




COVID-19

Maintaining Essential Health Services for Tuberculosis, Malaria and HIV during the COVID-19 Pandemic in Low Resource, Non-U.S. Settings

Updated Apr. 29, 2022

Summary of Recent Changes

Updates as of April 29, 2022 



- Four previously separate guidance documents have been combined into one document: **“Maintaining Essential Health Services for Tuberculosis, Malaria and HIV during COVID-19 in Low Resource, Non-U.S. Settings”**. The four documents were:
 - Maintaining Essential Health Services During COVID-19 in Low Resource, Non-U.S. Settings.
 - Operational Considerations for Maintaining Essential Services and Providing Prevention, Care, and Treatment for Tuberculosis (TB) in Low-Resource Non-US Settings During the COVID-19 Pandemic.
 - Maintaining Essential Services for Malaria in Low-Resource Countries.
 - Providing Care and Treatment for People Living with HIV in Low-Resource Non-US Settings during COVID-19 Pandemic.
- This document has been updated to reflect the current quarantine and isolation guidelines.

Key Points

- It is important to ensure continuity of essential health services to prevent illness and death from non-COVID-19 diseases such as tuberculosis (TB), malaria, and HIV infection, particularly in low resource settings.
- A positive test result for COVID-19 does not rule out the presence of other diseases such as HIV, TB, or malaria, especially in high burden settings. In these settings, simultaneous testing for persons with respiratory symptoms (e.g., fever, chill, cough, etc.) is recommended, especially for children under the age of 5 and pregnant women.
- It is imperative to implement activities to mitigate the impact of the COVID-19 on health services and to modify service delivery for essential non-COVID-19 services.
- Integration of infection prevention and control (IPC) measures to reduce the risk of exposure to COVID-19 among patients and healthcare workers (HCWs).

Background

Globally, health systems have been challenged by the overwhelming demands of the COVID-19 pandemic. Resources and staff are being diverted to test and provide treatment for people with presumed or diagnosed COVID-19, and supplies are limited. Some healthcare services are being compromised in order to meet the demands of caring for patients with COVID-19 and many people fear accessing healthcare facilities due to fear of acquiring the virus.

During the Ebola outbreak in West Africa in 2014–2015, increased morbidity and mortality in other diseases (e.g., measles, tuberculosis, malaria, HIV/AIDS) were seen due to reduction in access to and utilization of healthcare services¹. It is important to ensure continuity of essential health services in order to prevent illness and death from non-COVID-19 illnesses. This will likely [require adaptations to service delivery models and settings](#) . In addition, [infection prevention and control \(IPC\) measures to reduce the risk of exposure to COVID-19 among patients and HCWs](#)  should be integrated into all healthcare settings³.

The purpose of this document is to provide Ministries of Health, public health authorities, and partners with a framework for implementing strategies to reduce preventable illness and death during the COVID-19 pandemic, particularly in low-resource, non-U.S. settings. It includes specific guidance on tuberculosis (TB), malaria and HIV due to their high preventable burden.

General Guidance on Maintaining Essential Health Services

- Prioritize locations with the greatest burden of COVID-19 for targeted interventions to reduce the impact of COVID-19 on other diseases.
- Monitor service deliveries occurring outside of healthcare facilities to track patient retention in health programs, including those for chronic disease, antenatal care (ANC), and immunization services.
- Develop methods to facilitate access to healthcare during periods of movement restriction.
- Maintain adequate supplies to provide services and reduce risk of COVID-19 exposure to patients and HCWs:
 - Ensure adequate supply of personal protective equipment (PPE), hand hygiene supplies (soap and water or hand sanitizer with at least 60% alcohol), as well as cleaning and disinfecting supplies.
 - Forecast for multi-month dispensing of medications (e.g., 3- or 6-month dispensing) for chronically ill patients who are stable, to reduce frequency of clinic visits.
 - Use [telehealth](#) to monitor and support patients between in-person visits.
 - Establish and staff community isolation centers for mild-to-moderately ill patients with COVID-19 to isolate and recover.
 - Establish needed makeshift clinics in areas most heavily affected by COVID-19 for essential non-COVID-19 services.
- Separate patients by a distance of 6 feet from each other, and limit the number of people in the facility at a time, especially in small spaces such as pharmacies and hallway waiting areas.
- Designate certain facilities for COVID-19 care and others for essential non-COVID-19 services.
- Modify underused spaces in facilities that have access to improved water sources (water supplied through a household connection, public standpipe, borehole well, protected dug well, protected spring, or rainwater collection).
- Ensure good ventilation for presumptive or positive COVID-19 patients.
- Ensure separate spaces are available for assessment of acutely ill persons.

