



## Summary : Week 7 (February 13–February 19, 2011)

Influenza activity in Taiwan peaked at week 4 and the rate of emergency room visits for influenza-like illness decreased gradually. Pandemic (H1N1) 2009 virus is predominant in community. Most of the influenza viruses match the 2010–11 vaccine component.

- Of the 375 specimens tested during week 5–week 7, 184 (49%) were positive for influenza viruses, 136 (36%) were positive for pandemic (H1N1) 2009 viruses, 37 ( 10% ) were positive for influenza B viruses, 10 (3%) were positive for influenza A (H3N2) viruses and 1 (<1% ) was positive for influenza virus untyped A.
- There were 117 new complicated influenza infections during week 7, including 104 complicated pandemic (H1N1) 2009 influenza cases, 4 seasonal H3N2 cases, 3 seasonal influenza A untyped cases and 6 seasonal influenza B cases. Since July 1, 2010, there have been 1,616 reports of complicated influenza infections, including 928 reports of complicated pandemic (H1N1) 2009 virus infections (one patient is co-infected with pandemic [H1N1] 2009 virus and seasonal influenza virus type H3N2). Since July 1, 2010, there have been 85 reports of death from complicated influenza infection; 54 from the pandemic H1N1 2009 and 29 from the seasonal H3N2 strain and 2 from the seasonal influenza B strain, respectively.
- The number of deaths related to pneumonia and influenza during week 6 was 353, which was below the average number during the past 3 weeks (377 deaths).
- The rate of outpatient visits for influenza-like illness is 1.85%, an 11% decrease compared with the previous week (2.08%).
- The rate of emergency room visits for influenza-like illness is 17.09%, a 17% decrease compared with the previous week (20.66%).

## Virologic surveillance

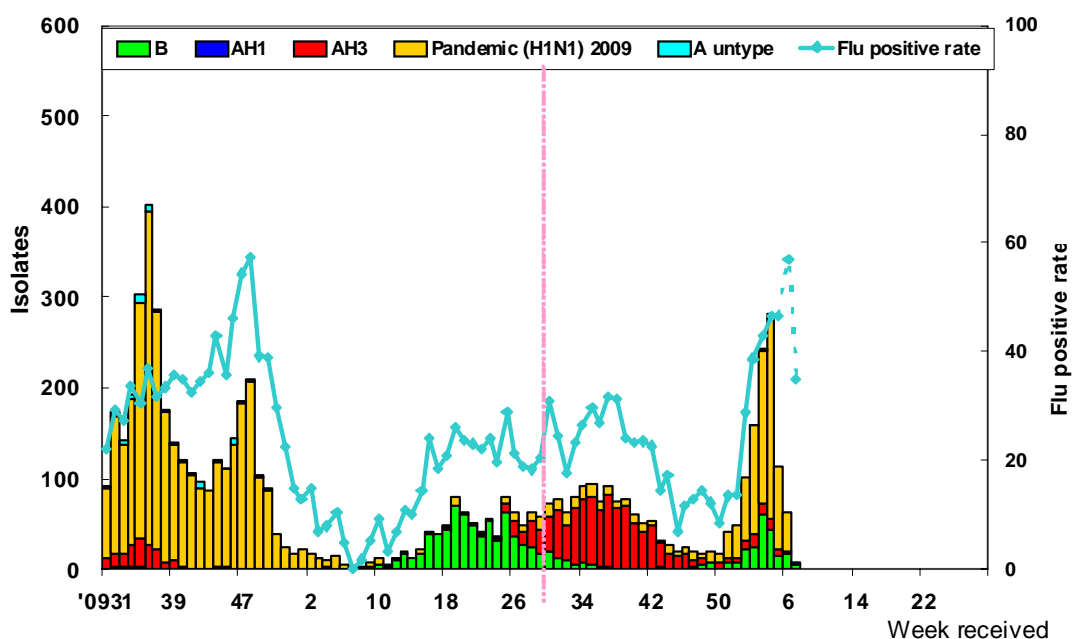
The results of tests performed during the past 3 weeks are summarized in the table below.

