



## Summary : Week 9 (February 27– March 5, 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 610 specimens tested during week 7–week 9, 171 (28%) were positive for influenza viruses, 130 (21%) were positive for pandemic (H1N1) 2009 viruses, 36 (6%) were positive for influenza B viruses, 4 (1%) were positive for influenza A (H3N2) viruses and 1 (<1%) were positive for influenza virus untyped A.
- There were 27 new complicated influenza infections during week 9, including 23 complicated pandemic (H1N1) 2009 influenza cases, 2 seasonal H3N2 cases, and 2 seasonal influenza A untyped cases. Since July 1, 2010, there have been 1,719 reports of complicated influenza infections, including 1,024 reports of complicated pandemic (H1N1) 2009 virus infections (one patient was co-infected with pandemic [H1N1] 2009 virus and seasonal influenza virus type H3N2). Since July 1, 2010, there have been 107 reports of death from complicated influenza infection; 73 from the pandemic H1N1 2009, 30 from the seasonal H3N2 strain, 2 from the seasonal influenza B strain and 2 from seasonal influenza A untyped strain, respectively.
- The number of deaths related to pneumonia and influenza during week 8 was 375, which was below the average number during the past 3 weeks (385 deaths).
- The rate of outpatient visits for influenza-like illness is 1.73%, a 3% decrease compared with the previous week (1.78%).
- The rate of emergency room visits for ILI is 16.83%. Because of the national holidays in week 9, the rate is comparable with the previous week (16.85%). Excluding the national holidays, the rate of emergency room visits for ILI is 15.51%, a 5.5% decrease compared with the same period in previous week (16.42%).

## Virologic surveillance

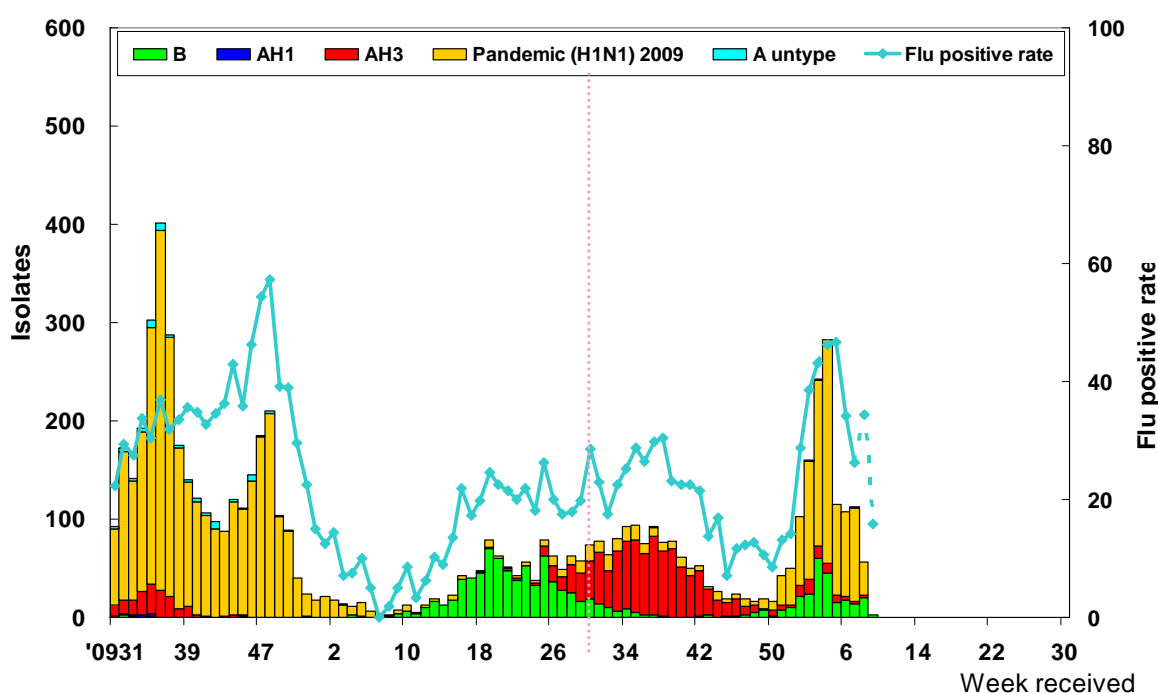
The results of tests performed during the past 3 weeks are summarized in the table below.