Community Engagement

Ministries of Health, public health authorities, and implementing partners should continue efforts to actively engage community leaders to promote behaviors that will prevent transmission of diseases. Ensure that people do not receive potentially contradictory messages or misinformation regarding care-seeking behavior for febrile illness. For example, some COVID-19 messages encourage people with fever and mild illness to stay home, but **if a person has TB, malaria, or HIV, it is critical that they seek care early**. Messages to people who may have febrile illness must be clear and tailored to them:

- Maintain access to testing for TB, malaria, and HIV and promote testing early, as appropriate, when fever is present.
- Address people's concerns about the safety of visiting a health facility and address the fears of exposure to COVID-19 virus in healthcare facilities.
- Develop targeted communications and educational materials for use in all healthcare settings on COVID-19 symptoms, prevention, and transmission among patients and HCWs.

- Establish IPC for both HCWs and patients. Refer to [CDC](#) and [WHO](#) [technical guidance on IPC measures in the context of the COVID-19 pandemic](#) .

Stigma and fear around diseases like COVID-19, TB, malaria, and HIV hamper an effective public health response.

Interventions that can help reduce stigma include:

- Building trust in the local health services,
- Showing empathy with those affected,
- Understanding the diseases themselves, and promoting adoption of effective, practical control measures to help keep people and their families and communities safe.
- Maintaining the privacy and confidentiality of those seeking healthcare and those who may be part of any contact investigation.
- Making sure that images used in communications show diverse communities and do not reinforce stereotypes.

Access and Delivery of Health Services

- Ensure provision of HIV, malaria, and TB services for all patients, including those in [quarantine](#) and those with suspected or laboratory confirmed COVID-19.
- Determine which essential services will continue and which need to be paused or referred to another clinic due to the burden of COVID-19 on health services.
- Use touchless temperature checks and screen patients for symptoms of COVID-19 (e.g., fever or chills, cough, shortness of breath, fatigue, muscle or body aches, loss of taste or smell, nausea or vomiting, sore throat and diarrhea). Ask whether they were recently exposed to someone with a laboratory confirmed case of COVID-19 before they get to the health facility.
- Triage patients to designated locations based on screening results.
- Ensure:
 - Appropriate use of PPE.
 - Regular cleaning, especially of high touched surfaces (e.g., chairs, benches, handrails, doorknobs, etc.).
 - The use of face masks for all patients and HCWs.
 - All people entering and exiting the facility wash their hands with soap and water or use hand sanitizer with at least 60% alcohol.
- Relocate services based on the number of COVID-19 cases in the community. In sites where there is a high burden of COVID-19 cases, the facility should:
 - Move non-COVID-19 services outside of the facility into community spaces, (e.g., a vacant school, church, or community center) to reduce risk of exposure at facilities and ensure access to care and treatment.
 - Promote [home-based care](#) for patients with COVID-19 who have mild or moderate symptoms and can safely [isolate](#) at home.
- Minimize patient contacts with HCWs and other patients to reduce risk of exposure or infection:
 - Use telemedicine visits (either video, phone calls, SMS) for screening, follow-up, and refilling prescriptions.
 - Offer multiple “no-contact” drug pick-up options for patients with chronic illnesses such as pharmacies, houses of worship, or schools.
 - Implement 3- or 6-month dispensing of medication for healthy, stable patients.
- Shift and share tasks by re-assigning staff from less busy services to assist with essential services or fill in for others who are sick or at high-risk for severe COVID-19 disease.
- Provide staggered appointments or implement an appointment scheduling system to reduce the number of people in waiting areas to decongest clinics.
- Limit number of visitors who may accompany patient to clinic.
- Provide fast-track services for acute and chronic patients to reduce contact with multiple providers (e.g., charts pulled, medications ready, patient only sees provider if needed, one provider sees patient through all services).

Ensuring Continuity of Quality Health Services




Maintaining Continuity of Quality Health Services

To protect the progress made through global efforts and investments in HIV, malaria, and TB, it is important that programs ensure continuity of essential services.


- When implementing case-finding strategies and community-based testing, follow local guidance on travel restrictions, physical distancing measures, and continuity of operations to protect HCW from COVID-19.
- Maximize the use of [telehealth](#) platforms for conducting case-finding activities and contact investigations.
- Consider the safety and support of communicable disease service providers, including facility and laboratory staff, community workers, peer navigators, etc.
- Ensure the provision of IPC training (preferably virtual), adequate [PPE](#), and [safe options/passage for transportation](#) to and from work for HCWs.

