



Martin County Health Department

2007-2008 Influenza Season Summary Report

Surveillance Time Period: September 30, 2007 - May 24, 2008

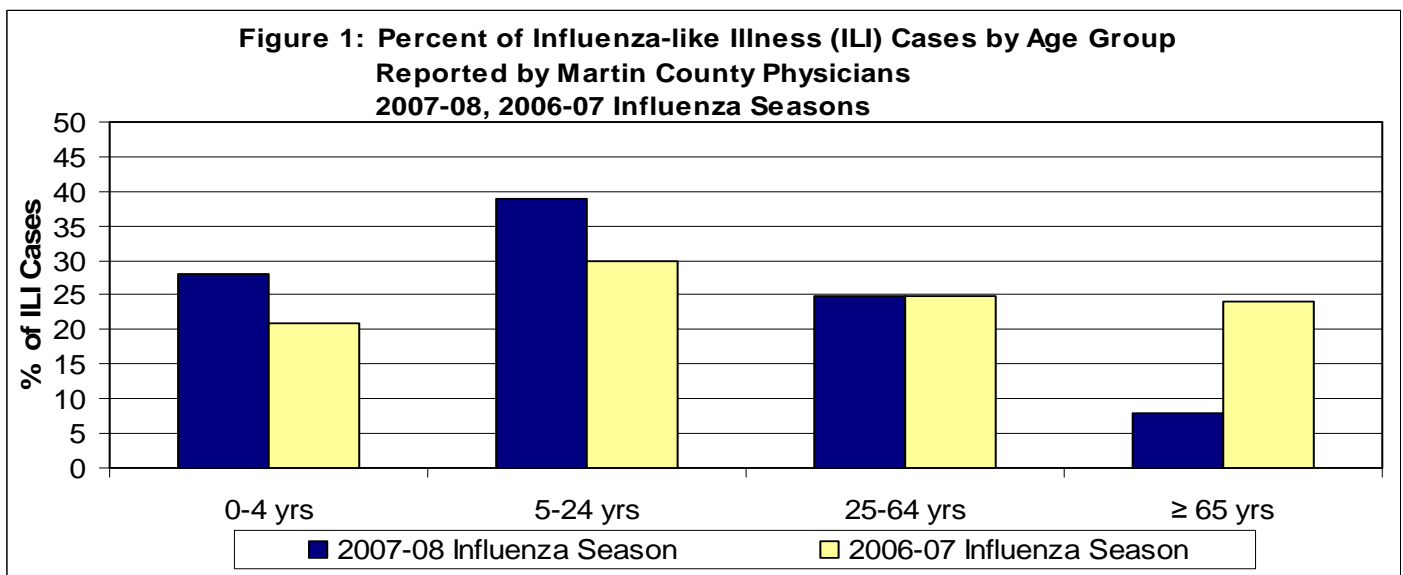
Jenneh Shannen Burphy, MPH, Syndromic Surveillance Specialist

