



Summary : Week 52 (Dec. 22–Dec. 28, 2013)

Influenza activity continued to increase in Taiwan during week 52. Influenza A (H3N2) remained the predominant virus subtype in Taiwan, followed by A (H1N1) virus.

- Of the 162 specimens tested during week 50, 2013, 14 (8.6%) were positive for influenza viruses, 10 (6.2%) were positive for influenza A (H3N2) virus, 2 (1.2%) were positive for influenza A (H1N1) virus, and 2 (1.2%) were positive for influenza B virus.
- During week 52, 2013, there were 20 new cases of complicated influenza, including 13 cases with influenza A (H3N2) virus infection, 5 cases with influenza A (H1N1) virus infection, 2 cases with influenza B virus infection; 1 report of death from complicated influenza with A (H3N2) virus infection. Since July 1, 2013, 232 cases of complicated influenza infection have been confirmed, including 169 cases from influenza A (H3N2) virus infection, 57 cases from influenza A (H1N1) virus infection, 1 case due to un-typed influenza A virus infection, and 5 cases from influenza B virus infection. 70 cases of complicated influenza infection received the intensive care. Since July 1, 2013, there have been 18 reports of death from complicated influenza infection; 14 cases from influenza A (H3N2) virus infection and 4 cases from influenza A (H1N1) virus infection respectively.
- During week 51, 2013, the number of deaths related to pneumonia and influenza was 300, which was above the number of the previous week (293 deaths).
- The proportion of outpatient visits for influenza-like illness (ILI) was 1.30%, a 5.7% increase compared with the proportion of previous week (1.23%).
- The proportion of emergency room visits for ILI was 10.61%, a 7.9% increase compared with the proportion of previous week (9.83%).

Virologic surveillance

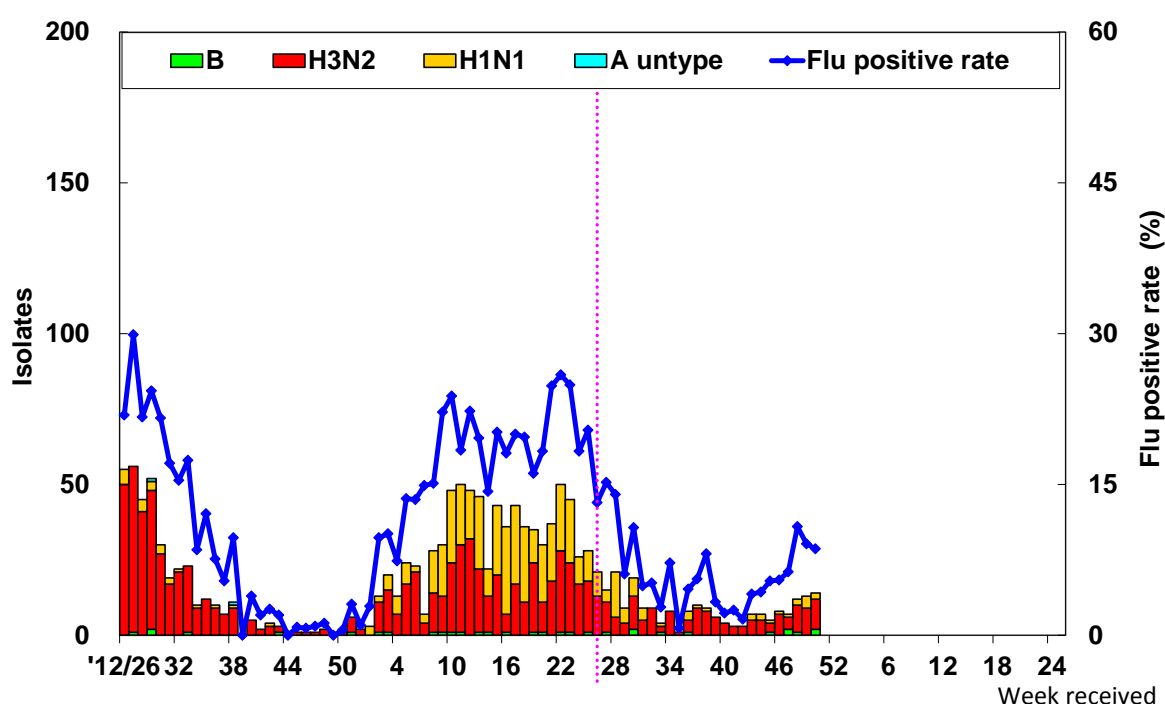
During week 50, 2013, the results of tests performed summarized in the table below.

