Director’s Update Brief

novel 2009-H1N1

Tuesday

21 JUL 2009 0815 EDT

Day 95

Week of:

Explaining the burden of disease and aligning resources
Key Events

novel 2009-H1N1 – 21 JUL 2009

- novel 2009-H1N1 Declarations
  - WHO: Pandemic Phase 6 (11 JUN 2009 1600 EDT)
  - USG: Public Health Emergency declared (26 Apr 2009)
  - HHS: Downgraded to Phase 1 – Awareness (9 May 2009)

- US Cases (as of 16 JUL 2009)

<table>
<thead>
<tr>
<th>US TOTALS</th>
<th>CASES</th>
<th>HOSPS</th>
<th>DEATHS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CASES</td>
<td>40,617</td>
<td>4,795</td>
<td>262</td>
</tr>
<tr>
<td>SLTTs AFFECTED</td>
<td>55</td>
<td>48</td>
<td>28</td>
</tr>
</tbody>
</table>

*Majority of states only testing hospitalized cases.

Only hospitalizations and deaths of cases will be reported as of 23 JUL 2009.
Reported cumulative number of confirmed cases of influenza A(H1N1)v by country, as of 18 July 2009, 17:00 hours CEST
South Africa

- Growing dominance of novel 2009-H1N1 over seasonal influenza

- CDC.EISO in Soweto
  - SARI surveillance in ICU
  - Increase sampling of adults in hospital
  - Expanding to ED, deaths
### Epidemiology/Surveillance

**Syndromic Surveillance Systems, *Existing and Opportunities under Evaluation* novel 2009-H1N1 – 21 JUL 2009**

<table>
<thead>
<tr>
<th>Name</th>
<th>Status</th>
<th>Description</th>
<th>Catchment</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>ILINet</td>
<td>Existing</td>
<td>Outpatient visits for ILI based on physician diagnosis</td>
<td>2500 providers in 50 states (&gt;23 million visits/year)</td>
<td>Daily and weekly</td>
</tr>
<tr>
<td>VSD</td>
<td>Existing</td>
<td>Outpatient and inpatient pneumonia and influenza using ICD9 codes</td>
<td>8.25 million</td>
<td>OPD weekly IPD monthly</td>
</tr>
<tr>
<td>122 Cities Mortality</td>
<td>Existing</td>
<td>Pneumonia and influenza deaths</td>
<td>24% of US population</td>
<td>Weekly (daily possible)</td>
</tr>
<tr>
<td>Indian Health Service</td>
<td>Existing</td>
<td>Outpatient and inpatient pneumonia and influenza using ICD9 codes</td>
<td>2 million</td>
<td></td>
</tr>
<tr>
<td>BioSense</td>
<td>Existing</td>
<td>Outpatient and inpatient pneumonia and influenza using ICD9 codes</td>
<td>550 hospitals and EDs</td>
<td>Daily</td>
</tr>
</tbody>
</table>
**Epidemiology/Surveillance**