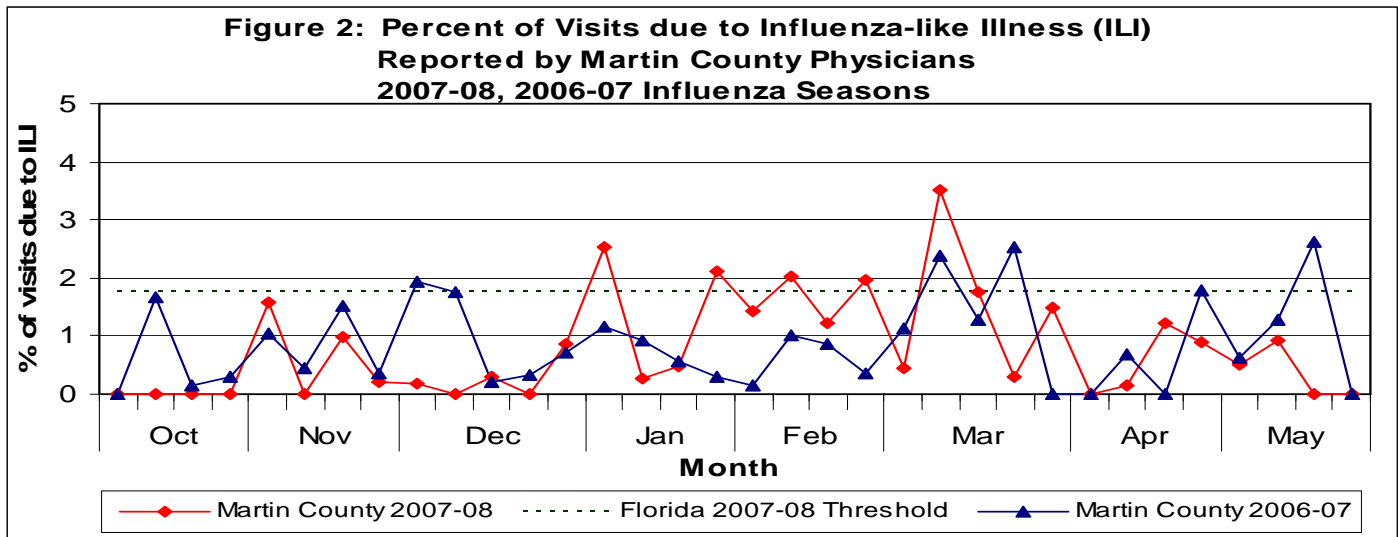
Martin County Influenza Surveillance Systems

Influenza surveillance in Martin County is conducted by the Martin County Health Department's Division of Epidemiology and is comprised of four surveillance components: 1) Influenza-like illness (ILI) reported by physicians, long-term care facilities, and schools, 2) school absenteeism, 3) laboratory surveillance, and 4) over-the-counter medication sales. ILI is defined as a fever $\geq 100^{\circ}\text{F}$ and cough and/or sore throat. The surveillance data is collected throughout the traditional influenza season (i.e. October-May) and is used to assess the impact of influenza in Martin County.

Physicians Influenza-like Illness (ILI) Surveillance

During the influenza season, physicians voluntarily report the total number of patient visits each week and the number of patient visits for ILI. During the 2007-2008 influenza season, physicians reported a total of 249 ILI cases. This is 31% higher than that reported during the 2006-2007 influenza season. As shown in Figure 1, during the 2007-2008 influenza season, the 5-24 year old age group had the highest percentage of ILI cases (39%) and the elderly population had the lowest (8%). The percentage of ILI cases observed among the elderly population this influenza season (8%) is lower than that observed during the 2006-2007 influenza season (24%) (Figure 1). The percentage of patient visits to physicians for ILI averaged 0.80% for the 2007-2008 influenza season. This average is below the state of Florida 2007-2008 ILI threshold for moderate activity (1.75%) and is lower than that observed during the 2006-2007 influenza season (0.88%). This influenza season, ILI activity reported by physicians peaked in March (Figure 2). In contrast, the 2006-2007 influenza season did not show a distinct peak, although increased ILI activity was observed in March and May (Figure 2).