	Data for week 50	Cumulative data since 7/1/2013
Number of specimens tested	162	3723
Number of positive specimens (%)	14(8.6)	232(6.2)
Positive specimens by type/subtype (%)		
Influenza A (% of all positive specimens)	12(86)	221(95)
A (H1N1) (% of all Influenza A)	2(17)	63(29)
A (H3N2)	10(83)	158(71)
A (unable to subtype)	0(0)	0(0)
A (subtyping not performed)	0(0)	0(0)
Influenza B	2(14)	11(5)



Antigenic characterization: Taiwan CDC has antigenically characterized 31 human influenza viruses [10 influenza A (H1N1) viruses, 20 influenza A (H3N2) viruses, and 1 B/Victoria-lineage virus] since October 1, 2013. 100% (n=10) influenza A (H1N1) viruses tested were related to the A (H1N1) component of the 2013-14 influenza vaccine (A/California/7/2009(H1N1)pdm09). 95% (n=19) of the influenza A (H3N2) viruses tested were related to the A (H3N2) component of the 2013-14 influenza vaccine (A/Victoria/361/2011(H3N2)). 1 influenza B/Victoria-lineage virus was characterized as B/Brisbane/60/2008-like, which is not related to the B component of the 2013-14 trivalent influenza vaccine (B/Massachusetts/2/2012-like(B/Yamagata-lineage virus)).

Influenza positive tests reported to Taiwan CDC by contracted laboratories, 2012–2014



Antiviral resistance: Since October 1, 2013, one influenza A (H1N1) virus and 3 influenza A (H3N2) virus 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.

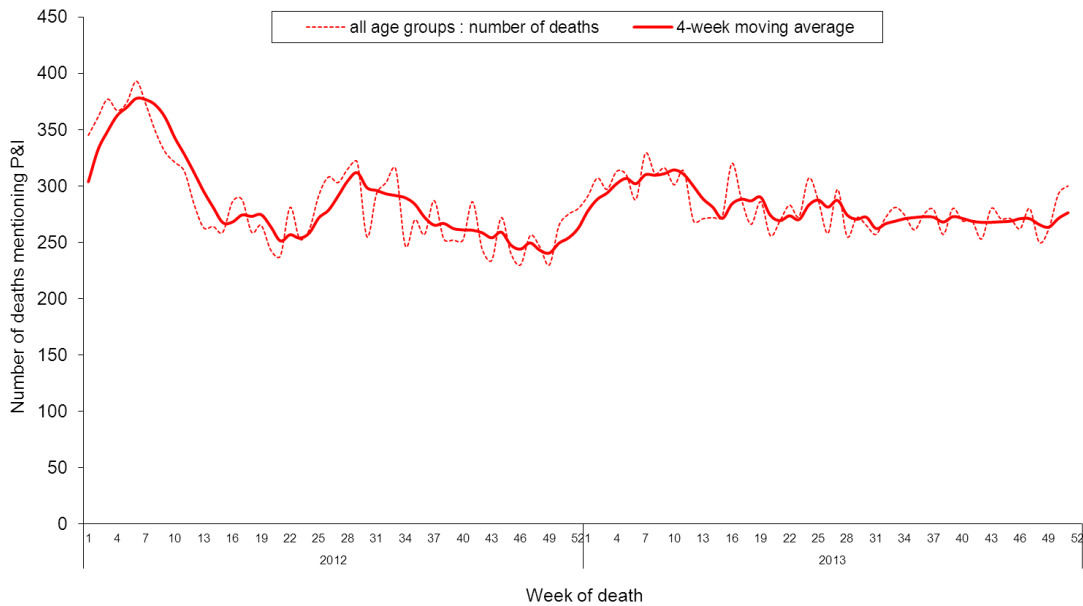
	Isolates tested (n)	Resistance Viruses, n (%)
		Oseltamivir
Influenza A (H1N1)	1	0
Influenza A (H3N2)	3	0
Influenza B	0	0



