



Director's Update Brief

Tuesday

09 JUN 2009 1100 EDT

Day 52

**The Week of Epidemiology, Budget, and
Communications Analyses in Support of
Vaccination Campaign Planning**



Situation Awareness 09 JUN 2009



- Severe Weather

- Missouri, Nebraska, Iowa, Kansas, Illinois

Source: FEMA National Sitrep for 9 June, 2009

- Other Public Health Events

- Earthquake: Adak, AK (8 June 09); No reports of damage or injuries; No tsunami generated

Source: FEMA National Sitrep for 9 June, 2009

- International

- *Vibrio cholerae* (Cholera) - Zimbabwe: 98,441 cases; 4,277 deaths; overall CFP=4.3% (as of 2 June 09)
- Influenza H5N1 Humans - Egypt: 79th case NAMRU-3 confirmed

Source: GDD Ops Center Daily Report 8 June 2009



Key Events Novel Influenza A (H1N1) 09 JUN 2009



- Novel Influenza A (H1N1) Declarations
 - WHO: Pandemic Phase 5 (29 Apr 1600 EDT)
 - USG: Public Health Emergency declared (26 Apr 2009)
 - HHS: Downgraded to Phase 1 – Awareness (9 May 2009)
- International Cases: 25,288 confirmed cases in 73 countries*
- US Cases: As of 05 JUN 2009 (all states reporting cases)

US TOTALS	Cases	Hosp	Deaths
CASES	13,217	1,027	27
SLTTs AFFECTED	52	41	10



Epidemiology/Surveillance
Novel Influenza A (H1N1) Case Counts by State
As of 05 JUN 2009 0100 EDT (n=13,217)



- **Secondary attack rate** in household contacts:
 - ARI—19%
 - ILI—12%
- **Generation time:**
 - ARI—2.0-3.1 days
 - ILI—2.4-3.1 days
- **Hospitalizations:** 1,027 (7.8%) as of 05 JUN 2009
- **Deaths:** 27 (0.20%) in 10 states as of 05 JUN 2009
- Change from daily to weekly reporting as of 03 JUN 2009
 - next update 12 JUN 2009

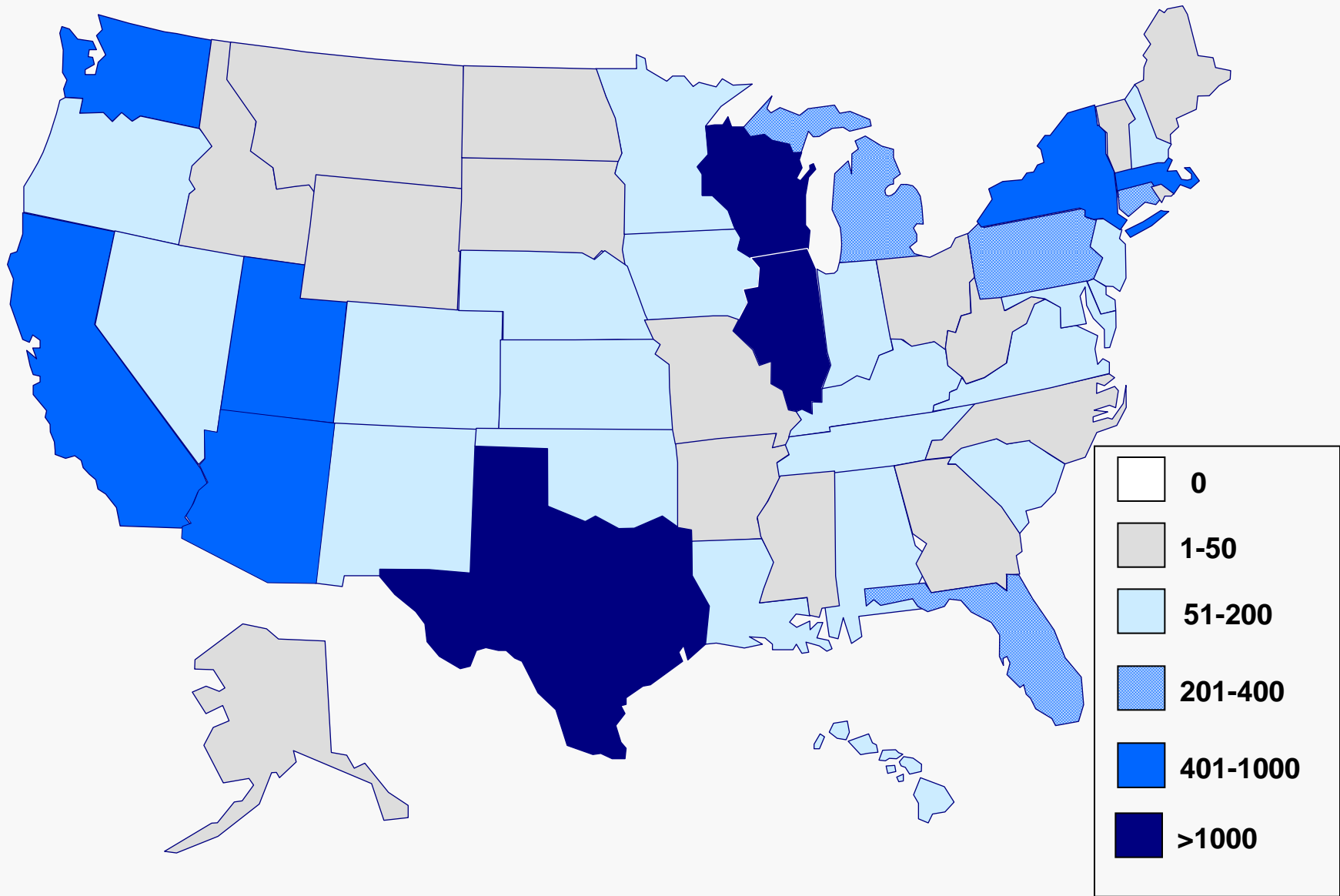
*indicates sites reporting aggregate data to CDC



Epidemiology/Surveillance

Novel Influenza A (H1N1) Cases Reported to CDC by State

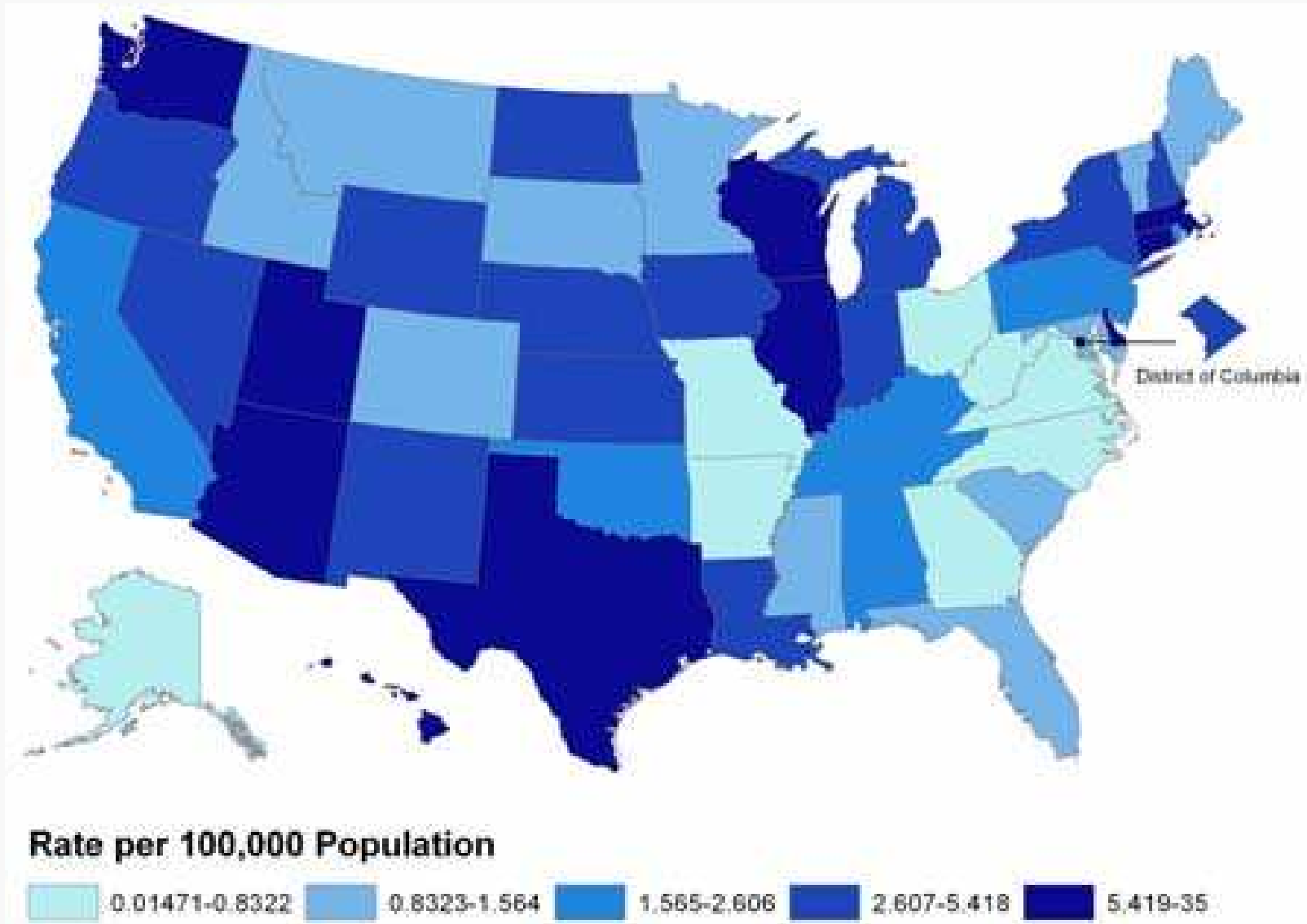
As of 05 JUN 2009 0100 EDT (n=13,217)





Epidemiology/Surveillance

Rate of Novel Influenza A (H1N1) Reported to CDC per 100,000 Population As of 05 JUN 2009 0100 EDT (n=13,217)

