



DHS H1N1 Weekly Situation Report

Influenza A(H1N1) National Integrated Report

10 to 16 October 2009

Executive Summary **CL High**

Overview:

- As of 16 October, the number of Influenza-Like Illness (ILI) deaths in the U.S. was 537 this week compared to 405 deaths reported last week. *(Source: HHS/CDC)*
- As of 16 October, the most significant impacts of A(H1N1) remain increased ILI outpatient visits and influenza associated pediatric deaths. *(Source: HHS/CDC)*

Major Highlights:

- CDC provided updated interim guidance on the use of face masks and N95 respirators for decreasing exposure to A(H1N1). *(Source: HHS/CDC)*
- At least four of the ten HHS Regions are reporting N95 mask shortages. N95 respirator availability is extremely limited for new customers. Distributors are employing allocation strategies to prioritize existing customers based on average historical purchase. *(Source: HHS/CDC)*

A(H1N1) Vaccine Shipment Status <i>(Source: HHS/CDC)</i>			
Date	Total Allocated Doses	Total Doses Ordered	Distributed
08 October 2009	6,816,000	3,690,000	1,232,100
15 October 2009	11,422,900	7,971,800	5,885,900

New Emergency Declarations:

- On 14 October, Illinois Governor Pat Quinn declared a public health emergency in the State of Illinois. *(Source: DHS)*

New Requests for Federal Assistance:

- None reported

Coordination Elements:

- **RCTs** (Regional Coordination Teams): All five RCTs partially activated (operating at 15 days per month). Conducting coordination. *(Source: DHS)*
- **ESFs** (Emergency Support Functions): ESF 8 working group is conducting twice weekly conference calls to update ongoing A(H1N1) response actions. *(Source: HHS)*
- **FEMA H1N1 IMAT A** (Incident Management Assistance Teams): All IMATs, including the National IMAT- East Team, completed A(H1N1) training. *(Source: DHS/FEMA)*

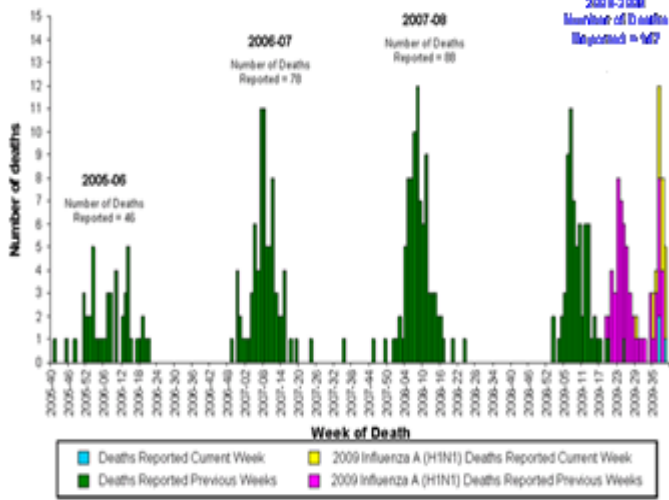
Leading Indicators **CL Medium**

Categories	Trend	Comments
Virus Characteristics <i>(Source HHS/CDC/WHO):</i>		
Oseltamivir Resistance	Very few isolates found	12 isolates from U.S., 31 isolates internationally
Vaccine Match	Recent viruses remain a good match	
Genetic Changes	No evidence of increased virulence	
U.S. Public Healthcare System Status <i>(Source HHS/CDC)</i>	Media is reporting increased healthcare surge operations	Sporadic reports of public health care systems conducting surge operations to accommodate influx of ILI patients

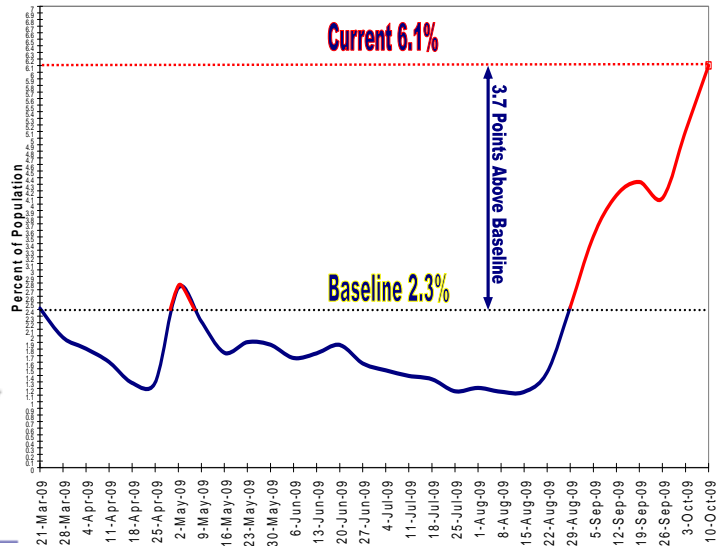
U.S. Pediatric A(H1N1) Influenza Deaths Weekly Trend - decreasing. Eleven reported this week as compared to 19 last week. (Source HHS/CDC)

U.S. Outpatient ILI cases Weekly Trend – increasing. All HHS regions are above region-specific, historic baseline levels (Source HHS/CDC)

Number of Influenza-Associated Pediatric Deaths by Week of Death: 2005-06 season to Week: 39