Maintaining Essential Health Services for Patients with Tuberculosis

Despite being preventable and curable, TB remains the world's deadliest infectious disease, taking the lives of 1.5 million persons each year. The [global community](#) has made substantial progress in the fight to end TB, and it is critical that the progress made in TB prevention, care, and treatment is not reversed by the COVID-19 pandemic. Increased demand for healthcare services due to COVID-19 can challenge health facilities and healthcare systems, resulting in delayed TB diagnosis and treatment, and increased illness and death. Previous global and regional health emergencies, like Severe Acute Respiratory Syndrome (SARS), Middle East Respiratory Syndrome (MERS), and Ebola virus disease, negatively impacted TB care^{2,3,4}.

[COVID-19 and TB share some common clinical features](#) . Patients with chronic respiratory diseases, including TB, are at increased risk of severe COVID-19 illness and death^{5,6,7}. [Exposure to both can occur simultaneously, and the presence of comorbidities can result in poor outcomes for both diseases](#). A positive test result for COVID-19 does not rule out the presence of TB disease. In high burden TB settings, implementation of simultaneous testing for both diseases is recommended by [WHO](#)   for persons with respiratory symptoms.

TB Preventive Treatment (TPT)

- [TPT](#)  [342 KB, 1 page] is an essential TB service for People Living with HIV (PLHIV) and children under 5 years of age who have had contact with a person with TB.
- Differentiated service delivery models (providing more intensive care to patients initiating therapy and less intensive care to well established patients) may be used while following local infection control and physical distancing policies.
- To avoid extra visits to healthcare facilities, distribute a multi-month supply of TB medicines and offer community-based drug dispensing for persons receiving TPT.
- Use community-based treatment monitoring and digital adherence interventions to monitor TPT and associated adverse events.

Safety in Healthcare Settings

- For patients with TB, outpatient care and community-based care are preferred over hospital treatment to reduce potential disease transmission.
- It is possible that some [patients with TB who are infected with SARS-CoV-2](#) will seek care at TB clinics.
- To ensure the safety of HCWs and patients accessing care at health facilities, implement respiratory infection control measures for both COVID-19 and TB including:
 - Triage, early identification, and separation of symptomatic patients
 - Fast tracking or expedited service
 - Implementation of droplet and contact precautions
 - Frequent handwashing
 - Disinfection of commonly touched surfaces
 - Avoiding touching one's face

- [Environmental engineering controls](#) (e.g., physical barriers, increased ventilation)
- Use of [PPE](#)

Supply Chain Management

- To ensure that national TB programs have an adequate supply of TB medicines and diagnostic supplies, actively monitor supply chains to avoid interruptions. Be sure to order commodities as early as possible to avoid possible delivery delays.
- In countries or settings with a high incidence of TB, the [Bacille Calmette-Guerin \(BCG\) vaccine](#) can prevent severe forms of TB in children, including TB meningitis. Childhood immunization programs should pursue dedicated stocks of BCG to protect children from severe forms of TB.

Maintaining Essential Services for Malaria

[Modeling](#) analysis by WHO and partners suggests that if [essential malaria interventions are greatly disrupted due to COVID-19](#), the number of malaria cases will significantly increase, and death rates could double. Ministries of Health and National Malaria Control Programs (NMCPs) should implement malaria prevention and treatment activities in a manner that also protects patients, health care providers, and public health officials from COVID-19.

Both COVID-19 and malaria may cause fever, therefore planning for continuous availability of rapid diagnostic tests (RDTs) in healthcare settings will help distinguish between the two diseases and allow better understanding of the burden of each and whether there are interactions between them. National COVID-19 Incident Management Teams should include a representative from the NMCP to support decision-making that could impact the [implementation of malaria prevention and control programs](#). These should supplement country Ministry of Health guidance.