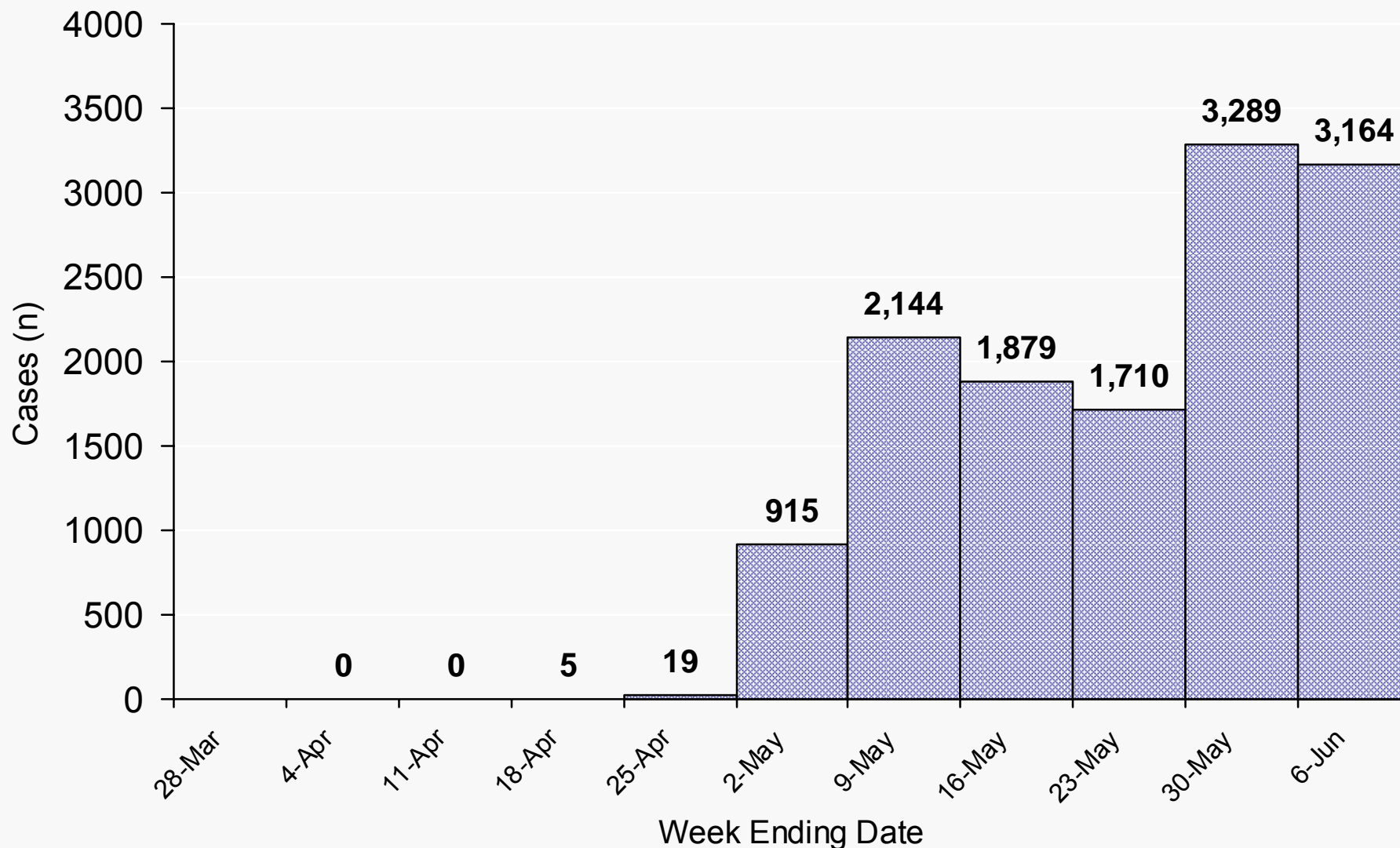




Epidemiology/Surveillance

Novel Influenza A (H1N1) Cases by Report Date

As of 05 JUN 2009 0100 EDT (n=13,125*) (Weekly**)



*No Date available for 92 cases.

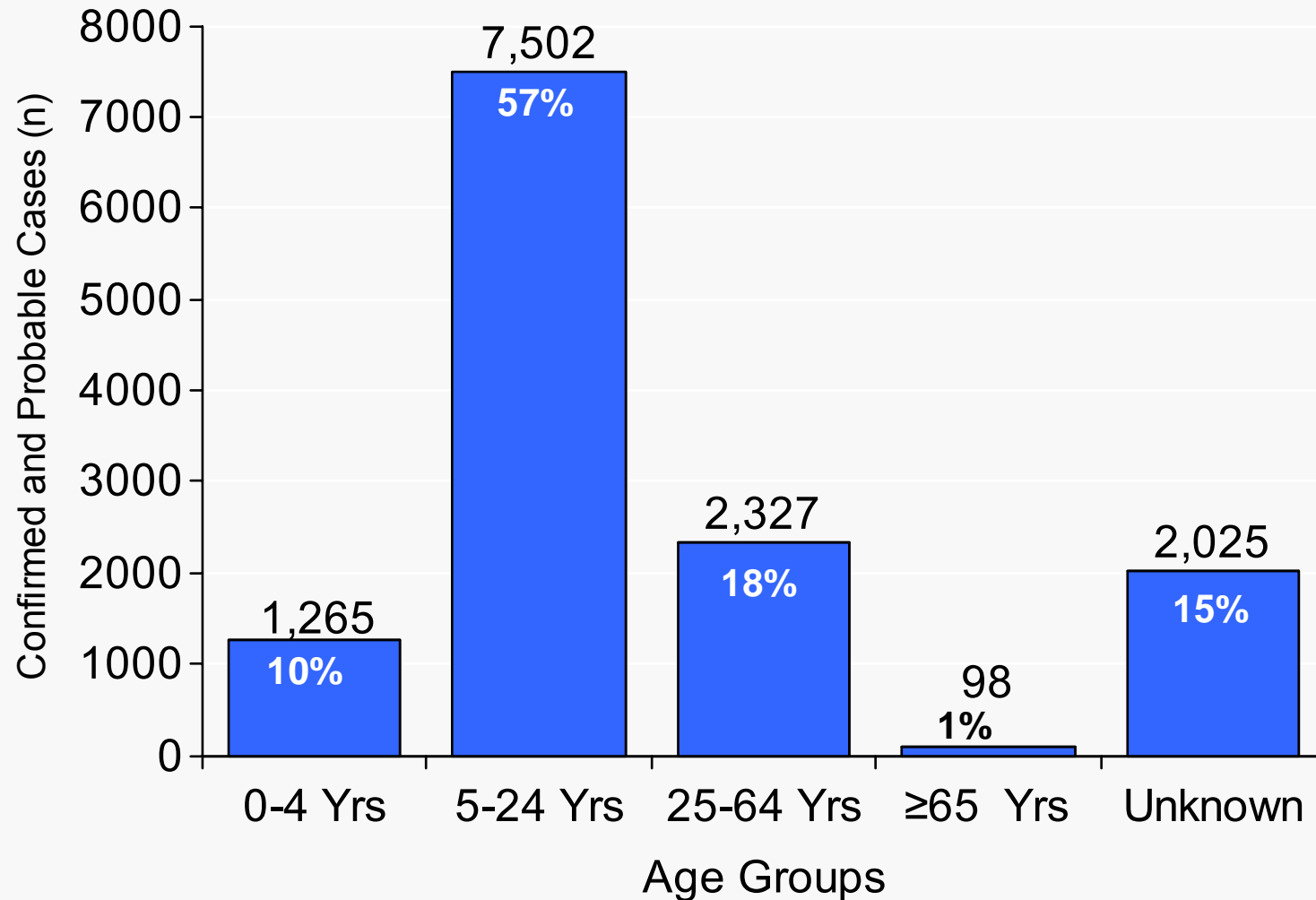
**Data for week ending 6 June 2009 include reports submitted between 8:00 AM EDT 5/31/2009 and 1:00 AM 6/3/2009.217



Epidemiology/Surveillance

Novel Influenza A (H1N1) Cases by Age

As of 05 JUN 2009 0100 EDT (n=13,217)



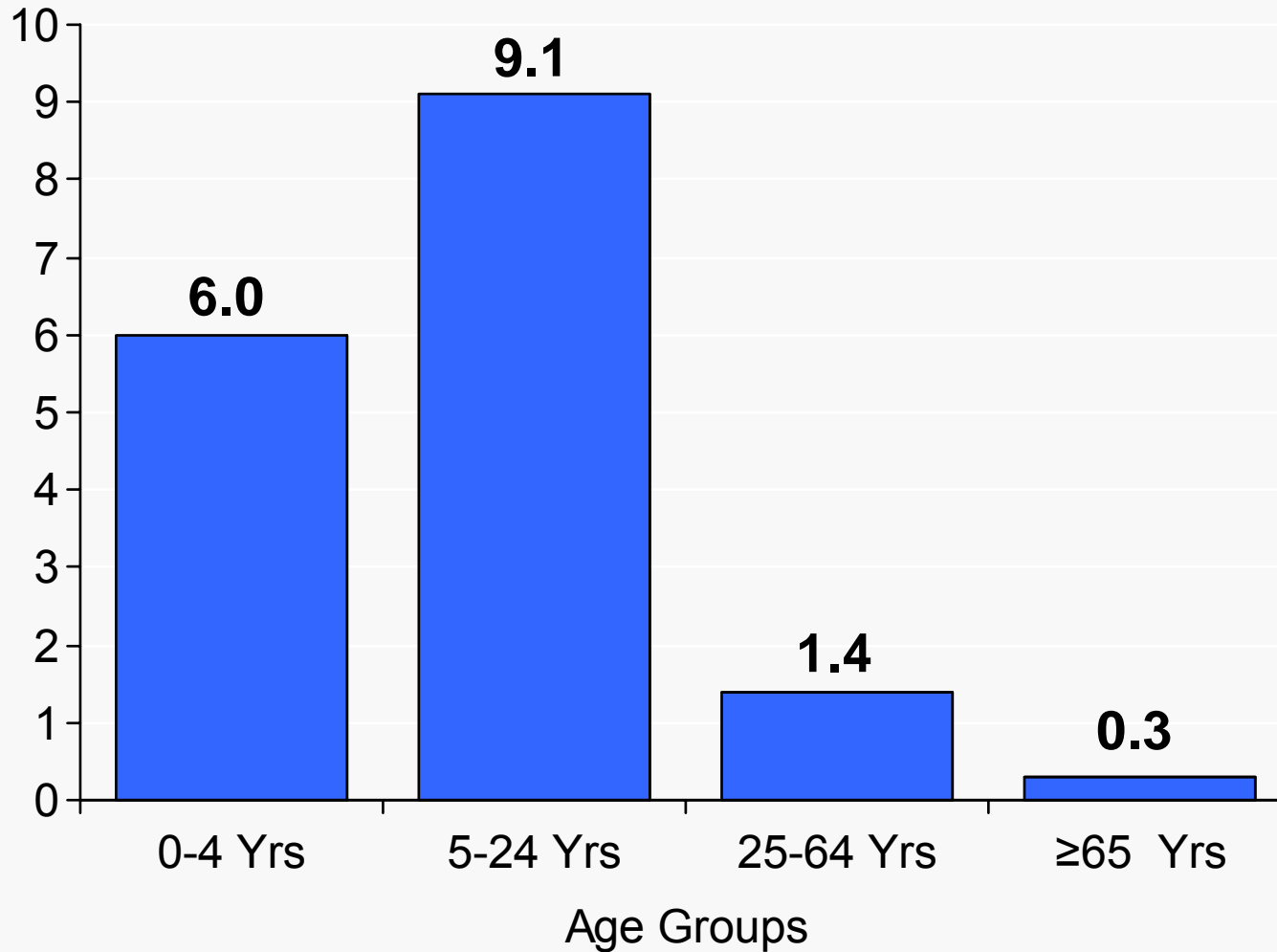
Percentages represent proportion of total cases