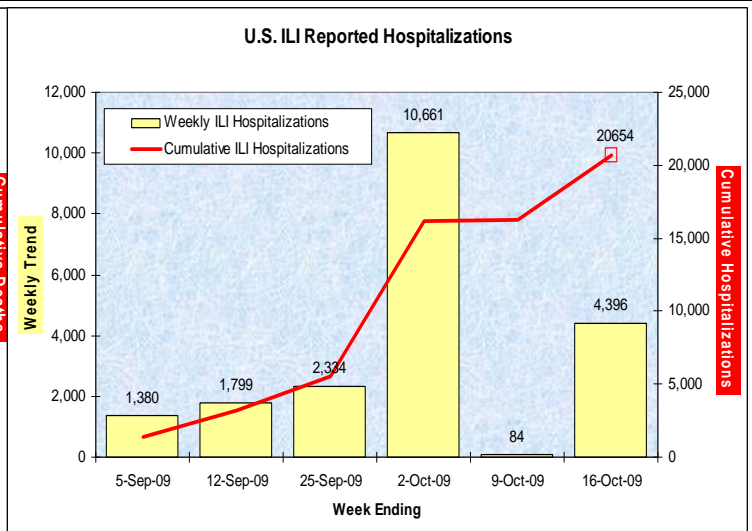
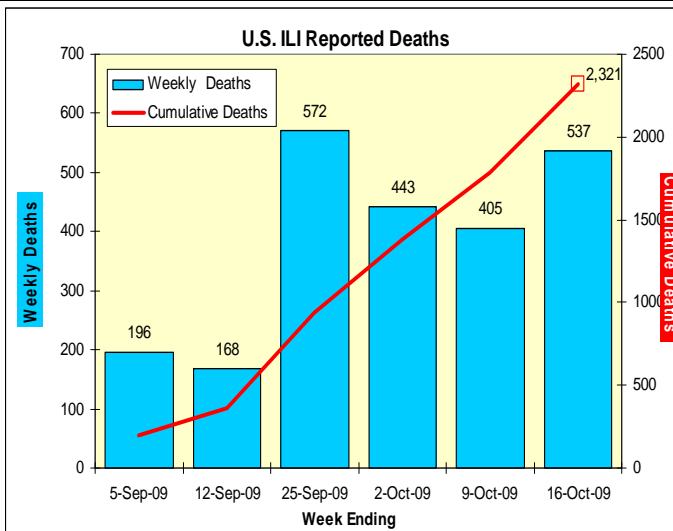


Percentage of Visits for Influenza-like Illness Reported by the U.S. Outpatient Influenza-like Illness Surveillance Network (ILINet)

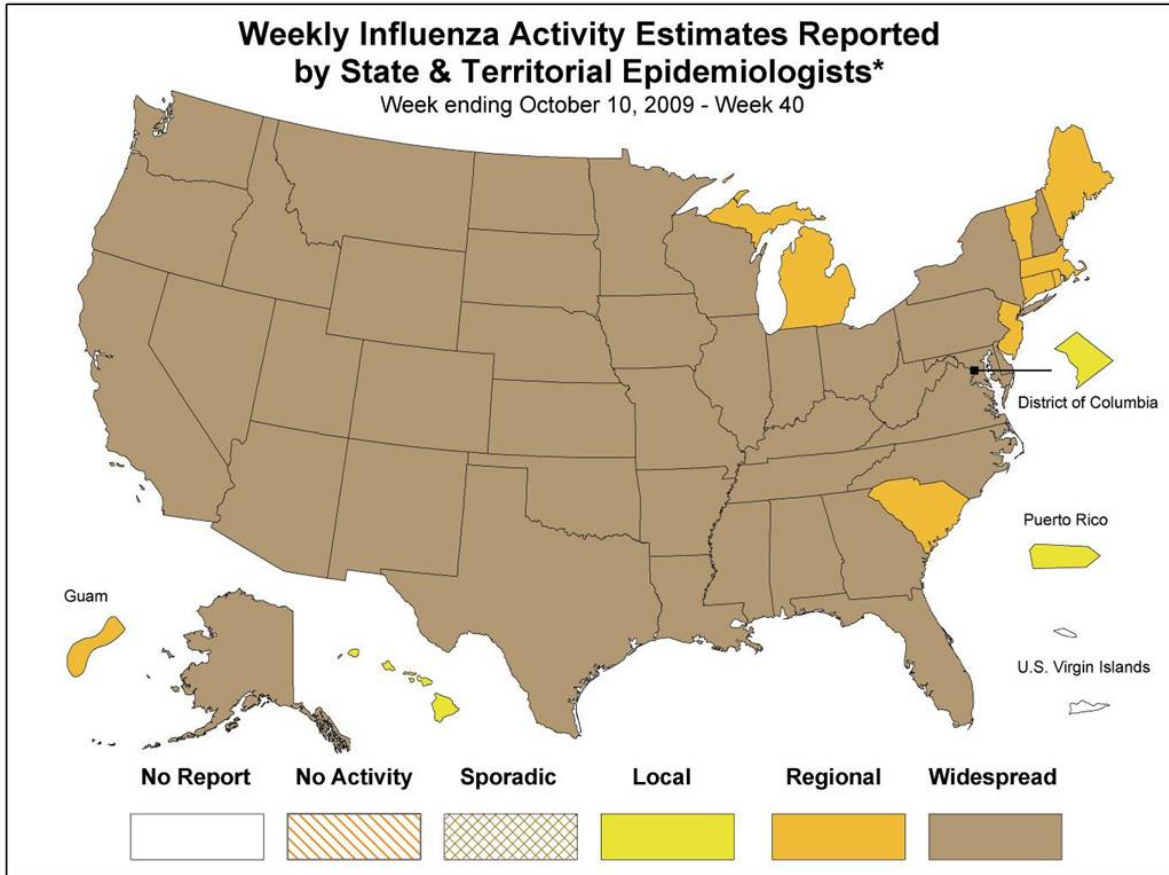


U.S. Weekly Deaths Weekly Trend - increasing. Pneumonia and Influenza deaths are at the epidemic threshold. (Source: HHS/CDC Data)

