



Summary : Week 52 (Dec 27, 2015 – Jan 2, 2016)

Influenza activity increases in Taiwan. Influenza A(H3N2) was the predominant virus subtype in 2015-16 flu season.

- The percentage of specimens testing positive for influenza was 14% during week 50, 2015. The predominant virus subtype of positive specimens were influenza A(H3N2) viruses.
- During week 52, there were 5 new cases of severe complicated influenza. Since July 1, 2015, there were 30 reports of death among 178 severe complicated influenza cases.
- The whole trend of both proportions of outpatient and emergency room visits for influenza-like illness (ILI) increased in recent weeks.

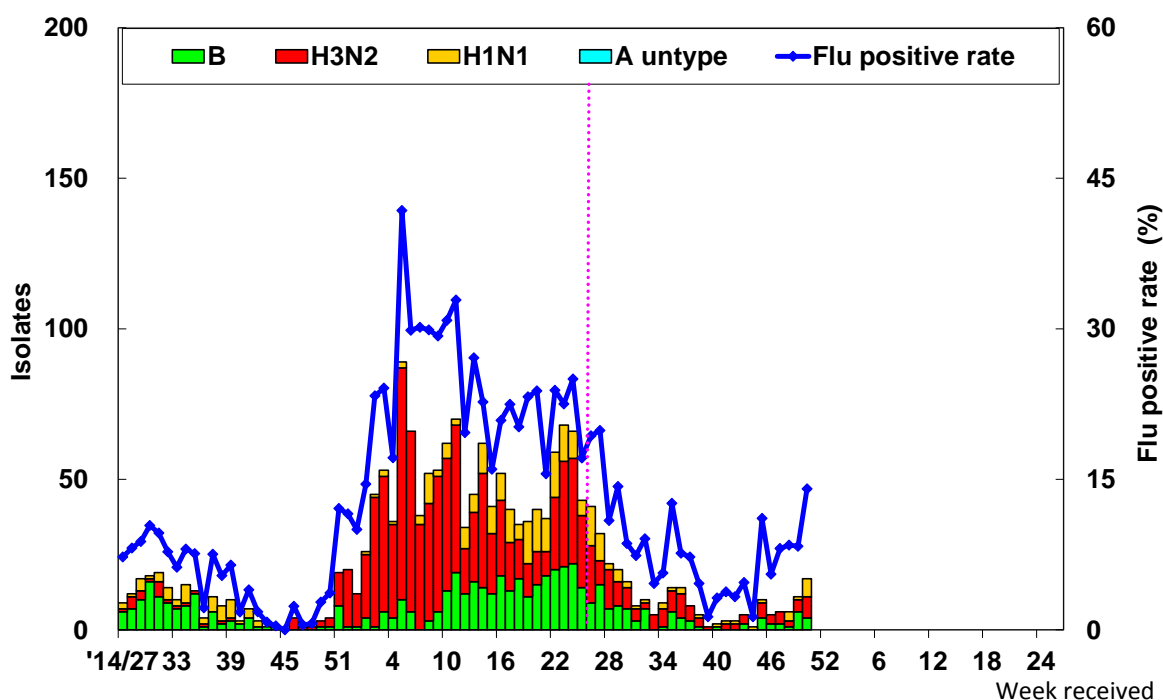
Viral Surveillance

| | Data for week 50, 2015 | Cumulative data since 7/1/2015 |
|---|------------------------|--------------------------------|
| Number of specimens tested | 121 | 2967 |
| Number of positive specimens (%) | 17(14) | 274(9.2) |
| Positive specimens by type/subtype (%) | | |
| Influenza A (% of all positive specimens) | 13(76.5) | 181(66.1) |
| A (H1N1) (% of all Influenza A) | 6(46.2) | 53(29.3) |
| A (H3N2) | 7(53.8) | 128(70.7) |
| A (unable to subtype) | 0(0) | 0(0) |
| A (subtyping not performed) | 0(0) | 0(0) |
| Influenza B | 4(23.5) | 93(33.9) |



Antigenic Characterization: Taiwan CDC has antigenically characterized 27 human influenza viruses. Since October 1, 2015, 89% 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). 83% 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.