Epidemiology/Surveillance

Novel Influenza A (H1N1) Cases per 100,000 Population by Age

As of 05 JUN 2009 0100 EDT (n=13,217)

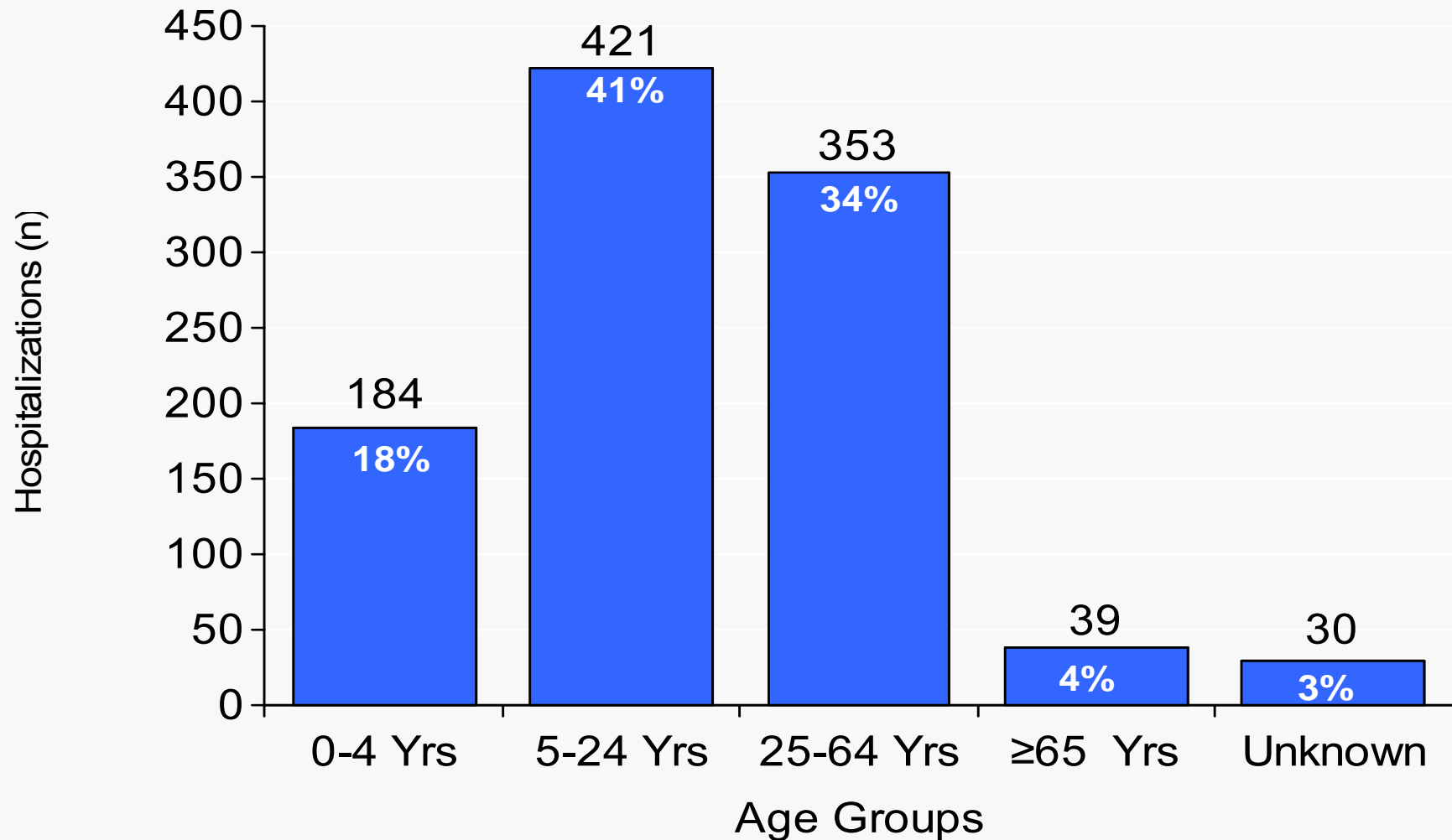




Epidemiology/Surveillance

Novel Influenza A (H1N1) Hospitalizations by Age

As of 05 JUN 2009 0100 EDT (n=1,027)



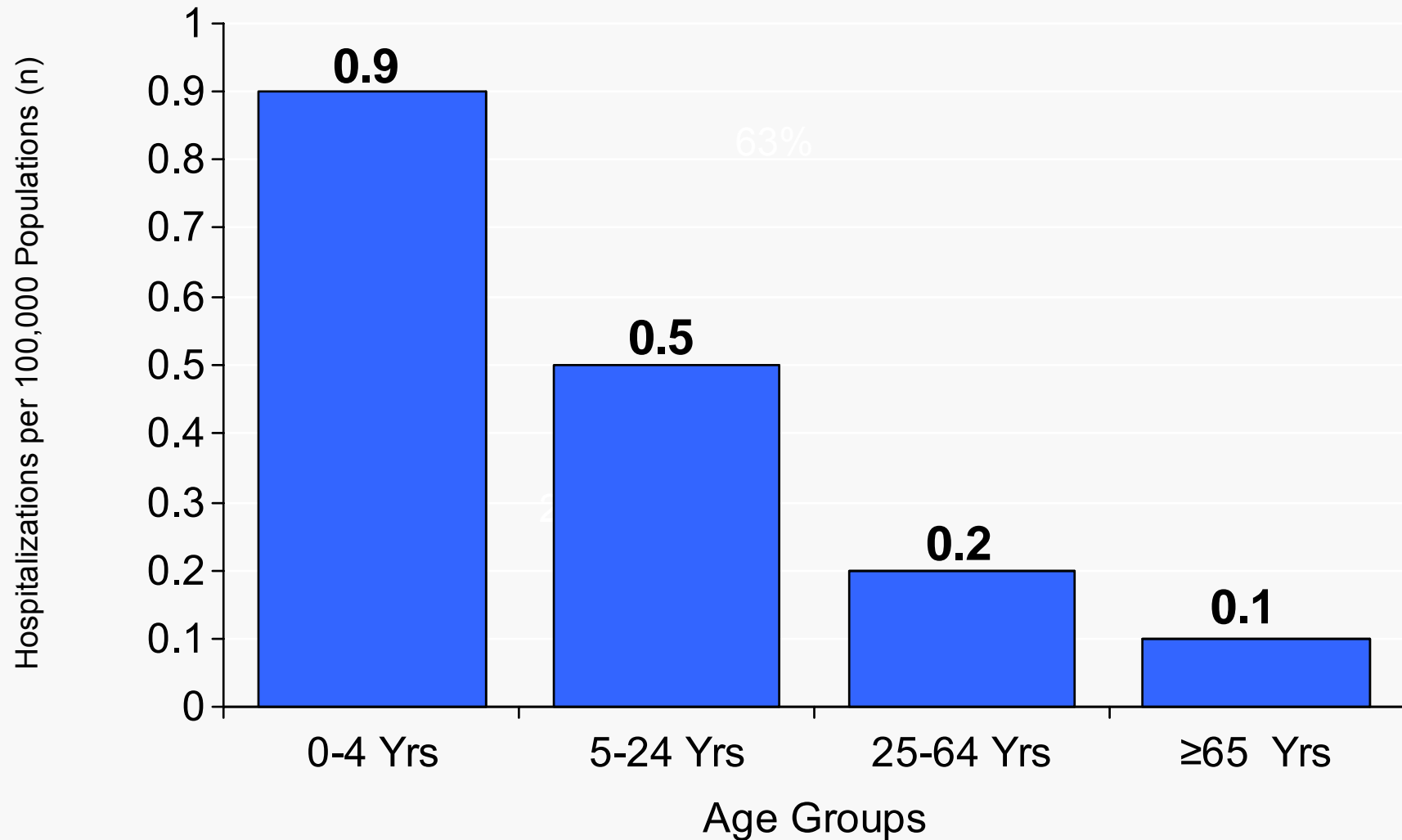
Percentages represent proportion of total hospitalizations



Epidemiology/Surveillance



Novel Influenza A (H1N1) Hospitalizations / 100,000 Population by Age Group As of 05 JUN 2009 0100 EDT (n=1,027)

