

Broward County's Influenza Season 2006-07

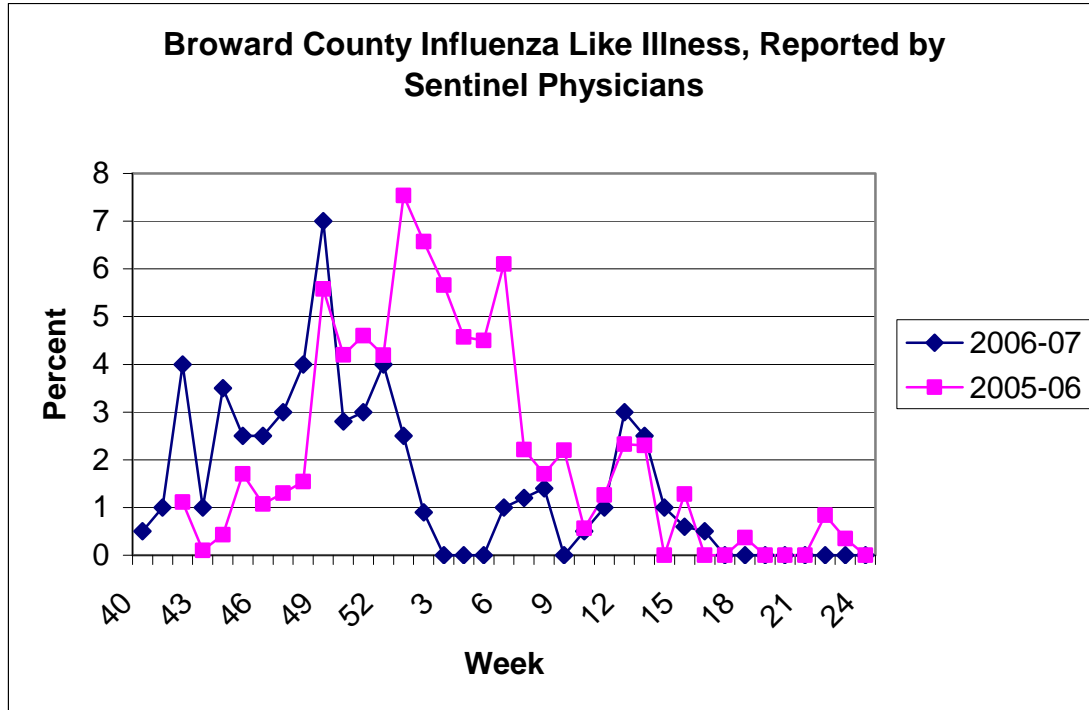
This is a simple general description of the influenza season in Broward County for the 2006-2007. Although influenza occurs year round, the Centers for Disease Control and Prevention considers the influenza season as the first week in October (Week 40) to mid-May (Week 20). This is the time surveillance is performed on a country-wide basis. Similarly, surveillance is done at the state and local level

Influenza activity in Broward County is estimated in a number of ways:

1. We have sentinel physicians who, out of the goodness of their hearts, report weekly the percent of patients they have seen with influenza like illness (ILI). This is defined as fever of 100.5 degrees Fahrenheit AND fever or sore throat. Although not specific for influenza, it assists in gauging the respiratory season.
2. The majority of our hospitals in Broward County participate in a syndromic surveillance system termed ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics). ESSENCE automatically codes chief complaints into syndrome categories by daily drawing data from the Emergency Rooms (ER) of the hospitals and placing it into a conglomerate database that can then be queried. Respiratory syndrome query can give one a quick look at the illnesses that fall into this category; however, one would have to drill down to each individual case for a diagnosis of influenza.
3. BioSense is a similar electronic reporting system as ESSENCE, except it extracts data from local Veterans Administration (VA) and Department of Defense (DoD) clinics, as well as LabCorp laboratory samples.
4. The Broward County Health Department receives the death certificates of all residents who die in Broward County. When a cause of death is pneumonia or influenza, this is reported to the State Department of Health through a computer system called EpiCom.
5. Although influenza is not a reportable disease, many of the hospitals (North & South Hospital Districts, Plantation General, Boca Raton Community, and Cleveland Clinic) send the epidemiology program their positive influenza lab results.

