

2019

STATE OF THE IMMUNION

A REPORT ON VACCINE-PREVENTABLE DISEASES IN THE U.S.



2018 PROVED VACCINE-PREVENTABLE



DISEASES ARE STILL A THREAT TO THE U.S.

2018 marked a difficult year in our fight against vaccine-preventable diseases. The country experienced a record number of flu deaths, measles cases and hepatitis A cases across the U.S. A lack of sufficient federal and state funding, barriers to vaccine access and a lack of understanding of the need for timely vaccines is helping to fuel the rise of vaccine-preventable diseases.

The Centers for Disease Control and Prevention (CDC) reported that the 2017-2018 influenza season resulted in approximately 79,000 deaths,¹ including 185 children, most of whom were unvaccinated.² That's more deaths from the flu than we have seen in any single season since the 1970s. Only 37% of adults³ and 58% of children⁴ received the flu vaccine during the season, despite the fact that vaccination is the best way to avoid serious

illness and complications from flu. As a result, flu and pneumonia remain the eighth most common killer of adults in the U.S.⁵

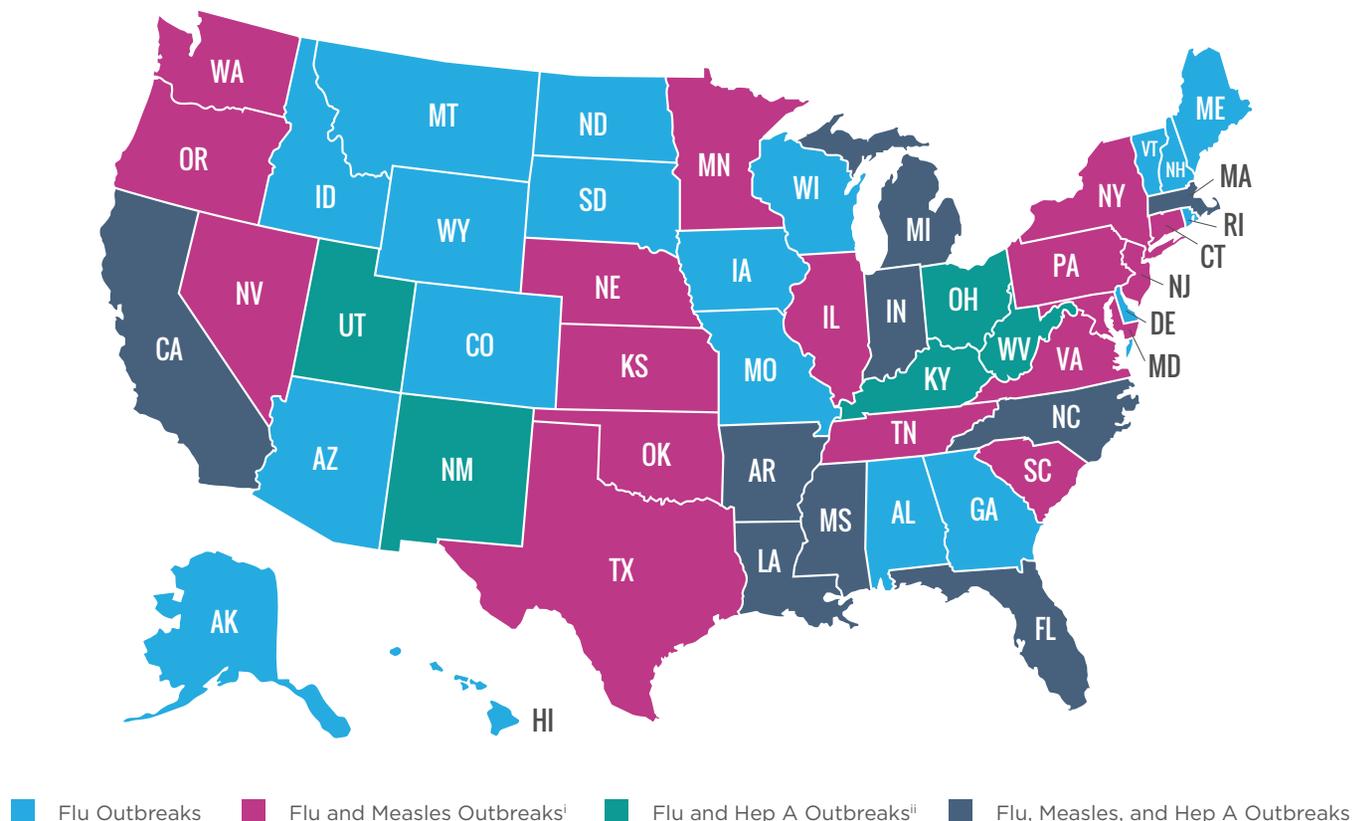
Meanwhile, measles cases are once again on the rise. After major, single source outbreaks in 2015 and 2017, multiple cases were imported to the U.S. by travelers with measles over the course of 2018. In 2018, 349 individual cases of measles were confirmed in 26 states and the District of Columbia. This is the second-greatest number of annual cases reported since measles was eliminated in the U.S. in 2000. (The greatest was 667 cases reported in 2014). The majority of people who got measles were unvaccinated.⁶

Compounding these issues are ongoing outbreaks of hepatitis A. Beginning in the spring of 2017, hepatitis A outbreaks began primarily among people who use drugs and/or are experiencing homelessness.⁷ These groups can be difficult for public health workers to reach, straining resources that were already spread thin due to the serious flu season. In states such as California, funding was quickly expended responding to these public health crises, and the CDC had no further funding for the year to support the state's efforts.