Insecticide-Treated Nets (ITNs [PDF](#) [Link](#))

NMCPs should ensure continued access to ITNs and proper use of ITNs for populations at risk. Nonetheless, plans to bring together large groups of people for ITN distribution should be reconsidered. If mass ITN distribution campaigns cannot be implemented as planned, consider:

- Prioritizing areas with the highest malaria burden
- Providing daily health checks for distribution teams
- Expanding routine and continuous distribution channels
- If mass ITN campaigns are necessary, avoid bringing together large groups of people

Entomological Monitoring

Essential routine entomological monitoring activities, such as vector bionomics collection, indoor residual spraying (IRS) quality and residual efficacy evaluation, and ITN durability monitoring may be conducted with NMCP approval if COVID-19 precautions are followed. This includes:

- Minimizing the number of people involved
- Physical distancing of distributors and community members while adhering to local safety protocols
- Conducting activities outdoors
- Maintaining physical distancing
- Providing [masks](#) for workers
- Ensuring the availability of appropriate PPE
- Providing cleaning and disinfectant supplies for field and laboratory entomological equipment
- Planning targeted IRS in communities
- Prioritizing ITNs in areas with the highest malaria burden

Malaria case management

In 2020, a [WHO](#) pulse survey on continuity of essential health services found that approximately half of countries reported partial to moderate disruptions in malaria diagnosis and treatment. It is therefore important that countries continue to encourage the general population to seek care early for fever and suspected malaria, particularly for children under age 5 and pregnant women, who are most at risk for adverse consequences of malaria, while taking into consideration physical distancing and COVID-19 policies and guidelines:

- Use RDTs or microscopy for individuals suspected of having malaria.
 - A positive test for malaria does not exclude co-infection with SARS-CoV-2 thus healthcare providers should consider testing for both malaria and COVID-19 whenever possible.
 - When testing for both diseases is not possible, healthcare providers should consider recommending that the individual [self-isolate](#) for possible COVID-19 based on the current guidance and level of suspicion.
- When treating confirmed malaria cases, healthcare providers should continue to follow national malaria case management guidelines.

Presumptive malaria treatment

In certain situations (e.g., ongoing local COVID-19 transmission, RDT stockouts, lack of PPE), [presumptive malaria treatment](#) for febrile illness may be required to minimize increased malaria illness and death while preventing COVID-19 transmission.

- Target presumptive therapy for children under 5 years of age, if RDTs or PPE are limited. Children under the age of 5 are at greatest risk of severe malaria and lowest risk of symptomatic COVID-19.
- Presumptive treatment could be extended to school age children, who have the highest burden of parasitemia, with testing for malaria continuing as long as possible for persons over 15 years; these individuals are less likely to develop fever as a result of malaria and more likely to have symptomatic illness with COVID-19.
- In situations where the burden of both malaria and COVID-19 are high, disruptions to the health system could lead to dramatic increases in malaria morbidity and mortality, and programs may consider implementing [mass drug administration](#), as was done during the Ebola epidemic, to reduce the burden of malaria on facilities. The effects of mass drug administrations are transient, and for maximum impact, multiple rounds may be required.
- [Consider continuing the delivery of planned preventive services that target specific populations](#). These services can include seasonal malaria chemoprevention for young children, intermittent preventive treatment in infants, and intermittent preventive treatment during pregnancy.

Commodity Supply Chain



Due to the COVID-19 pandemic, countries have seen delays in the production and [supply of malaria commodities](#), most notably RDTs and antimalarial treatments. Malaria program staff should proactively plan for potential changes in commodity availability, unreliable logistics systems, increased lead time for procurements, and increased demand for RDTs and antimalarial drugs. To avoid facility level stock-outs, countries should allow health care facilities to maintain 1 to 2-month longer supply stock than usual.

Information Systems

High-quality, timely routine health information—such as numbers of outpatient consultations, fevers, and malaria cases—is critical to monitoring both malaria and COVID-19 illness in the population. To help ensure timely availability of surveillance data for decision-making, countries should:




- Prioritize staff for surveillance activities.
- Ensure staff have adequate supplies of reporting materials.
- Create contingency plans for data transport and entry.


Maintaining Essential Health Services for People Living with HIV

Currently available data suggests that PLHIV who acquire SARS-CoV-2 infection are at greater risk for severe COVID-19 disease than the general population. [WHO report](#)   suggests that HIV is an independent risk factor for severe or critical illness at hospital admission and in-hospital mortality. Individuals with advanced HIV disease (e.g., CD4 count <200 cells/mm³) appear to be at greater risk for SARS CoV-2, and [individuals with HIV and severe COVID-19](#) may be at greater risk for death. In addition, some PLHIV may have additional comorbidities, such as obesity, [diabetes and hypertension](#), that put them at risk for severe illness from COVID-19. CDC and WHO have identified PLHIV as a group at higher risk for severe COVID-19 and vaccine receipt is recommended.

