

Laboratory Network of IDSP

Mandate

- Integration and decentralization of surveillance activities through establishment of surveillance units at Centre, State, and District levels under the Integrated Disease Surveillance Programme (IDSP).
- Strengthening of surveillance systems using Information Communication Technology (ICT) for efficient data collection, collation, compilation, analysis, and dissemination.
- Human Resource Development through regular training of State Surveillance Officers (SSOs), District Surveillance Officers (DSOs), Rapid Response Teams (RRTs), and other medical staff on disease surveillance and outbreak response.
- Strengthening of public health laboratories by improving infrastructure, ensuring availability of equipment and reagents, and enhancing linkages between District Public Health Laboratories (DPHLs) and State Referral Laboratories (SRLs) for timely and accurate diagnosis

The **Integrated Disease Surveillance Programme (IDSP)** lab network is structured as a two-pronged system, focusing on **basic routine laboratory testing and outbreak investigations at District Public Health Laboratories (DPHLs)**, and **referral testing of outbreak-related samples at State Referral Laboratories (SRLs)**. This tiered approach ensures timely detection, confirmation, and response to public health events across the country.

DPHL (District Public Health Laboratory):

DPHLs are established at district hospitals to strengthen diagnostic capacity for epidemic-prone diseases at the peripheral level. They perform routine microbiological testing (bacteriology, serology, and basic molecular diagnostics where available) for timely detection of outbreaks. DPHLs support sample collection, storage, and transport, ensure reporting of laboratory data into the surveillance system, and maintain essential infrastructure, trained personnel, and internal quality control to improve the reliability of results.

Minimal Diagnostic Services to be provided:

- Gram stain smears of clinical specimens like throat swab, sputum, CSF etc.
- Smear examination for malaria
- Culture blood, sputum, CSF etc for bacterial pathogens and perform antimicrobial susceptibility testing on the isolates
- Culture of stool specimen for *Vibrio cholerae* and other common bacterial enteropathogens
- IgM ELISA for Viral Hepatitis A & E
- IgM ELISA for Dengue/Chikungunya
- Diphtheria – smear examination and culture
- Rapid Latex Agglutination test for meningococci (during suspected outbreaks)
- IgM ELISA for Measles
- Sputum for AFB
- Other tests relevant for locally prevalent epidemic prone diseases i.e. ELISA for leptospirosis, rapid diagnostic tests for kala-azar, IgM ELISA for JE etc.

Current Status:

- 441 DPHLs sanctioned
- 418 DPHLs functional

Cost Component	Maximum Amount (₹)	Nature	Purpose
Recurring Cost	Up to ₹4.00 lakh	Recurring	Reagents, consumables, test kits, and other operational expenses
Non-Recurring Cost	Up to ₹17.90 lakh	Non-recurring	Laboratory equipment, instruments and other one-time infrastructure requirements
Total Maximum Cost	₹21.90 lakh	—	Maximum combined recurring + non-recurring provision

State Referral Laboratory

State-based referral laboratory networks established under the **Integrated Disease Surveillance Programme (IDSP)** to ensure access to diagnostic facilities for the investigation of epidemic-prone diseases during outbreak situations. States are required to identify functional laboratories within government institutions, preferably medical colleges and other large public health facilities, and link nearby districts to these referral laboratories for timely diagnostic support during suspected outbreaks.

Minimal Testing expected from SRLs:

- Cholera and other enteropathogens : culture and sensitivity and serotyping
- Typhoid: Blood Culture & antimicrobial sensitivity (including isolate confirmation with specific antisera)
- Bacterial meningitis-rapid latex agglutination test, CSF examination-wet mount, gram stain and culture & antimicrobial sensitivity.
- Hepatitis A-IgM μ capture ELISA
- Hepatitis E- IgM μ capture ELISA
- Measles- IgM μ capture ELISA
- Dengue- IgM μ capture ELISA
- Diphtheria-Smear examination, culture and toxigenicity testing
- Leptospirosis-ELISA/Rapid test
- Any other tests for locally prevalent epidemic prone disease (to be identified by the state)

