

Vaccines work!

CDC statistics demonstrate dramatic declines in vaccine-preventable diseases when compared with the pre-vaccine era

DISEASE	PRE-VACCINE ERA ESTIMATED ANNUAL MORBIDITY ¹	MOST RECENT REPORTS OR ESTIMATES OF U.S. CASES	PERCENT DECREASE
Diphtheria	21,053	1 ²	>99%
<i>H. influenzae</i> (invasive, <5 years of age)	20,000	40 ^{2,3}	>99%
Hepatitis A	117,333	3,473 ⁴	98%
Hepatitis B (acute)	66,232	19,764 ⁴	70%
Measles	530,217	667 ²	>99%
Meningococcal disease	2,886 ⁵	433 ²	85%
Mumps	162,344	1,223 ²	>99%
Pertussis	200,752	32,971 ²	84%
Pneumococcal disease (invasive, <5 years of age)	16,069	1,900 ⁶	88%
Polio (paralytic)	16,316	0 ²	100%
Rotavirus (hospitalizations, <3 years of age)	62,500 ⁷	12,500 ⁸	80%
Rubella	47,745	6 ²	>99%
Congenital Rubella Syndrome	152	1 ²	99%
Smallpox	29,005	0 ²	100%
Tetanus	580	25 ²	96%
Varicella	4,085,120	151,149 ⁹	96%

1. CDC. *JAMA* November 14, 2007; 298(18):2155–63.

2. CDC. *MMWR* September 18, 2015; 64(36):1019–33.

3. An additional 11 cases of Hib are estimated to have occurred among the 204 reports of Hib (<5 years) with unknown serotype.

4. CDC. Viral Hepatitis Surveillance – United States, 2013.

5. CDC. *MMWR* October 6, 1995; 43(53):1–98.

6. CDC. Active Bacterial Core Surveillance, 2013 data (unpublished).

7. CDC. *MMWR*, February 6, 2009; 58(RR-2):1–25.

8. CDC. New Vaccine Surveillance Network, 2013 data (unpublished); U.S. rotavirus disease now has a biennial pattern.

9. CDC. Varicella Program, 2014 data (unpublished). Calculation based on the percent decline from 4 states that have continuously reported varicella cases to CDC.