

NATIONAL SYNDROMIC SURVEILLANCE PROGRAM

WHAT IS SYNDROMIC SURVEILLANCE?

Health threats are becoming more complex and frequent. Syndromic surveillance provides public health officials with a timely system for detecting, understanding, and monitoring health events. By tracking symptoms of patients in emergency departments (EDs)—before and after a diagnosis is confirmed—public health professionals can detect unusual levels of illness to determine whether a response is needed. Data serve as an early warning system for events of concern. These data can also be used to monitor trends, track use of healthcare resources, and connect people with preventive care.

CDC and its partners provide a network to help scientists collect and use the most accurate, timely electronic health data available, without compromising privacy. Health departments and federal, state, local, and territorial partners use these data and tools with speed and efficiency to help protect their communities from health threats.

ABOUT THE NATIONAL SYNDROMIC SURVEILLANCE PROGRAM

By integrating syndromic data with other data sources, such as ED and laboratory data, our view of the nation's overall health improves as does our early detection system for public health threats. The National Syndromic Surveillance Program (NSSP) offers a suite of services, such as a virtual hub connecting public health professionals, a platform of cloud-based tools, and technical assistance. CDC works with federal partners; local, state, and tribal health departments; and academic and private sector partners to collect, analyze, and share electronic health data received when people seek care from EDs, urgent and ambulatory care centers, inpatient health care settings, and laboratories. Through NSSP, CDC provides public datasets and online dashboards that can track pressing health threats in near real-time, including respiratory illnesses, drug overdoses, extreme heat, and tick bites.

NSSP's two essential components—the NSSP Community of Practice and BioSense Platform—help standardize the use of electronic health data across our nation's decentralized public health system.

BY THE NUMBERS

- >1,300 members of the NSSP Community of Practice share best practices, build skills, and solve problems.
- >6,900 health care facilities covering 50 states, the District of Columbia, and Guam contribute data to NSSP daily.
- 80% of our nation's EDs contribute data to NSSP.
- More than 9.6 million electronic health messages are received by NSSP every day.
- Within 24 hours of a patient's ED visit, data are available for analyses.

ABOUT THE NSSP COMMUNITY OF PRACTICE

NSSP fosters a national community of practice where members collaborate on best practices, science, and use of public health data. This reflects NSSP's commitment to building engagement and aiding decision-making. Members virtually come together to share information, build knowledge, develop expertise, and work at solving common public health problems using syndromic surveillance.

The NSSP Community of Practice includes public health jurisdictions that contribute data to the BioSense Platform, public health practitioners who use local syndromic surveillance systems, CDC programs, other federal agencies, partner organizations, hospitals, health care professionals, and academic institutions. This collaboration improves practice and equips the public health workforce with skills needed to interpret emerging health threats. Federal, state, local, and territorial partners have used data through NSSP to detect and monitor countless health threats, including respiratory viruses, environmental threats, avoidable injuries, and more.

The Council of State and Territorial Epidemiologists (CSTE) partners with NSSP to facilitate the NSSP Community of Practice in accordance with cooperative agreement #6NU38OT000297-02-01: Strengthening Public Health Systems and Services through National Partnerships to Improve and Protect the Nation's Health.

ABOUT THE BIOSENSE PLATFORM

The BioSense Platform is a secure, cloud-based, and readily integrated electronic health information system that hosts advanced analytic and visualization tools. Public health professionals can use CDC-provided tools to analyze data received as early as 24 hours after a patient seeks care in a participating facility. The platform tools enable users to rapidly collect, analyze, share, store, and protect data. The platform stands alone with its mass quantities and high quality of ED data.

Unique in its volume and quality of ED data, the BioSense Platform excels in data integration of different health-related data sources. Practitioners can tailor data sources to collaborate with partner organizations and fast-track their understanding of community health.

The BioSense Platform evolved from activities to address congressional mandates in the Public Health Security and Bioterrorism Preparedness and Response Act of 2002, Pub. L. No. 107-188.

Access the NSSP website at

<https://www.cdc.gov/nssp>

for more information about this program



U.S. Centers for Disease Control and Prevention
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