Mass Gathering Surveillance for ICC Cricket World Cup in 2007

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Martinique, December 12-13, 2008

OUTLINE

- Preparation and Implementation
- Impact
- Challenges
- Lessons Learnt
- Recommendations
ICC CWC – What is it?

- International Cricket Council Cricket World Cup
- Takes place every 4 years
- One of the world’s largest sporting events
- Requires world class international health standards

ICC CWC 2007 – When? Where?

- March 11 - April 28, 2007 (47 days)
- Nine Caribbean countries:
  Antigua & Barbuda, Barbados, Grenada, Guyana, Jamaica, St. Lucia, St Kitts & Nevis, St. Vincent & Grenadines, Trinidad & Tobago
ICC CWC 2007 – Who?

- 16 teams: (51 matches)
  - Australia, Netherlands
  - Bermuda, New Zealand
  - Bangladesh, Pakistan
  - Canada, Scotland
  - England, South Africa
  - India, Sri Lanka
  - Ireland, West Indies
  - Kenya, Zimbabwe

Mass Gathering Surveillance System (MGSS)

Objective:

To rapidly detect unusual disease situation/patterns, disease outbreaks or injuries that might require immediate intervention before, during and after the event
Activities – Before the games

– Resource mobilization
– Hiring & placement of epidemiologists in 9 CMCs & CAREC
– Establishment of Caribbean Regional Health Emergency Response Team (RHERT)
– Training of national public health lab personnel in 21 CMCs
– Provision of supplies to CAREC lab and national labs
– Establishment of lab protocols, networks and algorithms
– Pilot test the surveillance system

Activities – Before the games

– Training and orientation teleconference sessions with epidemiologists in 9 CMCs
– Development and implementation of web-based reporting tool
– Food safety training sessions for EHOs
– Provision of equipments to support food safety and environmental health in 21 CMCs
– Establishment of a dedicated situation room at CAREC
Activities – During the games

- Daily meetings to review data
- Daily global scan to detect any unusual disease events
- Weekly teleconferences with host countries
- Production of a daily surveillance report
- Maintenance of daily surveillance blog
- Communication via listserv
- Coordination of MGSS
- Coordination & placement of non-host persons to host countries

Summary Surveillance Report
February 28-April 29

- Number of host countries = 9
- Number of reporting days = 57
- 86% of reports submitted on time
- 88% of reports complete
- 24 aberrations reported from 7 countries
- Aberrations occurred on 17 of 57 reporting days
### Completeness and Timeliness of Reports

<table>
<thead>
<tr>
<th>Country</th>
<th>Completeness (%)</th>
<th>Timelines (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Antigua and Barbuda</td>
<td>91.7</td>
<td>91.7</td>
</tr>
<tr>
<td>Barbados</td>
<td>100</td>
<td>66.7</td>
</tr>
<tr>
<td>Grenada</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Guyana</td>
<td>83.3</td>
<td>91.7</td>
</tr>
<tr>
<td>Jamaica</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>St. Kitts and Nevis</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>St Lucia</td>
<td>100</td>
<td>83.3</td>
</tr>
<tr>
<td>St Vincent and Grenadines</td>
<td>100</td>
<td>81.8</td>
</tr>
<tr>
<td>Trinidad and Tobago</td>
<td>42.3</td>
<td>88.5</td>
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</tbody>
</table>

### Aberrations

<table>
<thead>
<tr>
<th>Syndromes</th>
<th>No. of aberrations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fever &amp; Rash</td>
<td>2</td>
</tr>
<tr>
<td>Gastroenteritis&lt;5yr</td>
<td>1</td>
</tr>
<tr>
<td>Gastroenteritis≥5yrs</td>
<td>5</td>
</tr>
<tr>
<td>Fever &amp; Hemorrhagic symptoms</td>
<td>1</td>
</tr>
<tr>
<td>Fever &amp; Respiratory symptoms &lt;5yr</td>
<td>1</td>
</tr>
<tr>
<td>Fever &amp; Respiratory symptoms ≥5yr</td>
<td>4</td>
</tr>
<tr>
<td>Injuries</td>
<td>6</td>
</tr>
<tr>
<td>Fever &amp; Neurological symptoms</td>
<td>1</td>
</tr>
<tr>
<td>Undifferentiated fever &lt;5yr</td>
<td>2</td>
</tr>
<tr>
<td>Undifferentiated fever ≥5yr</td>
<td>1</td>
</tr>
</tbody>
</table>
Summary Surveillance Report
February 28-April 29

- CAREC Lab Data:
  - No unusual pathogens were identified during the period
  - Dengue type 2 & 3 (Guyana), type 4 (Grenada)
  - Influenza A virus (H3N2) in Dominica

- Global Scan data:
  - 12 clusters/outbreaks detected in 5 participating countries
  - 2 outbreaks detected in non-participating Caribbean countries
Example of EARS output

Example of daily surveillance report
Example of daily surveillance report

**Impact**

- Increase in core capacity within the region with respect to MGSS
- Established network of technical experts from around the globe
- Improved laboratory capacity
- Improved capacity to detect and respond to early outbreaks
Challenges

- Administrative issues (procurement, contracts)
- Logistics (e.g. movement of people)
- Limited access to weekend data due to staff availability
- Internet connectivity issues (e.g. bandwidth)

Lessons Learnt

- CWC provided opportunity to critically review & strengthen CD surveillance systems
- Important that sufficient time allotted for training in the use of new & updated tools
- Listserv invaluable for real time information sharing
- Procurement of supply is a long process
- Daily one-page surveillance report user friendly
- International cooperation was important
Recommendations

- Maintain situation room
- Maintain routine weekly surveillance meetings
- Implement routine surveillance system monitoring & evaluation
- Web-based tool available to all CAREC countries
- Use of real-time communication mechanisms such as listserv and virtual community should be encouraged
- Sufficient time for procurement of supplies should be allocated
- Maintain networks/collaborations between stakeholders

Merci

Thank you