	Data for weeks 05–07	Cumulative data since 7/1/2010
<b>Number of specimens tested</b>	375	9,370
<b>Number of positive specimens (%)</b>	184(49)	2433(26)
<b>Positive specimens by type/subtype (%)</b>		
<b>Influenza A (% of all positive specimens)</b>	147(80)	2035(84)
<b>A (pandemic [H1N1] 2009) (% of all Influenza A)</b>	136(93)	1017(50)
<b>A (H3)</b>	10(7)	1012(50)
<b>A (H1)</b>	0(0)	0(0)
<b>A (unable to subtype)</b>	1(<1)	6(<1)
<b>A (subtyping not performed)</b>	0(0)	0(0)
<b>Influenza B</b>	37(20)	398(16)



**Antigenic characterization:** Taiwan CDC has antigenically characterized 241 human influenza viruses [129 influenza A (H3), 51 pandemic (H1N1) 2009, 61 influenza B] since July 1, 2010. One hundred and twenty-eight (99%) of the influenza A (H3N2) viruses tested were related to the A (H3N2) vaccine component (A/Perth/16/2009). Forty-nine (96%) of the pandemic (H1N1) 2009 viruses tested were related to the A/California/07/2009 vaccine component. Fifty-five (90%) of the influenza B viruses tested belonged to the B/Victoria lineage and were related to the B component of the 2010–11 influenza vaccine (B/Brisbane/60/2008) .

### Influenza positive tests reported to Taiwan CDC by contracted laboratories, 2009–2011



**Antiviral resistance:** Since July 1, 2010, 265 influenza A (H3N2), 131 pandemic (H1N1) 2009 and 10 influenza B viruses have been tested for resistance to the neuraminidase inhibitors (oseltamivir). The results of antiviral resistance testing performed on these viruses are summarized in the table below.

	Isolates tested (n)	Resistance Viruses, n (%)
		Oseltamivir
A (H3)	265	0 (0)
A (pandemic [H1N1] 2009)	131	0 (0)
B	10	0 (0)



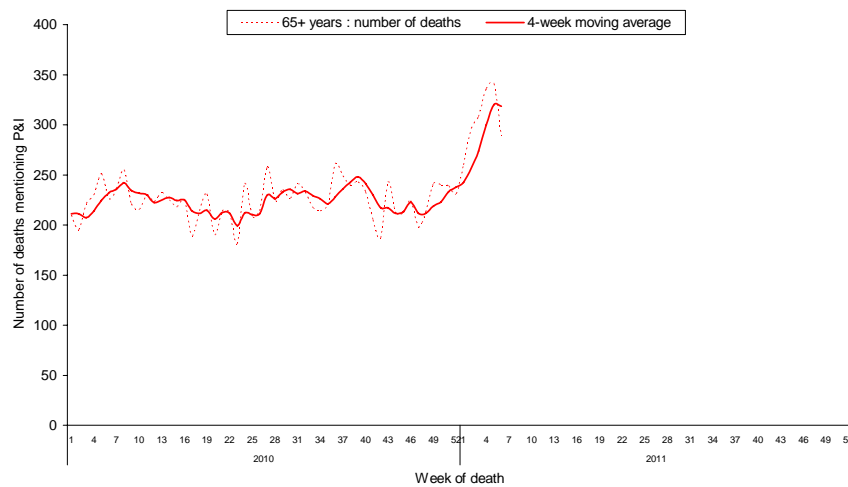
## Pneumonia and influenza (P&I) mortality surveillance

During week 6, 353 deaths reported through the National Death Certificate System mentioned P&I as the cause of death. This number was below the average number during the past 3 weeks (377 deaths). The number of deaths related to P&I for age groups 0–49, 50–64, and greater than 65 years was the highest for adult greater than 65 years of age.

