



**2018**

# STATE OF THE **IMM** **UNION**

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



# VACCINES ARE ONE OF THE GREATEST PUBLIC HEALTH INTERVENTIONS OF THE 20TH CENTURY, SECOND ONLY TO CLEAN WATER.

From smallpox to chicken pox, our nation has successfully protected Americans of all ages from deadly infectious diseases. In addition to saving lives, vaccines have major unintended consequences: cost savings. By preventing serious infectious diseases, vaccines also prevent us from spending large amounts of money on treating diseases. In fact, for every \$1 spent on childhood vaccinations, our country saves \$10.10.<sup>1</sup> **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.**<sup>2</sup>

With the addition of new vaccines in recent years, and more in development, there is an even greater potential to save millions of more lives. Unfortunately, continuing disease outbreaks across the U.S. remain a public health concern. Lack of access to vaccines, combined with people who are not taking full advantage

of opportunities to protect themselves, their families, and their communities, leaves people susceptible to preventable diseases.

Vaccinate Your Family: The Next Generation of Every Child By Two, has prepared this second annual *State of the ImmUnion* report to examine how strong our defenses truly are against vaccine-preventable diseases and what we can do, as public health advocates and legislators, to make our country stronger and more resilient in the face of emerging health threats.

Vaccinate Your Family is committed to working with stakeholders across the country to ensure everyone is aware of, and has access to, life-saving vaccines. We hope this report will offer you insights into areas of improvement to strengthen our protection against vaccine-preventable diseases.





# ***PROTECTING CHILDREN***

# ***IS EVERYONE'S RESPONSIBILITY***

While vaccination rates remain high nationwide, some families lack access to vaccines, despite the safety nets put in place, such as the Vaccines For Children (VFC) program and the Children's Health Insurance Program (CHIP). And, while less than 1% of parents decline vaccines for their children, there are clusters of like-minded individuals in a few communities throughout the U.S. who are choosing not to vaccinate their children against the 14 infectious diseases we can protect against in the first few years of life. As these groups grow in numbers, more children are left unprotected, leaving themselves and others around them vulnerable to dangerous diseases.

Vaccines protect both the individuals vaccinated and those around them from dangerous diseases (a concept known as “community protection”). That’s because most vaccine-preventable diseases are transmitted from person to person. **If a high proportion of the population is vaccinated and immune, then the chains of transmission are broken.** So, for example, a child can be protected against measles or whooping cough, even if they have not yet reached the recommended age for vaccination, because enough people around them have been vaccinated and are less likely to carry or transmit the disease. Thus, those children who cannot be

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 immunity 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.

Unfortunately, we are seeing more examples of communities falling below these thresholds across the U.S., resulting in greater incidence of **disease and higher costs for care and containment.** This past spring, Minnesota experienced a major outbreak of measles. In one community in Minnesota, measles vaccination rates had dropped to 42% among a group of preschool-aged children. This was due to targeted efforts by individuals who encouraged these families not to vaccinate their children by spreading false information about the safety of the measles-mumps-rubella (MMR) vaccine.

## A Community Protection Threshold

A community protection threshold is the percentage of vaccinated individuals needed in a population to prevent a disease from spreading.<sup>23,1</sup>



