AHCCCS
Arizona Health Care Cost Containment System

Back To Basics – Immunizations Part 1

6/6/18

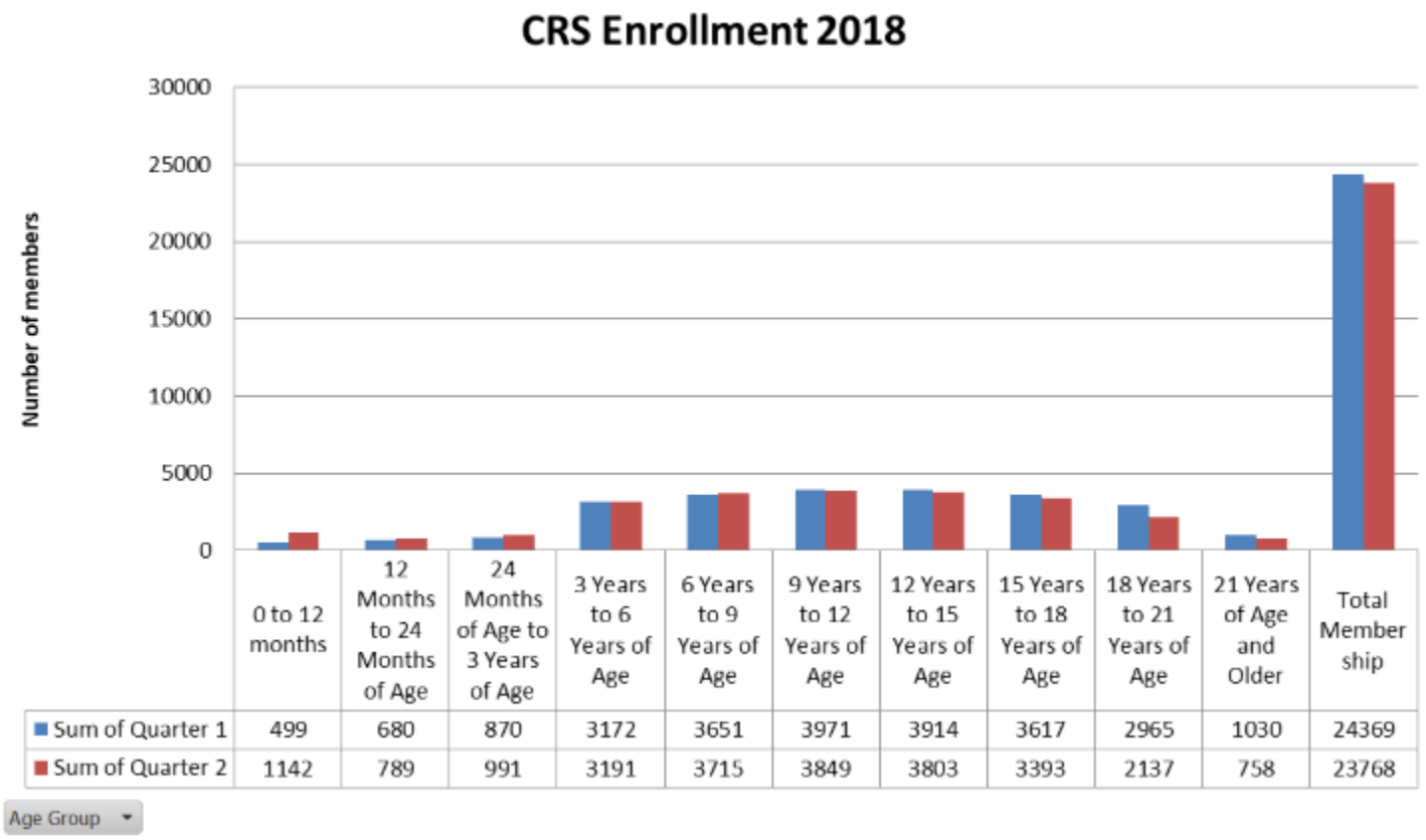
Recapitulation

Parking Lot from 5/30/18

Parking Lot From 5/30/18

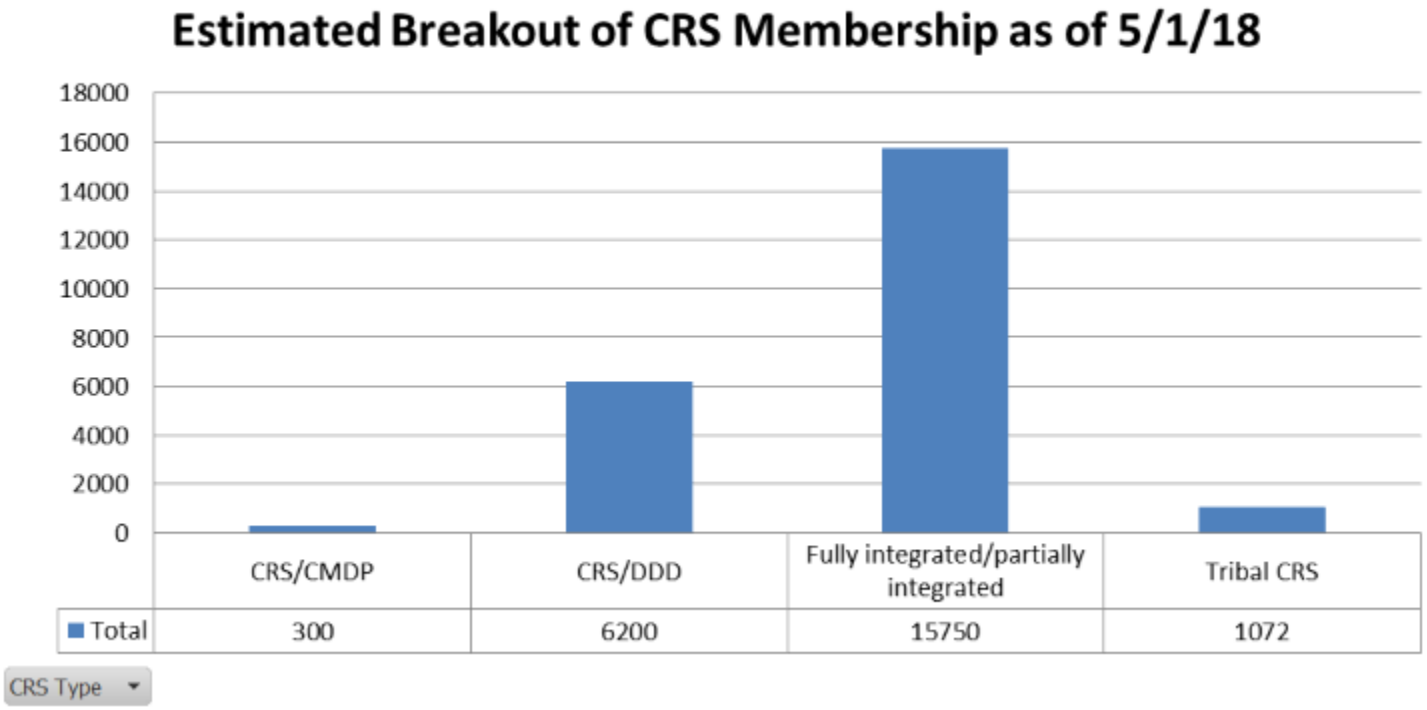
- **Q:** Can AHCCCS provide a breakout of the CRS membership? Can we have an idea how many members will be transitioned to an ACC plan on 10/1/18?
- **A:** The following graph is an estimation of the breakout of the CRS groups as of 5/1/18. Actual enrollment numbers will be assigned by algorithm (exclusive of member choice).

CRS Membership 4/18



	0 to 12 months	12 Months to 24 Months of Age	24 Months of Age to 3 Years of Age	3 Years to 6 Years of Age	6 Years to 9 Years of Age	9 Years to 12 Years of Age	12 Years to 15 Years of Age	15 Years to 18 Years of Age	18 Years to 21 Years of Age	21 Years of Age and Older	Total Member ship
Sum of Quarter 1	499	680	870	3172	3651	3971	3914	3617	2965	1030	24369
Sum of Quarter 2	1142	789	991	3191	3715	3849	3803	3393	2137	758	23768

Estimates


Estimated Breakout of CRS Membership as of 5/1/18
18000
16000
14000
12000
10000
8000
6000
4000
2000
0
CRS/CMDP
CRS/DDD
Fully integrated/partially integrated
Tribal CRS
Total
300
6200
15750
1072
CRS Type

Parking Lot from 5/30/18

- **Q**: Please clarify what is meant by "former CRS"?
- **A**: After 10/1/18, there will no longer be an opt-in option to continue with CRS designation after age 21. The only exception would be DD since they will continue to have a contract with UHC for CYE 19. ACC CRS members will auto-change to "former CRS", without notice, when they turn 21 or when it is determined they no longer have an active CRS condition. Plans should treat these members as adults with special health care needs if the CRS condition is still present at age 21.

Parking Lot from 5/30/18

- **Q**: Is it true that PCH is developing their equivalent to a MSIC?
- **A**: AHCCCS is aware of this as well and expects PCH to reach out to the health plans in the central region with further details.

Parking Lot From 5/30/18

- **Q**: My ACC is still confused with the Transition Table responsibilities outlined in the presentation. Will there be additional guidance on this topic?
- **A**:The purpose of the Transition Table (Exhibit G) in the contract is to avoid any gaps in care during the 10/1/18 transition. Exhibit G outlines responsibilities regarding honoring the course of care with previous providers (when provider agrees and if not in network). This would also mean they provide services without additional PA. How that will be handled with the new ACC plans that may require PA on all services will require additional guidance. This will also include guidance in addressing PA for non-CRS or non MSIC related services.
- Currently there is little to no PA required *with the MSICs* when the ISP services are provided within the clinic. However, PA *is required* with outside specialty providers. It will be up to the MSICs and plans to work together to hopefully implement consistent policies that will continue to provide efficient administrative processes and timely services to our members. More details will be forthcoming.

Parking Lot from 5/30/18

- **Q:** Can you comment on the FFS rates for the MSICs?
- **A:** The following information was shared at the AHCCCS Update meeting on May 16th in order for ACC plans to appropriately contract with the MSICs. This information was also shared with the MSICs in an email from the AHCCCS Network Administrator on 5/24/18. AHCCCS FFS rates for the four existing MSICs are currently being developed. These rates will apply strictly to AIHP and CMDP. In the interim, ACC Plans and MSICs are free to negotiate. The AHCCCS FFS rates will be the minimum amount for the plan to pay in the event a contract with the MSIC is not in place. **These are draft rates**:
- The MSIC Table is viewed as provider specific rates in PMMIS for each of the four MSICs
- These MSIC rates **will only apply to**:
  - Members with CRS Designation
  - Members with "Former CRS" Indicator (21 and over but could also be under 21)
- Will include unique rates for T1015 specific to each provider
  - Only payable to these four providers
  - Only payable for CRS/Former CRS members

	Phoenix	Tucson	Flagstaff	Yuma
T1015	$270.00	$276.96	$558.00	$441.00
All Other Codes	115%	120%	115%	115%

- **AHCCCS is developing billing rules and will publish them in the Fee For Service Provider Manual**
- As of 6/1/18 the four MSICs are registered as one of the following:
  - PT 02
  - PT 05
  - PT IC
- AHCCCS is considering a specific MSIC Provider Type post-10/1/18

Parking Lot from 5/30/18

- **Q**: Can you address the use of the T1015 code?
- **A**: The T1015 code is currently paid to MSICs for care coordination/care management for the CRS members that they serve. How that may be impacted by what the ACC plans reimburse providers, including the MSICs, for delegated care coordination is currently being discussed internally. Further guidance on this topic will be forthcoming.
- We are working to update the website on CRS referrals at this location for 10/1/18: https://www.azahcccs.gov/PlansProviders/CurrentProviders/CRSreferrals.html

Immunizations - CDC

Review of Vaccinations

Urgent Reminder

- Health plans need to remind their VFC providers that re-enrollment **must be completed no later than June 30**
- Any questions should be addressed to ADHS and the VFC Office

Reminder

Select Quality Measures

Measure	CYE 2013	CY 2014	CYE 2015	CYE 2016
Children's Access 12-24 mo	97.4	97.1	95.1	92.1
Children's Access 25 mo-6 y	89.2	88.5	87.7	85.4
Children's Access 7-11 y	91.4	92.4	91.5	90.6
Children's Access 12-19	89.4	90.1	89.3	88
Well child 6+ in 15 months	67.9	71.5	62.1	57.7
Well Child 3-6	65.5	64.9	64.6	61
Adolescent	39.7	40.7	39.9	39.2
Dental	59.2	63.5	63.7	58.6
EPSDT	59.2	63.5	63.7	58.6

Results of the Hybrid Audit

Aggregate Individual Immunization Completion Rates by 24 Months of Age
Measurement period ending September 30, 2017

	DTaP (4 doses)	IPV (3 doses)	MMR (1 dose)	HiB (3 doses)	Hep B (3 doses)	VZV (1 dose)	PCV (4 doses)	Hep A (1 dose)	RV (2-3 doses)	Flu (2 doses)	Combo 3
AHCCCS MPS (%)	85%	91%	91%	90%	90%	88%	82%	40%	60%	45%	68%
Medicaid Mean FFY 2016	76.8%	88.7%	89.5%	88.1%	88.0%	89.0%	77.2%	84.2%	69.0%	45.3%	69.7%
Current AHCCCS Rate (%)	77.4%	86.4%	87.6%	86.3%	85.9%	86.8%	74.9%	**87.3%**	59.0%	38.1%	69.1%
Previous AHCCCS Rate (%)[1]	82.9%	90.8%	93.0%	89.3%	89.9%	92.6%	80.1%	92.3%	76.4%	46.6%	73.2%

Rates in bold met or exceeded the AHCCCS MPS

[1]Data for CYE 2015 presented in the tables below have been updated to address a data revision post publication of the CYE2015 Childhood Immunization Completion Rates Report.

