be repurposed to focus on preventing COVID-19 transmission.
- Upon detection in a given geographical area of (a) a sudden increase in the incidence of NTD infections or (b) a significant burden of disease, the decision to resume or commence active case finding or mass treatment campaigns, or both, will require a risk-benefit assessment on an event-by-event basis; the assessment must factor in the health system's capacity to effectively conduct safe and high-quality health interventions in the context of the COVID-19 pandemic.
- This guidance does not cover ensuring access to diagnosis, treatment and care of NTDs for patients presenting to health care facilities, which should continue to the extent possible. In some settings, the only care for NTDs is through outreach initiatives and some adaptation of previous clinical pathways may be indicated. For example, for people being treated for leprosy, provision of sufficient medicine for 3 months instead of 1 month of treatment could be considered to reduce the number of attendances required.

Malaria

Overview

Malaria prevention interventions are highly effective, but they rely on high population coverage and uptake by individuals and households, especially in rural, underserved and hard-to-reach communities. Several key malaria interventions are typically delivered through campaigns, engaging communities and individuals to support the delivery of needed commodities, such as ITNs, insecticide for indoor residual spraying, and seasonal malaria chemoprevention.

Health facilities will continue to be responsible for preventive services, such as intermittent preventive treatment, for women during pregnancy and for infants. Continued access to early diagnosis and care will be ensured by community providers and health facilities. Care-seeking for febrile conditions should be strongly encouraged, especially in malaria-endemic areas and specifically for children younger than 5 years.

If malaria prevention efforts are delayed or discontinued and diagnosis and treatment are interrupted, malaria mortality is likely to return to the levels seen 20 years ago.

Specific considerations

- Access to and use of one of the core vector control tools should be maintained ([ITNs](#) or indoor residual spraying), including through adapted campaigns that are delivered using best practices to protect health workers and communities from COVID-19 (57, 58). Adaptations might include suspending some data and accountability procedures that increase person-to-person contact and the potential risk for COVID-19 transmission (for example, not requiring a signature for ITNs received by a household).
- Campaigns for seasonal malaria chemoprevention should continue.
- Countries where malaria has been eliminated and those working to prevent re-establishment should maintain intensive malaria surveillance activities in addition to core vector control activities, using best practices to protect health workers and communities.
- In exceptional circumstances, such as when there is a significant breakdown or inability of the health system to deliver services, mass administration of antimalarial treatment could be used to rapidly reduce mortality and morbidity.
- Countries should not scale back efforts to detect and treat malaria, including at the community level, such as through iCCM or community integrated management of childhood illness, which is discussed above.



Nutrition

Overview

Community-based nutrition programmes typically include growth monitoring and MUAC screening, nutrition counselling during pregnancy and lactation, the promotion of breastfeeding and age-appropriate infant and young child feeding practices, and micronutrient supplementation in areas where deficiencies are of public health concern. In some settings, the management of wasting may be included. Adaptations to nutrition services in the COVID-19 context will be required; many of the considerations for nutrition have been integrated into the Section on Key considerations across the life course.

Specific considerations

- Community-based nutrition activities should be incorporated into subnational and national service mapping; priority nutrition interventions should be included in the essential package of health and nutrition interventions that continue in the context of the COVID-19 pandemic.
- Temporarily suspend mass nutrition campaigns (for example, vitamin A supplementation) and large-scale gatherings, in accordance with the temporary suspension of vaccination campaigns.
- Monitor for deterioration in children's diet, and re-evaluate at regular intervals the necessity of delaying mass nutrition campaigns. Plan for the reinstatement and intensification of mass campaigns at the earliest opportunity deemed safe by authorities. Plan for post-outbreak distribution of vitamin A supplementation in conjunction with other programmes, such as immunizations.

- Maintain and prioritize treatment services for children with wasting, along with other measures aimed at protecting vulnerable children.
- Continue community screening for wasting by involving mothers or caregivers in measuring MUAC and checking for bilateral pitting oedema, as guided by the community health workforce.
- Continue screening sick children for wasting according to the modified protocol described in the Section on Community case management of acute illness in childhood in the context of COVID-19, and provide support and resources to the community health workforce to continue offering treatment for uncomplicated wasting, if this has been adopted into national protocols.
- Provide treatment for wasting; initiate discussions with ministries of health and national coordination platforms or nutrition clusters about context-specific adaptations of treatment protocols that might be necessary. Where [modified approaches](#) are applied (59), the treatment of uncomplicated wasting may be provided according to a [simplified protocol](#) (for example, using anthropometric criteria and modified dose and distribution schedules for ready-to-use therapeutic food) (60).



