



## Summary : Week 12 (March 20– March 26, 2011)

Influenza activity in Taiwan peaked at week 4 and the rate of emergency room visits for influenza-like illness decreased gradually. Seasonal influenza B virus is predominant in community in week 12. Most of the influenza viruses match the 2010–11 vaccine component.

- Of the 445 specimens tested during week 10–week 12, 66 (15%) were positive for influenza viruses, 48 (11%) were positive for influenza B viruses, 15 (3%) were positive for pandemic (H1N1) 2009 viruses, 3 (1%) were positive for influenza A untyped strain.
- There were 8 new complicated influenza infections during week 12, including 2 complicated pandemic (H1N1) 2009 influenza cases, 1 seasonal H3N2 case, and 5 seasonal influenza B cases. Since July 1, 2010, there have been 1,742 reports of complicated influenza infection, including 1,035 reports of complicated pandemic (H1N1) 2009 virus infections. Since July 1, 2010, there have been 127 reports of death from complicated influenza infection; 92 from the pandemic H1N1 2009, 30 from the seasonal H3N2 strain, 2 from the seasonal influenza B strain and 3 from seasonal influenza A untyped strain, respectively.
- The number of deaths related to pneumonia and influenza during week 11 was 332, which was below the average number during the past 3 weeks (364 deaths).
- The rate of outpatient visits for influenza-like illness is 1.53%, a 3.8% decrease compared with the previous week (1.59%).
- The rate of emergency room visits for ILI is 15.1%, a 4.3% decrease compared with the previous week (15.78%).

## Virologic surveillance

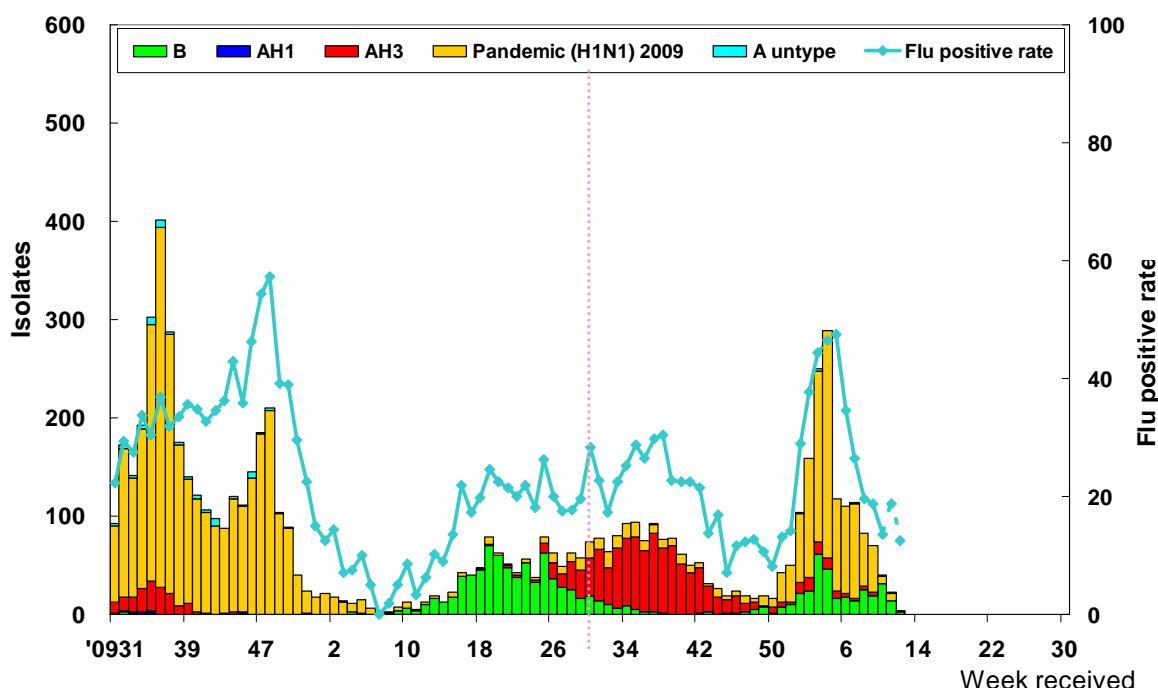
The results of tests performed during the past 3 weeks are summarized in the table below.

