

PA Influenza Weekly Report
Week ending October 31, 2009 (Week 43)

LEVEL OF ACTIVITY

WIDESPREAD

Outbreaks of influenza or increases in ILI and recent laboratory confirmed influenza in half or more regions of the state.

ILI is defined as patients presenting with fever over 100°F, cough and/or sore throat in the absence of a known cause other than influenza.

Summary of week 43 flu activity

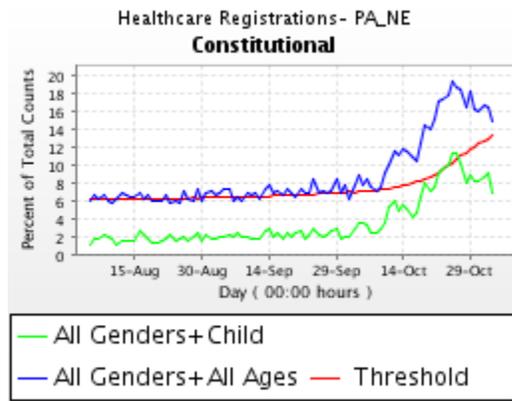
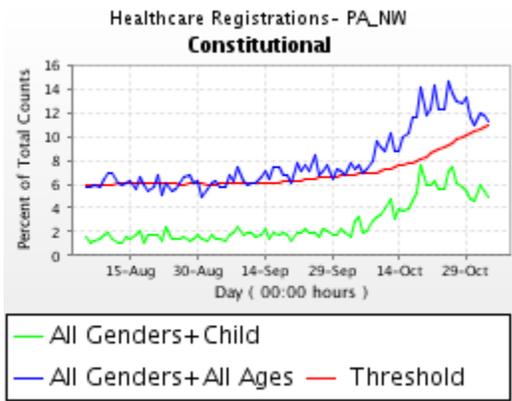
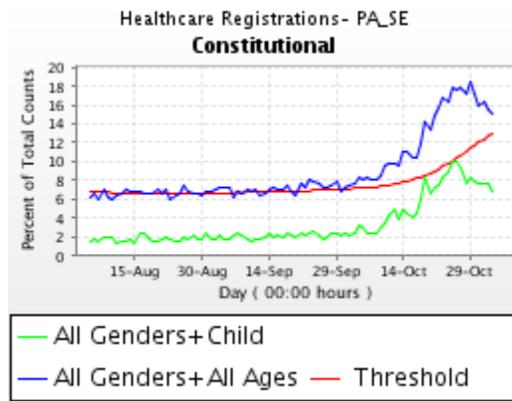
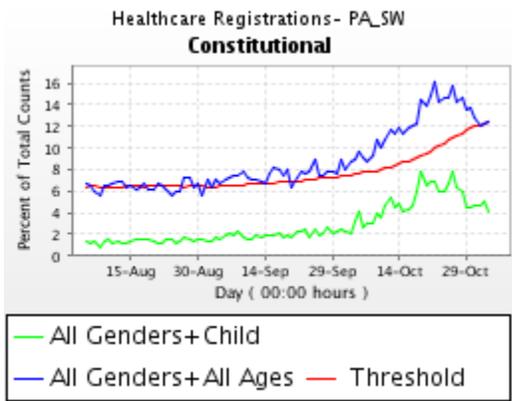
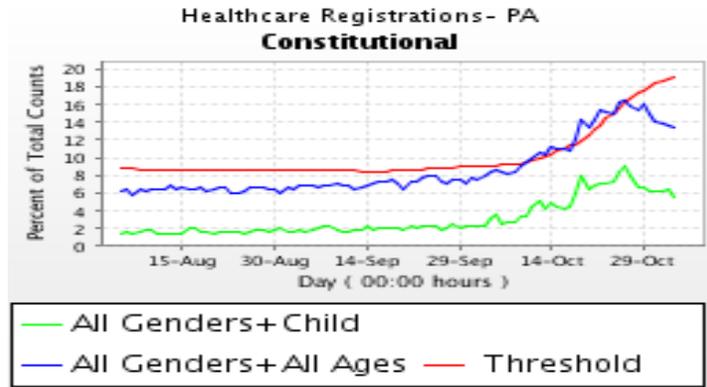
Widespread flu activity with early signs that the second wave may be going down:

- Flu-related Emergency Department (ED) visits were **elevated in all but the NC region. Overall, flu-related ED visits seem to have peaked in all regions of the state.**
- Eight (8%) of all outpatient visits reported by sentinel providers were due to ILI, **down from 9% the previous week.** Baseline ILI for this time of the year is 2-3%.
- Sentinel colleges reported lower ILI (5% down from 8% the previous week) while sentinel nursing homes reported an increase in ILI among staff and residents.
- 8247 flu cases were reported to PA NEDSS, **up by 21%** from the previous week. This is a **very moderate increase** compared to 60-100% increases seen in the last three weeks.
- There was sharp increase in flu cases the SE and NE parts of the state, very moderate increases in the SC, NC, SW and NW regions, and a slight decline in the SW region.
- There was a **5-20% decline in flu cases in all age groups.** The burden of disease may be shifting from children to adults.
- 405 (64%) of all the 633 flu specimens tested by the state lab were positive for influenza, **down from 83% positive rate reported the previous week.** Another possible indicator of declining flu activity.
- **390 (91%)** of all flu isolates detected were the 2009 Pandemic influenza A/H1N1 strain, one A/H3N2 and one flu type B.
- The positive rate of specimens submitted to the state lab went down from 98% during week 43 to 91% this week.
- About 1000 specimens were submitted to the state lab for confirmatory testing during week 43; most of these were from none hospitalized, none severely ill patients. Updated PA DoH guidelines for submitting specimens to the state lab can be found at, <http://www.dsf.health.state.pa.us/health/cwp/view.asp?A=171&Q=253991>.
- No influenza-associated school dismissal (closure) was reported during week 43. However, a number of sentinel schools reported high ILI and school absenteeism rates.

- Data on pandemic A/H1N1 can be found at <http://www.h1n1inpa.com/>, and information of flu trends in Pennsylvania can be found at <http://www.dsf.health.state.pa.us/health/cwp/view.asp?a=171&q=246529>.

Emergency Department Visits for Influenza-like illness, based on Real-time Outbreak and Disease Surveillance Data (RODS)

The number of people visiting emergency departments with influenza as the chief complaint was normal statewide but elevated in the NE, NW, SE, SW parts of the state.



Outpatient Influenza-like illness (ILI) reported by influenza sentinel physicians

Figure 1 below, 8.5% of all people seen by 53 sentinel physicians across Pennsylvania had influenza-like illness (ILI). The baseline for ILI in September is generally below 2%.