References

1. Elston JW, Cartright C, Ndumbi P, Wright J. The health impact of the 2014–15 Ebola outbreak. *Public Health*. 2017;143:60–70. [doi:10.1016/j.puhe.2016.10.020](https://doi.org/10.1016/j.puhe.2016.10.020).
2. Parpia AS, Ndeffo-Mbah ML, Wenzel NS, Galvani AP. Effects of response to 2014–2015 Ebola outbreak on deaths from malaria, HIV/AIDS, and tuberculosis, West Africa. *Emerg Infect Dis*. 2016;22(3):433–41. [doi:10.3201/eid2203.150977](https://doi.org/10.3201/eid2203.150977).
3. Brodin Ribacke KJ, Saulnier DD, Eriksson A, von Schreeb J. Effects of the West Africa Ebola virus disease on health-care utilization — a systematic review. *Front Public Health*. 2016;4:222. [doi:10.3389/fpubh.2016.00222](https://doi.org/10.3389/fpubh.2016.00222).
4. COVID-19: operational guidance for maintaining essential health services during an outbreak: interim guidance, 25 March 2020. Geneva: World Health Organization; 2020 (WHO/2019-nCoV/essential_health_services/2020.1; <https://apps.who.int/iris/handle/10665/331561>, accessed 29 April 2020).
5. Disability considerations during the COVID-19 outbreak. Geneva: World Health Organization; 2020 (<https://www.who.int/who-documents-detail/disability-considerations-during-the-covid-19-outbreak>, accessed 29 April 2020).
6. Coronavirus disease (COVID-19) technical guidance: surveillance and case definitions [website]. Geneva: World Health Organization; 2020 (<https://www.who.int/emergencies/diseases/novel-coronavirus-2019/technical-guidance/surveillance-and-case-definitions>, accessed 29 April 2020).
7. Risk communication and community engagement (RCCE) action plan guidance: COVID-19 preparedness and response. Geneva: World Health Organization; 2020 ([https://www.who.int/publications-detail/risk-communication-and-community-engagement-\(rcce\)-action-plan-guidance](https://www.who.int/publications-detail/risk-communication-and-community-engagement-(rcce)-action-plan-guidance), accessed 29 April 2020).
8. Coronavirus disease (COVID-19): key tips and discussion points for community workers and volunteers. New York: United Nations Children's Fund; 2020 (<https://www.unicef.org/documents/coronavirus-disease-covid-19-key-tips-discussion-points-community-workers-volunteers>, accessed 29 April 2020).
9. Home care for patients with COVID-19 presenting with mild symptoms and management of their contacts: interim guidance, 17 March 2020. Geneva: World Health Organization; 2020 (WHO/nCov/IPC/HomeCare/2020.3; [https://www.who.int/publications-detail/home-care-for-patients-with-suspected-novel-coronavirus-\(ncov\)-infection-presenting-with-mild-symptoms-and-management-of-contacts](https://www.who.int/publications-detail/home-care-for-patients-with-suspected-novel-coronavirus-(ncov)-infection-presenting-with-mild-symptoms-and-management-of-contacts), accessed 29 April 2020).
10. COVID-19 and violence against women: what the health sector/system can do, 7 April 2020. Geneva: World Health Organization; 2020 (<https://apps.who.int/iris/handle/10665/331699>, accessed 29 April 2020).