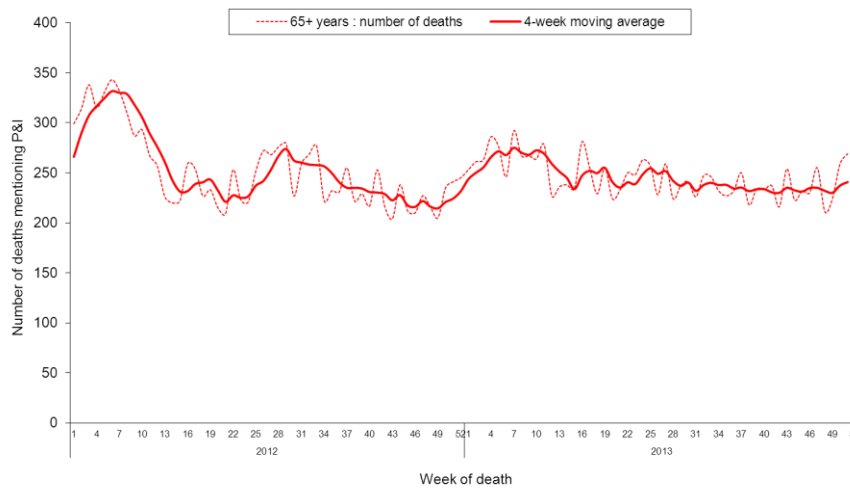
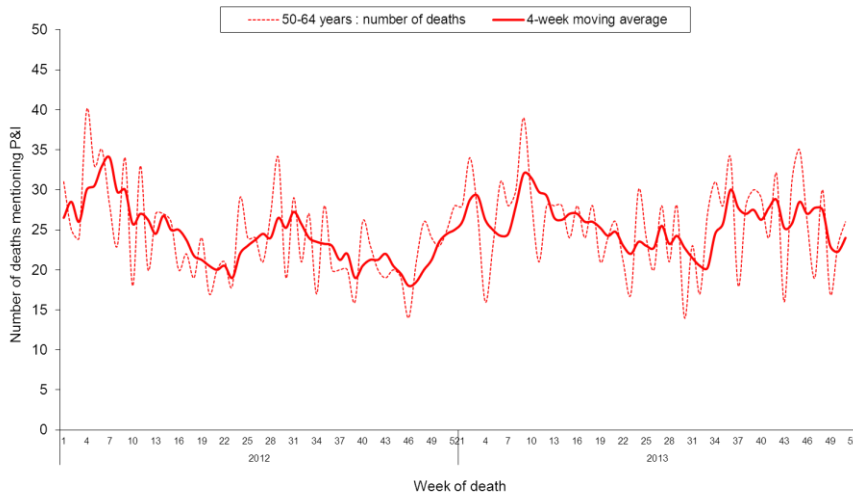
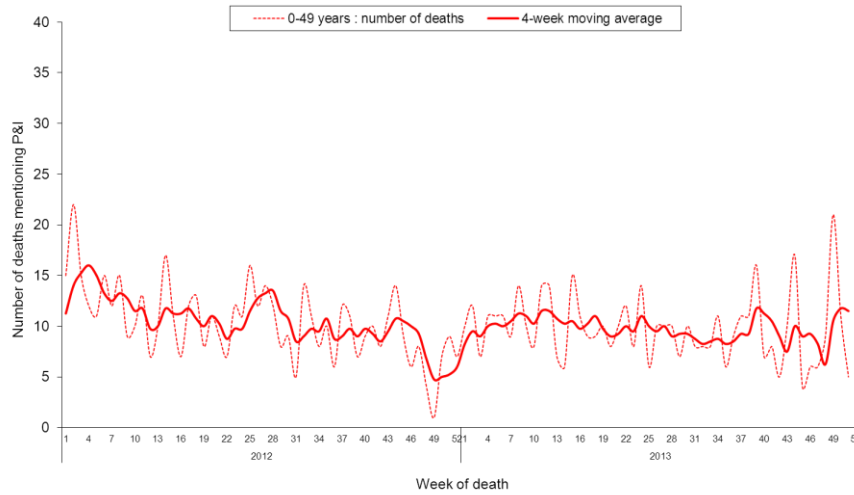
Pneumonia and influenza (P&I) mortality surveillance

During week 51, 2013, 300 deaths reported through the National Death Certificate System mentioned P&I as the cause of death. This number was above the number of previous week (293 deaths). The number of deaths related to P&I for adults of 65 or greater is the highest among the three age groups (0–49, 50–64, and 65+).