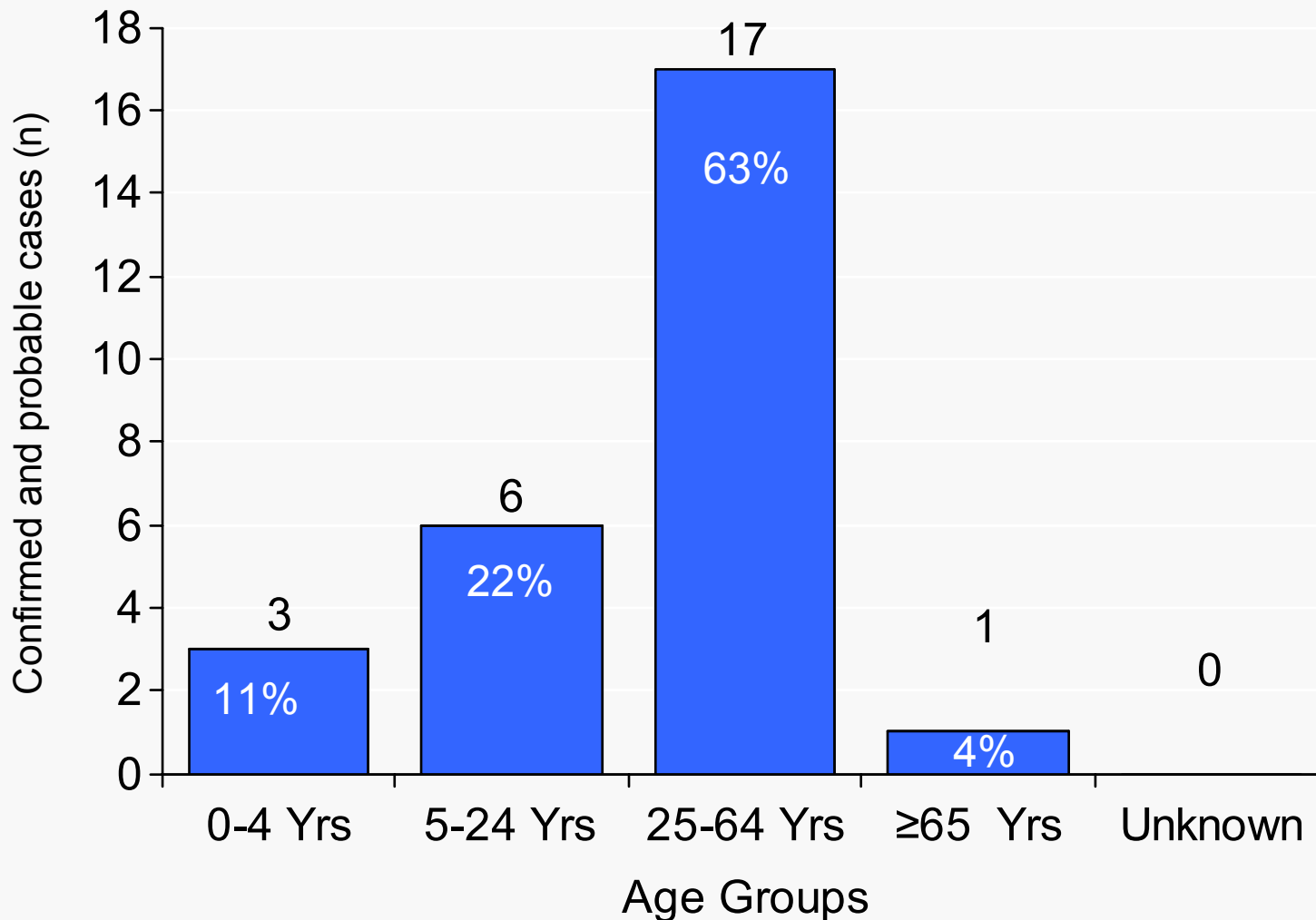




Epidemiology/Surveillance

Novel Influenza A (H1N1) Deaths by Age Group

As of 05 JUN 2009 0100 EDT (n=27)



States:

AZ	- 4
CT	- 1
IL	- 5
MI	- 1
MO	- 1
NY	- 8*
TX	- 3
UT	- 2
VA	- 1
WA	- 1

*7 in NYC

Percentages represent proportion of total deaths



Epidemiology/Surveillance
Novel Influenza A (H1N1) Hospitalizations Reported to CDC by States
As of 05 JUN 2009 0100 EDT



- 1,027 / 13,217 (7.8%) hospitalizations
- Detailed clinical data available on 201 / 1,027 (19.6%) hospitalized patients
 - Median time from onset of illness to hospital admission
 - 3 days (range 1-14 days)
 - Median length of stay
 - 3 days (range 1-53)
 - Median days from admission to discharge or death
 - 7 (range 2-65)



Epidemiology/Surveillance
Novel Influenza A (H1N1) Hospitalizations Reported to CDC
Clinical Characteristics As of 05 JUN 2009 0100 EDT (n=201)



Symptom	Percent
Fever*	92%
Cough	84%
Shortness of breath	54%
Fatigue/weakness	42%
Chills	35%
Myalgias	33%
Rhinorrhea	33%
Sore throat	30%
Headache	29%
Vomiting	28%
Wheezing	23%
Diarrhea	21%



Epidemiology/Surveillance

Novel Influenza A (H1N1) Hospitalizations Reported to CDC Underlying Conditions As of 05 JUN 2009 0100 EDT (n=201)



Condition	Percent
<i>Any underlying condition</i>	71%
Asthma or COPD	32%
Diabetes	16%
Immunocompromised	12%
Chronic cardiovascular disease**	11%
Current Smoker	10%
Chronic Renal Disease	8%
Neurocognitive disorder	8%
Neuromuscular disorder	7%
Pregnant	7%
Seizure disorder	6%
Cancer	3%



Epidemiology/Surveillance
Novel Influenza A (H1N1) Hospitalizations Reported to CDC
Clinical Information As of 05 JUN 2009 0100 EDT (n=201)



Characteristic	(%)
Chest radiograph with pneumonia at admission	41%
ARDS	9%
Dx with sepsis at admission	9%
Mechanical ventilation	16%
Treated with antivirals	72%
Treated with antibiotics	80%
Treated with steroids	36%
Admitted to ICU	24%
Died	8%
Recovered	86%



Epidemiology/Surveillance
Novel Influenza A (H1N1) - 05 JUN 2009
Surveillance Systems

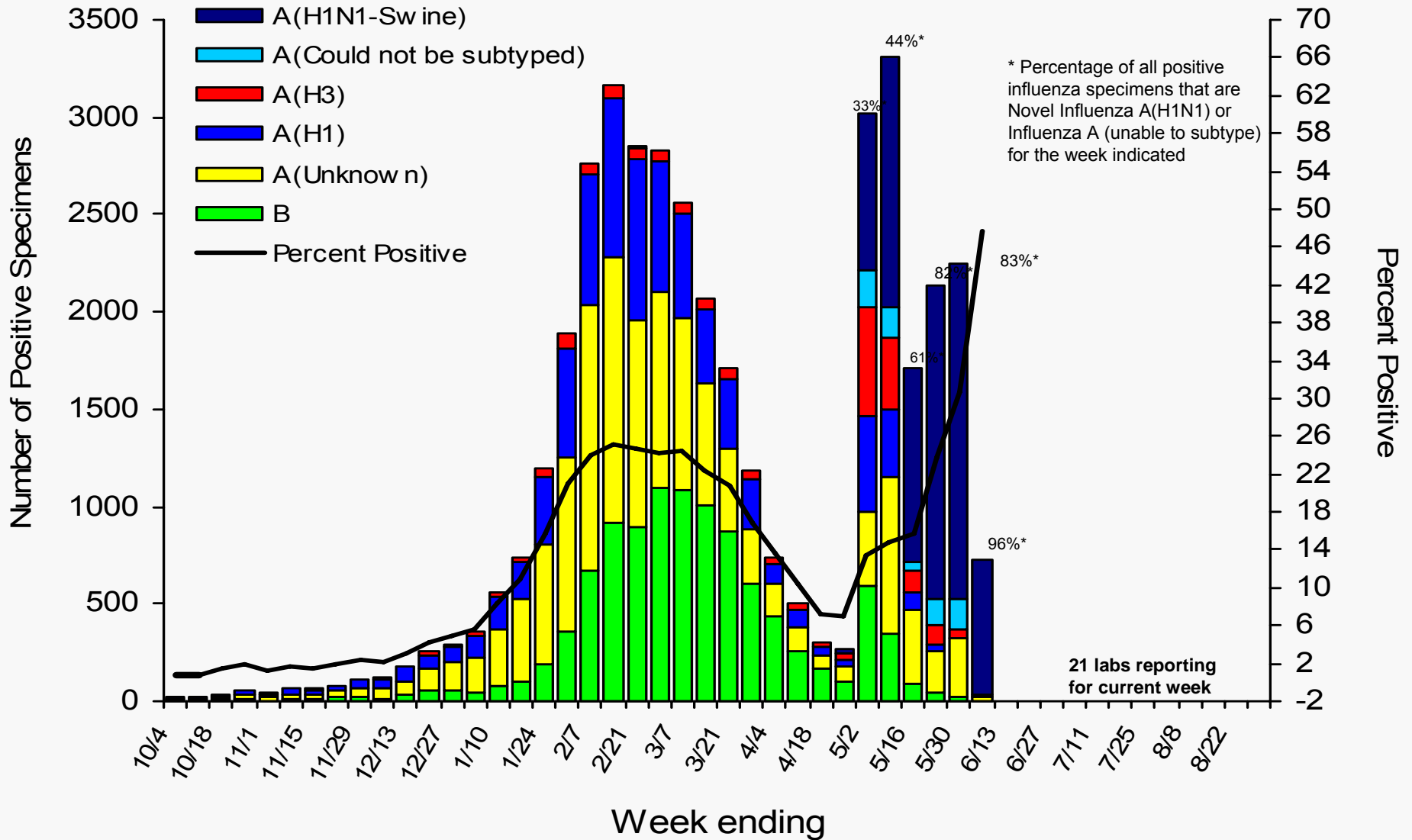


- **WHO/NREVSS Collaborating Laboratories**
 - Seasonal influenza A (H1), A (H3), and B viruses co-circulated with novel influenza A (H1N1) viruses
- **ILINet (week ending 30 May)**
 - % of ILI outpatient visits ↓ the national baseline
 - Overall, the percentage of outpatient visits for ILI is decreasing
- **122 Cities Mortality Reporting System (graph)**
 - % pneumonia and influenza deaths not exceeding the epidemic threshold
 - % deaths due to pneumonia and influenza remains stable
- **Geographic Spread of Influenza as Assessed by State and Territorial Epidemiologists – state reporting:**