11. COVID-19: how to include marginalized and vulnerable people in risk communication and community engagement. Geneva: International Federation of Red Cross and Red Crescent Societies; UN Office for the Coordination of Humanitarian Affairs; World Health Organization; 2020 (<https://interagencystandingcommittee.org/covid-19-how-include-marginalized-and-vulnerable-people-risk-communication-and-community-engagement>, accessed 29 April 2020).
12. LeBan K. How social capital in community systems strengthens health systems: people, structure, processes. Washington, DC: United States Agency for International Development, Child Survival and Health Grants Program; 2011 (https://coregroup.org/wp-content/uploads/2018/12/Components_of_a_Community_Health_System_final10-12-2011.pdf, accessed 29 April 2020).
13. Addressing human rights as key to the COVID-19 response. Geneva: World Health Organization; 2020 (WHO/2019-nCoV/SRH/Rights/2020.1; <https://www.who.int/publications-detail/addressing-human-rights-as-key-to-the-covid-19-response>, accessed 29 April 2020).
14. Practical considerations and recommendations for religious leaders and faith-based communities in the context of COVID-19: interim guidance, 7 April 2020. Geneva: World Health Organization; 2020 (WHO/2019-nCoV/Religious_Leaders/2020.1; <https://apps.who.int/iris/handle/10665/331707>, accessed 29 April 2020).
15. Coronavirus disease (COVID-19): resources for practitioners. Helpful guidance for front-line workers responding to the COVID-19 pandemic [website]. New York: United Nations Children's Fund; 2020 (<https://www.unicef.org/coronavirus/covid-19-resources-practitioners>, accessed 29 April 2020).
16. Basic emergency care: approach to the acutely ill and injured. Participant workbook. Geneva: World Health Organization; International Committee of the Red Cross; 2018 (<https://apps.who.int/iris/handle/10665/275635>, accessed 29 April 2020).
17. Bhaumik S, Moola S, Tyagi J, Nambiar D, Kakoti M. Frontline health workers in COVID-19 prevention and control: rapid evidence synthesis. New Delhi: The George Institute for Global Health, India; 2020 (<https://www.georgeinstitute.org/frontline-health-workers-in-covid-19-prevention-and-control-rapid-evidence-synthesis>, accessed 29 April 2020).
18. Mental health and psychosocial considerations during the COVID-19 outbreak: 18 March 2020. Geneva: World Health Organization; 2020. (WHO/2019-nCoV/MentalHealth/2020.1; <https://apps.who.int/iris/handle/10665/331490>, accessed 29 April 2020).
19. Operational considerations for COVID-19 surveillance using GISRS: interim guidance, 26 March 2020. Geneva: World Health Organization; 2020 (WHO/2019-nCoV/Leveraging_GISRS/2020.1; <https://apps.who.int/iris/handle/10665/331589>, accessed 29 April 2020).
20. Data and digital health [website]. New York: United Nations Children's Fund; 2020 (<https://www.unicef.org/health/data-and-digital-health>, accessed 29 April 2020).
21. Coronavirus disease (COVID-19) technical guidance: infection prevention and control/WASH [website]. Geneva: World Health Organization; 2020 (<https://www.who.int/emergencies/diseases/novel-coronavirus-2019/technical-guidance/infection-prevention-and-control>, accessed 29 April 2020).
22. Strategies to optimize the supply of PPE and equipment [website]. Atlanta (GA): Centers for Disease Control and Prevention; 2020 (<https://www.cdc.gov/coronavirus/2019-ncov/hcp/ppe-strategy/index.html>, accessed 29 April 2020).
