

Immunization Update

Division of Immunization Services

Jeff Neccuzi
2022 Immunization Summit
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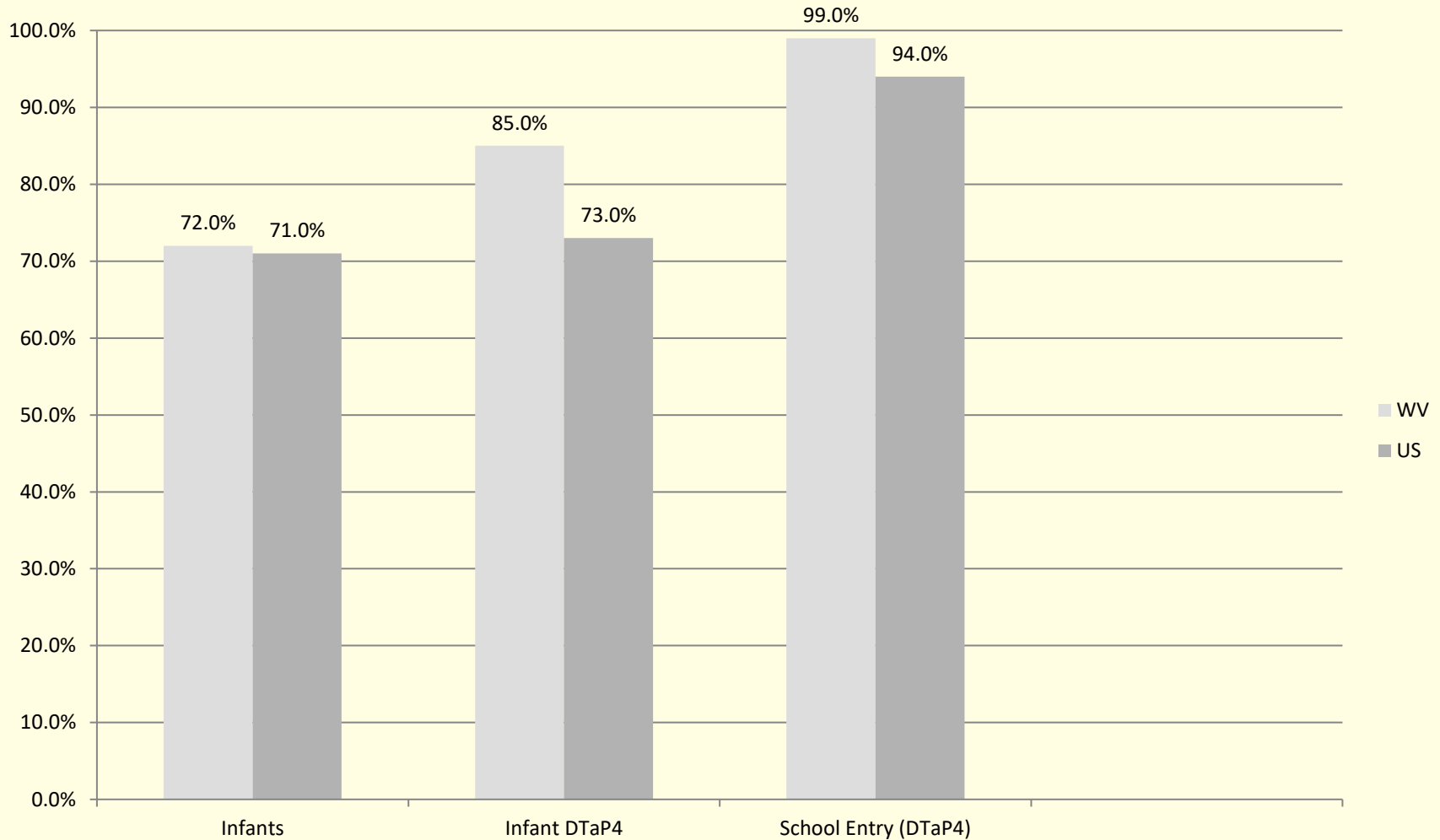


“Disease Is Bad, Vaccines Are Good”