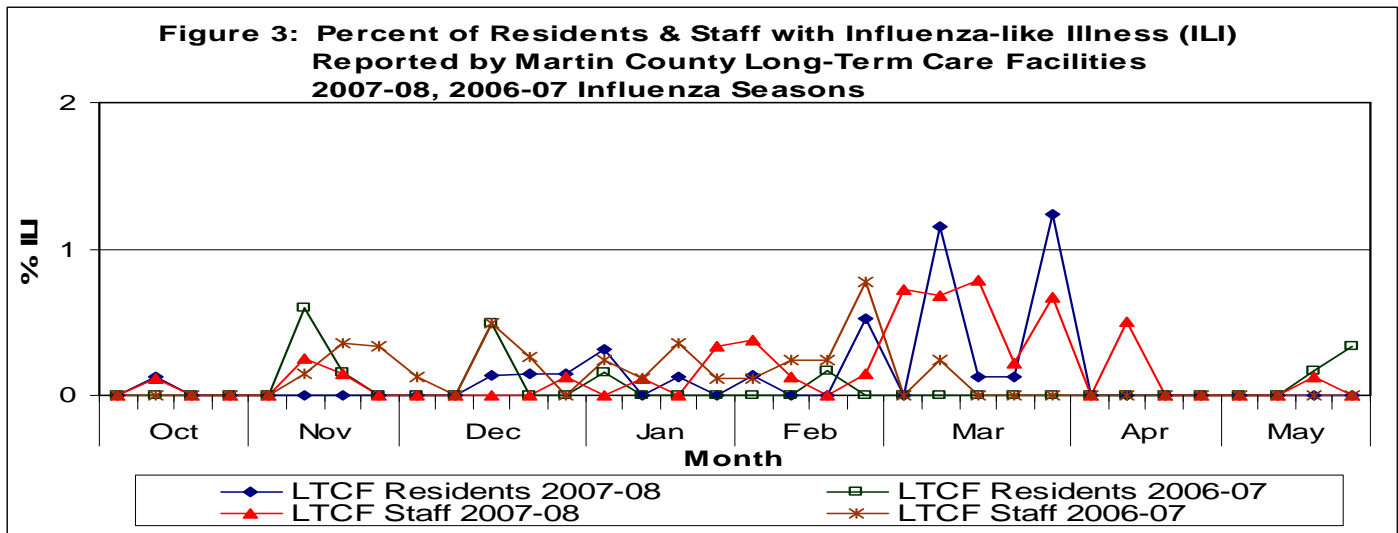




Florida 2007-2008 Threshold=1.75%. A line exceeding the threshold indicates moderate ILI activity.

