Global Health Security Agenda & Polio Legacy Planning

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A health threat anywhere is a health threat everywhere.

• The International Health Regulations (IHR), rev 2005, used by countries to prevent and control public health threats while avoiding unnecessary interference with international travel and trade.

• All WHO Member States committed to achieving the goals of IHR
International Health Regulations (2005)

- **Detect**: Ensure surveillance systems and laboratories detect potential threats
- **Assess**: Work together to make decisions about public health emergencies
- **Report**: through a global network of National Focal Points
- **Respond**: To public health events
Public health threats

Emergence & Spread of New Pathogens

Globalization of Travel, Food and Medicines

Rise of Drug Resistance

Intentional Engineering/Accidental Release

<table>
<thead>
<tr>
<th>Year</th>
<th>Threat</th>
<th># Infected</th>
<th># Deaths</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>Anthrax</td>
<td>22</td>
<td>5</td>
</tr>
<tr>
<td>2002-03</td>
<td>SARS</td>
<td>8,096</td>
<td>77</td>
</tr>
<tr>
<td>2009</td>
<td>H1N1</td>
<td>43-89M</td>
<td>~284,000</td>
</tr>
<tr>
<td>2014-15</td>
<td>Ebola</td>
<td>~28,000</td>
<td>&gt;11,000</td>
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Less than 1/3 of the world is prepared to respond

- By 2012, fewer than 20% of countries had met IHR goals
- By 2014, about 30% of countries were fully prepared to detect and respond to an outbreak

Source: Report to the Director-General of the Review Committee on Second Extensions for Establishing National Public Health Capacities and on IHR Implementation, November 2014
Outbreaks on the rise

CDC reported on 140 outbreaks in 107 countries since March 2014.
Why is global health security important?

**NOT PREPARED**
Most countries not prepared

**DISEASES SPREAD**
Faster and farther

**ECONOMIC IMPACT**
SARS: $40B
Ebola: Billions
GHSA: Prevent, Detect, Respond

- Prevent avoidable catastrophes
- Detect threats early
- Respond rapidly and effectively
Public health expertise

**Laboratory**
- Specimen referral network reaching > 80% of districts
- National reference laboratory performing 6 testing methods under IHR

**Surveillance**
- Surveillance for 3 core syndromes
- Capacity to analyze and link data for functional real-time biosurveillance system

**Emergency Operations**
- EOC activation when needed
- Functional IMS use for preparedness and response

**Workforce Development**
- National workforce planning
- Minimum of 1 trained field epidemiologist per 200,000
Global Health Security: country immunization action package

- Achieve and maintain high vaccine coverage against measles and other epidemic-prone VPDs
- Strengthen capacity for early outbreak detection and effective immunization response activities for all epidemic-prone VPDs
Africa’s Great Polio Legacy

Dr Matshidiso Moeti, WHO Regional Director for Africa, has called for the lessons from polio eradication to be built on to ensure that no child dies from vaccine preventable diseases.
## Polio eradication is GHS

<table>
<thead>
<tr>
<th>Polio Endgame</th>
<th>Prevent</th>
<th>Detect</th>
<th>Respond</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poliovirus detection and interruption</td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Immunization system strengthening</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Biocontainment and biosafety</td>
<td></td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>
GPEI workforce (N=30,000+) is focused in endemic and transitioning countries

- Millions of vaccinators
- Tens of thousands of local social mobilizers
- Thousands of skilled technical staff
- Hundreds of highly skilled technical managers/leaders

Includes social mobilizers. Does not include vaccinators or regional/headquarters personnel.
Building on the polio laboratory & surveillance network (>700 labs)
Global VPD LabNet activities

- Biosafety
- Outbreak investigations
- Technical innovation
  - New laboratory methods
  - New analytical tools
  - Point-of-care
- Biological surveillance
  - New agents
- New interventions
  - Impact of antimicrobials on disease burden
  - New or updated vaccines
- Applied research
- Network building
  - Technology transfer
  - Intensive training
  - Proficiency testing
  - Quality assurance
  - Consultation
  - Accreditation
  - Reference resources
  - Parallel testing
  - Troubleshooting
- Integration with programs
Eradicating polio is good training for GHS

- Identified 894 contacts
- Completed nearly 19,000 contact tracing visits
- Implemented social mobilization strategy reaching 26,000 households
- Established an ETU in two weeks
Polio resurfaces in Mali from Ebola-hit Guinea - WHO

Tom Miles GENEVA (Reuters) - There is a high risk of polio spreading in Ebola-ravaged Guinea and Mali, the World Health Organization said on Monday, after a Guinean...
POLIO LEGACY:
PLANNING FOR A POLIO-FREE WORLD
Post-polio eradication: what will need to be maintained?

- Surveillance and laboratory
- Immunization programs
- Outbreak response
- Vaccine stockpile
- Biocontainment and biosafety
Thank You