Widespread: 4 states	Regional: 11 states
Local: 13 states + DC	Sporadic: 21 states
None: 1 state	



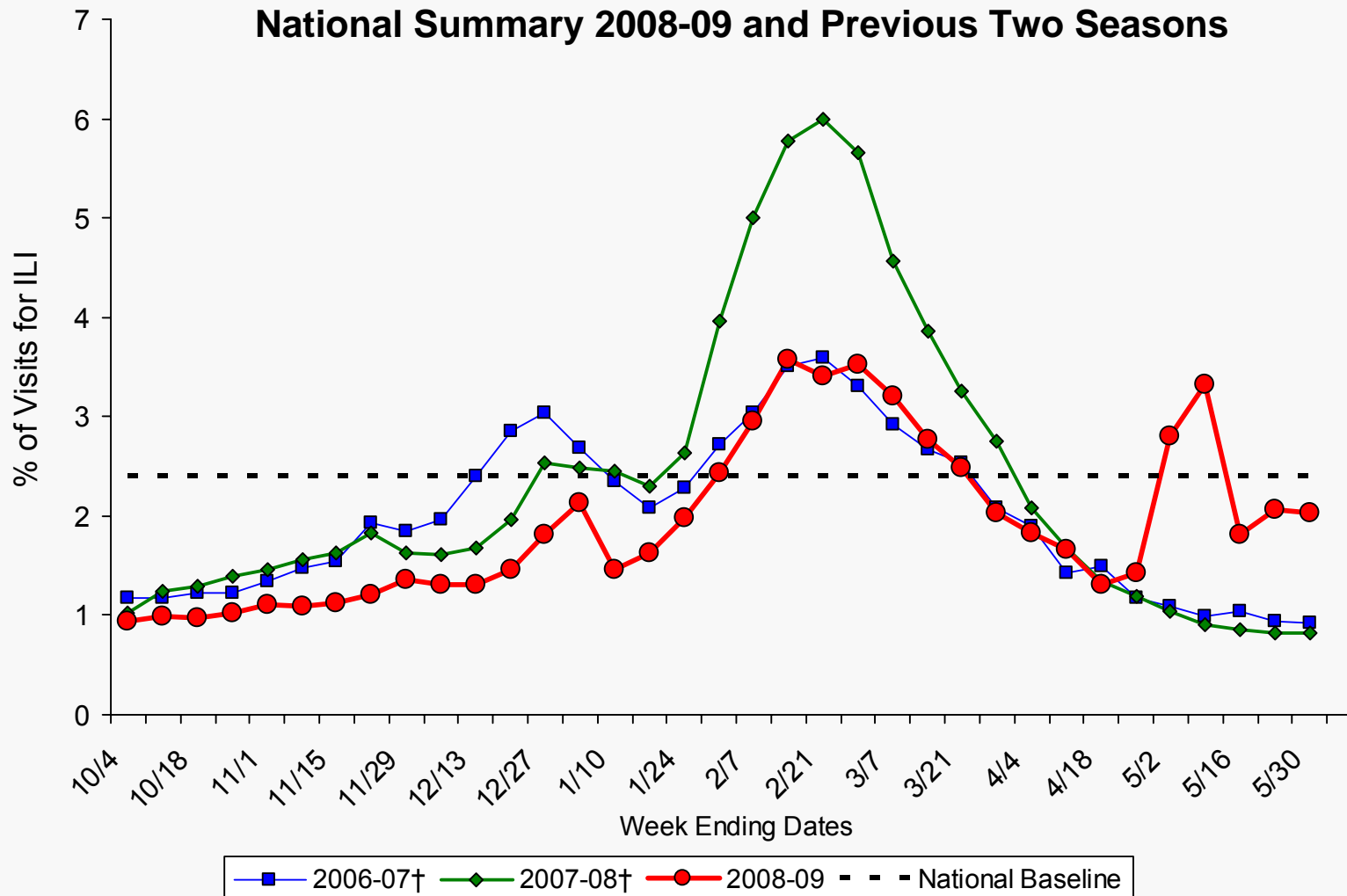
Epidemiology/Surveillance Novel Influenza A (H1N1) - U.S. WHO/NREVSS Collaborating Laboratories Summary, 2008-09





Epidemiology/Surveillance Novel Influenza A (H1N1) – 05 JUN 2009

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



NOTE: Week ending dates vary by influenza season

*Preliminary ILI data for week 21, as of June 5, 2009 (n=934 weekly ILI reports received from 48 states)

† 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.



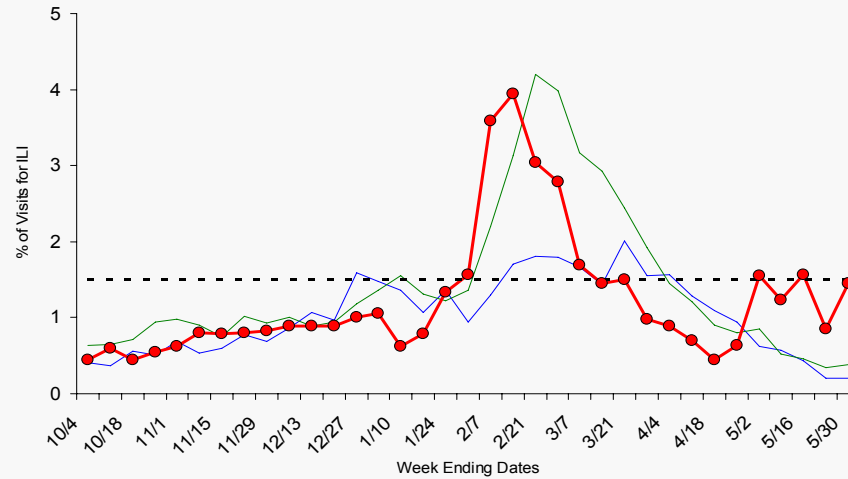
Epidemiology/Surveillance

Novel Influenza A (H1N1) – 05 JUN 2009

Current Influenza Surveillance – ILINet Regions I-III

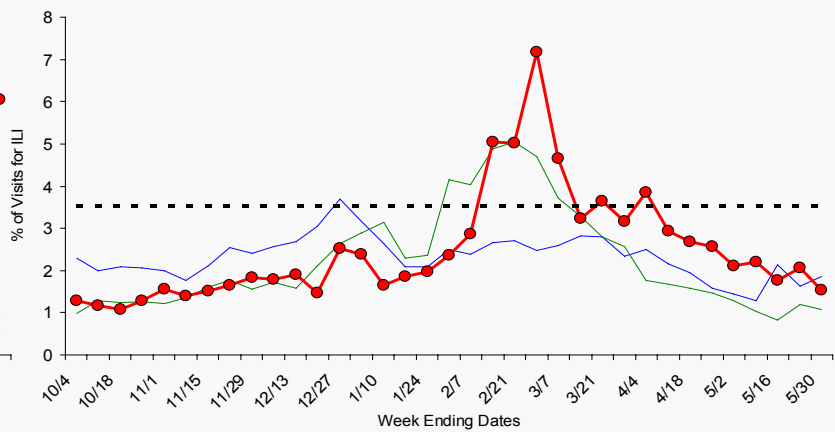
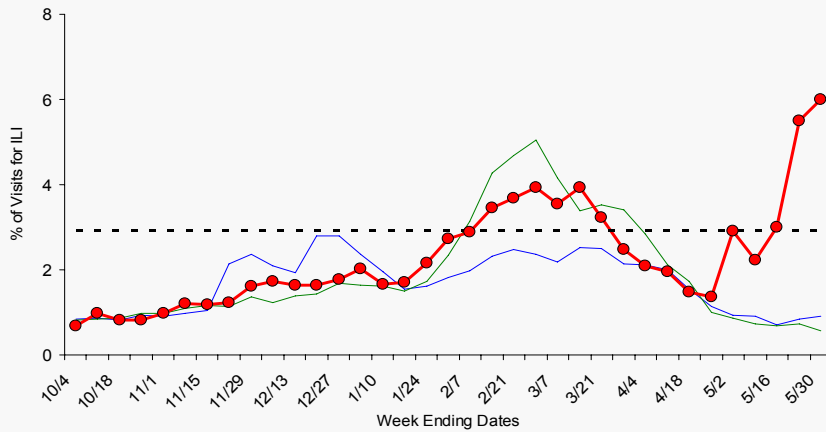


Region I - CT, ME, MA, NH, RI, VT



Region II - NJ, NY

Region III - DE, DC, MD, PA, VA, WV



NOTE: Scales differ between regions

NOTE: 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.



