



Martin County Health Department

2008-2009 Influenza Season Summary Report

Surveillance Time Period: September 28, 2008 - May 30, 2009

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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 2008-2009 influenza season, physicians reported a total of 355 ILI cases. This is 43% higher than that reported during the 2007-2008 influenza season. As shown in Figure 1, during the 2008-2009 influenza season, the 5-24 year old age group had the largest percentage of ILI cases (49%) and the elderly population had the smallest (2%). A similar trend was observed during the 2007-2008 influenza season. The percentage of patient visits to physicians for ILI averaged 0.94% for the 2008-2009 influenza season. This average is below Martin County's 2008-2009 ILI threshold for moderate activity (2.50%) but higher than that observed during the 2007-2008 influenza season (0.80%). This influenza season, ILI activity reported by physicians did not exhibit a distinct peak (Figure 2). Instead, sporadic increases in ILI activity were observed in December and January and a prolonged increase in ILI activity was observed from February through mid March (Figure 2). This is in contrast to the 2007-2008 influenza season which showed a distinct peak in March.

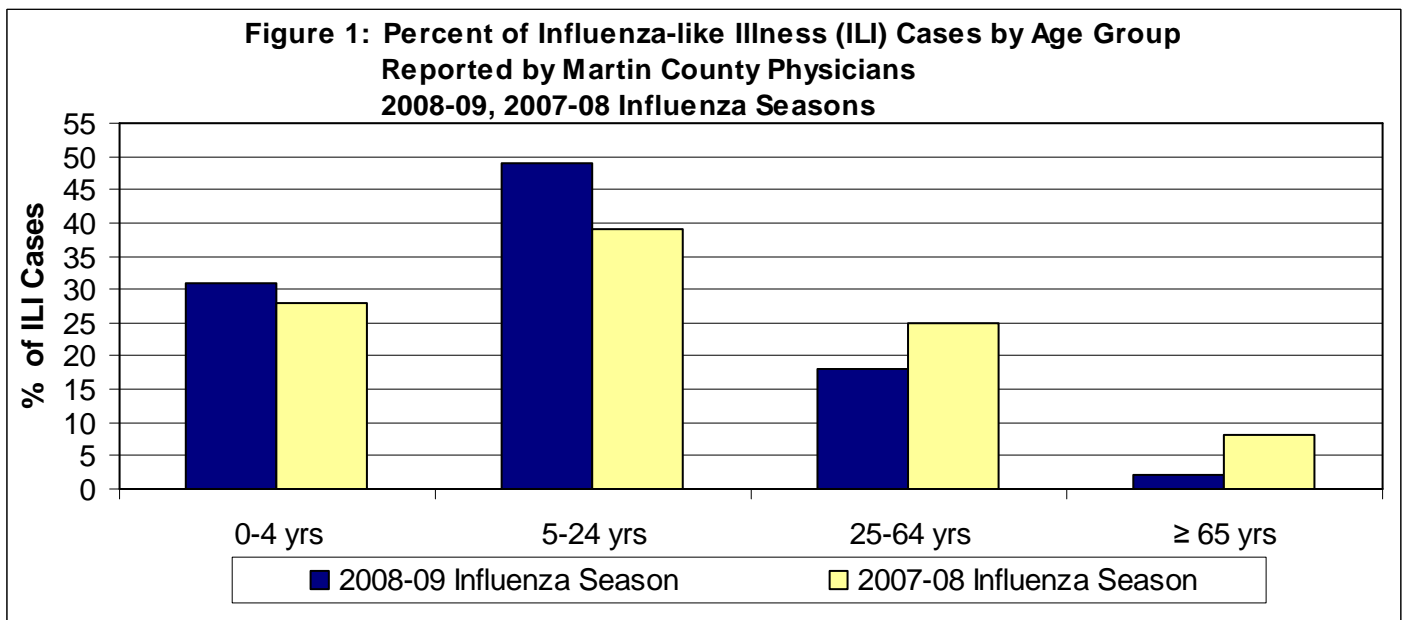
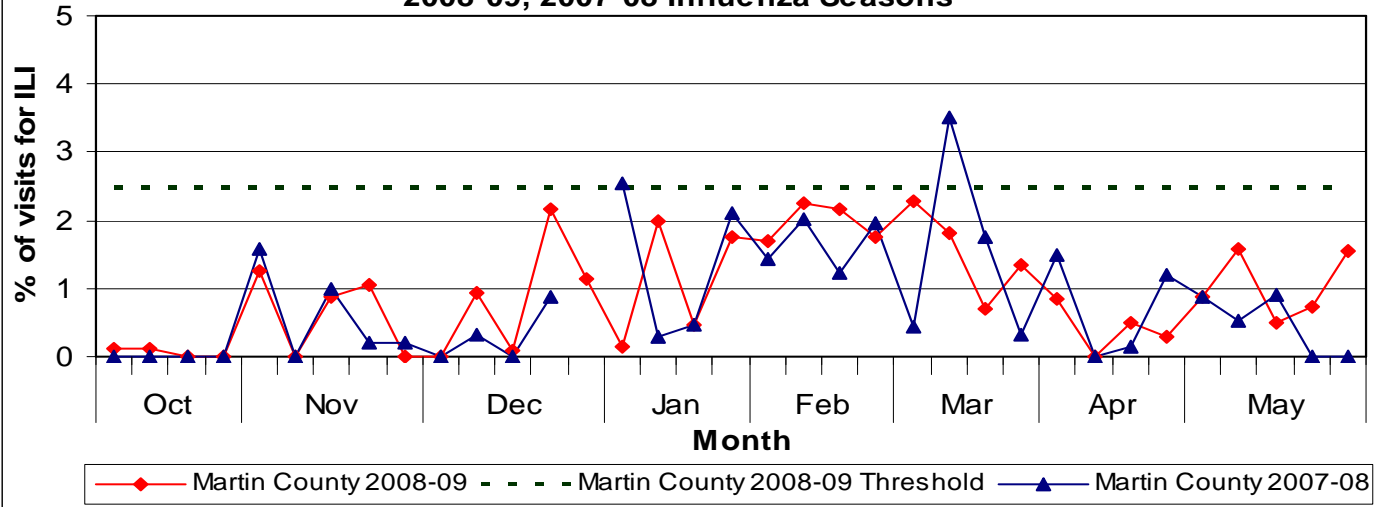


