



Norovirus

Norovirus Burden and Trends

Burden of Norovirus Illness in the United States

Norovirus is the leading cause of vomiting and diarrhea from acute gastroenteritis (inflammation of the stomach and intestines) among people of all ages in the United States.

You can get norovirus illness at any time during the year

Most norovirus outbreaks in the United States happen from November to April. In years when there is a new strain of the virus, there can be 50% more norovirus illness.

Each year in the United States, norovirus causes on average:

- 900 deaths, mostly among adults aged 65 and older
- 109,000 hospitalizations
- 465,000 emergency department visits, mostly in young children
- 2,270,000 outpatient clinic visits annually, mostly in young children
- 19 to 21 million illnesses

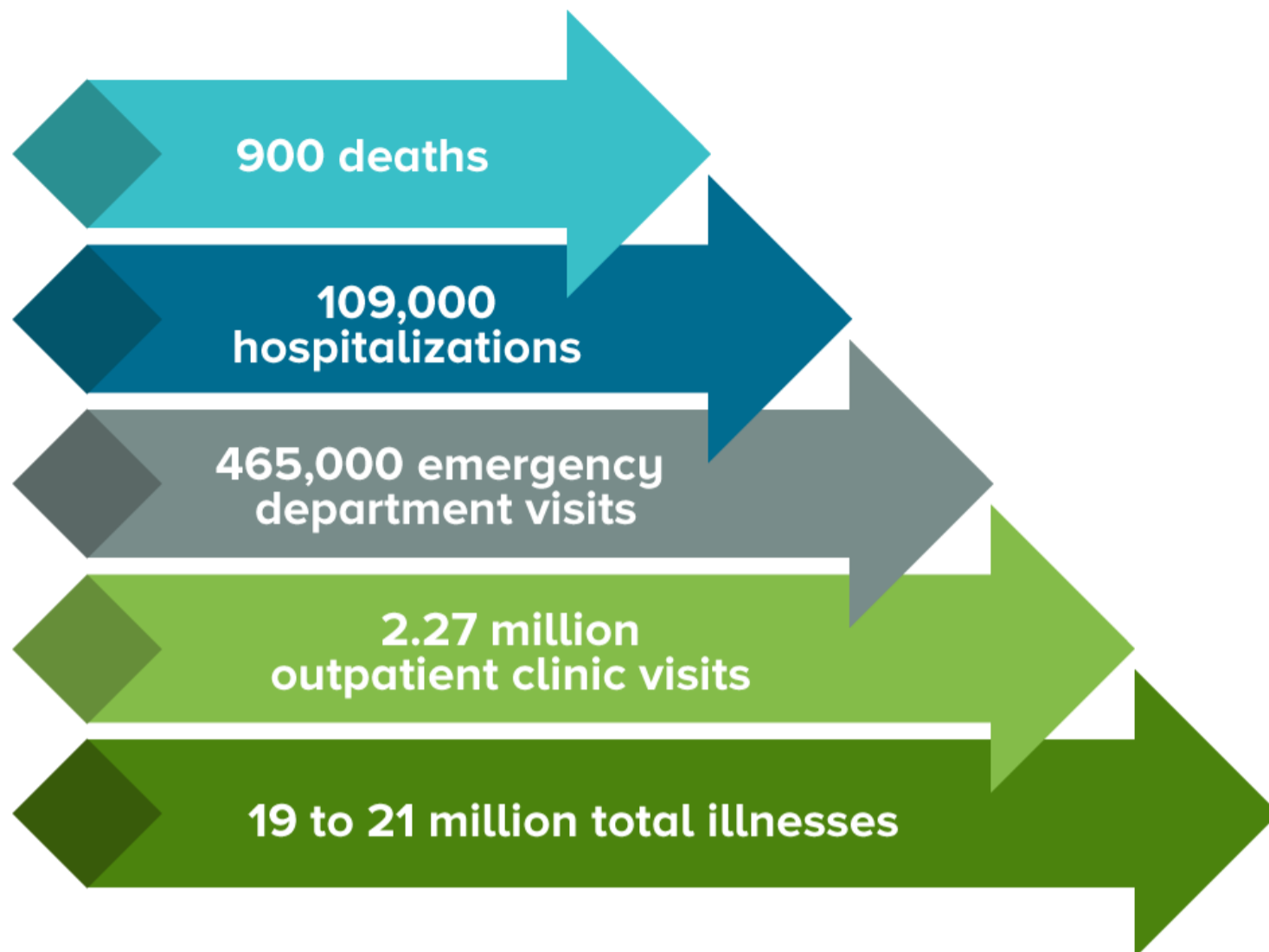


Figure: Burden of Norovirus in the United States. Estimates of the annual number of illnesses and associated outcomes for norovirus disease in the U.S., across all age groups.

Norovirus is responsible for nearly 1 million pediatric medical care visits annually

Children under 5 years old and adults aged 85 years and older are more likely to have an outpatient or emergency department visit than people of other ages.

