POST-DISASTER SURVEILLANCE
with a focus on
LEPTOSPIROSIS
Surveillance in Post Extreme Emergencies and Disasters (SPEED)
SPEED Background History

Born from the experiences of past disasters, most especially from Tropical Storm Ketsana (Ondoy) and Typhoons Parma (Pepeng) and Santi in 2009.

- Massive flooding in NCR, Regions III, IVA
- Massive displacement and isolation of communities = diseases
- Delayed reporting + Delayed action = Leptospirosis Outbreak post-Ondoy resulting to 3,389 cases with 249 deaths = one of the world’s largest documented outbreaks
Key Challenge Identified

- Need for health information system during emergencies and disasters
- that will give timely information
- to allow for evidence-based decision-making,
- and more focused and targeted response.
SPEED was conceptualized to provide real time health information reporting after a disaster. It was launched by DOH and WHO in 2010.
SPEED Objectives

- **Detect** early unusual increase in communicable and non-communicable health conditions
- **Monitor** health trends to determine effectiveness of intervention
- **Enable** identification of appropriate response to handle the emergency
SPEED Target Beneficiaries:

- **Ultimate beneficiaries:** disaster-affected populations
- **Immediate beneficiaries:** health emergency managers & decision-makers

Legal Framework:

- *Republic Act 10121: Phil Disaster Risk Reduction and Mgt Act of 2010*
SPEED Program Mechanism Milestones

- Twenty one (21) health conditions monitored
- Standard reporting tools (paper forms, SMS format)
- Web-based software to enable easy access to reported data anywhere, anytime
- Health facility codes (Ex. Vicente Sotto Memorial Medical Center = HF code is 7CEC001H)
- Training materials (interactive to flipcharts)
- Capability building – Training for SPEED Reporters, Managers, and Trainers covering 100% of regions, 100% of provinces, 88% of cities and municipalities; 140 trainers and 4300 managers and reporters
SPEED Program Mechanism Reporting Flow

Consultations at hospitals, RHUs, BHS, and evacuation centers

Accomplishment of appropriate standard SPEED reporting tool

Sending of SPEED data in the SPEED form thru texting/available modes

Entry of reports into the server

Action: (1) Immediate interventions
(2) Further investigation
(3) Intermediate measures

Use of information by health emergency managers at all levels

Data analysis and report generation at all levels

Validation of cases reported via SPEED c/o MHO/CHO/PHO/CHD/DOH-HEMS

MHO – Municipal Health Office / CHO – City Health Office / PHO – Provincial Health Office / CHD – Center for Health Development (DOH office in the region) / DOH-HEMS – Dept of Health – Health Emergency Management Staff (central Office)
<table>
<thead>
<tr>
<th>Players</th>
<th>Roles</th>
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<tbody>
<tr>
<td>Reporters</td>
<td>Local health staff/ partners: data collection and reporting</td>
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<tr>
<td>Data managers</td>
<td>MHO/CHO: data validation, data analysis, report generation and response</td>
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<tr>
<td></td>
<td>PHO: LGU monitoring and tech. assistance, data validation and analysis, report generation and response</td>
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<tr>
<td></td>
<td>RHO: LGU monitoring and tech. assistance, data validation and analysis, report generation and response</td>
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<td>Program manager</td>
<td>DOH-HEMS: oversees the entire program; provides policy direction; develops guidelines and protocols; report generation for national concerns; national response including mobilization of all logistical requirements and technical assistance</td>
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SPEED Program Impact

- Real-time reporting at all levels
- Facilitate delivery of timely and appropriate intervention
- Prioritized and maximized allocation and mobilization of resources
- Provision of tools for easier descriptive analysis and report generation
- Utilization of health facility codes assignment in other programs
- A model for SMS-based reporting systems
Illustrating the impact of SPEED reporting in CDO and Iligan post-Sendong


- 1st suspected leptospirosis consultation reported
- Prophylaxis provided to IDPs in ECs and patients with wounds and injuries seen in the hosp.
- Consultation of lepto started to rise
- Epidemiologic investigation conducted
- 3 deaths reported
- Peak of consult recorded
- Declared Leptospirosis Outbreak
- Mobile lepto team conducted massive prophylaxis
- Use of rapid diagnostics test
- Additional 7 deaths reported
- Consultation started to decrease
- No additional deaths reported
- Declaration by CHD X that lepto outbreak is over
SPEED Program as an innovation:

- It is the world’s first early warning disease surveillance system in times of disasters and emergencies that has ALL of the following characteristics:
  - With nationwide coverage
  - Is managed and run entirely by the national government with participation of the local government (institutionalized in the office of the DOH-Health Emergency Management Staff)
  - Uses easily available, accessible, affordable, acceptable, and very popular technology – SMS or texting
  - Uses internet-based information management software, making data analysis, report generation, dissemination, and action faster
THANK YOU