



Summary : Week 16 (Apr. 14–Apr. 20, 2013)

During week 16, 2013, influenza activity in Taiwan is still at low to moderate level. From the virologic surveillance data, the proportion of influenza A (H1N1) viruses has been increasing and co-circulating with influenza A (H3N2) viruses in the community since week 8.

- Of the 132 specimens tested during week 14, 2013, 21 (15.9%) were positive for influenza viruses, 11 (8.3%) were positive for influenza A (H3N2) virus, 9 (6.8%) were positive for influenza A (H1N1) virus, and 1 (0.8%) was positive for influenza B virus.
- During week 16, 2013, there were 27 new cases of complicated influenza, including 15 cases with influenza A (H3N2) virus infection and 12 cases with influenza A (H1N1) virus infection; 6 reports of death from complicated influenza, including 3 cases with influenza A (H3N2) virus infection and 3 cases with influenza A (H1N1) virus infection. Since July 1, 2012, 601 cases of complicated influenza infection have been confirmed, including 408 cases from influenza A (H3N2) virus infection, 180 cases from influenza A (H1N1) virus infection, 7 cases due to un-typed influenza A virus infection, and 6 cases from influenza B virus infection. 189 cases of complicated influenza infection received the intensive care. Since July 1, 2012, there have been 49 reports of death from complicated influenza infection; 33 cases from influenza A (H3N2) virus infection and 16 cases from influenza A (H1N1) virus infection, respectively.
- During week 15, 2013, the number of deaths related to pneumonia and influenza was 266, which was above the number of the previous week (262 deaths).
- The proportion of outpatient visits for influenza-like illness is 1.31%, which was comparable with the proportion of previous week (1.32%).
- The proportion of emergency room visits for ILI is 11.58%, which was comparable with the proportion of previous week (11.71%).

Virologic surveillance

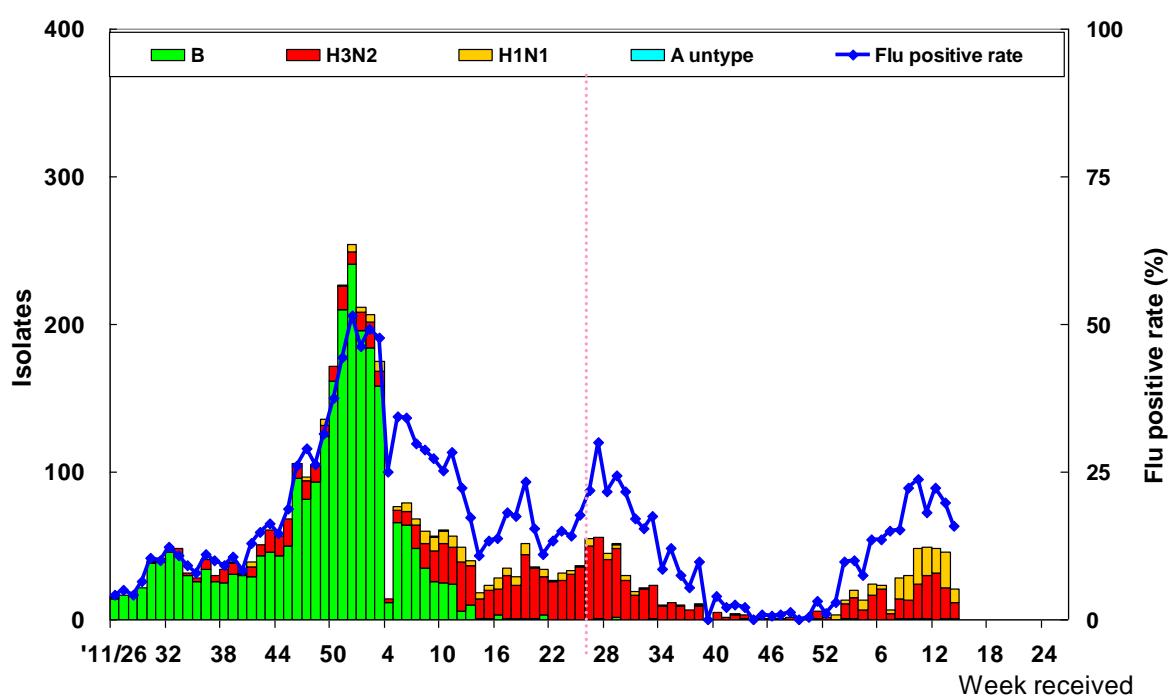
During week 14, 2013, the results of tests performed are summarized in the table below.