Network Status

- Operational in **27 States/UTs**
- **163** SRLs sanctioned

LAB NETWORK STRATEGIES

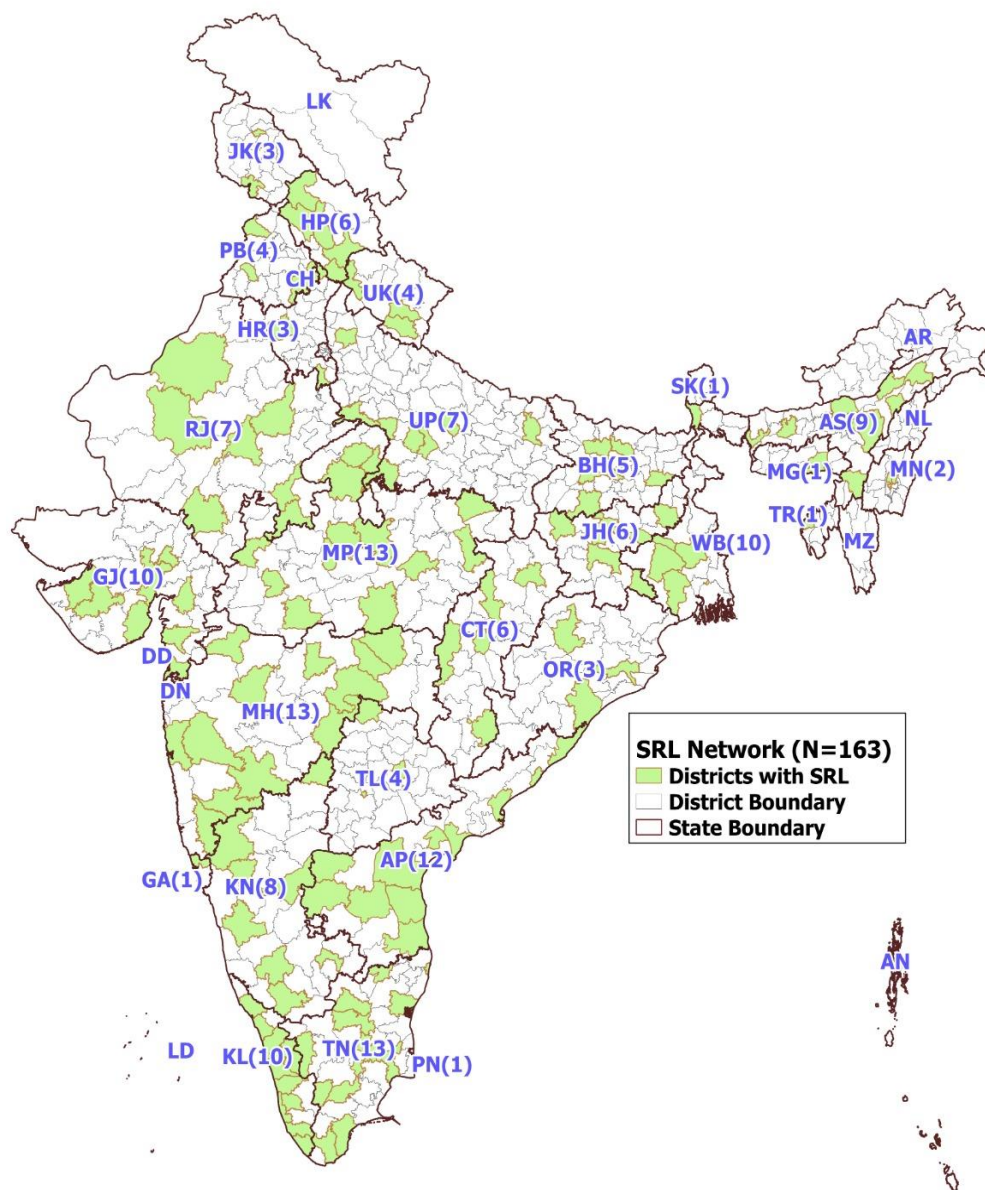
DISTRICT PUBLIC HEALTH LABORATORY

- Established at district hospitals to provide diagnostic support for epidemic-prone diseases.
- Conducts routine testing (bacteriology, serology, and basic molecular diagnostics where available) for early outbreak detection.
- Supports sample collection, storage, transport, and timely reporting into the surveillance system.
- Maintains essential infrastructure, trained manpower, and internal quality control to ensure reliable results.

