



Summary : Week 4 (Jan 24 – Jan 30, 2016)

Influenza activity increases in Taiwan. Influenza A(H1N1) was the predominant virus subtype in recent weeks.

- The percentage of specimens testing positive for influenza was 31.9% during week 2, 2016. The predominant virus subtype of positive specimens were influenza A(H1N1) viruses. Recently, some H1N1 isolates tested were considered as low reactors to the 2015-16 influenza vaccine virus A/California/7/2009.
- During week 4, there were 58 new cases of severe complicated influenza and 2 new reports of death. Since July 1, 2015, there were 43 reports of death among 311 severe complicated influenza cases.
- During week 4, 2016, both proportions of outpatient visits and emergence room visits for influenza-like illness (ILI) were higher than the proportions of previous week.

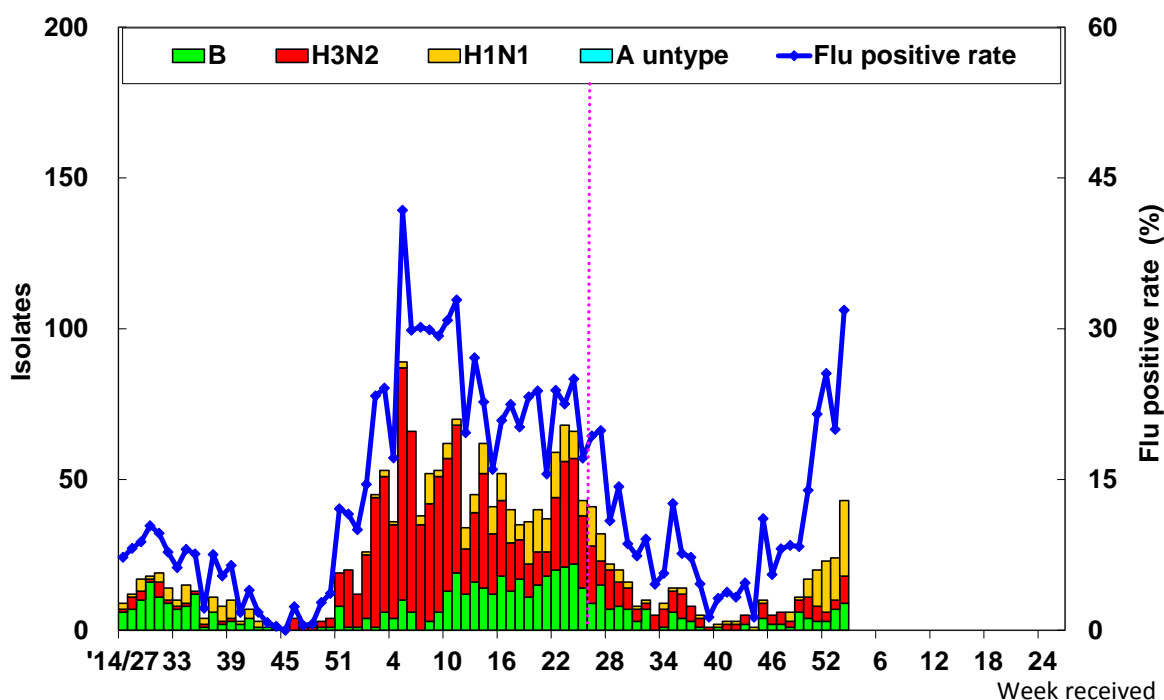
Viral Surveillance

	Data for week 2, 2016	Cumulative data since 7/1/2015
Number of specimens tested	135	3407
Number of positive specimens (%)	43(31.9)	384(11.3)
Positive specimens by type/subtype (%)		
Influenza A (% of all positive specimens)	34(79.1)	269(70.1)
A (H1N1) (% of all Influenza A)	25(73.5)	121(45)
A (H3N2)	9(26.5)	148(55)
A (unable to subtype)	0(0)	0(0)
A (subtyping not performed)	0(0)	0(0)
Influenza B	9(20.9)	115(29.9)



Antigenic Characterization: Taiwan CDC has antigenically characterized 63 human influenza viruses. Since October 1, 2015, 80.0% 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). 73.9% 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.