Figure 2: Percent of Visits for Influenza-like Illness (ILI) Reported by Martin County Physicians 2008-09, 2007-08 Influenza Seasons

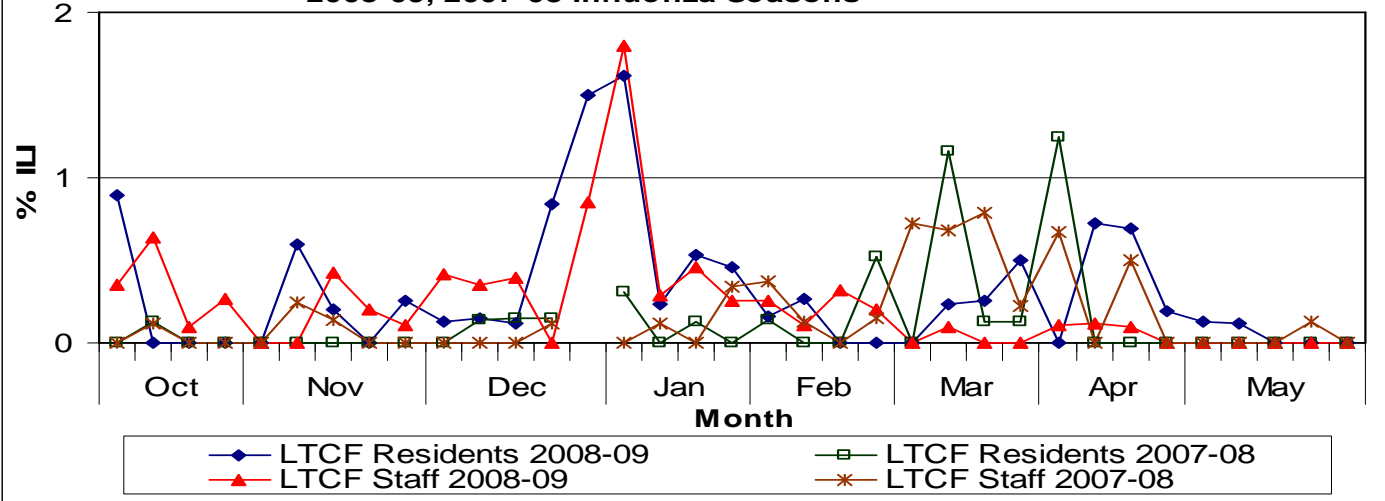


Martin County 2008-2009 Threshold=2.50%. A line exceeding the threshold indicates moderate ILI activity.

