# Syndromic Surveillance (SYS)



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National Web Site: https://www.cdc.gov/nssp/index.html

#### Sources of Information for the Database

Information in the SYS system is provided as a collaboration among public health agencies and other partners for timely exchange of syndromic data to improve the nations, situational awareness and responsiveness to hazardous events and disease outbreaks. The data for this collaboration is collected from local health care facilities; (Emergency Departments, Urgent Care, Inpatient and Ambulatory Care Settings) Electronic Health Record (EHR) systems in Kentucky in the form of Admit Discharge Transfer (ADT) messages through the Kentucky Health Information Exchange. The exchange of this data is required for eligible hospitals within Stage 2 Meaningful Use. This data project is a working partnership between the Kentucky Department for Public Health (KDPH), Kentucky Health Information Exchange, and the National Syndromic Surveillance Program (NSSP).

#### **Description of the Data Collected**

Syndromic Surveillance Data is collected using the Personal Health Information Number (PHIN) messaging guide for syndromic surveillance HL7 Version 2.5.1. High-level data elements that are collected include: facility name, patient type, event type, diagnosis codes, chief complaints, triage notes, gender, age, patient address, date, and time. Some of these data fields are required and others are optional. The KDPH also has access to this data utilizing a shared CDC environment of ESSENCE. The Kentucky Department for Public Health has access to the raw data and binned data within this application. All data sent from the Kentucky Health Information Exchange to the NSSP servers is de-identified.

## Strengths of the Data

The major strength of this data comes from the ability to see events as close to real time as possible. Hospital exit data can take up to three to six months before it is finalized and released.

## **Data Limitations**

- Lack of data completeness across facilities.
- Data is de-identified, making it hard to cross reference data between applications.
- Sending inconsistencies with facilities, data feeds can drop off at anytime.
- Vendor issues within KHIE.
- CDC ESSENCE environment is controlled by KHIE.

## **Specific Uses of Information**

- Opioid surveillance projects with Kentucky Injury Prevention and Research Center (KIPRC).
- Large event surveillance.
- Population health surveillance.
- Chronic disease surveillance.
- Environment related health issues.

# **System Evaluation**

The system is evaluated daily utilizing data dashboards looking at facility connectivity and data completeness.

## **Data Availability**

ESSENSE access is available on request and issued by the Kentucky Syndromic Surveillance administrator. The current administrator is John Prather.

## **Contributing Author**

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