



Summary : Week 9 (Feb 28 – Mar 5, 2016)

The influenza activity has gradually decreased. H1N1 is currently the dominant strain circulating in the community, and recent H1N1 isolates are similar to 2015-16 vaccine strain. The proportion of influenza B isolates among positive specimens has been increased, which could slow the decrease in the trend of ILI, but will have a limited effect on the number of severe cases and deaths. None of the viruses identified has shown drug resistance.

- The percentage of specimens testing positive for influenza was 39.3% during week 7, 2016. The predominant virus subtype of positive specimens were influenza A(H1N1) viruses.
- During week 9, there were 314 new cases of severe complicated influenza and 37 new reports of death. Since July 1, 2015, there were 121 reports of death among 1423 severe complicated influenza cases.
- During week 9, 2016, both proportions of outpatient visits and emergence room visits for influenza-like illness (ILI) were lower than the proportions of previous week.

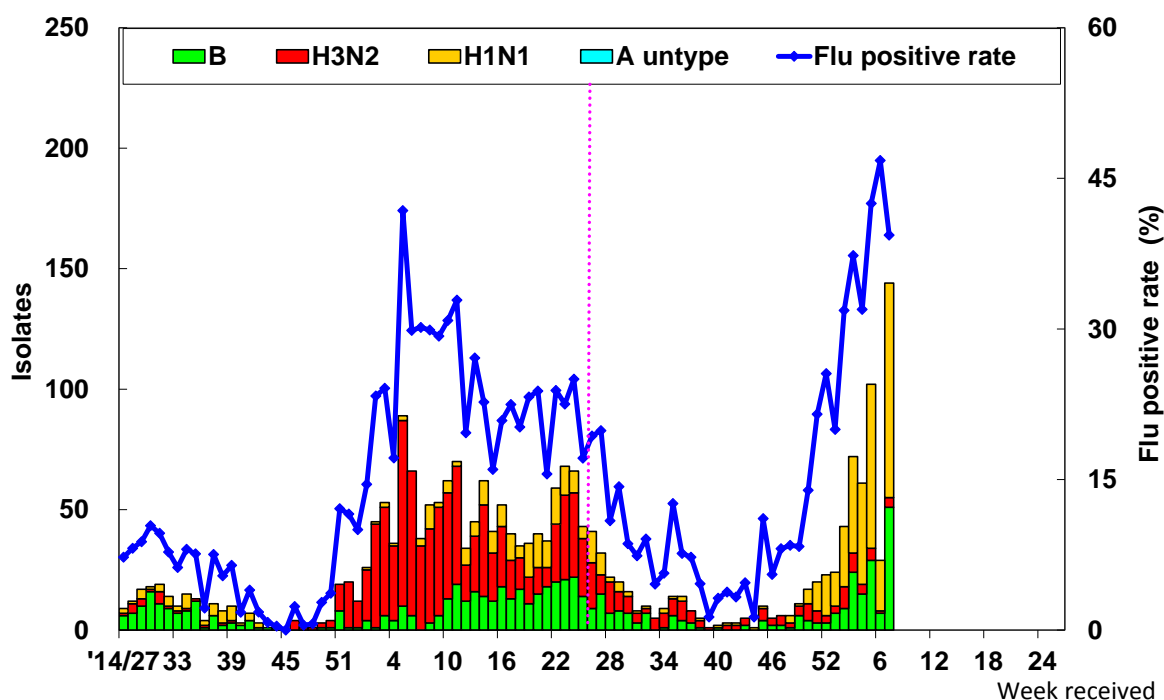
Viral Surveillance

	Data for week 7, 2016	Cumulative data since 7/1/2015
Number of specimens tested	366	4459
Number of positive specimens (%)	144(39.3)	792(17.8)
Positive specimens by type/subtype (%)		
Influenza A (% of all positive specimens)	93(64.6)	551(69.6)
A (H1N1) (% of all Influenza A)	89(95.7)	381(69.1)
A (H3N2)	4(4.3)	170(30.9)
A (unable to subtype)	0(0)	0(0)
A (subtyping not performed)	0(0)	0(0)
Influenza B	51(35.4)	241(30.4)



Antigenic Characterization: Taiwan CDC has antigenically characterized 156 human influenza viruses. Since October 1, 2015, 93.8 % of influenza A(H1N1) viruses tested were related to the A(H1N1) component of the 2015-16 influenza vaccine (A/California/7/2009). 100% of influenza A(H3N2) viruses tested were related to the A(H3N2) component of the 2015-16 influenza vaccine (A/Switzerland/9715293/2013). 60.9% of influenza B viruses tested were related to the B component of the 2015-16 influenza vaccine (B/Phuket/3073/2013-like).