For PLHIV who have suspected, probable, or confirmed COVID-19, care and treatment for HIV should:

- Be managed in areas dedicated to COVID-19 care.
- Have their antiretroviral therapy (ART) regimens be continued even if they are symptomatic or hospitalized.
 - Some ARTs (e.g., lopinavir/ritonavir, boosted darunavir, and tenofovir disoproxil fumarate/emtricitabine) are being evaluated in clinical trials and/or prescribed for off-label use for COVID-19 treatment or prevention; however, PLHIV should not change their current ART regimen in an effort to treat or prevent COVID-19. Notably, the US National Institutes of Health specifically recommends against use of lopinavir/ritonavir or other HIV protease inhibitors for the treatment of COVID-19 except in the context of a clinical trial.

[The US President's Emergency Plan for AIDS Relief \(PEPFAR\)](#)  regularly updates and provides detailed, publicly available [technical guidance](#)   for its HIV programs in the context of COVID-19. This technical guidance focuses on:

- Prioritizing continuity of care for PLHIV
- Leveraging existing health systems and infrastructure
- Assuring the safety of staff and clients in healthcare settings that may be overburdened and/or sources for potential exposure to COVID-19
- providing flexibility for PEPFAR programs in how to optimally serve PLHIV in areas affected by COVID-19
- Offering [SARS-CoV-2 vaccines to all persons with HIV when it is available](#) , regardless of CD4 count or viral load level.

HIV service delivery

HIV viral suppression is critically important, and thus many considerations for HIV service delivery in the context of COVID-19 center on providing uninterrupted ART.

- Implement multi-month dispensing (MMD, 3-6 months preferred), as recommended by PEPFAR for new ART initiators, pregnant and breastfeeding women, infants, and children.
- Decentralize delivery of ART, when appropriate, through existing or newly adopted differentiated HIV service delivery models, including pharmacies, home delivery (via HIV-positive peer networks or private contractors), automated lockers, or community pickup points (e.g., post offices, churches).
- ART delivery options can also be leveraged for delivery of medications for pre-exposure prophylaxis (PrEP), post-exposure prophylaxis (PEP), prevention of opportunistic infections (such as TB preventive therapy or cotrimoxazole), and other chronic disease management, and/or supplies like HIV self-testing kits and condoms.
- HIV facility visits should be limited to those deemed medically essential to reduce the risk and burden to patients and healthcare providers.

Conduct HIV care and treatment services in dedicated spaces that are physically separated from areas where patients with COVID-19 are being managed. PLHIV with COVID-19 should be managed in the areas dedicated to COVID-19 care.

Key Populations

Certain vulnerable populations may require focused attention to ensure uninterrupted service delivery. Children, adolescents, and pregnant and breastfeeding women should be included in differentiated HIV service delivery models. The same applies for patients with advanced HIV disease and/or high VLs who may require more frequent clinical evaluation. For some, this

may be conducted virtually or outside a facility-based setting. It is also important to prioritize efforts to continue critical services for key populations (who may be at increased risk for both HIV and SARS-CoV-2 infection), such as treatment for substance use disorder, including medications for opioid use disorder, and access to clean/sterile injection supplies such as needles and syringes. Programs may also wish to be vigilant for increasing mitigation efforts to address food and economic insecurity among PLHIV in the context of COVID-19.

HIV Testing

Although HIV testing may be affected by reductions in facility utilization and community testing activities, it should be prioritized:

- For patients with clinical suspicion or known exposure to HIV.
- In healthcare settings providing services for antenatal care, TB, sexually transmitted infection, or malnutrition services.
- Where traditional testing services are temporarily unavailable.

Active patient tracking and tracing to ensure linkage to care once diagnosed, and for patients late to appointments or medication pick-ups or lost to follow up, should rely primarily on phone calls before resorting to in-person tracking in communities. All persons involved in tracking patients in the community should be provided with proper PPE and follow IPC procedures.

Routine viral load (RVL) monitoring may be affected by staffing or facility limitations, and/or concurrent use of HIV diagnostic instruments for SARS-CoV-2 testing. PEPFAR guidance suggests:


- RVL and early infant diagnosis services be provided first to children, pregnant and breastfeeding women, and adults with recent documented non-suppression.
- Consideration be given to those with signs of HIV treatment failure, and patients requiring initial VL assessment after ART initiation.
- Opportunistic infection screening and prophylaxis (including for TB) should continue with as little reliance on in-person facility visits as possible.

Disclaimer:

CDC operational considerations documents and/or resources are developed in partnership with global partners and specifically designed as reference guides in non-U.S. settings. CDC guidelines are intended for a U.S. audience and not meant to supersede guidance issued by the World Health Organization or any country.

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