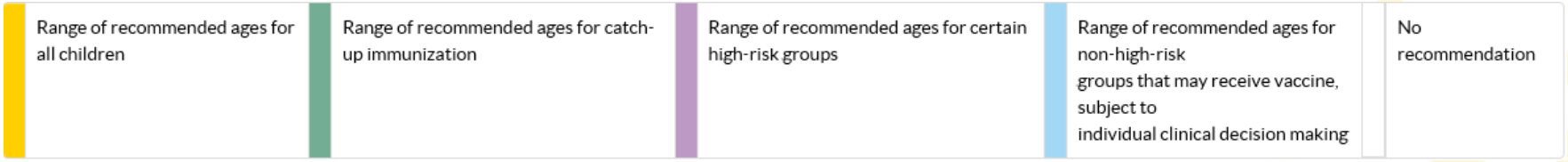
These Performance Measures are Functionally Related

IMMUNIZATIONS	WELL CHILD 6 + VISITS IN 15 MONTHS (6 X 15)	
	MET MPS FOR 6 X 15 COMPLETE IMMUNIZATION RECORD	DID NOT MEET MPS FOR 6 X 15 COMPLETE IMMUNIZATION RECORD
	MET MPS FOR 6 X 15 INCOMPLETE IMMUNIZATION RECORD	DID NOT MEET MPS FOR 6 X 15 INCOMPLETE IMMUNIZATION RECORD

CMS Requirements

- **Medicaid and CHIP**
- States cover all recommended immunizations for children enrolled in Medicaid and CHIP. Examples of these immunizations include flu, pneumonia, MMR.
- See: http://www.insurekidsnow.gov/state/index.html to visit your State's web site and find out more

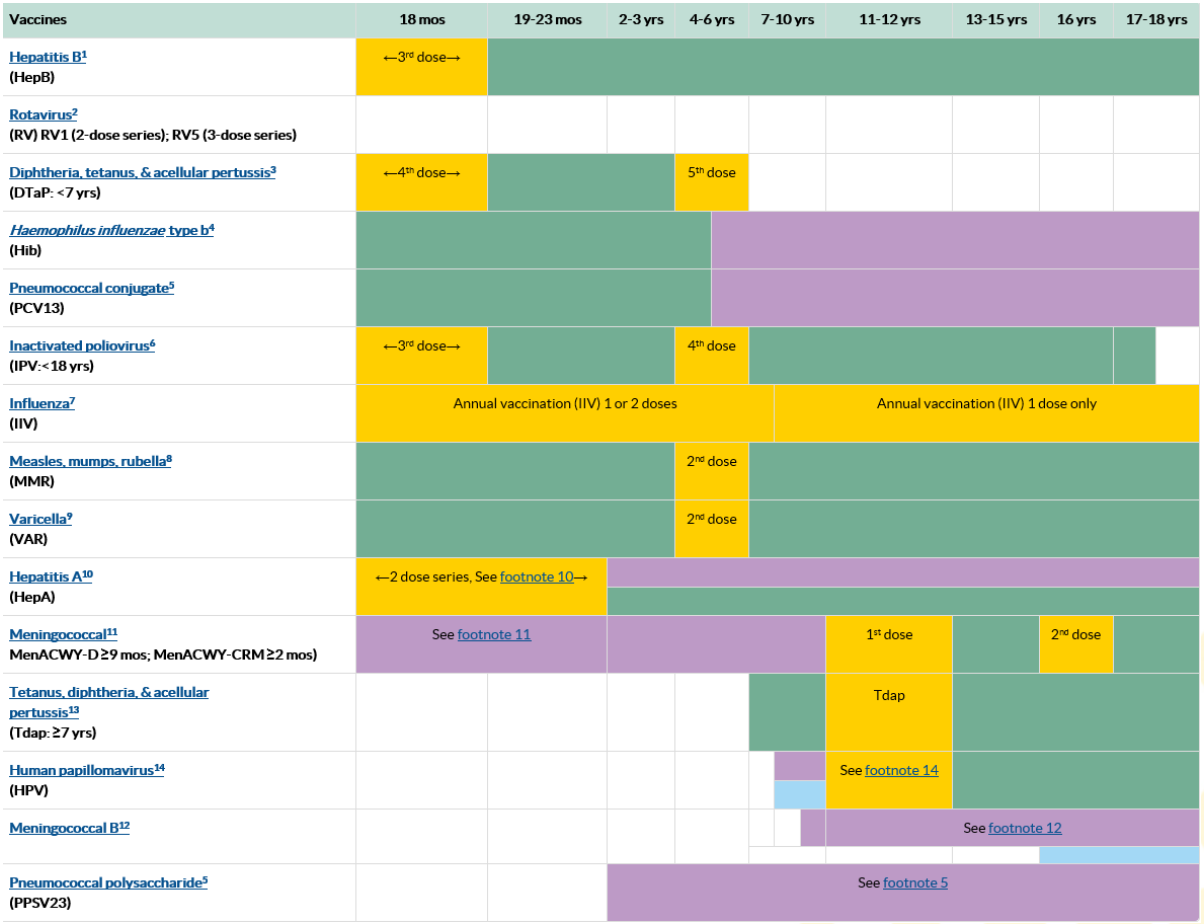
CDC Recommendations: Legend



Birth to 15 months

Vaccine	Birth	1 mo	2 mos	4 mos	6 mos	9 mos	12 mos	15 mos
Hepatitis B[1] (HepB)	1st dose	←2nd dose→			←3rd dose→			
Rotavirus[2] (RV) RV1 (2-dose series); RV5 (3-dose series)			1st dose	2nd dose	See footnote 2			
Diphtheria, tetanus, & acellular pertussis[3] (DTaP: <7 yrs)			1st dose	2nd dose	3rd dose			←4th dose→
Haemophilus influenzae type b[4] (Hib)			1st dose	2nd dose	See footnote 4		←3rd or 4th dose, See footnote 4→	
Pneumococcal conjugate[5] (PCV13)			1st dose	2nd dose	3rd dose		←4th dose→	
Inactivated poliovirus[6] (IPV:<18 yrs)			1st dose	2nd dose	←3rd dose→			
Influenza[7] (IIV)					Annual vaccination (IIV) 1 or 2 doses			
Measles, mumps, rubella[8] (MMR)					See footnote 8		←1st dose→	
Varicella[9] (VAR)							←1st dose→	
Hepatitis A[10] (HepA)							←2 dose series, See footnote 10→	
Meningococcal[11] MenACWY-D ≥9 mos; MenACWY-CRM ≥2 mos)			See footnote 11					
Tetanus, diphtheria, & acellular pertussis[13] (Tdap: ≥7 yrs)								
Human papillomavirus[14] (HPV)								
Meningococcal B[12]								
Pneumococcal polysaccharide[5] (PPSV23)								

18 Months to 18 Years



AHCCCS
Arizona Health Care Cost Containment System

Reaching across Arizona to provide comprehensive quality health care for those in need

Hepatitis B

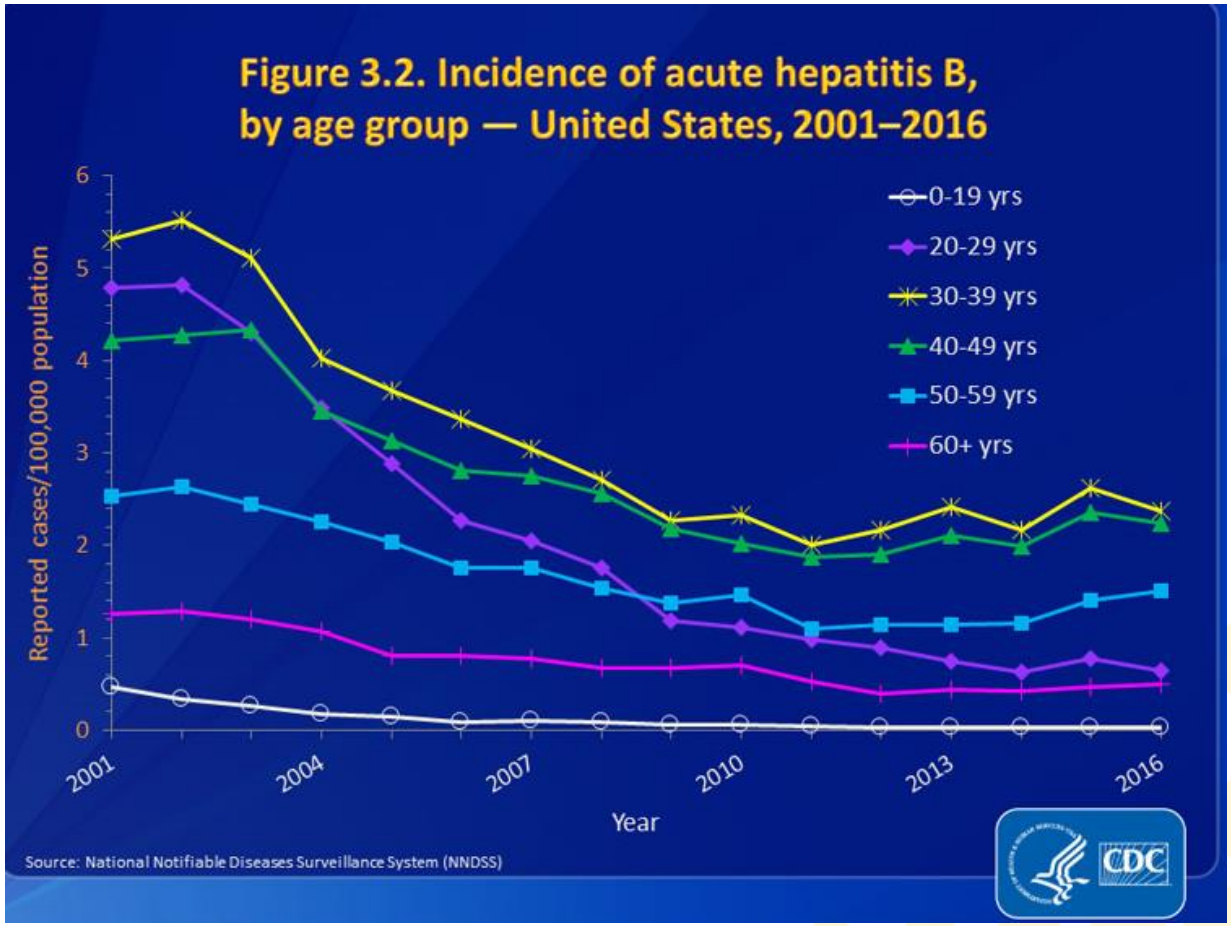


Figure 3.2. Incidence of acute hepatitis B, by age group — United States, 2001–2016
Reported cases/100,000 population
0
1
2
3
4
5
6
2001
2004
2007
2010
2013
2016
Year
0-19 yrs
20-29 yrs
30-39 yrs
40-49 yrs
50-59 yrs
60+ yrs
Source: National Notifiable Diseases Surveillance System (NNDSS)
CDC

Hepatitis B

- **Hepatitis B (HepB) vaccine. (minimum age: birth) Birth Dose (monovalent HepB vaccine only):**
  - **Mother is HBsAg-negative**: 1 dose within 24 hours of birth for medically stable infants ≥2,000 grams. Infants <2,000 grams administer 1 dose at chronological age 1 month or hospital discharge.
  - **Mother is HBsAg-positive**:
    - Give 1 dose **HepB vaccine** and **0.5 mL of HBIG** (at separate anatomic sites) within 12 hours of birth, regardless of birth weight.
    - Test for HBsAg and anti-HBs at age 9–12 months. If HepB series is delayed, test 1–2 months after final dose.
  - **Mother's HBsAg status is unknown**:
    - Give **HepB vaccine** within 12 hours of birth, regardless of birth weight.
    - For infants <2,000 grams, give **0.5 mL of HBIG** in addition to HepB vaccine within 12 hours of birth.
    - Determine mother's HBsAg status as soon as possible. If mother is HBsAg-positive, give **0.5 mL of HBIG** to infants ≥2,000 grams as soon as possible, but no later than 7 days of age.

Hepatitis B

- **Routine series:**
  - A complete series is 3 doses at 0, 1–2, and 6–18 months. (Monovalent HepB vaccine should be used for doses given before age 6 weeks.)
  - Infants who did not receive a birth dose should begin the series as soon as feasible (see catch–up schedule(https://www.cdc.gov/vaccines/schedules/hcp/imz/catchup.html)).
  - Administration of **4 doses** is permitted when a combination vaccine containing HepB is used after the birth dose.
  - **Minimum age** for the final (3rd or 4th) dose: 24 weeks.
  - **Minimum intervals:** Dose 1 to Dose 2: 4 weeks / Dose 2 to Dose 3: 8 weeks / Dose 1 to Dose 3: 16 weeks. (When 4 doses are given, substitute "Dose 4" for "Dose 3" in these calculations.)
- **Catch-up vaccination:**
  - Unvaccinated persons should complete a 3-dose series at 0, 1–2, and 6 months.
  - Adolescents 11–15 years of age may use an alternative 2-dose schedule, with at least 4 months between doses (adult formulation **Recombivax HB** only).

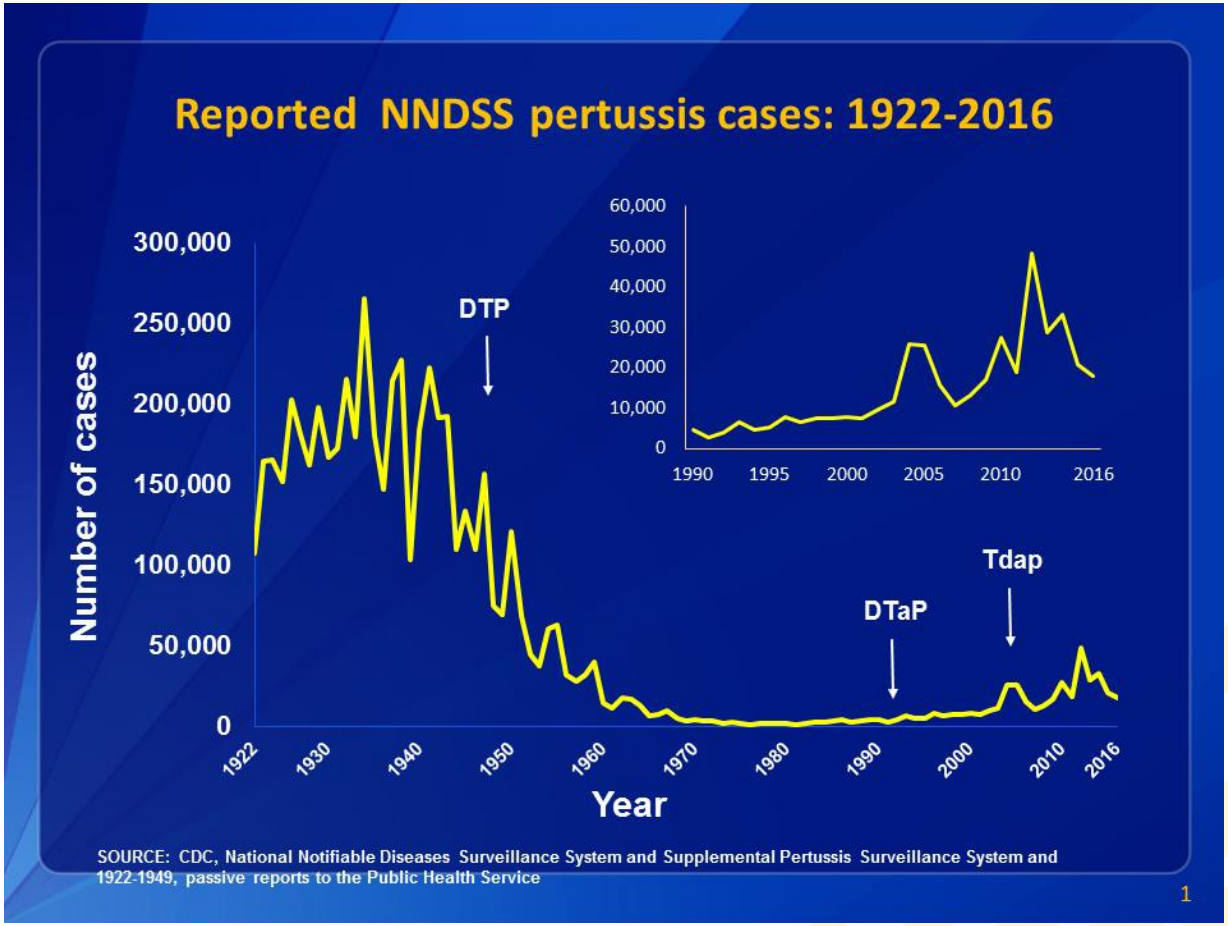
Rotavirus

- Rotavirus was the leading cause of severe diarrhea among infants and young children in the United States before rotavirus vaccine was introduced in 2006. Prior to vaccine introduction, almost all U.S. children were infected with rotavirus before their 5th birthday. Each year, among U.S. children younger than 5 years of age, rotavirus led to
- more than 400,000 doctor visits,
- more than 200,000 emergency room visits,
- 55,000 to 70,000 hospitalizations, and
- 20 to 60 deaths.
- Globally, rotavirus is still the leading cause of severe diarrhea in infants and young children. In 2013, rotavirus caused an estimated 215,000 deaths worldwide in children younger than 5 years old.

