# **Infection Control Practitioner Use of NC DETECT**

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#### **OBJECTIVE**

The UNC Department of Emergency Medicine (UNC DEM) conducted an online survey to better understand the surveillance needs of Infection Control Practitioners (ICPs) in North Carolina and solicit feedback on the utility of the North Carolina Disease Event Tracking and Epidemiologic Collection Tool (NC DETECT).

#### **BACKGROUND**

Lessons learned have shown that the incorporation of syndromic surveillance systems into daily practice is essential for success. Additionally, surveillance information used systematically has been shown to improve emergency response and build day-to-day organizational effectiveness.1 While hospital-based public health epidemiologists (PHEs) in the largest hospitals in NC have incorporated NC DETECT into their daily surveillance work flows, ICPs in other hospitals have been slow to use NC DETECT. In response, UNC DEM is actively seeking to improve understanding of the reports available to ICPs and provide targeted training on the specific surveillance needs of ICPs. In particular, we wanted to determine if NC DETECT usage would increase if ICPs recognized its utility for meeting the infection control requirements of the Joint Commission on the Accreditation of Healthcare Organizations (JCAHO).

### **METHODS**

In June 2008, UNC DEM contacted ICPs to complete an online survey to provide feedback on NC DETECT, ICP surveillance, and JCAHO requirements. Survey questions were adapted from the CDC Framework for Evaluating Public Health Surveillance Systems for Early Detection of Outbreaks to assess usefulness, timeliness, and acceptability. Eighty-seven ICPs were identified from 87 hospitals in North Carolina; hospitals with PHEs did not participate in the survey.

### RESULTS

Of 87 ICPs, 46 (53%) started the survey and 42 (48%) completed the survey. Of the 46 respondents, 43% (n=20) had heard of NC DETECT; 57% (n=26) were not familiar with NC DETECT. When asked about syndromic surveillance systems, 43% (n=19) agreed that syndromic surveillance systems, such as NC DETECT, would help them with their daily surveillance activities. Of 42 respondents completing the survey, 64% agreed that NC DETECT would be helpful in collecting and interpreting data related to infection control and disease outbreaks. Seventy

percent of ICPs familiar with NC DETECT (n=14) spent more than 10 hours a week working with surveillance data as compared to 54% of ICPs unfamiliar with NC DETECT (n=14). Additionally, 50% of ICPs familiar with NC DETECT responded that a syndromic surveillance system addresses the daily needs of ICPs, as compared to 35% of ICPs unfamiliar with NC DETECT. Respondents were asked to identify and rank the different JCAHO infection control requirements based on the utility of NC DETECT to assist in meeting them. The highest ranked standards were 1) Strategies for identifying communicable disease through surveillance, data collection, and data analysis; 2) Assessment of risk for acquiring and transmitting infectious agents within the program; and 3) Monitoring of prevention including immunization activities, communicable diseases. Overall, 69% (n=29) agreed that a better understanding of how NC DETECT would help meet JCAHO requirements would increase ICP usage of the system.

#### **CONCLUSIONS**

To increase the use and utility of NC DETECT for ICPs, UNC DEM, in collaboration with the North Carolina Division of Public Health (NC DPH), must improve general awareness of NC DETECT and demonstrate to ICPs how it will support daily activities while not increasing workload. Awareness campaigns should target NC ICP communication groups, such as the NC chapter of APIC and the NC Statewide Program for Infection Control and Epidemiology (SPICE). Training should focus on the tools in NC DETECT that assist in identifying potential outbreaks and early detection of communicable illness and provide county and statewide comparisons. UNC DEM should also assess how best to combine NC DETECT information with other ICP data sources, including APIC, SPICE, CDC, and NC HAN. As a result of this survey, NC DETECT will develop a user guide for ICPs addressing the goals and needs identified in this survey. A follow-up survey is planned for November to further assess NC DETECT utility for JCAHO accreditation and to identify additional training objectives and needs for ICPs.

## REFERENCES

 $1. Foldy \ SL. \ Linking \ better \ surveillance \ to \ better \ outcomes. \\ MMWR. \ 2004; 53 (Suppl): 12-17.$ 

2.Buehler JW, Hopkins RS, Overhage JM, Sosin DM, Tong V. Framework for evaluating public health surveillance systems for early detection of outbreaks. MMWR. 2004; 53(RR05):1-11.