Who Can We Trust for Vaccine Information?

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The Children's Hospital of Philadelphia

Perelman School of Medicine

The University of Pennsylvania

January 30, 2025

RFK Jr. appears before the Senate HELP Committee

Senator William Cassidy (R, LA), a physician, heads the committee

WE'RE FIGHTING WITH YOU...
Children's
Health Defense
TM

Science, Public Health Policy, and the Law
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Peer Reviewed, Clinical Research, Science

An Institute for Pure and Applied Knowledge (IPAK)

Public Health Policy Initiative (PHPI)

IPAK PHPI

Vaccination and Neurodevelopmental Disorders: A Study of Nine-Year-Old Children Enrolled in Medicaid

Anthony R. Mawson[1*], Binu Jacob[1]

Abstract

Background: Vaccinations required for school attendance have increased nearly threefold since the 1950s, now targeting 17 infectious diseases. However, the impact of the expanded schedule on

“Gold-Standard Science?”

- “Published” in a Word Press Blog, not a scientific or medical journal.
- Not peer reviewed. Funded by the National Vaccine Information Center, an anti-vaccine organization.
- Defined “vaccinated” and “unvaccinated” based on billing codes. “Unvaccinated” children might have been vaccinated through the Vaccine for Children’s program. Didn’t track specific vaccines.
- Failed to control for confounding variables like healthcare-seeking behavior, socioeconomic background, and medical background.

What is “gold-standard” science?

How to determine quality data

What guardrails are in place to protect us from studies that are not only wrong, but dangerously wrong?

- ☐ reputation of the investigator
- ☐ reputation of the institution
- ☐ quality of the journal
- ☐ expertise of the reviewers
- ☐ reproducibility by other investigators

Andrew Wakefield

Early report

Ileal-lymphoid-nodular hyperplasia, non-specific colitis, and pervasive developmental disorder in children

A J Wakefield, S H Murch, A Anthony, J Linnell, D M Casson, M Malik, M Berelowitz, A P Dhillon, M A Thomson, P Harvey, A Valentine, S E Davies, J A Walker-Smith

Summary

Background We investigated a consecutive series of children with chronic enterocolitis and regressive developmental disorder.

Introduction

We saw several children who, after a period of apparent normality, lost acquired skills, including communication. They all had gastrointestinal symptoms, including abdominal pain, diarrhoea, and bloating and, in some

Wakefield, A.J., et al. *Lancet* 351: 637-641, 1998.

Impact of Wakefield paper

- The media covered the story as fact.
- Immunization rates dropped. Measles swept through the United Kingdom causing thousands of cases, hundreds of hospitalizations, and four deaths.
- As the news of Wakefield's discovery crossed the ocean, tens of thousands of American parents chose not to give their children the MMR vaccine.
- Although measles had been eliminated from the United States by 2000, as early as 2004, in part because of Andrew Wakefield's paper, it was coming back.

In 2025, the US experienced its biggest measles outbreak in 33 years.

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UNBIASEDSCIENCE

A Comprehensive Review of the MMR Vaccine Studies: Many Years and Millions of People Reveal NO Link to Autism

Time to Move Forward: What Decades of Consistent Evidence Should Tell Us

JESS STEIER, DRPH, AIMEE PUGH BERNARD, PHD, DAVID HIGGINS, MD, MPH, AND IZZY BRANDSTETTER FIGUEROA,MPH

MAR 19, 2025

145 97 50 Share

Have you ever wondered what all those science articles about vaccines and autism really say? Look no further! A pediatrician, immunologist, epidemiologist, and public health scientist teamed up to break down all the articles into easy-to-understand summaries just for you.

Russell Portenoy

Pain, 25 (1986) 171–186
Elsevier

PAI 00878

Chronic Use of Opioid Analgesics in Non-Malignant Pain: Report of 38 Cases

Russell K. Portenoy and Kathleen M. Foley

Pain Service, Department of Neurology, Memorial Sloan-Kettering Cancer Center, and Department of Neurology, Cornell University Medical College, New York, NY 10021 (U.S.A.)