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

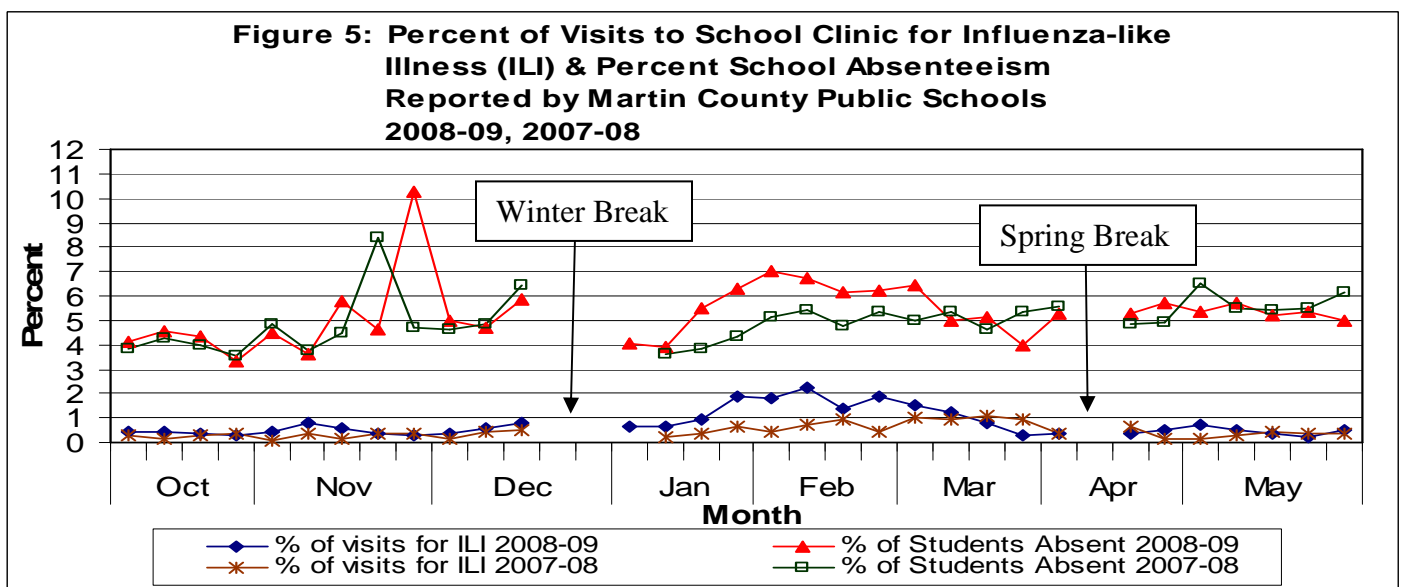
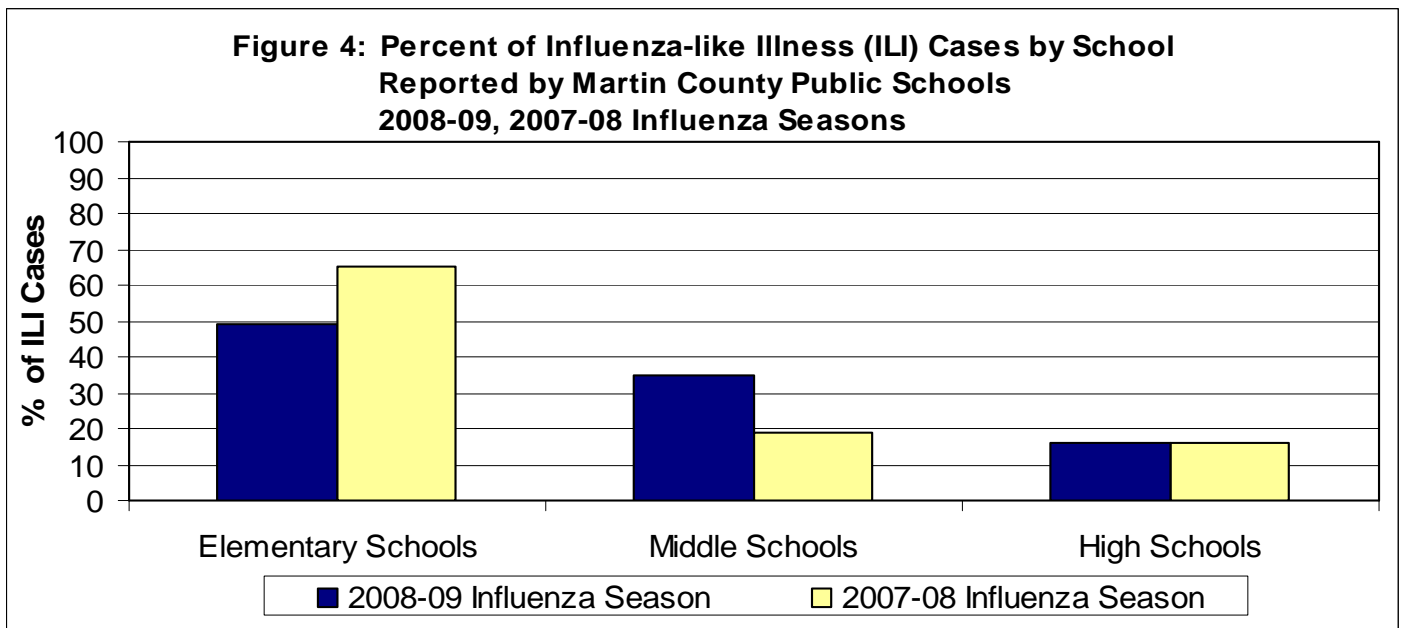
During the influenza season, long-term care facilities (i.e. nursing homes, assisted living facilities, and independent living facilities) voluntarily report the total number of residents and staff at the facility each week and the number of residents and staff with ILI. During the 2008-2009 influenza season, long-term care facilities reported a total of 86 residents with ILI and 80 staff with ILI. The number of residents with ILI this influenza season is almost 3 times higher than that reported during the 2007-2008 influenza season. The number of staff with ILI this influenza season is 67% higher than that reported during the 2007-2008 influenza season. The percentage of residents and staff with ILI averaged 0.31% and 0.23% respectively for the 2008-2009 influenza season. This is higher than that reported during the 2007-2008 influenza season. The sharp increase in ILI activity from late December through early January is primarily attributed to an increase in the number of ILI cases reported by one nursing home (Figure 3).