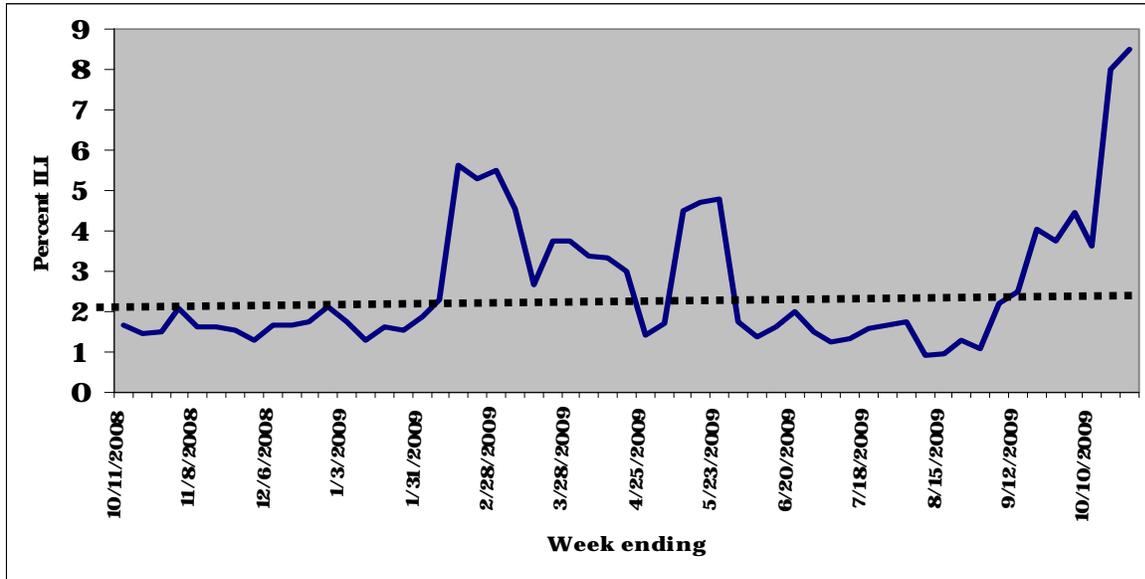
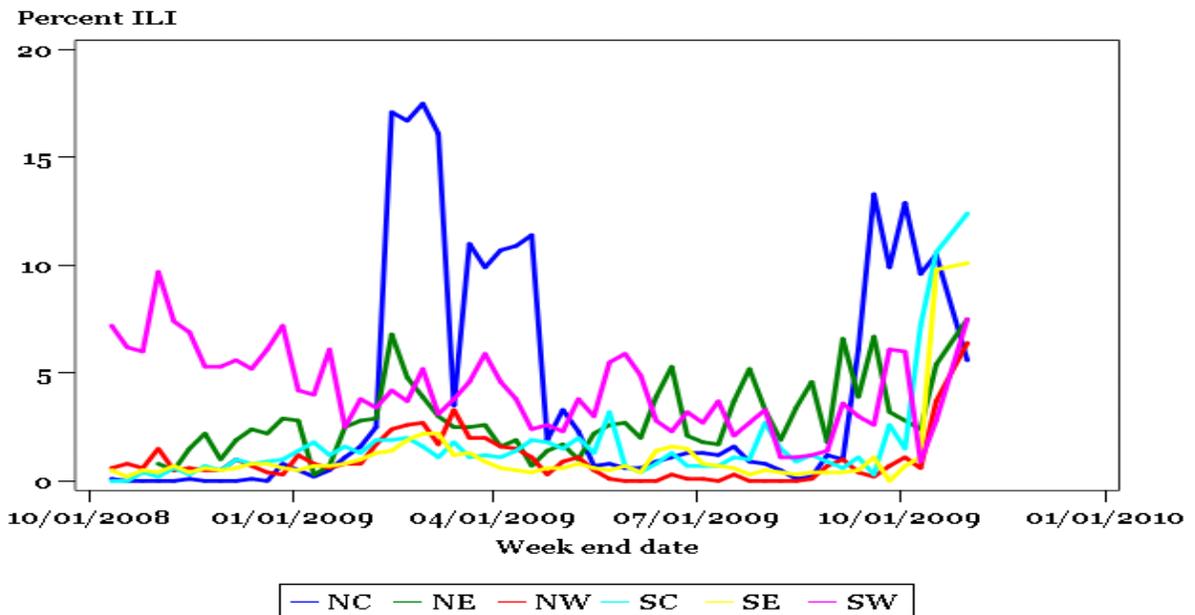


Figure 2 below, the proportion of ILI was elevated above baseline in all regions of the state (see below), with a large decline in one region of the state



Note: The proportion of ILI visits was 13% among college sentinel sites, 5% among

Pediatricians, 7% in family practice sites and 5% in other specialties. For more information on the Out patient Influenza-Like illness (ILINet) sentinel network, you may contact Owen Simwale at 717-787-3350.

Influenza confirmatory testing by the Pennsylvania State Lab

Figure 3 below, during week 43, 64% of all specimens tested to the lab were positive for influenza, 91% of these were the 2009 Pandemic A/H1N1 influenza.

