



NEISS Frequently Asked Questions

What is NEISS?

For more than 30 years, the CPSC has operated a statistically valid injury surveillance and follow-back system known as the National Electronic Injury Surveillance System (NEISS). The primary purpose of NEISS is to collect data on consumer product-related injuries occurring in the United States.

Since the year 2000, when CPSC initiated an expansion of the system to collect data on all injuries, NEISS has become an important public health research tool, not just for CPSC, but for researchers and consumers throughout the United States and around the world.

What is the Source of the Data?

NEISS injury data are gathered from the emergency departments (ED) of approximately 100 hospitals selected as a probability sample of all 5,000+ U.S. hospitals with emergency departments. The system's foundation rests on emergency department surveillance data, but the system also has the flexibility to gather additional data at either the surveillance or the investigation level.

Surveillance data enable CPSC analysts to make timely national estimates of the number of injuries associated with (but not necessarily caused by) specific consumer products. This data also provides evidence of the need for further study of particular products. Subsequent follow-back studies yield important clues to the cause and likely prevention of injuries and deaths.

Information gathered from NEISS, together with data from other CPSC sources, not only guides the Commission in setting priorities for further study, but it also may provide the Commission with evidence of the need for:

- a product recall,
- a public awareness campaign, or
- a product safety standard.

How Does NEISS Work?

The data collection process begins when a patient is admitted to the emergency department of a NEISS hospital with an injury. An emergency department staff member elicits critical information about how the injury occurred and enters that information into the patient's medical record.

At the end of each day, a NEISS hospital coordinator reviews all emergency department records for the day, selecting those that meet the criteria for inclusion in NEISS. The NEISS coordinator abstracts pertinent data from the selected emergency department record and transcribes it into coded form and onto a NEISS coding sheet, using rules described in a NEISS Coding Manual.

Identifying the consumer product(s) related to the injury is crucial for CPSC. The NEISS coordinator assigns a product code from an alphabetical listing of hundreds of products and recreational activities, using as much detail as the data allow. For example, if a lawn mower were involved in an injury, the coordinator would use a different product code for a walk-behind mower than for a riding mower. If the emergency department record contains additional product detail, the coordinator includes that information in a line or two of narrative text (e.g., gasoline-powered rotary mower made by XYZ Company).

The victim's age, gender, race, ethnicity, injury diagnosis, affected body parts, and incident locale are among other data variables coded. A brief narrative description of the incident is also included.

Once the abstracting and coding are completed, the NEISS coordinator enters the data for the day's NEISS injury cases into a computer provided by CPSC. As the coordinator keys in data, CPSC-designed software interactively edits the data, requiring that all fields be completed and allowing only acceptable entries (for example, a concussion of the foot is not acceptable).

Following completion of data entry at the hospital, the NEISS coordinator transmits the data to CPSC via a secure Internet connection. After undergoing a second computer editing process, acceptable cases are automatically incorporated into the Commission's permanent NEISS database daily. The data are available immediately for further review.

The CPSC analytical process begins on the same day the data are collected. Analysts in the Directorate for Epidemiology review the data, not only checking items for quality control, but also screening the data for a potential emerging hazard.

Follow-back Investigations

For some incidents identified at the NEISS surveillance level, follow-back investigations are conducted through telephone and on-site interviews with the patient or the patient's relative. Investigation reports provide important information about the likely causes of the incident, including the interaction among person, product, and environment. Commission staff uses this information to:

- classify incidents by hazard pattern;
- provide insight into the type of actions needed to reduce or eliminate the hazards;
- identify defective products; and
- evaluate the effectiveness of safety standards.

Sample Updates

Periodically, the NEISS is redesigned to update and improve the sample and thereby maintain the validity of injury estimates. This is necessary because, over time, new hospital emergency departments open, others close, while still others change significantly in size (as measured by the number of emergency department visits).

NEISS sampling statisticians have provided a systematic means of updating the sample of hospitals while retaining the basic sampling plan. In order to minimize the statistical variance and at the same time ensure an adequate geographic distribution, the sampling frame (a list of hospitals meeting the necessary criteria) has been stratified by hospital size and ordered by geographic location.

At each redesign, to date, operational improvements in procedures have helped NEISS managers to enhance and upgrade the system. Over time, this has led to decreases in coding errors and in the amount of underreporting.

