



# Global Immunization: Worldwide Disease Incidence

In 2018, about 86% of the world's children received vaccines that would protect them against polio, diphtheria, tetanus, pertussis, and measles. Immunizations currently prevent 2 million to 3 million deaths every year. Despite this success, more than 1.5 million people worldwide die from vaccine-preventable diseases each year.

## Top causes of death in children less than 5 years old

- Prematurity
- Acute respiratory infections
- Birth-related complications
- Diarrheal diseases
- Communicable diseases
- Bloodstream infections and other infectious conditions
- Congenital anomalies
- Malaria
- Other causes

### References:

- World Health Organization. [Immunization coverage](#). December 2019. Accessed January 23, 2020.
- World Health Organization, Global Health Observatory data, [Causes of Child Mortality, 2017](#). Accessed January 23, 2020.
- World Health Organization. [Together We Can Close the Immunization Gap](#). Accessed

January 23, 2020.

## Worldwide disease incidence of vaccine-preventable diseases

Even though some diseases may not be making people sick in your neighborhood, they may be common in other parts of the world. Given that people commonly travel for business, to visit family and friends, with relief groups, and for vacation, the viruses or bacteria that cause diseases can easily “hitch a ride.” Here is a look at the worldwide prevalence of many vaccine-preventable diseases:

### Global Immunization: Disease Incidence in the U.S. and the World

#### Anthrax

- Worldwide cases/year: 2,000
- Worldwide deaths/year: unavailable
- U.S. cases/year: 1-2
- U.S. deaths/year: 0

#### Cholera

- Worldwide cases/year: 1.3 million to 4 million
- Worldwide deaths/year: 21,000 to 143,000
- U.S. cases/year: < 15
- U.S. deaths/year: 0

#### Diphtheria

- Worldwide cases/year: 17,000
- Worldwide deaths/year: about 1,700
- U.S. cases/year: < 1
- U.S. deaths/year: < 1

#### Hepatitis A

- Worldwide cases/year: 1.4 million
- Worldwide deaths/year: about 7,000

- U.S. cases/year: 6,700
- U.S. deaths/year: about 90

## Hepatitis B

- Worldwide cases/year: 30 million new infections and about 260 million chronic infections
- Worldwide deaths/year: 900,000
- U.S. cases/year: 22,200 new infections and 860,000 to 2 million chronic infections
- U.S. deaths/year: < 2,000

## *Haemophilus influenzae* type b (Hib)

- Worldwide cases/year: 7 million to 8 million cases of pneumonia
- Worldwide deaths/year: hundreds of thousands
- U.S. cases/year: < 35
- U.S. deaths/year: < 5

## Human Papillomavirus

- Worldwide cases/year: 570,000 cases of cervical cancer
- Worldwide deaths/year: > 300,000
- U.S. cases/year: 14 million new infections, 34,800 cases of cancer caused by HPV
- U.S. deaths/year: > 5,000

## Influenza

- Worldwide cases/year: 3 million to 5 million severe cases
- Worldwide deaths/year: 290,000 to 650,000
- U.S. cases/year: 9 million to 36 million
- U.S. deaths/year: up to 56,000

## Japanese Encephalitis Virus (JEV)

- Worldwide cases/year: 68,000
- Worldwide deaths/year: 13,600 to 20,400
- U.S. cases/year: < 1
- U.S. deaths/year: < 1

## Meningococcus

- Worldwide cases/year: 500,000
- Worldwide deaths/year: 50,000
- U.S. cases/year: about 350
- U.S. deaths/year: about 50

## Measles

- Worldwide cases/year: > 350,000
- Worldwide deaths/year: 140,000
- U.S. cases/year: about 1,300
- U.S. deaths/year: <2

## Mumps

- Worldwide cases/year: > 500,000
- Worldwide deaths/year: unavailable
- U.S. cases/year: about 3,500
- U.S. deaths/year: 0

## Pertussis

- Worldwide cases/year: about 24 million children younger than 5 years old
- Worldwide deaths/year: about 161,000 children younger than 5 years old
- U.S. cases/year: about 16,000
- U.S. deaths/year: <25

## Pneumococcus

- Worldwide cases/year: unavailable
- Worldwide deaths/year: unavailable
- U.S. cases/year: 1,000,000
- U.S. deaths/year: < 22,000

## Polio

- Worldwide cases/year: < 35
- Worldwide deaths/year: unavailable

- U.S. cases/year: 0
- U.S. deaths/year: 0

## Rabies

- Worldwide cases/year: 29 million
- Worldwide deaths/year: > 59,000
- U.S. cases/year: 1 to 3
- U.S. deaths/year: 0

## Rotavirus

- Worldwide cases/year: >258 million
- Worldwide deaths/year: about 128,000
- U.S. cases/year: 500,000
- U.S. deaths/year: < 10

## Rubella

- Worldwide cases/year: about 15,000
- Worldwide deaths/year: unavailable
- U.S. cases/year: < 10 reported cases
- U.S. deaths/year: unavailable

## Shingles

- Worldwide cases/year: unavailable
- Worldwide deaths/year: unavailable
- U.S. cases/year: est. 1 million
- U.S. deaths/year: < 100

## Tetanus

- Worldwide cases/year: 500,000 to 1 million
- Worldwide deaths/year: About 40,000
- U.S. cases/year about 30
- U.S. deaths/year: 3 to 4

## Tuberculosis

- Worldwide cases/year: 10 million
- Worldwide deaths/year: 1.5 million
- U.S. cases/year: < 10,000
- U.S. deaths/year: < 500

### Typhoid

- Worldwide cases/year: 11 million to 21 million
- Worldwide deaths/year: 128,000 to 161,000
- U.S. cases/year: < 400
- U.S. deaths/year: unavailable

### Varicella (Chickenpox)

- Worldwide cases/year: 40 million to 50 million
- Worldwide deaths/year: > 4,200
- U.S. cases/year: < 350,000
- U.S. deaths/year: < 20

### Yellow Fever

- Worldwide cases/year: about 84,000 to 170,000
- Worldwide deaths/year: about 30,000 to 60,000
- U.S. cases/year: 0
- U.S. deaths/year: 0

\*Data represented in this table was compiled from multiple sources and in most cases rounded to the nearest thousand. The information presented represents the most recent data available.

If you know of updates, please contact us by e-mailing [contactPACK@email.chop.edu](mailto:contactPACK@email.chop.edu). Be sure to include the source of your information.

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