

# Super Bowl Surveillance: A Practical Exercise in Inter-Jurisdictional Public Health Information Sharing

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## OBJECTIVE

This paper describes an inter-jurisdictional surveillance data sharing effort carried out by public health departments in Miami, Chicago, and Indianapolis in conjunction with Super Bowl XLI.

## BACKGROUND

When the Chicago Bears met the Indianapolis Colts for Super Bowl XLI in Miami in January, 2007, fans from multiple regions visited South Florida for the game. In the past, public health departments have instituted heightened local surveillance during mass gatherings due to concerns about increased risk of disease outbreaks. For the first time, in 2007, health departments in all three Super Bowl-related regions already practiced daily disease surveillance using biosurveillance information systems (separate installations of the ESSENCE system, developed at JHUAPL). The situation provided an opportunity to explore ways in which separate surveillance systems could be coordinated for effective, short-term, multi-jurisdictional surveillance.

## METHODS

During the week prior to Super Bowl, public health departments in each region were consulted to determine the additional surveillance activities to implement for the event. Four departments participated: Miami-Dade County Health Department, Cook County Department of Public Health, Marion County Health Department, and Indiana State Department of Health. The following activities were arranged:

1. *Event-Specific Visualization.* JHUAPL introduced new zip code groupings into the Miami surveillance system that enabled Miami users to separately group, view, and analyze Miami hospital emergency department records generated by persons with Chicago area or Indiana home zip codes.
2. *Event-Specific Information Sharing.* The Miami health department agreed to share its daily surveillance summary report with the other three health departments. The Cook County public health department agreed to do the same if any unusual

disease activity was observed. The Marion County and Indiana health departments agreed to include the others in their standard notification process.

## RESULTS

Super Bowl surveillance activities began four days before the Super Bowl and extended through 14 days after it. Each health department followed through on its agreed information sharing activities. No unusual disease activity was observed in the three regions during the surveillance period. A record was kept of the information shared and other interactions between the health departments involved.

## CONCLUSIONS

It was possible, with very short notice, to arrange inter-jurisdictional information sharing between four public health departments to support mass gathering surveillance. The health departments in all three regions were willing to share summary surveillance information derived from their disease surveillance systems, despite their inability to share raw data. The level of preplanning and effort required to institute information sharing was extremely low. No formal data sharing agreements were needed. Aside from introducing new zip code groupings, no technical work was required. Given the departments' established use of biosurveillance systems, no additional data collection or analysis activities were needed, aside from willingness to use other jurisdictions' reports. Participants stated that the departments' common use of ESSENCE systems enhanced the value of the shared reports.

The utility of the arrangement for outbreak detection and management was not fully tested, as no unusual disease activity was detected in the three regions during the Super Bowl period. However, the speed and ease with which information sharing arrangements were developed is encouraging. The results suggest the potential value of further developing capabilities to coordinate separate disease surveillance systems to share inter-jurisdictional public health information for outbreak detection and response and public health situational awareness.