



BROADENING THE VACCINES PORTFOLIO

At Pfizer, we believe in the promise and value of vaccines to improve people’s lives. Leveraging leading technology in vaccine design and conjugation, we are pursuing preventative solutions to complex, difficult-to-treat bacterial pathogens — across the lifespan. We are also exploring the power of novel therapeutic vaccines to treat chronic conditions, and diseases such as cancer.

“We’re working on bringing our vaccines to more people everywhere they are needed. When I envision our world in 2030, I imagine one in which everyone — no matter where they’re born — has access to vaccines that help prevent illnesses and save lives.”

— Susan Silbermann
President, Pfizer Vaccines



TAKING ON MENINGOCOCCAL MENINGITIS

Trumenba® is the first vaccine approved in the United States to protect against meningococcal meningitis serogroup B, and we are in the process of filing with regulatory authorities in other countries around the world.

Building Out Our Meningitis Vaccines Portfolio

During 2015, we acquired from GlaxoSmithKline two quadrivalent (ACWY) meningitis vaccines, Nimenrix® (meningococcal serogroups A, C, W-135 and Y conjugate vaccine) and Mencevax® (meningococcal polysaccharide serogroups A, C, Y and W-135 vaccine), currently marketed in a number of countries outside the U.S. In 2014, we acquired NeisVac-C® (meningococcal group C-TT conjugate vaccine, adsorbed) from Baxter, a vaccine for protection against serogroup C meningococcal disease, marketed primarily in Europe. With the addition of these complementary vaccines, we have created a comprehensive portfolio that is focused on helping to prevent meningococcal disease and for controlling outbreaks.

Trumenba® Supplied in Campus Outbreaks

In Trumenba's first year of availability, we have already helped respond to outbreaks of serogroup B meningococcal meningitis at colleges and universities within the U.S. Following a public announcement by the Rhode Island State Department of Health that two students at Providence College contracted the disease, Pfizer worked with the college's officials to supply the vaccine for the on-campus vaccination clinic. We delivered the doses in less than a day and supported more than fifty health care providers who administered them. At the University of Oregon, when four students were confirmed to have contracted the disease, it took us only one day to put together a unique partnership with two local pharmacy chains to ultimately supply mass vaccination events targeting more than 22,000 students.

4,000 DOSES

WERE DELIVERED TO PROVIDENCE COLLEGE IN LESS THAN 24 HOURS.

22,000 STUDENTS

PFIZER RESPONDED QUICKLY TO SUPPLY MASS VACCINATION EVENTS TARGETING MORE THAN 22,000 STUDENTS AT THE UNIVERSITY OF OREGON.

"Pfizer colleagues jumped in at a moment's notice to respond to these urgent public health situations. Thanks to the team's focused actions, we helped to protect thousands of students from this rare but devastating disease."

— John Schutta
Pediatric and Adolescent Lead, U.S. Vaccines

PREVNAR 13® REACHING ACROSS THE LIFESPAN

Our Prevnar franchise (known as Prevenar outside the U.S.) continues to expand. We recently manufactured our billionth dose. And with Prevnar 13® (pneumococcal 13-valent conjugate vaccine [diphtheria CRM₁₉₇ Protein]) we are reaching more people, at more stages of life, around the world.

In 2014, the U.S. Centers for Disease Control and Prevention recommended Prevnar 13 for routine use to help protect adults age 65 and over against pneumococcal disease. Additional adult recommendations are under consideration by health authorities in countries around the world. We continue to work in close collaboration with global partners, such as the International Federation on Ageing, to raise awareness of the importance of adult vaccination.



Global Efforts to Reach People

We have pledged to supply up to 740 million doses of Prevenar 13® (pneumococcal polysaccharide conjugate vaccine, 13-valent, adsorbed) through 2025 to infants and young children throughout the developing world at a non-commercial price, through Gavi, the Vaccine Alliance.

Multi-Dose Vial for Prevenar 13®

To help address the practical constraints experienced by health workers operating in many Gavi countries, Pfizer has developed Prevenar 13® in a multi-dose vial (MDV) presentation and added the preservative 2-phenoxy ethanol to reduce vaccine wastage. The MDV presentation will contain four doses of Prevenar 13, and will be the same size as the current single dose vial. This will result in a smaller environmental footprint with a 75 percent reduction in cold chain and shipping material requirements. The dossier for the new MDV presentation is subject to approval by the European Medicines Agency and WHO prequalification. Pfizer's ongoing investments to ensure high quality vaccines in adequate and reliable supply, as well as the first preserved PCV multi-dose vial presentation, will help ensure more children have access in communities whose health care systems are still developing.

INVESTIGATIONAL VACCINES ADVANCING IN PIPELINE

We have two prophylactic vaccines for hospital-acquired infections in Phase 2 trials, one to help prevent *Clostridium difficile* (*C. difficile*) disease and one to help prevent *Staphylococcus aureus* (*S. aureus*) infections. Both of these investigational vaccines have been granted Fast Track status by the U.S. Food and Drug Administration.

C. difficile is a bacterium that can cause symptoms ranging from diarrhea to life-threatening inflammation of the colon. Pfizer is currently investigating a vaccine that targets the two main disease-causing toxins produced by *C. difficile* (Toxin A & B) and initiated a Phase 2 clinical trial to investigate the safety, immunogenicity and tolerability of Pfizer's *C. difficile* vaccine in healthy older adults.

S. aureus infections persist as a major cause of life-threatening hospital-acquired infections. To date, there is no licensed vaccine available to prevent invasive *S. aureus* disease. Our new investigational, multiantigen *S. aureus* vaccine is uniquely designed to help prevent a wide range of clinical disease manifestations by potentially facilitating pathogen killing at early stages of invasive infection.

