

# National Outbreak Reporting System

## Datasets and Related Documentation

Managed by the **National Center for Emerging and Zoonotic Infectious Diseases** and  
the **National Center for Immunization and Respiratory Diseases** at the  
**Centers for Disease Control and Prevention (CDC)**

Website: <http://www.cdc.gov/nors/>

Email: [NORSAdmin@cdc.gov](mailto:NORSAdmin@cdc.gov)



The Centers for Disease Control and Prevention (CDC) launched NORS in 2009 as a web-based platform for state and local health departments to enter reports of all waterborne and foodborne disease outbreaks and all enteric disease outbreaks resulting from transmission by contact with contaminated environmental sources, infected persons or animals, or unknown modes.

### Source of the Data

Most outbreaks in the United States are investigated by state, local, and territorial health departments. Outbreak information is then voluntarily reported to CDC by the public health agency that conducted the investigation. CDC may be involved in outbreak investigations that involve more than one state, are particularly large, or for which the state or local health department requests assistance. The current reporting forms can be found here: <http://www.cdc.gov/nors/forms.html>.

### Data Collection Activities and Instruments

Foodborne and waterborne disease outbreaks have been reported to CDC since the 1970s. Reporting was expanded in 2009 to include all enteric disease outbreaks regardless of mode of transmission. The table below provides an overview of the types of outbreak data and the periods when the data were collected.

Mode of Transmission	Years Active		
	1973—1997	1998—2008	2009—Present
Foodborne (FDOSS*)	pFORS* (paper form)	eFORS* (electronic reporting)	NORS* (electronic reporting)
Waterborne (WBDOS*)	Paper form (began 1971)*		NORS
Person-to-person	No systematic reporting		NORS
Animal Contact	No systematic reporting		NORS
Environmental	No systematic reporting		NORS
Unknown/Indeterminate	No systematic reporting		NORS

NOTE: In addition to these basic differences among the reporting systems, each system collected different information in different formats. Not all information was collected consistently across systems and years, so caution is advised when combining data.

\* FDOSS: Foodborne Disease Outbreak Surveillance System; pFORS: paper-based Foodborne Disease Outbreak Reporting System; eFORS: electronic-based Foodborne Disease Outbreak Reporting System; NORS: National Outbreak Reporting System; WBDOS: Waterborne Disease and Outbreak Surveillance System

### Data Quality, Close-Out, & Dissemination

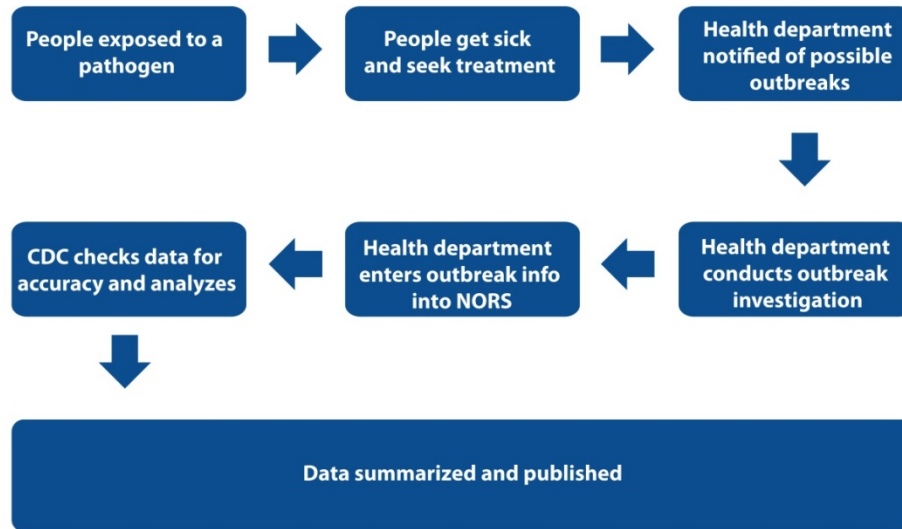
CDC epidemiologists routinely perform data quality and assurance procedures to validate key variables and identify possible errors. This process is referred to as “close-out.” Final data are typically available for release 12—18 months after the end of the reporting year; this allows states time to finalize reports and CDC to perform close-out. NORS is a dynamic system, and reports can be modified when new information is available, even months or years after data have been closed out.

Data on foodborne disease outbreaks beginning in 1998 are available through the Foodborne Outbreak Online Database (FOOD), at <http://www.cdc.gov/foodborneoutbreaks/>. Published line lists of waterborne disease outbreaks beginning in 1971 are available at <http://www.cdc.gov/healthywater/surveillance/surveillance-reports.html>. To request additional NORS or related historical data, or to obtain data for use in scientific publications, email [NORSAdmin@cdc.gov](mailto:NORSAdmin@cdc.gov) and ask for a NORS Data Request Application.



Department of Health and Human Services  
Centers for Disease Control and Prevention

### How Outbreak Data are Reported to NORS and Summarized by CDC



### Standard Data Restrictions

An outbreak reported to NORS is defined as the occurrence of two or more cases of a similar illness resulting from a common exposure. Data on specific reports might not be released if:

- the report does not meet the definition of an outbreak (e.g., only contains information on a single case of illness)
- the report has not been finalized by the state that reported it or has not been closed-out by CDC

### Data Dictionaries

Data dictionaries for NORS are available at <https://www.cdc.gov/nors/data.html>. Data dictionaries for data systems no longer in use are not available online, but can be requested.

### Formats

NORS data are maintained in a relational structure (i.e., multiple data tables that can be linked together by a common identifier). NORS data and datasets from earlier times may be provided as flattened (i.e., each row represents one outbreak) Microsoft Excel workbooks or as relational Microsoft Access databases. If applicable, the “NORSMain” table should be used as the reference table. A frequency count on the outbreak report identifier variable in this table (“CDCID”) will calculate the number of outbreaks included in the database. Due to the multiple relationships in the database, other tables may contain more than one observation per outbreak or no observations if the data are missing.

### Analytic Caveats

To fulfill a data request, data may be provided in more than one dataset. Manipulation of the data in a program such as Microsoft Access or SAS may be necessary. Variables may be named differently and be in different tables in different databases. For Microsoft Access files, refer to the relationship database tool to view how tables are related. Identifiers may not be unique among data tables or databases. For example, an identifier in one database may be used for an unrelated record in another database. NORS contains aggregate outbreak data rather than case-specific data; aggregate-level analyses are possible with many variables including gender, age, incubation period, and duration of illness. NORS contains many free-text fields that are not standardized (e.g., “FoodName”). When searching for key words, allow for spelling variations.

### Limitations

- Reporting of outbreaks to CDC is voluntary; outbreaks are likely underreported due to limited resources and training in health departments, which might vary by outbreak mode of transmission.
- Only a small proportion of illnesses reported each year are identified as associated with outbreaks. The extent to which the distribution of various sources and settings implicated in outbreaks reflects the same sources of infection and settings of sporadic illnesses is unknown.
- Outbreaks occurring on cruise ships and those where the exposure occurred outside the United States are not reported through NORS.
- Additional limitations may apply to the content or use of outbreak surveillance datasets.