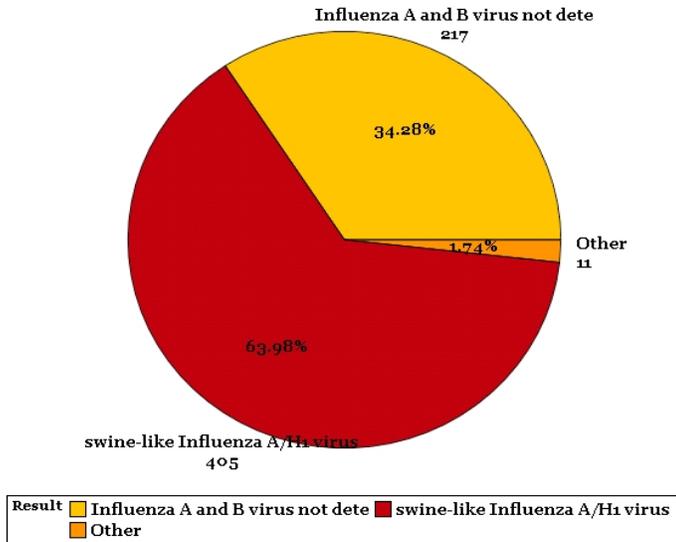
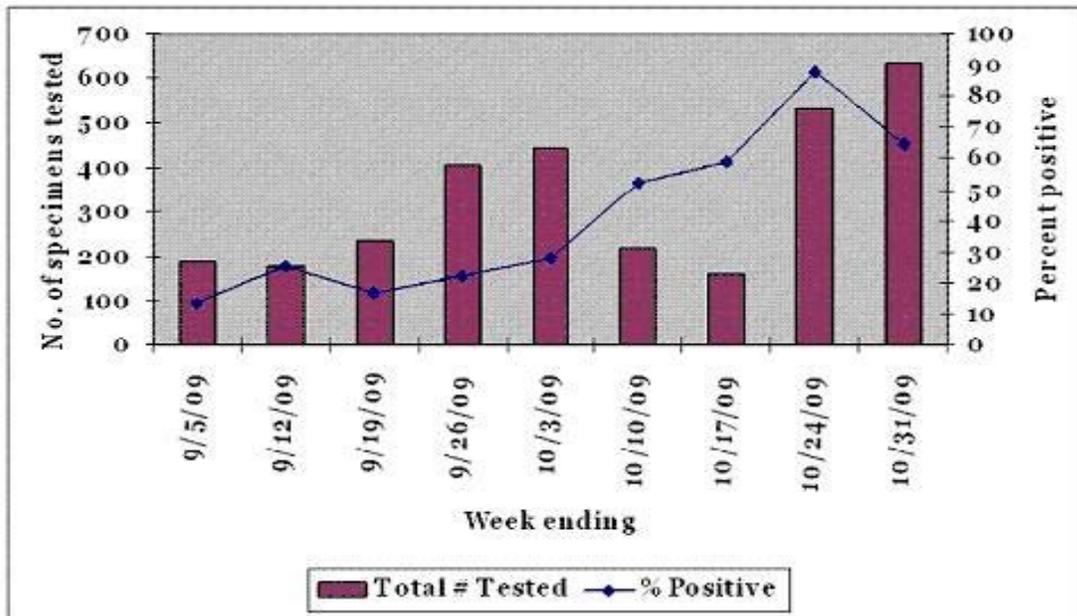


Figure 4: Positive rate of influenza specimens tested at the state lab between September 5th and October 31st, 2009.



Positive cases of influenza reported to PA NEDSS by hospitals, labs and physicians

Figure 5: Multi year comparison of influenza cases reported to PA NEDSS, as of October 31, 2009