	Data for weeks 07–09	Cumulative data since 7/1/2010
<b>Number of specimens tested</b>	610	10445
<b>Number of positive specimens (%)</b>	171(28)	2642(25)
<b>Positive specimens by type/subtype (%)</b>		
<b>Influenza A (% of all positive specimens)</b>	135(79)	2212(84)
<b>A (pandemic [H1N1] 2009) (% of all Influenza A)</b>	130(96)	1191(54)
<b>A (H3)</b>	4(3)	1015(46)
<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>	36(21)	430(16)



**Antigenic characterization:** Taiwan CDC has antigenically characterized 256 human influenza viruses [133 influenza A (H3), 56 pandemic (H1N1) 2009, 67 influenza B] since July 1, 2010. 99% (n=132) of the influenza A (H3N2) viruses tested were related to the A (H3N2) vaccine component (A/Perth/16/2009). 95% (n=53) of the pandemic (H1N1) 2009 viruses tested were related to the A/California/07/2009 vaccine component. 88% (n=59) 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, 363 pandemic (H1N1) 2009, 266 influenza A (H3N2), and 12 influenza B viruses have been tested for resistance to the neuraminidase inhibitors (oseltamivir). 3 pandemic (H1N1) 2009 viruses which were resistant to oseltamivir were detected in week 9. The results of antiviral resistance testing performed on these viruses are summarized in the table below.

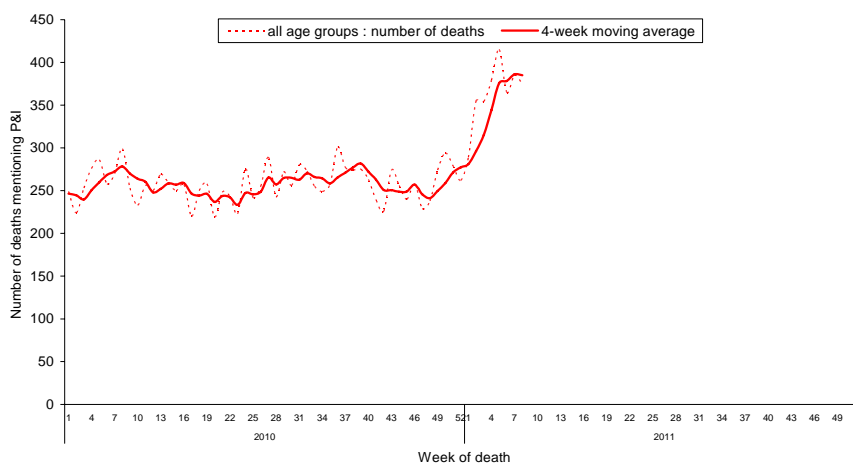
	Isolates tested (n)	Resistance Viruses, n (%)
		Oseltamivir
A (pandemic [H1N1] 2009)	363	3 (0.8)
A (H3)	266	0 (0)
B	12	0 (0)