**MEASLES: 83-94%**



**WHOOPING COUGH: 92-94%**



**VARICELLA: 90%**



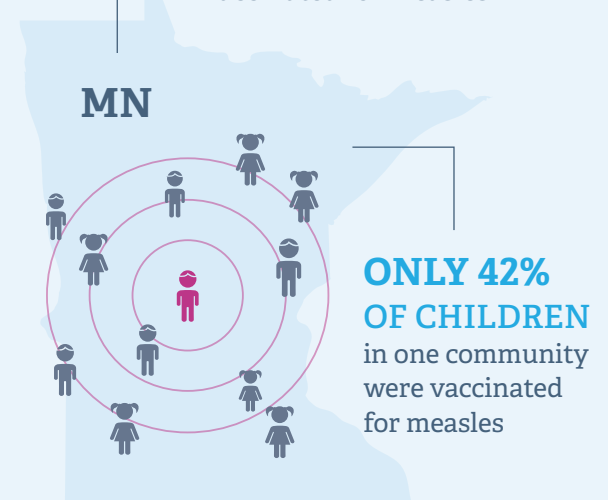
**MUMPS: 75-86%**

## DID YOU KNOW?

### Large Outbreaks Can Begin in Unprotected Communities

#### 2017 MEASLES OUTBREAK IN MINNESOTA

**93% OF KINDERGARTENERS** in the state were vaccinated for measles



**ONLY 42% OF CHILDREN** in one community were vaccinated for measles

**8,000** people were exposed and many children contracted measles



## We All Bear the Economic Burden of Preventable Diseases

### PERTUSSIS OUTBREAK IN NEBRASKA SCHOOL<sup>ii</sup>



 **\$52,000**  
COST

### MEASLES OUTBREAK IN MINNESOTA<sup>iii</sup>



 **\$1.3 Million** COST TO  
STATE & LOCAL HEALTH DEPARTMENTS

### 2015-2016 INFLUENZA SEASON<sup>iv</sup>



 **\$87 Billion**  
TOTAL ECONOMIC BURDEN

As a result, when someone infected with measles arrived in the community, the disease quickly spread. During the outbreak, which lasted several months, more than 8,000 people were exposed.<sup>3</sup> **Seventy-three of the 79 people who contracted the disease were children under 10, and 22 were hospitalized.**<sup>4</sup> A massive public health response was implemented to contain the disease and treat those infected. Luckily, no one died as a result of this outbreak, but there can be long-term consequences to contracting measles. Subacute sclerosing panencephalitis (SSPE) is a fatal complication of measles that can develop seven to

10 years after a person has measles.<sup>5</sup> While the condition is rare, it is more likely to occur in children who contract measles before two years of age.<sup>6</sup>

The U.S. is experiencing other disease outbreaks as well. Whooping cough continues to threaten the health of babies and in the 2016-17 flu season we lost another 110 children to influenza.<sup>7</sup> While some parents are choosing not to vaccinate their children, due to disinformation about the safety and efficacy of vaccines, others are simply not able to access the care their children need.



And still others are not well informed about which vaccines are recommended, when they should be administered and how to pay for them. Public health efforts over the past several decades have been highly successful at reducing immunization coverage disparities. **Unfortunately, recent data shows that we are once again experiencing a growing disparity between children who are vaccinated and those who are not based on where they live.**<sup>8</sup> Efforts must be enhanced to ensure that every child is protected from deadly infectious diseases no matter where they are raised.

Disease outbreaks among unprotected children can be an enormous burden on a family's financial stability as children who are ill are not permitted to attend school in order to avoid further spreading the disease, 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 disease. During this time, parents will likely miss work to remain home with their children, which can translate to hard costs that add up quickly. Parents also risk missing twice as many days if they or other family members contract the disease as well.

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.**<sup>9</sup> These costs do not include the amounts incurred by private insurance or the in-direct 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 school entry requirements, exemption rules, and exclusion policies during outbreaks. However, the one thing **all states struggle with is a lack of appropriate funding to respond to outbreaks. This is where the federal government's financial support is critical.** 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.

## DID YOU KNOW?

### The Costs of Vaccine-Preventable Disease

When you or a loved one contracts a preventable disease, the associated costs can range from money spent on treating the disease and its symptoms, to days of school or work lost while waiting out the disease's incubation period.<sup>v</sup>

#### INCUBATION PERIODS BY DISEASE

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





A photograph of three young people. On the left, a young man with short brown hair, wearing a light purple button-down shirt over a blue t-shirt, is smiling. In the center, a young man with dark hair, wearing a white t-shirt under a blue and white striped shirt, is also smiling. On the right, a young man with glasses and a red t-shirt is leaning forward, laughing heartily. The background is a plain, light-colored wall.

# **KEEPING PRETEENS**

# **AND TEENS HEALTHY**

As children transition to adolescence, they tend to shoulder more responsibilities. Whether they are helping their parents by watching younger siblings, conducting community service, taking part in athletics, or earning money at jobs after school, teens play a key role in their schools, families, and communities. Vaccines are an important part of ensuring they, and those around them, stay healthy now and into the future.

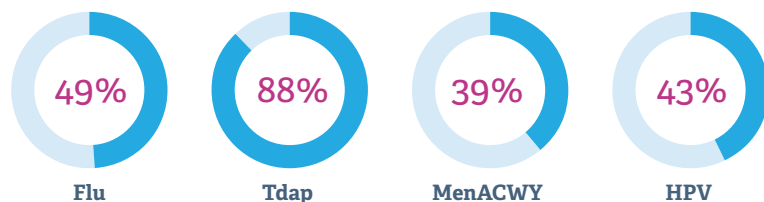
While adolescents embrace their independence by making their own decisions, they still need guidance in a number of areas – specifically around their personal health. Preteens and teens are at risk of contracting certain vaccine-preventable diseases as they engage in common activities such as sharing drinks and utensils, kissing, and attending summer camps. There are in fact four vaccines recommended for adolescents. Unfortunately, since teens have fewer well visits with providers, missed opportunities to vaccinate can cause this population to remain highly 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 such as whooping cough. This disease can make preteens and teens ill, but there is also concern that they can pass this disease on to younger siblings, 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.**<sup>10</sup> The adolescent Tdap vaccine is therefore critical for protecting both the teen and their family members.