How did we get here? Throughout this report, we examine the reasons why children, adolescents and adults including pregnant women may not be receiving timely vaccinations. Most importantly, we put forward several policy solutions to stop the needless loss of lives due to vaccine-preventable diseases.

The CDC has declared vaccines to be the single greatest public health intervention of the 20th century, second only to clean water. Furthermore, we know that for every \$1 spent on childhood vaccination, our country saves \$10.10 Together, we can ensure we're saving both lives and money.

Are Disease Outbreaks Affecting Your State?



Honoring a Policy Pioneer

In November 2018, Vaccinate Your Family co-founder Betty Bumpers, wife of the late Senator Bumpers and former first lady of Arkansas, passed away. Working alongside Former First Lady Rosalynn Carter for over thirty years, Betty was the driving force behind many of the nation's most effective federal and state immunization policies, including kindergarten and daycare vaccine-entry requirements and the Vaccines for Children program. Learn more about her legacy saving children from vaccine-preventable diseases at www.vaccinateyourfamily.org/in-memory-of-betty-bumpers/.



PROTECTING CHILDREN IS

ALL OF OUR RESPONSIBILITY

Vaccination rates are beginning to decline among children in some communities. Some parents are choosing to exempt their children from school vaccination requirements, but their reasons vary. While some are concerned about the safety of vaccines, others simply do not have the means to access them.

Vaccines protect both the individuals vaccinated and those around them from dangerous diseases (a concept known as “community protection,” “community immunity” or “herd immunity”). That’s because most vaccine-preventable diseases are transmitted from person to person. If a high proportion of the population is vaccinated and immune to a disease then the chains of transmission are broken. So, for example, a child can be indirectly protected against diseases like measles and whooping cough even if they are not fully vaccinated because enough people around them were immunized, making those people less likely to carry or spread the diseases.

Community Protection Thresholds

A community protection threshold is the percentage of vaccinated individuals needed in a population to prevent a disease from spreading.^{2,3,1}



MEASLES: 93-95%



WHOOPIING COUGH: 92-94%



VARICELLA: 90%



MUMPS: 75-86%

Thus, those children who are not yet fully vaccinated are indirectly protected because they are not exposed to the vaccine-preventable infectious germ when immunity levels induced by vaccination are high in the community. It’s therefore critical that we vaccinate a certain percentage of the population to prevent vaccine-preventable diseases from circulating. This percentage, known as a “community protection threshold,” varies from disease to disease based on its infectivity and is by no means a perfect number. We must continually strive toward high vaccination rates, because even a small drop in vaccination rates within a community can lead to a disease outbreak.

Overall vaccination rates remain high in the U.S.; however, we do continue to see groups of children who remain unprotected against vaccine-preventable diseases. Children who live outside metropolitan areas as well as those who are on Medicaid are less likely to be fully vaccinated by as much as 15% for some vaccines.⁶ Uninsured children are also less likely to be protected than those who are privately insured. **The difference is startling: over 7% of uninsured children receive no vaccines, compared to less than 1% of privately insured children.**⁷ This is particularly concerning since the Vaccines for Children Program (VFC) was created just for this reason and provides

vaccines at no cost to qualifying children whose families otherwise may not be able to afford them. More research is being conducted by the CDC and others to pinpoint the exact barriers preventing these children from receiving vaccines, particularly recommended booster doses.

We have also begun to see an increase in the percentage of children who receive no vaccines. Normally, we see variations in immunization rates from vaccine to vaccine, but **since 2011, the rate of children who received no vaccines increased from 0.9% to 1.3%, which translates to approximately 18,400 children at risk of serious disease and even death.**⁸



Families who choose not to vaccinate tend to cluster together in communities, which means the high vaccination rates necessary for community protection may not have been reached. We saw this happen in 2017, when a measles outbreak swept through a community in Hennepin County, Minnesota. Those families had chosen not to vaccinate their children against measles due to disinformation about the safety of the vaccine from activists who are opposed to immunizations. During the outbreak, which lasted several months, more than 8,000 people were exposed.⁹ Seventy-three of the 79 people who contracted the disease were children under 10, and 22 were hospitalized.¹⁰ Luckily, no one died as a result of this outbreak, but it's important to realize that measles can be very serious in people of all ages. The disease can also result in long-term consequences, such as subacute

sclerosing panencephalitis, a rare but fatal disease of the central nervous system that can develop seven to 10 years after a person has measles.¹¹ While the condition is rare, it is more likely to occur in children who get measles before two years of age.¹²

Disease outbreaks among unprotected children can also be an enormous burden on a family's financial stability. Children with vaccine-preventable illnesses are not permitted to attend school in order to avoid further spreading the diseases, and children who have not been vaccinated may be excluded from school for weeks during an outbreak to ensure they are not exposed to the diseases. During this time, parents will likely miss work to remain home with their children, which can translate to costs that add up quickly. Parents also risk missing even more days if they or other family members contract the disease as well.

A Chickenpox Outbreak in Asheville

Chickenpox is not an innocent childhood disease. **Prior to the vaccine, between 100 and 150 people died of the disease each year and nearly 11,000 children were hospitalized due to serious complications.**ⁱⁱⁱ Unfortunately, a large group of parents in Asheville, North Carolina, have decided not to vaccinate their children against several diseases, including chickenpox, also known as varicella. As a result, nearly 40 children had contracted the disease as of November 2018. It is the state's largest outbreak of the disease since the vaccine was introduced in 1995.^{iv}



NEARLY 40 CHILDREN contracted chickenpox in Asheville, North Carolina.