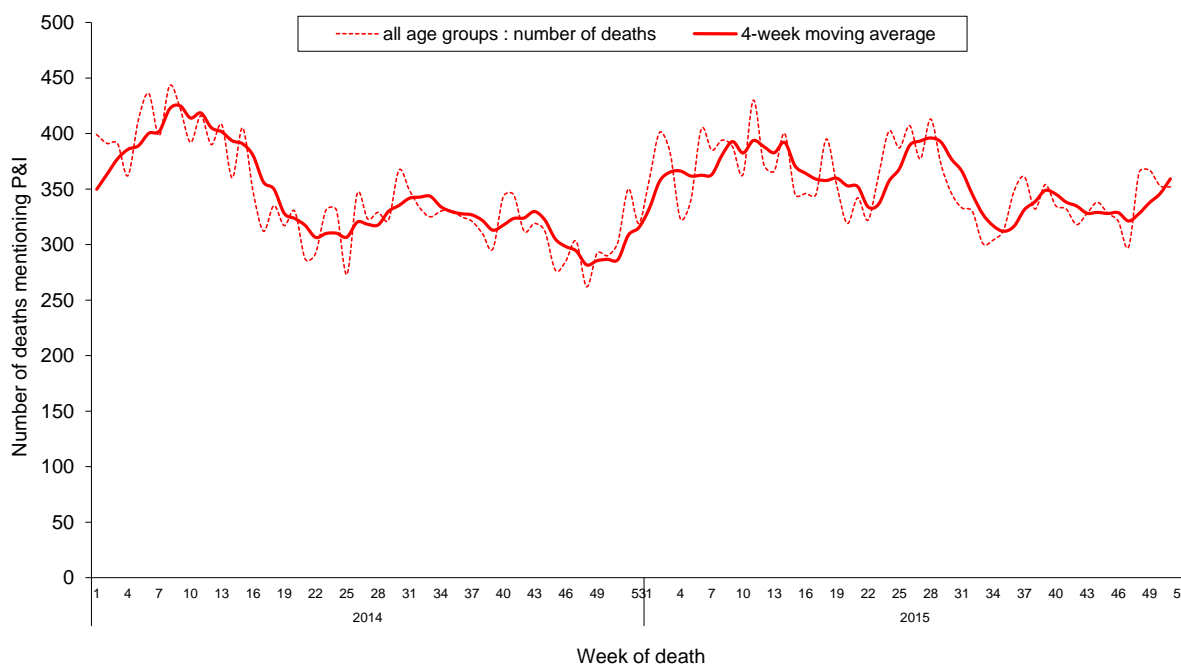
| | Isolates tested (n) | Resistance Viruses, n (%) |
|--------------------|---------------------|---------------------------|
| | | Oseltamivir |
| Influenza A (H1N1) | 7 | 0 |
| Influenza A (H3N2) | 23 | 0 |
| Influenza B | 11 | 0 |



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+).