Weekly U.S. Hospitalization Rate Weekly Trend – increasing. (Source HHS/CDC)

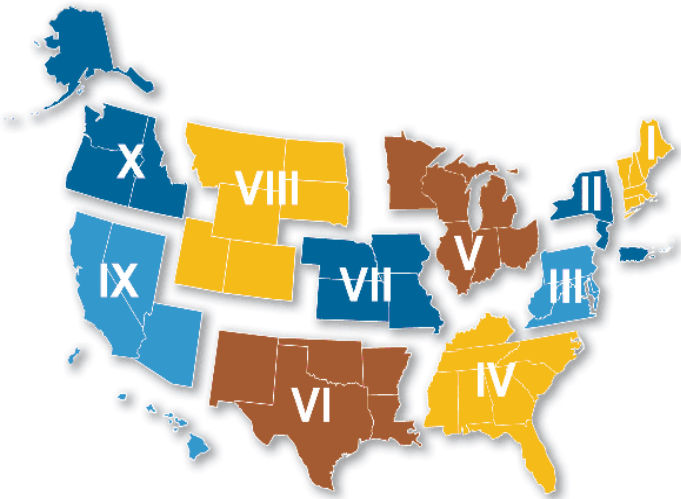


U.S. Geographic Spread *Weekly Trend – increasing.* 41 States reported geographically widespread influenza activity compared to 37 last week. Nine states reported regional or local influenza activity as compared to 13 last week. (Source HHS/CDC)

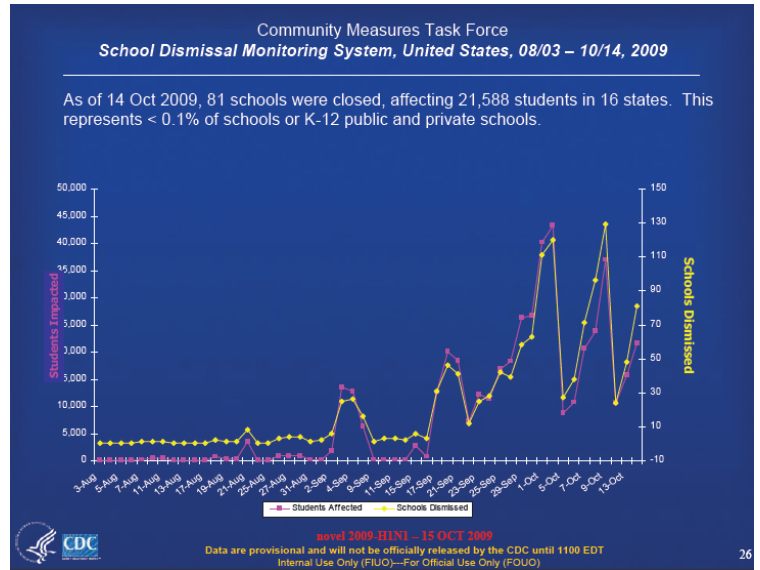


* This map indicates geographic spread & does not measure the severity of influenza activity