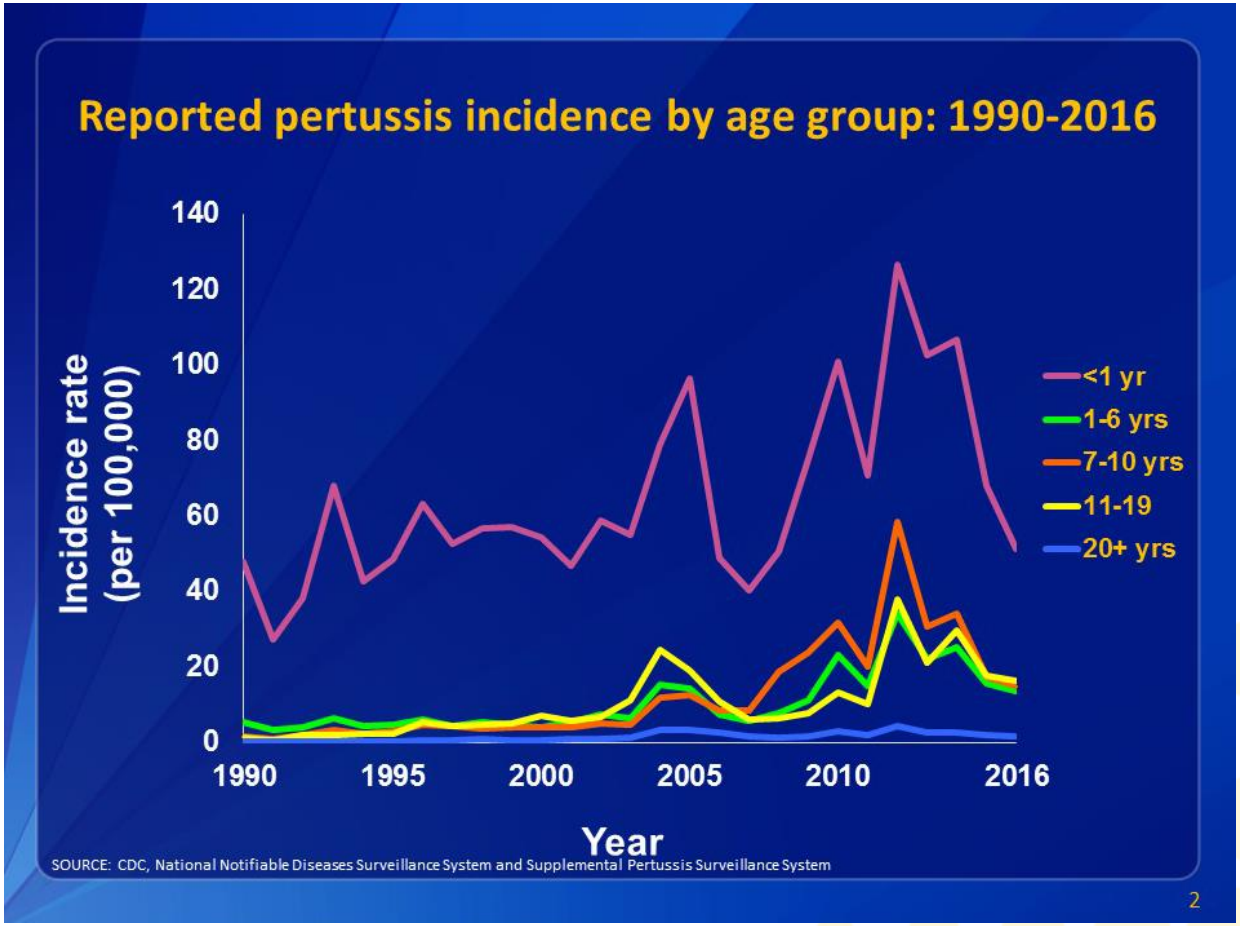
Rotavirus

- **Rotavirus vaccines. (minimum age: 6 weeks) Routine vaccination:**
  - **Rotarix:** 2-dose series at 2 and 4 months.
  - **RotaTeq:** 3-dose series at 2, 4, and 6 months.
    If any dose in the series is either RotaTeq or unknown, default to 3-dose series.
- **Catch-up vaccination:**
  - Do not start the series on or after age 15 weeks, 0 days.
  - The maximum age for the final dose is 8 months, 0 days.
- For other catch–up guidance, see catch–up schedule(https://www.cdc.gov/vaccines/schedules/hcp/imz/catchup.html).

Pertussis


Reported NNDSS pertussis cases: 1922-2016
Number of cases
300,000
250,000
200,000
150,000
100,000
50,000
0
DTP
DTaP
Tdap
1922
1930
1940
1950
1960
1970
1980
1990
2000
2010
2016
Year
60,000
50,000
40,000
30,000
20,000
10,000
0
1990
1995
2000
2005
2010
2016
SOURCE: CDC, National Notifiable Diseases Surveillance System and Supplemental Pertussis Surveillance System and 1922-1949, passive reports to the Public Health Service
1

Pertussis Today



DTaP

- **Diphtheria, tetanus, and acellular pertussis (DTaP) vaccine. (minimum age: 6 weeks [4 years for Kinrix or Quadracel]) Routine vaccination:**
  - 5-dose series at 2, 4, 6, and 15–18 months and 4–6 years.
    - **Prospectively:** A 4th dose may be given as early as age 12 months if at least 6 months have elapsed since the 3rd dose.
    - **Retrospectively:** A 4th dose that was inadvertently given as early as 12 months may be counted if at least 4 months have elapsed since the 3rd dose.
- **Catch–up vaccination:**
  - The 5th dose is not necessary if the 4th dose was administered at 4 years or older.
- For other catch–up guidance, see catch–up schedule(https://www.cdc.gov/vaccines/schedules/hcp/imz/catchup.html).

Hib Incidence

- **National Estimates of Invasive Disease**
- Cases: 6,400 (1.99/100,000)
  Deaths: 900 (0.29/100,000)
- **How Well Do Hib Vaccines Work?**
- Some Hib infections are "invasive." Invasive disease means that germs invade parts of the body that are normally free from germs. Invasive disease is usually very serious and can sometimes result in death.
- Vaccines that help protect against Hib disease work well, but cannot prevent all cases.
- Studies show Hib vaccination protects
- Nearly all (between 93 and 100 in 100) children from serious infections, called invasive Hib disease
- Protection decreases over time. Children need a dose between 12 and 15 months old to maintain high levels of protection during early childhood

Hib

- ***Haemophilus influenzae* type b (Hib) conjugate vaccines. (minimum age: 6 weeks) Routine vaccination:**
  - **ActHIB, Hiberix, or Pentacel:** 4-dose series at 2, 4, 6, and 12–15 months.
  - **PedvaxHIB**: 3-dose series at 2, 4, and 12–15 months.
- **Catch–up vaccination:**
  - **1st dose at 7–11 months**: Give 2nd dose at least 4 weeks later and 3rd (final) dose at 12–15 months or 8 weeks after 2nd dose (whichever is later).
  - **1st dose at 12–14 months:** Give 2nd (final) dose at least 8 weeks after 1st dose.
  - **1st dose before 12 months and 2nd dose before 15 months:** Give 3rd (final) dose 8 weeks after 2nd dose.
  - **2 doses of PedvaxHIB before 12 months:** Give 3rd (final) dose at 12–59 months and at least 8 weeks after 2nd dose.
  - **Unvaccinated at 15–59 months:** 1 dose

Hib - Exceptions

- **Special situations:**
  - **Chemotherapy or radiation treatment 12-59 months**
    - Unvaccinated or only 1 dose before 12 months: Give 2 doses, 8 weeks apart.
    - 2 or more doses before 12 months: Give 1 dose, at least 8 weeks after previous dose.
  - *Doses given within 14 days of starting therapy or during therapy should be repeated at least 3 months after therapy completion.*
  - **Hematopoietic stem cell transplant (HSCT)**
    3-dose series with doses 4 weeks apart starting 6 to 12 months after successful transplant (regardless of Hib vaccination history).
  - **Anatomic or functional asplenia (including sickle cell disease) 12-59 months**
    - Unvaccinated or only 1 dose before 12 months: Give 2 doses, 8 weeks apart.
    - 2 or more doses before 12 months: Give 1 dose, at least 8 weeks after previous dose.
  - ***Unimmunized* persons 5 years or older***
    - Give 1 dose.
  - **Elective splenectomy *Unimmunized* persons 15 months or older***
    - Give 1 dose (preferably at least 14 days before procedure).
  - **HIV infection 12–59 months**
    - Unvaccinated or only 1 dose before 12 months: Give 2 doses, 8 weeks apart.
    - 2 or more doses before 12 months: Give 1 dose, at least 8 weeks after previous dose.
  - ***Unimmunized* persons 5–18 years***
    - Give 1 dose.
  - **Immunoglobulin deficiency, early component complement deficiency 12–59 months**
    - Unvaccinated or only 1 dose before 12 months: Give 2 doses, 8 weeks apart.
    - 2 or more doses before 12 months: Give 1 dose, at least 8 weeks after previous dose.
- **Unimmunized* = less than routine series (through 14 months) OR no doses (14 months or older)

Pneumococcal Disease

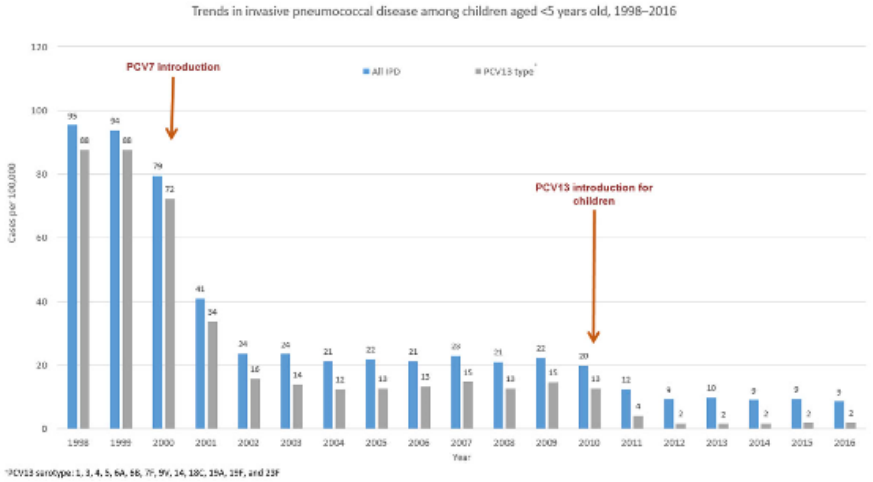


Figure 1 shows changes in the incidence of invasive pneumococcal disease (IPD) among children <5 years old from 1998 through 2016 in the United States. Rates of IPD expressed as cases per 100,000 population are shown on the y-axis, and calendar year of surveillance on the x-axis. Blue bars represent overall IPD incidence, while the grey bars represent IPD incidence caused by serotypes included in the 13-valent pneumococcal conjugate vaccine (PCV13). Pneumococcal 7-valent conjugate vaccine (PCV7), containing serotypes 4, 6B, 9V, 14, 18C, 19F, and 23F, was introduced for use among children <5 years old in 2000. PCV13, containing serotypes 1, 3, 4, 5, 6A, 6B, 7F, 9V, 14, 18C, 19A, 19F, and 23F, was introduced for use among children <5 years old in 2010. The overall IPD incidence declined from 95 cases per 100,000 in 1998 to 9 cases per 100,000 in 2016; IPD caused by PCV13 serotypes declined from 88 cases per 100,000 in 1998 to 2 cases per 100,000 in 2016.

PCV

- **Pneumococcal vaccines. (minimum age: 6 weeks [PCV13], 2 years [PPSV23]) Routine vaccination:**
  - 4-dose series at 2, 4, 6, and 12–15 months.
- **Catch-up vaccination with PCV13:**
  - 1 dose for healthy children aged 24–59 months with any incomplete* PCV13 schedule