	Data for week 14	Cumulative data since 7/1/2012
Number of specimens tested	132	6188
Number of positive specimens (%)	21(15.9)	698(11.3)
Positive specimens by type/subtype (%)		
Influenza A (% of all positive specimens)	20(95)	684(98)
A (H1N1) (% of all Influenza A)	9(45)	168(25)
A (H3N2)	11(55)	514(75)
A (unable to subtype)	0(0)	2(<1)
A (subtyping not performed)	0(0)	0(0)
Influenza B	1(5)	14(2)



Antigenic characterization: Taiwan CDC has antigenically characterized 83 human influenza viruses [25 influenza A (H1N1) viruses, 52 influenza A (H3N2) viruses, and 6 influenza B viruses] since October 1, 2012. 98% (n=51) of the influenza A (H3N2) viruses tested were related to the A (H3N2) component of the 2012-13 influenza vaccine (A/Victoria/361/2011(H3N2)). All of the 25 influenza A (H1N1) viruses tested were related to the A (H1N1) component of the 2012-13 influenza vaccine (A/California/7/2009(H1N1)pdm09). 83% (n=5) of the influenza B viruses tested belonged to the B/Yamagata lineage and were related to the B component of the 2012-13 influenza vaccine (B/Wisconsin/1/2010).

Influenza positive tests reported to Taiwan CDC by contracted laboratories, 2011–2013



Antiviral resistance: Since October 1, 2012, 35 influenza A (H1N1), 62 influenza A (H3N2) and 2 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.

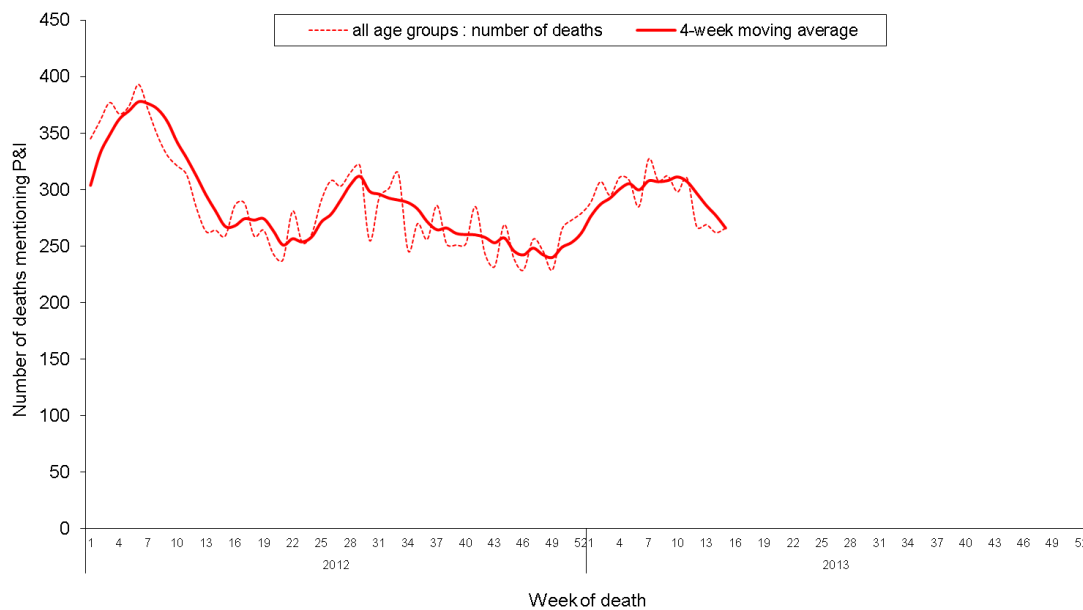
	Isolates tested (n)	Resistance Viruses, n (%)
		Oseltamivir
Influenza A (H1N1)	35	0 (0)
Influenza A (H3N2)	62	0 (0)
Influenza B	2	0 (0)



