Illinois establishes automated alerts about travelers from Ebola-affected regions seeking health care



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CATEGORY: Syndromic Surveillance

Illinois Department of Public Health (IDPH) connected their Ebola-region traveler list to their syndromic surveillance platform to quickly identify travelers seeking care during their monitoring period, allowing public health to respond in a timely manner.

The "What"

Illinois Department of Public Health (IDPH) established an automatic alert system when patients from regions affected by Ebola began arriving in the US. The system was designed to notify both the state department of public health and the local department in the jurisdiction where the patient was residing if any of the travelers appeared in the emergency department.

To achieve this, application programming interface (API) connections were created to the REDCap server where the traveler list was located, and syndromic surveillance data admission-discharge-transfer (ADT) feed from all Illinois emergency department visits was used. The data sets were matched using a deterministic matching algorithm that relied on personal identifiers such as first name, last name, date of birth, and gender. Once a match was found, an email alert was sent to the local health



department and IDPH. The matching process was repeated every 15 minutes to ensure timely alerts for any newly received data. This allowed the state to quickly identify any travelers who visited a hospital for care within 21 days of their arrival to the US. Although two travelers visited emergency departments during this time, neither of the visits was related to Ebola.

The "So What"

When travelers arrive from countries where a significant disease is circulating, these individuals may return to the US and may develop symptoms and go directly to health care despite being asked to call public health first. It is important to be notified of this as soon as possible. This data linkage between traveler information and syndromic surveillance alerted IDPH to two travelers who sought care during their monitoring period. In these two situations, their reason for seeking health care was unrelated to the infectious disease of concern but if it was related to infectious disease, it provides us another way to have quick notification.

The "Now What"

IDPH plans to use these alerts in any future traveler-related monitoring situations and may expand to other situations as needed.



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