DID YOU KNOW?

Parents Miss Work When Children are Ill

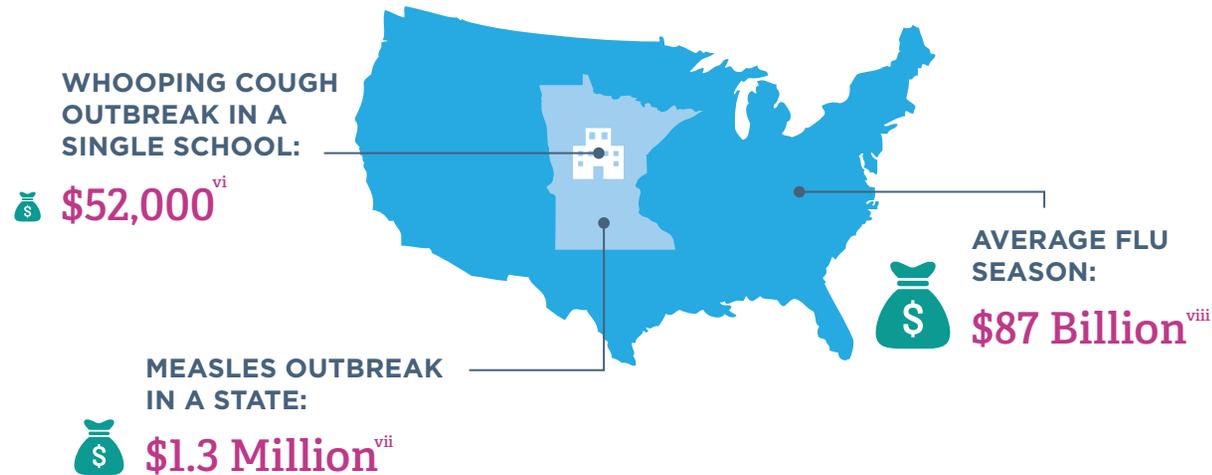
When children are sick with vaccine-preventable diseases, parents have to stay at home for extended periods of time.^v

INCUBATION PERIODS BY DISEASE

Chickenpox 10-21 days	Measles 8-12 days	Rubella 14-21 days
Diphtheria 2-5 days	Influenza 1-6 days	Whooping Cough 7-10 days
Hepatitis A 14-50 days	Mumps 12-25 days	Meningitis (bacterial) 2-10 days

The Economic Burden of Vaccine-Preventable Diseases

While vaccines save money, treating vaccine-preventable diseases can be expensive for local, state and national authorities:



These costs are not limited to individual families. Disease outbreaks require a huge investment of public health staff and financial resources to control and contain outbreaks once they have begun. The Minnesota measles outbreak cost Hennepin County and the State Department of Health \$1.3 million to contain.¹³ These costs do not include the amounts incurred by private insurance or the indirect costs incurred by families due to lost days of work or ongoing care.

States are doing their best to address the threat of outbreaks through a combination of policy and funding solutions. For instance, each state has different laws pertaining to vaccinations required for school entry, vaccine exemption rules, and exclusion

policies during outbreaks. However, the one thing that all states struggle with is a lack of sufficient funding to respond to outbreaks. This is where the federal government's financial support is critical, as diseases know no borders.

It's far better to vaccinate children to prevent these diseases than to have to treat the illnesses. In fact, **vaccines given to children born between 1994-2016 will prevent an estimated 381 million illnesses, 24.5 million hospitalizations, 855,000 deaths, and \$1.65 trillion in total societal costs.**¹⁴ It is essential that states work in tandem with the federal government to support our nation's public health infrastructure and ensure everyone has equal access to vaccines.



ADOLESCENTS ARE AT RISK FROM SERIOUS

VACCINE-PREVENTABLE DISEASES

Just because children are getting older doesn't mean they've outgrown vaccines. Preteens and teens are being exposed - and exposing others - to vaccine-preventable diseases that could impact their health now and for many years to come.

Adolescents are learning to make their own choices, but they still need guidance in a number of areas – specifically around their personal health. Preteens and teens are at risk of contracting certain vaccine-preventable diseases as they engage in common activities such as sharing drinks and utensils, kissing, and attending summer camps. There are now five vaccines recommended for adolescents. Unfortunately, since teens have fewer well visits with providers, missed opportunities to vaccinate can cause this population to remain undervaccinated and thus at risk of deadly diseases.

The Tdap (tetanus-diphtheria-pertussis) vaccine is recommended for all 11-12 year olds in order to boost the immunity they received from their DTaP vaccination series as young children. The booster shot not only extends their own protection, but also helps protect those around them from diseases including pertussis (whooping cough). This disease can cause illness in adolescents, but the greater concern is that they can pass this disease onto their siblings and other young children, who are more likely to suffer serious consequences. Infants, for example, are most likely to be hospitalized or die from whooping cough. Studies show that when a source of whooping cough among infants could be identified, family members were the source of the infections 85% of the time.¹⁵

Adolescents may also need two meningococcal vaccines, which together cover serogroups A, B, C, Y, and W135. Meningococcal disease will kill nearly 15% of those infected, and leave nearly 20% of survivors permanently disabled.¹⁶ Preteens and teens are recommended to receive a MenACWY vaccine at 11 or 12 years of age with a booster at 16 years. Parents can also ask their children’s healthcare providers about a vaccine against meningitis B which is recommended for some adolescents, and can be given to anyone 16 through 23 years old. While rare, meningitis B has been associated with outbreaks of serious disease and deaths, particularly in colleges.¹⁷

For some illnesses, the importance of the vaccines received as an adolescent may not be revealed until later in life. Consider the human papillomavirus (HPV) vaccine, a two-dose immunization recommended by the CDC that can prevent several forms of cancer in adulthood.

