Integrated Health Information Platform
What is Integrated Health Information Platform

• IHSP is an information platform that integrates data from various “registries” to provide real-time information on health surveillance from all across India for decision-makers to take action.

• All data contained in IHSP has the public health surveillance attributes: Person, Place, Time and all data has geocoded for geographic reference.

• The design and development of this platform found are attributed to the strengthening of India’s Public Health Surveillance System.
Why is IHSP needed?

- As part of IHR core capacity building and to strengthen public health surveillance system, India needs a comprehensive information system to monitor emerging and emerging public health threats, disasters and mass events.
- IHSP provides the Union health ministry, State health ministries, local governments, municipalities to real-time information on health surveillance from anywhere on any electronic device.
What are the essential differences between IDSP portal and new IHSP?

• **IDSP** was designed to:
  – Capture aggregate data only
  – Paper-based data collection
  – Not to link data from S, P and L forms
  – Weekly surveillance
  – Monitor only 13 health conditions

• **IHSP** is designed to:
  – Capture disaggregate data of persons at all levels
  – Link data from S, P L, EWS 1 and 2 forms
  – Capture real-time or daily surveillance data
  – Provide analysis on mobile and electronic devices
  – Monitor more than 33+ health conditions
  – Integrate with ongoing surveillance programs
IDSP’s Workflow in India’s Geographic Context

- **State**: (36 States/UTs)
- **District**: (707)
- **Sub-district**: (6267)
- **Village**: (655075)

Map of India showing States and Union Territories.
IDSP’s Data Collection Process at State-level

**Sub Center**
Primary Health Center
(Auxiliary Nurse Midwife, or Male Health Worker)

Weekly household visits to collect data

**Block PHC**
*or* Community Health Center
(Medical Doctor + helper)

B-PHC or CHC data collected from PHCs

**District Surveillance Unit**
(District Surveillance Officer, Data Manager, Data Entry Operator)

**State Surveillance Unit**
(State Surveillance Officer, Data Manager, Data Entry Operator)

One consolidated “S” Form per Sub-center per week
Paper Forms

One consolidated “P” form/PHC/week + “L” forms
Paper Forms

Spreadsheets

Paper forms are converted to electronic data

Spreadsheets

Electronic data, kept in the form of XL sheets or on a DB / Portal

**Village**
(655075)

**Sub-district**
(6267)

**District**
(707)

**State**
(36 States/UTs)
IDSP’s Access to ICT Infrastructure at State-level

**Sub Center or Health Sub Center**
Primary Health Center

**Block PHC**
*or* Community Health Center

**District Surveillance Unit**

**State Surveillance Unit**

**Village**
(655075)

**Sub-district**
(6267)

**District**
(707)

**State**
(36 States/UTs)

**Proposed System:** Portal access allows reporting of all data from DSU, CSU, SSU to CSU/IDSP in near real-time. Mobile reporting is both store and forward and near real-time. Data analytics and results will be accessible at all levels for action.
MoHFW Health Data Collection – Simplified View

IDSP
Population-based Surveillance of select conditions
(data collected from reporting units)
Weekly

HMIS
Health Management Information System
(data collected from health facilities)
Monthly

Other MoHFW Programs
Population-based Surveillance of select conditions
(data collected from reporting units)
Varies

Personal Health Records
EHR (Electronic Health Record) or Paper-based Record
(person’s record at hospitals and healthcare facilities)
Daily

Central Level Data Collection

State Level Data Collection

Need to move to near real-time web-based reporting and public health action
Information and Communications Technology Master plan

Integrated Diseases Surveillance Program

Major Milestones in the Evolution of Integrated Health Surveillance Platform
Timeline for development of integrated health surveillance platform

**Landscape Analysis**

- Identify stakeholders to conduct structured interviews for data discovery and review background documents

**Phase 1: 3 Weeks**

April-May 2017

**Requirements Gathering & Design**

- Conduct data integration exercise to finalize systems requirements document;
- Finalize tender for bidding and commission prototype development

**Phase 2: 4 Weeks**

September 2017

**Validation**

- Field test and finalize the IDSP information platform, and phase-based system deployment; staff training

**Phase 3: 8 Weeks**

December 2017
Articulation of Integration Health Surveillance Platform

*Four Conceptual Pillars*

**Pillar 1:** Envision IDSP’s integrated near-real-time eSurveillance

**Pillar 2:** Embed innovation and ensure quality data for decision-making

**Pillar 3:** Empower public health surveillance workforce

**Pillar 4:** Ensure sustained financing and continued leadership
**IDSP Data-linked Information System**
*(simplified view)*

Select number of data fields from considered for integration

**MoHFW entities**

- Revised National TB Control Program (RNTCP)
- National Vector Born Disease Control Program (NVBDCP)
- National AIDS Control Program (NACP)
- National Leprosy Eradication Program (NLEP)
- Health Management Information System (HMIS)
- Emergency Medical Relief (EMR)
- International Health and Point of Entry (IH & PoE)

**Non-MoHFW GoI entities**

- National Animal Disease Reporting System (NADRS)
- Geospatial Data from National Informatics Center (NIC)
- Civil Registration System (CRS)
- Public Assets (Airport, Seaport, Transportation datasets)

**IDSP Reporting Platform**
*(secure access to all reporting units)*

Platform access provided to all registered public and private reporting entities and contributing MoHFW Programs

**Data integration**

**IDSP Dashboard** *(secure access to all reporting units)*

(Selected number of indicators made available to NHP Dashboard)

**NHP Dashboard**

(Data distribution)
MoHFW Integrated Health Surveillance Dashboard
Strategic Health Operations Center
Demonstration of Integrated Health Surveillance Platform

http://localhost/idsp/#/:8080
Thank you

For further information

Dr Ramesh Krishnamurthy (WHO Headquarters), Krishnamurthy@who.int
Dr Pavana Murthy (WHO India Country Office), MurthyP@who.int