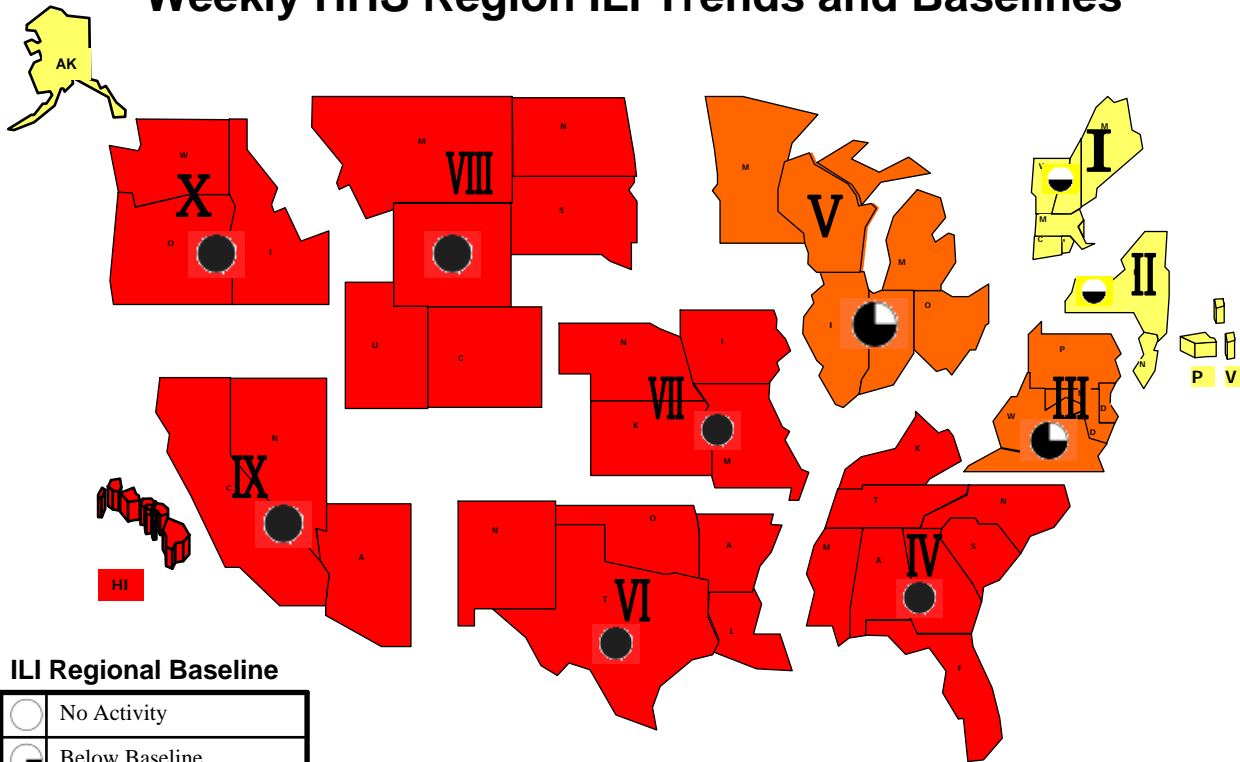
Current U.S. Situation				CL Medium
Reported United States K-12 School Dismissal				
Date	HHS Region*	School Dismissals	Students Affected	Teachers Affected
8 Oct-09	III, IV, V, VI, VII, IX	96 from 16 States	23,768	1,686
09-Oct-09	III, IV, V, VI, VII, VIII, X	129 from 18 States	36,926	2,597
12-Oct-09 <i>Columbus Day</i>	V, III, IV, VI, VIII,	24 from 07 States	10,585	641
13-Oct-09	IV, V, VI, VIII, X	48 from 10 States	15,657	1,050
14-Oct-09	III, IV, V, VI, VII, VIII, X	81 from 16 States	21,588	1,672
15-Oct-09	III, IV, V, VI, VII, VIII, X,	88 from 19 States	22,674	1673
HHS Regions (see below)* Source HHS/CDC		*School Dismissals include both new and ongoing dismissals		



HHS Regions



Weekly HHS Region ILI Trends and Baselines



ILI Regional Baseline

	No Activity
	Below Baseline
	National Baseline
	Slightly Above Baseline
	High Above Baseline



(Source: HHS/CDC)

- According to the HHS/CDC, the percentage of visits for ILI reported by the US Outpatient ILI Surveillance Network is well above the national baseline (2.3%) for this time of year at 6.10%. This is unusual for this time of year. (Source: HHS/CDC)
- CDC provided updated interim guidance on the use of facemasks and N95 respirators for decreasing the exposure to A(H1N1) virus. The new guidance includes a wider range of settings for increased risk people. Unlike ordinary masks, N95 respirators protect against the flu virus, are fluid resistant and are at least 95% efficient against solid and liquid particles (excluding oil). (Source: HHS/CDC)

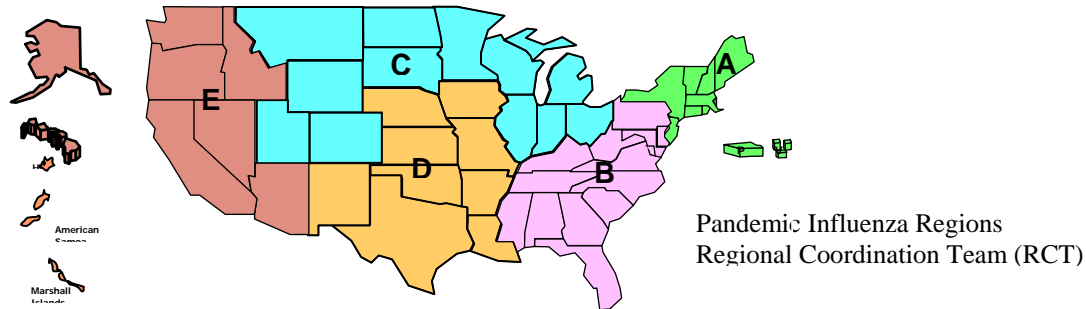
Federal Departments and Agencies		CL High
H1N1 Department and Agency Updates		
HHS	Increase in aggregate reports of hospitalization, WIDESPREAD in 41 states; REGIONAL in eight states; LOCAL in 1 state. Percent of pneumonia & influenza deaths above epidemic threshold; Percent of deaths due to pneumonia & influenza increased. N95 respirator availability extremely limited for new customers. Distributors employing allocation strategies to prioritize existing customers based on average historical purchase.	
DHS	A second round of A(H1N1) modeling is underway through the National Infrastructure Simulation and Analysis Center (NISAC) with a focus on more extensive and realistic details regarding input parameters, assumptions, and current data. This modeling should be completed and available mid-November.	
DOD	NSTR	
NGB	Nothing reported	
USDA	Food and Nutrition Service (FNS) briefed a plenary session of the American Association of the SNAP (Supplemental Nutrition Assistance Program) Directors (AASD), on the new pandemic authority in the 2010 USDA Appropriations Bill. The legislation grants additional authorities for the Secretary of Agriculture to provide SNAP benefits to replace missed school lunches when a school has been closed for at least five consecutive days due to a pandemic, and to provide for emergency commodities during a pandemic.	
DoED	Nothing reported	
DOL	Nothing reported	
DOS	Nothing reported	
DOJ	Nothing reported	
DOT	NSTR	
DOC	Nothing reported	
VA	NSTR	
OPM	Nothing reported	
DOI	Nothing reported	
EPA	Nothing reported	
OMB	Nothing reported	
Treasury	Nothing reported	
DOE	Nothing reported	
IC	Nothing reported	
ARC	A new flu preparedness course targeting small businesses was released entitled “Preparing Small Business Workplaces for Pandemic Flu”. The course was launched with a joint ARC/OSHA web cast on pandemic preparedness for the workplace, with more than 2500 businesses registered. The course helps small business owners understand what to expect during a widespread outbreak, how to reduce transmission, and what workplace protocols are needed.	