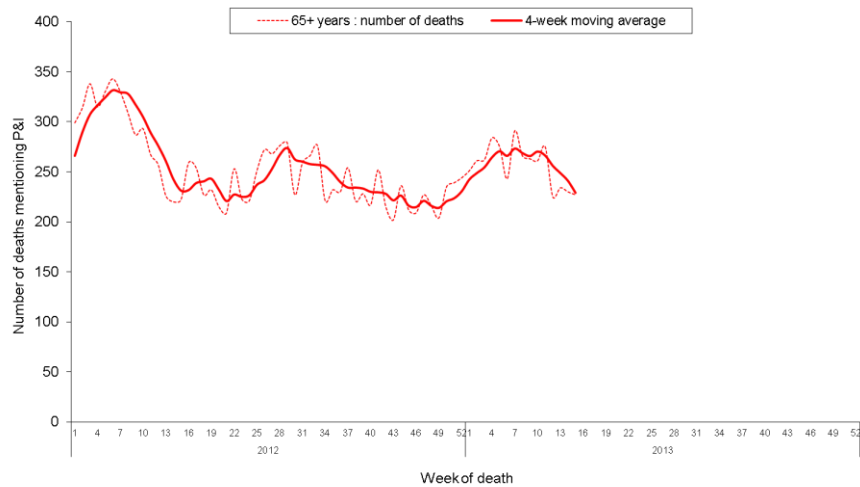
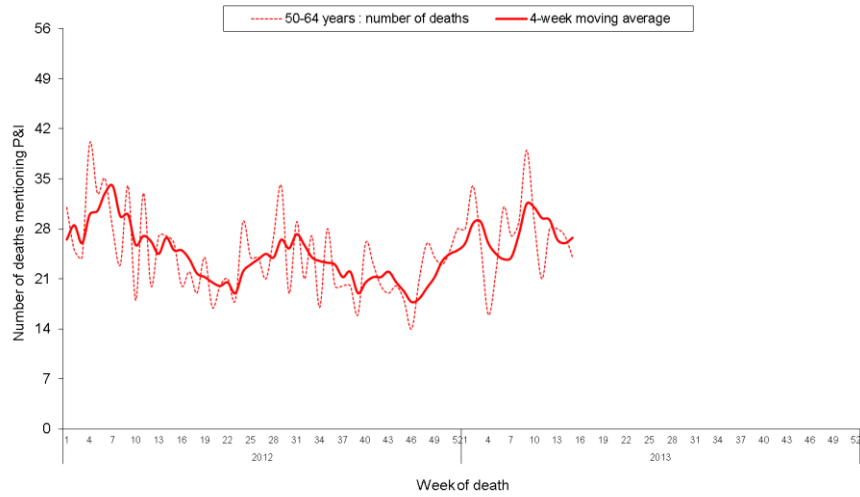
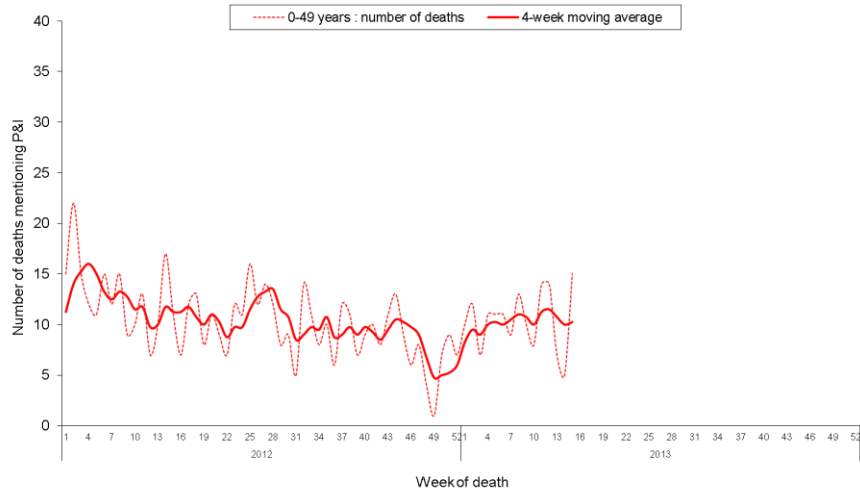
Pneumonia and influenza (P&I) mortality surveillance

During week 15, 2013, 266 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 (262 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 April 13, 2013



