COVID-19 and HIV
Latest WHO updates and guidance
Update 23 April 2020

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WHO Department of Global HIV, Hepatitis and Sexually Transmitted Infection Programmes
Recapping the last 4 months ....

- A pneumonia of unknown cause detected in Wuhan, China was first reported to the WHO Country Office in China on 31 December 2019.
- The outbreak was declared a Public Health Emergency of International Concern on 30 January 2020.
- By 23 April 2020, more than 2,471,136 confirmed cases and 169,006 deaths in 210 countries.

COVID-19 and HIV & TB

- Patients with severe immunodeficiency usually have high risk of complications with any infectious disease

- Several reports of HIV-CoVs co-infections (HIV/SARS - Wong, 2004; HIV/MERS - Salahoub, 2015; HIV/COVID19 - Zhu, 2020; Guo, 2020; Joob, 2020); Spain with 56 PLHIV; Mild moderate CoV disease despite severe immunodeficiency; most recover

- PLHIV low CD4 & COVID similar outcomes to non-PLHIV (Guo, 2020)

- TB and comorbidities DM, malnutrition may increase risk of COVID-19

- **Children and COVID-19:**
  - Predominantly Asymptomatic/Mild/Moderate Disease
  - Case reports of infant deaths and children < 14 yo
  - Challenge to maintain clinics, MMD, and transition to new paediatric ARVs
  - Unknown number & outcomes of HIV/TB/COVID coinfections among < 5 yo
Efficacy and safety of ARVs for the treatment and prevention of SARS, MERS or COVID-19

Use of ARV as treatment for CoV infections
- 433 titles, two randomized trials and 24 observational studies reported outcomes using LPV/r as treatment.
- 21 observational studies reporting treatment outcomes,
  - 3 with SARS, 6 with MERS, 12 with COVID-19.
- 1 RCT of 99 patients with severe COVID-19
  - LPV/r was not associated with a statistically significant difference in time to clinical improvement, although LPV/r given within 12 days of symptoms was associated with shorter time to clinical improvement;
  - 28 day mortality was numerically lower in the LPV/r group (14/99) compared to the control group (25/100), but not statistically significant.
- Other RCT found no benefit.
- In the observational studies 3 out of 361 patients who received LPV/r died;

Use of ARV as Prevention (PEP) for CoV infections
- 2 studies reported a possible protective effect of LPV/r as post-exposure prophylaxis (SARS and MERS). The certainty of the evidence was very low due to uncertainty and limited sample size.

- 19 assessing LPV/r, 1 assessing upboosted LPV, 1 assessing ritonavir, 1 darunavir and cobicistat, 1 assessing TAF.
WHO launched the SOLIDARITY trial on 18 March 2020.

The SOLIDARITY trial provides simplified procedures to enable even hospitals that have been overloaded to participate.

The trial entails:
- an experimental antiviral compound called remdesivir;
- the malaria medications chloroquine and hydroxychloroquine; a combination of two HIV drugs, lopinavir and ritonavir; and plus interferon-beta.

>90 Many countries have already confirmed that they will join the SOLIDARITY trial—Argentina, Bahrain, Canada, France, Iran, Norway, South Africa, Spain, Switzerland, and Thailand.

The COVID-19 Solidarity Response Fund has raised over US$43 million from more than 173,000 individuals and organizations. FIFA has contributed US$10 million.
COVID-19 Updates/New technical guidance

- **Surveillance**: Operational considerations for surveillance of COVID-19 using GISRS

- **Clinical care**: Severe Acute Respiratory Infections Treatment Centre: Practical manual (section on women and children)

- **Lab**: Guidance for laboratories shipping specimens to WHO reference laboratories that provide confirmatory testing for COVID-19 virus

- **Logistics**: Essential Supplies Forecasting Tool

Maintaining Essential Health Services- Umbrella Document

When health systems are overwhelmed, both direct mortality from an outbreak and indirect mortality from vaccine-preventable and treatable conditions increase dramatically. **This provides guidance on a set of targeted immediate actions that countries should consider at national, regional, and local level to reorganize and maintain access to high-quality essential health services for all.**

https://www.who.int/publications-detail/covid-19-operational-guidance-for-maintaining-essential-health-services-during-an-outbreak

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COVID-19 and HIV, Malaria Q&A

Q&A on COVID-19, HIV and antiretrovirals

24 March 2020 | Q&A

- Are people living with HIV at increased risk of being infected with the virus that causes COVID-19?
- Can antiretrovirals be used to treat COVID-19?
- Can antiretrovirals be used to prevent COVID-19 infection?
- What studies on treatment and prevention of COVID-19 with antiretrovirals are being planned?
- What is WHO’s position on the use of antiretrovirals for the treatment of COVID-19?