23. WHO Guidelines on hand hygiene in health care. Geneva: World Health Organization; 2009 (<https://www.who.int/infection-prevention/publications/hand-hygiene-2009/en/>, accessed 29 April 2020).
24. Coronavirus disease (COVID-19) technical guidance: patient management [website]. Geneva: World Health Organization; 2020 (<https://www.who.int/emergencies/diseases/novel-coronavirus-2019/technical-guidance/patient-management>, accessed 29 April 2020).
25. WHO consolidated guideline on self-care interventions for health: sexual and reproductive health and rights. Geneva: World Health Organization; 2019 (<https://www.who.int/reproductivehealth/publications/self-care-interventions/en/>, accessed 29 April 2020).
26. New app for WHO's medical eligibility criteria for contraceptive use [website]. Geneva: World Health Organization; 2019 (<https://www.who.int/reproductivehealth/mec-app/en/>, accessed 29 April 2020).
27. WHO recommendations on antenatal care for a positive pregnancy experience. Geneva: World Health Organization; 2016 (https://www.who.int/reproductivehealth/publications/maternal_perinatal_health/anc-positive-pregnancy-experience/en/, accessed 29 April 2020).
28. WHO recommendations: intrapartum care for a positive childbirth experience. Geneva: World Health Organization; 2018 (<https://www.who.int/reproductivehealth/publications/intrapartum-care-guidelines/en/>, accessed 29 April 2020).
29. WHO recommendations on postnatal care of the mother and newborn, Geneva: World Health Organization; 2014 (<https://apps.who.int/iris/handle/10665/97603>, accessed 29 April 2020).
30. Definition of skilled health personnel providing care during childbirth: the 2018 joint statement by WHO, UNFPA, UNICEF, ICM, ICN, FIGO, IPA. Geneva: World Health Organization; 2018 (WHO/RHR/18.1; <https://www.who.int/reproductivehealth/publications/statement-competent-mnh-professionals/en/>, accessed 29 April 2020).
31. WHO recommendations: optimizing health worker roles for maternal and newborn health interventions through task shifting. Geneva: World Health Organization; 2012 (<https://apps.who.int/iris/handle/10665/77764>, accessed 29 April 2020).
32. Infection prevention and control guidance for long-term care facilities in the context of COVID-19: interim guidance, 21 March 2020. Geneva: World Health Organization; 2020 (WHO/2019-nCoV/IPC_long_term_care/2020.1; <https://apps.who.int/iris/handle/10665/331508>, accessed 29 April 2020).
33. Programmatic guidance for sexual and reproductive health in humanitarian and fragile settings during COVID-19 pandemic. New York: Inter-Agency Working Group on Reproductive Health in Crises; 2020 (<https://iawg.net/resources/programmatic-guidance-for-sexual-and-reproductive-health-in-humanitarian-and-fragile-settings-during-covid-19-pandemic>, accessed 29 April 2020).
34. Frequently asked questions: breastfeeding and COVID-19 for health care workers, 28 April 2020. Geneva: World Health Organization; 2020 (https://www.who.int/docs/default-source/maternal-health/faqs-breastfeeding-and-covid-19.pdf?sfvrsn=d839e6c0_1, accessed 29 April 2020).
35. Preventing and controlling micronutrient deficiencies in populations affected by an emergency: multiple vitamin and mineral supplements for pregnant and lactating women, and for children aged 6 to 59 months. (<https://www.who.int/who-documents-detail/WHO-WFP-UNICEF-statement-micronutrients-deficiencies-emergency>, accessed 30 April 2020).
36. Tips and guidance for families [website]. New York: United Nations Children's Fund; 2020 (<https://www.unicef.org/coronavirus/covid-19>, accessed 30 April 2020).