Influenza positive tests reported to Taiwan CDC by contracted laboratories, 2014–2016



Antiviral Resistance: Since October 1, 2015, the results of antiviral resistance to neuraminidase inhibitor (Oseltamivir) are summarized in the table below.

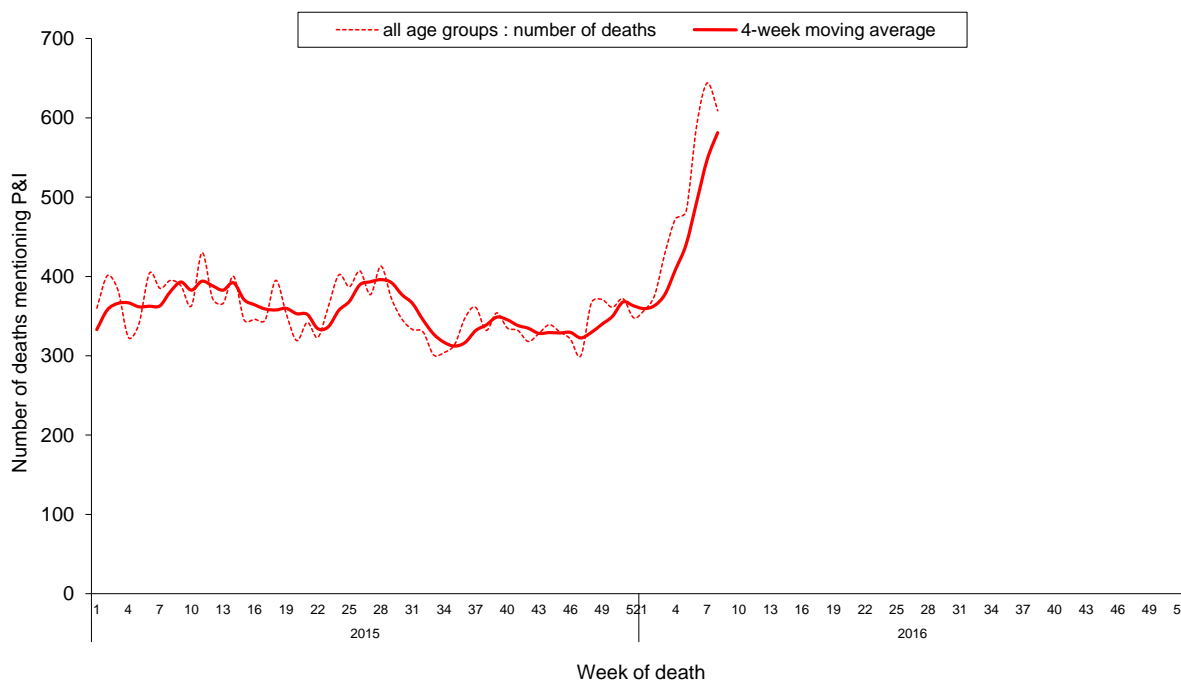
	Isolates tested (n)	Resistance Viruses, n (%)
		Oseltamivir
Influenza A (H1N1)	42	0
Influenza A (H3N2)	37	0
Influenza B	26	0



Pneumonia and influenza (P&I) mortality surveillance

The whole trend of P&I increased in recent weeks. The number of deaths related to P&I for adults aged 65 years or greater was the highest among the three age groups (0–49, 50–64, and 65+).

