





Test, test, test: COVID-19 and HIV testing updates



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WHO updates on COVID-19 testing: Policies, challenges and solutions

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Who to test



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Several goals of COVID-19 testing:

- **Slow or stop transmission**
 - **Identify cases**
- **Lift economic and population restrictions**

Though the WHO recommends all suspected cases be tested for COVID-19, prioritization may be necessary as capacity and/or resources are limited:

- key populations at highest risk of developing severe disease: elderly, those with co-morbidities, high contact industries, and health care providers
- people with symptoms severe enough for admission
- people who have symptoms regardless of severity
- close contacts
- all contacts

Global surveillance for COVID-19 caused by human infection with COVID-19 virus

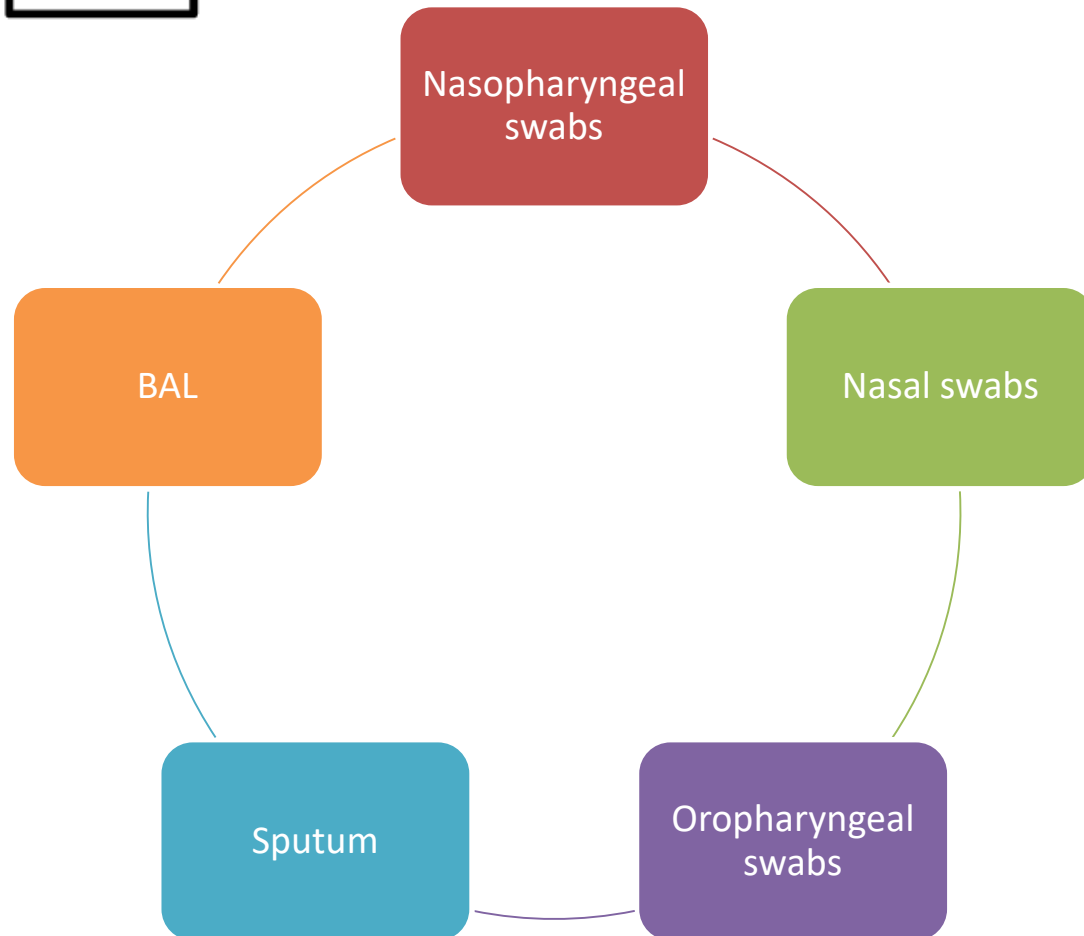
Interim guidance
20 March 2020



How to test



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Any and all sample types to be used for testing should be validated and indicated as an intended use by the supplier.

Research considerations:
can other less invasive sample types be used?

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

Interim guidance
31 March 2020





What tests to use



WHO currently recommends the use of nucleic acid (also called 'molecular') testing to identify patients with COVID-19

- Several automated platforms exist: sample in, result out
- More manual, open platforms also exist: allow for greater access to test reagents and flexibility
- Testing biosafety standards being revised
- Necessary specimen handling and transportation should be considered



Laboratory testing for coronavirus disease (COVID-19) in suspected human cases.

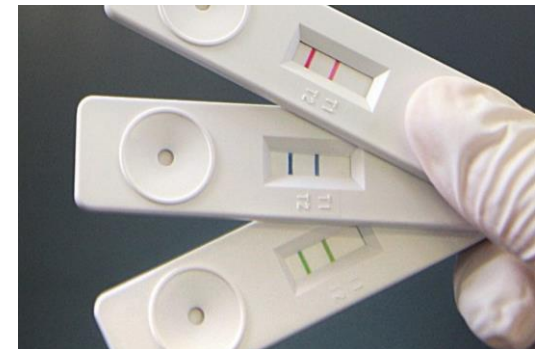


What tests to use



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- WHO does not currently recommend the use of **antigen-detecting rapid diagnostic tests** for patient care, although research into their performance and potential diagnostic utility is highly encouraged
- WHO does not recommend the use of **antibody-detecting rapid diagnostic tests** for patient care, but encourages the continuation of work to establish their usefulness in disease surveillance and epidemiologic research
 - Do antibodies confer immunity?
 - What are the rates of seroconversion?
 - Key interpretation challenges if used in diagnosis:
 - Inability to discriminate active from past infection
 - False negatives: early and late in infection
 - Over-reliance on test result rather than clinical acumen
 - Performance



Advice on the use of point-of-care immunodiagnostic tests
for COVID-19

Scientific brief
8 April 2020



Diagnostics Consortium for COVID-19



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- **Three molecular technologies have US FDA emergency use authorization** (two with WHO prequalification emergency use listing review) that are commonly used by HIV and TB programmes – **Abbott m2000, Cepheid Xpert, Roche cobas 6800/8800**
- **A Diagnostics Consortium for COVID-19** has been developed that includes WHO, Unicef, Global Fund, World Bank, Unitaid, Gates Foundation, FIND, and CHAI
 - Gathering information and data on tests in development
 - Working with suppliers to negotiate access to tests as well as lower prices
 - Developing an equitable allocation plan for distribution to LMICs
 - Additional technologies will be brought into the consortium as available
- 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



Some considerations for HIV and TB diagnostics



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

- It will be essential to maintain current critical molecular diagnostic services, especially for:
 - Early infant diagnosis
 - HIV viral load testing for people living with advanced HIV disease and those suspected of failing treatment (non-suppressed), including pregnant and breastfeeding women
 - HIV viral load testing for infants, children, and adolescents
 - Tuberculosis testing in all patient groups

https://www.who.int/tb/COVID_19considerations_tuberculosis_services.pdf
- It is not recommended to move equipment to centralized settings in response to COVID-19 as that could cause significant disruptions to current testing networks