11,000

ACCORDING TO THE U.S. CENTERS FOR DISEASE CONTROL AND PREVENTION, *S. AUREUS* RESULTS IN NEARLY 700,000 HOSPITALIZATIONS AND 11,000 DEATHS ANNUALLY.

“The development of the *C. difficile* and *S. aureus* vaccines has real potential to reduce the suffering and mortality associated with bacterial infections contracted in health care settings. If successful, these vaccines would provide additional tools to positively impact human health.”

— William Gruber, M.D.
Senior Vice President, Vaccine Clinical
Research and Development

“Vaccines generate tremendous social value by helping to prevent disease and sustain healthy communities.”

— James Wassil
Global Health and Value Lead, Pfizer Vaccines

SELECTED VACCINE CANDIDATES IN CLINICAL DEVELOPMENT

NAME	INDICATION	PHASE
Trumenba® (MnB rLP2086)	Adolescent and Young Adult Meningitis B (EU)	Phase 3
4-Antigen <i>Staphylococcus Aureus</i> Vaccine (SA4Ag) (PF-06290510)	<i>Staph aureus</i> (FAST TRACK)	Phase 2b
PF-06425090	<i>Clostridium difficile</i> Colitis (FAST TRACK)	Phase 2

MATERNAL VACCINATION

To deliver on our promise to bring immunizations to people across all stages of life, we are exploring the development of maternal vaccination candidates to protect newborns from dangerous infections such as Group B streptococcus, respiratory syncytial virus, and cytomegalovirus (CMV), a herpes virus. Our acquisition of Redvax GmbH, a spin-off from Redbiotec AG, a privately held Swiss biopharmaceutical company, provides access to a preclinical human cytomegalovirus vaccine candidate, as well as intellectual property and a technology platform related to another vaccine program. The CMV vaccine program will complement our robust research portfolio of investigational vaccines and help place Pfizer among the leaders in CMV research and development.

The Institute of Medicine has ranked the development of a CMV vaccine as the highest priority because of the lives it would save and the disabilities it would prevent. A large segment of young adults, especially women of childbearing age who remain CMV negative, are at high risk of CMV infection during pregnancy and of passing the infection on to the unborn child (congenital infection). There are potentially serious and lifelong consequences for babies born with the disease. More children have disabilities due to congenital CMV than other well-known infections and syndromes, including Down syndrome, fetal alcohol syndrome, spina bifida and pediatric HIV/AIDS.

I'M WORKING ON...



Kena Swanson
Senior Principal Scientist, Vaccine Research and Development

WATCH VIDEO

“We are dedicated to developing innovative vaccines that help prevent and treat serious diseases. Through the acquisition of Redvax, we obtained an innovative CMV vaccine platform and expertise to develop a vaccine to prevent a difficult disease that can have a devastating and lifelong impact on young children.”

– Kathrin U. Jansen, Ph.D.
Senior Vice President, Head of Vaccine Research Development



~5,000 CHILDREN

EACH YEAR IN THE U.S. DEVELOP LASTING HEALTH PROBLEMS CAUSED BY CMV, SUCH AS HEARING OR VISION LOSS, AND SEVERE NEUROLOGIC DISORDERS.

2B BABIES

WILL BE BORN BETWEEN NOW AND 2030 WORLDWIDE.

THE VALUE OF VACCINES



For every \$1.00 the U.S. spends on childhood vaccinations,

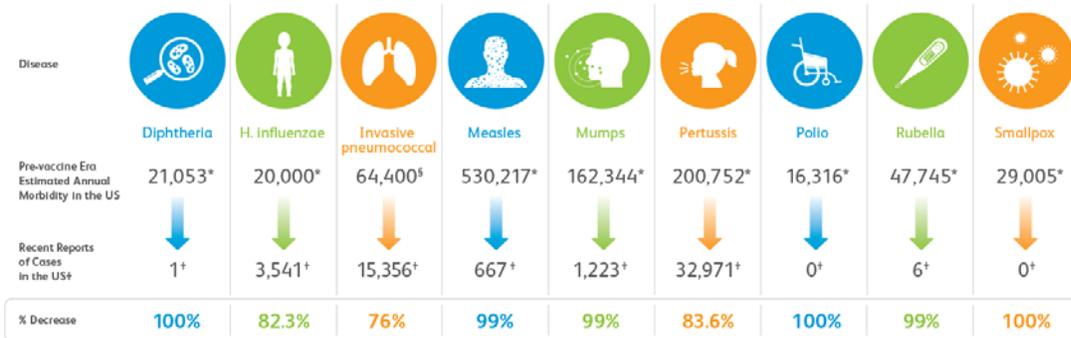


\$10.20 is saved in disease treatment costs.

Source: Centers for Disease Control and Prevention (CDC) – Immunizations and Respiratory Disease Factsheet. Retrieved from: http://cdc.gov/fmo/topic/budget%20information/factsheets/IRD_Factsheet.pdf Accessed: March, 2015

THE IMPACT OF VACCINES ON INFECTIOUS DISEASE MORBIDITY IN THE UNITED STATES, PRE-VACCINES – 2014

The Impact of Vaccines on Infectious Disease Morbidity in the United States, Pre-vaccines-2014



* Adapted from: CDC, JAMA, November 14, 2007; 298(18):2155-63; CDC. † MMWR, September 18, 2015; 64:1020-1033. § CDC Active Bacterial Core Surveillance Report, Emerging Infections Program Network, Streptococcus pneumoniae, 1999