(Received 10 June 1985, accepted 28 October 1985)

Summary

Thirty-eight patients maintained on opioid analgesics for non-malignant pain were retrospectively evaluated to determine the indications, course, safety and efficacy of this therapy. Oxycodone was used by 12 patients, methadone by 7, and levorphanol by 5; others were treated with propoxyphene, meperidine, codeine, pentazocine, or some combination of these drugs. Nineteen patients were treated for

Portenoy, R.K., et al. "Chronic Use of Opioid Analgesics in Non-Malignant Pain: Report of 38 Cases." *Pain* (1986) 25: 171-186.

Impact of Portenoy paper

- Portenoy reported the stories of 38 people who were on high-doses of opioids. He found that only two had become addicted to their drugs—and both had a previous history of addiction.
- Portenoy claimed that “opioid maintenance therapy can be safe.”
- Pharmaceutical companies seized on Portenoy’s study as proof that opioids, like OxyContin, could be used without fear of addiction.
- Since that publication, more than 800,000 people in the United States have died from opioid overdoses and an additional 3,000-4,000 are dying every year.

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The NEW ENGLAND JOURNAL of MEDICINE

REVIEW ARTICLE

MEDICAL PROGRESS

Opioid Therapy for Chronic Pain

Jane C. Ballantyne, M.D., and Jianren Mao, M.D., Ph.D.

OPIUM IS A BITTER, BROWN, GRANULAR POWDER DERIVED FROM THE seedpod of the poppy (*Papaver somniferum*). People have used opium for the relief of pain and suffering for thousands of years. Before the 19th century, opium was cultivated and used chiefly in the Middle East, whereas in Europe and the United States it was a luxury available mainly to the elite. During the 19th century, several historical events conspired to make opium and other opioids more readily available. The production of opium increased rapidly, and after the morphine alkaloid was identified in 1806 pharmacologic production of opioid drugs began. Use of morphine-containing tinctures such as laudanum became commonplace, especially in the treatment of the "travails" and "boredom" of Victorian women. Morphine-containing cures for colic, diarrhea, dysmenorrhea, and other painful conditions were widely available and could be bought from doctors and pharmacists.

Ballantyne, J.C., J. Mao, "Opioid Therapy for Chronic Pain." *New England Journal of Medicine* (2003) 349: 1943-1953.

Who can the public trust for scientific and medical information?

A few simple suggestions

#1: It’s all about the data

Moderna COVID-19
Vaccine, Bivalent
Original and Omicron BA.4/BA.5
Suspension for Intramuscular Injection
For use under Emergency
Use Authorization
BOOSTER DOSES ONLY
Multi-Dose Vial
Booster dose: 0.5 mL or 0.25 mL
based on age

The bivalent Covid-19 vaccine

- In December 2021, the omicron variant BA.1 entered the United States. At the time, the Covid-19 vaccine only contained the original ancestral strain of SARS-CoV-2.

- In September 2022, the FDA authorized use of a bivalent Covid-19 vaccine that contained 15 ug of the ancestral strain of SARS-CoV-2 plus 15 ug of the BA.1 omicron variant. The monovalent Covid-19 vaccine had contained 30ug of the ancestral strain only.

- Was the bivalent vaccine better than the monovalent vaccine? It made sense that it would be, but was it?

The NEW ENGLAND JOURNAL of MEDICINE

Perspective

FEBRUARY 9, 2023

Bivalent Covid-19 Vaccines — A Cautionary Tale

Paul A. Offit, M.D.

In November 2019, a bat coronavirus made its debut in humans in Wuhan, China. Two months later, the original strain of SARS-CoV-2, called the Wuhan-1 or ancestral strain, was isolated and

samples obtained from people who were vaccinated against or previously infected with SARS-CoV-2 exhibited substantially lower neutralizing activity against BA.1 than against the ancestral

Offit, P.A. New England Journal of Medicine (2023) 388: 481-483.

Antibody Response to Omicron BA.4–BA.5 Bivalent Booster

TO THE EDITOR: The continued evolution of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) has led to the emergence of the B.1.1.529 (omicron) variant and numerous sublineages that often evade neutralizing-antibody responses induced by infection or vaccination.[1] In response to this worrisome trend, the Food and Drug Administration granted emergency use authorizations to bivalent formulations of the messenger RNA (mRNA) vaccines mRNA-1273 (Moderna) and BNT162b2 (Pfizer–BioNTech) that target both the omicron BA.4–BA.5 spike and the ancestral wild-type (D614G) spike of SARS-CoV-2.[2] Published data on antibody responses to the bivalent vaccines have been limited to studies in animals and in humans that have used another bivalent mRNA vaccine targeting the BA.1 spike in addition to the D614G spike.[3,4] Despite the widespread administration of booster vaccines, the effect of a booster injection with new bivalent vaccines on the neutralizing-antibody response in humans remains unknown.