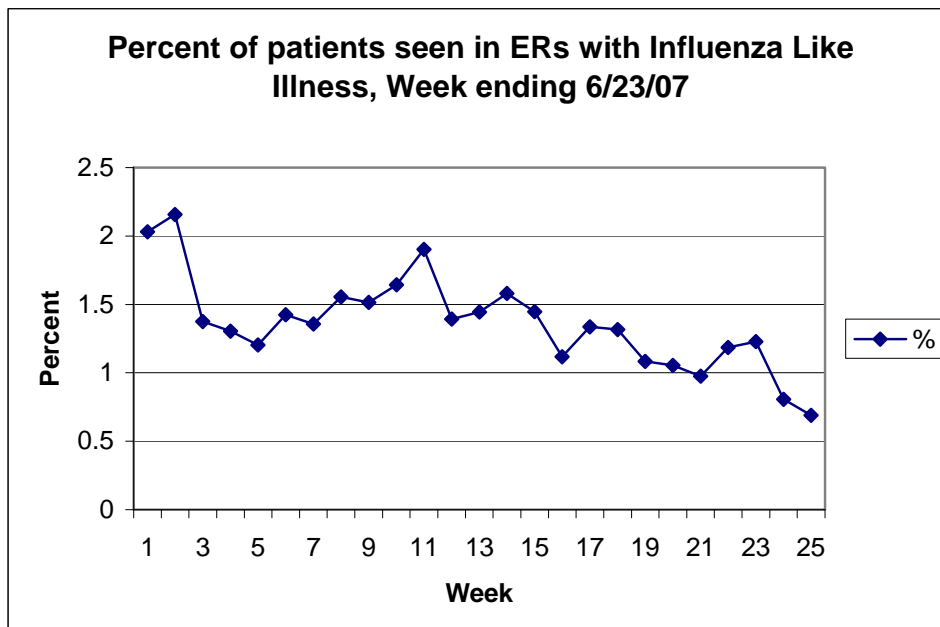
Sentinel Physician Reporting. As seen in Chart 1, ILI peaked in early December whereas last season it peaked one month later. By this data last season appears more active than 2006-07. However, because this is voluntary system, the number of physicians reporting in a particular week can bias the information.

Chart 1



ESSENCE. Chart 2 shows the percentage of Emergency Room (ER) patients seen that met the definition of ILI. As one can see, as summer approached, ILI decreased.

Chart 2



BioSense. Chart 3 shows an example of data from BioSense. It shows the last two weeks of respiratory data. Data is also taken daily from the DoD clinics and LabCorp. The next graph (Chart 4) shows the standard deviation from the number of patients expected. As one can see, the data from the various sources line up and validate one another. The dips indicate the weekends when most clinics are closed. The map shows respiratory illness for the Tri-County area. It depicts the average VA and DoD patients per zip-code with respiratory illness in the two week period. The zip-code is the patient's residence.

