

Appendix E

Reported Cases and Deaths from Vaccine Preventable Diseases, United States

Year	Diphtheria		Tetanus		Pertussis		Polio (paralytic)		Measles		Mumps		Rubella		CRS
	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases
1950	5,796	410	486	336	120,718	1,118	33,300 [†]	1,904	319,124	468	NR		NR		NR
1951	3,983	302	506	394	68,687	951	28,386 [†]	1,551	530,118	683	NR		NR		NR
1952	2,960	217	484	360	45,030	402	57,879 [†]	3,145	683,077	618	NR		NR		NR
1953	2,355	156	506	337	37,129	270	35,592 [†]	1,450	449,146	462	NR		NR		NR
1954	2,041	145	524	332	60,886	373	18,308	1,368	682,720	518	NR		NR		NR
1955	1,984	150	462	265	62,786	467	13,850	1043	555,156	345	NR		NR		NR
1956	1,568	103	468	246	31,732	266	7,911	566	611,936	530	NR		NR		NR
1957	1,211	81	447	279	28,295	183	2,499	221	486,799	389	NR		NR		NR
1958	918	74	445	303	32,148	177	3,697	255	763,094	552	NR		NR		NR
1959	934	72	445	283	40,005	269	6,289	454	406,162	385	NR		NR		NR
1960	918	69	368	231	14,809	118	2,525	230	441,703	380	NR	42	NR	12	NR
1960	617	68	379	242	11,468	76	988	90	423,919	434	NR	53	NR	14	NR
1962	444	41	322	215	17,749	83	762	60	481,530	408	NR	43	NR	8	NR
1963	314	45	325	210	17,135	115	396	41	385,156	364	NR	48	NR	16	NR
1964	293	42	289	179	13,005	93	106	17	458,083	421	NR	50	NR	53	NR
1965	164	18	300	181	6,799	55	61	16	261,904	276	NR	31	NR	16	NR
1966	209	20	235	158	7,717	49	106	9	204,136	261	NR	43	46,975	12	NR
1967	219	32	263	144	9,718	37	40	16	62,705	81	NR	37	46,888	16	NR
1968	260	30	178	66	4,810	36	53	24	22,231	24	152,209	25	49,371	24	NR
1969	241	25	192	89	3,285	13	18	13	25,826	41	90,918	22	57,686	29	62
1970	435	30	148	79	4,249	12	31	7	47,351	89	104,953	16	56,552	31	67
1971	215	13	116	64	3036	18	17	18	75,290	90	124,939	22	45,086	20	44
1972	152	10	128	58	3,287	6	29	2	32,275	24	74,215	16	25,507	14	32
1973	228	10	101	40	1,759	5	7	10	26,690	23	69,612	12	27,804	16	30
1974	272	5	101	44	2,402	14	7	3	22,094	20	59,128	6	11,917	15	22
1975	307	5	102	45	1,738	8	13	9	24,374	20	59,647	8	16,652	21	32
1976	128	7	75	32	1,010	7	10	16	41,126	12	38,492	8	12,491	12	22
1977	84	5	87	24	2,177	10	19	16	57,345	15	21,436	5	20,395	17	29
1978	76	4	86	32	2,063	6	8	13	26,871	11	16,817	3	18,269	10	30
1979	59	1	81	30	1,623	6	22	1	13,597	6	14,255	2	11,795	1	57
1980	3	1	95	28	1,730	11	9	2	13,506	11	8,576	2	3,904	1	14
1981	5	0	72	31	1,248	6	10	0	3,124	2	4,941	1	2,077	5	10
1982	2	1	88	22	1,895	4	12	0	1,714	2	5,270	2	2,325	4	13
1983	5	0	91	22	2,463	5	13	0	1,497	4	3,355	2	970	3	7
1984	1	0	74	20	2,276	7	9	0	2,587	1	3,021	1	752	1	2
1985	3	0	83	23	3,589	4	8	0	2,822	4	2,982	0	630	1	2
1986	0	0	64	22	4,195	6	10	0	6,282	2	7,790	0	55	1	13
1987	3	1	48	16	2,823	1	9	0	3,655	2	12,848	2	306	0	3

†Total reported cases (i.e., including non-paralytic)