**Dr. Alan Hinman, senior public health scientist at the Taskforce for Child
Survival and Development, Emory University**

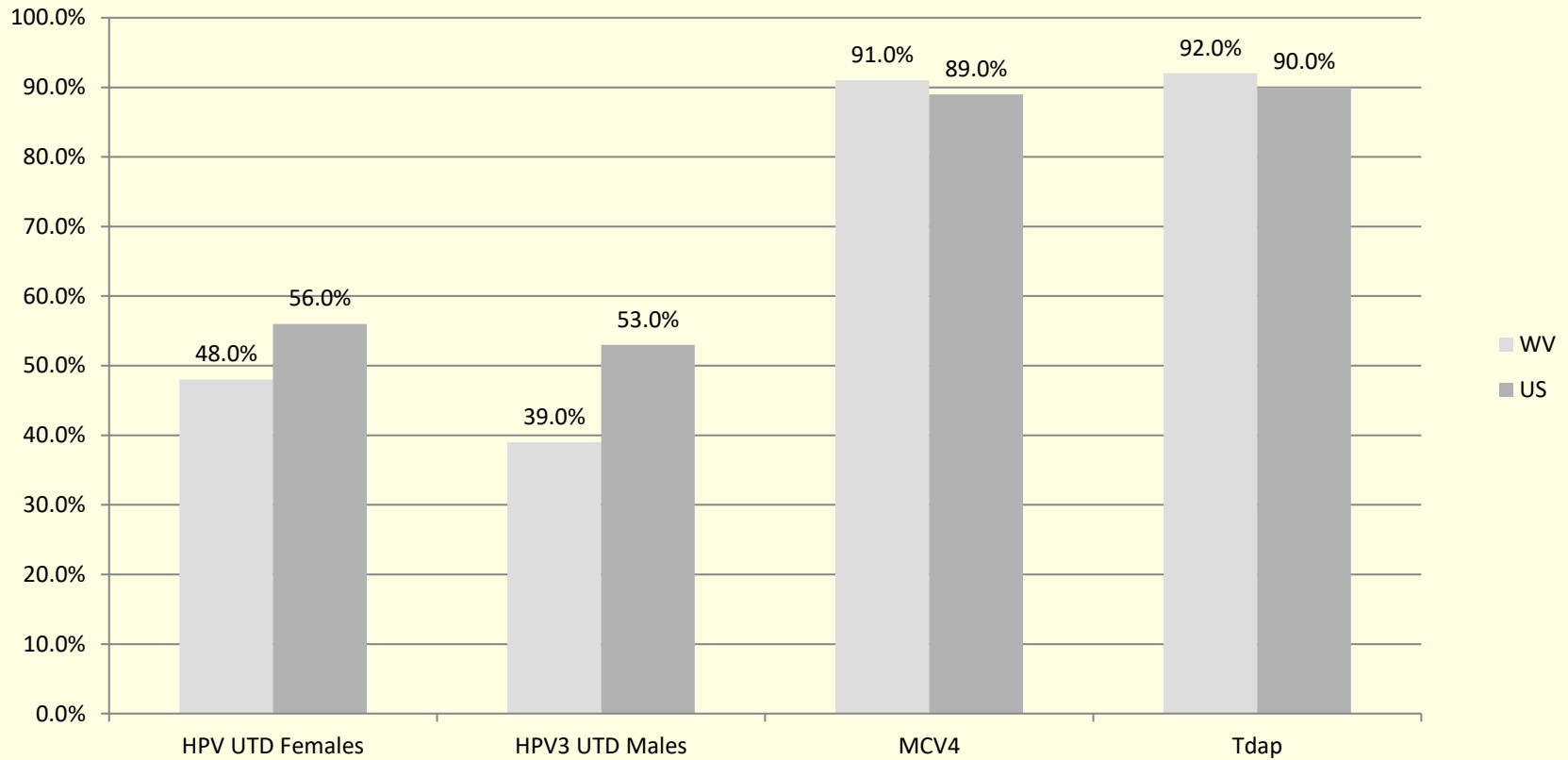
Childhood Vaccination Coverage

National Immunization Survey Data



Teen Vaccination Coverage

National Immunization Survey Data



K-12 Vaccination Requirements

West Virginia Immunization Requirements for New School Enterers

State law and rules¹ require that all children entering school in West Virginia for the first time in grades K-12 must show proof of immunization against diphtheria, pertussis, tetanus, polio, measles, mumps, rubella, varicella, and hepatitis B unless properly medically exempted². The table below outlines immunization requirements as most commonly met.³ The West Virginia Bureau for Public Health recommends that vaccine doses administered 4 days or fewer before the minimum interval or age should be considered valid.

Vaccine	Requirements	Provisional Enrollment	Additional Information
DTaP/DTP Td/Tdap	Before admission, four doses required. One dose must be after the 4 th birthday.	After one dose, student may be allowed up 8 months to complete the series if necessitated by the minimum intervals of the vaccine schedule.	<ul style="list-style-type: none"> • Three doses only for children completing primary series at age 7 years and older. • Children exempted from the pertussis component of DTaP vaccine should receive DT vaccine instead, or if past 7th birthday, Td / Tdap vaccine, as applicable.
Polio (IPV)	Before admission, three doses required. One dose must be after the 4 th birthday.	After one dose, student may be allowed up 7 months to complete the series if necessitated by the minimum intervals of the vaccine schedule.	<ul style="list-style-type: none"> • If polio immunization series included both OPV and IPV, then a total 3 of 4 doses are required depending upon the age of the child.
Measles, Mumps & Rubella (MMR)	Before admission, two doses required. First dose must be after the 1 st birthday.	After one dose, student may be allowed up to 30 days to complete the series.	<ul style="list-style-type: none"> • Doses should be a minimum of 28 days apart.