According to the CDC, nearly all men and women will get at least one type of HPV at some point in their lives.¹⁸ In fact, HPV causes over 33,700 cases of cancer in men and women every year in the U.S.¹⁹ The HPV vaccine is vital to ensuring the health of adolescents as they grow to adulthood, and could result in the annual prevention of up to 31,200 cases (90%) of related cancers in both men and women as well as cost savings for years to come.²⁰



DID YOU KNOW?



We could eliminate nearly all cervical cancers, and other HPV-associated cancers, with **two doses of the HPV vaccine.**

4 in 5 

people in the U.S. will be infected with HPV at some point.^{ix}



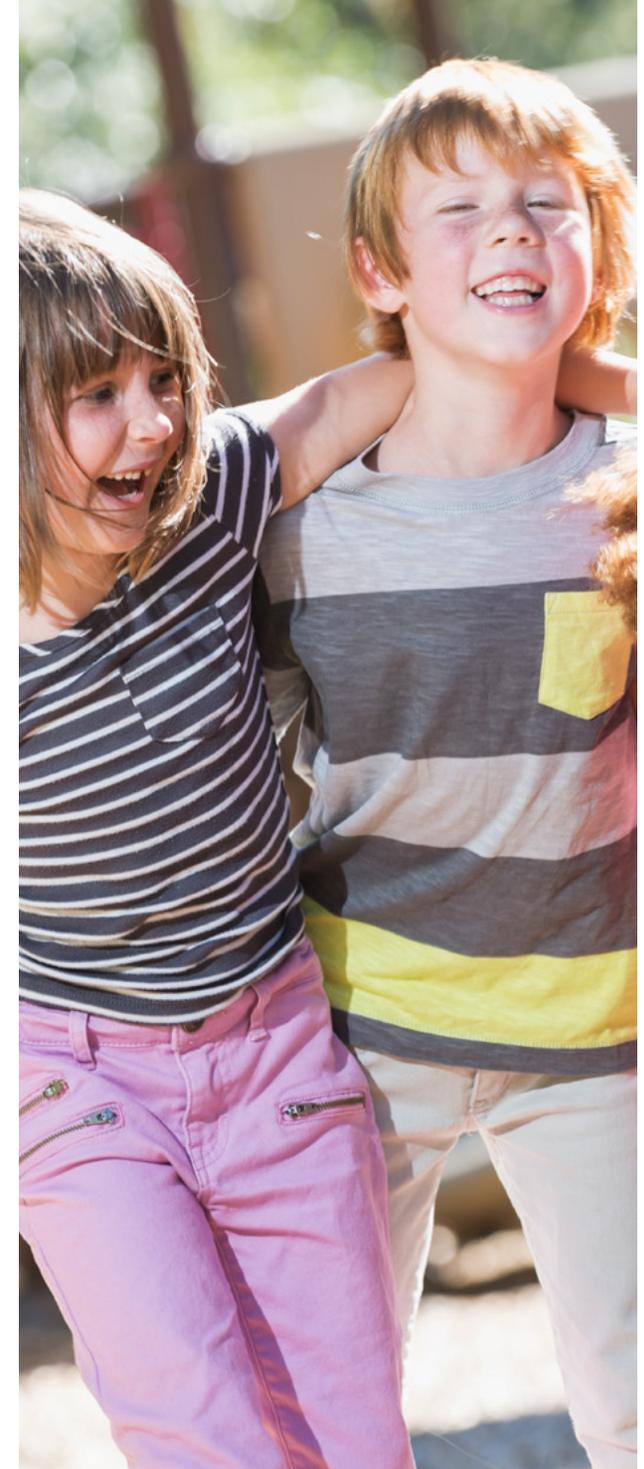
31,200 OF 33,700 HPV-RELATED CANCERS could be prevented each year in the U.S.^x

Despite the incredible benefits of this cancer prevention vaccine, many parents are still failing to understand the lifelong value of the vaccine and the importance of getting their preteens vaccinated at ages 11-12, before the risk of exposure to the virus and when the vaccine is most effective. Until we can raise the HPV vaccination rates, we will be failing to prevent thousands of cases of HPV-related cancers among tomorrow's adults.

