

# THE NATIONAL SYNDROMIC SURVEILLANCE PROGRAM

The National Syndromic Surveillance Program (NSSP) is a collaboration among CDC, federal partners, local and state health departments, and academic and private sector partners who have formed a community of practice. They collect, analyze, and share electronic patient encounter data received from emergency departments, urgent and ambulatory care centers, inpatient healthcare settings, and laboratories. The electronic health data are integrated through a shared platform—the BioSense Platform. The public health community uses analytic tools on the platform to analyze data received within 24 hours of patient visits to participating facilities. These timely and actionable data are used to detect, characterize, monitor, and respond to events of public health concern.

## HOW WE CONDUCT SYNDROMIC SURVEILLANCE



**People seek treatment** in a medical facility, such as emergency department or urgent care.



Medical facility sends de-identified data including chief complaint, diagnosis codes, patient characteristics, and location to state and local health departments or to data aggregators such as Health Information Exchanges.



**CDC provides**

- Analytic tools, services, and system infrastructure
- Funding to health departments
- Technical assistance and training
- Data analysis support
- Collaboration on specific projects



**DATA**

**Public health departments and Health Information Exchanges** contribute data to the NSSP BioSense Platform.



**NSSP Community of Practice**



- Conduct syndromic surveillance to monitor public health
- Share data via NSSP BioSense Platform
- Share knowledge
- Build skills via webinars, trainings, and workgroup participation
- Collaborate to develop methods and respond to emergencies



**U.S. Department of Health and Human Services**  
Centers for Disease Control and Prevention

# EXAMPLES OF SYNDROMIC SURVEILLANCE IN ACTION

## Using syndromic surveillance, public health officials can:

- Detect illness, injuries, and health care needs after major disasters such as hurricanes
- Characterize extent of opioid and other drug-related overdoses in communities
- Monitor for early signs of outbreaks associated with crowding and compromised sanitation at mass gatherings like concerts, conventions, or large festivals
- Respond to foodborne outbreaks such as the identification of fish poisoning that resulted in a product recall

## NSSP BIOSENSE PLATFORM BY THE NUMBERS



Nearly 6,000 health care facilities covering 49 states and the District of Columbia contribute emergency department data to the BioSense Platform daily.



Currently, 70% of the nation's emergency departments contribute data to NSSP (or the BioSense Platform).



Within 24 hours of patient visits, data are available for analysis.



Over 6 million electronic health messages are received by the NSSP BioSense Platform every day.

## WHY DO SYNDROMIC SURVEILLANCE?



Provides public health officials a digital platform to detect, characterize, monitor, and respond to potential public health threats



Provides regional and national situational awareness about public health concerns



Supports more informed public health decisions and interventions



Contributes to protecting the health of communities