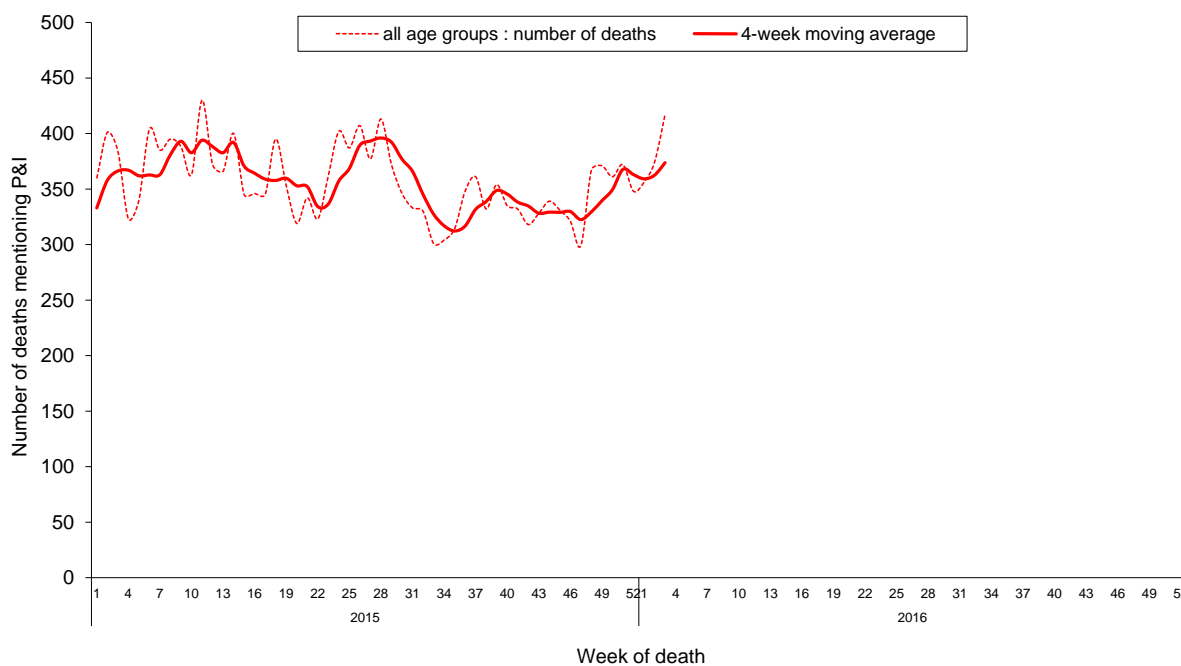
	Isolates tested (n)	Resistance Viruses, n (%)
		Oseltamivir
Influenza A (H1N1)	23	0
Influenza A (H3N2)	32	0
Influenza B	18	0



Pneumonia and influenza (P&I) mortality surveillance

The whole trend of P&I increased slightly 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+).