Therefore, we collected serum samples from participants who had received three doses of either of the original monovalent mRNA vaccines followed by one dose of a bivalent vaccine targeting BA.4–BA.5 (bivalent-booster group), with each booster produced by the two original manufacturers. (The BA.4–BA.5 subvariants are often grouped together because they have the same spike protein.) Details regarding the methods that were used in this study and the recruitment

Wang, Q., et al. New England Journal of Medicine (2023) 388: 567-569.

The NEW ENGLAND JOURNAL of MEDICINE

CORRESPONDENCE

Immunogenicity of BA.5 Bivalent mRNA Vaccine Boosters

TO THE EDITOR: Waning immunity after messenger RNA (mRNA) vaccination and the emergence of variants of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) have led to reduced mRNA vaccine efficacy against symptomatic infection and severe disease.[1,2] Bivalent mRNA boosters (manufactured by Pfizer–BioNTech and Moderna) expressing the spike protein of the B.1.1.529 (omicron) BA.5 sublineage and the ancestral WA1/2020 strain have been developed because BA.5 substantially evades neutralizing antibodies.[3] However, the immunogenicity of the BA.5-containing bivalent mRNA boosters remains unknown.

Spike-specific CD8+ and CD4+ T-cell responses increased modestly after monovalent and bivalent mRNA boosting. The median BA.5 CD8+ T-cell response increased from 0.027% to 0.048% after monovalent mRNA boosting and from 0.024% to 0.046% after bivalent mRNA boosting (Fig. 1C and 1D). The median BA.5 CD4+ T-cell response increased from 0.060% to 0.130% after monovalent mRNA boosting and from 0.051% to 0.072% after bivalent mRNA boosting (Fig. 1E and 1F). The median BA.5 memory B-cell response was 0.079% after monovalent mRNA boosting and 0.091% after bivalent mRNA boosting (Fig. S4).

Collier, A.Y., et al. New England Journal of Medicine (2023) 388: 565-567.

CNN

Was the bivalent Covid-19 vaccine in 2022 better than the monovalent vaccine?

Sadly, data don’t speak for themselves.

If data don’t speak for themselves, who can you trust to speak for them?

#2: Ask the audience

WHO WANTS TO BE A
MILLIONAIRE
WHO WANTS TO BE A

Who Wants to Be a Millionaire?

- On August 16, 1999, ABC aired the first episode of the popular game show, *Who Wants to Be a Millionaire?* Regis Philbin was the host.
- The show featured a quiz competition with contestants trying to win the top prize of $1,000,000 by answering a series of questions with increasing difficulty.
- Contestants were allowed to seek help in answering questions by either “phoning a friend,” or “asking the audience.” After 15 years of the show, the “ask the audience” success rate was 95% compared with 66% for “phoning a friend.”

What is the scientific equivalent of asking the audience?

Are Covid-19 vaccines safe and effective?

Covid-19 vaccines

- In December 2020, the FDA vaccine advisory committee (VRBPAC) was asked to consider authorizing the Covid-19 mRNA vaccines made by Pfizer and Moderna.

- We reviewed Pfizer's vaccine on December 10th and Moderna's on December 17th. The week before each review session, our committee received a 200-page document from the vaccine maker and another 200-page document from the FDA, which had reviewed all the clinical data to make sure that the company's documents didn't contain any omissions or misrepresentations.

- In other words, before we made the decision to recommend authorization of these two vaccines, each committee member had read about 800 pages of evidence.

Covid-19 vaccines

- At that point, about 35,000 adults had been inoculated with the mRNA Covid-19 vaccines. If we recommended authorization, hundreds of millions of people would be vaccinated. In other words, we didn't know everything. The question before us was, "Did we know enough?"

- The evidence looked good. The FDA advisory committee voted unanimously to approve both vaccines. A few weeks later, the CDC's vaccine advisory committee read the same documents and reached the same conclusion. It was the right decision.