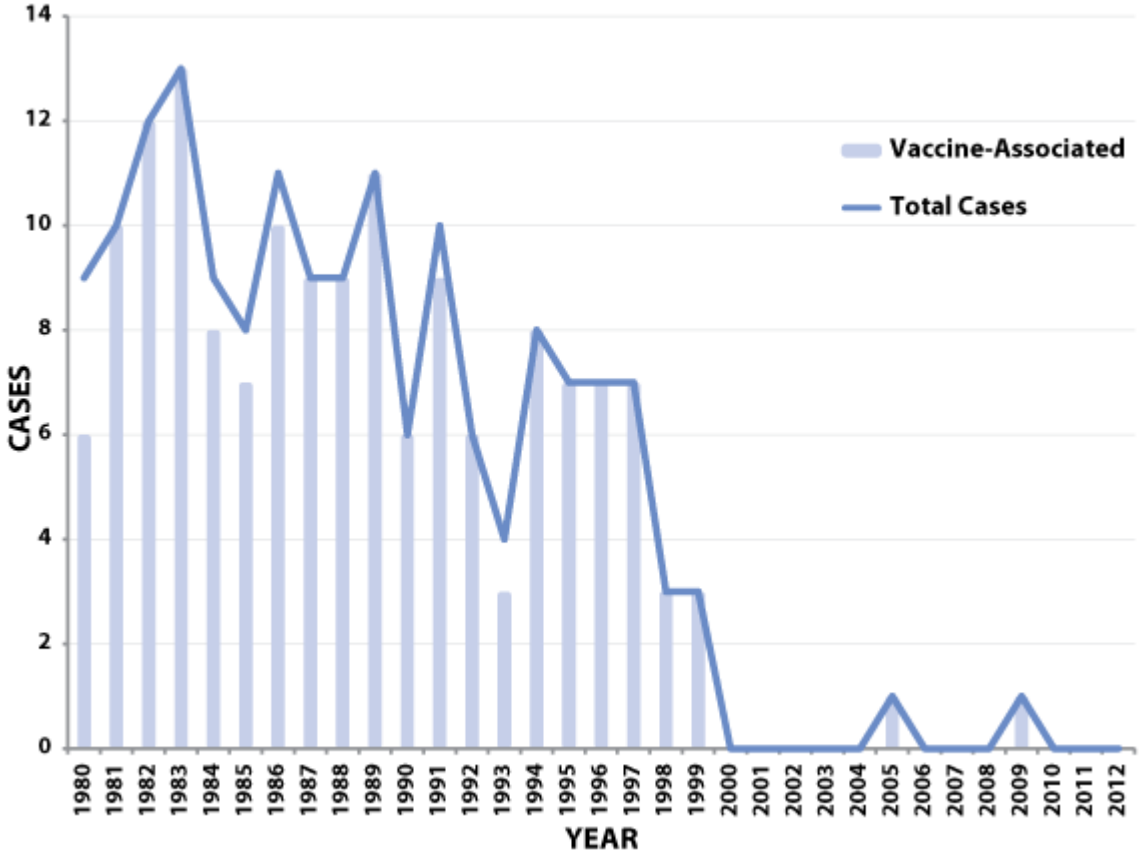
PCV – Special Situations

- **Special situations: High-risk conditions:**
- Administer PCV13 doses before PPSV23 if possible.
- **Chronic heart disease (particularly cyanotic congenital heart disease and cardiac failure); chronic lung disease (including asthma treated with high-dose, oral, corticosteroids); diabetes mellitus:**
- **Age 2–5 years:**
  - Any incomplete* schedules with:
    - 3 PCV13 doses: 1 dose of PCV13 (at least 8 weeks after any prior PCV13 dose).
    - <3 PCV13 doses: 2 doses of PCV13, 8 weeks after the most recent dose and given 8 weeks apart.
  - No history of PPSV23: 1 dose of PPSV23 (at least 8 weeks after any prior PCV13 dose).
- **Age 6–18 years:**
  - No history of PPSV23: 1 dose of PPSV23 (at least 8 weeks after any prior PCV13 dose).
- **Cerebrospinal fluid leak; cochlear implant:**
- **Age 2–5 years:**
  - Any incomplete* schedules with:
    - 3 PCV13 doses: 1 dose of PCV13 (at least 8 weeks after any prior PCV13 dose).
    - <3 PCV13 doses: 2 doses of PCV13, 8 weeks after the most recent dose and given 8 weeks apart.
  - No history of PPSV23: 1 dose of PPSV23 (at least 8 weeks after any prior PCV13 dose).
- **Age 6–18 years:**
  - No history of either PCV13 or PPSV23: 1 dose of PCV13, 1 dose of PPSV23 at least 8 weeks later.
  - Any PCV13 but no PPSV23: 1 dose of PPSV23 at least 8 weeks after the most recent dose of PCV13.
  - PPSV23 but no PCV13: 1 dose of PCV13 at least 8 weeks after the most recent dose of PPSV23.

PCV – Special Situations

- **Sickle cell disease and other hemoglobinopathies; anatomic or functional asplenia; congenital or acquired immunodeficiency; HIV infection; chronic renal failure; nephrotic syndrome; malignant neoplasms, leukemias, lymphomas, Hodgkin disease, and other diseases associated with treatment with immunosuppressive drugs or radiation therapy; solid organ transplantation; multiple myeloma:**
- **Age 2–5 years:**
  - Any incomplete* schedules with:
    - 3 PCV13 doses: 1 dose of PCV13 (at least 8 weeks after any prior PCV13 dose).
    - <3 PCV13 doses: 2 doses of PCV13, 8 weeks after the most recent dose and given 8 weeks apart.
  - No history of PPSV23: 1 dose of PPSV23 (at least 8 weeks after any prior PCV13 dose) and a 2nd dose of PPSV23 5 years later.
- **Age 6–18 years:**
  - No history of either PCV13 or PPSV23: 1 dose of PCV13, 2 doses of PPSV23 (1st dose of PPSV23 administered 8 weeks after PCV13 and 2nd dose of PPSV23 administered at least 5 years after the 1st dose of PPSV23).
  - Any PCV13 but no PPSV23: 2 doses of PPSV23 (1st dose of PPSV23 to be given 8 weeks after the most recent dose of PCV13 and 2nd dose of PPSV23 administered at least 5 years after the 1st dose of PPSV23).
  - PPSV23 but no PCV13: 1 dose of PCV13 at least 8 weeks after the most recent PPSV23 dose and a 2nd dose of PPSV23 to be given 5 years after the 1st dose of PPSV23 and at least 8 weeks after a dose of PCV13.
- **Chronic liver disease, alcoholism:**
- **Age 6–18 years:**
  - No history of PPSV23: 1 dose of PPSV23 (at least 8 weeks after any prior PCV13 dose).
- *Incomplete schedules are any schedules where PCV13 doses have not been completed according to ACIP recommended catch-up schedules. The total number and timing of doses for complete PCV13 series are dictated by the age at first vaccination. See Tables 8 and 9 in the ACIP pneumococcal vaccine recommendations (www.cdc.gov/mmwr/pdf/rr/rr5911.pdf[24 pages](https://www.cdc.gov/mmwr/pdf/rr/rr5911.pdf)) for complete schedule details.

Polio


14
12
10
8
6
4
2
0
CASES
Vaccine-Associated
Total Cases
1980
1981
1982
1983
1984
1985
1986
1987
1988
1989
1990
1991
1992
1993
1994
1995
1996
1997
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
YEAR

Sabin and Salk Never Received the Nobel Prize for Medicine or Physiology

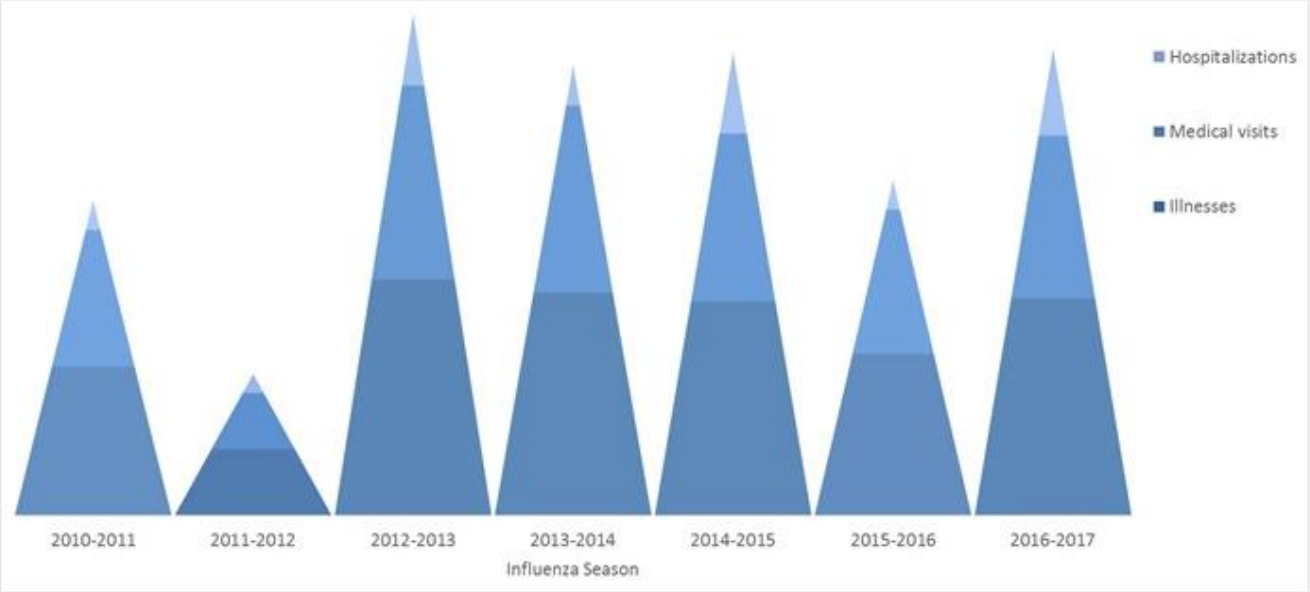
- Why Salk or Sabin did not receive the Nobel Prize? Because Salk did not discover anything new, but simply put together existing technologies in a productive way. Sabin once said that Salk didn't invent anything, what he did was pure kitchen chemistry. An article in the Annals of Neurology, "Polio and Nobel Prizes: Looking Back 50 Years", by Erling Norrby and Stanley Prusiner, directly addresses this question.
- The authors took advantage of the fact that the Nobel Archives are open to scholarly investigation 50 years after the Prize is awarded. They looked into the written record surrounding the 1954 Nobel Prize, which was awarded to John Enders, Thomas Weller, and Frederick Robbins for their discovery of the ability of poliovirus to grow in cultures of various types of tissue. This discovery was a milestone in virology because it not only lead to the production of both killed and live poliovirus vaccines, but it allowed the growth of many other viruses.
- Examination of the Nobel Archives reveals that Dr. Sven Gard, Professor of Virology at the Karolinska Institute, convinced the Nobel Committee to name Enders and his colleagues recipients of the 1954 Prize. He wrote that 'the discovery by Enders' group is the most important in the whole history of virology…The discovery has had a revolutionary effect on the discipline of virology'. Salk was nominated for the Prize in 1955 and in 1956. The first time, it was decided to wait for the results of the clinical trial of Salk's killed poliovaccine, which was in progress. In 1956, Gard wrote an 8-page analysis of Salk's work, in which he concluded that "Salk has not in the development of his methods introduced anything that is principally new, but only exploited discoveries made by others." He concluded that "Salk's publications on the poliomyelitis vaccine cannot be considered as Prize worthy".
- In the late 1960s, Salk, Sabin, Koprowski, and Gard were nominated for the Nobel Prize for poliovirus vaccines. Gard refused to be nominated, saying that the work was not primary but depended on accomplishments of those who had already received the Prize; this effectively killed the nomination. The developers of the poliovaccine were never again seriously considered for a Nobel Prize.

IPV

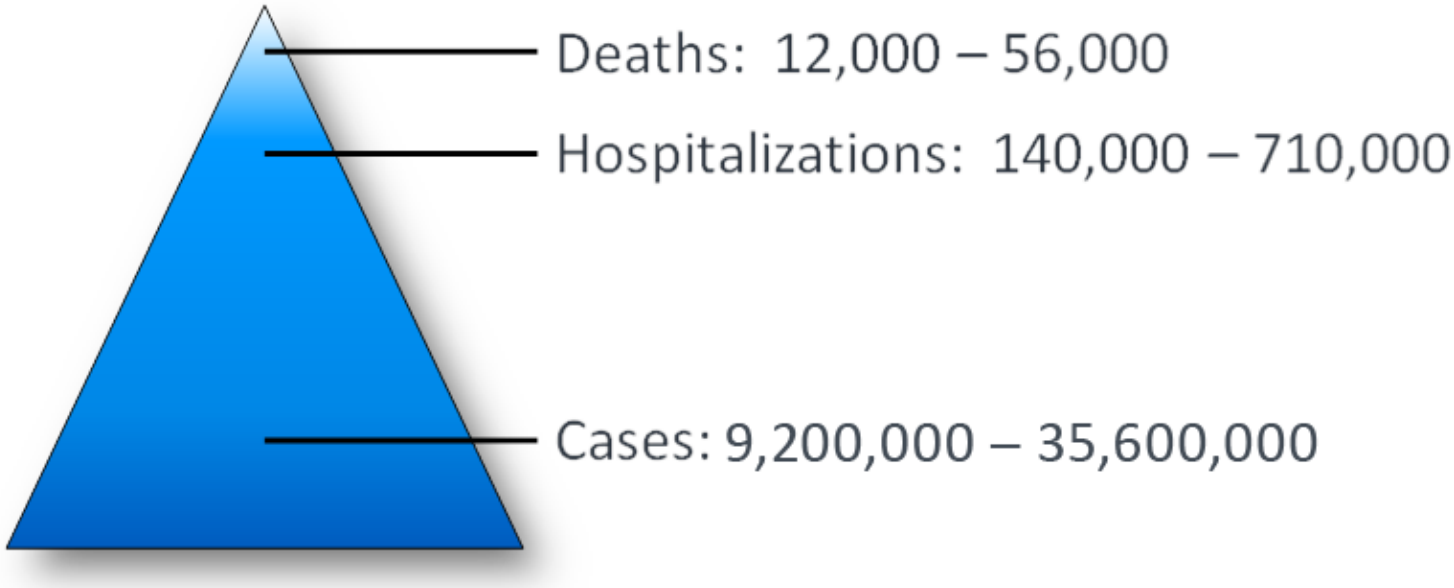
- **Inactivated poliovirus vaccine (IPV). (minimum age: 6 weeks) Routine vaccination:**
  - 4-dose series at ages 2, 4, 6–18 months, and 4–6 years. Administer the final dose on or after the 4th birthday and at least 6 months after the previous dose.
- **Catch-up vaccination:**
  - In the first 6 months of life, use minimum ages and intervals only for travel to a polio-endemic region or during an outbreak.
  - If 4 or more doses were given before the 4th birthday, give 1 more dose at age 4–6 years and at least 6 months after the previous dose.
  - A 4th dose is not necessary if the 3rd dose was given on or after the 4th birthday and at least 6 months after the previous dose.
  - IPV is not routinely recommended for U.S. residents 18 years of age and older.
- **Series containing oral polio vaccine (OPV),** either mixed OPV-IPV or OPV-only series:
  - Total number of doses needed to complete the series is the same as that recommended for the U.S. IPV schedule. See https://www.cdc.gov/mmwr/volumes/66/wr/mm6601a6.htm(https://www.cdc.gov/mmwr/volumes/66/wr/mm6601a6.htm).
  - Only trivalent OPV (tOPV) counts toward the U.S. vaccination requirements. For guidance to assess doses documented as "OPV" see https://www.cdc.gov/mmwr/volumes/66/wr/mm6606a7.htm(https://www.cdc.gov/mmwr/volumes/66/wr/mm6606a7.htm).

Influenza

Figure 1: Estimates of Influenza-associated Illness, Medical Visits, and Hospitalizations — United States, 2010–2011 to 2016–2017 Influenza Seasons



Influenza Estimates



While the impact of flu varies, it places a substantial burden on the health of people in the United States each year. CDC estimates that influenza has resulted in between 9.2 million and 35.6 million illnesses, between 140,000 and 710,000 hospitalizations and between 12,000 and 56,000 deaths annually since 2010.