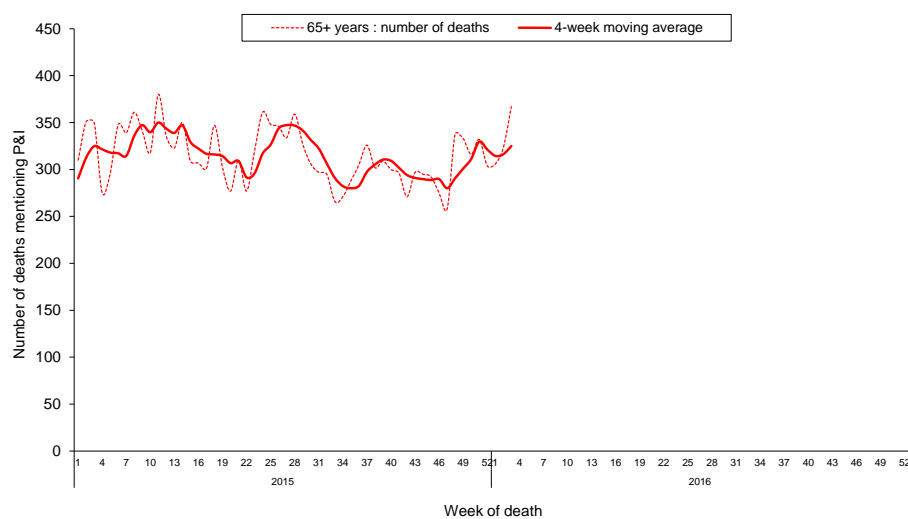
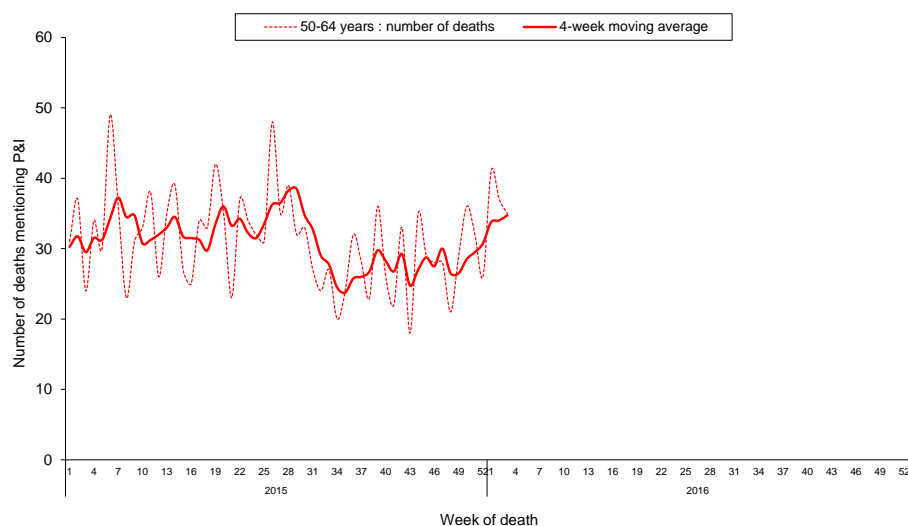
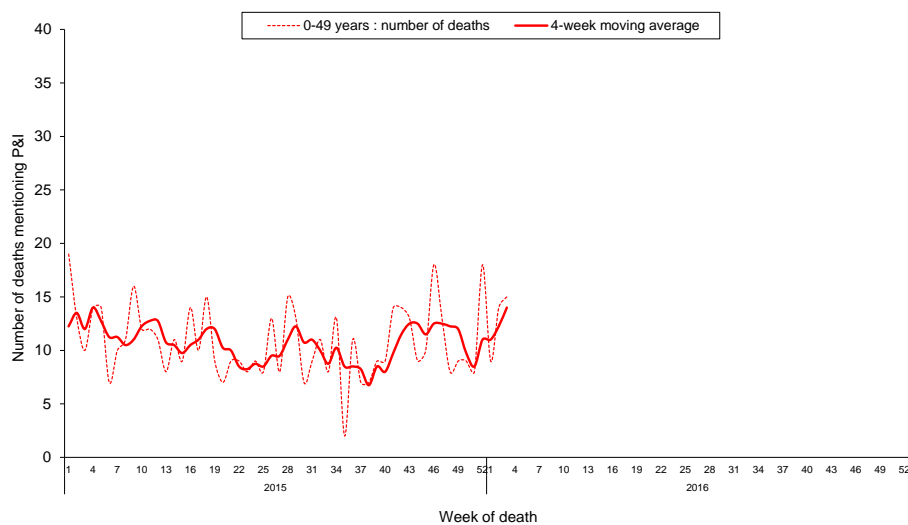
National pneumonia and influenza mortality Week ending at Jan 23, 2016



* 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.