	Active surveillance of shelter populations in areas impacted by natural disasters continues.
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* NSTR – Nothing Significant To Report

State, Local, Tribal, and U.S. Territory Updates		CL High
Status of State Requests for A(H1N1)Vaccine	All States have requested A(H1N1) vaccine. (Source: HHS/CDC)	
States with Less Than 25% of Antiviral Inventory Remaining	None Reported (Source: HHS/CDC)	
Running count of States that have declared an emergency	None (Source: FEMA)	
Running count of States that have declared a public health or civil emergency	Two – Maine, Illinois (Source: HHS/CDC)	
Running count of States that have made requests for federal assistance (i.e. EMAC, Stafford, etc.)	None (Source: FEMA)	

Pandemic Regional Coordination Teams Update	CL Medium
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Region A (Source Region A Team Leader):

- State health officials have reported issues related to receiving significantly fewer doses of A(H1N1) vaccine than expected and the delayed distribution of seasonal flu vaccine injections. As a result, states have had to restrict and scale back distribution of A(H1N1) vaccines.

Region B (Source Region B Team Leader):

- Wake County, North Carolina health officials closed four clinics after four days of immunizations due to depleted A(H1N1) nasal spray vaccine. Officials said they would reopen the clinics as soon as the vaccine is replenished.
- During HHS Region III’s conference call, State health departments reported continuing difficulties in obtaining Personal Protective Equipment (PPE), particularly N95 masks, from commercial suppliers and they may request PPE from the Strategic National Stockpile if shortages continue. When and if PPE becomes a true shortfall, requests will be coordinated through HHS.

Region C (Source Region C Team Leader):

- On 16 October, Minnesota Department of Health hosted a closed meeting with HHS and CDC on Points of Dispensing for identified mission critical federal employees.
- In Saint Paul, Minnesota, Children’s Hospitals and Clinics of Minnesota recorded its second-highest patient volume ever at its Saint Paul Campus. Nearly half of the 195 emergency room patients were suffering from influenza-like illnesses.
- Sporadic release of both seasonal and A(H1N1) vaccine is providing a variety of challenges

for state health departments and has resulted in cancellation of seasonal vaccine clinics.

- Region C remains currently unsupported for a Department of Defense Regional Joint Task Force (RJTF). The decision for appointment of the RJTF is presently with the Joint Staff and Secretary of Defense.

Region D (Source Region D Team Leader):

- Barnes Jewish Children’s Hospital in St. Louis, Missouri reported opening two “reception/triage” tents in the hospital’s parking garage to take care of a very large overflow of patients with Influenza-Like-Illness.
- Many hospitals in CDC Region VI reported a high demand for services in emergency rooms.
- States have expressed concerns about visibility on delivery, timeliness, and amounts of A(H1N1) vaccines. CDC Region-VI DHHS/ASPR/OPEO has advised states to alert them regarding any shortfalls of PPE, vaccine, or antivirals.

Region E (Source Region E Team Leader):

- HHS continues to administer grant programs to fund implementation of state and territory vaccination plans
- Federal agencies are conducting aggressive campaigns to promote Federal employee health, including vaccinations for seasonal flu and A(H1N1)
- FEMA Region X Telework Training was completed the week of 05 October
- American Samoa has not ordered its A(H1N1) vaccine due to cold chain problems
 - Their vaccine storage facility does not have a backup generator and the facility has lost power several times during the past few weeks
 - The American Samoa Governor’s office is working on the cold storage issue using on-island resources
- The Outer Pacific is experiencing several limiting factors including;
 - A(H1N1) vaccine cold-storage and transportation (being addressed through HHS funding mechanisms)
 - Limited laboratory presence which complicates surveillance efforts
 - Limited trained personnel to administer vaccine in remote areas
 - Real-time collaboration (being addressed by establishment of a page on the Virtual Joint Planning Office web site)

Critical Infrastructure Key Resources (CIKR)		CL Low
Critical Infrastructure Issues/Operational Activities	Sector Sampling of: Absenteeism, Operational Impact, 7-10 Day Concerns, Mitigation Measures, Unique Concerns (Source: DHS/IP/NICC)	
Food & Agriculture	This report is submitted on behalf of the Food and Drug Administration (FDA) and the U.S. Department of Agriculture (USDA). In response to this requirement, FDA and USDA are working with our Food and Agriculture Sector Coordinating Council to receive reports of H1N1 related impacts. To date, we have nothing significant to report.	
Banking & Finance	At present, the Treasury is in contact with the Banking and Finance sector to determine H1N1’s impact on the sector’s operations. Based upon the limited information received from the sector, the Treasury has not been alerted to any operational impacts.	
Chemical	The Chemical SSA has not received any reports indicating that H1N1 is impacting the Sector. The Sector’s Pandemic contingency plans are in place when and if need for implementations arises. Issue: Availability of both the seasonal and H1N1 vaccines.	
Commercial Facilities	NSTR	
Communications	The SSA has coordinated with the Communications ISAC. There are no issues related to H1N1 to report at this time.	