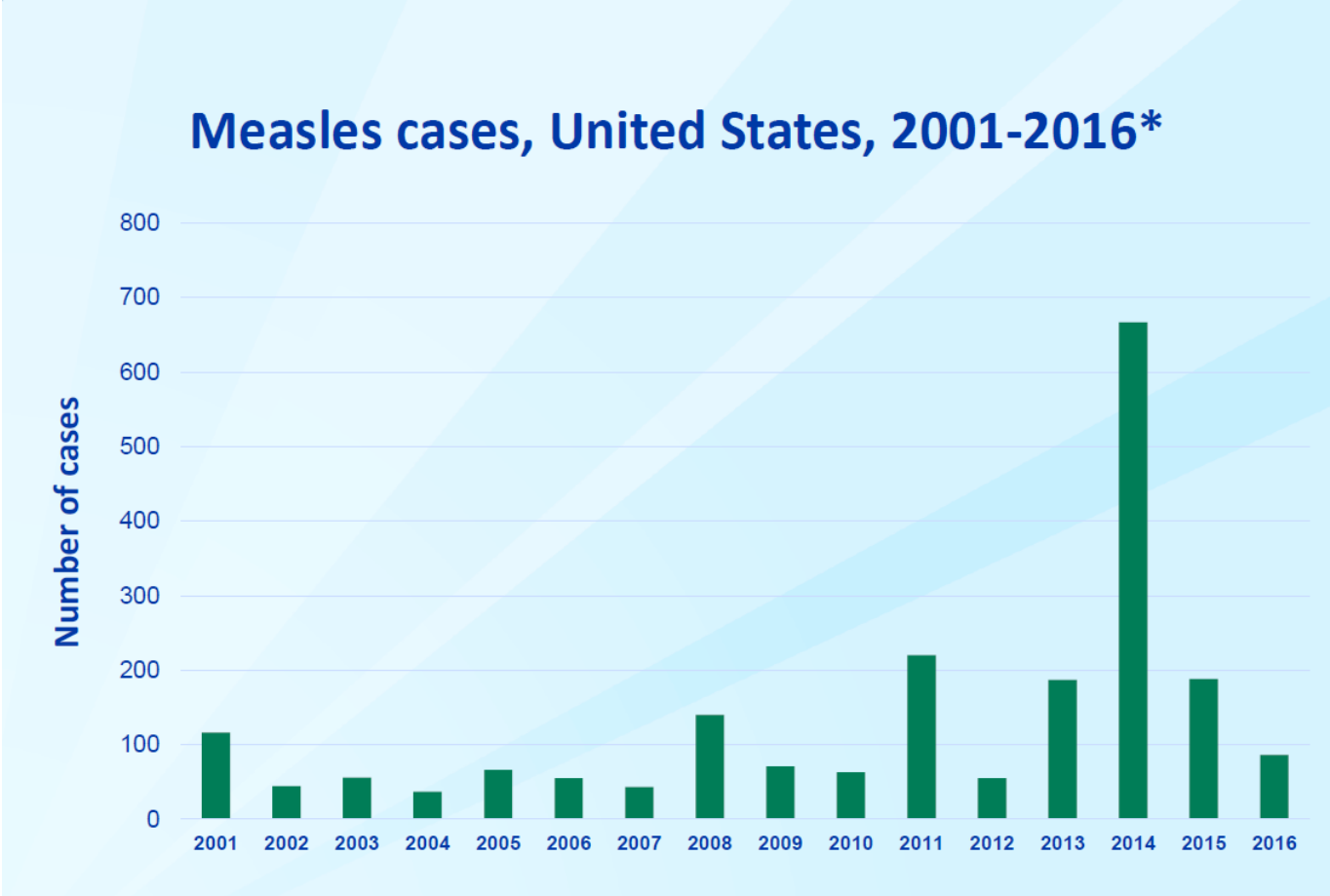
Influenza

- **Influenza vaccines. (minimum age: 6 months)Routine vaccination:**
  - Administer an age-appropriate formulation and dose of influenza vaccine annually.
    - **Children 6 months–8 years** who did not receive at least 2 doses of influenza vaccine before July 1, 2017, should receive 2 doses separated by at least 4 weeks.
    - **Persons 9 years and older:** 1 dose.
  - Live, attenuated influenza vaccine (LAIV) is not recommended for the 2017–18 season.
  - For additional guidance, see the 2017–18 ACIP influenza vaccine recommendations (MMWR August 25, 2017;66(2):1-20: https://www.cdc.gov/mmwr/volumes/66/rr/pdfs/rr6602.pdf[24 pages](https://www.cdc.gov/mmwr/volumes/66/rr/pdfs/rr6602.pdf)). (For the 2018–19 season, see the 2018–19 ACIP influenza vaccine recommendations.)

MMR

- Reported number of new measles (rubeola) cases: 667 (2015)
- Reported number of new mumps cases: 1,223 (2015)
- Reported number of new German measles (rubella) cases: 6 (2015)

Measles


Measles cases, United States, 2001-2016*
Number of cases
800
700
600
500
400
300
200
100
0
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016

Complications

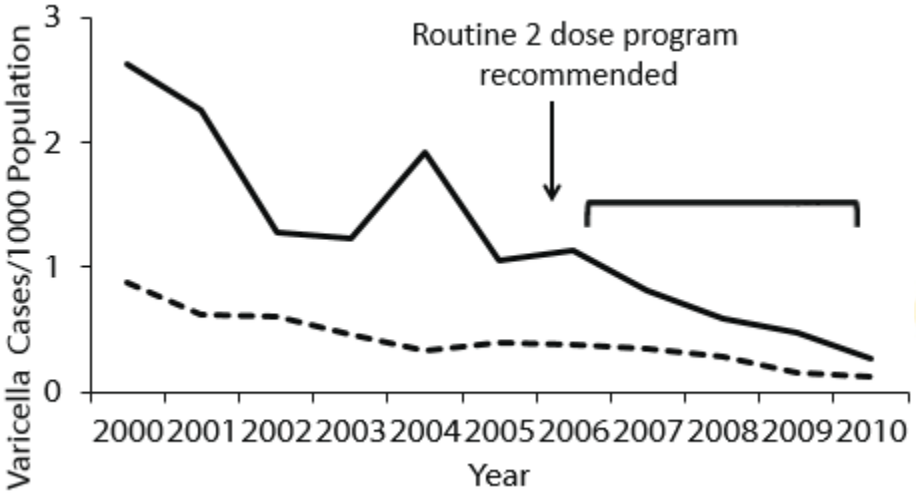
Common Complications

- • Common measles complications include ear infections and diarrhea.
- • Ear infections occur in about one out of every 10 children with measles and can result in permanent hearing loss.
- • Diarrhea is reported in less than one out of 10 people with measles.
- **· Severe Complications**
- Some people may suffer from severe complications, such as pneumonia (infection of the lungs) and encephalitis (swelling of the brain). They may need to be hospitalized and could die.
- As many as one out of every 20 children with measles gets pneumonia, the most common cause of death from measles in young children.
- About one child out of every 1,000 who get measles will develop encephalitis (swelling of the brain) that can lead to convulsions and can leave the child deaf or with intellectual disability.
- For every 1,000 children who get measles, one or two will die from it.
- **· Long-term Complications**
- Subacute sclerosingpanencephalitis(SSPE) is a very rare, but fatal disease of the central nervous system that results from a measles virus infection acquired earlier in life. SSPE generally develops 7 to 10 years after a person has measles, even though the person seems to have fully recovered from the illness. Since measles was eliminated in 2000, SSPE is rarely reported in the United States.
- Among people who contracted measles during the resurgence in the United States in 1989 to 1991, 4 to 11 out of every 100,000 were estimated to be at risk for developing SSPE. The risk of developing SSPE may be higher for a person who gets measles before they are two years of age.

MMR

- **Measles, mumps, and rubella (MMR) vaccine. (minimum age: 12 months for routine vaccination) Routine vaccination:**
  - 2-dose series at 12–15 months and 4–6 years. The 2nd dose may be given as early as 4 weeks after the 1st dose.
- **Catch-up vaccination:**
  - Unvaccinated children and adolescents: 2 doses at least 4 weeks apart.
- **International travel:**
  - Infants 6–11 months: 1 dose before departure. Revaccinate with 2 doses at 12–15 months (12 months for children in high-risk areas) and 2nd dose as early as 4 weeks later.
  - Unvaccinated children 12 months and older: 2 doses at least 4 weeks apart before departure.
- **Mumps outbreak:**
  - Persons ≥12 months who previously received ≤2 doses of mumps-containing vaccine and are identified by public health authorities to be at increased risk during a mumps outbreak should receive a dose of mumps-virus containing vaccine.

Varicella


Routine 2 dose program recommended
Varicella Cases/1000 Population
3
2
1
0
2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010
Year

Varicella

- **Measles, mumps, and rubella (MMR) vaccine. (minimum age: 12 months for routine vaccination) Routine vaccination:**
  - 2-dose series at 12–15 months and 4–6 years. The 2nd dose may be given as early as 4 weeks after the 1st dose.
- **Catch-up vaccination:**
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- **International travel:**
  - Infants 6–11 months: 1 dose before departure. Revaccinate with 2 doses at 12–15 months (12 months for children in high-risk areas) and 2nd dose as early as 4 weeks later.
  - Unvaccinated children 12 months and older: 2 doses at least 4 weeks apart before departure.
- **Mumps outbreak:**
  - Persons ≥12 months who previously received ≤2 doses of mumps-containing vaccine and are identified by public health authorities to be at increased risk during a mumps outbreak should receive a dose of mumps-virus containing vaccine.

Hepatitis A

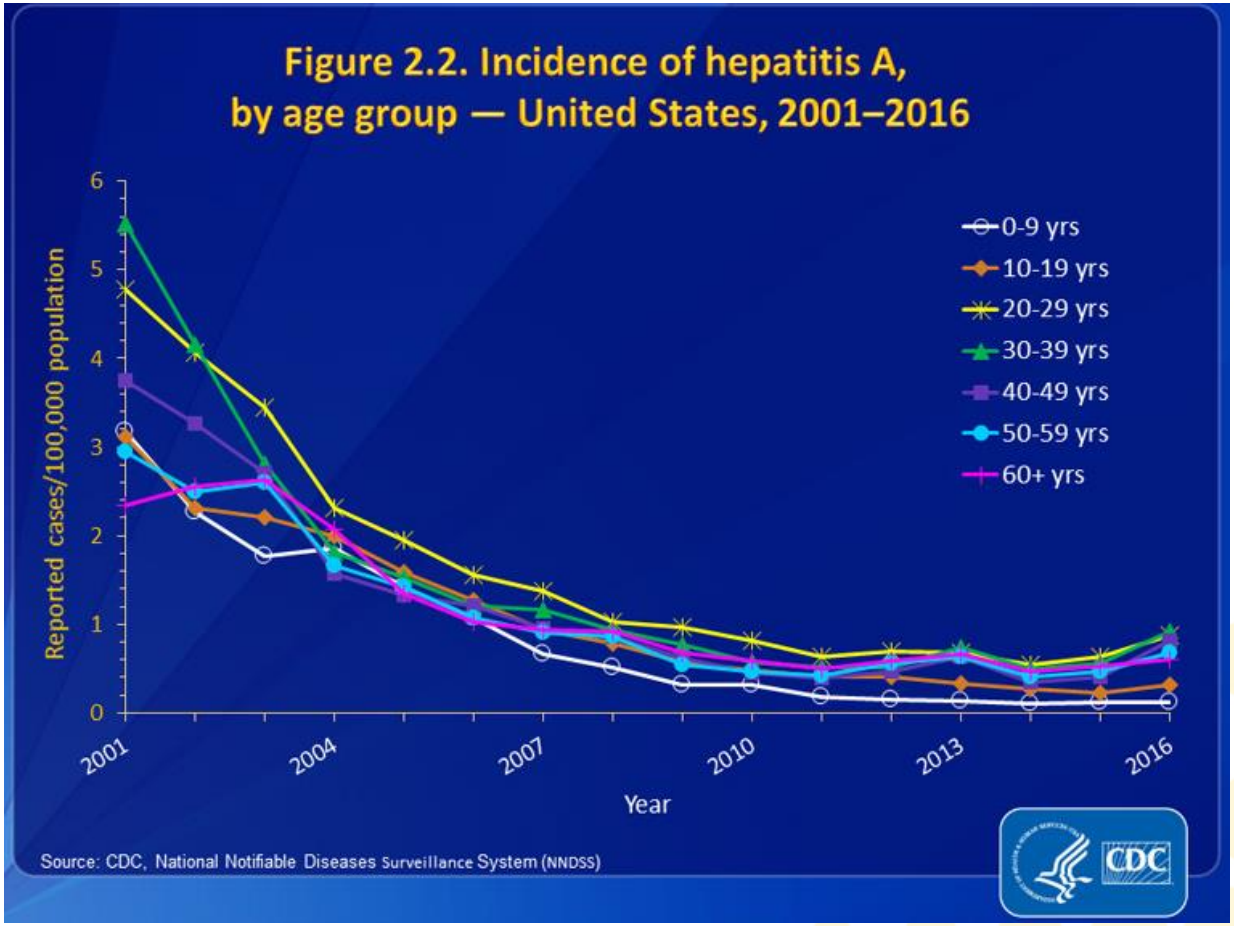
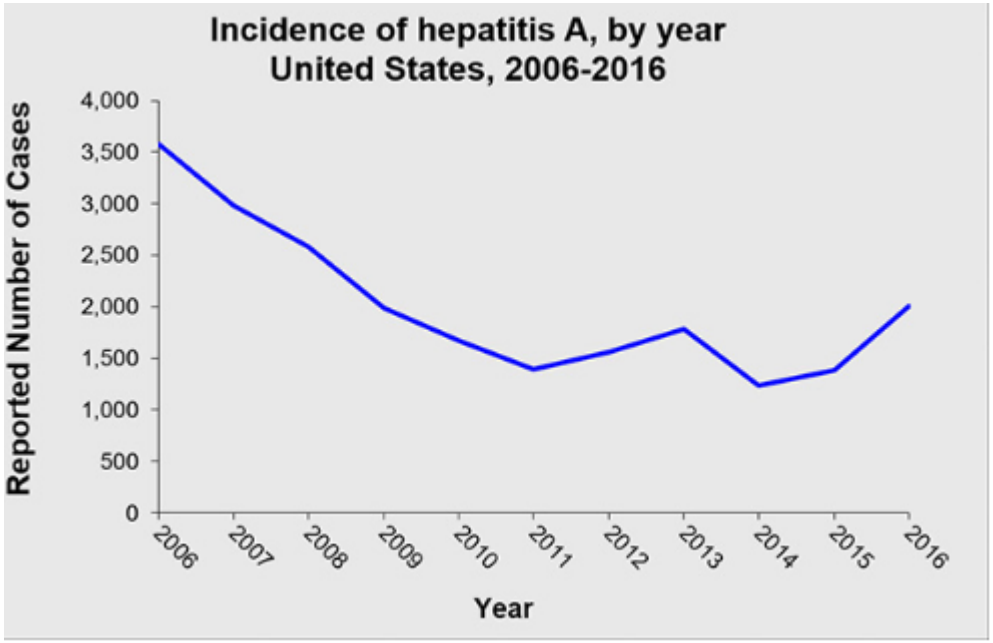


Figure 2.2. Incidence of hepatitis A,
by age group — United States, 2001–2016
Reported cases/100,000 population
0
1
2
3
4
5
6
2001
2004
2007
2010
2013
2016
Year
0-9 yrs
10-19 yrs
20-29 yrs
30-39 yrs
40-49 yrs
50-59 yrs
60+ yrs
Source: CDC, National Notifiable Diseases Surveillance System (NNDSS)
CDC