	Data for weeks 10–12	Cumulative data since 7/1/2010
<b>Number of specimens tested</b>	445	11565
<b>Number of positive specimens (%)</b>	66(15)	2822(24)
<b>Positive specimens by type/subtype (%)</b>		
<b>Influenza A (% of all positive specimens)</b>	18(27)	2319(82)
<b>A (pandemic [H1N1] 2009) (% of all Influenza A)</b>	15(83)	1290(56)
<b>A (H3)</b>	0(0)	1021(44)
<b>A (H1)</b>	0(0)	0(0)
<b>A (unable to subtype)</b>	3(17)	8(<1)
<b>A (subtyping not performed)</b>	0(0)	0(0)
<b>Influenza B</b>	48(73)	503(18)



**Antigenic characterization:** Taiwan CDC has antigenically characterized 286 human influenza viruses [138 influenza A (H3), 64 pandemic (H1N1) 2009, 84 influenza B] since July 1, 2010. 99% (n=137) of the influenza A (H3N2) viruses tested were related to the A (H3N2) vaccine component (A/Perth/16/2009). 95% (n=61) of the pandemic (H1N1) 2009 viruses tested were related to the A/California/07/2009 vaccine component. 83% (n=70) 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, 519 pandemic (H1N1) 2009, 295 influenza A (H3N2), and 30 influenza B viruses have been tested for resistance to the neuraminidase inhibitors (oseltamivir). Since July 1, 2010 six pandemic (H1N1) 2009 viruses which were resistant to oseltamivir has been detected. The results of antiviral resistance testing performed on these viruses are summarized in the table below.

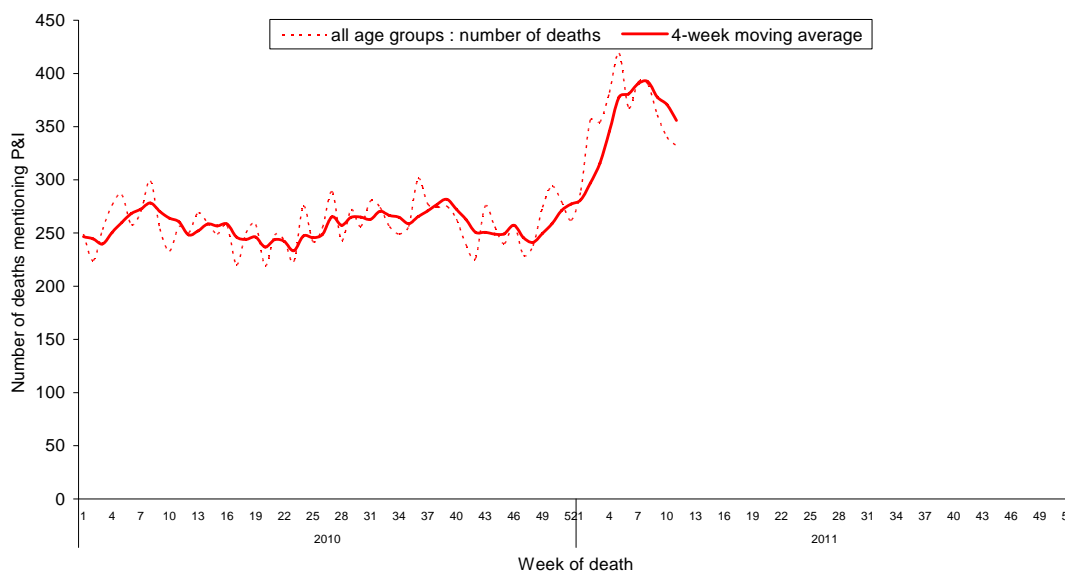
	Isolates tested (n)	Resistance Viruses, n (%)
		Oseltamivir
<b>A (pandemic [H1N1] 2009)</b>	519	6 (1.2)
<b>A (H3)</b>	295	0 (0)
<b>B</b>	30	0 (0)