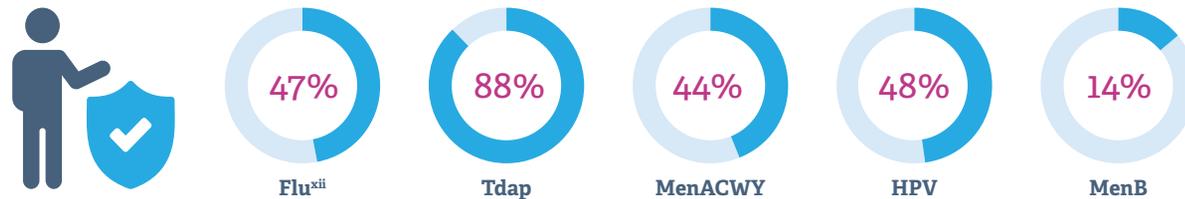
Finally, adolescents also need to receive a yearly flu vaccine. Influenza can spread quickly in schools, and a typical case of flu can result in a week or more of missed classes.²¹ Teens, even those who are otherwise healthy, can also have severe illness from influenza, which has resulted in several deaths in recent years. Once a preteen or teen is infected, he or she can also spread the infection to their parents, siblings, and other vulnerable family and community members.²²

Unfortunately, rates for all five of these vaccines remain alarmingly low. More research needs to be done to understand why there is a disparity between vaccine rates when the Tdap, MenACWY and HPV vaccines should be recommended together. The CDC has determined that the way healthcare providers are recommending HPV vaccine has left parents with doubts as to whether it's necessary for their preteens. Other disparities, however, such as a gap between Tdap and MenACWY vaccination rates in rural areas, need further exploration.

Adolescent vaccinations enable parents to protect their children in ways that were unimaginable just 10 years ago, yet without sufficient public health funding to support educational programs and other efforts, many children will remain vulnerable to preventable infectious diseases.



Preteens & Teens Aren't Getting the Protection They Deserve^{xi}



■ Vaccination Rates for the 5 Recommended Adolescent Vaccines



ENSURING ACCESS TO AFFORDABLE

An investment in vaccinating adults could help eliminate the nearly \$27 billion spent annually while treating four vaccine-preventable diseases in adults over the age of 50.²³

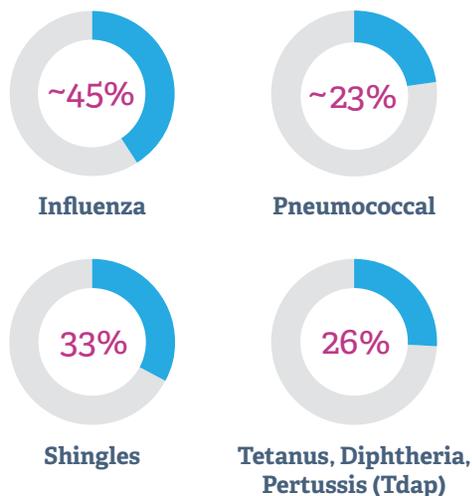
VACCINES FOR ADULTS

Influenza and pneumonia together are the eighth leading causes of death of adults in this country.²⁴ Low vaccination rates contribute to substantial, yet preventable, national healthcare expenses and productivity losses. The nearly \$27 billion that is spent each year treating four vaccine-preventable diseases (flu, pneumococcal disease, shingles and whooping cough) in adults includes the cost of medical visits, hospitalizations and

Adults are Missing Critical Vaccinations

Vaccination rates among U.S. adults are well below the targets established in the Healthy People 2020 report.^{18, ix}

■ Real vaccination rate among U.S. adults



prescription coverage. This does not cover the astronomical costs of absenteeism and short-term disability from work.

As the country's population ages, we can expect that by 2020, one of every four workers will be over the age of 55.²⁵ The costs for addressing the health challenges within this segment of the workforce are massive, as treatments for conditions like diabetes and heart disease number in the hundreds of billions of dollars annually.²⁶ Many current vaccines, as well as those in development pipelines, prevent diseases that can cause dangerous illnesses, and lead to severe and sometimes deadly complications in individuals with chronic conditions. Vaccines are a proven means of preventing and reducing the inevitably huge cost of maintaining the health of our aging workforce.

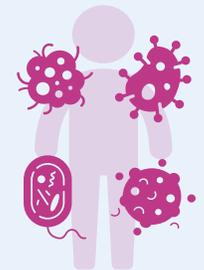
Unfortunately, older adults and those with chronic health conditions are not the only groups at high risk of contracting vaccine-preventable diseases. The opioid epidemic ravaging many parts of our country has had yet another unintended consequence: an uptick in hepatitis B cases. In Kentucky, Tennessee and West Virginia alone there has been a 114% increase in hepatitis B cases from 2006 to 2013.²⁷ That number is expected to increase across the country as opioid dependence has become even more common over the past five years.

DID YOU KNOW?

The Costs of Vaccine-Preventable Disease

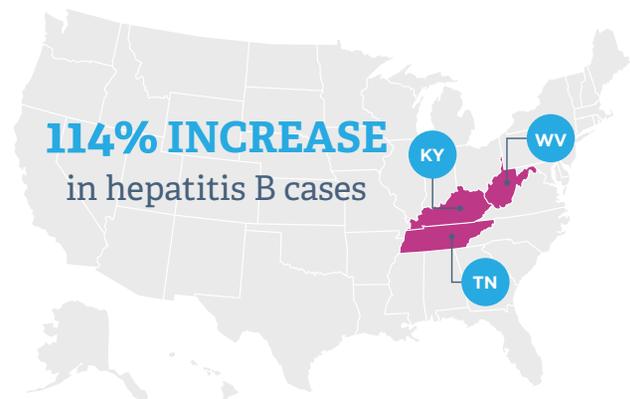
Flu, pneumococcal disease, shingles and whooping cough cost \$27 billion to treat each year in adults over the age of 50.

**\$27
BILLION**
in treatment



Vaccines & the Opioid Epidemic

The opioid epidemic has led to a 114% increase in hepatitis B cases in Kentucky, Tennessee and West Virginia.

