

Public Health Surveillance Systems

Public health surveillance can be defined as the ongoing, systematic collection, analysis, interpretation, and dissemination of data about health-related events in order to reduce morbidity and mortality and improve the public's health. Below are selected examples of public health surveillance systems in the United States.

- **American Association of Poison Control Centers (AAPCC)**
<http://www.aapcc.org/>

The AAPCC works with the nation's 55 poison centers to track poisonings and their sources, including household products, food and beverages, chemicals in the workplace and home, environmental toxins, drugs and medicine, and animal and insect bites and stings.

- **Researched Abuse, Diversion and Addiction-related Surveillance (RADARS®) System**
<http://www.radars.org/>

RADARS is a prescription drug abuse, misuse, and diversion surveillance system that collects timely product- and geographically-specific data. The system measures rates of abuse, misuse and diversion throughout the United States, contributing to the understanding of trends and aiding the development of effective interventions. For example, these data assist pharmaceutical companies in fulfilling their regulatory obligations, such as risk evaluation and mitigation strategies.

- **RADARS Web Monitoring**
<http://www.radars.org/home2/programs/web-monitoring>

This real-time surveillance system characterizes themes and sentiments posted to social media and website blogs and forums related to prescription drug abuse, misuse, and associated consequences (addiction, overdose, and death). This information can serve as an early detection system to monitor new drug trends or emerging activity of new drugs entering the market.

SAMHSA'S CENTER FOR THE APPLICATION OF PREVENTION TECHNOLOGIES

- **RADARS Street RX**
<http://www.radars.org/home2/programs/streetrx>

StreetRx.com gathers user-submitted information on street prices of diverted prescription drugs. Visitors can anonymously view, post, and rate submissions in a format that offers price transparency to an otherwise opaque black market while providing a novel data set for public health surveillance.

- **Real-time Outbreak and Disease Surveillance (RODS) System**
<https://www.rods.pitt.edu/site/>

Developed by the University of Pittsburgh's Department of Biomedical Informatics, RODS is computer-based public health surveillance system for early detection of disease outbreaks. Hospitals send RODS data from clinical encounters over virtual private networks and leased lines using the Health Level 7 (HL7) message protocol. The data are sent in real time.

- **FirstWatch Real-time Situational Awareness System**
<https://www.firstwatch.net/>

The FirstWatch system tracks information entered into computer-aided dispatch systems in real-time, and immediately sends an alert via email or text message to designated public health and safety officials if it detects certain symptoms or trends of concern.