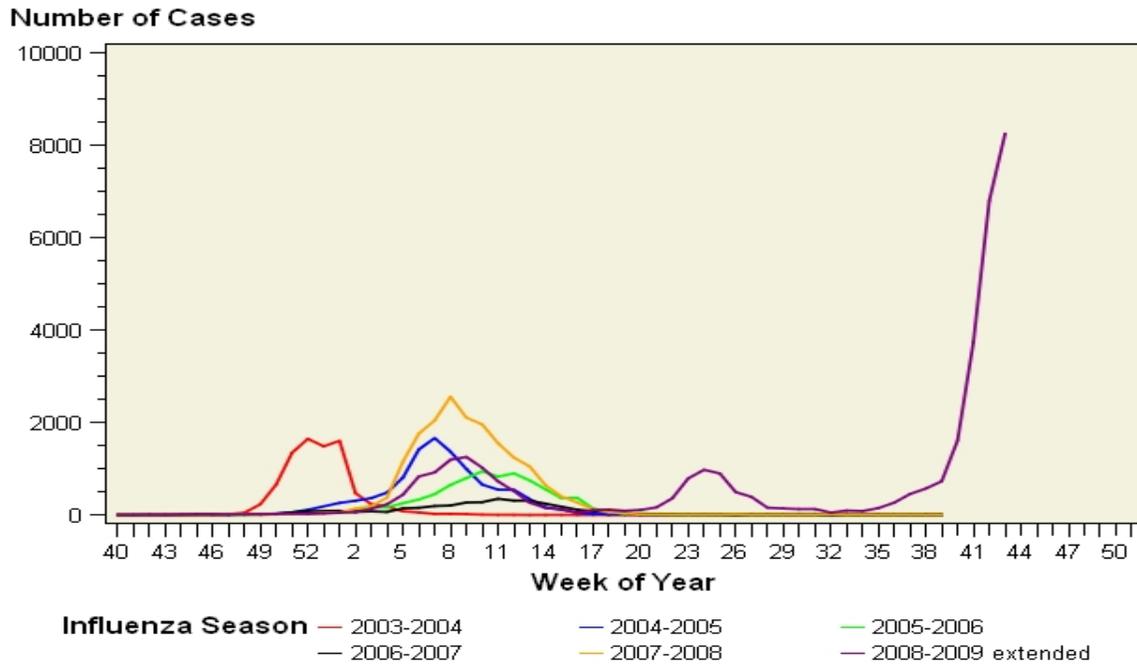


Figure 6: Influenza cases reported to PA NEDSS, by region, as of October 31, 2009

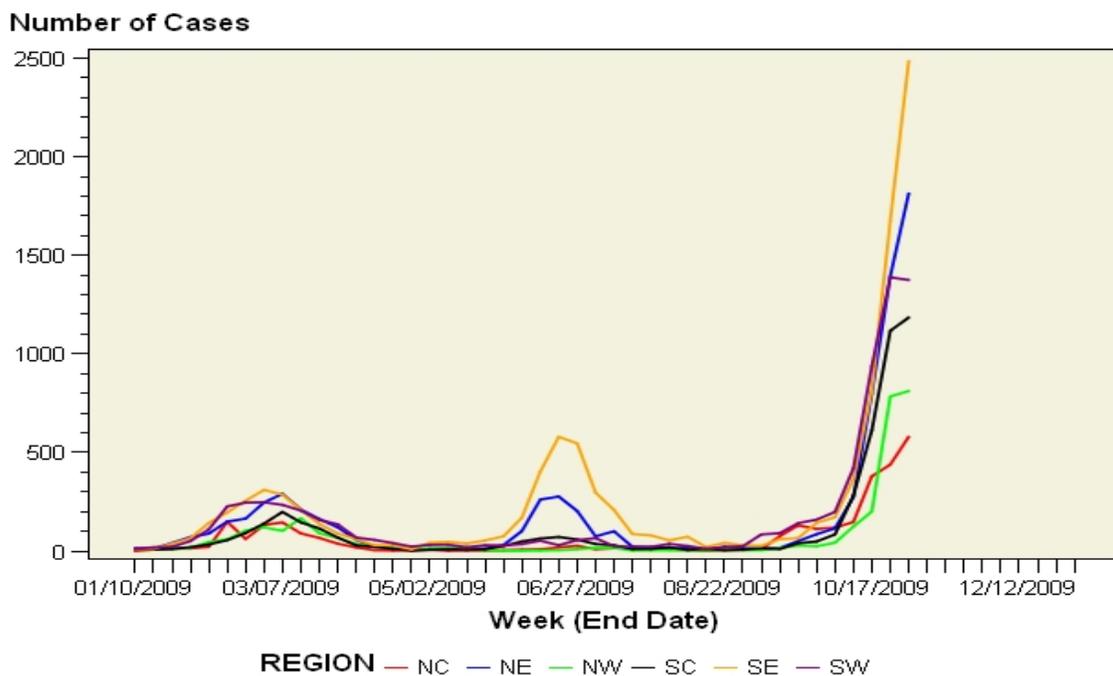


Figure 7: Influenza cases reported to PA NEDSS, by region, as of October 31, 2009

