

WHO model list of essential in vitro diagnostics (EDL)

Dr Ana Aceves Capri **Technical Officer** WHO EDL Secretariat









What is the EDL?

The WHO model list of essential in vitro diagnostics (EDL) is an evidence-based register of categories of IVD tests and recommendations (e.g., assay format, test purpose, specimen type) for those tests.

- First edition (May 2018): 62 unique IVDs ٠
- Second edition (November 2019): 113 ٠ unique IVDs
- Third edition (January 2021): 142 unique ٠ **IVDs**





Objectives of the EDL

The EDL is intended to support IVD policy development to improve people access to IVD testing and clinical laboratory services

- To provide evidence-based guidance for countries to create or update their national EDL
- To prioritize IVDs that should be available at different levels of the healthcare system
- To inform United Nations agencies and NGOs that support the selection, procurement, supply or donation of IVDs
- To provide guidance to the private health technology and manufacturing sectors about the IVDs priorities required to address global health issues







Scope of EDL 3

The EDL includes general and disease-specific tests for non-communicable disease (NCD) and infectious diseases

General tests	Disease-specific		
Anatomical pathology	Aspergillosis		
Blood typing	Cancer		
Clinical chemistry	Chagas disease		
Clinical microbiology	Cholera		
Clinical pathology	COVID-19		
Haematology	Diabetes mellitus		
Pregnancy testing	Endocrine disorders		
	Hepatitis B		
	Hepatitis C		
	HIV		
	Human papillomavirus		
	Influenza		
	Malaria		
	Neglected tropical diseases		
	Pneumocystis pneumonia		
	Primary immunodeficiencies		
	Streptococcal pharyngitis Sickling disorders		
	Sexually transmitted infections		
	Syphilis		
	Tuberculosis		
	Vaccine preventable diseases		
	Visceral leishmaniasis		
	Zika virus		





Presentation of the EDL 3

The WHO EDL is presented by health-care facility level in **two tiers** and a "Do Not Do" recommendations section

Community settings and health facilities without laboratories



I.a General tests (arranged by discipline)

I.b Disease-specific tests (arranged by disease)

Health care facilities with clinical laboratories



II.a General tests (arranged by discipline)

II.b Disease-specific tests (arranged by disease)

II.c Bloods screening tests

Do Not Do recommendations



Refer to test categories that have been listed for discontinuation





Example of EDL 3 entry

I.b Disease-specific IVDs for use in community settings and health facilities without laboratories (continued)

Disease	Diagnostic test	Test purpose	Assay format	Specimen type	WHO prequalified or recommended products	WHO supporting documents
Diabetes mellitus <i>continued</i>	Haemoglobin A1c (HbA1c)	To diagnose and monitor diabetes mellitus	Handheld and small analysers	Capillary whole blood	N/A	HEARTS-D: diagnosis and management of type 2 diabetes (2020) <u>https://www.who.int/publica</u> <u>tions/i/item/who-ucn-ncd-</u> <u>20.1</u> <u>https://www.who.int/health-</u> <u>topics/diabetes#tab=tab_1</u>
Hepatitis B virus (HBV) infection	Hepatitis B surface antigen (HBsAg)	To screen for HBV infection, or to aid in the diagnosis of chronic and acute HBV infection: infants > 12 months of age, children, adolescents and adults	RDT	Capillary whole blood Venous whole blood ¹⁰	Public reports of WHO prequalified IVDs https://extranet.who .int/pqweb/vitro- diagnostics/prequali fication- reports/whopr?field _whoprcategory=63	Guidelines on hepatitis B and C testing (February 2017) https://apps.who.int/iris/han dle/10665/254621 https://www.who.int/news- room/fact- sheets/detail/hepatitis-b







Review and updating of the list

- The EDL is updated regularly, with periodic calls for submission of applications
- Applications can be submitted by:
 - WHO HQ departments
 - WHO regional or country offices
 - Other stakeholders, such as Member States, academia, NGOs or companies in the IVD industry
- The EDL secretariat oversees submissions, and the **SAGE IVD** is responsible for reviewing applications and making recommendations







Additional tools to support countries

- 1. WHO Technical Report Series The selection and use of essential IVDs
- 2. Electronic EDL (eEDL)
- Selection of essential in vitro diagnostics at country level: using the WHO Model List of Essential In Vitro Diagnostics to develop and update a national list of essential in vitro diagnostics
- 4. Technical specifications to support selection and procurement of IVD products









Planning for the EDL 4

Timeline

- Call for submissions is open from 19 January until July 31, 2022
- May to August 2022: review of submissions
- September 2022: public consultation
- October 2022: review of input from public consultation
- November 2022: SAGE IVD meeting, date and modality to be confirmed
- November December 2022: development of the report of the SAGE IVD meeting, including the EDL 4
- January 2023: EDL 4 launch







High priority IVDs categories for EDL 4

For the addition of new IVD categories for EDL4 we are specially inviting applications for the following IVD categories:

- 1. Therapeutic drug monitoring (TDM) Amikacin
- 2. TDM Gentamicin
- 3. TDM Phenytoin
- 4. TDM Lithium
- 5. TDM Methotrexate
- 6. Nucleic acid testing, N. meningitidis
- 7. Antigen, Entamoeba
- 8. Testosterone total
- 9. Protein electrophoresis (in serum and urine)
- 10. Immunofixation electrophoresis
- 11. Free light-chain test (in serum)

- 12. Antibodies against Scrub Typhus (IgM)
- 13. Antibodies against Leptospira (IgM)
- 14. Serology, Yellow fever
- 15. Nucleic acid testing, Diphtheria
- 16. IVDs for Bordetella pertussis
- 17. IVDs for Poliovirus
- 18. IVDs for Rotavirus
- 19. Lead
- 20. Hepatitis Delta (RDTs, EIA and RNA PCR)
- 21. Hepatitis E (RDTs, EIA and RNA PCR)
- 22. 17 hydroxyprogesterone
- 23. Parathyroid hormone

The EDL Secretariat will also consider submissions for IVD categories not mentioned in the above list.





EDL4 call for submissions

Expressions of interest

- Department of Public Health Syracuse University: Hepatitis E virus
- International Myeloma Working Group: Protein electrophoresis (in serum and urine), immunofixation electrophoresis and free light-chain test (in serum)
- Queensland Children's Hospital: 17-hydroxyprogesterone, testosterone and PTH
- The Ohio State University: Parathyroid hormone
- WHO: yellow fever, rotavirus and diphtheria
- FIND and Life for a Child: glucose (edits)
- International Federation of Biomedical Laboratory Science
- Uganda National Health Laboratories and Diagnostics
- Manufacturers: blood typing dry format card testing





Additional Information

- EDL Secretariat contact: EDLsecretariat@who.int
- EDL 4 Call for submissions: <u>https://www.who.int/news-room/articles-detail/call-for-submission---</u> submissions-for-the-fourth-who-model-list-of-essential-in-vitro-diagnostics-(edl-4)
- EDL Submission portal: <u>https://submissions.who-healthtechnologies.org/</u>
- WHO IVD web page: <u>https://www.who.int/health-topics/in-vitro-diagnostics#tab=tab_1</u>
- WHO web page on the EDL: https://www.who.int/teams/health-product-policy-and-standards/assistive-and-medical-technology/medical-devices/selection-access-and-use-in-vitro
- Electronic eEDL (beta version): <u>https://edl.who-healthtechnologies.org/</u>
- WHO Medical Devices web page: https://www.who.int/health-topics/medical-devices#tab=tab_1