Appendix E

Year	Diphtheria		Tetanus		Pertussis		Polio (paralytic)		Measles		Mumps		Rubella		CRS
	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases
1988	2	0	53	17	3,450	4	9	0	3,396	3	4,866	2	225	1	2
1989	3	0	53	9	4,157	12	11	0	18,193	32	5,712	3	396	4	2
1990	4	1	64	11	4,570	12	6	0	27,786	64	5,292	1	1,125	8	32
1991	5	0	57	11	2,719	0	10	1	9,643	27	4,264	1	1,401	1	34
1992	4	1	45	9	4,083	5	6	0	2,237	4	2,572	0	160	1	11
1993	0	0	48	11	6,586	1	4	0	312	0	1,692	0	192	0	4
1994	2	0	51	9	4,617	8	8	0	963	0	1,537	0	227	0	7
1995	0	1	41	5	5,137	6	7	1	309	2	906	0	128	1	3
1996	2	0	36	1	7,796	4	7	0	508	1	751	1	238	0	2
1997	4	0	50	4	6,564	6	6	0	138	2	683	0	181	0	9
1998	1	1	34	7	6,279	5	3	0	100	0	666	1	364	0	9
1999	1	1	40	7	7,288	7	2	0	100	2	387	1	267	0	6
2000	1	0	35	5	7,867	12	0	0	86	1	338	2	176	0	8
2001	2	0	37	5	7,580	17	0	0	116	1	266	0	23	2	3
2002	1	0	25	5	9,771	18	0	0	44	0	270	1	18	0	1
2003	1	1	20	4	11,647	11	0	0	56	1	231	0	7	0	4
2004	0	0	34	4	25,827	16	0	0	37	0	258	0	10	1	0
2005	0	0	27	1	25,616	31	1 [§]	0	66	NA	314	0	11	0	1
2006	0	0	41	4	15,632	9	0	0	55	0	6,584	1	11	0	1
2007	0	0	28	5	10,454	9	0	0	43	0	800	0	11	1	0
2008	0	0	19	3	13,278	6	0	0	140	0	454	2	16	0	0
2009	0	0	18	6	16,858	1	1 [§]	0	71	2	1991	2	3	2	2
2010	0	0	26	3	27,550	5	0	0	63	2	2,612	1	5	2	0
2011	0	0	36	6	18,719	1	0	0	220	0	404	0	4	1	0
2012	1	0	37	4	48,277	4	0	0	55	2	229	0	9	0	3
2013	0	0	26	3	28,639	2	1 [§]	0	187	0	584	1	9	0	1
2014	1	0	25	1	32,971	7	0	0	667	0	1,223	0	6	0	1
2015	0	NA	29	NA	20,762	NA	0	NA	188	NA	1,329	NA	5	NA	1
2016	0	NA	34	NA	17,972	NA	0	NA	85	NA	6,369	NA	1	NA	2

§ Vaccine-associated/derived paralytic polio.

