Tsunami
Post Disaster Disease Surveillance

Indian Experience

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Tsunami Impact – States Affected

- Affected States / UT Administration
  - Andaman & Nicobar Islands
  - Tamil Nadu
  - UT of Pondicherry
  - Kerala
  - Andhra Pradesh
Post Tsunami Disease Surveillance Challenges

• Massive Population displacement to camps/shelters.

• Disruption of water/sanitation facilities

• Environmental conditions conducive to disease outbreak.

• Hostile terrain and lack of communication
Post Tsunami Disease Surveillance

- Government of India along with WHO reviewed disease surveillance measures. The existing National Communicable Disease surveillance Programme was strengthened with additional inputs in terms of manpower and logistics including laboratory support.

- National Institute of Communicable diseases, Delhi (NICD) and WHO did need assessment in southern coastal belt and established additional surveillance units (TamilNadu[4], Andhra Pradesh[4], Pondicherry [1]), and Kerala[3].

- NICD along with other Premier public Health Institutions did need assessment in Andaman and Nicobar Group of Islands.

- NICD set up a Central Disease Surveillance Unit at Port Blair with sub units in Little Andaman, Car Nicobar, Camorta (Nancowry Group), Katchal (Nan Cowry Group), Little Nicobar, and Cambell Bay.
Post Tsunami Disease Surveillance

- Medical Officers and Health Workers in Primary Health care system sensitised in the affected districts.

- Four Day Training workshops held for medical Officers and Health workers (600 each of Medical Officers and Health workers trained)

- Apart from this TOTs were held for four trainers for each of the 12 districts of Tamilnadu.

- Further training of the entire medical officers and health workers being taken up.
Post Tsunami Disease Surveillance

• Integrated disease surveillance Programme (IDSP) Manual adopted for training.

• The reporting formats of IDSP used for uniform reporting and computer based data management.

• Two way flow of information established between Primary Health Centres, district and state Headquarters.
Post Tsunami Disease Surveillance

- Standard case definitions adopted.
- Surveillance for ARTI, Measles, Diarrhoea, Jaundice, Fever, Malaria.
- Rapid Response teams for outbreak investigations.
Post Tsunami Disease Surveillance
How Effective?

• No outbreak of Communicable Disease

• Sporadic cases of diarrhoeal diseases and RTI reported. Increased incidence acted upon early with appropriate public health interventions.

• Early warning signals of increase incidence in Malaria cases (PV&PF) in Nicobar and other remote islands (endemic for Malaria) controlled by effective four prong strategy.
Post Tsunami Disease Surveillance
What was well done?

- Nodal agency identified at Centre and states.
- Effective need assessment and Strengthening of surveillance system
- Rapid response teams for outbreak investigations
- Daily reporting, collection, collation and analysis.
- Detection of early warning signals and appropriate interventions
- Confirmation of potential pathogens through laboratory support.
Post Tsunami Disease Surveillance
What could have been done better?

• Involvement of Private Hospitals and their laboratory systems.

• Networking

• Quality assurance
Post Tsunami Disease Surveillance
Strength

- Existing National Disease surveillance programme
- Expertise available with WHO
- Availability of Public Health Experts and premier public health institutions
- An existing primary health care infrastructure (though inadequate)
- Vertical National Programmes for TB, Vector Borne diseases (Malaria, JE, Dengue); RCH (diarrhoeal diseases, vaccine Preventable diseases) having its own surveillance component.
Post Tsunami Disease Surveillance Weakness

• National Programme for disease Surveillance covers only 100 districts (One sixth of the total districts)

• Inadequate interphase between these districts and disaster vulnerable districts.

• Lack of laboratory quality assurance.

• Disease thresh-hold levels not clearly defined.
Post Tsunami Disease Surveillance

Opportunities
• Opportunity to muster funds and built up capabilities

Threat
• A single episode of disease outbreak would have jeopardized the entire tsunami efforts.
Post Tsunami Disease Surveillance

Integrated Disease surveillance Programme
- Decentralised Community Based Approach
- To cover the entire nation in Phases.
- Integration of the surveillance component of vertical programmes.
- Involvement of Private sector.
- Computerised data management/ uniform reporting and documentation.
- Surveillance for 14 diseases/ syndromic approach.
- Assured laboratory support.

World Health Organization
THANK YOU