

# Seasonal & Pandemic Influenza 2007

## Poster Section: Surveillance and Diagnostics, with an Update on Rapid Diagnostics

**Section Chair: David Hillyard, MD**

### Poster Title: Using a Statewide Syndromic Surveillance System for Influenza Monitoring

**Kristina Simeonsson<sup>1</sup>, Svetlana Deyneka<sup>1</sup>, Matthew Scholer<sup>2</sup>, Jeffrey Engel<sup>1</sup>**

<sup>1</sup>North Carolina Department of Health and Human Services; <sup>2</sup>University of North Carolina at Chapel Hill  
Department of Emergency Medicine

#### **Objective**

To describe the use of emergency department (ED) data for syndromic influenza surveillance and compare that with the sentinel provider network (SPN) ILI surveillance in North Carolina.

#### **Background**

The North Carolina Disease Event Tracking and Epidemiologic Collection Tool (NC DETECT) monitors near-real-time data from 90 hospital EDs for pre-diagnosis syndromes. NC DETECT syndromic signals are monitored daily by an epidemiologist in order to detect unexpected cases and outbreaks earlier in their course than traditional disease-based surveillance.

#### **Methods**

NC DETECT's ILI case definition was derived from a sample of ED visits assigned an ICD-9 CM code for influenza. The software searches the chief complaint field and, when available, the nurses' notes and initial ED temperature fields for keywords and values to assign a visit to the syndrome category. NC DETECT ILI trends were compared with NC's SPN trends for the 2005-2006 and 2006-2007 influenza seasons.

#### **Results**

In each influenza season, trends in the proportion of visits for ILI in EDs and the SPN were similar. The proportion of ILI visits was higher for EDs than the SPN.

#### **Conclusion**

NC DETECT provides more timely ILI surveillance than the SPN with similar trends. The ability to capture and analyze ILI in real time provides an opportunity for rapid implementation of public health control measures during an influenza pandemic.