Adolescents may also need two meningococcal vaccines, which together cover serogroups A, B, C, Y, and W<sub>135</sub>. Meningococcal disease will kill nearly 15% of those infected, and leave nearly 20% of survivors permanently disabled.<sup>11</sup> Preteens and teens are recommended to receive a

## Preteens & Teens Aren't Getting the Protection They Deserve<sup>vii</sup>



■ Vaccination Rates for the 4 Recommended Adolescent Vaccines



## DID YOU KNOW?



### Today's Teens are Vulnerable to Dangers of Meningococcal Disease



In the past four years, students at **36 college campuses** in the U.S. got meningitis.<sup>vi</sup>

The disease strikes quickly and **CAN KILL IN HOURS**



**1-2 in 10** will die.



Of those who survive **1 in 5** will suffer **permanent disabilities** such as limb amputations, organ or brain damage or hearing loss



MenACWY vaccine at 11 or 12 years of age with a booster at 16 years. Parents can also ask their children's health care providers about a vaccine against MenB, which is recommended for some adolescents. While rare, MenB has been associated with outbreaks of serious disease, particularly in colleges.<sup>12</sup>

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.<sup>13</sup> Of these infections, about 31,500 will lead to HPV-related cancer diagnoses each year, which require costly and painful treatments.<sup>14</sup> 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 29,000 cases of cancer in both men and women as well as cost savings for years to come.**<sup>15</sup>

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 and when the vaccine is most effective. Sadly, less than 50% of girls and under 40% of boys in the US have received all necessary doses of the vaccine.<sup>16</sup> 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.<sup>17</sup> Teens can also have severe outcomes from influenza, which has led to 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 family and community members.<sup>18</sup>

Adolescent vaccines 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.**



## DID YOU KNOW?

### HPV Vaccination Can Spare Future Generations from Deadly Cancers

**4 in 5**  people in the U.S. will be infected with HPV in their lifetime.<sup>viii</sup>

**Less than 50%** of U.S. adolescents are protected by the HPV vaccine. 



If everyone received the HPV vaccine as recommended, about **29,000 CASES OF CANCER COULD BE PREVENTED EACH YEAR.**



# ***ENSURING ACCESS TO AFFORDABLE VACCINES FOR ADULTS***

America's economy depends on the health of its workforce. Illness can have a staggering impact on both worker earnings and company output, yet many adult workers fail to take advantage of some of the most effective means of wellness and immunity: vaccines. Immunization coverage for adults remains dismally low, at less than 25% percent for some diseases.<sup>19</sup> Considering that the United States spends nearly \$27 billion annually treating four vaccine-preventable diseases in adults over the age of 50, there is much we can do to improve adult immunization rates.<sup>20</sup>

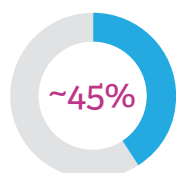


Influenza and pneumonia are the eighth largest killers of adults in this country.<sup>21</sup> Low vaccination rates contribute to substantial, yet preventable, national healthcare expenses and productivity losses. The nearly \$27 billion that is spent each year treating four vaccine-preventable diseases in adults includes the cost of medical visits, hospitalizations, and prescription coverage. This does

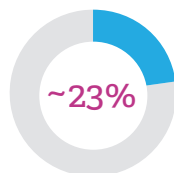
## Adult Vaccination Rates for Common Vaccine-Preventable Diseases

Vaccination rates among U.S. adults are well below the targets established in the Healthy People 2020 report.<sup>18, ix</sup>

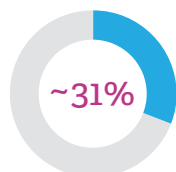
■ Real vaccination rate among U.S. adults



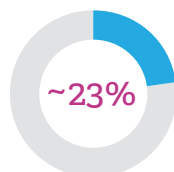
Influenza



Pneumococcal



Shingles



Tetanus, Diphtheria, Pertussis (Tdap)



not cover the astronomical costs of absenteeism and short-term disability from work.