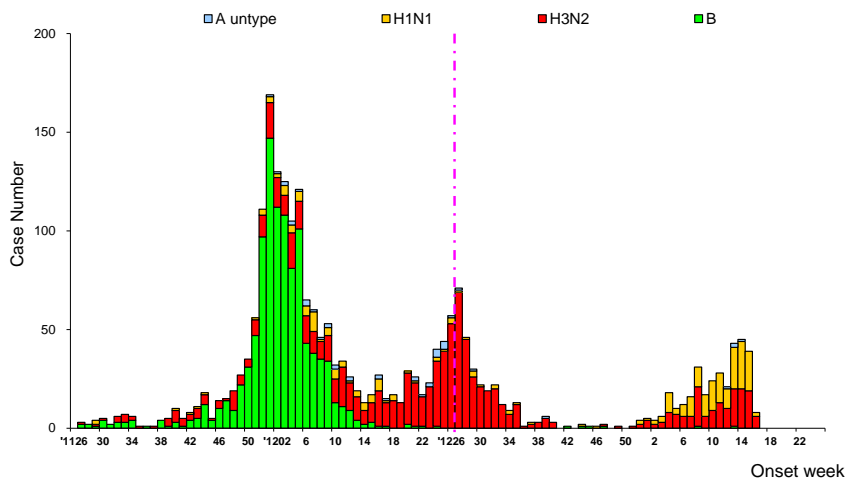
National pneumonia and influenza mortality by age group Week ending April 13, 2013



Reports of complicated influenza*

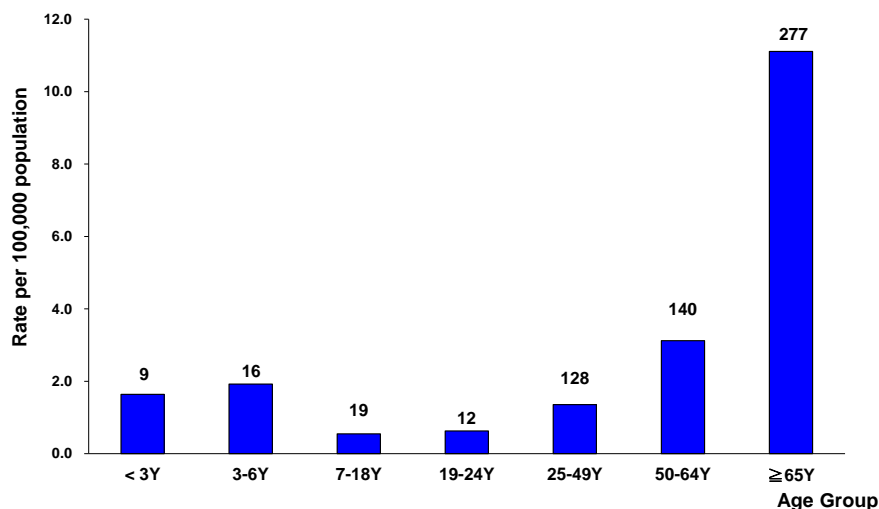
During week 16, 2013, there were 27 new cases of complicated influenza, including 15 cases with influenza A (H3N2) virus infection and 12 cases with influenza A (H1N1) virus infection; 6 reports of death from complicated influenza, including 3 cases with influenza A (H3N2) virus infection and 3 cases with influenza A (H1N1) virus infection. Since July 1, 2012, 601 cases of complicated influenza infection have been confirmed, including 408 cases from influenza A (H3N2) virus infection, 180 cases from influenza A (H1N1) virus infection, 7 cases due to un-typed influenza A virus infection, and 6 cases from influenza B virus infection. 189 cases of complicated influenza infection received the intensive care. Since July 1, 2012, there have been 49 reports of death from complicated influenza infection; 33 cases from influenza A (H3N2) virus infection and 16 cases from influenza A (H1N1) virus infection, respectively.

Number of complicated influenza reports by week of onset June 26, 2011 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, 2012 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 16, 2013, 1.31% of outpatient visits reported through the National Health Insurance Database were due to influenza-like illness (ILI), which was comparable with the proportion of previous week (1.32%).

The proportion of emergency room visits for ILI is 11.58%, which was comparable with the proportion of previous week (11.71%).

Proportions of outpatient and emergency room (ER) visits for influenza-like illness (June 26, 2011 to present)