Varicella	Before admission, two doses required. First dose must be after the 1 st birthday.	After one dose, children less than 13 years of age may be allowed up to 80 days to obtain 2 nd dose; children aged 13 years and older may be allowed up to 30 days to obtain the 2 nd dose.	<ul style="list-style-type: none"> • Children less than 13 years of age are recommended to have an interval of 12 weeks between the 1st and 2nd doses, however, an interval of at least 4 weeks is acceptable. • Children aged 13 years and older may receive the 2nd dose 28 days after the first dose. • Immunity may also be demonstrated through the legal guardian's written or verbal attestation of varicella (chickenpox) disease.
Hepatitis B	Before admission, three doses required. Last dose must be after the age of 6 months.	After one dose, student may be allowed up to 4 months to complete the series if necessitated by the minimum intervals of the vaccine schedule.	<ul style="list-style-type: none"> • Final dose is not valid if administered before 24 weeks / 6 months of age.

¹ See WV Code §16-3-4 and 64CSR95 for further information.

² Medical exemptions must be requested by a physician who has treated or examined the child and be reviewed and submitted to the Immunization Officer of the Bureau for Public Health. Requests for exemptions must be based on current standards of immunization practice and include the following information: the vaccine(s) being exempted, the specific medical reason for the exemption, whether the exemption is temporary or permanent, and, if temporary, when the exemption should be reevaluated. West Virginia State Law does not allow for non-medical exemptions to immunization requirements.

³ Occasionally, based on product used or the age at which a child is being immunized, deviations from these requirements may be acceptable. Any deviation must be consistent with applicable, age appropriate immunization schedules found at <http://www.cdc.gov> and searching under "Immunization Schedules".

Vaccine Requirements for Grades 7 and 12

7th Grade School Entry Requirement

Vaccine	Requirement	Provisional Enrollment
Tdap (tetanus, diphtheria, acellular pertussis)	Proof of booster dose of Tdap vaccine.	No provisional enrollment permitted.
MCV4 (meningococcal/meningitis)	Proof of 1 st dose of MCV4 vaccine.	No provisional enrollment permitted.