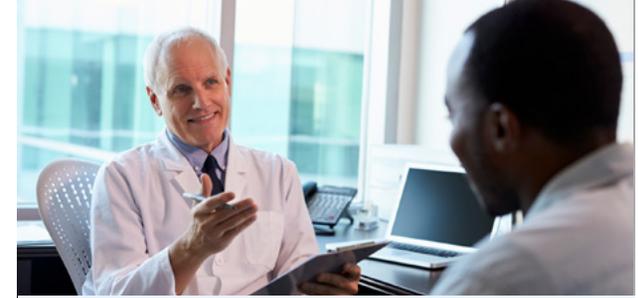


Racial and ethnic disparities also continue in vaccination coverage among adult populations, as whites are consistently better vaccinated than minority groups.²⁸ People of color have traditionally been at disproportionate risk for being underinsured, lacking access to quality treatment, and preventive care through health insurance coverage.

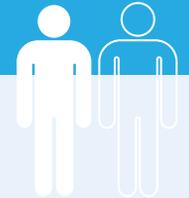
In fact, first dollar coverage of vaccines can greatly improve the likelihood that an adult will be immunized.²⁹ Without it, we can expect more adults to be required to pay out-of-pocket expenses for vaccines. Expanding first dollar coverage of vaccines to Medicare Part D and encouraging Medicare Advantage and stand-alone Medicare Prescription Drug Plans to include immunizations in the zero-cost sharing tier is also critical to reducing the barriers to access for all adults. Influenza and pneumococcal vaccines, which are both covered by Part B, have been received by 71.5% and 61.3% of seniors over the age of 65, respectively. This same population must spend between \$14 and \$102, on average to receive either the shingles or the Tdap vaccine. These two vaccines that protect against four diseases have only been received by 27.9% and 14% of seniors, respectively.³⁰ The cost savings for our economy, coupled with increased workplace productivity, are well worth the investment.

In addition to coverage, access to immunization providers in a wide array of community settings, such as a healthcare provider office, health clinic, pharmacy, employer-sponsored clinic or other site is also essential to improving adult immunization rates. Incentivizing a robust network of community providers who support and carry out adult immunization standards in their practices has been proven to be a strong driver of improved adult immunization rates.

Future healthcare reform could therefore have a deep impact on vaccination rates and consequently serious illness, hospitalizations and deaths due to vaccine-preventable diseases, both among vulnerable populations and the general public, and will require careful Congressional consideration.



DID YOU KNOW?



Disparities in Adult Vaccination Rates

Adult vaccination rates for shingles, as seen in the following statistics from 2016, varied greatly among racial/ethnic groups:^{xiii}

Whites	Blacks	Hispanics & Asians
38%	16%	22%

PPHF is Not “Extra” Money

Since the introduction of the Prevention & Public Health Fund (PPHF), Congress has been redirecting core funding for immunizations under this line item.

PPHF now provides half of all immunization funding. If PPHF were cut:



Local immunization programs would be **CUT BY 45%**



Fewer children, adolescents, adults and pregnant women would be vaccinated, **RESULTING IN DISEASE OUTBREAKS**

Learn more at: immunizationmanagers.org/page/Publication



PROTECTING PREGNANT WOMEN

ALSO EXTENDS PROTECTION

TO THEIR BABIES

A single vaccine can protect both a pregnant woman and her baby.

Maternal vaccinations protect both pregnant women and their babies, both before they are born and during the first few months of life.

Almost all vaccines for infants start at two months of age or later, so the only protection for newborns from vaccine-preventable diseases is through vaccination of their mothers, who transfer protective proteins called antibodies to their babies across the placenta. These antibodies protect the infants until they can develop their own immunity through vaccination.

The stakes are high. Pregnant women and their unborn babies have a greater risk of influenza complications than the general population. Due to changes in the immune system, heart, and lungs during pregnancy, pregnant women are more prone to severe illness from flu, which has been known to result in premature delivery, low birth weight babies, miscarriage, hospitalization and even death. Fortunately, babies whose mothers got the seasonal flu vaccine during pregnancy were 70% less likely to get the flu than babies born to unimmunized mothers.³¹ Since infants do not begin receiving their own annual influenza vaccinations until they are six months of age, they rely on the protection they get from their mothers; however, only about half of pregnant women are getting flu vaccines in pregnancy.³²

Infants also comprise the largest share of pertussis-related deaths. Half of the infants who get pertussis, also known as whooping cough, will be hospitalized, and one in 100 will die.³³ Studies show that when a source of whooping cough among infants could be identified, family members were the source of the infections 85% of the time.³⁴ The Tdap vaccine, which should be administered to women during weeks 27-36 of every pregnancy,³⁵ is therefore critical for protecting newborns.

While currently only influenza, pertussis, diphtheria, and tetanus are preventable through maternal vaccination, researchers are working to discover scientific breakthroughs for many other devastating infant conditions. Maternal vaccines may soon be used to protect infants from respiratory syncytial virus (RSV), cytomegalovirus (CMV), and group B streptococcus (GBS).

Our country's future rests in the hands of our young. Here in the U.S. we have the technology to prevent suffering among some of our most vulnerable citizens—our infants. Through public health efforts to educate all maternal providers, and by working together to ensure access to and delivery of vaccines to pregnant women, we can prevent the suffering of families who could otherwise lose their precious newborns to vaccine-preventable diseases.

DID YOU KNOW?

Receiving Flu and Tdap Vaccines During Pregnancy Protects Mom & Baby



DURING PREGNANCY:

Changes in immune, heart & lung functions make pregnant women more susceptible to disease and pregnancy complications.