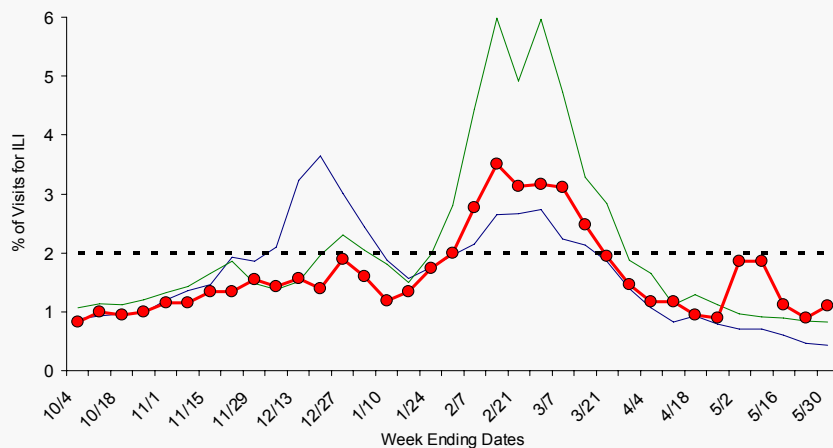
Epidemiology/Surveillance

Novel Influenza A (H1N1) – 05 JUN 2009

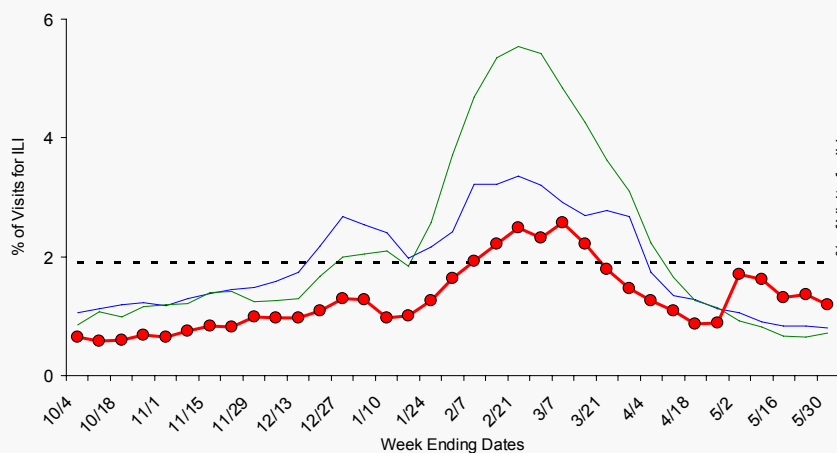
Current Influenza Surveillance – ILINet Regions IV-VI



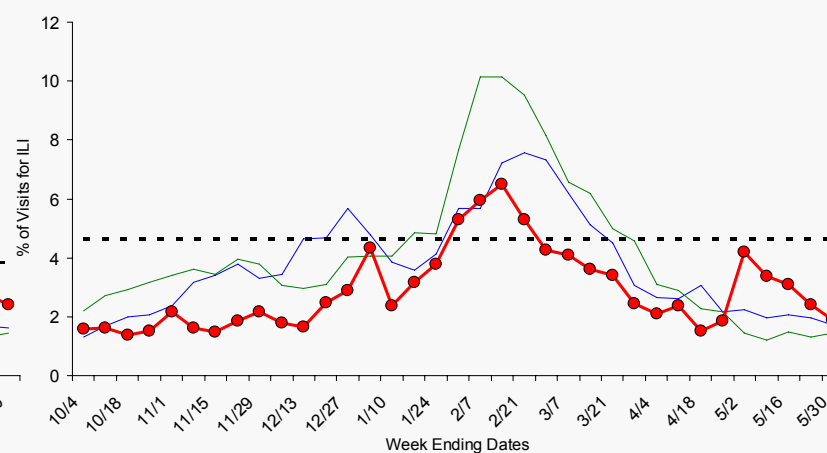
Region IV - AL, FL, GA, KY, MS, NC, SC, TN



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



Region VI - AR, LA, NM, OK, TX



NOTE: Scales differ between regions

NOTE: 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

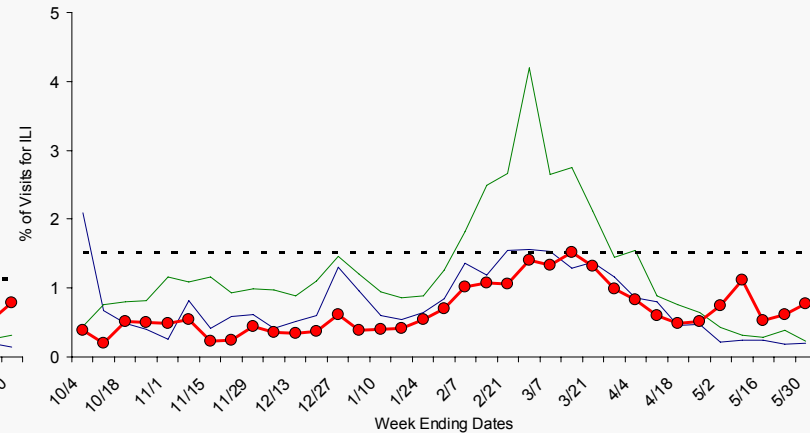
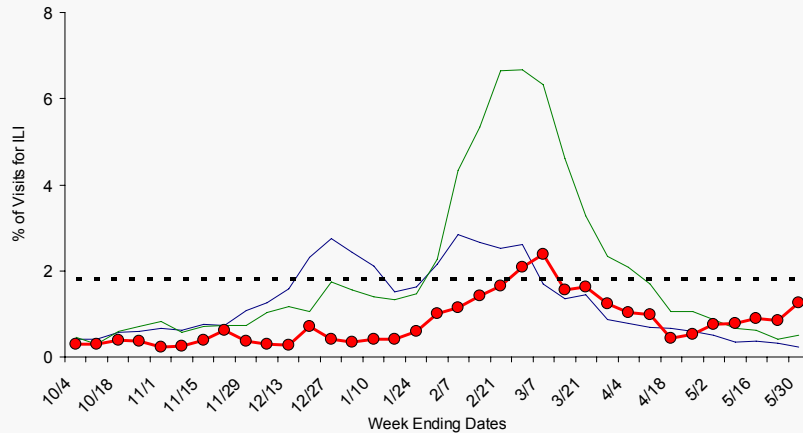
Novel Influenza A (H1N1) – 05 JUN 2009

Current Influenza Surveillance – ILINet Regions VII-X



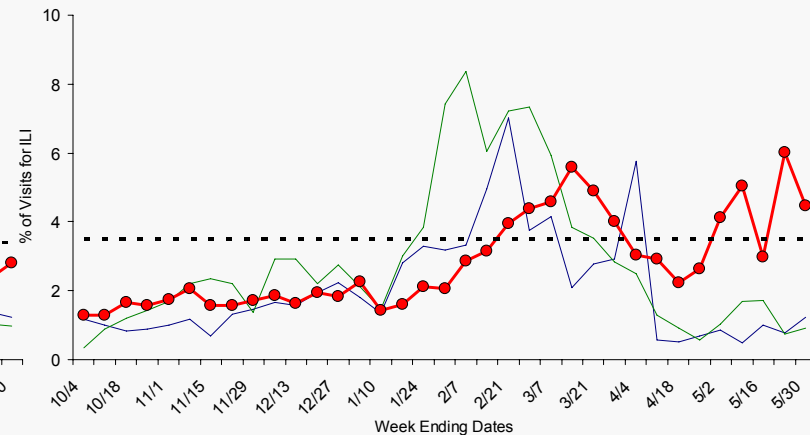
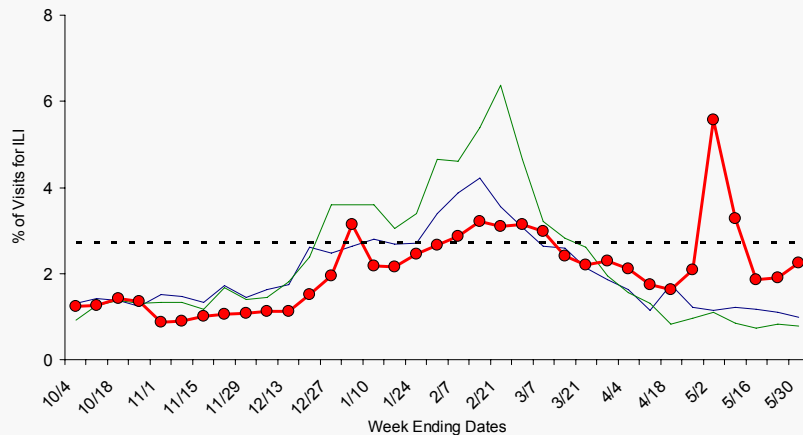
Region VII - IA, KS, MO, NE