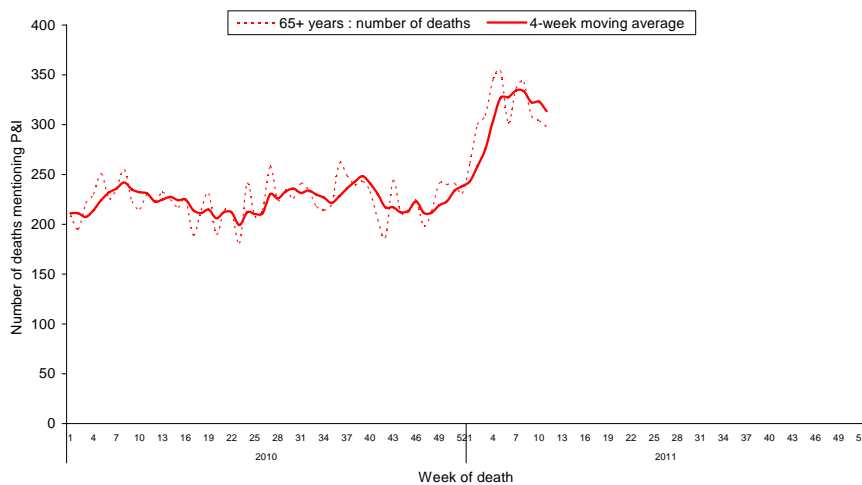
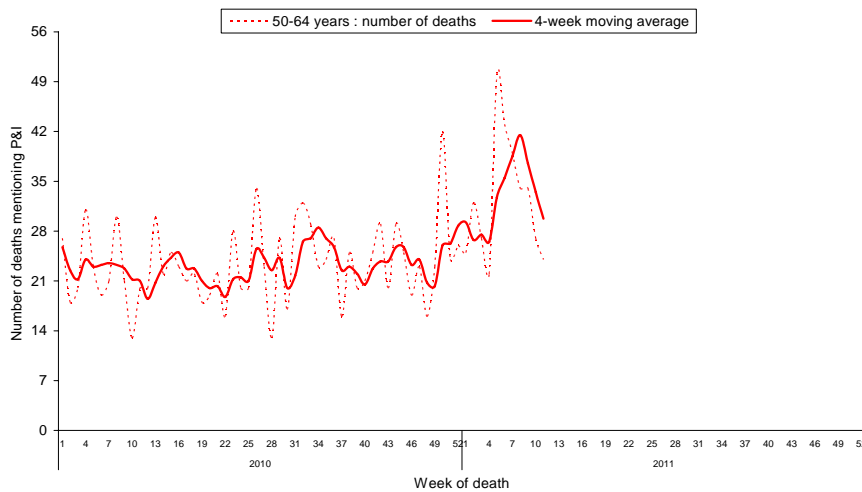
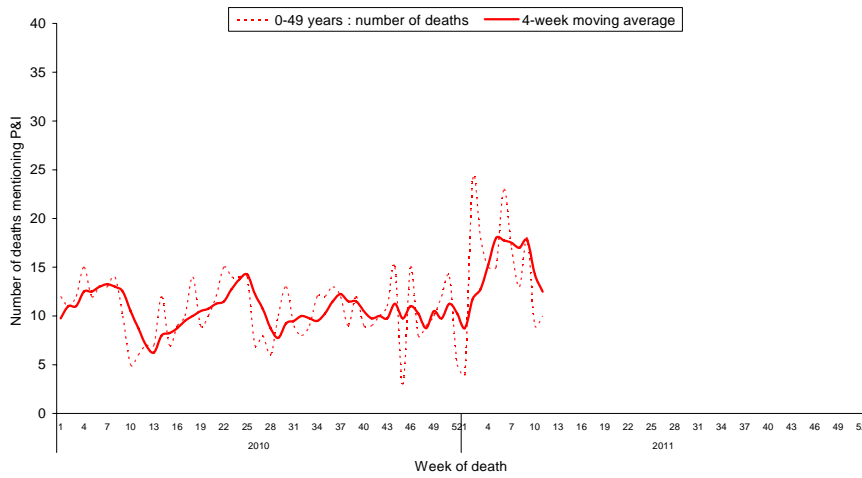
## Pneumonia and influenza (P&I) mortality surveillance