12th Grade School Entry Requirement

Vaccine	Requirement	Provisional Enrollment
Tdap (tetanus, diphtheria, acellular pertussis)	Proof of booster dose of Tdap vaccine.	No provisional enrollment permitted.
MCV4 (meningococcal)	One or two doses required. One dose of MCV4 is required if received <u>after</u> the 16 th birthday. Second dose is required if first dose was before 16 th birthday.	No provisional enrollment permitted.

Tdap and MCV4 Vaccinations

- 7th grade enterers must have one dose of Tdap
- Only one dose of Tdap is recommended for students; 12th grade enterers are not required to have a 2nd Tdap
- Additional doses of Tdap recommended only for pregnant females during each pregnancy
- One dose of MCV4 is required for 7th grade enterers
- An additional (booster) dose of MCV4 vaccine is required for 12th grade entry if the first dose was before 16th birthday

> Adolescent Vaccinations

- Human Papillomavirus (HPV)
- Meningococcal B (Men B)

> Infant and Toddler Vaccinations

- Pneumococcal (PCV13)
- Haemophilus Influenza Type B (Hib)
- Hepatitis A
- Rotavirus

Human Papillomavirus (HPV)

- Each year in the United States, about 46,143 new cases of cancer are found in parts of the body where human papillomavirus (HPV) is often found. HPV causes about 36,500 of these cancers.
- Cervical cancer is still responsible for more than 4,000 deaths per year in the U.S.
- Majority of HPV cancers are oropharyngeal and cervical
- Oropharyngeal cancers disproportionately affect males
- Males need HPV vaccine, too

HPV-Associated Cancer Cases Per Year

Cancer site	Average number of cancers per year in sites where HPV is often found (HPV-associated cancers)	Percentage probably caused by any HPV type ^a	Estimated number probably caused by any HPV type ^a
Cervix	12,200	91%	11,100
Vagina	863	75%	600
Vulva	4,191	69%	2,900
Penis	1,365	63%	900
Anus	7,288	91%	6,600
Female	4,909	93%	4,500
Male	2,379	89%	2,100
Oropharynx	20,236	70%	14,400
Female	3,556	63%	2,300
Male	16,680	72%	12,100
TOTAL	46,143	79%	36,500
Female	25,719	83%	21,400
Male	20,424	74%	15,100

HPV VACCINE RECOMMENDATION

- HPV vaccination requires only two doses now instead of three for children who start the series on time
- The 2nd dose of HPV for males and females 9-14 years of age is recommended 6-12 months after 1st dose
- People who start the series at 9-14 years of age need only one additional dose if they are 15 years or older when getting the 2nd dose
- If the 2nd dose is inadvertently administered at less than 5 months from the 1st dose, proceed with a 3 dose schedule
- Males and females 15-26 years of age still recommended to receive a 3 dose series on 0, 2, 6 month schedule

Meningococcal B (Men B)

- Even when treated, invasive meningococcal disease fatality rate is 10%-15%
- Up to 20% of survivors will suffer disabilities such as hearing loss, brain damage, amputations, nervous system problems, or severe scars from skin grafts
- Meningococcal B vaccine also recommended for administration to non-high-risk groups subject to individual clinical decision making for persons 16-23 years of age (16-18 years of age preferred)
- Persons with weakened immune systems and adolescents and young adults 16 through 23 years old are among those at increased risk from Men B disease

Meningococcal B (Men B)

- Men B vaccine is a two dose series
Bexsero: 2 doses, 1 month apart
Trumenba: 2 doses, 6 months apart
(3 doses for special populations)
- Men B recommendation is a “class B” recommendation of the Advisory Committee on Immunization Practices
- Class B vaccinations are provided by the VFC Program and must be covered by insurance under the Affordable Care Act*

* Immunization Action Coalition

Incidence of Meningococcal Disease Before and After Implementation of Quadrivalent Meningococcal Conjugate Vaccine in the United States

Objective: To describe the association between MenACWY vaccination and the incidence of meningococcal disease in US adolescents.

Conclusions and Relevance: After introduction of a primary and booster MenACWY dose, the rates of decline in incidence of meningococcal disease due to serogroup C, W, or Y accelerated nearly 2-fold to 3-fold in vaccinated adolescent age groups. Although the MenACWY vaccine alone cannot explain the decline of meningococcal disease in the United States, these data suggest that MenACWY vaccination is associated with reduced disease rates in adolescents.