Critical Manufacturing	The Critical Manufacturing Sector reports no adverse impact to the sector as a result of the H1N1 virus. We have reached out to our sector and continue to monitor the situation. Sector partners have pandemic plans in place in the event of a disruption and will advise us accordingly.
Dams	The Dams SSA has not received any information regarding impacts to the sector resulting from H1N1.
Defense Industrial Base	DoD has alerted its global contract management enterprise to observe and report on requested information. At this time there is no impact observed or anticipated during the next reporting period.
Emergency Services	ESS has no significant changes within the last week. We continue to reach out to the SCC and maintain discipline specific trending efforts for additional sources of information. The SCC remains concerned about H1N1 vaccination prioritization and distribution.
Energy	Oil & Gas reports, The Energy sector is continuing to prepare for both direct and indirect impacts of a widespread outbreak, in coordination with DOE and relevant federal, state, and local partners. Both the Electricity and Oil and Natural Gas subsectors have stood up pandemic working groups, which are holding conference calls to address the sector challenges posed by the H1N1. Personnel safety and continuity of business operations are of utmost importance and the sector will continue to assess the possible effects of the virus as needed.
Government Facilities	The education facilities subsector is currently experiencing H1N1 school dismissals. For the week of October 5-9, 2009, there were 173 school dismissals, affecting 50,196 students and 3,474 teachers across 24 States (AR, AZ, CO, FL, ID, IL, IN, KS, KY, LA, MD, MI, MO, MT, ND, OH, OK, OR, PA, SC, TN, TX, WI, and WV).
Health Care & Public Health	The Healthcare and Public Health Sector is experiencing no unusual level of absenteeism. Workforce challenges are related primarily to time demands of preparedness and response activities for 2009-H1N1 flu. The supply chain for N95 respirators remains strained due to increased demand, especially for customers without an established ordering history.
Information Technology	Declined to provide data.
National Monuments & Icons	DOI continues to make contact with the National Monuments and ICONs sector assets for any operational impacts related to H1N1. Currently, DOI has not been notified of any issues impacting operations.
Nuclear Reactors, Materials & Waste	Nuclear Sector security partners continue to monitor the status of sector activities. No significant impacts due to influenza like illness have been reported by Nuclear Sector facilities/assets.
Postal & Shipping	NSTR
Transportation Systems	NSTR
Water	EPA continues to leverage existing mechanisms to collect information on H1N1-related impacts to the Water Sector. The Water ISAC is facilitating an H1N1 town hall discussion on October 21, 2009, in which EPA will participate. At this time, there are no issues to report.

National Framework Pillars	CL Medium
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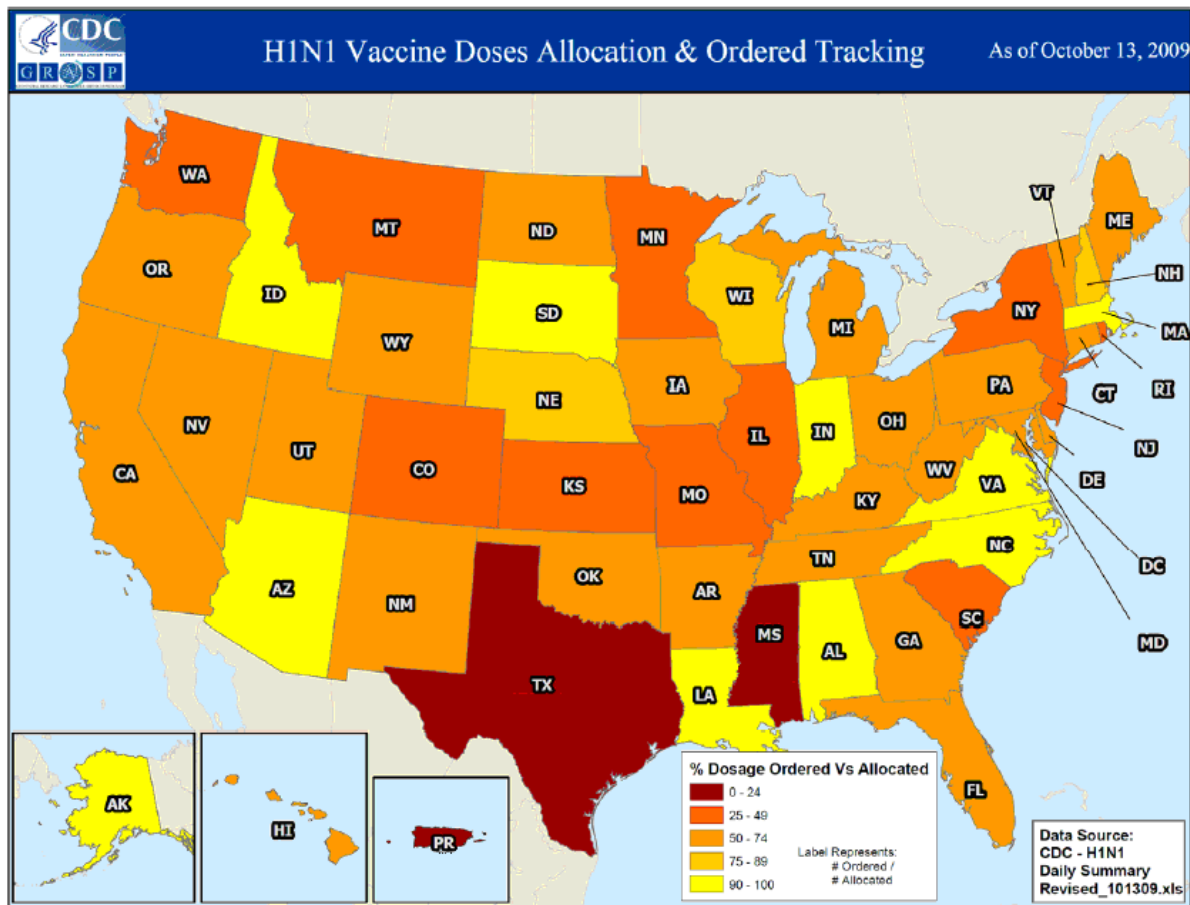
Surveillance