Long-Term Care Facilities Influenza-like Illness (ILI) Surveillance

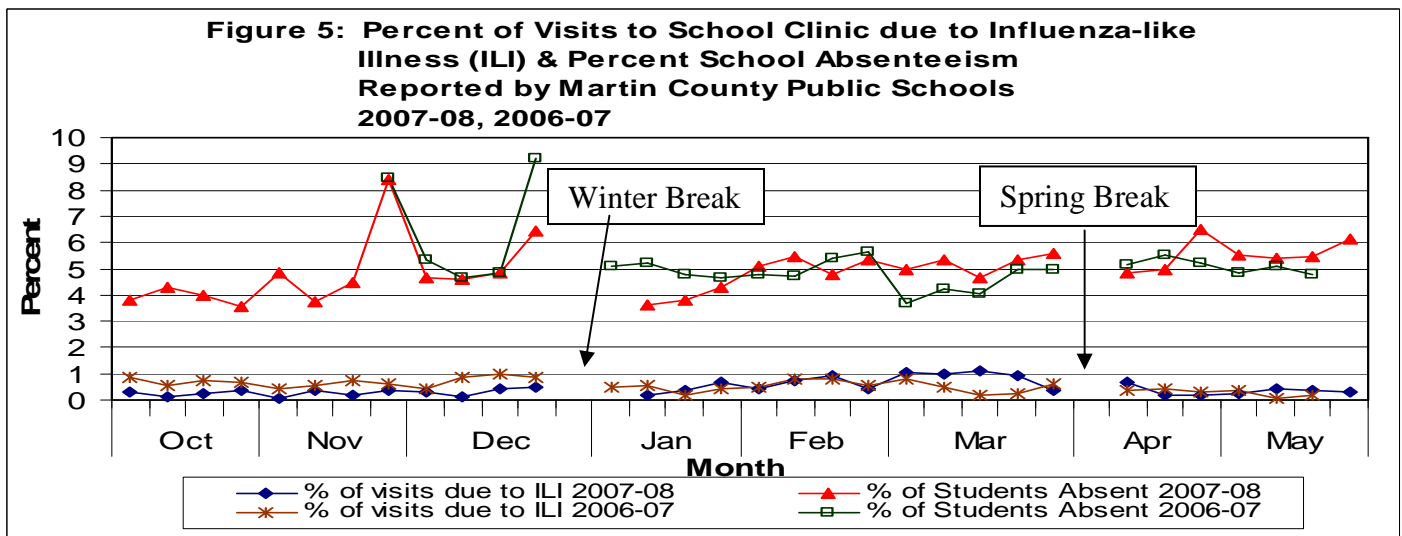
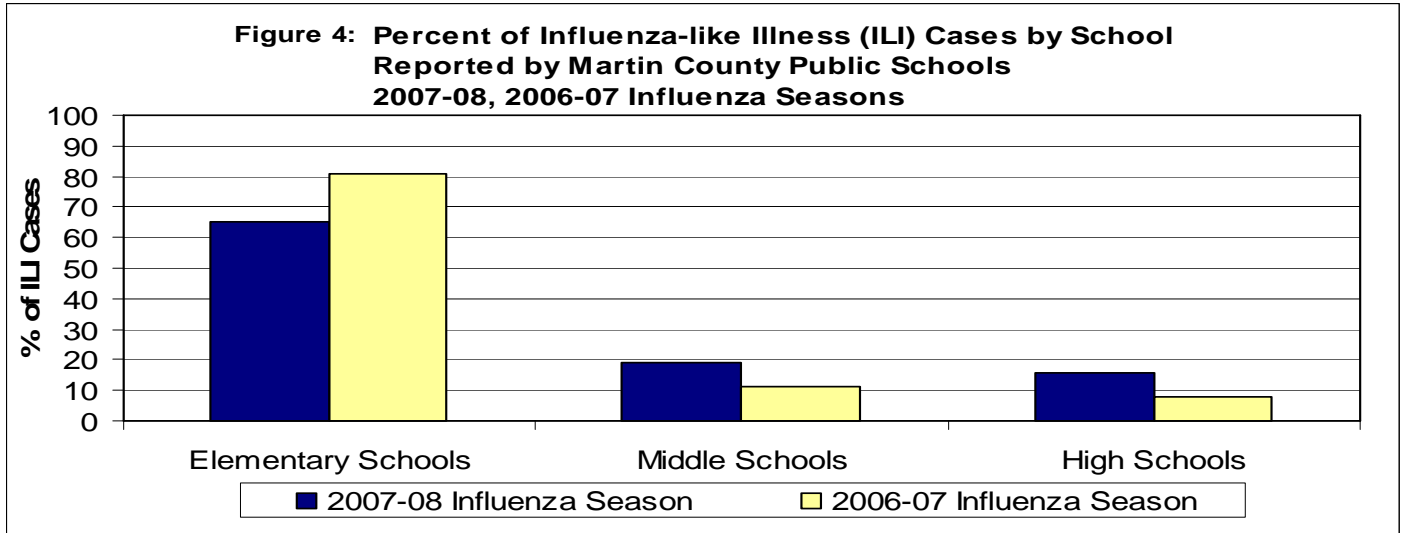
During the influenza season, long-term care facilities (i.e. nursing homes, assisted living facilities, and independent living facilities) voluntarily report the total number of residents and staff at the facility each week and the number of residents and staff with ILI. During the 2007-2008 influenza season, long-term care facilities reported a total of 32 residents with ILI and 48 staff with ILI. This is higher than that reported during the 2006-2007 influenza season. This influenza season, ILI activity among long-term care facilities residents and staff peaked during the month of March (Figure 3). The percentage of residents and staff with ILI averaged 0.13% and 0.16% respectively for the 2007-2008 influenza season. This is higher than that reported during the 2006-2007 influenza season.



Schools Influenza-like Illness (ILI) and Absenteeism Surveillance

During the influenza season, Martin County Public Schools' health technicians report the total number of student visits to the school health clinic each week and the number of student visits for ILI. During the 2007-2008 influenza season, Martin County Public Schools reported a total of 320 students with ILI. This is 14% lower than that reported during the 2006-2007 influenza season.