Chart 3. Ambulatory Data from VA – Respiratory diagnosis

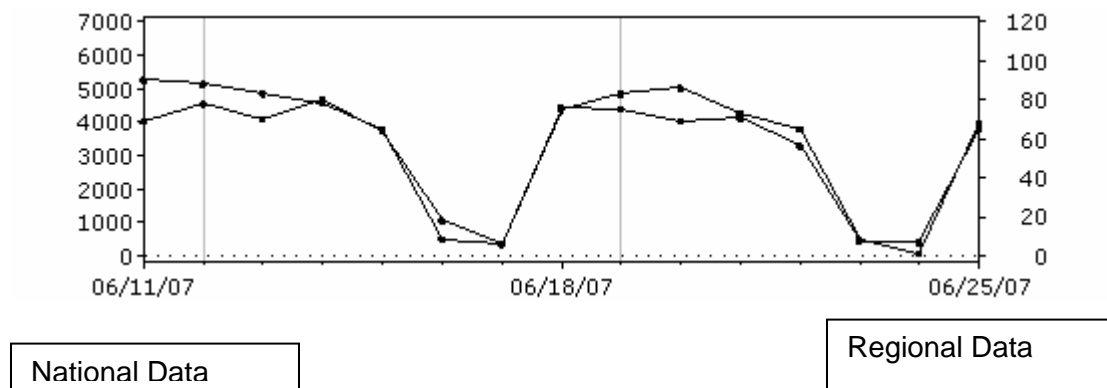
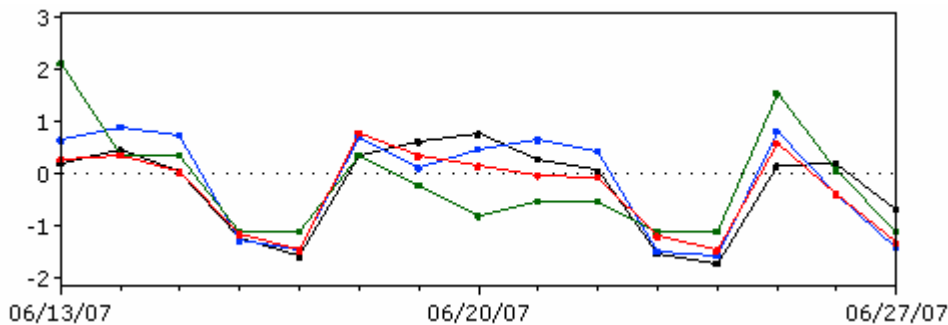
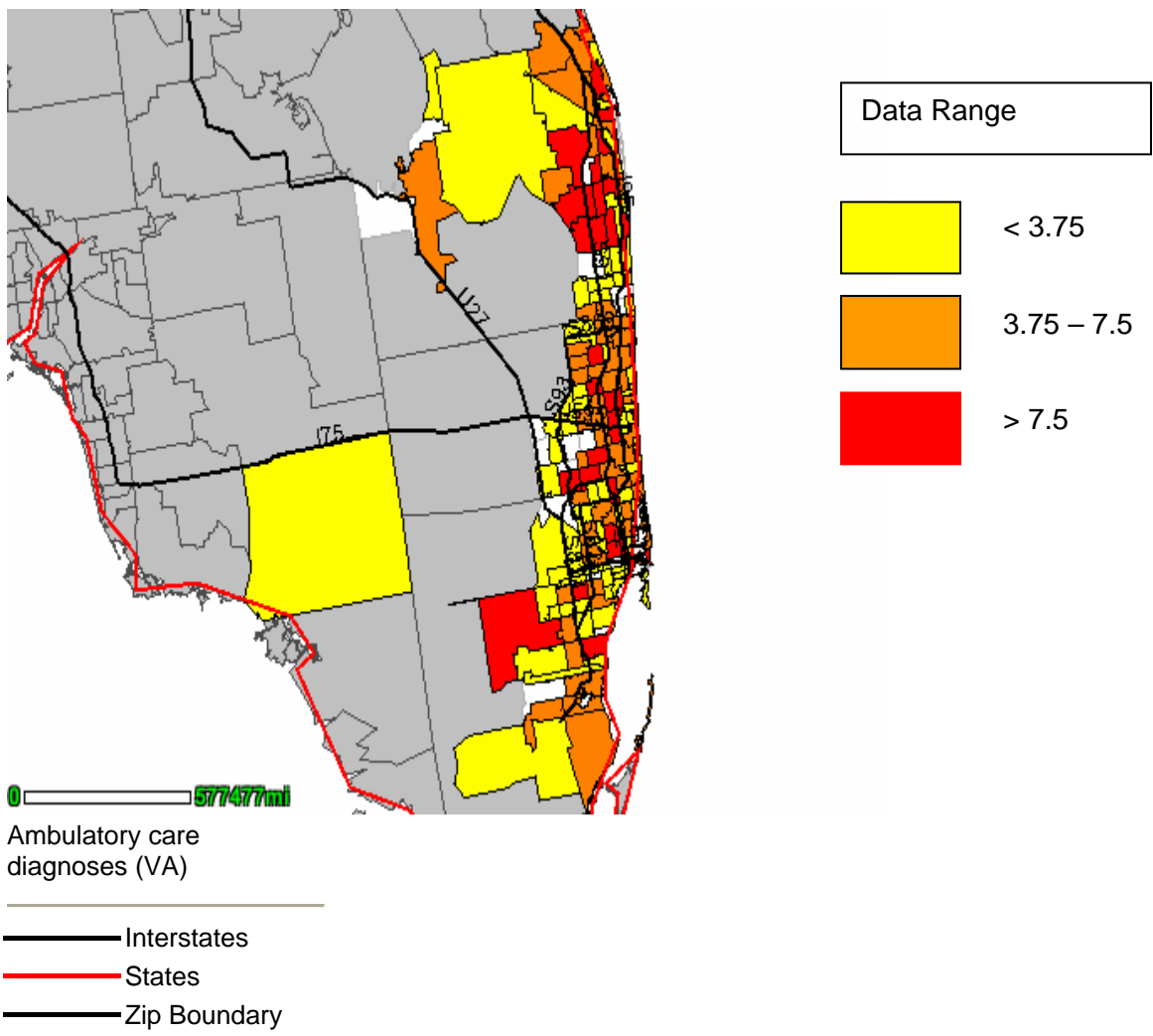