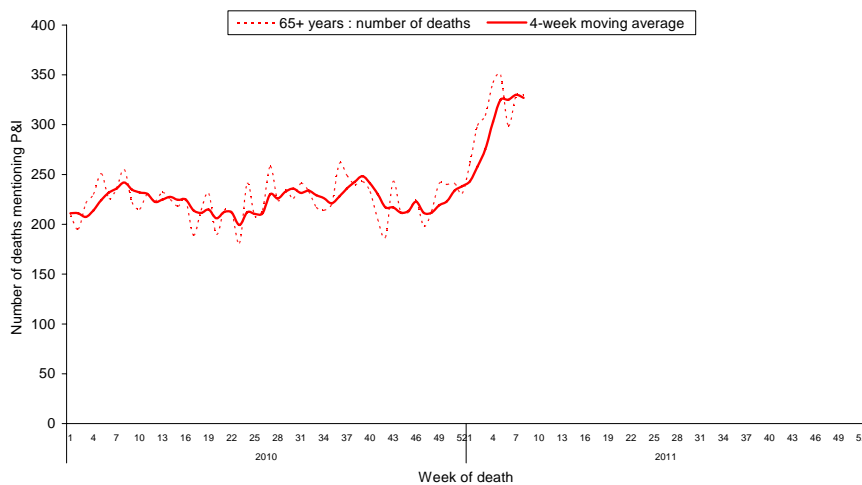
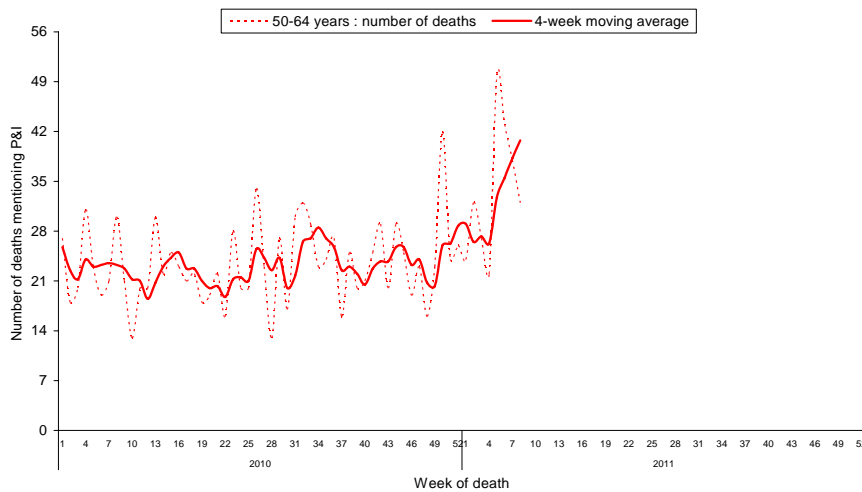
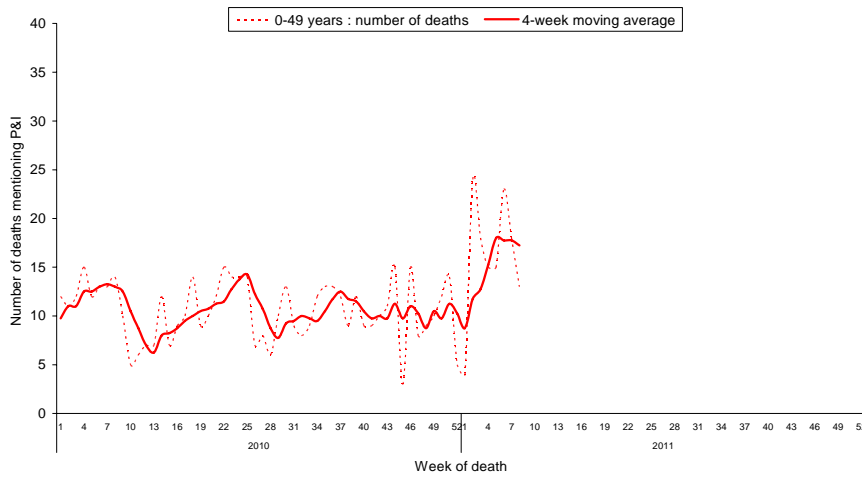
## Pneumonia and influenza (P&I) mortality surveillance

During week 8, 375 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 (385 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 2/26/2011



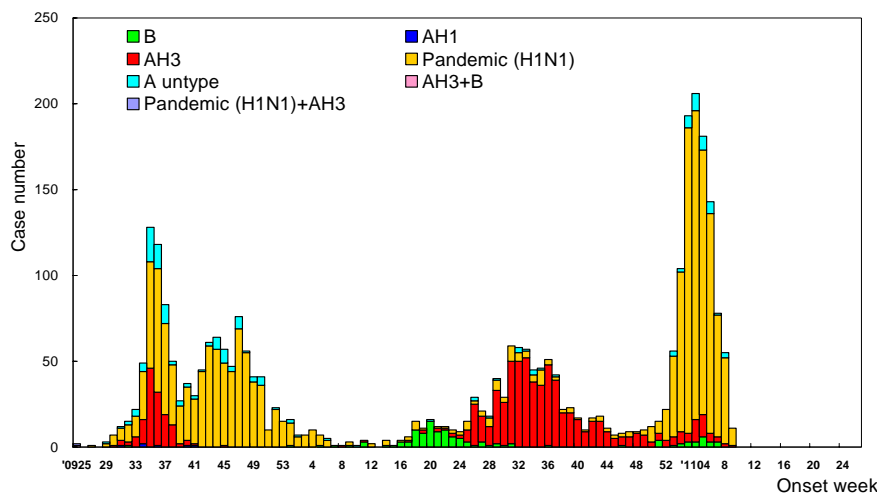
## National pneumonia and influenza mortality by age group Week ending 2/26/2011



## Reports of complicated influenza\*

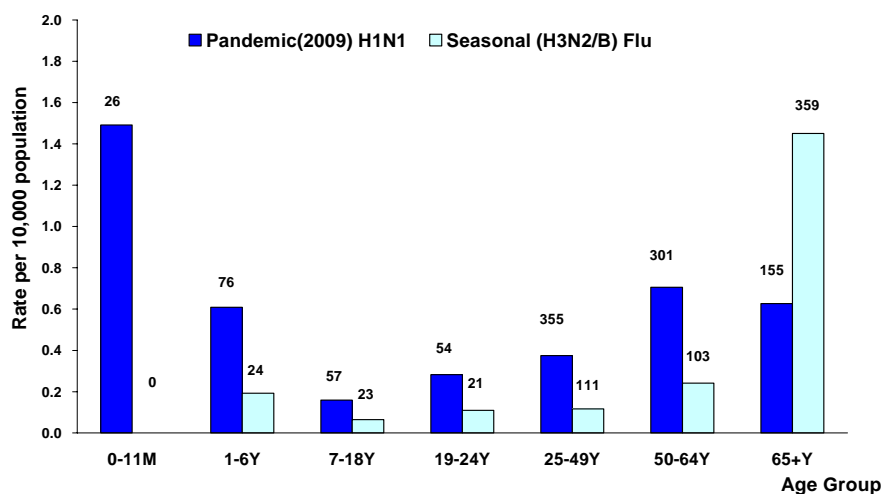
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### Number of complicated influenza reports by week of onset 7/1/2009 to present



\*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 coinfecting with pandemic (2009) H1N1 and seasonal H3N2 strains.