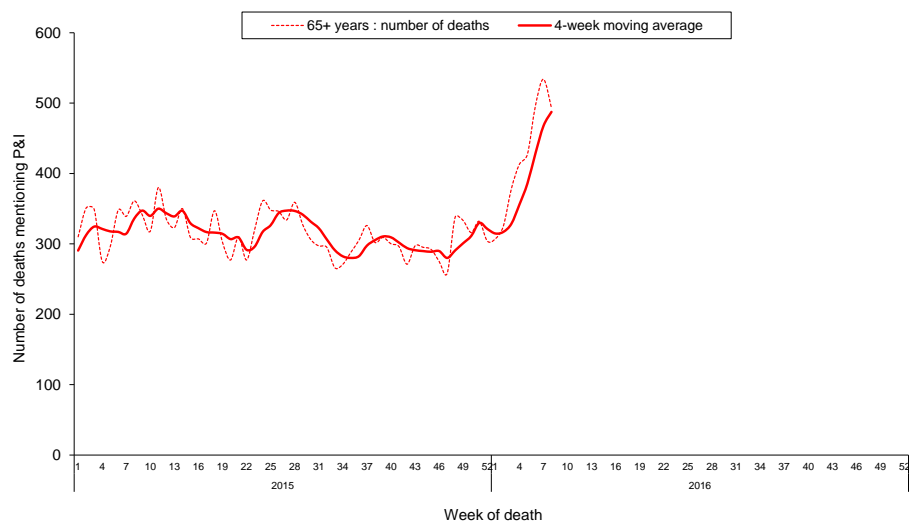
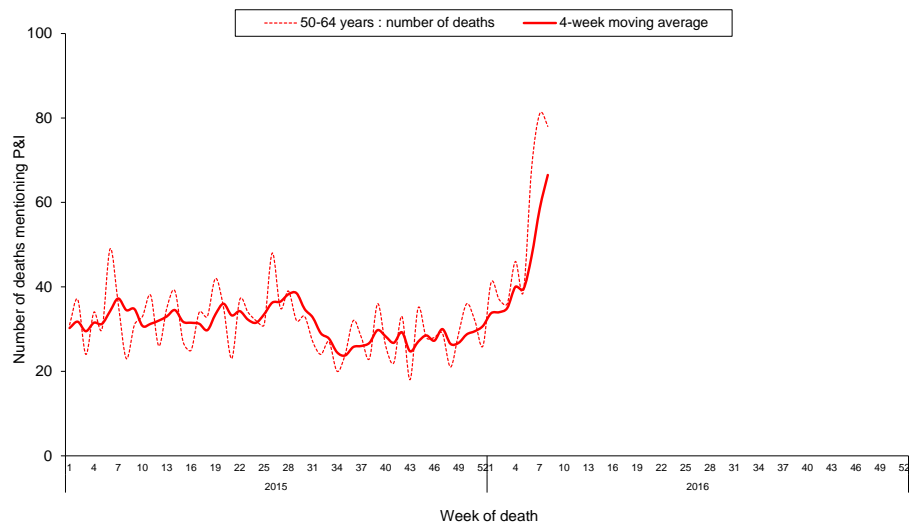
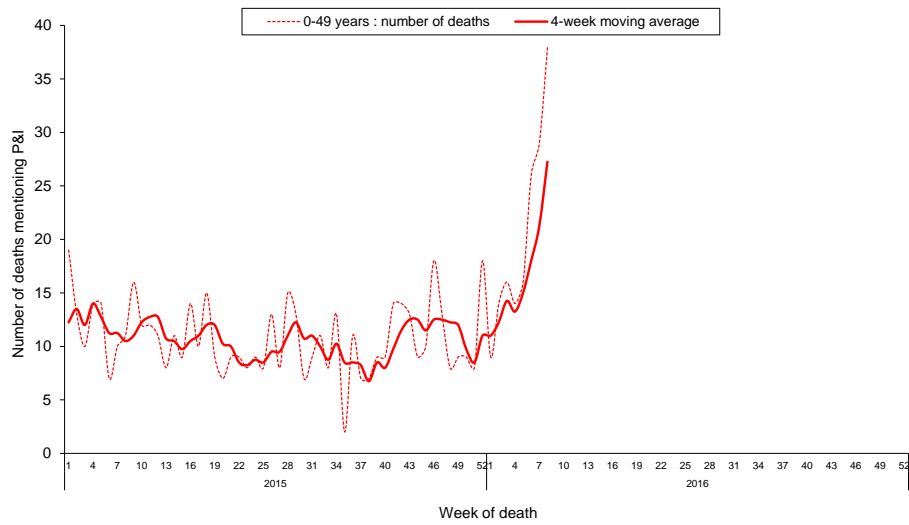
National pneumonia and influenza mortality Week ending at Feb 27, 2016



* Medical institutions were required to report any mortality case to Ministry of Health and Welfare (MOHW) within 7 days after a death certification is issued through the Internet System for Death Reporting (ISDR). The last field of immediate cause or the underlying cause of death was used to identify P&I death cases. Only those with keywords texts containing 'pneumonia', 'influenza' or 'common cold' were counted as a P&I death. Since January 1, 2014, the ISDR has been improved in coverage.