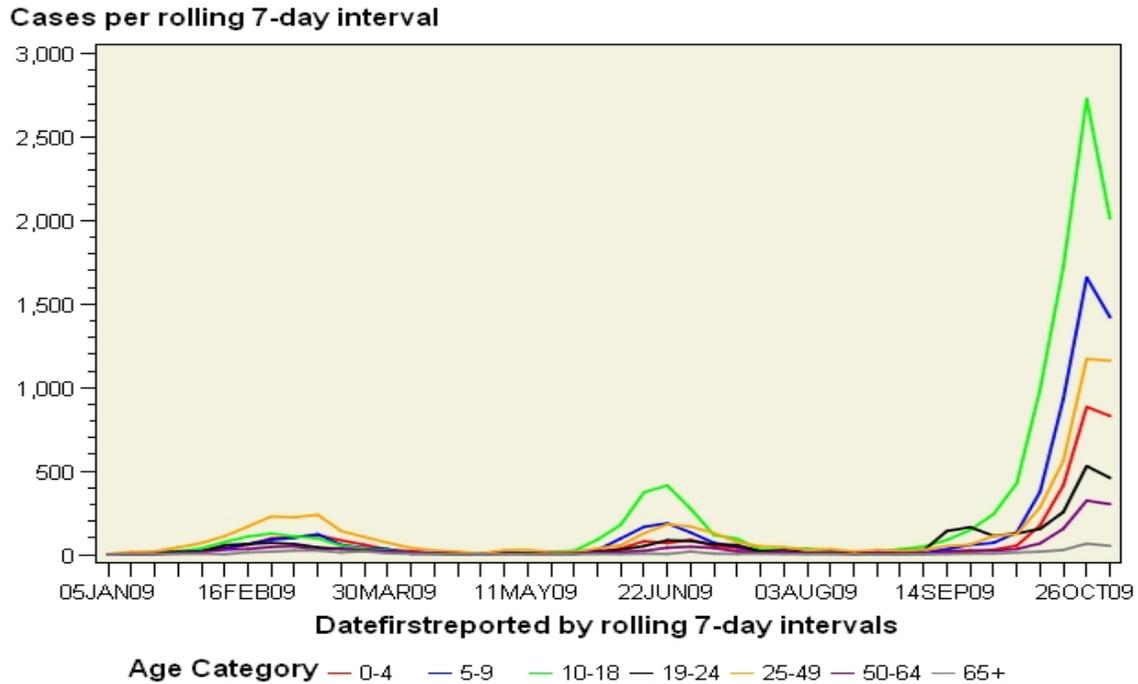
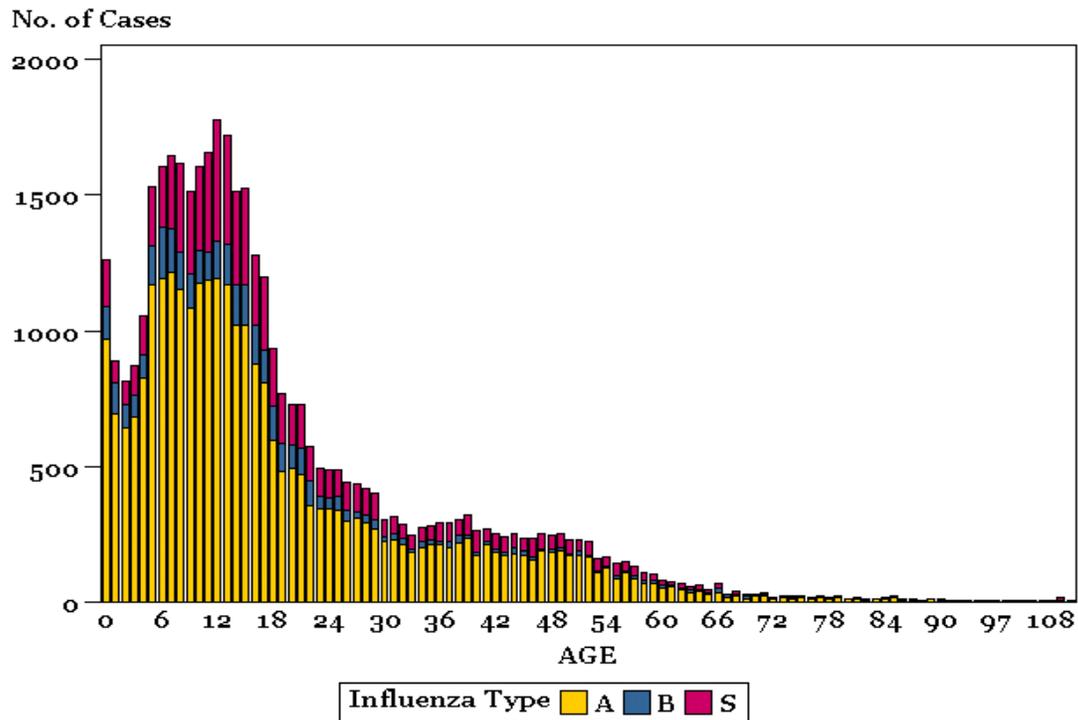
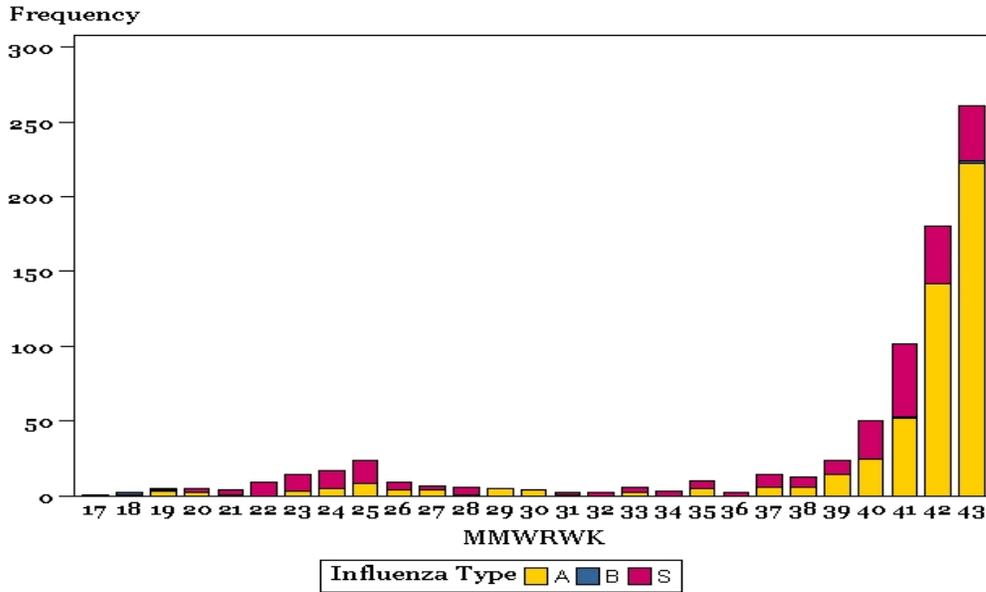