- The mRNA Covid-19 vaccines saved about 3 million American lives and 20 million lives worldwide. On the other hand, about 234,000 Americans who chose not to get the mRNA Covid-19 vaccines died as a result.

Covid-19 vaccines

- After we recommended authorization of these two vaccines, I received a lot of requests from people wondering whether they should get them.

- Many told me that that they weren't going to take the vaccines. They had done their research and decided that the vaccines were too dangerous. But doing their research didn't mean reviewing the 800 pages of primary information that we had reviewed, even though those data were publicly available.

- Rather, it meant reading other people's opinions about these vaccines on the internet or on social media.

Covid-19 vaccines

- To read and understand those 800 pages of documents would have required at least some working knowledge of virology, immunology, statistics, and epidemiology. Most people don't have that expertise. Indeed, many doctors don't have that expertise.

- Collectively, the 12-member FDA vaccine advisory committee and 17-member CDC vaccine advisory committee had that expertise. These committees were the equivalent of "asking the audience."

- Other sources of expert committees are the AAP, ACOG, IDSA, AAFP, NFID, the Vaccine Integrity Project at the University of Minnesota, the Vaccine Education Center at the Children's Hospital of Philadelphia, among others. Collectively, these are the single best sources of vaccine information.

Expert advisory committees aren’t always right.

Covid-19 vaccines

- In February 2021, the FDA and CDC vaccine advisory committees were charged with reviewing data on Johnson & Johnson's adenovirus vectored Covid-19 vaccine.

- J&J's vaccine had been tested in a 40,000 person, prospective, placebo-controlled trial and appeared to be safe and effective.

- However, when J&J's vaccine was given to millions of people, it was found to be a rare cause of clotting, including clotting of the brain, including fatal clotting of the brain. The adverse event was rare, about 1 in 250,000 vaccine recipients. Too rare to have been detected in a study of 20,000 vaccine recipients.

- Because the mRNA vaccines were safer, J&J's vaccine was taken off the market in May 2023.

Covid-19 vaccines

- After the J&J vaccine was taken off the market, some people said, “See, that’s why you can’t trust science or scientific advisory committees.”

- In truth, because science is self-correcting and willing to learn as new data become available, that’s exactly why you can trust science.

- Because we are open-minded, we have set up systems like the Vaccine Safety DataLink to quickly pick up rare safety problems that weren’t detectable before vaccines are broadly distributed.

