Syndromic Surveillance in California

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CCLHO Health Data Committee Oct 1, 2008
BES Mission

- Improve ability to detect a potential bioterrorism event
- Improve ability to respond to a bioterrorism event
Activities

- Maintain knowledge base in syndromic surveillance methods and literature
- Maintain site on CAHAN that lists sources for syndromic surveillance
- Exploring options for statewide ED surveillance, Biosense, HMS
- Sponsored EARS training in coordination with CDC and Southern CA LHDs
- Considering statewide OTC surveillance system (NRDMS, HMS)
- Poison Control Center Data- webinar, exploring data analysis, visualization, reporting
- Electronic Death Registry system- competitive grant proposal declined by CDC
Syndromic Surveillance Survey
November 2007

- Who uses it?
- Sources of data
- Systems
- Methods
- Evaluations
- Resources
- Plans
- Reasons for not using
Is your jurisdiction engaging in Syndromic Surveillance or other enhanced surveillance to improve situational awareness or early event detection?

Yes = 40/61 (66%)
# Data Sources (N=40)

<table>
<thead>
<tr>
<th>Data Source</th>
<th>No. LHDs (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emergency Department</td>
<td>23 (57.5)</td>
</tr>
<tr>
<td>School Absentee data</td>
<td>21 (52.5)</td>
</tr>
<tr>
<td>Sentinel Provider data</td>
<td>18 (45)</td>
</tr>
<tr>
<td>Foodborne Complaint line</td>
<td>17 (40)</td>
</tr>
<tr>
<td>Pharmacy data</td>
<td>14 (35)</td>
</tr>
<tr>
<td>Laboratory data</td>
<td>11 (27.5)</td>
</tr>
<tr>
<td>Vital Statistics</td>
<td>11 (27.5)</td>
</tr>
<tr>
<td>Vector Control</td>
<td>10 (25)</td>
</tr>
<tr>
<td>Coroner’s data</td>
<td>10 (25)</td>
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</tbody>
</table>
## Data Sources con’t

<table>
<thead>
<tr>
<th>Data Source</th>
<th>No. LHDs (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emergency Medical Service (EMS)</td>
<td>8 (20)</td>
</tr>
<tr>
<td>Urgent Care</td>
<td>6 (15)</td>
</tr>
<tr>
<td>Hospital Discharge</td>
<td>6 (15)</td>
</tr>
<tr>
<td>Animal Health</td>
<td>6 (15)</td>
</tr>
<tr>
<td>911 calls</td>
<td>5 (12.5)</td>
</tr>
<tr>
<td>Poison Control</td>
<td>4 (10)</td>
</tr>
<tr>
<td>Hazmat Response</td>
<td>4 (10)</td>
</tr>
<tr>
<td>Nurse call center</td>
<td>1 (2.5)</td>
</tr>
</tbody>
</table>
Systems

- **Current Use**
  - RODS NRDM (14), Reddinet (11), Biosense (9), FirstWatch (3), ESSENSE (1)

- **Discontinued**
  - RODS NRDM (5), ESSENCE (2), RODS (1), Biosense (1), SYRIS (1)
Other Questions (N=40)

- 37 provide feedback to hospitals or data sources
- 28 have future plans to increase surveillance capacity
- 23 have an algorithm or procedure for deciding when to investigate
- 15 have worked with other jurisdictions on regional projects
- 12 have sufficient resources to set up and maintain systems
- 7 have done any evaluation to determine if SS is beneficial
Emergency Dept Data (N=23)

- **Number of hospitals**
  - 1-2 (10)
  - 3-5 (6)
  - 6+ (7)
  - >75% or population covered (10)

- **Receive data**
  - Real time twice daily (2)
  - Daily (8)
  - Weekly (6)
  - Monthly or as needed (6)
  - Automated data (6)
Reasons for not using SS (N=21)

- 10 have done some SS or drop in surveillance in the past
- 17 Lack staff resources
- 12 Lack financial resources
- 8 Cost outweigh benefits
- 8 No benefits
- 8 Lack IT resources
- 6 Lack staff/analytical tools
- 6 Lack data sources/access to hospitals
Fire Related Syndromic Surveillance Report
San Diego Aberration Detection and Incident Characterization

Respiratory

Count

Date

Figures include data from the years 2007 and 2008, with a notable peak around October 2007.

No other relevant information can be extracted from the image.
Biosense Southern California
Wildfire report
(San Diego hospitals data only shown)

- Respiratory syndrome 8-36% daily increase over 7 day baseline
- Asthma 150-615% increase in hospital admissions
- Burns - 3-9 visits/day
- Cardiac dysrhythmias – 5-6 visits/day
- Total visits 16-85% increase in admissions, 16-40% increase in ED visits