### National pneumonia and influenza mortality Week ending 2/12/2011



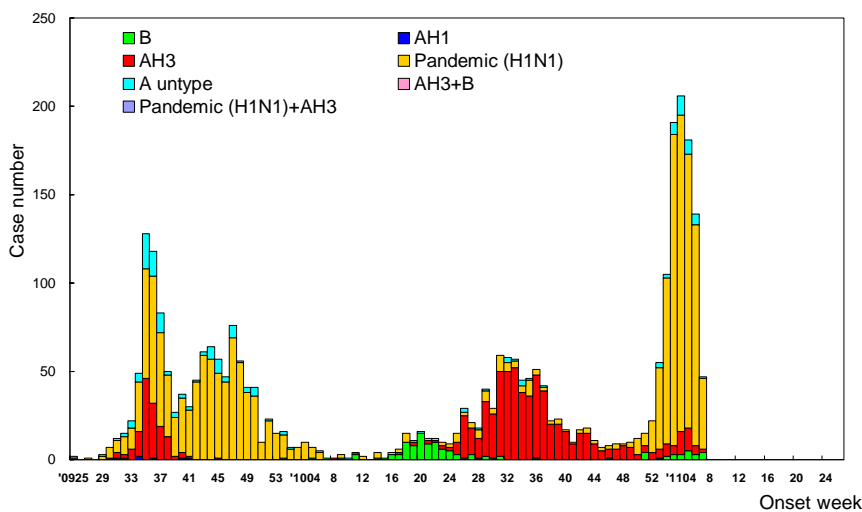
## National pneumonia and influenza mortality by age group Week ending 2/12/2011



## Reports of complicated influenza\*

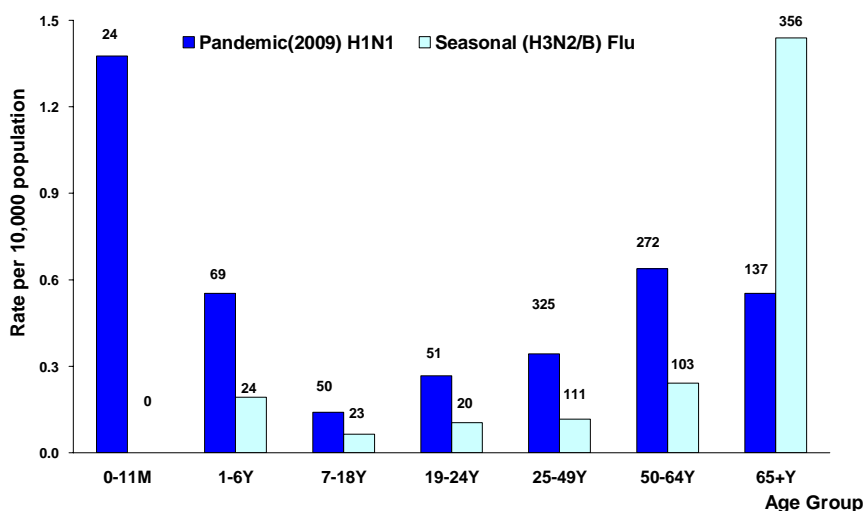
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### Number of complicated influenza reports by week of onset 7/1/2009 to present



\*Defined as influenza infection with pulmonary complication, neurologic complication, myocarditis, pericarditis, invasive bacterial infection, or those requiring intensive care or resulting deaths.

### Rate of complicated influenza reports by age groups 7/1/2010 to present



\*Numbers represent number of complicated influenza reports for that specific age stratum.

\* The number of patients with pandemic (2009) H1N1 includes one coinfected with pandemic (2009) H1N1 and seasonal H3N2 strains.



## Outpatient and emergency room influenza-like illness surveillance

Nationwide during week 7, 1.85% of outpatient visits reported through the National Health Insurance Database were due to influenza-like illness (ILI). This rate has decreased by 11% compared with the previous week (2.08%).

Nationwide during week 7, 17.09% of emergency room patient visits reported through the Real-time Outbreak and Disease Surveillance System (RODS) were due to ILI. This rate has decreased by 17% compared with the previous week (20.66%).

### Rate of outpatient and emergency room (ER) visits for influenza-like illness

6/14/2009 to present