Appendix E

Year	Hepatitis A		Hepatitis B		Haemophilus		Varicella	
	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths
1966	32,859	NA	1,497	NA	NR	NR	NR	NA
1967	38,909	NA	2,458	NA	NR	NR	NR	NA
1968	45,893	NA	4,829	NA	NR	NR	NR	NA
1969	48,416	NA	5,909	NA	NR	NR	NR	NA
1970	56,797	NA	8,310	NA	NR	NR	NR	NA
1971	59,606	NA	9,556	NA	NR	NR	NR	NA
1972	54,074	NA	9,402	NA	NR	NR	164,114	122
1973	50,749	NA	8,451	NA	NR	NR	182,927	138
1974	40,358	NA	10,631	NA	NR	NR	141,495	106
1975	35,855	NA	13,121	NA	NR	NR	154,248	83
1976	33,288	NA	14,973	NA	NR	NR	183,990	106
1977	31,153	NA	16,831	NA	NR	NR	188,396	89
1978	29,500	NA	15,016	NA	NR	NR	154,089	91
1979	30,407	129	15,452	260	NR	NR	199,081	103
1980	29,087	112	19,015	294	NR	NR	190,894	78
1981	25,802	93	21,152	394	NR	NR	200,766	84
1982	23,403	83	22,177	375	NR	NR	167,423	61
1983	21,532	82	24,318	438	NR	NR	177,462	57
1984	22,040	77	26,115	465	NR	NR	221,983	53
1985	23,210	80	26,611	490	NR	NR	178,162	68
1986	23,430	65	26,107	557	NR	NR	183,243	47
1987	25,280	77	25,916	595	NR	NR	213,196	89
1988	28,507	70	23,177	621	NR	NR	192,857	83
1989	35,821	88	23,419	711	NR	NR	185,441	89
1990	31,441	76	21,102	816	NR	NR	173,099	120
1991	24,378	71	18,003	912	2,764	17	147,076	81
1992	23,112	82	16,126	903	1,412	16	158,364	100
1993	24,238	95	13,361	1041	1,419	7	134,722	100
1994	26,796	97	12,517	1120	1,174	5	151,219	124
1995	31,582	142	10,805	1027	1,180	12	120,624	115
1996	31,032	121	10,637	1082	1,170	7	83,511	81
1997	30,021	127	10,416	1,030	1,162	7	98,727	99
1998	23,229	114	10,258	1,052	1,194	11	82,455	81
1999	17,047	134	7,694	832	1,309	6	46,016	48
2000	13,397	106	8,036	886	1,398	6	27,382	44
2001	10,609	83	7,843	769	1,597	11	22,536	26
2002	8,795	76	7,996	762	1,743	7	22,841	32
2003	7,653	54	7,526	685	2,013	5	20,948	16
2004	5,970	58	6,741	643	2,085	11	26,659	19

Appendix E

Year	Hepatitis A		Hepatitis B		Haemophilus		Varicella		Meningococcal ACWY*		Meningococcal B*	
	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths
2005	4,488	43	5,119	642	2,304	4	32,242	13	297	NA	156	NA
2006	3,579	34	4,713	700	2,436	4	48,445	18	318	NA	193	NA
2007	2,979	34	4,519	719	2,541	10	40,146	6	325	NA	167	NA
2008	2,585	37	4,033	671	2,886	3	30,386	18	330	NA	188	NA
2009	1,987	26	3,405	597	3,022	7	20,480	22	301	NA	174	NA
2010	1,670	29	3,374	588	3,151	4	15,427	15	280	NA	135	NA
2011	1,398	25	2,903	614	3,539	NA	14,513	14	257	NA	159	NA
2012	1,562	23	2,895	581	3,418	NA	13,447	16	161	NA	110	NA
2013	1,781	24	3,050	573	3,792	NA	11,359	8	142	NA	99	NA
2014	1,239	26	2,791	535	3,541	NA	10,172	4	123	NA	89	NA
2015	1,390	NA	3,370	NA	4,138	NA	9,789	NA	120	NA	111	NA
2016	2,007	NA	3,218	NA	4,895	NA	8,953	NA	126	NA	86	NA

*Meningococcal cases were not separated by serogroup prior to 2005.

Notes

NA - Not Available

NR - Not nationally reportable

CRS: Congenital Rubella Syndrome

Prior to 1966, hepatitis A and B were not separated from other types of hepatitis. Prior to 1978, deaths from hepatitis A and B were not separated from deaths from other types of hepatitis.

Haemophilus (Hi) reporting includes all serotypes and all ages. In 2016, 159 cases of invasive Hi type b disease were reported among children younger than 5 years of age.

Varicella was removed from the nationally notifiable disease list in 1991. In 2015, varicella cases were reported from 47 states, the District of Columbia, New York City, Guam, Puerto Rico, the Northern Mariana Islands and the U.S. Virgin Islands.

Sources:

Final totals for nationally reportable infectious diseases are reported in *Morbidity and Mortality Weekly Report (MMWR)*. Tables are published for the previous year in August or September of the following year. Final totals for 2016 were published by the National Notifiable Diseases Surveillance System (NNDSS), accessible through *MMWR* 2017;66(38). CDC also publishes a more comprehensive surveillance document, the annual *Summary of Notifiable Diseases*. The most current annual summary was published on August 11, 2017 for calendar year 2015. This document and annual summaries for previous years are available on the MMWR website at <http://www.cdc.gov/mmwr/>.