- A Journal of the American Medical Association (JAMA) study of critically ill patients in Canada with A(H1N1) influenza suggests severe disease and mortality is concentrated in relatively healthy adolescents and adults (10-60 years). Few patients over 60 years were admitted to the ICU in this study. A potential biological basis is that this patient group has much higher A(H1N1) influenza cross-reactive antibody rate than younger patients. A similar JAMA study

was conducted in Mexico showing 24 of 58 critical ill patients with A(H1N1) died after 60 days of onset with most (19) dying within two weeks of becoming critically ill. (Source: JAMA)

- CDC noted that A(H1N1) can be serious, even in healthy people with no underlying conditions. Until now, “health officials” found the most seriously ill adults had some other medical condition. However, CDC reported nearly half of A(H1N1) hospitalized adults were otherwise healthy. (Source: HHS/CDC)
- Several cities that reported large outbreaks of A(H1N1) influenza in the spring, including New York, Philadelphia, and Boston, are now reporting fewer cases than expected. Although only 10-20% of New Yorkers fell ill with A(H1N1) influenza during the spring, health officials believe that 20-40% were exposed to the virus and developed immunity. (Source: NBIS)
- The British Medical Journal (BMJ) released a study indicating the seasonal influenza vaccine may provide some protection against 2009 A(H1N1) by boosting existing antibodies from previous exposure to an influenza A(H1N1) virus. Limitations to the study include a small sample size and additional research needed to confirm or refute findings. (Source: NBIS)

Vaccine



- On 21 October, DHS and HHS Secretaries are scheduled to testify before the Senate Homeland Security and Government Affairs Committee on A(H1N1) vaccine distribution/rollout, current epidemiological surveillance, recent guidance/Public Safety Announcements, and issues in recent Trust for America’s Health report about surge capacity in public health departments and hospitals. (Source: HHS/CDC)

Mitigation

- The National Institute of Allergy and Infectious Diseases (NIAID) announced A(H1N1) vaccine trials of HIV-infected pregnant women and HIV-infected children and young adults enrolling 130 pregnant women and 140 people aged 4 to 24 years in the two studies. The trials address HIV infection and pregnancy increase the risk of a poor immune response to vaccines and these groups increased risk of severe A(H1N1) illness. (*Source: NIAID*)
- CDC released updated interim guidance on infection control measures for A(H1N1) in healthcare settings, including protection of healthcare personnel. The guidance emphasizes that preventing transmission requires a comprehensive approach beginning with written pandemic planning that is flexible and adaptable (depending on the severity of the illness). Revisions from earlier guidance include:
 - Criteria for identification of suspected influenza patients
 - Recommended time away from work for healthcare personnel
 - Changes to isolation precautions based on tasks and anticipated exposures
 - Expansion of information on the hierarchy of controls which ranks preventive interventions (elimination of exposures, engineering controls, administrative controls, and PPE equipment)
 - Use of respiratory protections (*Source: HHS/CDC*)