Figure 8: Lab confirmed influenza (rapid test, culture, PCR) cases reported to PA NEDSS by age, as of between October 1st, 2008 and October 31st, 2009.



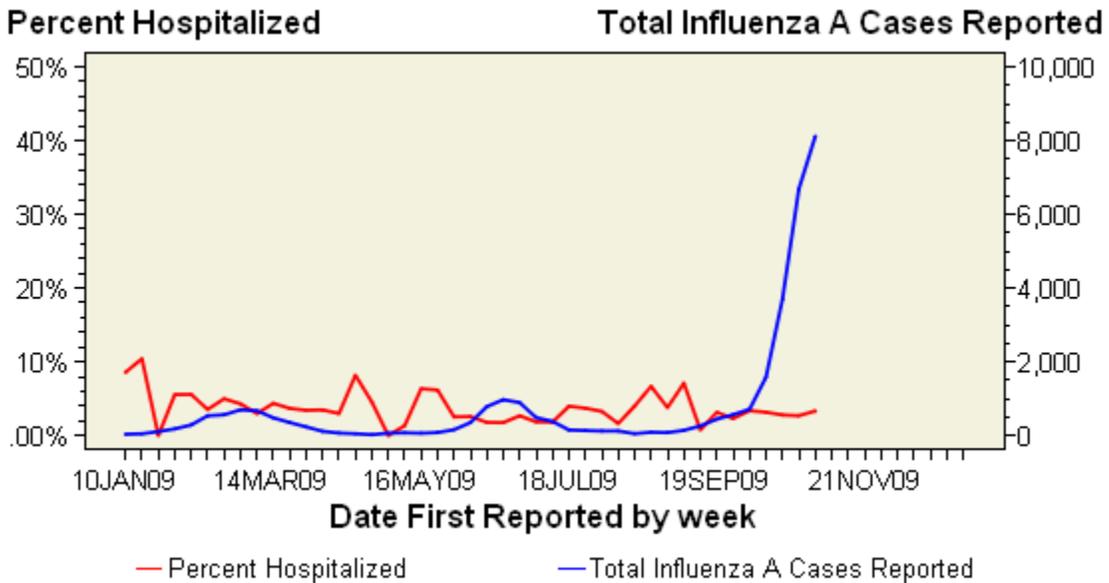
Lab confirmed influenza hospitalizations