As the American populace ages, we can expect that by 2020, one of every four workers will be over the age of 55.<sup>22</sup> 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.<sup>23</sup> Many current vaccines, as well as those in development pipelines, prevent diseases that can cause dangerous 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.

We also face continuing racial disparities in vaccine coverage among adult populations, as whites are consistently better vaccinated than

## DID YOU KNOW?

### The Costs of Vaccine-Preventable Disease

Even if work days are not missed, productivity still suffers and costs the U.S. economy billions of dollars:<sup>20, x</sup>



Each year, poor health costs the U.S. economy an estimated

**\$576 billion**

**\$227 billion** of this amount is in productivity losses from employees who are absent due to illness, and from employees who are present, but too ill to perform at their best.



The U.S. spends **nearly \$27 billion annually** treating four vaccine-preventable diseases in adults over the age of 50: influenza, pertussis, pneumococcal disease, and shingles.

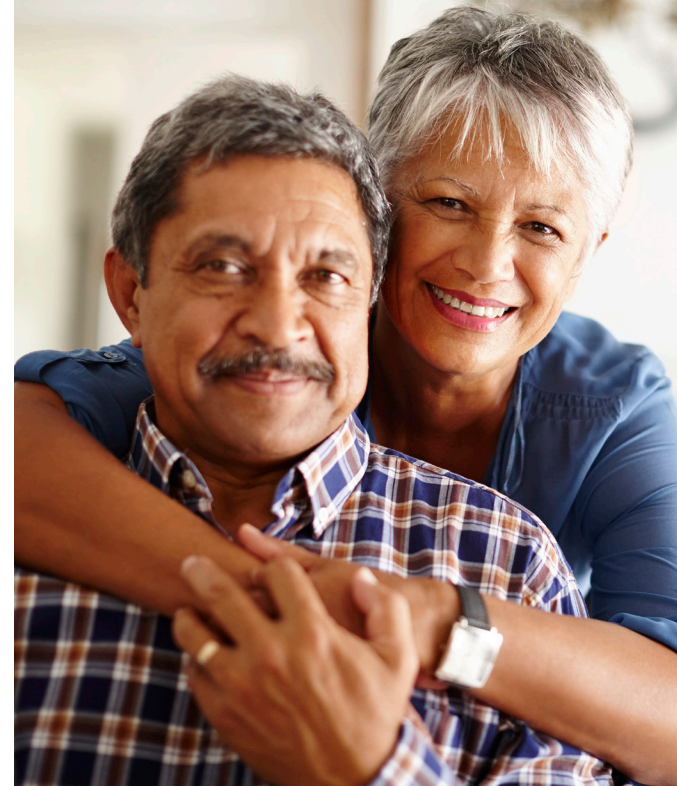
minority groups.<sup>24</sup> People of color have traditionally been at disproportionate risk for being underinsured, lacking access to quality treatment and preventive care through medical coverage.

First dollar coverage of vaccines can greatly improve the likelihood that an adult will be immunized.<sup>25</sup> Without it, we can expect more adults to be required to pay out of pocket expenses for vaccines. **Expanding first dollar coverage to Medicare Part D and encouraging Medicare Advantage and stand-alone Prescription Drug Plans to include immunizations in the zero-cost sharing vaccine 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 vaccines have only been received by 27.9% and 14% of seniors, respectively.<sup>26</sup> 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 provider office, health clinic, pharmacy, employer-sponsored clinic or other health sites 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 health care reform could therefore have a deep impact on vaccination rates, 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 2014, varied greatly among racial/ethnic groups:<sup>23, xi</sup>

Whites	Blacks & Hispanics	Asians
34.6%	<16%	26%

First dollar coverage of vaccines **greatly improves the likelihood that an adult will be immunized.**







***PROTECTING PREGNANT WOMEN***

***ALSO EXTENDS PROTECTION***

***TO THEIR BABIES***

The better tomorrow we all hope for will be created by the infants of today. In order to provide them with a foundation for success, we must work to ensure that they have a healthy start — even before they are born. Vaccines are a critical part of quality health care for both pregnant women and their babies.

Maternal vaccines protect both pregnant mothers 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 very young infants 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 newborn until the baby can develop their own antibodies 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, expectant women are more prone to severe illness from flu, which has been known to result in premature delivery, low birth weight babies, miscarriage, hospitalization or even death. Fortunately, babies whose mothers got the seasonal flu vaccine during pregnancy were 70% less likely to contract the flu than babies born to unimmunized mothers.<sup>27</sup> Since infants do not begin receiving their own 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.**<sup>28</sup>

Infants also comprise the largest share of pertussis-related deaths. **Half of the infants who contract pertussis, also known as whooping cough, will be hospitalized and one in 100 will die.**<sup>29</sup> 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.**<sup>30</sup> The maternal Tdap vaccine, which should be administered during weeks 27-36 of every pregnancy,<sup>31</sup> 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.