Chart 4

■ Ambulatory care diagnoses (VA) ■ Ambulatory care procedures (VA)
■ Ambulatory care diagnoses (DoD) ■ Lab Test Orders (LabCorp)





Deaths Certificates. Table 1 lists the deaths due to influenza and/or pneumonia by age groups. There were 224 deaths, of which 79% (178/224) occurred in those 65 years of age and older. There was no certificate in which the cause of death was due to influenza.

Table 1. Broward County Deaths due to Influenza and/or Pneumonia, October 2006 - May 2007

| | Pneumonia | Influenza |
|------------------|-----------|-----------|
| Under 28 Days | 0 | 0 |
| 28 Days - 1 Year | 1 | 1 |
| 1 - 14 Years | 1 | 1 |
| 15 - 24 Years | 0 | 0 |
| 25 - 44 Years | 12 | 11 |
| 45 - 64 Years | 34 | 33 |
| 65 - 74 Years | 42 | 40 |
| 75 - 84 Years | 71 | 67 |
| 85 and Over | 77 | 71 |

Positive Lab Results. Table 2 shows the positive laboratory results that were reported by select hospitals. There were 454 positive results with 77% occurring in those less than 15 years of age. Two thirds (305/454) of the labs were positive for Influenza A, 31% were positive for B. (Ten lab results used a rapid test that did not differentiate between the two.)

Table 2

| Age | Total | Percent |
|-------|-------|---------|
| <1 | 59 | 13.0 |
| 1-14 | 292 | 64.3 |
| 15-24 | 42 | 9.3 |
| 25-44 | 30 | 6.6 |
| 45-64 | 20 | 4.4 |
| 65-74 | 4 | 0.9 |
| 75-84 | 4 | 0.9 |
| 85+ | 3 | 0.7 |
| Total | 454 | 100.0 |

Thus ends another flu season, but this fall, do not forget to encourage flu shots. And year round encourage people to:

COVER YOUR COUGH
&
WASH YOUR HANDS