National pneumonia and influenza mortality Week ending at December 21, 2013



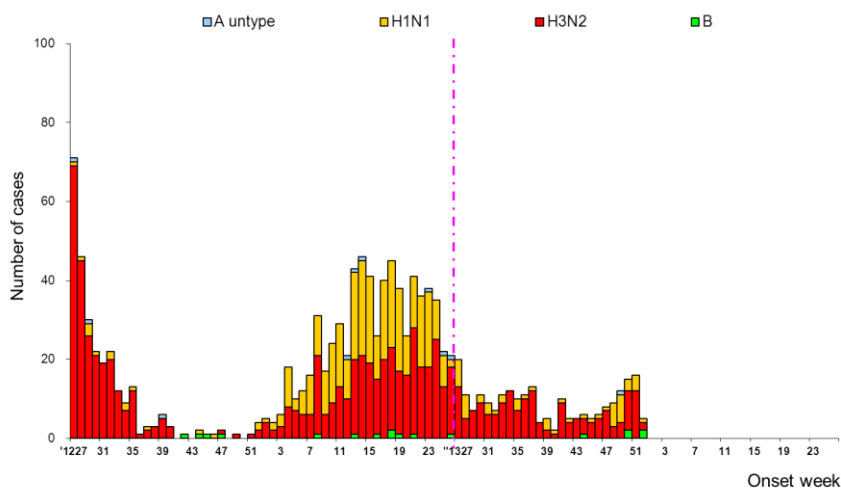
National pneumonia and influenza mortality by age group Week ending at December 21, 2013



Reports of complicated influenza*

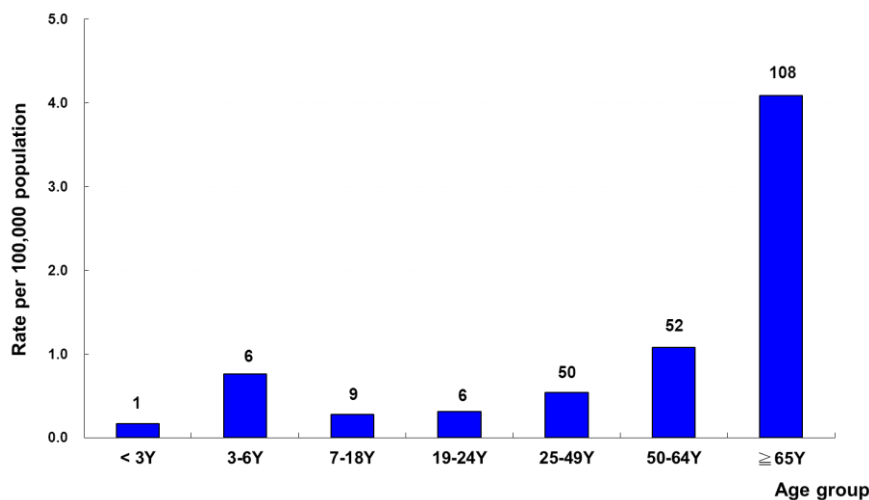
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Number of complicated influenza reports by week of onset July 1, 2012 to present



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

Rate of complicated influenza reports by age groups July 1, 2013 to present



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



Outpatient and emergency room influenza-like illness surveillance

Nationwide during week 52, 2013, 1.30% of outpatient visits reported through the National Health Insurance Database were due to influenza-like illness (ILI), a 5.7% increase compared with the proportion of previous week (1.23%).

The proportion of emergency room visits for ILI was 10.61%, a 7.9% increase compared with the proportion of previous week (9.83%).

Proportions of outpatient and emergency room (ER) visits for influenza-like illness (July 1, 2012 to present)