Region VIII - CO, MT, ND, SD, UT, WY



Region IX - AZ, CA, HI, NV

Region X - AK, ID, OR, WA

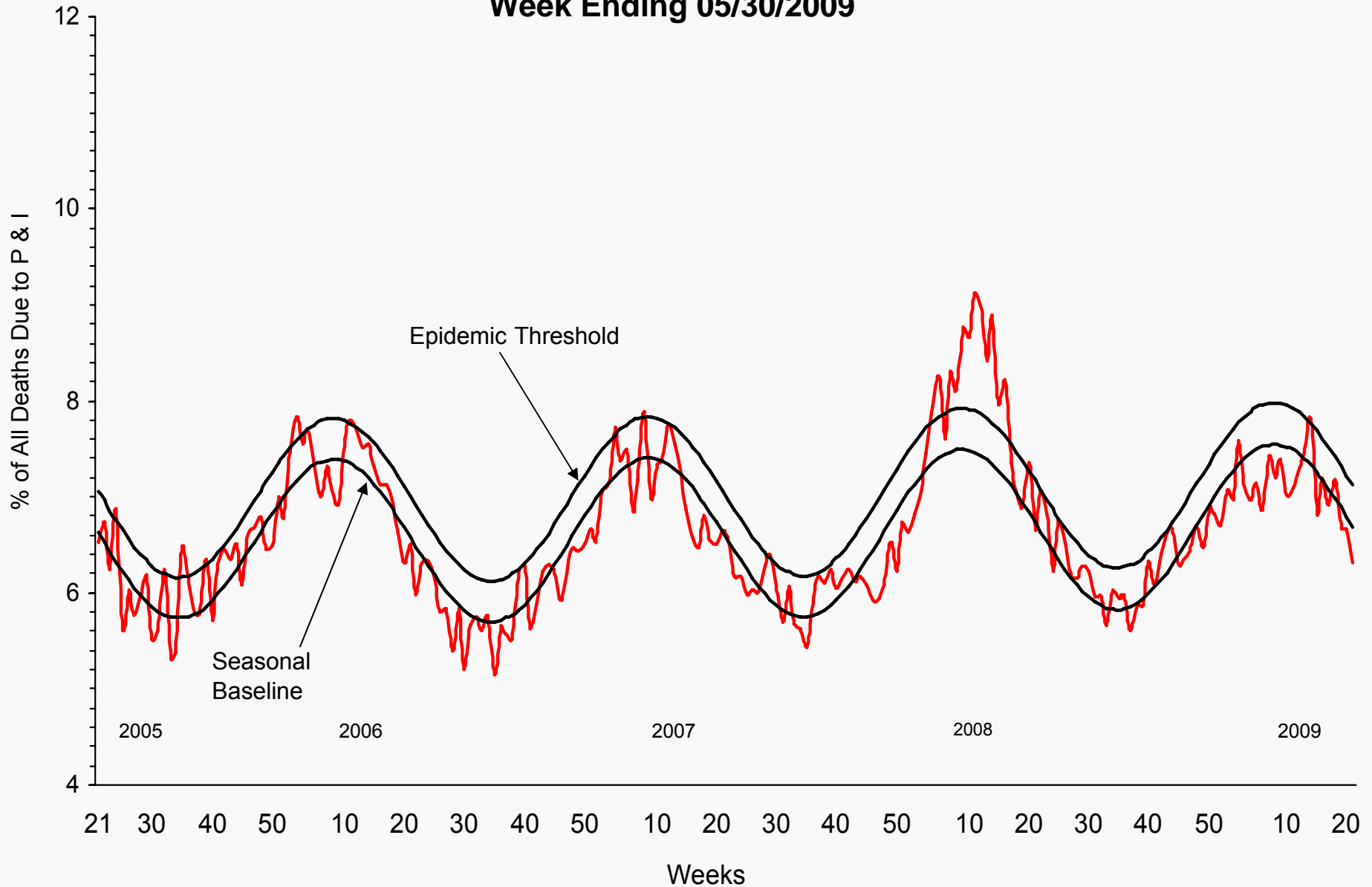


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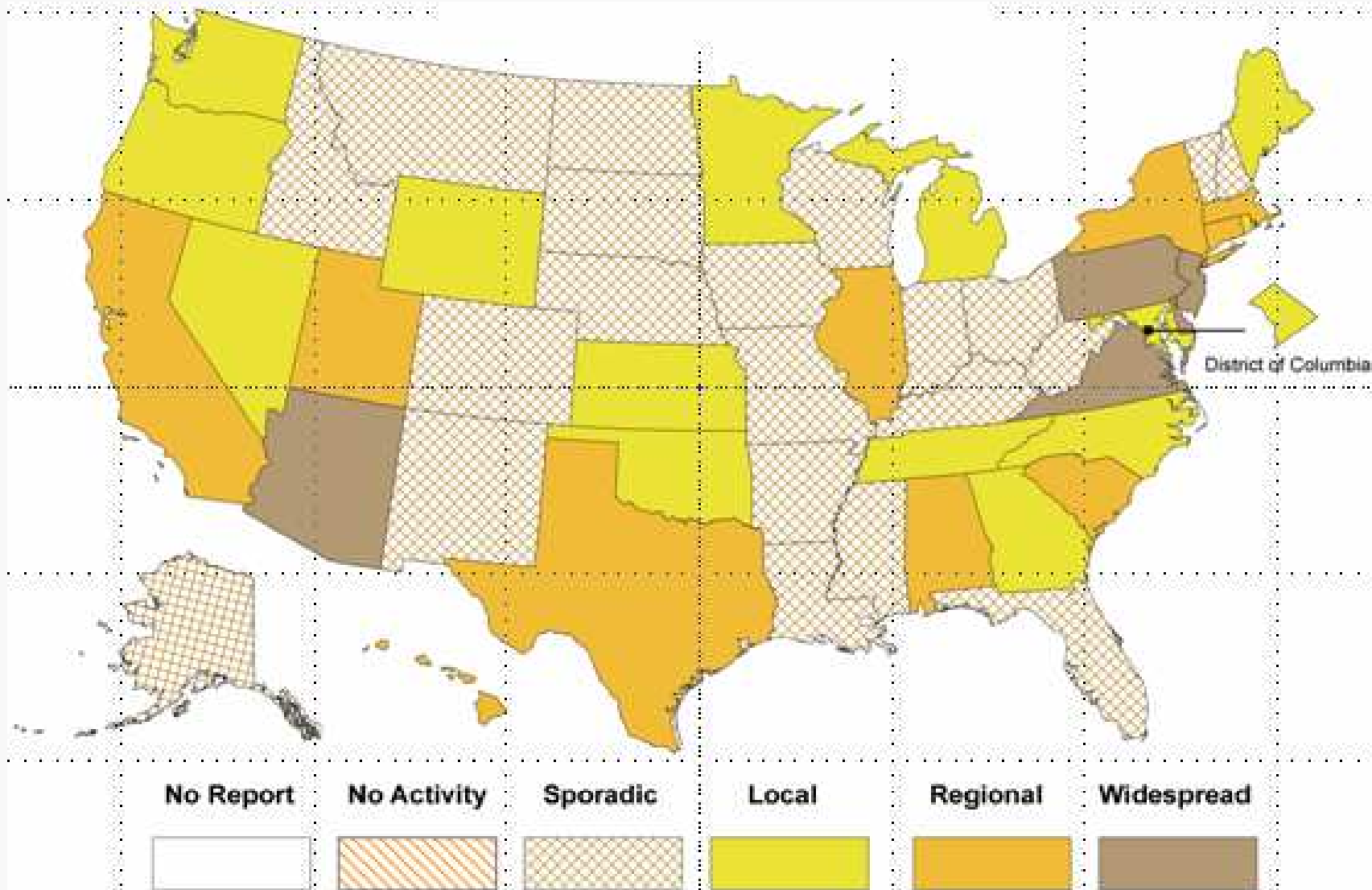


Epidemiology/Surveillance Novel Influenza A (H1N1) Pneumonia and Influenza Mortality for 122 U.S. Cities Week Ending 05/30/2009





Weekly Influenza Activity Estimates Reported by State and Territorial Epidemiologists Week ending May 30, 2009 – Week 21

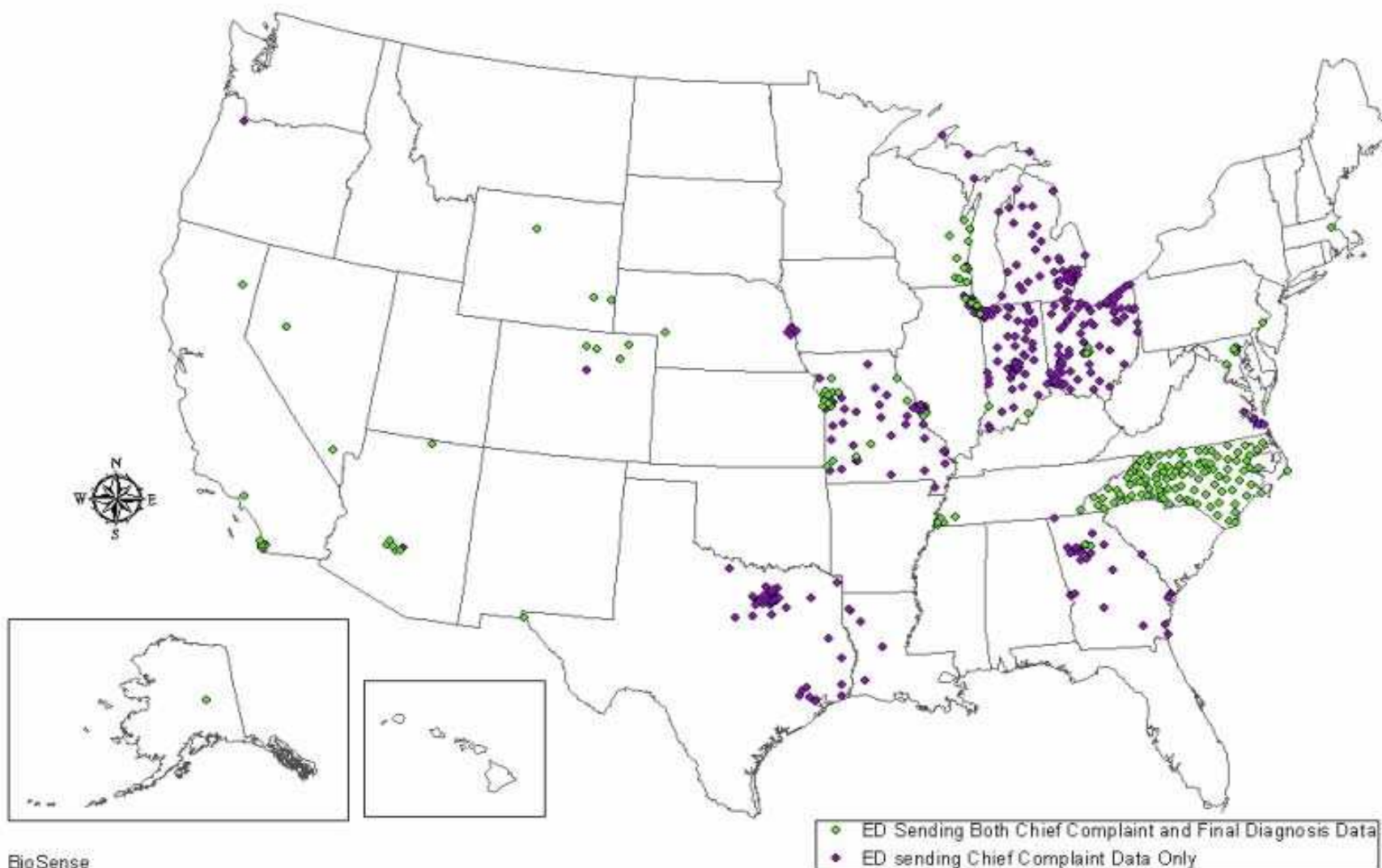


* This map indicates geographic spread & does not measure the severity of influenza activity



Epidemiology/Surveillance - BioSense

Location of BioSense Emergency Departments (ED) Reporting Chief Complaint and Final Diagnosis Data.