Malaria and the COVID-19 pandemic

27 March 2020 | Q&A

WHO is continuously monitoring and responding to the COVID-19 pandemic. This Q&A will be updated as more is known about the novel coronavirus, how it spreads and how it is affecting malaria responses worldwide.

- How many malaria-affected countries have reported cases of COVID-19?
- Should core malaria vector control interventions be maintained in view of the rapid global spread of COVID-19?
- Should WHO-recommended preventive therapies be maintained in sub-Saharan Africa?
- Are there any changes to WHO guidance with respect to malaria diagnosis and treatment?
- What additional special measures may be needed in the context of COVID-19?
Community distribution of ARVs in time of COVID-19

People living with HIV who are on treatment should ensure that they have at least 30 days of ARVs with them and, where possible, 3 to 6 months supply of ARVs.

MMS approach should also be considered for concomitant used medicines in comorbidities.
Testing Considerations for HIV in the context of COVID-19

Lara Vojnov
WHO HIV, hepatitis and STI department

ASLM Webinar “Maintaining HIV & TB Testing in the context of COVID-19”

23 April 2020
Differentiated HIV testing services (HTS) in COVID-19 Context

- It is important to support undiagnosed PLHIV to get tested and linked to ART
  - PLHIV, who do not know their status and are not ART and those with known risk factors (e.g. diabetes), who acquire a COVID-19 infection may be at risk of COVID-19 complications

- Safety of HTS providers needs to be ensured during testing procedures
  - practices including PPE, hand hygiene, respiratory hygiene, and physical distancing measures.
  - adaptations such as increased use of phone calls, digital tools (e.g. videos, websites, social media, text messages) and approaches like self-testing

- Considerations for prioritizing and adapting HTS programmes
  - Continuing ongoing critical clinical services (e.g. ANC, individuals with symptoms or conditions indicative of HIV or with related co-infections or other co-morbidities (e.g. TB, STIs, malnutrition), and EID of HIV-exposed children).
  - Partner/index/family testing to reach the partners of PLHIV presenting at facilities, as well ongoing key populations programmes; increasingly using phone calls
  - Increasing use of HIV self-testing (HIVST) and restricting/pausing community outreach in some settings
  - Maintain linkage and referrals to ART and condoms.
  - Key populations and other vulnerable groups who need HTS, as well as other comprehensive sexual health services, and social protection.
  - Monitor supply chain management as there may be increased risks of disruptions.

Considerations for HIVST

- HIVST may be an acceptable alternative to maintain services while adhering to physical distancing guidance.

- It is important to strategically implement HIVST prioritizing areas and populations with the greatest needs and gaps in testing coverage.

- HIVST approaches include:
  - distribution for personal use and/or sexual and/or drug injecting partners of PLHIV and social contacts of key populations
  - In some high HIV burden settings, pregnant women may also provide HIVST kits to their male partners.

- Priority settings to consider
  - Pick up at facilities or community sites
  - Online platforms (e.g. websites, social media, digital platforms) and distribution through mail
  - Pharmacies, retail vendors, vending machines

The Global COVID-19 Response Strategy

World Health Organization

Making people healthier
HIV and COVID-19 Diagnostics considerations

WHO encourages collaboration and sharing of currently existing molecular diagnostic platforms to support the COVID-19 preparedness response.

- Diagnostic technologies and systems developed through disease programs can be considered to support the COVID-19 response; however, established systems should not be disrupted.

- It is not recommended to move equipment from their currently designated laboratories or health care facilities to different or central settings to respond to the COVID-19 demand. This will cause significant disruptions to the current networks and to critical testing for HIV and TB.

- Maintain other critical molecular diagnostics, particularly:
  - Early infant diagnosis
  - Viral load testing for people living with advanced HIV disease; those suspected of failing treatment, including pregnant and breastfeeding women; infants, children, and adolescents.
  - Tuberculosis testing for all patient groups
COVID-19 Diagnostics considerations

- Three molecular technologies have US FDA emergency use authorization that are commonly used by HIV and TB programmes – Abbott m2000, Cepheid Xpert, Roche cobas 6800/8800; two have received WHO emergency use listing.

- A Diagnostics Supply Consortium has been developed that includes WHO, Unicef, Global Fund, World Bank, Unitaid, Gates Foundation, FIND, and CHAI
  - This consortium is working with suppliers, particularly Abbott, Cepheid, Hologic, Roche, and ThermoFisher, to negotiate access to tests as well as pricing considerations.
  - Discussions have progressed well and final numbers from each supplier are being finalized.
  - Countries and partners are encouraged to consider a multi-pronged testing approach, not just relying on one technology or solely on automated technologies, due to limited test availability.
  - Additional technologies will be brought into the consortium as available.

