INTEGRATED DISEASE SURVEILLANCE PROJECT

Background

The Government of India is initiating a decentralized, state based Integrated Disease Surveillance Project (IDSP) in the country in response to a long felt need expressed by various expert committees. The project would be able to detect early warning signals of impending outbreaks and help initiate an effective response in a timely manner. It is also expected to provide essential data to monitor progress of on going disease control programs and help allocate health resources more optimally.

Objectives

The project development objective is *to improve the information available to the government health services and private health care providers on a set of high-priority diseases and risk factors, with a view to improving the on-the-ground responses to such diseases and risk factors*. Specifically, the projects aims:

- To establish a decentralized state based system of surveillance for communicable and non-communicable diseases, so that timely and effective public health actions can be initiated in response to health challenges in the country at the state and national level.

- To improve the efficiency of the existing surveillance activities of disease control programs and facilitate sharing of relevant information with the health administration, community and other stakeholders so as to detect disease trends over time and evaluate control strategies.

The project will assist the Government of India and the states and territories to:

- surveil a limited number of health conditions and risk factors;
- strengthen data quality, analysis and links to action;
- improve laboratory support;
- train stakeholders in disease surveillance and action;
- coordinate and decentralize surveillance activities;
- integrate disease surveillance at the state and district levels, and involve communities and other stakeholders, particularly the private sector.

Components

Component 1. Establish and Operate a Central-level Disease Surveillance Unit.
Under this component, Ministry of Health and Family Welfare (MOHFW) will establish a new Disease Surveillance Unit at the central level to help coordinate and decentralize disease surveillance activities. The new unit will support and complement the states' disease surveillance efforts. The unit will be staffed by existing permanent staff reassigned from within the MOHFW. This component will address the constraints of lack of coordination despite central control of surveillance activities and the need for changing the diseases included in the system. Effective coordination (as compared to control) of disease surveillance activities depends on establishing

the appropriate processes and institutional arrangements at the central level. This will be done through the creation of a small disease surveillance unit to support the states disease surveillance efforts.

Component 2. **Integrate and strengthen disease surveillance at the state and district levels**. This component addresses the constraints imposed by lack of coordination at the sub-national levels, the limited use of modern technology and data management techniques, the inability of the system to act on information and the need for inclusion of other stakeholders. It will integrate and strengthen disease surveillance at the state and district levels, and involve communities and other stakeholders, in particular, the private sector.

Component 3. **Improve laboratory support.** This component will consist of:

(i) upgrading laboratories at the state level, in order to improve laboratory support for surveillance activities. Adequate laboratory support is essential for providing on-time and reliable confirmation of suspected cases; monitoring drug resistance; and monitoring changes in disease agents;

(ii) introducing a quality assurance system for assessing and improving the quality of laboratory data.

Component 4. **Training for disease surveillance and action.** The changes envisaged under the first three components will require a large and coordinated training effort to reorient health staff to an integrated surveillance system and provide the new skills needed. Training programs will include representatives from the private sector, NGOs and community groups.

Project Highlights

It will monitor a limited number of conditions based on state perceptions including 13 core and 5 state priority conditions for which pubic health response is available.

District, State & Central Surveillance units will be set up so that the program is able to respond in a timely manner to surveillance challenges in the country including emerging epidemics.

It will integrate surveillance activities in the country under various programs and use existing infrastructure for its function.

Private practitioners / Private hospitals / Private laboratories will be inducted into the program as sentinel units.

Active participation of medical colleges in the surveillance activities.

The project will ensure uniform high quality surveillance activities at all levels by

(i) Limiting the total number of diseases under surveillance and reducing overload at the periphery
(ii) Developing standard case definitions
(iii) Developing formats for reporting
(iv) Developing user friendly manuals

(v) Providing training to all essential personnel, and

(vi) Setting a system of regular feed back to the participants on the quality of surveillance activity.

District Public Health Laboratory will be strengthened to enhance capacity for diagnosis and investigations of epidemics and confirmation of disease conditions.

Use of information technology for communication, data entry, analysis, reporting, feedback and actions. A national level surveillance network will be established up to the district level.

Diseases conditions under the surveillance program

(i) ***Regular Surveillance***:

Vector Borne Disease	: 1.	Malaria
Water Borne Disease	: 2.	Acute Diarrhoeal Disease (Cholera)
	: 3.	Typhoid
Respiratory Diseases	: 4.	Tuberculosis
Vaccine Preventable Diseases	: 5.	Measles
Diseases under eradication	: 6.	Polio
Other Conditions	: 7.	Road Traffic Accidents (Linkup with police computers)
Other International commitments:	: 8.	Plague
Unusual clinical syndromes (Causing death / hospitalization)	: 9.	Menigoencephalitis/Respiratory Distress Hemorragic fevers, other undiagnosed conditions

(ii) ***Sentinel Surveillance***

Sexually transmitted diseases/Blood borne	: 10	HIV/HBV, HCV
Other Conditions	: 11	Water Quality
	: 12	Outdoor Air Quality (Large Urban centers)

(iii) ***Regular periodic surveys:***

NCD Risk Factors	: 13	Anthropometry, Physical activity, Blood Pressure, Tobacco, Nutrition, Blindness

(iv) ***Additional State Priorities*** for surveillance. : Each state may identify up to five additional conditions

Note: GOI may include in a public health emergency any other unusual health condition. Project funds could be used for such emergencies and reimbursed by IDA subject to agreement at the next joint project review mission.

Phasing

Phase I **(commencing from FY 2004-05)**
Andhra Pradesh, Himachal Pradesh, Karnataka, Madhya Pradesh, Maharashtra, Uttaranchal, Tamil Nadu, Mizoram & Kerala

Phase II **(commencing from FY 2005-06)**
Chhatisgarh, Goa, Gujarat, Haryana, Rajasthan, West Bengal, Manipur, Meghalaya, Orissa, Tripura, Chandigarh, Pondicherry, Delhi

Phase III **(commencing from FY 2006-07)**
Uttar Pradesh, Bihar, Jammu & Kashmir, Jharkhand, Punjab, Arunachal Pradesh, Assam, Nagaland, Sikkim, A & N Nicobar, D & N Haveli, Daman & Diu, Lakshdweep.

Key performance indicators:

Key aspects of overall performance of the surveillance system will be assessed using the following indicators:

- Number and percentage of districts providing monthly surveillance reports on time - by state and overall;
- Number and percentage of responses to disease-specific triggers on time - by state and overall;
- Number and percentage of responses to disease-specific triggers assessed to be adequate - by state and overall;
- Number and percentage of laboratories providing adequate quality of information - by state and center;
- Number of districts in which private providers are contributing to disease information;
- Number of reports derived from private health care providers;
- Number of reports derived from private laboratories;
- # and % of states in which surveillance information relating to various vertical disease control programs have been integrated
- # and % of project districts and states publishing annual surveillance reports within three months of the end of the fiscal year;
- Publication by CSU of consolidated annual surveillance report (print, electronic, including posting on the websites) within three months of the end of fiscal year.

Expectations
Surveillance is the essence of a disease control program. By setting up a decentralized, action oriented, integrated and responsive program, it is expected that IDSP will avert a sufficient number of disease outbreaks and epidemics and reduce human suffering and improve the efficiency of all existing health programs. Such a program will also allow monitoring of resource allocation and form a tool to enhance equity in health delivery.