Incidence of Hepatitis A



Hepatitis A

- **Hepatitis A (HepA) vaccine. (minimum age: 12 months) Routine vaccination:**
  - 2 doses, separated by 6–18 months, between the 1st and 2nd birthdays. (A series begun before the 2nd birthday should be completed even if the child turns 2 before the 2nd dose is given.)
- **Catch-up vaccination:**
  - Anyone 2 years of age or older may receive HepA vaccine if desired. Minimum interval between doses is 6 months.
- **Special populations:**
- Previously unvaccinated persons who should be vaccinated:
  - Persons traveling to or working in countries with high or intermediate HepA endemicity
  - Men who have sex with men
  - Users of injection and non-injection drugs
  - Persons who work with hepatitis A virus in a research laboratory or with non-human primates
  - Persons with clotting-factor disorders
  - Persons with chronic liver disease
  - Persons who anticipate close, personal contact (e.g., household or regular babysitting) with an international adoptee during the first 60 days after arrival in the United States from a country with high or intermediate endemicity (administer the 1st dose as soon as the adoption is planned-ideally at least 2 weeks before the adoptee's arrival)

The difference in:

- **DPT**: Original DTwP – toxoids of "d" and "t" with killed whole cells of "p"
- **DTaP**: Formulated for members less than 7 years of age with acellular "p"
- **Tdap**: "the booster shot" for members over the age of 11. Reduced doses of "d" and "p"
- **Td**: Tetanus booster for adults

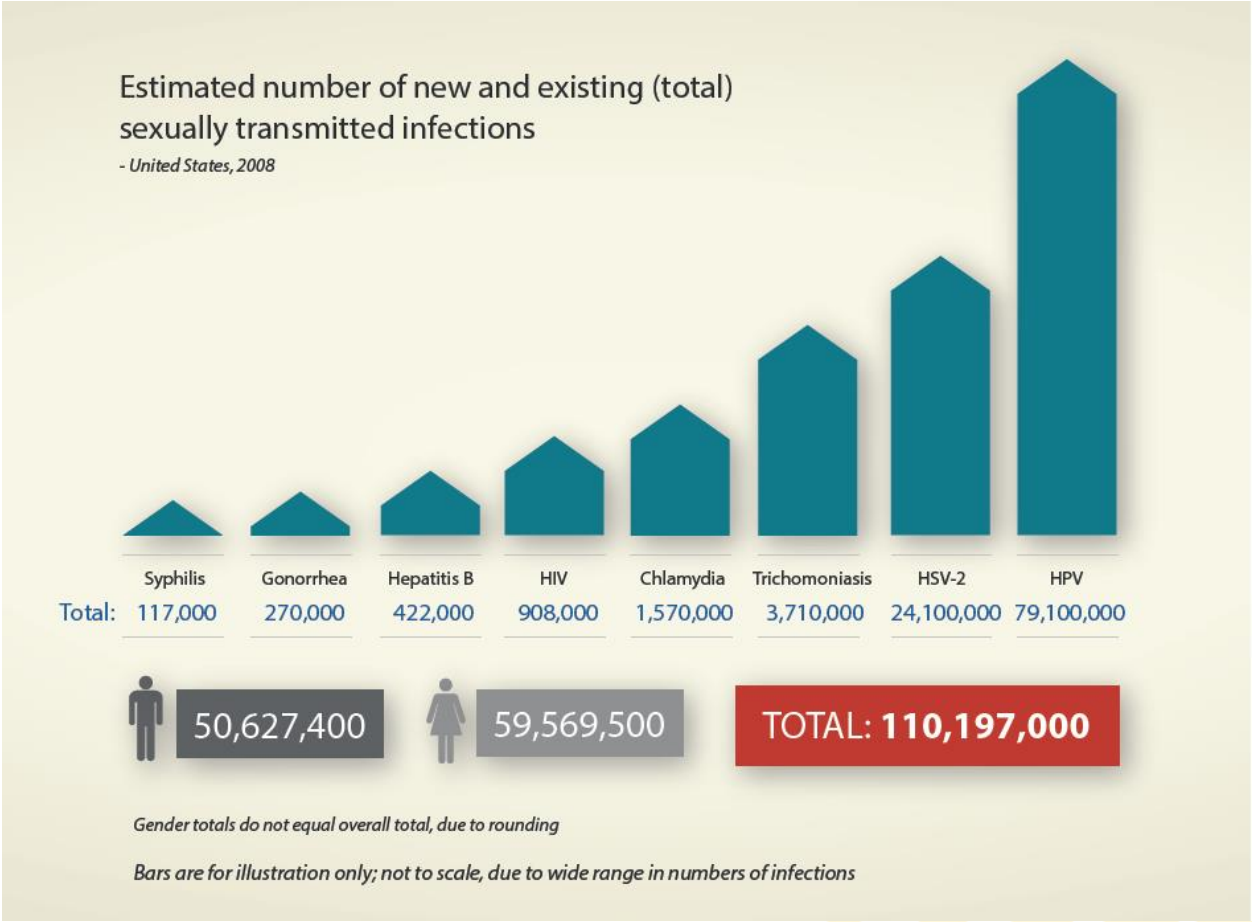
Tdap

- **Tetanus, diphtheria, and acellular pertussis (Tdap) vaccine. (minimum age: 11 years for routine vaccinations, 7 years for catch-up vaccination) Routine vaccination:**
  - **Adolescents 11–12 years of age:** 1 dose.
  - **Pregnant adolescents:** 1 dose during each pregnancy (preferably during the early part of gestational weeks 27–36).
  - Tdap may be administered regardless of the interval since the last tetanus- and diphtheria-toxoid-containing vaccine.
- **Catch-up vaccination:**
  - **Adolescents 13–18 years who have not received Tdap:** 1 dose, followed by a Td booster every 10 years.
  - **Persons aged 7–18 years not fully immunized with DTaP:** 1 dose of Tdap as part of the catch-up series (preferably the first dose). If additional doses are needed, use Td.
  - **Children 7–10 years** who receive Tdap inadvertently or as part of the catch-up series may receive the routine Tdap dose at 11-–12 years.
  - **DTaP inadvertently given after the 7th birthday:**
    - **Children 7–10 years:** DTaP may count as part of catch-up series. Routine Tdap dose at 11–12 may be given.
    - **Adolescents 11–18 years:** Count dose of DTaP as the adolescent Tdap booster

More Information

- https://www.cdc.gov/vaccinesafety/vaccines/dtap-tdap-vaccine.html

HPV


Estimated number of new and existing (total) sexually transmitted infections
- United States, 2008
Syphilis
Gonorrhea
Hepatitis B
HIV
Chlamydia
Trichomoniasis
HSV-2
HPV
Total:
117,000
270,000
422,000
908,000
1,570,000
3,710,000
24,100,000
79,100,000
50,627,400
59,569,500
TOTAL: 110,197,000
Gender totals do not equal overall total, due to rounding
Bars are for illustration only; not to scale, due to wide range in numbers of infections

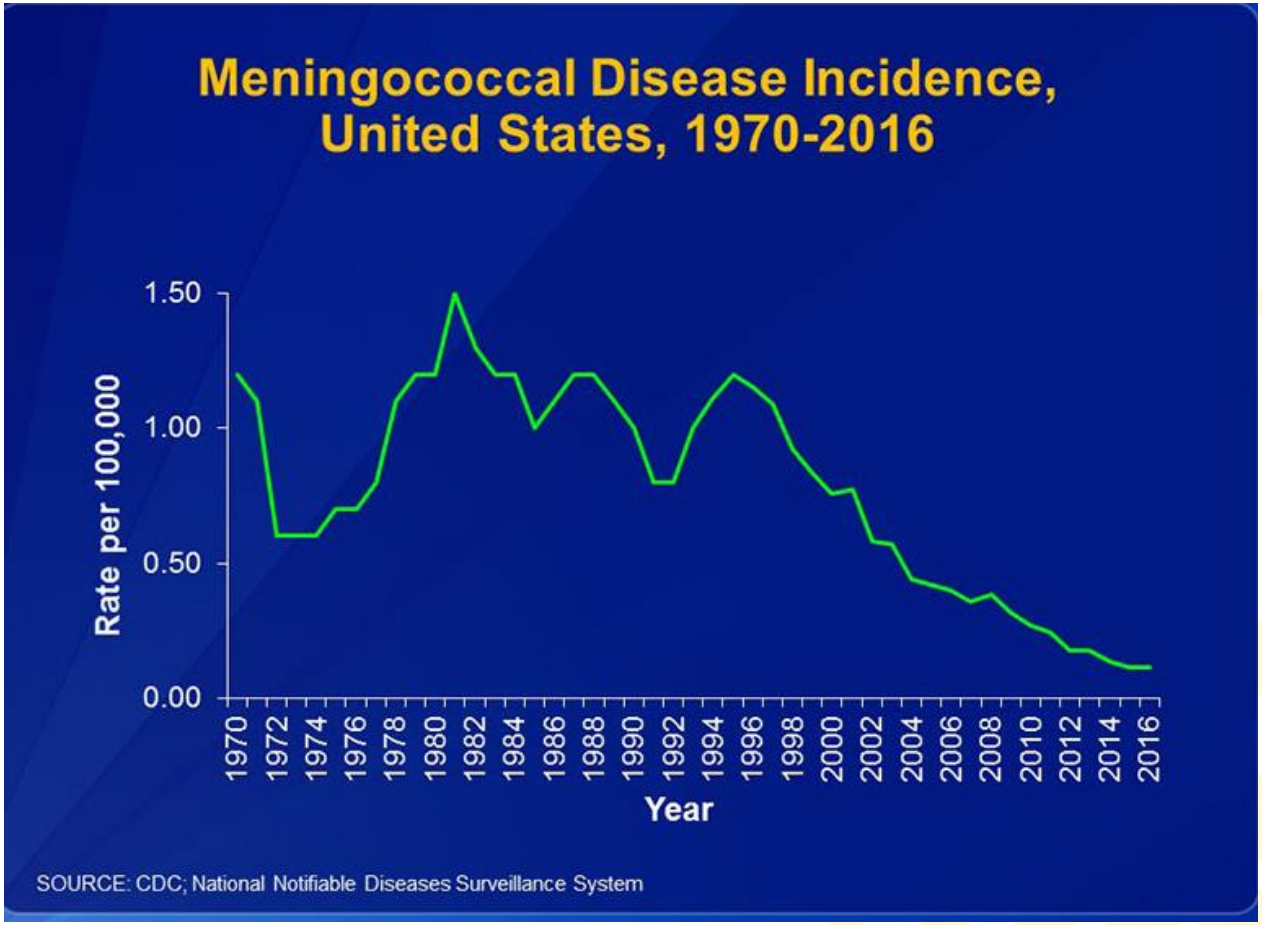
HPV


Estimated number of new sexually transmitted infections
- United States, 2008
Ages 25+
Ages 15-24
8%
20%
45%
70%
13%
63%
49%
Hepatitis B
HIV*
Syphilis
HSV-2
Gonorrhea
Trichomoniasis
Chlamydia
HPV
Total: 19,000
41,400
55,400
776,000
820,000
1,090,000
2,860,000
14,100,000
Young people (15-24) represent 50% of all new STIs
TOTAL: 19,738,800
*HIV incidence not calculated by age in this analysis
Bars are for illustration only; not to scale, due to wide range in numbers of infections

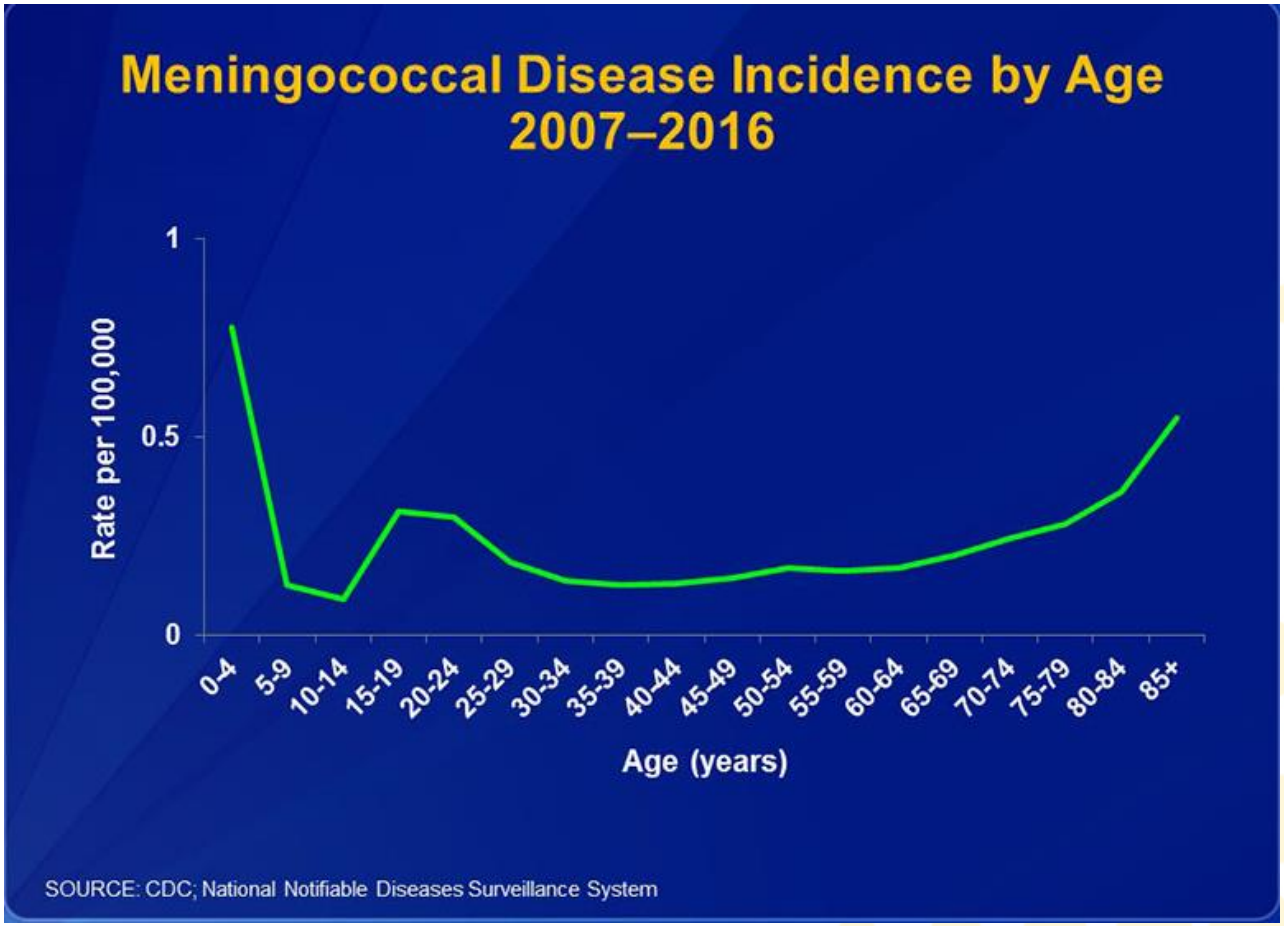
HPV

- **Human papillomavirus (HPV) vaccine (minimum age: 9 years) Routine and catch-up vaccination:**
  - Routine vaccination for all adolescents at 11–12 years (can start at age 9 years) and through age 18 if not previously adequately vaccinated. Number of doses dependent on age at initial vaccination:
    - **Age 9–14 years at initiation:** 2-dose series at 0 and 6–12 months. Minimum interval: 5 months (repeat a dose given too soon at least 12 weeks after the invalid dose and at least 5 months after the 1st dose).
    - **Age 15 years or older at initiation:** 3-dose series at 0, 1–2, and 6 months. Minimum intervals: 4 weeks between 1st and 2nd dose; 12 weeks between 2nd and 3rd dose; 5 months between 1st and 3rd dose (repeat dose(s) given too soon at or after the minimum interval since the most recent dose).
  - Persons who have completed a valid series with any HPV vaccine do not need any additional doses.
- **Special situations:**
  - **History of sexual abuse or assault:** Begin series at age 9 years.
  - **Immunocompromised* (including HIV)** aged 9–26 years: 3-dose series at 0, 1–2, and 6 months.
  - **Pregnancy:** Vaccination not recommended, but there is no evidence the vaccine is harmful. No intervention is needed for women who inadvertently received a dose of HPV vaccine while pregnant. Delay remaining doses until after pregnancy. Pregnancy testing not needed before vaccination