Communication and Education

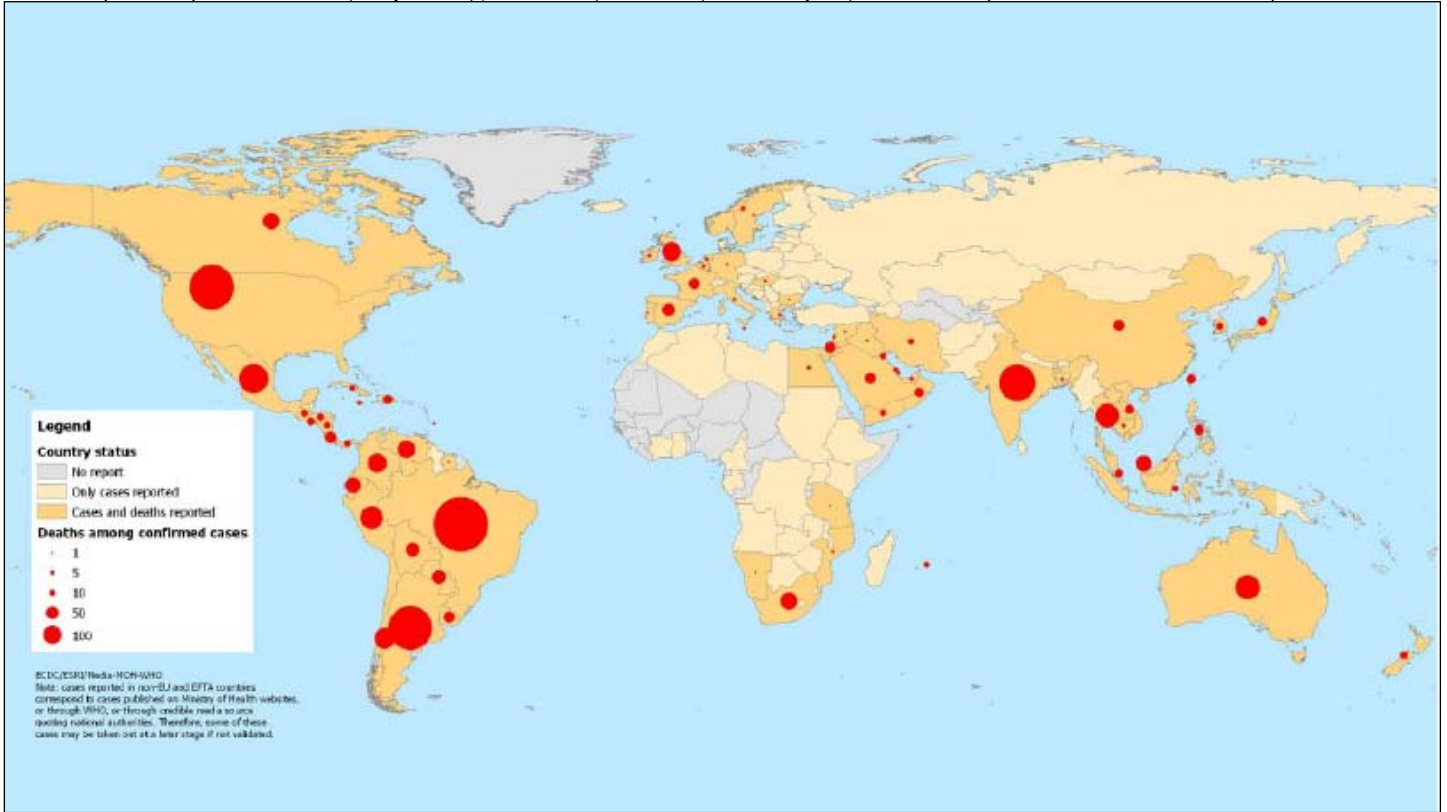
- Department of State chaired a multilateral “developing world A(H1N1) vaccine availability” teleconference to flesh out international vaccine assistance logistical details. The USG will chair an 18 October meeting, simultaneously with the World Health Organization’s Intergovernmental Meeting, to discuss established vaccine manufacturing company production/capabilities and the next steps. (*Source: DOS*)

Current World Situation

CL Low

- A(H1N1) affected Australia and New Zealand and caused an epidemic acute respiratory distress syndrome (ARDS) that was treated with extracorporeal membrane oxygenation (ECMO). At the time of reporting, 48 of the 68 patients had survived. This finding suggests ECMO may be an alternative when there is a ventilator shortage. (*Source: DOS*)
- Globally, the number of A(H1N1) deaths per week (not including U.S.) decreased this week (179) compared to deaths reported last week (190). The three month trend indicates a slight weekly decrease. (*Source: European Center for Disease Control*)
- Global Clustering - Trends indicate most pronounced clustering in city centers and within socio-economic at-risk populations. Brazil, U.S., and Argentina are leading death rates (number of deaths per number of ILI cases) (*Source: WHO*)

- As of 15 October, the reported cumulative number of confirmed fatal cases of influenza A(H1N1) and country reporting status by country are displayed below (*Source: WHO/ECDC*):



- The Global Disease Detection Operations Center (GDDOC) reported that the International Rescue Committee activated its emergency preparedness plan for A(H1N1) in the two largest refugee camps in Kenya due to at least 21 A(H1N1) reported cases (of 320,000 refugees) with several other camps also reporting cases. Healthcare systems are already strained due to overcrowding and lack of resources. (*Source: GDDOC*)
- The UK updated their Pandemic Influenza Clinical Package along with plans for significantly expanding the national capacity for intensive care. The package is designed for use by ‘frontline’ healthcare professionals in severe circumstances such as when high surge demand leads to the need for strict hospital admission triage in affected areas. (*Source: ECDC*)
- On 12 October, European Union (EU) officials met and agreed on a coordinated strategic EU approach toward A(H1N1) such as availability of vaccines, vaccine strategy and reiterating the commitment to supporting global cooperation. (*Source: EU*)

Index: Data Confidence Levels (CL)

Confidence levels of low, medium, and high are provided for each entry below which indicate the reliability of the information based on reporting sources, controlling factors, multiple confirmations, vetting processes, and sampling size.

CL High	Government source, normally collected data/information, confirmed by multiple reliable sources
CL Medium	Data/information reported is numerical, not anecdotal, confirmed by one other reliable source
CL Low	Data/information are open source, unconfirmed, anecdotal

Feedback Desired

Any questions or feedback relating to information contained in this situation report should be directed to the DHS H1N1 Operational Planning Team (OPT), at H1N1.OPT@hq.dhs.gov. The OPT will coordinate agency specific feedback with the respective agencies. All federal departments and agencies are requested to solicit State, local, tribal, and non-governmental feedback on this product.