- Several guidance documents exist & operational guidance documents to support COVID-19 testing with practical and programmatic guidance are in development
Discussion and next steps

- We want to hear about your in-country experiences, needs, questions etc
- Get inputs on draft information notes and documents
- Define next steps and address outstanding questions needs etc.
TB/COVID-19: considerations in diagnostics

Dennis FALZON
WHO Global TB Programme, Switzerland

ASLM Webinar “Maintaining HIV & TB Testing in the context of COVID-19”

23 April 2020
World Health Organization (WHO) Information Note
Tuberculosis and COVID-19

COVID-19: Considerations for tuberculosis (TB) care

As the world comes together to tackle the COVID-19 pandemic, it is important to ensure that essential services and operations for dealing with long-standing health problems continue to protect the lives of people with TB and other diseases or health conditions. Health services, including national programmes to combat TB, need to be actively engaged in ensuring an effective and rapid response to COVID-19 while ensuring that TB services are maintained.

The World Health Organization (WHO) is advising Member States that are leading the response to the unfolding COVID-19 pandemic [1]. The WHO Global TB Programme, along with WHO regional and country offices, has developed an information note, in collaboration with stakeholders. This note is intended to assist national TB programmes and health providers to urgently maintain continuity of essential services for people affected with TB during the COVID-19 pandemic, driven by innovative people-centred approaches, as well as maximizing joint support to tackle both diseases. It is important to maintain TB service continuity in line with the World Health Assembly resolution 73.14 on COVID-19 [2].

Related
World Health Organization (WHO) Information Note
Tuberculosis and COVID-19 Date: 4 April 2020

Commentaries


https://www.who.int/tb/COVID_19considerations__tuberculosis_services.pdf
What should health authorities do to provide essential TB services during the COVID-19 pandemic?
What services can be leveraged across both diseases?

**TB programme staff:** can share expertise and logistical support, such as in active case finding and contact tracing. Capacity building and training may be needed

**Community-based care:** strongly preferred over hospital treatment where possible and visits to TB treatment centres minimized

**Prevention:** limit transmission of TB and COVID-19 in congregate settings and health care facilities, basic infection prevention and control, cough etiquette, patient triage. TPT maintained

**Diagnosis:** TB laboratory networks and platforms could support COVID 19 response

**TB treatment:** must be ensured and medicines given to patients to take home, including TPT

**Digital technologies**

**Proactive planning, procurement, supply and risk management**
TB infection prevention and control measures: many also apply to COVID-19

In diagnostic site: training on universal precautions, consistent use of the N95 respirator, handwashing, gloves, goggles or protection shield, waterproof aprons, regular decontamination of surfaces, staff distancing in the lab, ventilated workplaces and safe transportation.

Additional, temporary measures to be considered during the pandemic:
• Reduce visits for TB follow-up
• Fix TB visits on specific days or times
• TB medicines dispensed to the patient or caregiver to last until the next visit
• Sputum collection at home or in open, well-ventilated space, away from health facility
Basic protective measures in COVID-19

Protect yourself and others from getting sick

Wash your hands
- after coughing or sneezing
- when caring for the sick
- before, during and after you prepare food
- before eating
- after toilet use
- when hands are visibly dirty
- after handling animals or animal waste

Protect others from getting sick

When coughing and sneezing cover mouth and nose with flexed elbow or tissue
- Throw tissue into closed bin immediately after use

Clean hands with alcohol-based hand rub or soap and water after coughing or sneezing and when caring for the sick

Avoid close contact when you are experiencing cough and fever

Avoid spitting in public
If you have fever, cough and difficulty breathing seek medical care early and share previous travel history with your health care provider
As the pandemic advances...
• more people and TB patients will be exposed to COVID-19
• in high TB burden settings a positive result for COVID-19 infection does not exclude concomitant TB, and vice versa
• clinical trajectory can determine need for testing in TB and COVID-19 patients

Simultaneous testing of the same patient for both TB and COVID-19 would generally be indicated in presence of:
1. clinical features common to both diseases
2. simultaneous exposure to both diseases
3. a risk factor for poor outcomes to either disease

Should all people being evaluated for TB also be tested for COVID19 and vice-versa?
Can TB and COVID-19 be tested on the same type of specimen?

- Specimens are usually different – sputum for TB and nasopharyngeal/oropharyngeal swabs for COVID-19
- Diagnostic testing using molecular techniques is currently recommended for both conditions; serology is not recommended for both
- By 23 April 2020, three *in vitro* diagnostic molecular tests were on the WHO Emergency Use Listing for COVID-19

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<td>cobas SARS-CoV-2 Qualitative assay for use on the cobas 6800/8800 Systems</td>
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[https://www.who.int/diagnostics_laboratory/EUL/en/](https://www.who.int/diagnostics_laboratory/EUL/en/)

This cartridge is meant to be used on GeneXpert machines which have been widely deployed for rapid TB testing. Protecting time to test TB specimens is important if these machines will be involved in COVID-19 testing.

WHO is currently evaluating this cartridge (below as on 21 April 2020)

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