Source: <https://jamanetwork.com/journals/jamapediatrics/fullarticle/2768552>

Vaccines for Children (VFC) Program

- VFC is a federal entitlement program that guarantees free vaccines for eligible children at any of the 45,000+ VFC-enrolled provider sites in the U.S.
- The VFC Program supports more than \$3 billion worth of vaccines each year, including over \$24 million in West Virginia
- Children birth through age 18 are eligible if they are:
 - > enrolled in Medicaid
 - > uninsured
 - > American Indian or Alaskan Native
 - > underinsured
- There are currently 411 VFC-enrolled provider sites in West Virginia

Importance of the VFC Program

- Eliminates most referrals, keeps children in their medical home for vaccination
- Saves providers some up-front costs of purchasing vaccines
- Removes costs as a barrier to immunization
- Providers receive medical, technical and other best practices guidance from CDC through the West Virginia VFC Program
- VFC enabled the efficiencies achieved by the creation of vaccine distribution centers saving states the expense of vaccine shipping and associated wastage incidents

West Virginia Ensures All Children Have Access to Immunization

- West Virginia utilizes state funding to guarantee vaccines for indigent population
- West Virginia LHDs will provide immunizations to children not eligible for the VFC Program under certain conditions
- Primary care provider must submit a “physician referral” for their non-VFC eligible patient to receive vaccination at the LHD
- Parents of a non-VFC eligible child may self-refer under certain conditions

Primary Care Physicians Must Submit Official Referral Form

- Form is required by the LHD; if necessary, referrals may be faxed while patient is in the LHD waiting area
- Referral must include a copy of the child's immunization record or attest that patient's record in WVSIS is accurate
- Referral must indicate reason for referral
- Form is available online under section 6 of the West Virginia Division of Immunization Services website at <http://www.dhhr.wv.gov/oeps/immunization/Pages/VFCManual.aspx> as *Physician Referral Form to LHD*

Parent of non-VFC eligible child may self-refer if:

- Family moved recently, medical home not yet established
- Provider unwilling to provide vaccination(s) or make an appointment in timely manner to enable new school entry
- Medical care home unavailable for any reason
- NOTE: Unless extenuating circumstances exist, a parent may use self-referral one-time only

- All LHDs currently provide the following vaccines for uninsured and underinsured adults: Tdap, influenza, hepatitis A and B, shingles and pneumococcal vaccines
- Adult vaccine funding is limited; LHDs screen clients for eligibility
- Underinsured adults should be rare; the Affordable Care Act mandates all health plans to provide coverage for both children and adults
- Hundreds of pharmacies in West Virginia also provide adult vaccinations

PHBPP was established in 1990 following the Advisory Committee on Immunization Practices (ACIP) guidelines which include:

- Identification of Hepatitis B Surface Antigen (HBsAg) positive pregnant women
- Administration of Hepatitis B Immune Globulin (HBIG) and a birth dose of hepatitis B vaccine within 12 hours of delivery to infants born to HBsAg positive women
- Timely completion of hepatitis B vaccine series
- Timely post vaccine serologic testing following completion of series (at 9 months of age if series completed on time)

At-risk infants without post exposure prophylaxis:

- Without postexposure immunoprophylaxis, approximately 40% of infants born to HBV-infected mothers in the United States will develop chronic HBV infection, approximately one-fourth of whom will eventually die from chronic liver disease
- If the mother is positive for hepatitis B surface and E antigens, the infant has a 70% – 90% chance of becoming infected
- Infants who become infected have a 90% chance of becoming chronically infected

Prevention is Achievable

- Following the recommended program guidelines approach has shown to be up to 95% effective in preventing hepatitis B infection among these at-risk infants
- Testing all pregnant women for hepatitis B during each pregnancy
- Reporting all cases of HBsAg positive pregnant women to your LHDs or state health department
- Joint effort among reporting facilities, local providers and hospitals, state and LHD
- Case management efforts conducted by LHDs are essential

