

Frequently Asked Questions about CDC's Foodborne Outbreak Online Database

What is the Foodborne Outbreak Online Database?

The Foodborne Outbreak Online Database (FOOD) is a new web-based software tool for searching CDC's foodborne disease outbreak surveillance database.

Why did CDC develop the database called FOOD?

Many people and organizations—the medical community, public health workers, the food industry, consumer advocacy groups, and members of the public—have questions about foodborne outbreaks in the United States. The questions can span a range of topics, depending on the questioner's specific interests or responsibilities. Sometimes people want to know how many outbreaks occurred in certain areas or over certain time periods, or what foods caused those outbreaks, or how many people got sick or were hospitalized or died. Our intention is to make CDC's foodborne outbreak surveillance data easily accessible to everyone who is interested.

How can I access the FOOD?

You can access the FOOD at this link:

<http://wwwn.cdc.gov/foodborneoutbreaks>

How does the FOOD work?

The FOOD lets you search and download data on foodborne outbreaks reported to CDC from 1998 through 2007. Search fields include year, state (multi-state outbreaks are listed as "Multi-state outbreak reported by CDC"), location of exposure setting, etiology (the pathogen that caused the illnesses in the outbreak), and the etiology status (whether the etiology was confirmed or suspected). The downloaded database includes additional fields--total illnesses, hospitalizations, deaths, and contaminated food vehicle. In many outbreak investigations, a specific food vehicle is not identified; for these outbreaks, the contaminated food vehicle is reported as "unknown."

Why can't I search on "food vehicle"?

When you download the results of a FOOD search, food vehicles implicated in outbreak investigations are included. More than 1800 food items have been reported as implicated vehicles to CDC's foodborne outbreak surveillance system, so searching on a single food name often doesn't yield a clear picture of the outbreaks linked to that food. For example,

“hamburger,” “hamburger sandwich,” “meatloaf,” and “steak” and are all beef, but none of them would be identified by searching on the word “beef.” To categorize foods into more useful groups, CDC has developed a classification scheme that includes 17 commodities, such as “beef,” “eggs,” and “leafy vegetables.” Future development work on the FOOD will include the ability to search by commodity for reports of outbreaks with food vehicles belonging to that commodity.

Where do the outbreak data come from?

The data in the FOOD come from CDC’s national outbreak surveillance database. Most foodborne outbreaks are investigated by the state or local health department where the outbreak occurs. Outbreak information is then reported to CDC by the public health agency that conducted the investigation. CDC is only directly involved in outbreak investigations that are multi-state or particularly large or when the state or local health department requests assistance. CDC uses a detailed form to collect information on outbreaks from the public health agency that conducts the investigation. The outbreak surveillance database is dynamic. This means that reporting agencies (state, local, territorial, and tribal health departments, and CDC) can modify their outbreak reports at any time, even months or years after an outbreak. Therefore, results from the FOOD are subject to change. The date on which the searchable FOOD database was last updated is recorded in the "LastTransferDate" field in the downloaded file.

Does the FOOD give a complete picture of all foodborne outbreaks that have occurred in the United States?

The FOOD includes data on all foodborne outbreaks reported to CDC. However, not all foodborne outbreaks are reported. Some never get identified. Sometimes, an investigation is not conducted or the investigation is incomplete. Some outbreaks that are investigated might not be reported to CDC.

What is the format of the data file downloaded from the FOOD?

The downloaded database is an xml file, which can easily be imported into many different programs, like Excel, SAS, Access, and Word. Files are downloaded from FOOD in xml format to allow use with multiple software programs. These xml files can be viewed directly in Access or Excel and can be read by analytical software such as SAS, SPSS, and STATA. Consult the software provider's customer support materials for directions on importing xml files into these or other software programs.

What do you mean by a “multi-state” outbreak?

A multi-state outbreak is defined as one in which exposures occurred in more than one state; an outbreak affecting residents from more than one state due to exposures in a single state is considered to be a single-state outbreak. A search for outbreaks for a specific state will return all

single-state outbreaks reported by that state and all multi-state outbreaks involving that state. CDC staff are currently working to confirm the accuracy of data in past multi-state outbreak reports, so it's possible that the state assignment of some outbreaks could change.

Why doesn't the FOOD include outbreaks from before 1998?

CDC started its electronic reporting system for outbreaks in 1998 and also enhanced surveillance for outbreaks at the same time. The FOOD includes outbreaks from the start of electronic reporting.

Why do the outbreak data stop after 2007?

It takes time for public health authorities to complete their outbreak investigations and then to report the results to CDC. Once outbreaks are reported, CDC needs to review the reports for missing information and data errors and also to make sure that data from outbreaks that affected more than one state are consolidated accurately into a single report. CDC is currently working to complete the 2008 outbreak data and will then update the FOOD database. It will continue to be updated periodically, as new outbreak information is reported.

What is CDC doing to help prevent outbreaks of foodborne disease?

CDC is part of the U. S. Public Health Service, with a mission to use the best scientific information to monitor, investigate, control and prevent public health problems. Using the tools of epidemiology and laboratory science, CDC provides scientific assessment of public health threats. CDC works closely with state health departments to monitor the frequency of specific diseases and conducts national surveillance for them. CDC provides expert epidemiologic and microbiologic consultation to health departments and other federal agencies on a variety of public health issues, including foodborne disease, and it stations epidemiologists in state health departments to help with the surveillance and investigation of many problems. At the invitation of state public health officials, CDC can also send a team into the field to help them conduct emergency field investigations of large or unusual outbreaks. CDC researchers develop new methods for identifying, characterizing and fingerprinting the microbes that cause disease. We translate laboratory research into practical field methods that can be used by public health authorities in States and counties.

CDC is not a regulatory agency. Government regulation of food safety is carried out by the Food and Drug Administration (FDA), the U.S. Department of Agriculture (USDA), the National Marine Fisheries Service, and other regulatory agencies. CDC maintains regular contact with the regulatory agencies.

When new public health threats appear, CDC, in collaboration with its public health partners, conducts epidemiologic and laboratory investigations to determine what they are and how they can be controlled. These results are then shared widely, including with the food industry. Although CDC does not regulate the safety of food, CDC assesses the effectiveness of current

prevention efforts. CDC provides independent scientific assessment of what the problems are, how they can be controlled, and where gaps exist in our knowledge.

You can find more information on foodborne illness and CDC's prevention activities at http://www.cdc.gov/ncidod/dbmd/diseaseinfo/foodborneinfections_g.htm