America's future rests in the hands of our young. Here in the U.S. we have the technology to prevent suffering among our most vulnerable citizens, our newborns. **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.

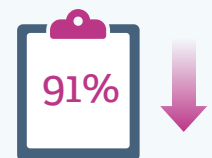
**POST DELIVERY:** Moms pass protective antibodies on to their babies, which helps protect them from dangerous infections until they can receive their flu and Tdap vaccines.



### Vaccines Given in Pregnancy Protect Babies

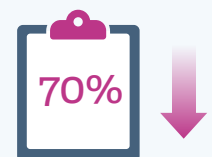
#### Pertussis

When mothers get Tdap vaccine in pregnancy, they **reduce infants risk of pertussis by<sup>xii</sup>:**



#### Flu

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





# THE STATE

## OF OUR IMMUNION IS PRECARIOUS

As outbreaks continue to rise, 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. You can help by:

- **Appropriating annual funding to the CDC, states and territories** so that they are prepared to: respond to existing and potential emerging vaccine-preventable disease outbreaks; conduct community outreach; educate providers and the public; maintain immunization registries; and offer vaccine services to the community.

Historically, federal vaccine appropriations have not met the levels requested in CDC's Annual Justification Report to Congress, and state budgets for vaccine infrastructure are nearly non-existent. This has resulted in a loss of personnel and the disbanding of several highly effective statewide immunization coalitions which supported vaccination programs for decades.

The Prevention & Public Health Fund currently provides 53% of the CDC's Immunization Program funding. Using PPHF as a budgetary

offset for other programs could place constituents' health in grave danger;

- **Supporting health care reform 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 results in often prohibitive cost sharing for beneficiaries who wish to access recommended vaccines under the Part D program. Recommended vaccines should be widely available to consumers of all ages at no additional cost, regardless of insurance program;
- **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 recommendation and that prior to and following licensure, vaccine safety is heavily monitored by various divisions 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, threatening to impact your constituents' understanding of the safety and value of vaccines in ensuring healthy communities for all. You can be a champion and advocate simply by knowing how to respond to your constituents' concerns and offering evidence-based responses;

- **Reaching out to your local immunization advocates**, including hospitals, leading health care providers, colleges and universities, and immunization coalitions, to support their efforts and gather feedback on the impact policies have on their ability to protect your constituents from deadly diseases; and
- **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 channels. Learn more at:
  - [www.vaccinateyourfamily.org](http://www.vaccinateyourfamily.org)
  - [www.shotofprevention.com](http://www.shotofprevention.com)
- And on Facebook ([facebook.com/VaccinateYourFamily](https://facebook.com/VaccinateYourFamily)) and Twitter ([@EveryChildBy2](https://twitter.com/EveryChildBy2))

### 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 Officers](#) 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: <https://www.cdc.gov/vaccines/imz-managers/coverage/childvaxview/data-reports/index.html>
- School Rates: <https://www.cdc.gov/vaccines/imz-managers/coverage/schoolvaxview/data-reports/index.html>
- Teen Rates: <https://www.cdc.gov/vaccines/imz-managers/coverage/teenvaxview/index.html>
- Adult Rates: <https://www.cdc.gov/vaccines/imz-managers/coverage/adultvaxview/index.html>
- Flu Rates: <https://www.cdc.gov/flu/fluview/index.html>



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The Next Generation of Every Child By Two

#### **Vaccinate Your Family**

Vaccinate Your Family (VYF) is an Every Child By Two initiative aimed at raising awareness of the critical importance of vaccines across the lifespan. It is the next generation of the Vaccinate Your Baby program, which focused on the importance of protecting infants against vaccine-preventable diseases. Learn more at [vaccinateyourfamily.org](https://vaccinateyourfamily.org).

#### **Every Child By Two – Carter/Bumpers Champions for Immunization**

Founded in 1991 by Former First Lady Rosalynn Carter and Former First Lady of Arkansas Betty Bumpers, Every Child By Two works to protect families and individuals from vaccine-preventable diseases by raising awareness of the critical need for timely immunizations for people of all ages, increasing the public's understanding of the benefits of vaccines, increasing confidence in the safety of vaccines, ensuring that all families have access to life-saving vaccines, and advocating for policies that support timely vaccination.