**Syndromic Surveillance Systems, Existing and Opportunities under Evaluation**

**novel 2009-H1N1 – 21 JUL 2009**

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<tr>
<td>BRFSS</td>
<td>In development</td>
<td>Community infection and care seeking frequency</td>
<td>National and Territories</td>
<td>Monthly</td>
</tr>
<tr>
<td>DiSTRIBuTE</td>
<td>In development</td>
<td>ED visits for summarized counts of ILI syndrome</td>
<td>TBD</td>
<td>Daily</td>
</tr>
<tr>
<td>GE</td>
<td>In development</td>
<td>Outpatient visits by patient complaint and diagnosis Pharmaceutical data Laboratory findings</td>
<td>TBD</td>
<td>TBD</td>
</tr>
<tr>
<td>SDI</td>
<td>Under evaluation</td>
<td>Outpatient visits for ILI based on ICD-9 code identification</td>
<td>45% of insured US outpatient visits</td>
<td>Daily</td>
</tr>
<tr>
<td>SDI</td>
<td>Under evaluation</td>
<td>Inpatient visits for pneumonia and influenza from all cause hospitalization using ICD9 codes</td>
<td>21% of insured US inpatient encounters</td>
<td>1 week</td>
</tr>
<tr>
<td>SDI</td>
<td>Under evaluation</td>
<td>Vaccine administration from outpatient visits</td>
<td>45% of insured US outpatient visits</td>
<td>Daily</td>
</tr>
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</tr>
<tr>
<td>Cerner</td>
<td>Under evaluation</td>
<td>Influenza laboratory testing, may be able to provide bacterial infections</td>
<td>EST: 22 labs in 20 states</td>
<td></td>
</tr>
<tr>
<td>Voxiva</td>
<td>Under evaluation</td>
<td>Inpatient visits for pneumonia and influenza from all cause hospitalization using ICN reports Hospital census reports</td>
<td>TBD by enrollment through APIC</td>
<td>TBD, but flexible</td>
</tr>
<tr>
<td>Premier</td>
<td>Under evaluation</td>
<td>Admission diagnoses Lab testing ICU information Pharmaceutical utilization Patient disposition</td>
<td>200 hospitals</td>
<td>Real-time</td>
</tr>
<tr>
<td>MedMined</td>
<td>Under evaluation</td>
<td>Admission diagnoses Influenza test orders (all labs) Pharmaceutical utilization Hospital census</td>
<td>310 hospitals</td>
<td>Real-time</td>
</tr>
</tbody>
</table>
• Conference call Friday 7/17 with Laboratory Partners’ Organizations regarding interpretation of Rapid Influenza Diagnostic Test results
  – General agreement on guidelines
    • Refined Guidance for RIDT Testing – submitting final draft to CDC clearance emphasizing “use negative test results with caution”
    • Possibly different testing algorithms for “peak” (high prevalence) and “off season” testing
      – Suggest single document for clinicians and laboratories
      – Suggest guidelines precede or accompany MMWR on RIDT performance data
• FDA Proposed Changes to EUA for novel 2009-H1N1 PCR
  – In discussion w/FDA regarding new rule to limit PCR testing for novel 2009-H1N1 to only FDA-approved laboratories submitting validation via EUA
  – Further engagement needed to determine if new rule may lead to increased testing at PHLs
Community Measures Task Force (CMTF)
Update
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- Work on drafting comprehensive school guidance continues
  - Webinar with state health directors, other public health scheduled for July 30 to serve as sounding board

- Isolation guidance in clearance

- Planning meeting to discuss community measures lessons learned from Spring/Summer (mid August)
7/20/09 Tweets:

- Shock that Australia's worst case scenario predicts 6,000 novel 2009-H1N1 deaths
- novel 2009-H1N1 tests are unreliable
- Thailand to step up flu screening measures
- Hong Kong reports 76 new cases
- Users say they avoid coworkers, friends, relatives, etc. who may have novel 2009-H1N1
- First confirmed novel 2009-H1N1 death on Guam
- "20,000 people die from novel 2009-H1N1 and everybody wants to wear a mask.
- 9 million people die from AIDS and no one wants to wear a condom
- User says that "more and more evidence" shows that the government created novel 2009-H1N1 in a lab and released it
Supporting Documentation
Percentage of Visits for Influenza-like Illness (ILI) Reported by the US Outpatient Influenza-like Illness Surveillance Network (ILINet), National Summary 2008-09 and Previous Two Seasons

† There was no week 53 during the 2006-07 and 2007-08 seasons, therefore the week 53 data point for those seasons is an average of weeks 52 and 1.
Epidemiology/Surveillance
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Current Influenza Surveillance – ILINet Regions IV-VI

Region IV - AL, FL, GA, KY, MS, NC, SC, TN

Region V - IL, IN, MI, MN, OH, WI

Region VI - AR, LA, NM, OK, TX
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Current Influenza Surveillance – ILINet Regions VII-X

Region VII - IA, KS, MO, NE
Region VIII - CO, MT, ND, SD, UT, WY
Region IX - AZ, CA, HI, NV
Region X - AK, ID, OR, WA

Week Ending Dates

% of Visits for ILI

Week Ending Dates

% of Visits for ILI

Internal Use Only (FIUO)---For Official Use Only (FOUO)
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Percentage of Visits Due to ILI Reported to ILINet*, by Day**

*Average of 181 providers reporting per day
**Weekend and holiday data excluded

Date

% ILI

Three Day Moving Average
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Percentage of Deaths Due to Pneumonia and Influenza
Reported by 122 Cities Mortality Reporting System

*Average of 53 cities reporting per day
**Weekend & Holiday data excluded
Epidemiology/Surveillance
novel 2009-H1N1 – 21 JUL 2009
Pneumonia and Influenza Mortality for 122 U.S. Cities
Week Ending 07/11/2009

Weeks

% of All Deaths Due to P&I

Seasonal Baseline
Epidemic Threshold

2005 2006 2007 2008 2009

21 30 40 50 10 20 30 40 50 10 20 30 40 50 10 20