

Coalition Statement on the Impact and Safety of Vaccines

A coalition of 34 scientific and medical organizations led by the American Association of Immunologists and the American College of Physicians released the following statement:

We strongly support vaccination as a cornerstone of public health, a shining example of the power of scientific research, and a vital tool in the fight against preventable diseases. We urge everyone to adhere to recommended vaccination schedules to protect themselves, their families, and their communities. Together, we can continue to build a healthier and safer world for ourselves and future generations. We encourage all individuals to speak to their trusted healthcare professional regarding their personal medical care or if they have any concerns or questions about vaccines.

Scientific Foundation and Safety of Vaccines

The science behind vaccines is robust and well-established. Decades of rigorous scientific research in the lab underpins vaccine design and development. Layers of safety testing and oversight ensure that the benefits of vaccines far outweigh any risk. From the initial discoveries in the lab to large-scale clinical trials, the journey from concept to approved vaccine often spans 10 to 15 years or longer, reflecting the immense amount of work required to develop life-saving vaccines.

Some vaccines can be approved for use rapidly because the research underpinning the vaccine has already been done. For example, more than 50 years of prior work on mRNA technology and coronaviruses allowed scientists to swiftly create mRNA vaccines for SARS-CoV-2 when the COVID-19 pandemic emerged. Thanks to this scientific foundation, researchers developed the COVID-19 vaccines in record time, and they have since protected billions from severe disease and hospitalization and saved countless lives worldwide ([WHO, 2024](#)).

The Real-World Impact of Vaccines

Vaccines are one of the most significant public health achievements, providing safe and effective protection against many infectious diseases. Vaccination programs have dramatically reduced or eliminated diseases that once caused widespread illness, suffering, or death. Key achievements include:

- **Globally over 150 million lives saved in 50 years:** Vaccination campaigns worldwide have saved an estimated 154 million lives over the past 50 years, particularly through initiatives targeting diseases like smallpox, polio, and measles ([WHO, 2024](#)). In the USA over the last 30 years, immunization efforts have prevented an estimated 508 million cases of illness, 32 million hospitalizations, and over 1 million deaths. These efforts saved \$540 billion in direct costs and \$2.7 trillion in societal costs ([CDC, 2024](#)).
- **Eliminating measles in the U.S.:** Measles once affected millions annually, causing severe complications such as pneumonia, brain swelling, and death. Before the introduction of the measles vaccine in 1963, the United States recorded over 500,000 cases and nearly 500 deaths each year ([CDC, 2019](#)). Widespread vaccination campaigns reduced U.S. cases to the point that in 2000 it was declared that measles was eliminated ([CDC, 2019](#)). However, recent outbreaks have highlighted the importance of maintaining high vaccination coverage. In 2019, measles surged to its highest numbers in decades due to decreased vaccination

rates, emphasizing the need for continued public education and immunization efforts. Globally, the vaccine has prevented more than 60 million deaths between 2000 and 2023 ([WHO, 2024](#)).

- **Near-eradication of polio worldwide:** In the early 20th century, the U.S. experienced tens of thousands of cases of polio each year. Polio infections peaked in the U.S. in 1952, with more than 21,000 people suffering from paralysis because of their infection ([CDC, 2024](#)). Decades of research led to the development of a polio vaccine and dramatic decline in cases. By 1979, the United States was declared polio-free. Globally, polio vaccination campaigns have brought the world to the brink of eradication. Cases have declined by more than 99% since 1988, from 350,000 cases annually to fewer than 200 in 2022 ([Global Polio Eradication Initiative, 2023](#)).
- **Preventing cancer:** Vaccination programs to reduce the spread of Human papillomavirus (HPV), the cause of nearly all cases of cervical cancer, have proven to be highly effective. WHO efforts, as an example, have been established to guide the elimination of cervical cancer as a public health problem. Vaccination, alongside screening and treatment, is a key pillar to achieving global elimination of cervical cancer ([WHO, 2025](#)).

Through rigorous scientific research and extensive testing, vaccines have consistently proven their ability to save lives, prevent illness, and protect entire communities. Clinical trials and long-term post-market safety monitoring ensure that vaccines are safe, and any safety concerns that arise are swiftly investigated.

While no medical intervention can offer absolute protection, and all come with some level of individual risk, vaccines provide the most effective means of protecting individuals and society from deadly infectious diseases and/or their complications.

List of Coalition Organizations

American Association of Immunologists
American College of Physicians
Academy of Managed Care Pharmacy (AMCP)
American Academy of Pediatrics
American Anthropological Association
American Association for Anatomy
American Association for Dental, Oral, and Craniofacial Research
American Association of Colleges of Pharmacy (AAP)
American College of Obstetricians and Gynecologists
American Industrial Hygiene Association
American Institute of Biological Sciences
American Osteopathic Association
American Pharmacists Association
American Physiological Society
American Society for Biochemistry and Molecular Biology
American Society for Clinical Pharmacology & Therapeutics (ASCPT)
American Society for Investigative Pathology

American Society for Matrix Biology (ASMB)
American Society for Microbiology
American Society for Pharmacology and Experimental Therapeutics (ASPET)
American Society of Tropical Medicine and Hygiene
American Statistical Association
Association of Biomolecular Resource Facilities
Biophysical Society
Council of Medical Specialty Societies
Entomological Society of America
FASEB
Gerontological Society of America
March of Dimes
Society for Leukocyte Biology
Society of Behavioral Medicine
The Histochemical Society
The Society for Research in Child Development
United States Pharmacopeia (USP)