The majority (65%) of the ILI cases reported this influenza season were among elementary school students. (Figure 4). Elementary school students also had the highest percentage of ILI cases during the 2006-2007 influenza season (81%) (Figure 4). The percentage of student visits to the school health clinic for ILI averaged 0.45% for the 2007-2008 influenza season. This average is lower than that observed during the 2006-2007 influenza season (0.54%). This influenza season, ILI activity among students peaked during the month of March (Figure 5). In addition to ILI data, daily all-cause school absenteeism and enrollment data is collected from all Martin County Public Schools during the influenza season. The absenteeism rate in all Martin County Public Schools combined averaged 5.0% for the 2007-2008 influenza season. This is slightly lower than that observed during the 2006-2007 influenza season (5.2%).



Laboratory-Confirmed Influenza Surveillance

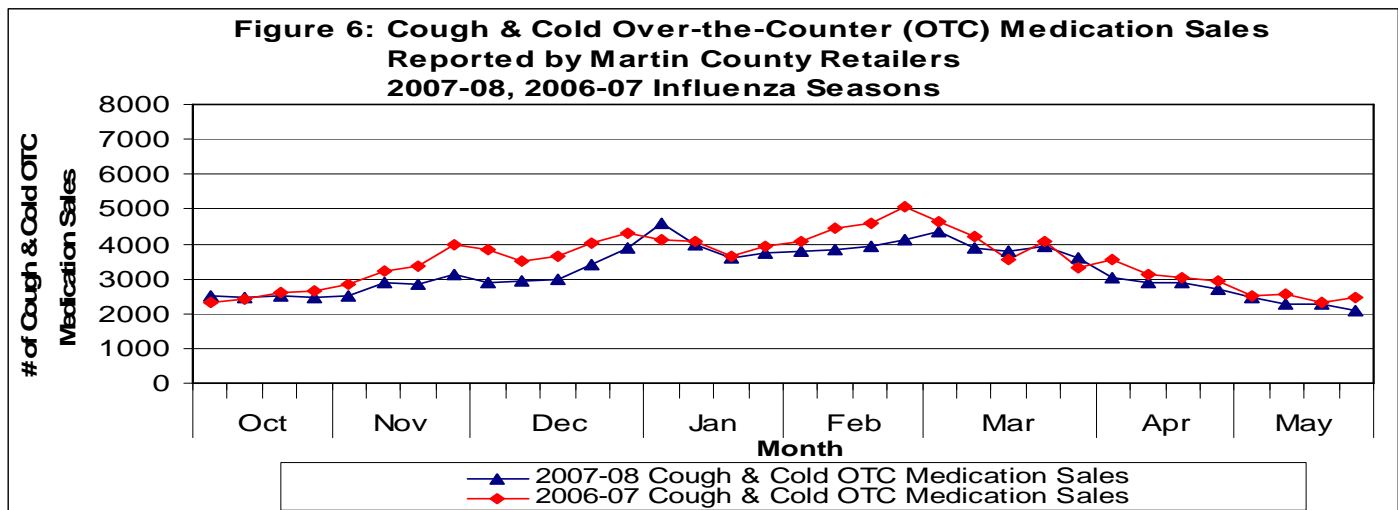
The Division of Epidemiology collects laboratory-confirmed influenza cases from Martin Memorial Hospital. A total of 25 laboratory-confirmed influenza cases were reported during the 2007-2008 influenza season (Table 1). The total number of laboratory-confirmed influenza cases reported this influenza season is more than six times higher than that reported during the 2006-2007 influenza season and more than three times higher than that reported during the 2005-2006 influenza season

(Table 1). The majority (56%) of the laboratory-confirmed influenza cases reported this influenza season were influenza A viruses (Table 1). However, it is important to note that a larger percentage of influenza B viruses were reported this influenza season than compared to prior influenza seasons (i.e. 2006-2007 and 2005-2006) (Table 1). The majority of the laboratory-confirmed influenza cases reported during the 2007-2008 influenza season were among females and the elderly population (Table 1). The number of laboratory-confirmed influenza cases reported during the 2007-2008 influenza season peaked in March. This coincides with the time period when peak ILI activity was reported by physicians, long-term care facilities, and schools.