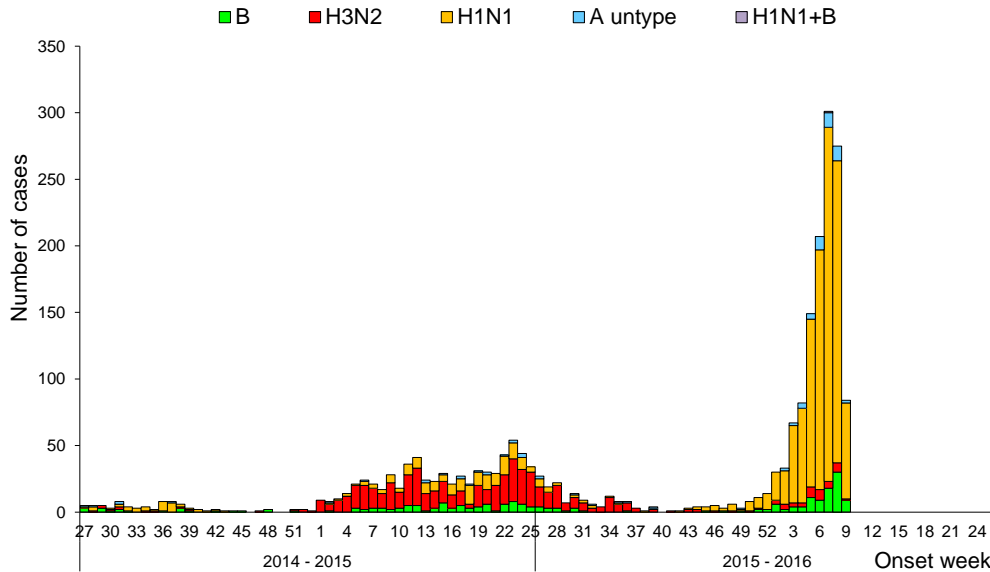
National pneumonia and influenza mortality by age group Week ending at Feb 27, 2016



Reports of severe complicated influenza

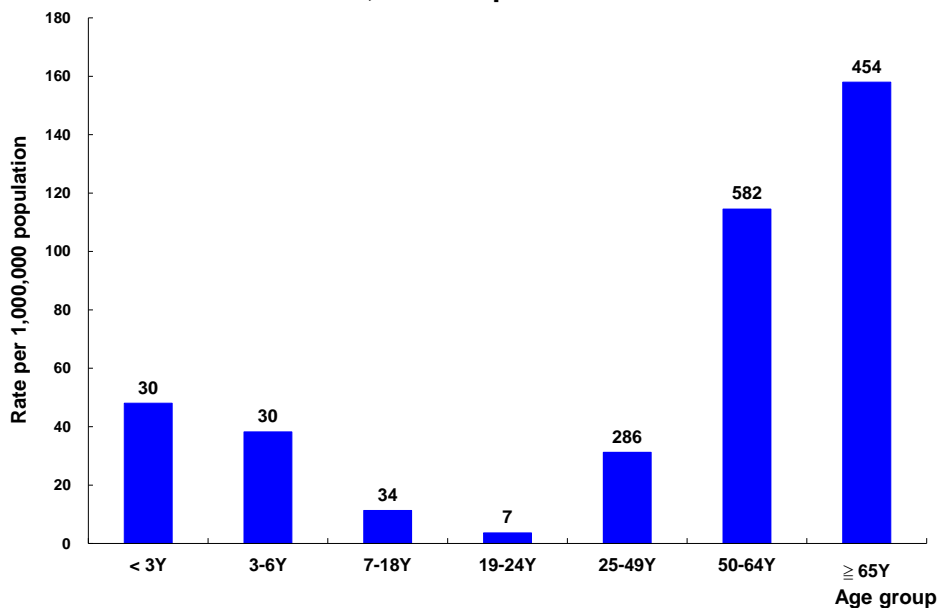
During week 9, 2016, there were 314 new cases of severe complicated influenza, including 268 influenza A(H1N1) cases, 6 influenza A(H3N2) cases, 11 un-typed influenza A cases, 29 influenza B cases. There were 37 new reports of death from severe complicated influenza, including 30 influenza A(H1N1) virus infections, 1 influenza A(H3N2) virus infection, 1 un-typed influenza A virus infection and 5 influenza B virus infections. Since July 1, 2015, there were 121 reports of death among 1423 severe complicated influenza cases. During this season, thus far, the incidences of all age groups were the highest in the last 3 years, especially in 50-64 age group.

