

Syndromic Surveillance and Influenza-like Illness in Georgia

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OBJECTIVE

To describe Georgia's experience using emergency department-based (ED) syndromic surveillance (SS) as a source of influenza-like illness surveillance data.

BACKGROUND

There are multiple sources of influenza and influenza-like illness (ILI) surveillance data within the state of Georgia. These include laboratory surveillance for influenza viruses, sentinel providers that report ILI, pneumonia and influenza mortality, influenza-associated hospitalizations, and influenza-associated pediatric deaths [1, 2, unpublished data, Georgia Department of Human Resources]. The usefulness of ED-based SS data as an additional source of ILI surveillance data is currently being evaluated at national, state, and local levels [1, 3].

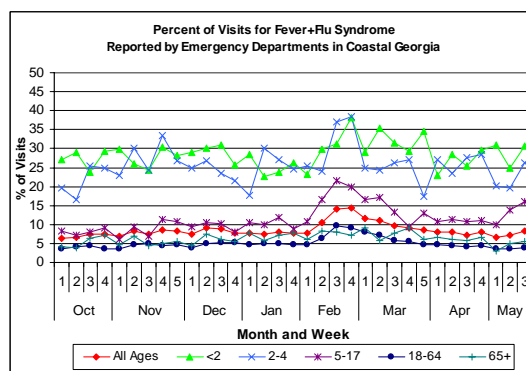
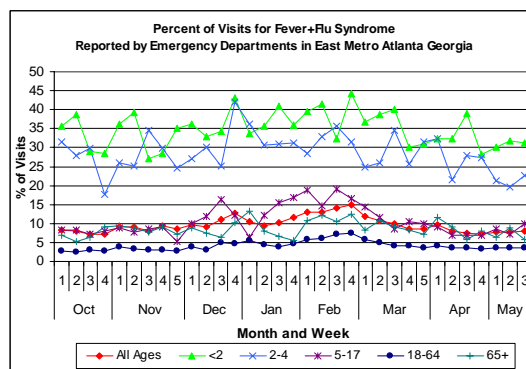
METHODS

An integral component of Georgia's SS Program is ED-based. Data are automatically sent from pre-existing databases in participating ED facilities to provide a "real-time" monitoring system to detect events of potential public health significance. The Fever+Flu syndrome, which includes ED visits for febrile and viral illnesses, is used to monitor ILI activity.

In addition to the patients' reason for visiting the ED, demographic and geographic information are received on each ED visit. Frequencies and percentage of all visits were calculated for daily and/or weekly Fever+Flu ED visits at different geographic levels (state, health district, and zip code) and by age group (<2, 2-4, 5-17, 18-64, 65+ years).

RESULTS

During the 2005-06 influenza season, 2 of 18 GA Health Districts had participating EDs providing data daily (East Metro-Atlanta and Coastal-Savannah and Brunswick). The Fever+Flu syndrome demonstrated that these two areas of the state had different experiences with respect to ILI that year, including time of onset and impact. Age distributions were similar for the two areas; however, differences were seen between the timing and impact within and among the different age groups between the two areas.



CONCLUSIONS

ED-based SS has proven to be a valuable tool for monitoring seasonal influenza-like illness trends in Georgia. Because it captures demographic and zip code information (in addition to the patient's reason for visiting the ED), ED-based SS is able to better and more quickly characterize the influenza season in Georgia than other existing ILI surveillance systems.

REFERENCES

- [1] Georgia Department of Human Resources; Weekly Influenza Surveillance in Georgia, 2005-2006; <http://health.state.ga.us/epi/flu/fluupd05.asp>. Accessed: March 8, 2007.
- [2] Centers for Disease Control and Prevention; 2005-06 U.S. Influenza Season Summary; <http://www.cdc.gov/flu/weekly/weeklyarchives2005-2006/05-06summary.htm>. Accessed: March 8, 2007.
- [3] International Society for Disease Surveillance; DiSTRIBuTE Project; http://www.syndromic.org/society/Invitation_to_DiSTRIBuTE.pdf. Accessed: March 8, 2007.

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The findings and conclusions in this report are those of the authors and do not necessarily represent the views of the Centers for Disease Control and Prevention.