Figure 3: Percent of Residents & Staff with Influenza-like Illness (ILI) Reported by Martin County Long-Term Care Facilities 2008-09, 2007-08 Influenza Seasons



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 2008-2009 influenza season, Martin County Public Schools reported a total of 618 students with ILI. This is almost 2 times higher than that reported during the 2007-2008 influenza season. As shown in Figure 4, during the 2008-2009 influenza season, elementary school students had the largest percentage of ILI cases (49%) and high school students had the smallest (16%). The percentage of student visits to the school health clinic for ILI averaged 0.76% for the 2008-2009 influenza season. This average is higher than that observed during the 2007-2008 influenza season (0.45%). This influenza season, ILI activity among students peaked during the month of February (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 5.3% for the 2008-2009 influenza season. This is slightly higher than that observed during the 2007-2008 influenza season (5.0%).



Laboratory-Confirmed Influenza Surveillance

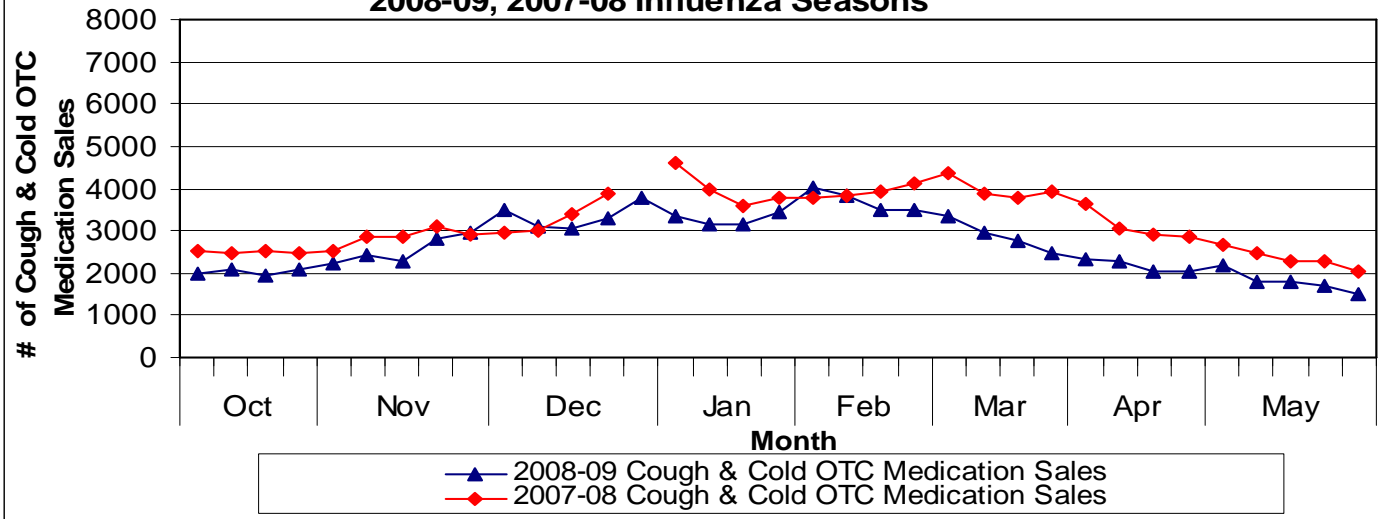
The Division of Epidemiology collects laboratory-confirmed influenza cases from Martin Memorial Hospital. A total of 32 laboratory-confirmed influenza cases were reported during the 2008-2009 influenza season (Table 1). This is 28% higher than that reported during the 2007-2008 influenza season (Table 1). Influenza B viruses accounted for the largest percentage (41%) of the laboratory-confirmed influenza cases reported this influenza season (Table 1). This is in contrast to prior influenza seasons (i.e. 2007-2008, 2006-2007, and 2005-2006) where influenza A viruses accounted for the largest percentage of laboratory-confirmed influenza cases (Table 1). During the 2008-2009 influenza season, the number of people infected with both influenza A and B viruses (N=8) was considerably higher than that reported during prior influenza seasons (i.e. 2007-2008, 2006-2007, and 2005-2006) (Table 1). Two influenza A (H1N1) swine origin cases were reported during the 2008-2009 influenza season (i.e. September 28, 2008 - May 30, 2009). The two influenza A (H1N1) swine origin cases occurred during week ending May 30, 2009. The majority of the laboratory-confirmed influenza cases reported during the 2008-2009 influenza season were under the age of 25 (Table 1). This is in contrast to the 2007-2008 influenza season where the majority of the laboratory-confirmed influenza cases reported were 25 years of age or older (Table 1). 53% of the laboratory-confirmed influenza cases reported during the 2008-2009 influenza season were female (Table 1).