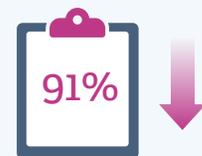
POST DELIVERY: Moms pass protective antibodies on to their babies, which helps protect them from dangerous infections until they can receive their flu and Tdap vaccines.



Vaccines Given in Pregnancy Protect Babies

Pertussis

When mothers get Tdap vaccine in pregnancy, they **reduce infants risk of pertussis by^{xii}:**



Flu

When mothers get flu vaccine in pregnancy, they **reduce infant risk of flu by:**





A QUICK REFERENCE GUIDE TO

VACCINE SAFETY AND OVERSIGHT

Questions about the safety of vaccines are common. Vaccinate Your Family is dedicated to breaking down the complex science so everyone can understand why vaccines are the best option for protecting you, your family and your constituents from serious infectious diseases.

Vaccines are one of the most thoroughly tested medical products available in the U.S. Before a vaccine can be considered for approval by the FDA, a vaccine manufacturer must show it is safe and effective through clinical trials. Developing a new vaccine begins with an exploratory stage and a pre-clinical stage before advancing to three stages of clinical trials. Together, this scientific process can take over a decade and cost millions of dollars.³⁶ The FDA then examines these studies and determines whether a vaccine is safe, effective, and ready to be licensed for use. The FDA only licenses vaccines that have data that shows that the vaccines' benefits outweigh the potential risks. If there is any question or concern about the data, the FDA will request further studies before approving the vaccine.³⁷

After a vaccine is licensed for use in the U.S., there are four systems in place that work together to help scientists monitor the safety of vaccines and identify any rare side effects that may not have been found in clinical trials. Even large clinical trials may not be big enough to find very rare side effects. For example, some side effects may only happen in 1 in 100,000 or 1 in 500,000 people. In addition, vaccine trials may not include certain populations like pregnant women or people with specific medical conditions who might have different types of side effects or who might have a higher risk of side effects than the volunteers who got the vaccine during clinical trials. These four systems are:



- 1 Vaccine Adverse Events Reporting System (VAERS)³⁸:** VAERS is a passive reporting system. That means it relies on individuals to report vaccine reactions. Anyone can report a reaction or injury, including healthcare providers, patients and patients' representatives, such as caregivers or attorneys. The system is co-managed by the FDA and the CDC. However, it is important to note that VAERS data alone can't be used to answer the question, "Does a certain vaccine cause a certain side effect?" This is because adverse events (health problems) reported to VAERS may or may not be caused by vaccines. There are reports in VAERS of common conditions that occur just by chance after vaccination. Further investigation may find no medical link between vaccination and these conditions. Instead, the purpose of VAERS is to see if unexpected or unusual patterns emerge, which may indicate an issue that needs to be researched further.
- 2 Vaccine Safety Datalink (VSD)³⁹:** Established in 1990, VSD is a collaboration between the CDC's Immunization Safety Office and eight healthcare organizations across the country. It conducts studies based on questions or concerns raised from the medical literature and reports to VAERS. In addition, when new vaccines are recommended or if changes are made in how a vaccine is recommended, VSD will monitor the safety of these vaccines.

3 Clinical Immunization Safety Assessment Project (CISA)⁴⁰: CISA, which was created in 2001, is a national network of vaccine safety experts from the CDC's Immunization Safety Office, seven medical research centers and other partners. CISA addresses vaccine safety issues, conducts high quality clinical research and assesses complex clinical adverse events following vaccination. CISA also helps to connect clinicians with experts who can help consult on vaccine safety questions related to individual patients.

4 Post-Licensure Rapid Immunization Safety Monitoring System (PRISM)⁴¹: PRISM is a partnership between the FDA's Center for Biologics Evaluation and Research and leading health insurance plans. It actively monitors and analyzes data from a representative subset of the general population. PRISM links data from health plans with data from state and city immunization information systems (IIS). PRISM has access to information for over 190 million people allowing it to identify and analyze rare health outcomes that would otherwise be difficult to assess.

In summary, because vaccines are given to the entire population, they are one of the most scrutinized and well-tested products on the U.S. market. The systems that have been put in place to ensure their ongoing safety are expansive and have time and again proven to be effective at determining any safety signals that require further investigation. For more information on how the U.S. healthcare system collaborates with the federal government on these endeavors or for answers to a particular vaccine-related concern from your constituents, please visit the *Questions About Vaccines* section of our website at vaccinateyourfamily.org/questions-about-vaccines.



THE STATE

OF OUR IMMUNION IS UNCERTAIN

2019 will mark the 25th anniversary of the Vaccines for Children program, yet outbreaks of some vaccine-preventable diseases are now on the rise. As a result, even seemingly unrelated policy decisions regarding healthcare can have unintended consequences on vaccination rates.

Legislators can play an important role in ensuring that public health professionals are prepared to face the threats of disease outbreaks and that their constituents are protected from dangerous infectious diseases. Please consider:

- **Increasing the federal appropriations to the CDC, states and territories** so that they are prepared to respond to existing and potential emerging vaccine-preventable disease outbreaks and can conduct community outreach, educate providers and the public, maintain immunization information systems, and offer vaccine services to the community. Historically, federal vaccine appropriations have not met the levels requested in CDC's

Congressional budget justifications, and state budgets for vaccine infrastructure are nearly non-existent. This has resulted in a loss of essential immunization program personnel and the disbanding of several highly effective statewide immunization coalitions, which supported vaccination programs for decades.