During week 11, 332 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 (364 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 3/19/2011



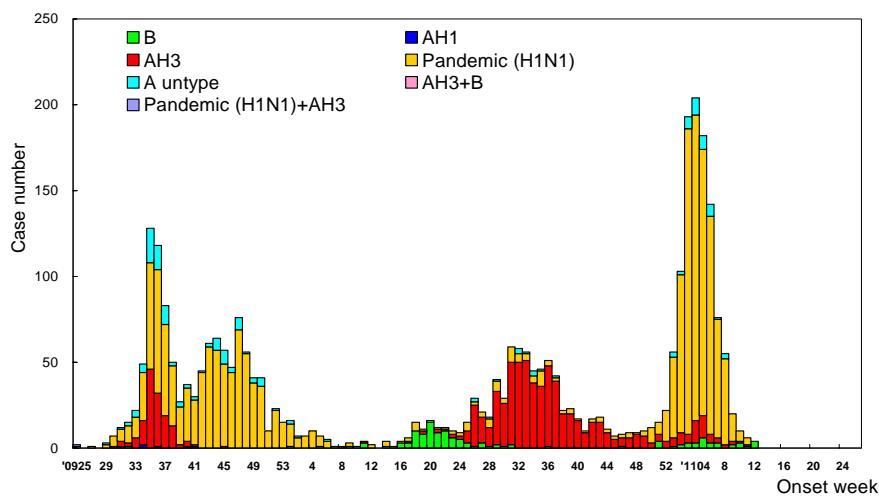
## National pneumonia and influenza mortality by age group Week ending 3/19/2011



## Reports of complicated influenza\*

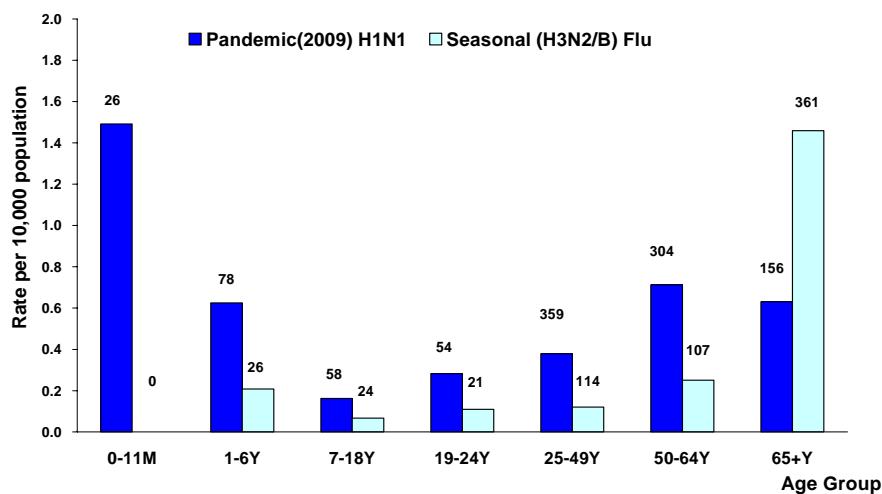
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### Number of complicated influenza reports by week of onset 7/1/2009 to present



\*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 co-infected with pandemic (2009) H1N1 and seasonal H3N2 strains; one co-infected with pandemic (2009) H1N1 and seasonal B strains.



## Outpatient and emergency room influenza-like illness surveillance

Nationwide during week 12, 1.53% of outpatient visits reported through the National Health Insurance Database were due to influenza-like illness (ILI). This rate has decreased by 3.8% compared with the previous week (1.59%).

The rate of emergency room visits for ILI is 15.1%, a 4.3% decrease compared with the previous week (15.78%).

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

6/14/2009 to present

