

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. Centers for Disease Control and Prevention
Office of Public Health Data, Surveillance, and Technology

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



More than 6,900 health care facilities covering 50 states, the District of Columbia, and Guam contribute data to NSSP daily.



80% of U.S. emergency departments send data to NSSP, often within 24 hours.



Within 24 hours of a patient's ED visit, data are available to NSSP for analysis.



More than 9.6 million electronic health messages are received by NSSP everyday.

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