Furthermore, it's important to note that the Prevention & Public Health Fund (PPHF) currently provides 53% of the CDC's Immunization Program funding. Proposals to cut PPHF or use PPHF as a budgetary offset for other programs could place your constituents' health in further danger when compounded with the current funding gap.

- **Also increasing funding to the Indian Health Service that includes a specific line item for immunizations** to support immunization activities, clinical service delivery and electronic health record systems.
- **Expanding funding to include pressing research into access barriers.** There is an increasing disparity between those who receive vaccines in rural areas and those who live in suburban and urban areas. Children without private health insurance are also less likely to be vaccinated, despite programs in place such as VFC, which are meant to address this gap. In order to ensure equal access to life-saving vaccines, CDC and other agencies require additional funding to further explore and address the specific barriers.

- **Supporting healthcare payment measures that expand access, protect first dollar coverage and essential health benefits.**

For example, Medicare immunization coverage is divided between Medicare Part B and Medicare Part D and often results in prohibitive cost sharing for beneficiaries who wish to access recommended vaccines such as shingles and Tdap under the Part D program. Recommended vaccines should be widely available to people of all ages at no additional cost, regardless of insurance program, as they are cost-saving preventive care.

Also consider other avenues through which vaccines can be helpful, such as in policies and funding packages meant to address the opioid epidemic. By ensuring young adults are vaccinated against hepatitis B, we can prevent long-term costs associated with treating the diseases as they recover from their addictions.

- **Learning more about the science behind vaccines and supporting the CDC-recommended immunization schedule.** The public must be reassured that the timing of vaccines is carefully considered prior to CDC's recommendations and that prior to and following licensure, vaccine safety is heavily monitored by various departments within HHS, CDC, and FDA, and through long-term health plan collaboratives. There are many disproven myths about the safety of vaccines that continue to circulate, negatively impacting your constituents' understanding of the safety and value of vaccines, and threatening the health of your communities. You can be an immunization champion simply by knowing how to respond to your constituents' concerns and offering science-based responses.
- **Reaching out to your local immunization advocates** including hospitals, leading healthcare providers, colleges and universities, and immunization coalitions, to support their efforts and gather feedback on the impact that policies have on their ability to protect your constituents from deadly diseases.
- **Connecting with your fellow legislators** to sponsor legislation in support of federal, state and local efforts.





RESOURCES AND USEFUL LINKS

Commonly Requested Information for Constituents

- Vaccinate Your Family: The Next Generation of Every Child By Two is a leading source of evidence-based vaccine information. You can find information on common questions about vaccines, vaccine safety oversight, disease outbreaks and other topics on our website and social media pages. Learn more at:
- Vaccinate Your Family (Vaccinateyourfamily.org)
- Shot of Prevention Blog (Shotofprevention.com)
- Facebook ([@VaccinateYourFamily](https://www.facebook.com/VaccinateYourFamily))
- Twitter ([@Vaxyourfam](https://twitter.com/Vaxyourfam))
- Instagram ([@VaccinateYourFamily](https://www.instagram.com/VaccinateYourFamily))

Policy Resources

- [Trust for American's Health: Ready or Not?](#) examines the nation's ability to respond to public health emergencies, tracks progress and vulnerabilities, and includes a review of state and federal public health preparedness policies and a state-by-state map rating of preparedness.
- [317 Coalition](#) is solely focused on advocating for increased federal funding for the National Center for Immunization and Respiratory Diseases at

the Centers for Disease Control and Prevention, and as such will focus on implementing the policies of the Advisory Committee on Immunization Practices and other relevant policy making bodies.

- [Adult Vaccine Access Coalition](#) is fostering an inclusive partnership of organizations to inform and engage federal policymakers in working towards common legislative and regulatory solutions that will strengthen and enhance access to and utilization of adult immunization services across the health care system.
- [Association of Immunization Managers](#) enables immunization program managers to work together to effectively prevent and control vaccine-preventable diseases and improve immunization coverage in the United States and its territories.
- [Association of State and Territorial Health Officials](#) is the national nonprofit organization representing public health agencies in the United States, the U.S. Territories, and the District of Columbia, and over 100,000 public health professionals these agencies employ.
- [Immunization Coalitions Network of the Immunization Action Coalition](#) offers a searchable database to locate state and local

immunization coalitions and a host of state policy resources.

- [National Association of County & City Health Officials](#) is comprised of over 2,800 Local Health Departments across the United States.
- [American Academy of Pediatrics](#) offers an overview of recent disease outbreaks and vaccination rates.
- [The Centers for Disease Control and Prevention](#) has created an infographic outlining the country's process for vaccine approval and ongoing oversight.

Annual Vaccination Rate Data

- Child Rates: www.cdc.gov/vaccines/imz-managers/coverage/childvaxview/data-reports/index.html
- School Rates: www.cdc.gov/vaccines/imz-managers/coverage/schoolvaxview/data-reports/index.html
- Teen Rates: www.cdc.gov/vaccines/imz-managers/coverage/teenvaxview/index.html
- Adult Rates: www.cdc.gov/vaccines/imz-managers/coverage/adultvaxview/index.html
- Flu Rates: www.cdc.gov/flu/fluview/index.html

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Our mission is to protect people of all ages from vaccine-preventable diseases by raising awareness of the critical need for timely immunizations, increasing the public's understanding of the benefits of vaccines, increasing confidence in the safety of vaccines, ensuring that all families have access to lifesaving vaccines, and advocating for policies that support timely vaccination.