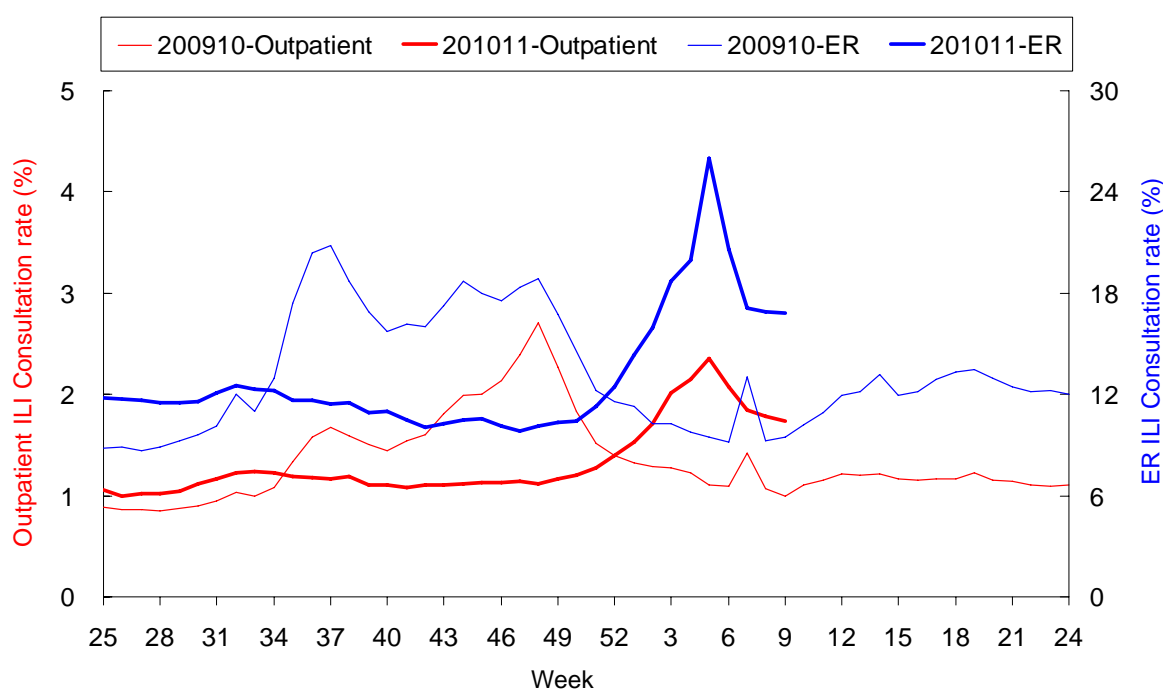
## Outpatient and emergency room influenza-like illness surveillance

Nationwide during week 9, 1.73% of outpatient visits reported through the National Health Insurance Database were due to influenza-like illness (ILI). This rate has decreased by 3% compared with the previous week (1.78%).

The rate of emergency room visits for ILI is 16.83%. Because of the national holidays in week 9, the rate is comparable with the previous week (16.85%). Excluding the national holidays, the rate of emergency room visits for ILI is 15.51%, a 5.5% decrease compared with the same period in previous week (16.42%).

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

6/14/2009 to present



Week	Date	Total ER Visits	Visits - RODES respiratory syndrome	Consultation Rate - RODES respiratory syndrome	Percentage change in Consultation Rate	Percentage change in ER Visits
Week 8	2011/02/22	15,401	2,497	16.42	↓ 5.5%	↓ 10.5%
	2011/02/23	14,981	2,463			
	2011/02/24	15,098	2,413			
	2011/02/25	15,171	2,408			
	2011/02/26	17,445	3,040			
	Total	78,096	12,821			
Week 9	2011/03/01	15,754	2,430	15.51	↓ 5.5%	↓ 10.5%
	2011/03/02	14,157	2,146			
	2011/03/03	13,918	2,138			
	2011/03/04	13,939	2,109			
	2011/03/05	16,222	2,653			
	Total	73,990	11,476			