Figure 9: Lab confirmed influenza by hospitalizations by week, 09/01/09 to 10/31/09



Of the 1113 hospitalizations reported as of 10/31/09, 723 (65%) occurred second (of fall) wave of the pandemic influenza outbreak, 115(10%) during the spring (first wave) and 275(24%) were from seasonal influenza.

Figure 10: Number of influenza hospitalization as a percentage of all flu cases reported to PA NEDSS, as of October 31, 2009



Note: Even though the number of influenza hospitalizations has significantly increased since September of 2009, hospitalized cases represent 3% of all reported flu cases.

Lab confirmed influenza Deaths

Figure 11: Influenza and Pneumonia deaths as a percentage of all deaths reported in 6 Pennsylvania cities.

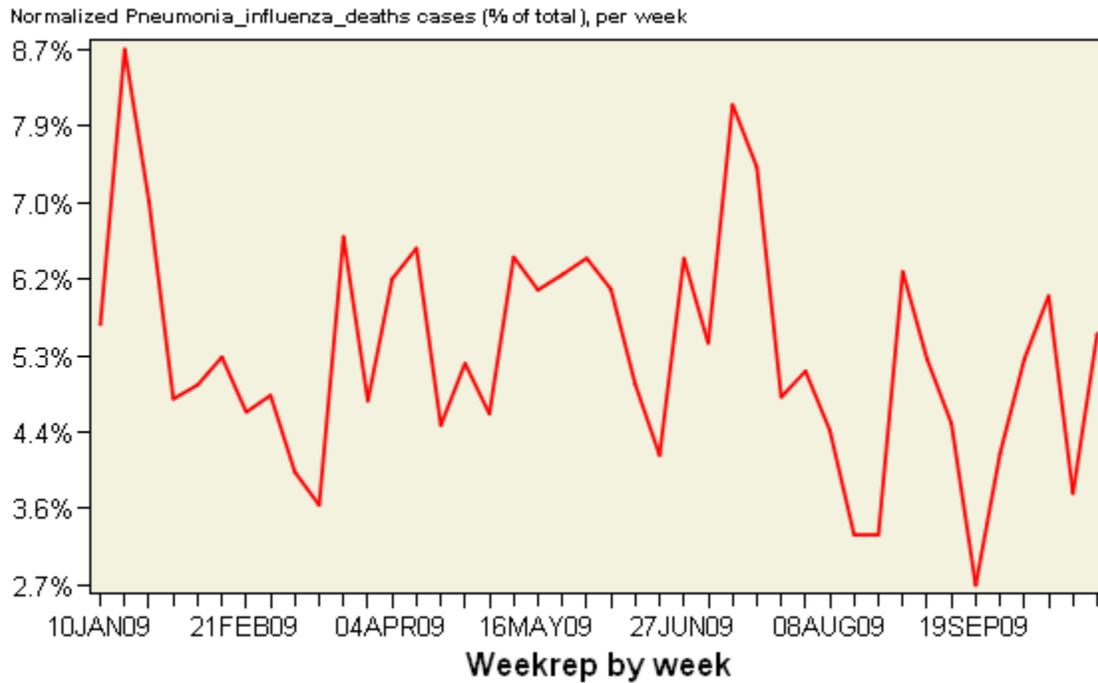


Figure 12: Influenza-associated deaths reported monthly to PA NEDSS between May 1st and November 5, 2009