Interventions

- Collaboration with WIN to form the Well Child Initiative to develop strategies to improve rates of well-child visits with improved vaccination rates
- Collaboration with Medicaid MCOs to discuss incentives, provide data for HEDIS and other evaluation
- Collaboration with child care center licensing unit to assess and enforce immunization compliance
- Collaboration with West Virginia WIC and local WIC directors to assess and promote immunization screening
- Provider and parent education
- Local health department (LHD) support

COVID-19 and Routine Immunization

- The year before COVID-19 (02/01/2019 – 1/31/2020)
60,144 doses of MMR and Tdap administered to children in West Virginia
- The COVID-19 year (04/01/2020 – 3/31/2021)
54,818 doses of MMR and Tdap (9% decrease from pre-pandemic year)
- The year after (04/01/2021 – 03/31/2022)
56,466 doses of MMR and Tdap (6% decrease from pre-pandemic year)

Source: West Virginia Statewide Immunization Information System

COVID-19 Impact on Childhood Vaccination

POLITICO



DRUG IMPORTATION COULD OPEN THE FLOOD GATES TO COUNTERFEIT OR SUBSTANDARD DRUGS. **SAY NO TO SHORT-SIGHTED IMPORTATION POLICIES THAT COULD ULTIMATELY HARM PATIENTS!**

NHCOA
NATIONAL HISPANIC COUNCIL ON AGING

HEALTH CARE

Covid vaccine concerns are starting to spill over into routine immunizations

Public health leaders fear preventable and possibly fatal diseases could become more common.



<https://www.politico.com/news/2022/04/18/kids-are-behind-on-routine-immunizations-covid-vaccine-hesitancy-isnt-helping-00025503>

COVID-19 Impact On Vax Rates

“In Florida, where the surgeon general last month announced that healthy children may not benefit from Covid vaccines, 2-year-old routine rates for all immunizations in county-run facilities plummeted from 92.1 percent in 2019 to 79.3 percent in 2021.”

“In Tennessee, nearly 14 percent fewer vaccine doses were given to children under 2 in 2020 and 2021 than before the pandemic.”

“And in Idaho, the number of kids who received their first dose of the measles, mumps and rubella (MMR) vaccine by age 2 decreased from roughly 21,000 in 2018 and 2019 to 17,000 in 2021.”

“In places like Colorado, Louisiana, Mississippi and New York, state health officials and pediatricians say they aren’t seeing a noticeable difference in parents’ attitudes toward immunization or in their available data.”

BUT....

“Heather Gagliano, operations and education director for the Idaho Immunization Coalition, said data lags make it difficult to prove the scale of the problem.”

Vaccines

Are

Still

Safe

And

Effective

Impact of Vaccines in the 20th & 21st Centuries

Comparison of 20th Century Annual Morbidity & Current Morbidity: Vaccine-Preventable Diseases

Disease	20 th Century Annual Morbidity*	2017 Reported Cases [†]	% Decrease
Smallpox	29,005	0	100%
Diphtheria	21,053	0	100%
Pertussis	200,752	18,975	91%
Tetanus	580	33	94%
Polio (paralytic)	16,316	0	100%
Measles	530,217	120	>99%
Mumps	162,344	6,109	96%
Rubella	47,745	7	>99%
CRS	152	5	97%
<i>Haemophilus influenzae</i>	20,000 (est.)	33 [§]	>99%

* JAMA. 2007;298(18):2155-2163

† CDC. *National Notifiable Diseases Surveillance System, 2017 Annual Tables of Infectious Disease Data*. Atlanta, GA. CDC Division of Health Informatics and Surveillance, 2018. Available at: www.cdc.gov/nndss/infectious-tables.html. Accessed on December 3, 2018. NNDSS finalized annual data as of November 28, 2018.

§ *Haemophilus influenzae* type b (Hib) <5 years of age. An additional 10 cases of Hib are estimated to have occurred among the 203 notifications of Hi (<5 years of age) with unknown serotype.

Contact Information

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<https://oeps.wv.gov/immunizations>