37. Coronavirus disease (COVID-19) advice for the public: advocacy. Parenting in the time of COVID-19 [website]. Geneva: World Health Organization; 2020 (<https://www.who.int/emergencies/diseases/novel-coronavirus-2019/advice-for-public/healthy-parenting>, accessed 30 April 2020).
38. COVID-19: 24/7 parenting. Geneva: World Health Organization; 2020 (<https://www.covid19parenting.com>, accessed 30 April 2020).
39. Guideline: daily iron supplementation in infants and children. Geneva: World Health Organization; 2016 (<https://apps.who.int/iris/handle/10665/204712>, accessed 29 April 2020).
40. WHO guideline: use of multiple micronutrient powders for point-of-use fortification of foods consumed by infants and young children aged 6–23 months and children aged 2–12 years. Geneva: World Health Organization; 2016 (<https://www.who.int/nutrition/publications/micronutrients/guidelines/mmpowders-infant6to23mons-children2to12yrs/en/>, accessed 29 April 2020).
41. How teenagers can protect their mental health during coronavirus (COVID-19) [website]. New York: United Nations Children's Fund; 2020 (<https://www.unicef.org/coronavirus/how-teenagers-can-protect-their-mental-health-during-coronavirus-covid-19>, accessed 30 April 2020).
42. Malone ML, Hogan TM, Perry A, Biese K, Bonner A, Pagel P, Unroe KT. COVID-19 in older adults: key points for emergency department providers [website]. New York: Geriatric Emergency Department Collaborative; 2020 (<https://gedcollaborative.com/article/covid-19-in-older-adults-key-points-for-emergency-department-providers/>, accessed 30 April 2020).
43. COVID 19 and the disability movement [website]. Geneva: International Disability Alliance; 2020 (<http://www.internationaldisabilityalliance.org/content/covid-19-and-disability-movement>, accessed 30 April 2020).
44. Integrated care for older people: guidelines on community-level interventions to manage declines in intrinsic capacity. Geneva: World Health Organization; 2017 (<https://apps.who.int/iris/handle/10665/258981>, accessed 30 April 2020).
45. Health workforce [website]. Geneva: World Health Organization; 2020 (<https://www.who.int/westernpacific/health-topics/health-workforce>, accessed 30 April 2020).
46. Continuity and coordination of care: a practice brief to support implementation of the WHO Framework on integrated people-centred health services. Geneva: World Health Organization; 2018 (<https://apps.who.int/iris/handle/10665/274628>, accessed 29 April 2020).
47. Pregnancy, childbirth, breastfeeding and COVID-19 [website]. Geneva: World Health Organization; 2020 (<http://www.who.int/reproductivehealth/publications/emergencies/COVID-19-pregnancy-ipc-breastfeeding-infographics/en/>, accessed 30 April 2020).
48. COVID-19: resources for adolescents and youth [website]. Geneva: World Health Organization; 2020 (http://www.who.int/maternal_child_adolescent/links/covid-19-mncah-resources-adolescents-and-youth/en/, accessed 30 April 2020).
49. Adolescents and young people & coronavirus disease (COVID-19): coronavirus disease (COVID-19) preparedness and response. UNFPA interim technical brief. New York: United Nations Population Fund; 2020 (<https://www.unfpa.org/resources/adolescents-and-young-people-coronavirus-disease-covid-19>, accessed 30 April 2020).
50. Devercelli, Amanda Epstein; Humphry, Ella Victoria. 2020. 15 ways to support young children and their families in the COVID-19 response. Washington, (DC): World Bank; 2020 (<http://documents.worldbank.org/curated/en/963051586986115651/15-Ways-to-Support-Young-Children-and-their-Families-in-the-COVID-19-Response>, accessed 30 April 2020).
51. Caring for the sick child in the community: adaptation for high HIV or TB settings: community health worker manual, facilitator notes, chart booklet, referral form [website]. Geneva: World Health Organization; 2020 (http://www.who.int/maternal_child_adolescent/documents/newborn-child-community-care/en/, accessed 30 April 2020).
52. ENGAGE-TB: integrating community-based tuberculosis activities into the work of nongovernmental and other civil society organizations: operational guidance. Geneva: World Health Organization; 2012 (WHO/HTM/TB/2012/8; http://www.who.int/tb/publications/2012/engage_tb_policy/en/, accessed 30 April 2020).
53. COVID-19: considerations for tuberculosis (TB) care. Geneva: World Health Organization; 2020 (https://www.who.int/tb/COVID_19considerations_tuberculosis_services.pdf, accessed 29 April 2020).
54. Adepoju P. Tuberculosis and HIV responses threatened by COVID-19. Lancet HIV.2020. Forthcoming. doi:10.1016/S2352-3018(20)30109-0.
55. Immunization in the context of the COVID-19 pandemic: frequently asked questions (FAQ), 16 April 2020. Geneva: World Health Organization, United Nations Children's Fund; 2020 (WHO/2019-nCoV/immunization_services/FAQ/2020.1; <https://apps.who.int/iris/handle/10665/331818>, accessed 30 April 2020).
56. Polio eradication programme continuity planning: measures to ensure continuity of operations in the context of the COVID-19 pandemic. Geneva: World Health Organization; 2020 (<http://polioeradication.org/news-post/global-polio-eradication-and-covid-19/>, accessed 30 April 2020).
57. Tailoring malaria interventions in the COVID-19 response. Geneva: World Health Organization; 2020 (<http://www.who.int/malaria/publications/atoz/tailoring-malaria-interventions-in-the-covid-19-response/en/>, accessed 30 April 2020).
58. Considerations for distribution of insecticide treated nets (ITNs) amid COVID-19 concerns and in COVID-19 affected countries. Geneva: Alliance for Malaria Prevention; 2020 (<https://allianceformalariaprevention.com/wp-content/uploads/2020/03/ITN-COVID-Key-messages.pdf>, accessed 29 April 2020).
59. Simplified approaches for the treatment of child wasting. Geneva: World Health Organization; 2020 (<http://www.who.int/nutrition/events/2019-consultation-simplified-treatment-childwasting-26to27march/en/>, accessed 30 April 2020).
60. Management of child wasting in the context of COVID-19 [website]. New York: United Nations Children's Fund; 2020 (<https://www.enonline.net/covid19wastingbrief>, accessed 30 April 2020).



**World Health
Organization**

World
Health
Organization
Avenue

