

HIV DRUG RESISTANCE

WHO HIVResNet

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LABORATORY OPERATIONAL FRAMEWORK

SECOND EDITION — SEPTEMBER 2020



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EXECUTIVE SUMMARY

The WHO HIV Drug Resistance Network (HIVResNet) HIV drug resistance laboratory operational framework describes how WHO HIVResNet laboratories function to support national, regional and global HIV drug resistance surveillance by providing accurate genotyping results in a standardized format according to WHO specifications. The aim of the operational framework is to ensure:

- accurate collection, handling, shipment and storage of specimens collected in countries implementing HIV drug resistance surveillance; and
- The availability of quality-assured HIV genotyping laboratory services producing comparable and reliable results at the national, regional and global levels.

WHO requires all countries implementing HIV drug resistance surveys to send specimens for HIV drug resistance genotyping to laboratories designated by WHO for this purpose. This publication describes:

- the structure of the WHO HIVResNet Laboratory Network;
- the roles and responsibilities of the different types of Network laboratories;
- the requirements for application;
- the application review and evaluation process; and
- the requirements for submitting HIV drug resistance data to WHO.

The WHO HIVResNet HIV drug resistance laboratory operational framework consists of the following four elements.

1. National strategy for laboratory support for HIV drug resistance surveillance.
2. The WHO HIVResNet Laboratory Network is responsible for ensuring the delivery of quality-assured HIV genotyping data at the national, regional and global levels. The Laboratory Network includes different categories of membership, with different tasks and responsibilities:
 - national HIV drug resistance laboratories (usually one per country);
 - regional HIV drug resistance laboratories (ideally, at least one per WHO region); and
 - specialized HIV drug resistance laboratories.
3. Standards for specimen collection, handling, shipment and storage. The Laboratory Network provides guidance

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