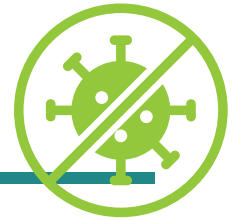


# WHY VACCINES MATTER

## UNDERSTANDING THE PUBLIC HEALTH IMPACT OF VACCINES



- In the 20th century alone, smallpox killed approximately 300 million people worldwide. Following the introduction of the smallpox vaccine, the disease was globally eradicated in 1980.
- Before the development of the polio vaccine in 1955, polio caused more than 16,000 cases of paralysis each year in the United States, leaving hundreds of thousands of children disabled for life. Polio is now considered eradicated in the Americas thanks to the vaccine.
- Vaccines have also eradicated rubella in the United States and significantly decreased infection rates for measles, mumps, diphtheria, tetanus, pertussis (whooping cough) and varicella (chickenpox).
- Although most of these cases did not carry long-term consequences, some diseases, like smallpox, were debilitating and deadly. Infections from these diseases still result in severe, long-lasting side effects and deaths around the world.
- When people choose not to get vaccinated, it erodes immunization rates, which can impact community immunity and lead to outbreaks of vaccine-preventable diseases.

### U.S. CASES BEFORE AND AFTER VACCINES

Virus	1900 <sup>1</sup>	2022 <sup>2</sup>
Smallpox	48,164	0 <sup>†</sup>
Measles	503,282	121 <sup>3</sup>
Mumps	152,209	322
Rubella	47,745	0 <sup>†</sup>
Diphtheria	175,885	0
Tetanus	1,314	26
Pertussis (whooping cough)	147,271	2,388
Poliomyelitis (polio)	16,316	0 <sup>†</sup>
Varicella (chickenpox)	~4 million <sup>4</sup>	8,297*

<sup>†</sup>Eradicated in the United States.

\*2019 data.

<sup>1</sup> "Achievements in Public Health, 1900-1999," Centers for Disease Control and Prevention, 1999, <http://bit.ly/3YC5PG2>.

<sup>2</sup> "Nationally Notifiable Infectious Diseases and Conditions, United States: Annual Tables," CDC, 2019, <http://bit.ly/3xsHvKN>.

<sup>3</sup> "Measles (Rubeola)," CDC, <http://bit.ly/3Z0Dzgd>.

<sup>4</sup> "Epidemiology of Varicella During the Two-Dose Vaccination Program — United States, 2005–2014," CDC, 2016, <http://bit.ly/3S3Twj8>.

For more information on vaccines, visit the Vaccines Cause Adults page at: [bakerinstitute.org/vaccines-cause-adults](http://bakerinstitute.org/vaccines-cause-adults).

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VACCINES  
CAUSE  
ADULTS