Meningococcal Disease



Meningococcal Disease



Meningococcal A, C, W, Y

- **Serogroup A, C, W, Y meningococcal vaccines. (Minimum age: 2 months [Menveo], 9 months [Menactra]. Routine:**
  - 2-dose series: 11-12 years and 16 years.
- **Catch-up:**
  - Age 13-15 years: 1 dose now and booster at age 16-18 years. Minimum interval 8 weeks.
  - Age 16-18 years: 1 dose

Special Considerations

- **Special populations and situations:**
- **Anatomic or functional asplenia, sickle cell disease, HIV infection, persistent complement component deficiency (including eculizumab use):**
  - **Menveo**
    - 1st dose at 8 weeks: 4-dose series at 2, 4, 6, and 12 months.
    - 1st dose at 7–23 months: 2 doses (2nd dose at least 12 weeks after the 1st dose and after the 1st birthday).
    - 1st dose at 24 months or older: 2 doses at least 8 weeks apart.
  - **Menactra**
    - Persistent complement component deficiency:
      - 9–23 months: 2 doses at least 12 weeks apart.
      - 24 months or older: 2 doses at least 8 weeks apart.
    - Anatomic or functional asplenia, sickle cell disease, or HIV infection:
      - 24 months or older: 2 doses at least 8 weeks apart.
      - **Menactra** must be administered at least 4 weeks after completion of PCV13 series.

Special Considreations

- **Children who travel to or live in countries where meningococcal disease is hyperendemic or epidemic, including countries in the African meningitis belt or during the Hajj, or exposure to an outbreak attributable to a vaccine serogroup:**
  - Children <24 months of age:
    - **Menveo (2-23 months):**
      - 1st dose at 8 weeks: 4-dose series at 2, 4, 6, and 12 months.
      - 1st dose at 7-23 months: 2 doses (2nd dose at least 12 weeks after the 1st dose and after the 1st birthday).
    - **Menactra (9-23 months):**
      - 2 doses (2nd dose at least 12 weeks after the 1st dose. 2nd dose may be administered as early as 8 weeks after the 1st dose in travelers).
  - Children 2 years or older: 1 dose of **Menveo** or **Menactra**.
- **Note: Menactra** should be given either before or at the same time as DTaP. For MenACWY booster dose recommendations for groups listed under "Special populations and situations" above, and additional meningococcal vaccination information, see meningococcal *MMWR* publications at: www.cdc.gov/vaccines/hcp/acip-recs/vacc-specific/mening.html.

Meningococcal B

- **Serogroup B meningococcal vaccines (minimum age: 10 years [Bexsero, Trumenba].Clinical discretion: Adolescents not at increased risk for meningococcal B infection who want MenB vaccine.**MenB vaccines may be given at clinical discretion to adolescents 16–23 years (preferred age 16–18 years) who are not at increased risk.
  - **Bexsero:** 2 doses at least 1 month apart.
  - **Trumenba:** 2 doses at least 6 months apart. If the 2nd dose is given earlier than 6 months, give a 3rd dose at least 4 months after the 2nd.
- **Special populations and situations:**
- **Anatomic or functional asplenia, sickle cell disease, persistent complement component deficiency (including eculizumab use), serogroup B meningococcal disease outbreak:**
  - **Bexsero:** 2-dose series at least 1 month apart.
  - **Trumenba:** 3-dose series at 0, 1-2, and 6 months.
- **Note: Bexsero and Trumenba** are not interchangeable.

More Information

- TAPI https://www.whyimmunize.org/why-immunize/
- CHoP: https://www.whyimmunize.org/vaccine-safety/
- Vaccine Education Center: http://www.chop.edu/centers-programs/vaccine-education-center

Arizona Immunization Program

ARS and ADHS

Arizona Statutory Requirements

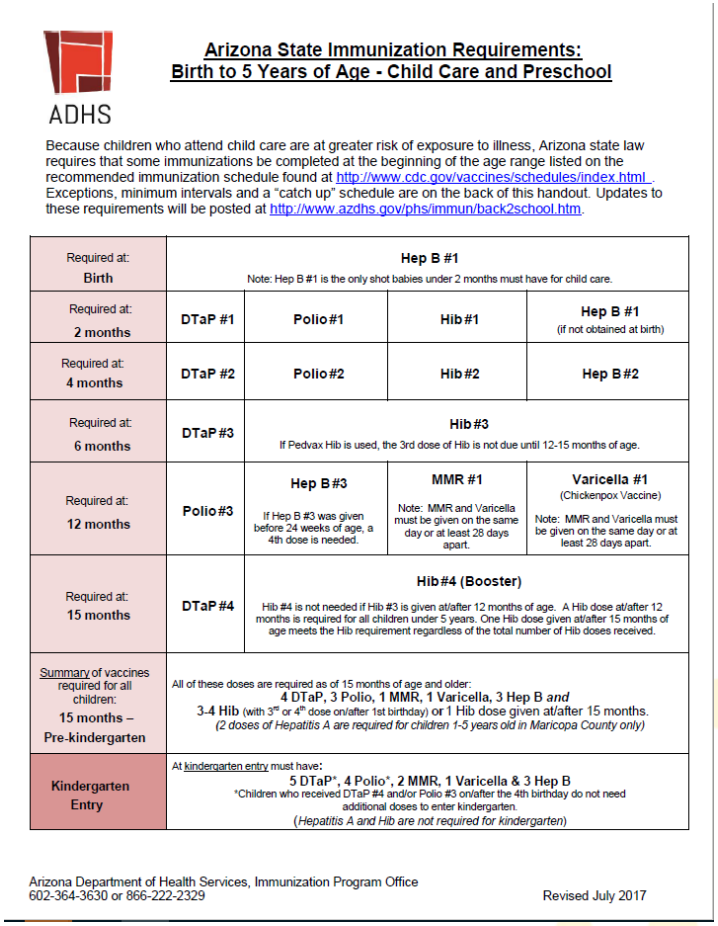
- A.R.S. §15-871 through §15-874
- A.A.C. Title 9, Article 7
- Arizona Department of Education regulations
- Bureau of Child Care Licensure (ADHS)

ADHS Arizona Immunization Program

- https://azdhs.gov/preparedness/epidemiology-disease-control/immunization/index.php#schools-immunization-forms
- https://azdhs.gov/preparedness/epidemiology-disease-control/immunization/index.php#vaccines-children-guide
- https://azdhs.gov/documents/preparedness/epidemiology-disease-control/immunization/vaccines-for-children/exhibits/operations-guide.pdf

Let's Go To The ADHS Website

Child Care and Preschool



ADHS

Arizona State Immunization Requirements:
Birth to 5 Years of Age - Child Care and Preschool

Because children who attend child care are at greater risk of exposure to illness, Arizona state law requires that some immunizations be completed at the beginning of the age range listed on the recommended immunization schedule found at http://www.cdc.gov/vaccines/schedules/index.html . Exceptions, minimum intervals and a "catch up" schedule are on the back of this handout. Updates to these requirements will be posted at http://www.azdhs.gov/phs/immun/back2school.htm.

Required at: **Birth**	**Hep B #1** Note: Hep B #1 is the only shot babies under 2 months must have for child care.			
Required at: **2 months**	**DTaP #1**	**Polio #1**	**Hib #1**	**Hep B #1** (if not obtained at birth)
Required at: **4 months**	**DTaP #2**	**Polio #2**	**Hib #2**	**Hep B #2**
Required at: **6 months**	**DTaP #3**	**Hib #3** If Pedvax Hib is used, the 3rd dose of Hib is not due until 12-15 months of age.		
Required at: **12 months**	**Polio #3**	**Hep B #3** If Hep B #3 was given before 24 weeks of age, a 4th dose is needed.	**MMR #1** Note: MMR and Varicella must be given on the same day or at least 28 days apart.	**Varicella #1** (Chickenpox Vaccine) Note: MMR and Varicella must be given on the same day or at least 28 days apart.
Required at: **15 months**	**DTaP #4**	**Hib #4 (Booster)** Hib #4 is not needed if Hib #3 is given at/after 12 months of age. A Hib dose at/after 12 months is required for all children under 5 years. One Hib dose given at/after 15 months of age meets the Hib requirement regardless of the total number of Hib doses received.		
Summary of vaccines required for all children: **15 months – Pre-kindergarten**	All of these doses are required as of 15 months of age and older: **4 DTaP, 3 Polio, 1 MMR, 1 Varicella, 3 Hep B *and*** **3-4 Hib** (with 3rd or 4th dose on/after 1st birthday) **or** 1 Hib dose given at/after 15 months. *(2 doses of Hepatitis A are required for children 1-5 years old in Maricopa County only)*			
Kindergarten Entry	At kindergarten entry must have: **5 DTaP*, 4 Polio*, 2 MMR, 1 Varicella & 3 Hep B** *Children who received DTaP #4 and/or Polio #3 on/after the 4th birthday do not need additional doses to enter kindergarten. (*Hepatitis A and Hib are not required for kindergarten*)			

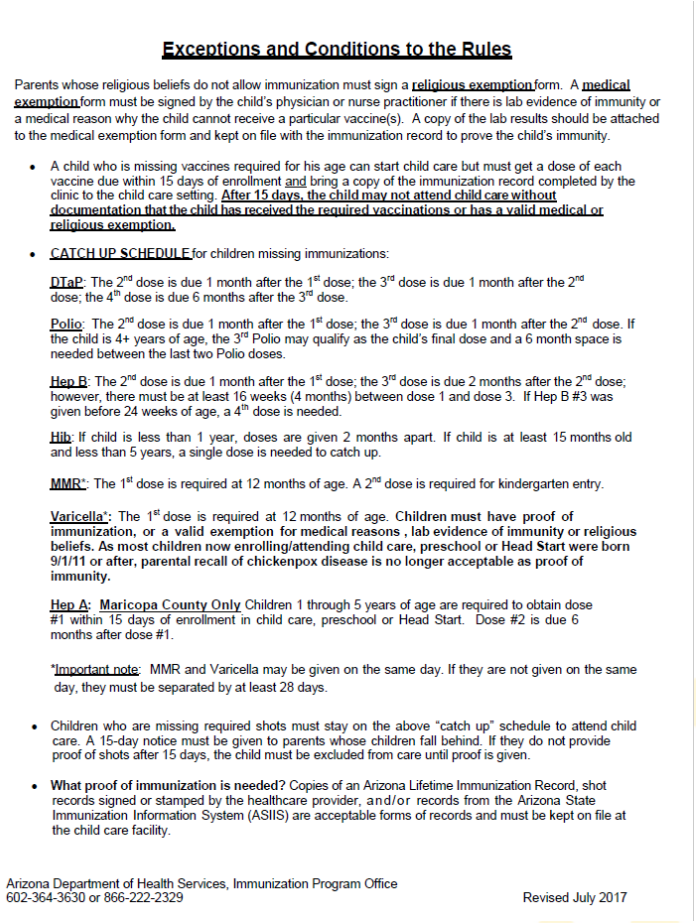
Arizona Department of Health Services, Immunization Program Office
602-364-3630 or 866-222-2329

Revised July 2017

AHCCCS
Arizona Health Care Cost Containment System

Reaching across Arizona to provide comprehensive quality health care for those in need

Child Care and Preschool



Exceptions and Conditions to the Rules

Parents whose religious beliefs do not allow immunization must sign a **religious exemption** form. A **medical exemption** form must be signed by the child's physician or nurse practitioner if there is lab evidence of immunity or a medical reason why the child cannot receive a particular vaccine(s). A copy of the lab results should be attached to the medical exemption form and kept on file with the immunization record to prove the child's immunity.

- A child who is missing vaccines required for his age can start child care but must get a dose of each vaccine due within 15 days of enrollment and bring a copy of the immunization record completed by the clinic to the child care setting. **After 15 days, the child may not attend child care without documentation that the child has received the required vaccinations or has a valid medical or religious exemption.**
- **CATCH UP SCHEDULE** for children missing immunizations:

  DTaP: The 2nd dose is due 1 month after the 1st dose; the 3rd dose is due 1 month after the 2nd dose; the 4th dose is due 6 months after the 3rd dose.

  Polio: The 2nd dose is due 1 month after the 1st dose; the 3rd dose is due 1 month after the 2nd dose. If the child is 4+ years of age, the 3rd Polio may qualify as the child's final dose and a 6 month space is needed between the last two Polio doses.

  Hep B: The 2nd dose is due 1 month after the 1st dose; the 3rd dose is due 2 months after the 2nd dose; however, there must be at least 16 weeks (4 months) between dose 1 and dose 3. If Hep B #3 was given before 24 weeks of age, a 4th dose is needed.

  Hib: If child is less than 1 year, doses are given 2 months apart. If child is at least 15 months old and less than 5 years, a single dose is needed to catch up.

  MMR*: The 1st dose is required at 12 months of age. A 2nd dose is required for kindergarten entry.

  Varicella*: The 1st dose is required at 12 months of age. **Children must have proof of immunization, or a valid exemption for medical reasons , lab evidence of immunity or religious beliefs. As most children now enrolling/attending child care, preschool or Head Start were born 9/1/11 or after, parental recall of chickenpox disease is no longer acceptable as proof of immunity.**

  Hep A: Maricopa County Only Children 1 through 5 years of age are required to obtain dose #1 within 15 days of enrollment in child care, preschool or Head Start. Dose #2 is due 6 months after dose #1.

