

Vaccines: Decades of Research Supporting Safety and Effectiveness

Vaccines are among the most extensively studied medical products on the market, with decades of research and continued monitoring to ensure their safety and effectiveness. Below is an overview of key findings and resources, including a curated list of some of the most significant studies confirming the safety of vaccines.

Landmark Research Studies on Vaccine Safety

1. Measles, Mumps, and Rubella (MMR) Vaccine and Autism

- a. *Study*: "MMR Vaccination and Autism: A Nationwide Cohort Study" (Hviid et al., 2019)
- b. *Journal*: Annals of Internal Medicine, <https://www.acpjournals.org/doi/10.7326/M18-2101>
- c. *Summary*: A large-scale study of over 650,000 children in Denmark found no link between the MMR vaccine and autism.

2. Thimerosal and Neurodevelopmental Outcomes

- a. *Study*: "Safety of Thimerosal-Containing Vaccines: A Two-Phased Study" (Verstraeten et al., 2003)
- b. *Journal*: Pediatrics, <https://publications.aap.org/pediatrics/article-abstract/112/5/1039/28714/Safety-of-Thimerosal-Containing-Vaccines-A-Two>
- c. *Summary*: No evidence of harm was found in children who received vaccines containing thimerosal, a mercury-based preservative removed from most childhood vaccines in the U.S. by 2001 as a precautionary measure.

3. HPV Vaccine and Long-Term Safety

- a. *Study*: "Safety of the Human Papillomavirus Vaccine: A Systematic Review" (Arbyn et al., 2018)
- b. *Journal*: Clinical Infectious Diseases
- c. *Summary*: Analysis of over 100 studies confirmed the long-term safety and effectiveness of HPV vaccines in preventing cervical and other cancers.

4. Pediatric Vaccine Schedule

- a. *Study*: "Safety of the Childhood Vaccine Schedule" (Institute of Medicine, 2013), <https://nap.nationalacademies.org/catalog/13563/the-childhood-immunization-schedule-and-safety-stakeholder-concerns-scientific-evidence>
- b. *Summary*: A comprehensive review found no evidence to suggest that following the recommended vaccine schedule increases the risk of adverse effects.

Trusted Resources for Further Information:

- **Vaccinate Your Family:** A compilation of numerous studies on vaccine safety.
Visit VYF: vaccinateyourfamily.org/questions-about-vaccines/vaccine-research/
- **American Academy of Pediatrics:** A compilation of some of the studies on vaccine safety.
Visit AAP: healthychildren.org/English/safety-prevention/immunizations/Pages/vaccine-studies-examine-the-evidence.aspx
- **Vaccine Education Center (Children's Hospital of Philadelphia):** Easy-to-understand vaccine information for families.
Visit VEC: chop.edu/vaccine-education-center
- **Centers for Disease Control and Prevention (CDC):** Comprehensive vaccine safety data and resources.
Visit CDC: cdc.gov/vaccine-safety
- **National Institute of Allergy and Infectious Diseases (NIAID):** Research updates and vaccine studies.
Visit NIAID: niaid.nih.gov
- **World Health Organization (WHO):** Global perspectives on vaccine safety and efficacy.
Visit WHO: who.int

Bottom Line:

The science is clear: Vaccines are one of the safest and most effective ways to prevent serious illnesses and protect public health.

For more information, visit **Vaccinate Your Family** at vaccinateyourfamily.org.