H1N1 Surveillance in Island Nations

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Decision-Making for Using Community Mitigation Measures
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Experiences from Selected Island States

- Why do surveillance
- Approaches to doing surveillance
- Advantages
- Challenges
- Surveillance for community mitigation

These are issues identified in published data.
For each, let us know if they are similar to that experienced by your Caribbean country, what was not similar, and what was not captured.

H1N1 Surveillance Reports for Selected Island States

Author	Country	Period	First case	Total cases Attack Rate (per 1000)	Population
Sobers-Grannnum	Barbados	Jun - Oct	June 3	155	256,000
Larrieu	Guadeloupe Martinique, St. Martin	Aug-	Aug/Sept	28-70	453,000 413,000 29,500
	St. Barthelemy		December	28-70	7,500
Lernout	Mayotte	9 weeks			90,000
Renault	Reunion	Jul - Oct	July 5 (I)* July 23 (A)*	128	725,000
Sigmunds-dottir	Iceland	May-Dec	May/June (I)*? July (A)*	100-220	293,000

*I = imported. A = autochthonous
#: ARI = 2,483

Surveillance

- The on-going systematic collection, collation, analysis and interpretation of data of public health interest and the dissemination of the findings to those who need to effect public health action, response or policy.

Why do Surveillance?

- **Regionally: Although globally similar characteristics, each islands epidemic will differ in terms of scale and severity**
- **Containment phase**
  - **Detect the introduction of the pandemic virus**
  - **Early detection of the occurrence of epidemic/pandemic**
  - **Detection and management of individual cases,**
- **Autochthonous circulation confirmed**
  - **Monitor the population through data collected from sentinel doctors' networks and virological surveillance**
  - **Follow evolution until over**
  - **Monitor spread and impact on public health**
  - **Estimate attack rate, hospitalization rate, mortality rate**
- **Provide data to identify decision points to trigger appropriate mitigation and healthcare preparedness strategies**
  - ***Public health action of interest for this meeting***

Approaches to Pandemic Disease Surveillance in Island Nations

- Surveillance may be based on different systems
  - Active and passive surveillance
  - Enhanced regular influenza surveillance system
    - Influenza-like illness (ILI), acute respiratory illness (ARI) and/or severe acute respiratory illness (SARI)
  - Sentinel practitioner network for influenza-like illness
  - Surveillance of the activity at the hospital emergency departments
  - Virological surveillance
  - Surveillance of severe and fatal cases
    - Review of death certificates
  - Data collection on sale of antipyretic and anti-viral drugs
  - School absenteeism reports
  - Online automatic system for immediate reporting of ILI and cases with laboratory-confirmed influenza (Iceland)

Potential Advantages

- Active sentinel network easier to establish on islands?
- Although resources limited, can pool regional expertise on emerging diseases
- Provide opportunity to create networks and regionally strengthen surveillance of infectious diseases
- Improved virological surveillance
- Strengthened public and private sector partnerships
- Effective regional and international collaborations
- Apply lessons to outbreaks caused by other pathogens

Potential Challenges

- Logistical aspects of virological surveillance
- Co-circulation of dengue virus in many Caribbean countries
- Need to rapidly implement
- Overwhelmed by complexity and volume

Surveillance to Identify Decision Points to Trigger Community Mitigation Strategies

- Did you use surveillance data to trigger CM strategies?
- Did it work, was the surveillance information useful?
  - What worked?
  - What made it work well?
- What surveillance information did/would you want?
- What information did you need that you did not get?
- What information did you get that did not make sense?

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