Table 1: Laboratory-Confirmed Influenza Cases Reported by Martin Memorial Hospital 2007-08, 2006-07, 2005-06 Influenza Seasons			
	2007-08	2006-07	2005-06
Number of Cases	25	4	8
Influenza Type (count, percentage)			
A	14 (56%)	3 (75%)	8 (100%)
B	10 (40%)	0 (0%)	0 (0%)
A/B	1 (4%)	1 (25%)	0 (0%)
Age Group (count, percentage)			
0-4 yrs	2 (8%)	1 (25%)	3 (38%)
5-24 yrs	4 (16%)	0 (0%)	1 (13%)
25-64 yrs	7 (28%)	1 (25%)	1 (13%)
≥ 65 yrs	12 (48%)	2 (50%)	3 (38%)
Gender (count, percentage)			
Male	12 (48%)	1 (25%)	2 (25%)
Female	13 (52%)	3 (75%)	6 (75%)

Over-the-Counter Medication Sales

The National Retail Data Monitor (NRDM) collects daily sales of over-the-counter (OTC) healthcare products from retailers (pharmacies, grocery stores, etc) in Martin County. Overall, sales of cough and cold OTC medications were lower during the 2007-2008 influenza season than the 2006-2007 influenza season (Figure 6).

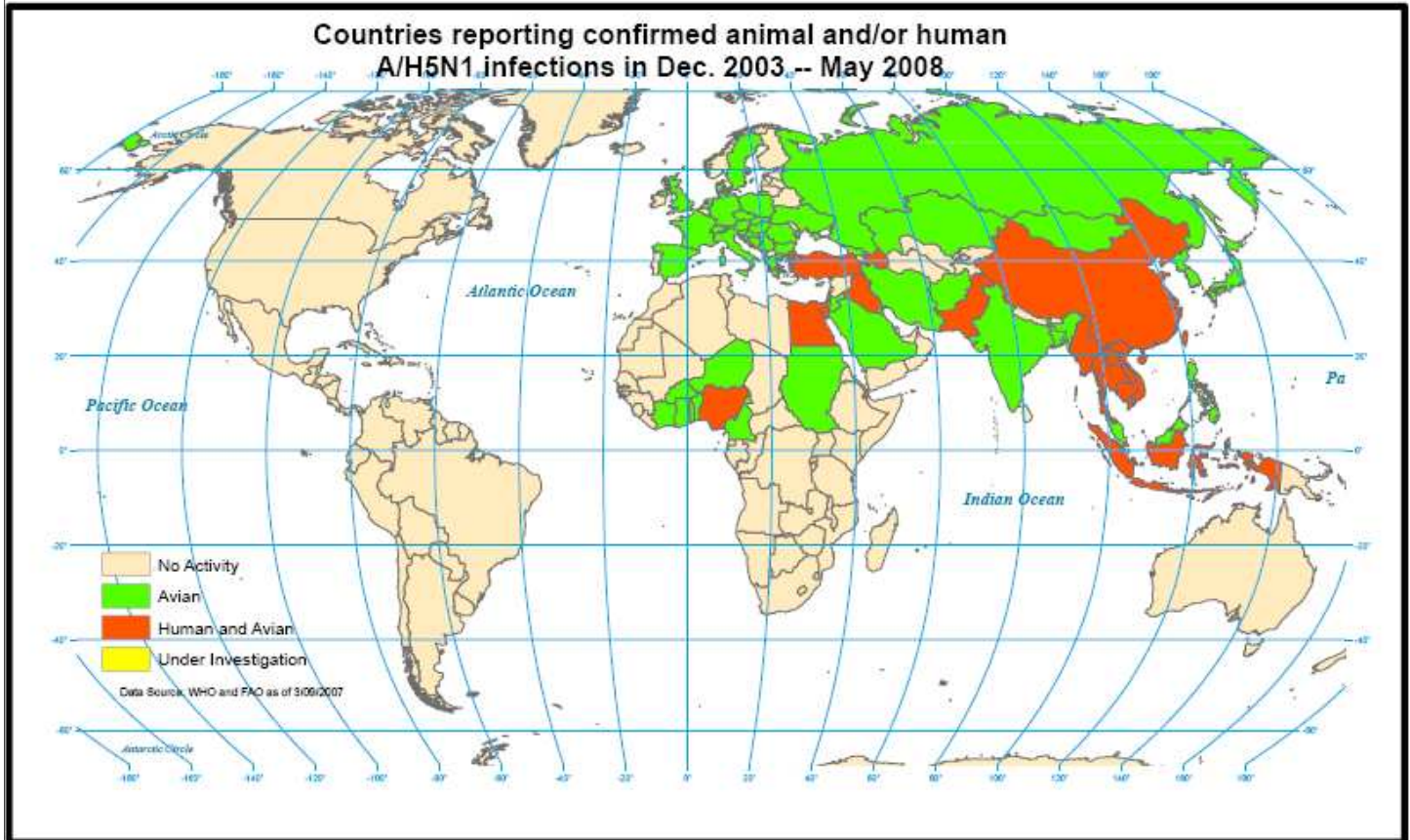


Important Influenza Surveillance Reminders

- ◆ Influenza and influenza-like illness activity reporting by healthcare providers is voluntary.
- ◆ The influenza surveillance data is used to answer the question of where, when, and what viruses are circulating. It can be used to determine if influenza activity is increasing or decreasing, but it cannot be used to ascertain how many people have become ill with influenza so far this season.

Avian Influenza Update

Summary of Worldwide A/H5N1 Avian Influenza Activity



For up-to-date Avian Influenza information, please visit:

www.pandemicflu.gov

www.cdc.gov/flu/avian

www.who.int/csr/disease/avian_influenza/en/

http://www.nwhc.usgs.gov/disease_information/avian_influenza/index.jsp

www.doh.state.fl.us/disease_ctrl/epi/htopics/BirdFlu.htm