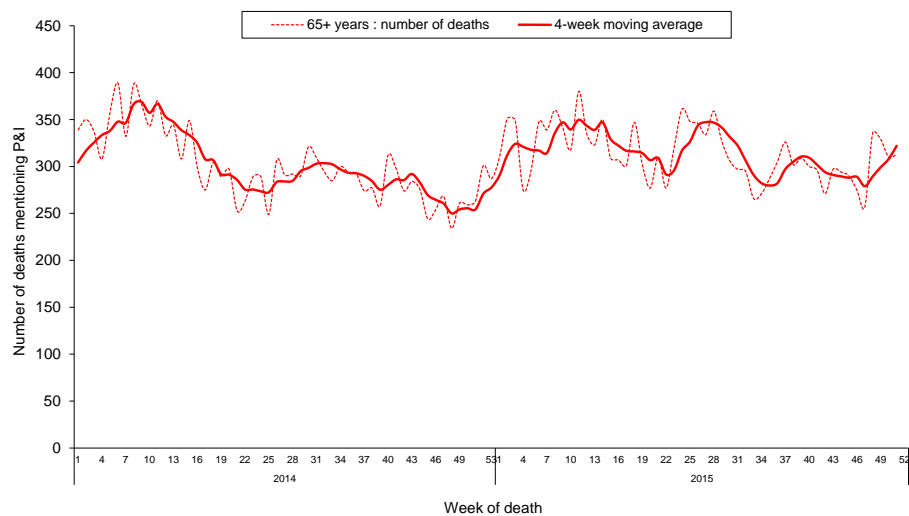
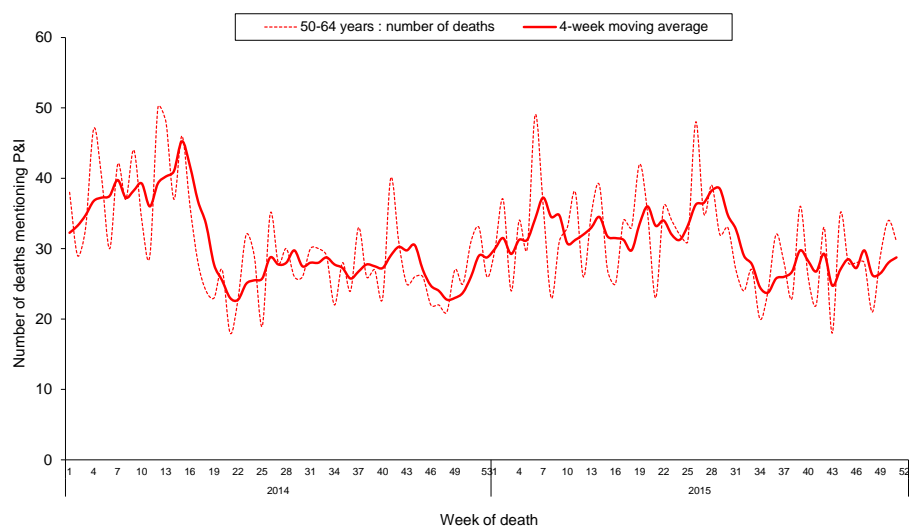
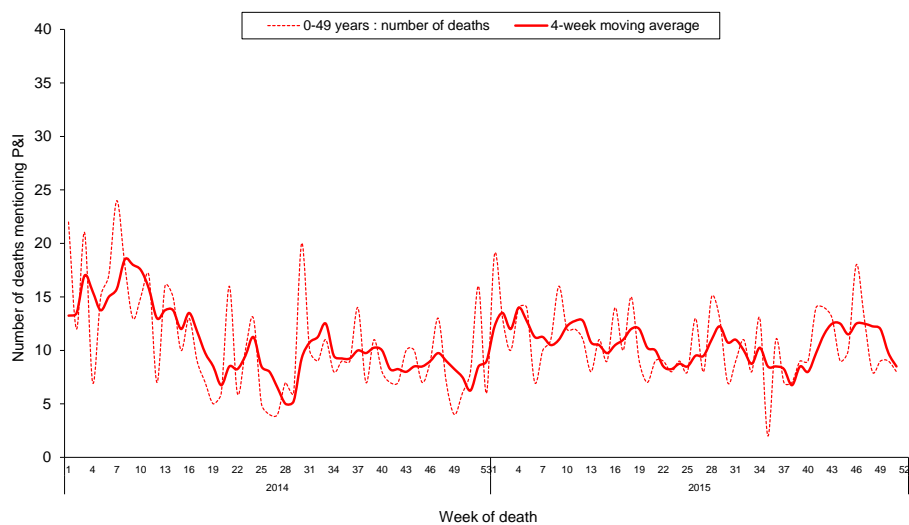
National pneumonia and influenza mortality Week ending at Dec 26, 2015



* 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.