STATE REFERRAL LABORATORY

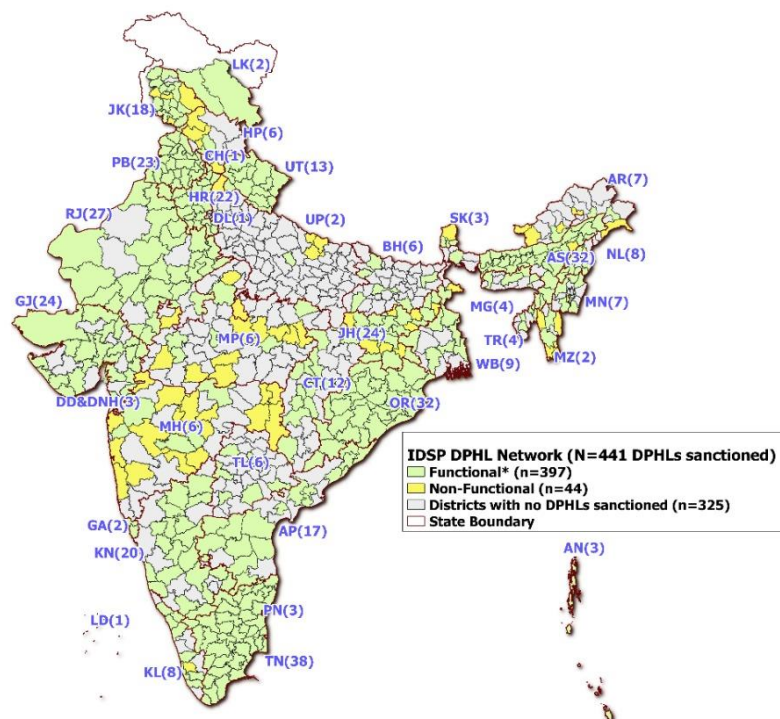
- Functions as a state-level reference lab providing advanced and confirmatory diagnostic services.
- Receives and tests referred samples from DPHLs and other health facilities.
- Implements external quality assurance (EQAS) and provides training and mentorship to DPHL staff.
- Supports outbreak investigations and standardizes laboratory practices across the state.

SRL Network



IDSP Lab Component

District Public Health Laboratory(DPHL) Network (N=766 Districts), as of May, 2026.



State/UT	District(No.)	DPHLs Sanctioned(N=441)(%)	DPHLs Functional(N=397)
ANDAMAN & NICOBAR	3	03(100)	3
ANDHRA PRADESH	26	17(65.4)	17
ARUNACHAL PRADESH	26	08(31)	7
ASSAM	35	31(91.4)	31
BIHAR	38	06(15.8)	6
CHANDIGARH	1	01(100)	1
CHATTISGARH	33	12(36.4)	12
DADAR & NAGAR HAVELI	1	01(100)	1
DAMAN & DIU	2	02(100)	2
DELHI	11	01(9.1)	1
GOA	2	02(100)	2
GUJARAT	33	24(72.7)	24
HARYANA	22	22(100)	22
HIMACHAL PRADESH	12	06(50)	2
JAMMU & KASHMIR	20	20(100)	18
JHARKHAND	24	24(100)	24
KARNATAKA	31	20(64.5)	20
KERALA	14	09(64.3)	8
LADAKH	2	02(100)	2
LAKSHADWEEP	1	01(100)	0
MADHYA PRADESH	52	10(19.2)	6
MAHARASHTRA	36	22(61.1)	6
MANIPUR	16	07(43.8)	7
MEGHALAYA	12	04(33.3)	4
MIZORAM	11	06(55)	2
NAGALAND	16	12(75)	8
ODISHA**	30	32(100)**	32
PUDUCHERRY	4	03(75)	3
PUNJAB	23	23(100)	23
RAJASTHAN	33	27(81.8)	27
SIKKIM	6	04(66.6)	3
TAMIL NADU	38	38(100)	38
TELANGANA	33	06(18.9)	6
TRIPURA	8	04(50)	4
UTTAR PRADESH	75	07(9.3)	2
UTTARAKHAND	13	13(100)	13
WEST BENGAL	23	10(43.5)	9

**Districts Khorda and Sundergarh have each two DPHLs sanctioned