Number of severe complicated influenza reports by week of onset July 1, 2014 to present



*A confirmed severe complicated influenza case is defined as influenza viruses infection with complication (pulmonary complication, neurologic complication, myocarditis, invasive bacterial infection, or pericarditis), and requiring intensive care or resulting in death within 14 days after the onset of influenza-like illness.

Rate of severe complicated influenza reports by age groups Jul 1, 2015 to present



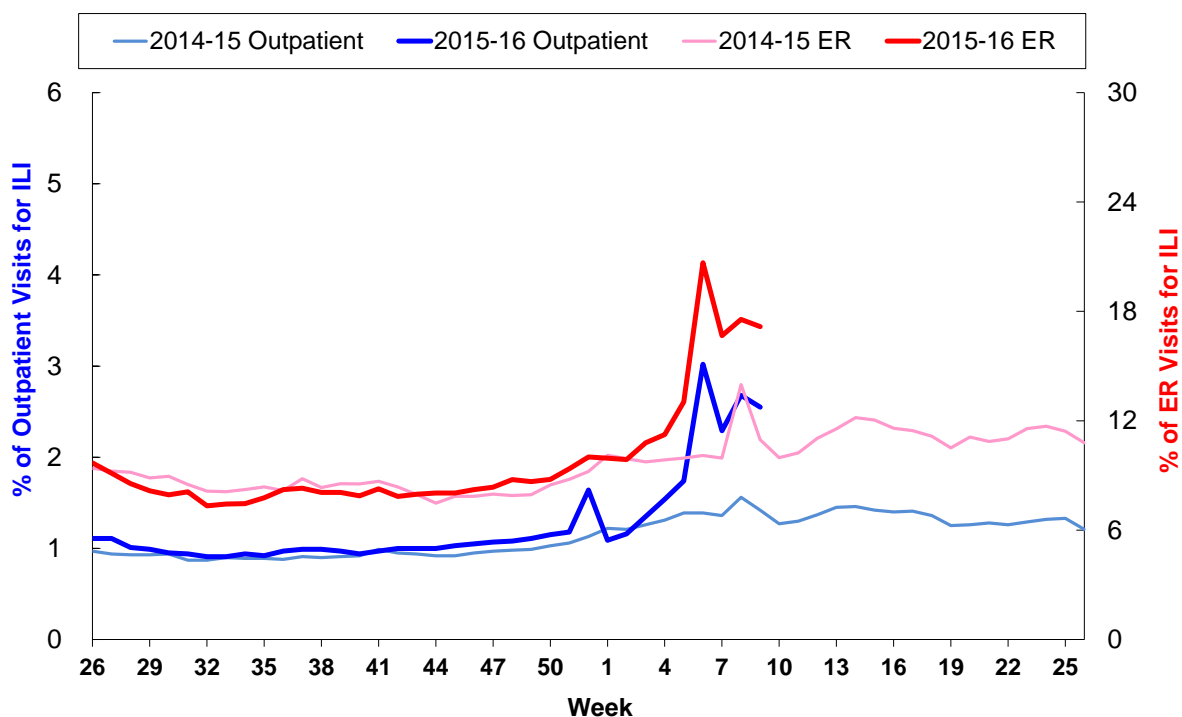
*Numbers represent number of complicated influenza reports for that specific age stratum.



Outpatient and Emergency Room Influenza-like Illness Surveillance

Nationwide during week 9, 2016, the proportion of outpatient visits for influenza-like illness (ILI) according to the National Health Insurance Database was lower than the proportion of previous week. The proportion of emergency room (ER) visits for ILI was lower than the proportion of previous week.

Proportions of outpatient and emergency room (ER) visits for influenza-like illness (July 1, 2014 to present)



* Since year 2016, the analysis of ILI data from National Health Insurance Database is according to the ICD-10 diagnosis codes.