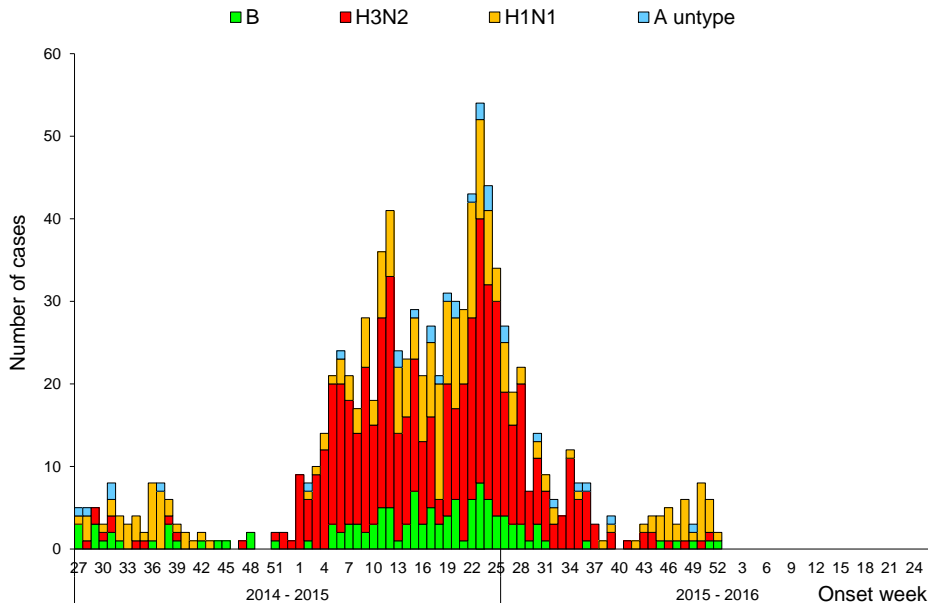
National pneumonia and influenza mortality by age group Week ending at Dec 26, 2015



Reports of severe complicated influenza

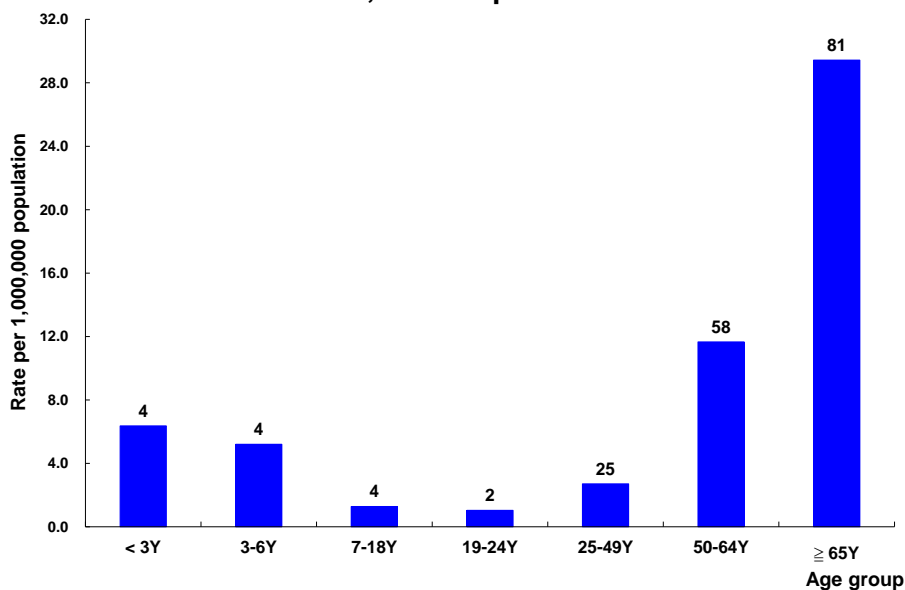
During week 52, there were 5 new cases of severe complicated influenza, including 3 influenza A(H1N1) cases, 1 influenza A(H3N2) case, and 1 influenza B case. There was no report of death from severe complicated influenza. Since July 1, 2015, 178 cases of severe complicated influenza have been confirmed, including 51 influenza A(H1N1) cases, 102 influenza A(H3N2) cases, 7 un-typed influenza A cases, 18 influenza B cases. There have been 30 reports of death from severe complicated influenza infection, including 5 influenza A(H1N1) cases, 20 influenza A(H3N2) cases, 2 un-typed influenza A cases and 3 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 52, 2015, 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)