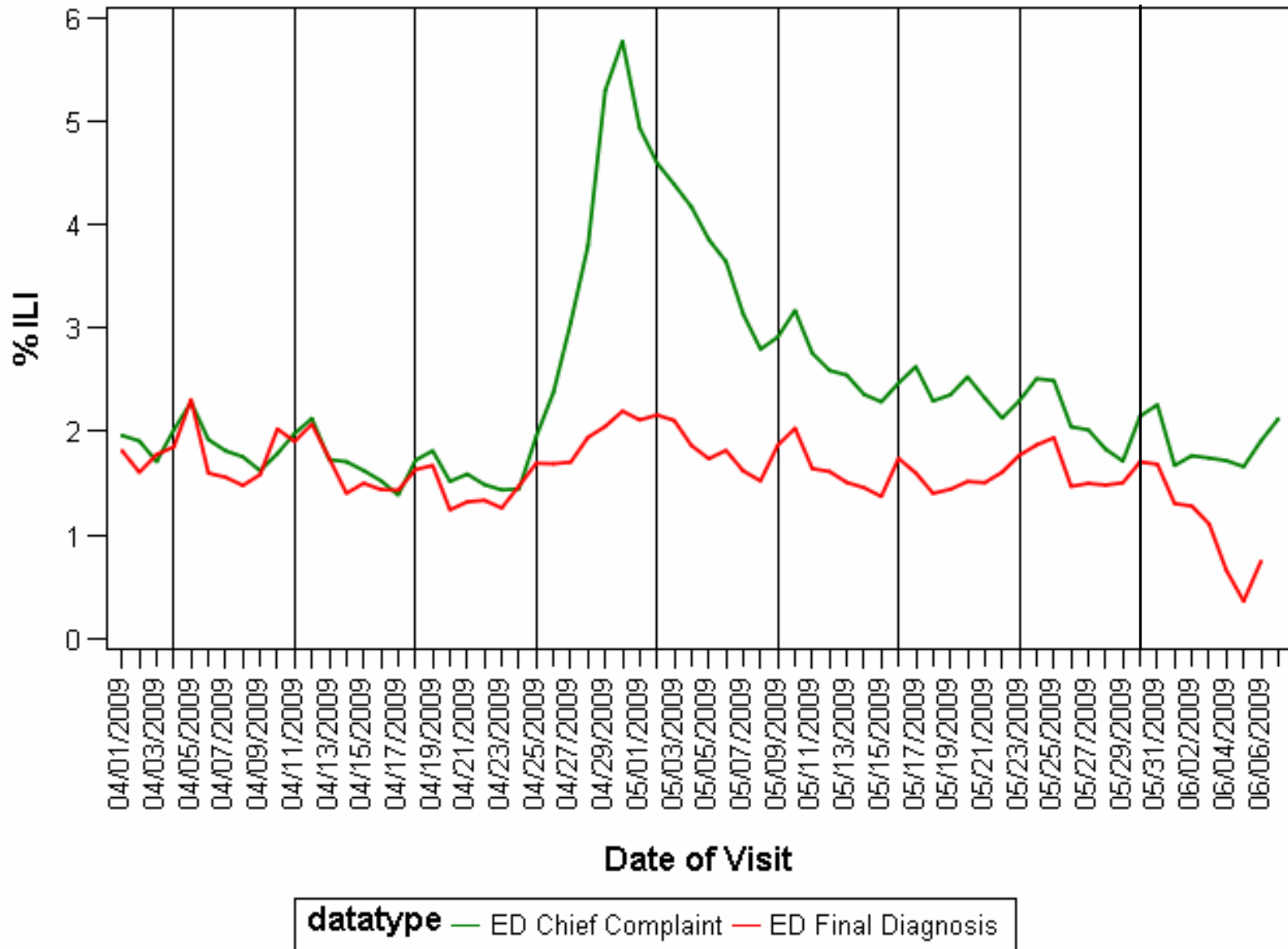
BioSense
National Center for Public Health Informatics
Centers for Disease Control and Prevention



Epidemiology/Surveillance - BioSense

Percentage of Visits for ILI Reported by Emergency Departments

04/01/2009 to 06/03/2009: U.S.





**International
Novel Influenza A (H1N1) 09 JUN 2009
New Countries with Confirmed Cases & Other Major Developments**

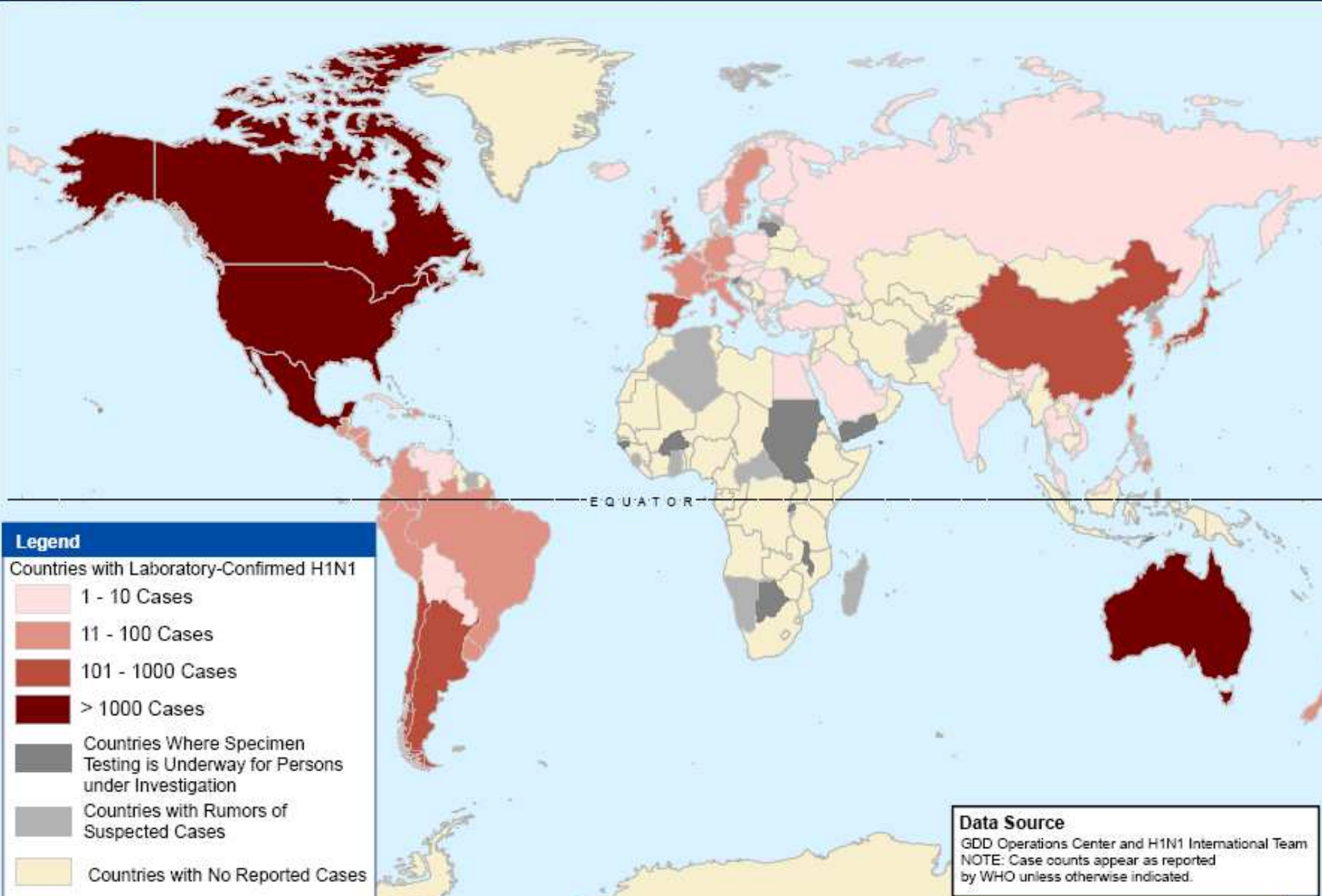


- **New countries with confirmed cases (last 4 days):**
 - Caribbean: Cayman Islands, Dominica, Trinidad & Tobago, Barbados**
 - Middle East: United Arab Emirates, Saudi Arabia**
 - Europe: Luxembourg**
- **Other major developments:**
 - **First death in the Caribbean:** Dominican Republic
 - Pregnant 17 year old female with underlying disease
 - India reporting first two cases of human-to-human transmission
 - Both family members of individuals with foreign travel history (one to NY, other unknown)
 - ECDC reporting first case in South Pacific (French Polynesia) identified in woman arriving from Los Angeles
 - China CDC investigating possible transmission on 5/26 Cathay Pacific flight from JFK to Hong Kong



Novel Influenza A (H1N1) International Case and Information Tracking

As of
09 June 2009
1100 EDT





**Division of Global Migration and Quarantine
Novel Influenza A (H1N1) - 09 JUN 2009
Community Mitigation and Ports of Entry**



- **Community Mitigation**
 - **CDC strategy for fall under development**
 - **Guidance documents for summer camp (in clearance) and child care (in progress)**
- **Ports of Entry**
 - **MMWR draft in development, on experience at POEs, April**
 - **May, 2009**



**Joint Information Center (JIC) Summary
Communication Surveillance
09 Jun 2009 0100 EDT**



- **Channel Traffic 6/7-6/8**
 - **Web Page Views: 233,304 (-54%)**
 - **Clinician Inq (CDC INFO): 8 (-64%)**
 - **Television Stories: 78 (-72%)**
 - **Public Inquiries (CDC INFO): 89 (-67%)**
 - **Print/Internet News: 108 (+47%)**
 - **Twitter: “Swine Flu”: 9.0/min (+257%)**
- **Major News Media Themes**
 - **Quarantine: N.O. mayor in China, Student dorm, Ruby players in Australia**
 - **Local case counts and confirmed deaths**
 - **Information Gaps:**
 - **Scant information on public health guidance or health protection (despite coverage of quarantine)**
- **Public Inquiries (CDC INFO)**
 - **Symptoms of H1N1? (22%)**
 - **Testing? (15%)**
 - **Prevention (9%)**
- **Twitter Topics**
 - **Quarantine**
 - **Worry about new cases**
 - **Difference between swine and bird flu?**