The first major redesign occurred in 1978. Several updates have occurred since then:

- In 1990, CPSC updated the NEISS sample to accommodate changes in the universe of U.S. hospitals with emergency departments.
- In 1991, CPSC increased the size of the NEISS sample of hospitals from 65 to 91 and retained the sample design. The increase in hospitals provided approximately 40 percent more injury cases per year. This increase in cases allowed for faster completion of special studies, as well as provided for a modest boost in measures of statistical confidence.
- In 1997, CPSC again updated the NEISS sample to reflect the current distribution of U.S. hospitals with emergency departments. The current NEISS sample includes approximately 100 hospitals grouped into five strata, four representing hospital emergency departments of differing sizes and a fifth representing emergency departments from children's hospitals.

Other System Milestones

In addition to updating the sample, over time, CPSC managers have altered NEISS operational collection and coding rules to accommodate the needs of other agencies and the differing interpretations of which products fall under the Commission's jurisdiction.

Over time, CPSC managers also have modified the definitions of the NEISS variables collected. For example, product codes have been added, deleted, combined, or split into two or more codes.

The year 2000 initiative to expand NEISS to collect all injuries necessitated several important operational revisions. The expanded system includes:

- injuries where no product is mentioned (e.g., fell on ground);
- injuries related to products not currently collected (e.g., motor vehicles); and
- intentional injuries, such as assaults or suicide attempts.

Data users should carefully consider the likely impact of system updates and modifications, especially when comparing estimated injuries over time.

NEISS Serves Others, Too!

Since 1978, CPSC has assisted other federal agencies by collecting data of special interest through NEISS. This has allowed other organizations to quickly and easily gather critically needed, statistically valid national data without the investment in personnel, time, and dollars that designing, implementing, and executing an independent special survey would require.

In serving the needs of other agencies, the scope of NEISS has been broadened to include incidents outside the jurisdiction of CPSC, such as occupational or intentional injuries. The usefulness of these data has been enhanced by adding to the NEISS record a limited number of additional variables, such as the injured worker's occupation. To date, other agencies have used NEISS to study injuries associated with motor vehicles, firearms, medical devices, mobile homes, pesticides, acts of violence, adverse drug effects, and occupation.

With the advent of the expanded all-injury NEISS, initiated in 2000, more federal agencies may find NEISS a powerful and useful tool to identify and track the public health problems associated with injuries.

For further information on how your organization can benefit by sharing the NEISS, contact:

Thomas Schroeder, Director
Division of Hazard and Injury Data Systems
U.S. Consumer Product Safety Commission
4330 East West Highway
Bethesda, MD 20814
(301) 504-7431

Availability of NEISS Data

The Consumer Product Safety Act requires the maintenance of a National Injury Information Clearinghouse “to collect, investigate, analyze and disseminate injury data and information relating to the causes and prevention of death, injury and illness associated with consumer products . . .” (CPSA, Section 5(a) (1)).

NEISS surveillance data are available to the public at: www.cpsc.gov. Certain standard reports may be requested from the National Injury Information Clearinghouse. Custom reports are also available at rates specified in the Freedom of Information Act.

NEISS injury estimates involving specific products are available at: www.cpsc.gov/library/neiss.html for the most recent 20 years. Click on “Access NEISS” at bottom of the page, then enter the product code and year(s) desired, and other parameters, if needed, and click on “Submit Query” for CPSC’s nationwide historical estimate for emergency department-treated injuries for that specific product. Product codes are available in the NEISS Coding Manual.

Information on actual cases involving those treated in NEISS emergency departments for product-related injuries can be downloaded for the most recent 20 years. The data do not contain personally identifiable information. Follow-back investigation data are available as computer printouts, special reports, and hazard analyses. Each year, the Clearinghouse responds to thousands of requests for information. Most requests are answered free of charge within 10 working days.

To request injury information, write, email, or call:

National Injury Information Clearinghouse
U.S. Consumer Product Safety Commission
4330 East West Highway
Bethesda, MD 20814

clearinghouse@cpsc.gov
Telephone: (301) 504-7921

Additional historical and background information about NEISS:

- [2019 Comparability Table \(PDF\)](#)
- [NEISS Sample Design 1979-1996 \(PDF\)](#)
- [NEISS Sample Design 1997-Present \(PDF\)](#)
- [NEISS: A Tool For Researchers \(PDF\)](#)
- [Map of NEISS Hospitals \(PDF\)](#)

Access NEISS