By 5 years of age:

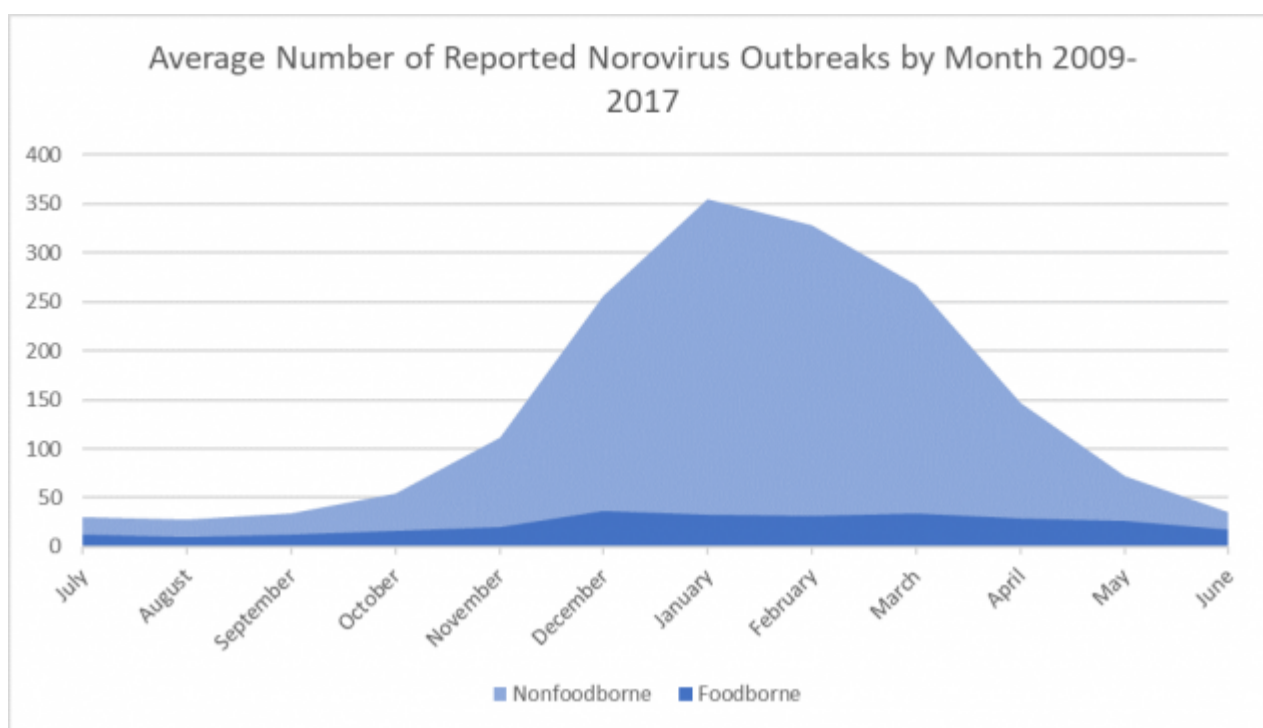
- 1 in 110,000 will die from norovirus
- 1 in 160 will be hospitalized
- 1 in 40 will go to the emergency department
- 1 in 7 will go to an outpatient clinic

Norovirus is the leading cause of foodborne illness in the United States.

It causes 58% of [foodborne illnesses](#) acquired in the United States. Each year, foodborne norovirus illness in the United States costs about \$2 billion, mainly due to lost productivity and healthcare expenses.

Norovirus outbreaks are common

Each year, there are about 2,500 reported norovirus outbreaks in the United States. Norovirus outbreaks occur throughout the year but are most common from November to April. Most outbreaks occur when infected people spread the virus to others through direct contact, such as by caring for them or sharing food or eating utensils with them. Learn about [common settings of norovirus outbreaks](#).



Norovirus Worldwide

Global Trends

Worldwide, about one out of every five cases of acute gastroenteritis (inflammation of the stomach or intestines) that leads to diarrhea and vomiting is caused by norovirus.

Norovirus is the most common cause of acute gastroenteritis, annually causing an estimated 685 million cases. About 200 million cases are seen among children under 5 years old, leading to an estimated 50,000 child deaths every year, mostly in developing countries. However, norovirus illness is a problem in both low- and high-income countries. Every year, norovirus is estimated to cost \$60 billion worldwide due to healthcare costs and lost productivity.

Norovirus illnesses and outbreaks are usually more common in cooler winter months. Most outbreaks occur from November to April in countries above the equator, and from May to September in countries below the equator. However, in places closer to the equator, norovirus may be less seasonal.

Global Outbreaks

Globally, norovirus is the leading cause of acute gastroenteritis outbreaks.

- Since 2002, GII.4 viruses (genogroup II genotype 4) have caused the majority of norovirus outbreaks worldwide.
- However, non-GII.4 viruses, such as GII.17 and GII.2, have temporarily replaced GII.4 viruses in several Asian countries.
- Between 2002 and 2012, new GII.4 viruses emerged about every 2 to 4 years, but since 2012, the same virus (GII.4 Sydney) has been the dominant strain worldwide. Often, but not always, these new strains lead to a global increase in norovirus outbreaks.

CDC works with many global partners to identify the burden of acute gastroenteritis caused by norovirus and to prevent norovirus outbreaks.

Related Pages and Resources

[Estimates of the Global Burden of Foodborne Diseases](#)

[The Global Burden of Norovirus & Prospects for Vaccine Development](#)

[Global Burden of Norovirus and Prospects for Vaccine Development](#) [4.39 MB, 46 pages]

[CDC Estimates of Foodborne Illness in the United States](#)