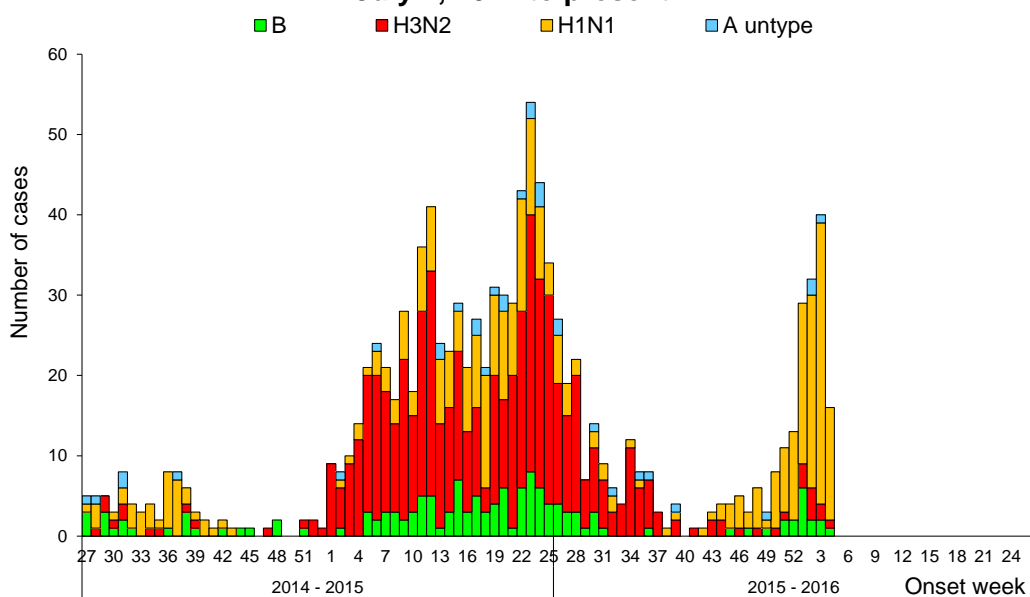
National pneumonia and influenza mortality by age group Week ending at Jan 23, 2016



Reports of severe complicated influenza

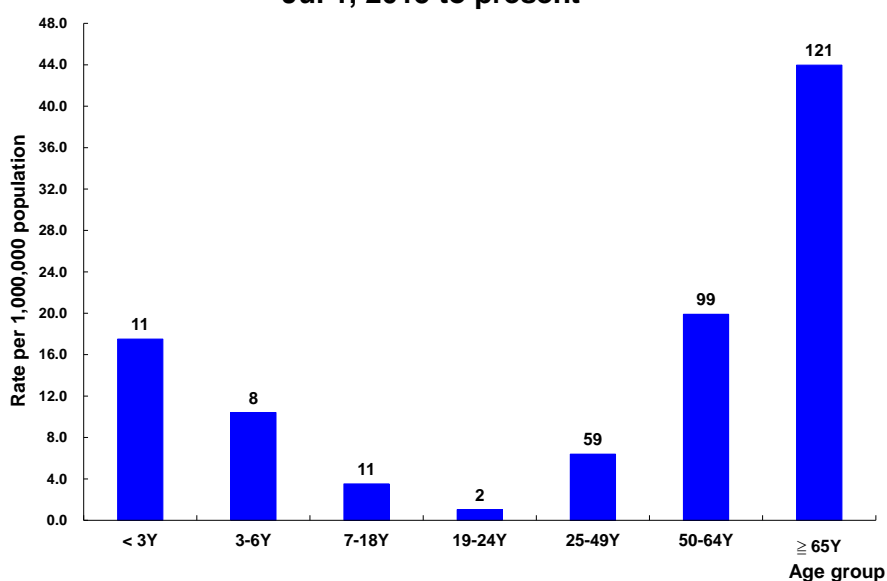
During week 4, 2016, there were 58 new cases of severe complicated influenza, including 49 influenza A(H1N1) cases, 4 influenza A(H3N2) cases, 2 un-typed influenza A cases and 3 influenza B cases. There were 2 new reports of death from severe complicated influenza, including 1 influenza A(H1N1) virus infection and 1 influenza B virus infection. Since July 1, 2015, 311 cases of severe complicated influenza have been confirmed, including 158 influenza A(H1N1) cases, 112 influenza A(H3N2) cases, 10 un-typed influenza A cases, 31 influenza B cases. There have been 43 reports of death from severe complicated influenza infection, including 13 influenza A(H1N1) cases, 21 influenza A(H3N2) cases, 2 un-typed influenza A cases and 7 influenza B cases.

