

NATIONAL NOTIFIABLE DISEASE SURVEILLANCE SYSTEM

WHAT IS THE PUBLIC HEALTH ISSUE?

Effective infectious disease surveillance systems provide baseline information regarding the number of cases, trends, and geographic distribution of recognized diseases or conditions. For healthcare professionals to prevent and control the spread of certain diseases, notifiable disease surveillance systems that provide regular, frequent, and timely information regarding individual cases are necessary. Similarly, quick detection of new or re-emerging public health threats, whether naturally occurring or resulting from terrorism, is critical. All states have laws regarding collecting and reporting of certain infectious diseases. Since 1961, CDC has provided support for the tracking of notifiable diseases through the National Notifiable Disease Surveillance System (NNDSS). Working together, state agencies and CDC determine which diseases should be nationally notifiable. Diseases can be added to the list as new pathogens emerge or be deleted as incidence declines. Currently, over 60 infectious diseases and conditions are nationally notifiable.

WHAT HAS CDC ACCOMPLISHED?

NNDSS provides a critical framework for public health surveillance in the United States by supporting the development and dissemination of structured case definitions, reporting of core surveillance information describing disease cases, and developing standard surveillance protocols and policies. CDC publishes provisional nationally notifiable disease surveillance data every week in the *Morbidity and Mortality Weekly Report*. Recent accomplishments include

- Adding new diseases to NNDSS in 2003, including Severe Acute Respiratory Syndrome, coronavirus-associated disease, and smallpox vaccination adverse effects.
- Revising case definitions, which allow for standardized reporting throughout the United States of acute hepatitis C and Rocky Mountain spotted fever.
- Revising and implementing guidelines for determining the reporting jurisdiction for the disease case-patient.

Example of Program in Action

In 2003, to enhance CDC's ability to detect previously unrecognized disease outbreaks in multi state NNDSS data, CDC began to systematically apply statistical aberration-detection methods regarding disease occurrences that are unusual and warrant public health investigation. The methods proved to be effective and the results of weekly analyses are being made available to state and CDC epidemiologists.

WHAT ARE THE NEXT STEPS?

CDC plans to strengthen the ability of state and local public health departments to track and monitor national notifiable diseases by

- Using new information technologies, such as Internet reporting, to enhance CDC's ability to manage the increasing amount of health information.
- Exploring new computer-based technologies to help detect emerging public health threats.
- Improving the quality, completeness, and timeliness of national notifiable disease surveillance data through surveillance assessment and technical assistance.

For additional information on this or other CDC programs, visit www.cdc.gov/program

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