Table 1: Laboratory-Confirmed Influenza Cases Reported by Martin Memorial Hospital 2008-09, 2007-08, 2006-07, 2005-06 Influenza Seasons				
	2008-09	2007-08	2006-07	2005-06
Number of Cases	32	25	4	8
Influenza Type (count, percentage)				
A	11 (34%)	14 (56%)	3 (75%)	8 (100%)
B	13 (41%)	10 (40%)	0 (0%)	0 (0%)
A/B	8 (25%)	1 (4%)	1 (25%)	0 (0%)
Age Group (count, percentage)				
0-4 yrs	9 (28%)	2 (8%)	1 (25%)	3 (38%)
5-24 yrs	10 (31%)	4 (16%)	0 (0%)	1 (13%)
25-64 yrs	2 (6%)	7 (28%)	1 (25%)	1 (13%)
≥ 65 yrs	11 (34%)	12 (48%)	2 (50%)	3 (38%)
Gender (count, percentage)				
Male	15 (47%)	12 (48%)	1 (25%)	2 (25%)
Female	17 (53%)	13 (52%)	3 (75%)	6 (75%)

Over-the-Counter Medication Sales

The National Retail Data Monitor 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 2008-2009 influenza season than the 2007-2008 influenza season (Figure 6).

Figure 6: Cough & Cold Over-the-Counter (OTC) Medication Sales Reported by Martin County Retailers 2008-09, 2007-08 Influenza Seasons



Important Influenza Surveillance Reminders

- ◆ The influenza surveillance data is used to answer the question of where, when, and what influenza 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.
- ◆ For up-to-date Influenza A (H1N1) Swine Origin information, please visit:
<http://www.cdc.gov/h1n1flu/>
<http://www.who.int/csr/disease/swineflu/en/index.html>
http://www.doh.state.fl.us/disease_ctrl/epi/swineflu/index.html
- ◆ As the traditional influenza season runs from October through May, this is the final report for the 2008-2009 influenza season. The influenza surveillance reports will resume at the beginning of the 2009-2010 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.



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

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Dr. Richard Weisberg
Jupiter Island Medical Clinic
Martin Memorial Family Care at Hobe Sound
Martin Memorial Hospital
Martin Memorial Treasure Coast Pediatrics
MedStat Urgent Care Center
Pulmonary Medicine
Stuart Oncology
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
The Manors at Hobe Sound
The Place at Stuart
Waters Edge Extended Care

Public Schools

Bessey Creek Elementary
Challenger Elementary
Citrus Grove 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