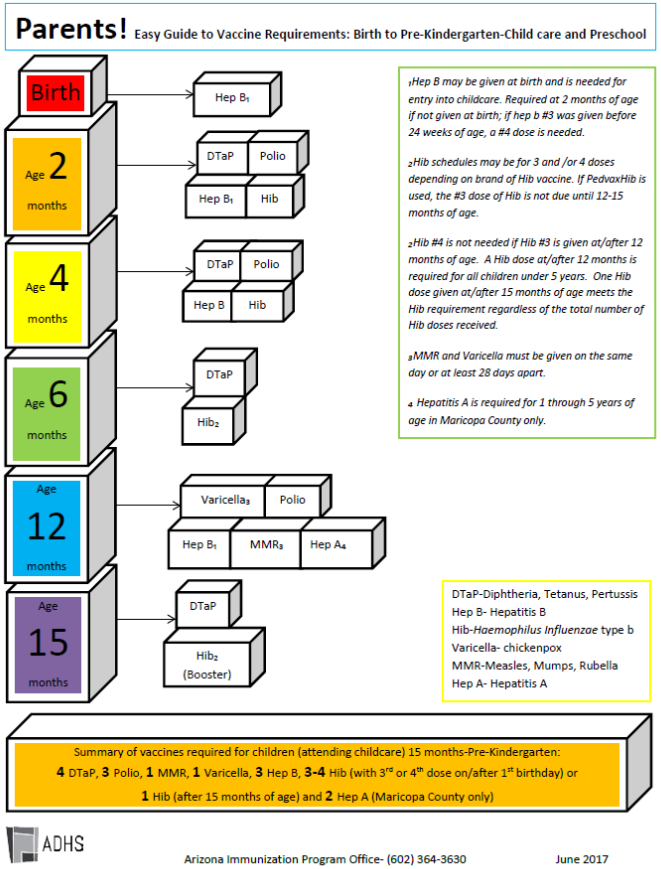
  *Important note: MMR and Varicella may be given on the same day. If they are not given on the same day, they must be separated by at least 28 days.

- Children who are missing required shots must stay on the above "catch up" schedule to attend child care. A 15-day notice must be given to parents whose children fall behind. If they do not provide proof of shots after 15 days, the child must be excluded from care until proof is given.
- **What proof of immunization is needed?** Copies of an Arizona Lifetime Immunization Record, shot records signed or stamped by the healthcare provider, and/or records from the Arizona State Immunization Information System (ASIIS) are acceptable forms of records and must be kept on file at the child care facility.

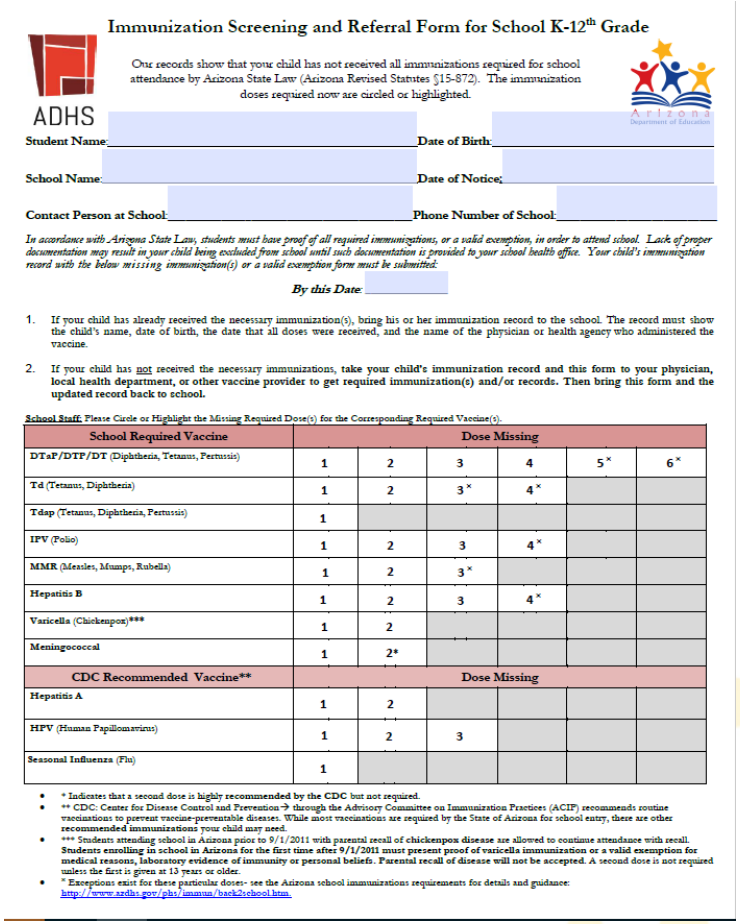
Arizona Department of Health Services, Immunization Program Office
602-364-3630 or 866-222-2329

Revised July 2017

Guide for Birth to 15 Months



School Referral Form



Immunization Screening and Referral Form for School K-12th Grade

ADHS

Our records show that your child has not received all immunizations required for school attendance by Arizona State Law (Arizona Revised Statutes §15-872). The immunization doses required now are circled or highlighted.

Arizona Department of Education

Student Name: _____ **Date of Birth:** _____

School Name: _____ **Date of Notice:** _____

Contact Person at School: _____ **Phone Number of School:** _____

In accordance with Arizona State Law, students must have proof of all required immunizations, or a valid exemption, in order to attend school. Lack of proper documentation may result in your child being excluded from school until such documentation is provided to your school health office. Your child's immunization record with the below missing immunization(s) or a valid exemption form must be submitted:

By this Date: _____

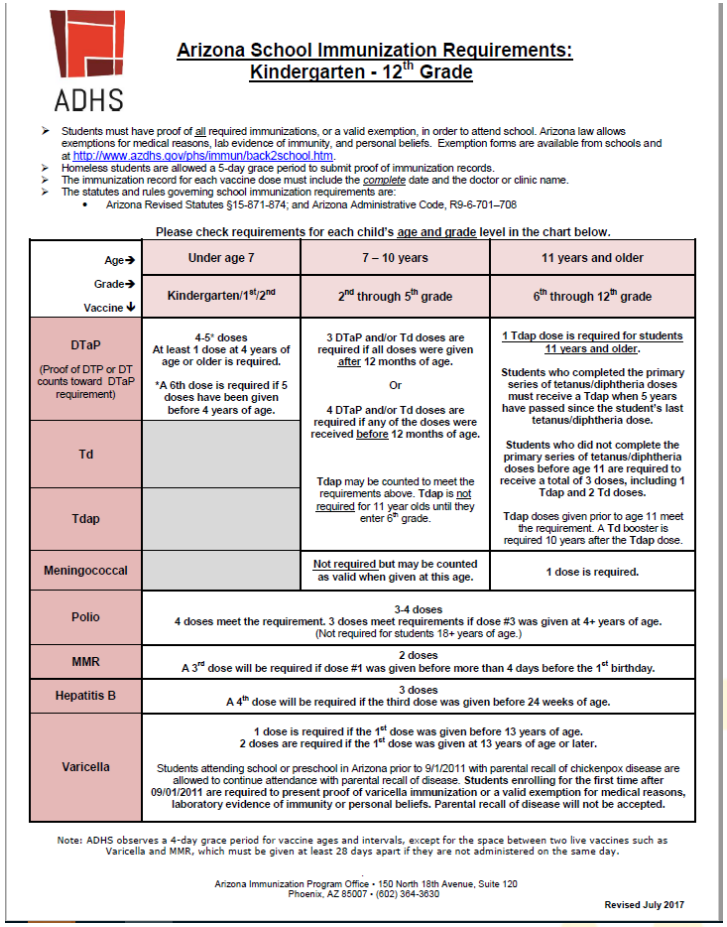
1. If your child has already received the necessary immunization(s), bring his or her immunization record to the school. The record must show the child's name, date of birth, the date that all doses were received, and the name of the physician or health agency who administered the vaccine.
2. If your child has not received the necessary immunizations, **take your child's immunization record and this form to your physician, local health department, or other vaccine provider to get required immunization(s) and/or records. Then bring this form and the updated record back to school.**

School Staff: Please Circle or Highlight the Missing Required Dose(s) for the Corresponding Required Vaccine(s).

School Required Vaccine	Dose Missing					
DTaP/DTP/DT (Diphtheria, Tetanus, Pertussis)	1	2	3	4	5^	6^
Td (Tetanus, Diphtheria)	1	2	3^	4^		
Tdap (Tetanus, Diphtheria, Pertussis)	1					
IPV (Polio)	1	2	3	4^		
MMR (Measles, Mumps, Rubella)	1	2	3^			
Hepatitis B	1	2	3	4^		
Varicella (Chickenpox)***	1	2				
Meningococcal	1	2*				
CDC Recommended Vaccine**	**Dose Missing**					
Hepatitis A	1	2				
HPV (Human Papillomavirus)	1	2	3			
Seasonal Influenza (Flu)	1					

- * Indicates that a second dose is highly recommended by the CDC but not required.
- ** CDC: Center for Disease Control and Prevention → through the Advisory Committee on Immunization Practices (ACIP) recommends routine vaccinations to prevent vaccine-preventable diseases. While most vaccinations are required by the State of Arizona for school entry, these are other recommended immunizations your child may need.
- *** Students attending school in Arizona prior to 9/1/2011 with parental recall of chickenpox disease are allowed to continue attendance with recall. Students enrolling in school in Arizona for the first time after 9/1/2011 must present proof of varicella immunization or a valid exemption for medical reasons, laboratory evidence of immunity or personal beliefs. Parental recall of disease will not be accepted. A second dose is not required unless the first is given at 13 years or older.
- ^ Exceptions exist for these particular doses- see the Arizona school immunizations requirements for details and guidance: http://www.azdhs.gov/phs/immun/back2school.htm.

K – 12 Requirements



ADHS

Arizona School Immunization Requirements: Kindergarten - 12th Grade

- Students must have proof of all required immunizations, or a valid exemption, in order to attend school. Arizona law allows exemptions for medical reasons, lab evidence of immunity, and personal beliefs. Exemption forms are available from schools and at http://www.azdhs.gov/phs/immun/back2school.htm.
- Homeless students are allowed a 5-day grace period to submit proof of immunization records.
- The immunization record for each vaccine dose must include the *complete* date and the doctor or clinic name.
- The statutes and rules governing school immunization requirements are:
  - Arizona Revised Statutes §15-871-874; and Arizona Administrative Code, R9-6-701–708

Please check requirements for each child's age and grade level in the chart below.

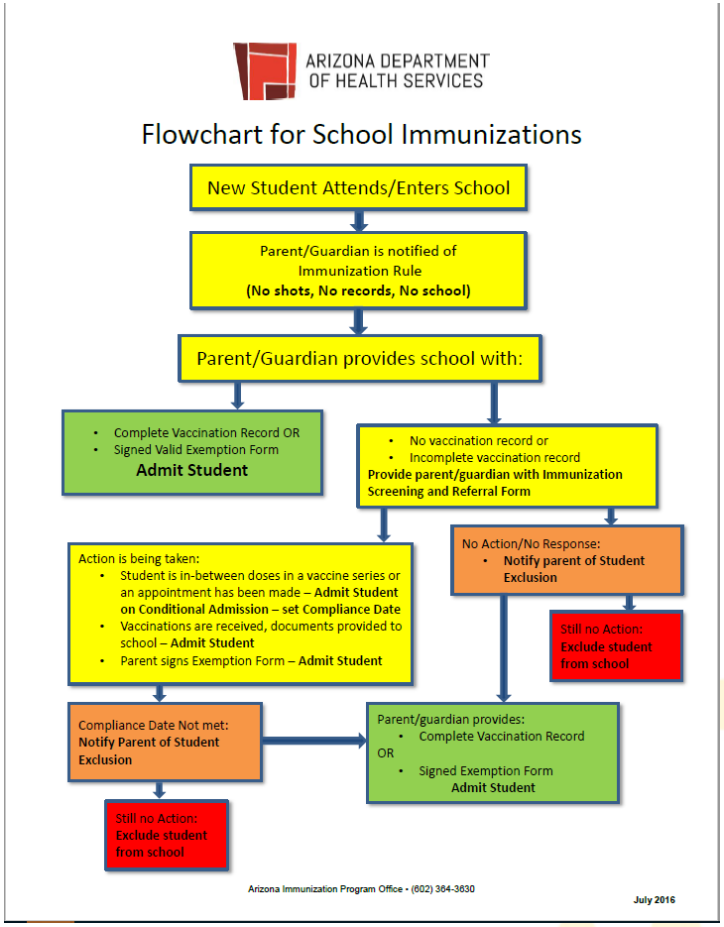
Age→ / Grade→ / Vaccine ↓	Under age 7 Kindergarten/1st/2nd	7 – 10 years 2nd through 5th grade	11 years and older 6th through 12th grade
DTaP (Proof of DTP or DT counts toward DTaP requirement)	4-5* doses At least 1 dose at 4 years of age or older is required. *A 6th dose is required if 5 doses have been given before 4 years of age.	3 DTaP and/or Td doses are required if all doses were given after 12 months of age. Or 4 DTaP and/or Td doses are required if any of the doses were received before 12 months of age. Tdap may be counted to meet the requirements above. Tdap is not required for 11 year olds until they enter 6th grade.	1 Tdap dose is required for students 11 years and older. Students who completed the primary series of tetanus/diphtheria doses must receive a Tdap when 5 years have passed since the student's last tetanus/diphtheria dose. Students who did not complete the primary series of tetanus/diphtheria doses before age 11 are required to receive a total of 3 doses, including 1 Tdap and 2 Td doses. Tdap doses given prior to age 11 meet the requirement. A Td booster is required 10 years after the Tdap dose.
Td			
Tdap			
Meningococcal		Not required but may be counted as valid when given at this age.	1 dose is required.
Polio	3-4 doses 4 doses meet the requirement. 3 doses meet requirements if dose #3 was given at 4+ years of age. (Not required for students 18+ years of age.)		
MMR	2 doses A 3rd dose will be required if dose #1 was given before more than 4 days before the 1st birthday.		
Hepatitis B	3 doses A 4th dose will be required if the third dose was given before 24 weeks of age.		
Varicella	1 dose is required if the 1st dose was given before 13 years of age. 2 doses are required if the 1st dose was given at 13 years of age or later. Students attending school or preschool in Arizona prior to 9/1/2011 with parental recall of chickenpox disease are allowed to continue attendance with parental recall of disease. Students enrolling for the first time after 09/01/2011 are required to present proof of varicella immunization or a valid exemption for medical reasons, laboratory evidence of immunity or personal beliefs. Parental recall of disease will not be accepted.		

Note: ADHS observes a 4-day grace period for vaccine ages and intervals, except for the space between two live vaccines such as Varicella and MMR, which must be given at least 28 days apart if they are not administered on the same day.

Arizona Immunization Program Office • 150 North 18th Avenue, Suite 120
Phoenix, AZ 85007 • (602) 364-3630

Revised July 2017

Work Flow for School Immunizations



ADHS Annual Arizona Immunization Conference May 2018

- https://www.azdhs.gov/preparedness/epidemiology-disease-control/immunization/index.php#annual-conference

EPSDT Tracking Forms

- Example at 2 months:

IMMUNIZATIONS ORDERED:	☐ HepB ☐ DTaP ☐ Hib ☐ IPV ☐ PCV ☐ Rotavirus ☐ Other _____ ☐ Given at Today's Visit ☐ Parent Refused ☐ Delayed ☐ Deferred *Reason*: _____ ☐ Shot Record Updated ☐ Entered in ASIIS ☐ Importance of Immunizations Discussed ☐ Parent Refusal Form Completed

Questions?

Thank You.