**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**



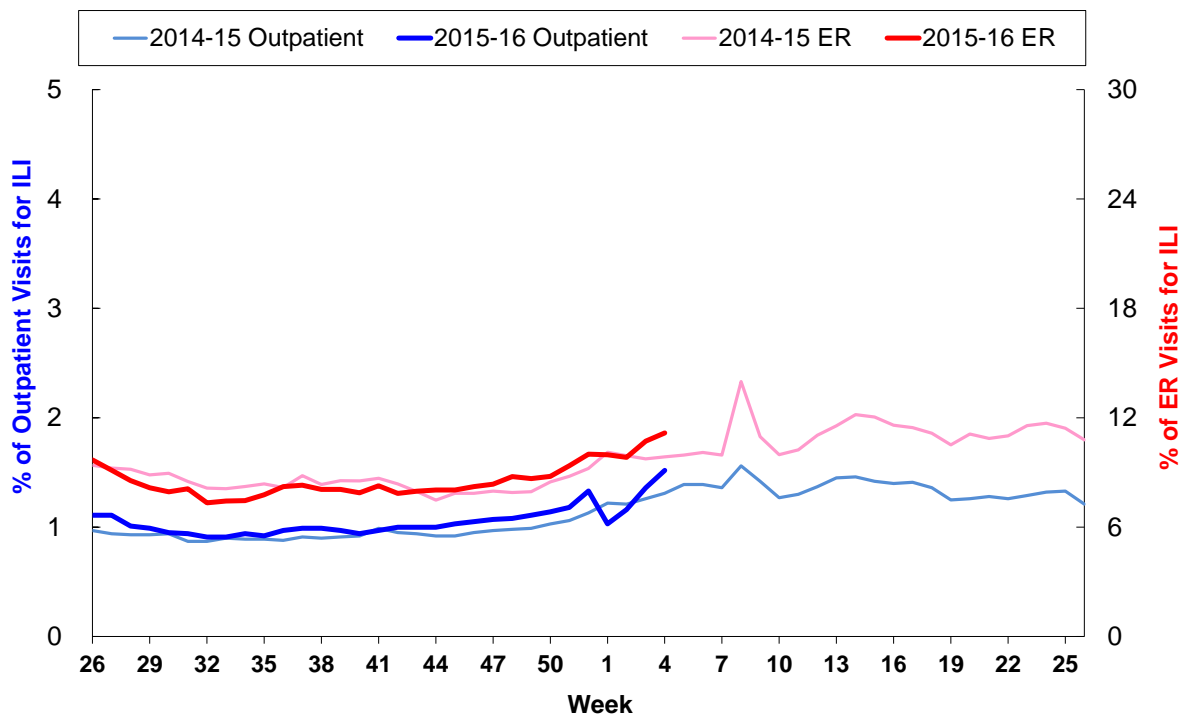
*Numbers represent number of complicated influenza reports for that specific age stratum.



Outpatient and Emergency Room Influenza-like Illness Surveillance

Nationwide during week 4, 2016, the proportion of outpatient visits for influenza-like illness (ILI) according to the National Health Insurance Database was higher than the proportion of previous week. The proportion of emergency room (ER) visits for ILI was higher 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.