We would like to thank our influenza surveillance program participants for the time and effort each contributed towards monitoring and reporting influenza and/or ILI cases to the health department. We sincerely thank the following community partners:

Medical Providers

Dr. Douglas Bowling
Dr. Yvette Bushéy
Dr. Eric Ewald
Dr. Celia Fernandez-Butelho
Dr. Jaime Gomez
Dr. Chad Harvey
Dr. Vivek Kaul
Dr. Suzann Leslie
Dr. Richard Loew
Dr. Philip Mendell
Dr. Devang Patel
Dr. Trinidad Rojas
Dr. Richard Weisberg
East Ocean Family Care
Martin Memorial Hospital
Volunteers in Medicine Clinic

Long-Term Care Facilities

Family Manors
Maple Leaf Assisted Living Facility
Martin Nursing and Restorative Care Center
Ocean Palms Retirement Center
Palm City Nursing and Rehabilitation Center
Parkway Health and Rehabilitation Center
Salerno Bay Manor
Sterling House of Stuart
Stuart Nursing and Restorative Care Center
Summerville at Jensen Beach
The Place at Stuart
The Residence
Water's Edge Extended Care

Public Schools

Bessey Creek Elementary
Challenger Elementary
Crystal Lake Elementary
Dr. David L. Anderson Middle
Felix A. Williams Elementary
Hidden Oaks Middle
Hobe Sound Elementary
Indiantown Middle
J.D. Parker Elementary
Jensen Beach Elementary
Jensen Beach High
Martin County High
Murray Middle
Palm City Elementary
Pinewood Elementary
Port Salerno Elementary
SeaWind Elementary
South Fork High
Spectrum Junior/Senior High
Stuart Middle
Warfield Elementary

As the traditional influenza season runs from October through May, this is the final report for the 2007-2008 influenza season. The influenza surveillance reports will resume at the beginning of the 2008-2009 influenza season. Any questions or comments regarding this report or any healthcare providers interested in participating in our ongoing influenza surveillance program should contact the Division of Epidemiology at (772) 221-4030 ext. 2214 or ext. 2130.