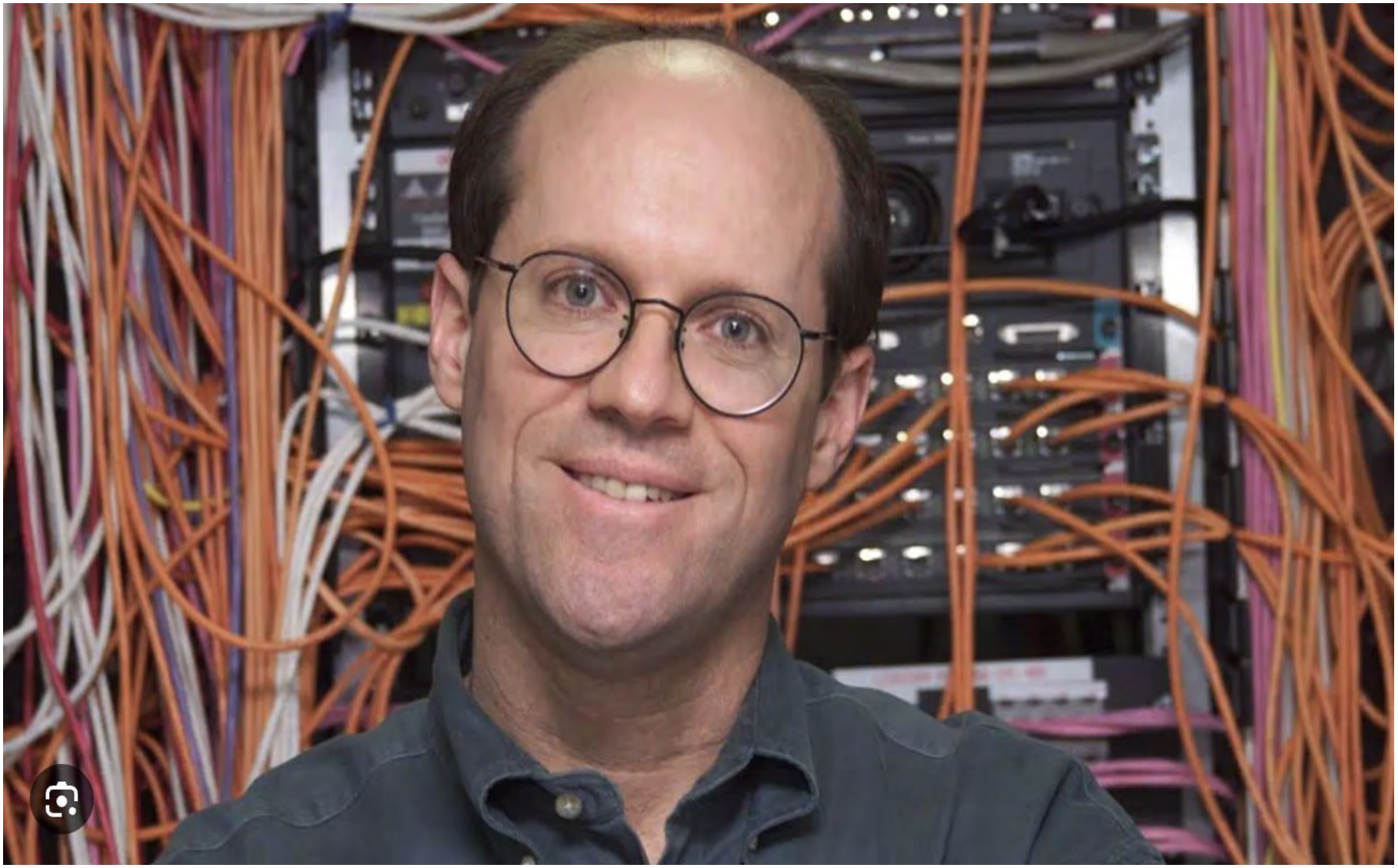
Covid-19 vaccines

- "Trust us. We're experts," however, is not exactly a message that sells in the 21st century. Indeed, RFK Jr. has specifically recommended against trusting experts, which, in an era of medical freedom, *is* a message that sells.

- Most people believe they can do their own research online and know just as much as these committees.

People looking for information apart from expert advisory groups should avoid the following pitfalls:

#3: Scientific truths are determined in a scientific venue, not on a debate stage



Steve Kirsch

Debating Science

- On September 14, 2021, Steve Kirsch tweeted that the mRNA Covid-19 vaccine made by Pfizer "kills more people than it saves."

- Kirsch claimed that the Pfizer vaccine "killed five people" for each Covid-19 death prevented. Given that the Covid-19 vaccines were estimated to have saved about 20 million people worldwide, this would mean that the vaccine killed at least 100 million people. Then Steve Kirsch offered me $1 million to debate him.

- If Steve Kirsch wants to prove that he is right, then he should do what other researchers do to prove their claims about vaccine harms—do a large epidemiological study, rigorously control for confounding variables, publish it in peer-reviewed journals and wait for it to be reproduced by others.

The NEW ENGLAND JOURNAL of MEDICINE

Guillain-Barré Syndrome and the 1978–1979 Influenza Vaccine

Authors: Eugene S. Hurwitz, M.D., Lawrence B. Schonberger, M.D., M.P.H., David B. Nelson, M.D., and Robert C. Holman, M.S. Author Info & Affiliations

Abstract

An ongoing surveillance program was intensified to determine whether an increased risk of acquiring vaccine-related Guillain-Barré syndrome (GBS) (similar to that observed after vaccination with the A/New Jersey swine-influenza vaccine in 1976) existed for the approximately 12.5 million adults (≥18 years old) vaccinated in the 1978–1979 influenza campaign. In the contiguous United States (excluding Maryland) 544 cases of GBS with onset between September 1, 1978, and March 31, 1979, were reported, including 12 adults who had been vaccinated within eight weeks before the onset of GBS and 393 who had not. The relative risk of vaccine-associated GBS for adults reported in this surveillance was 1.4 (95 per cent confidence limits, 0.7 to 2.7) — significantly below the risk (6.2) associated with A/New Jersey vaccine for the equivalent eight-week period. In contrast to the A/New Jersey vaccine,

Hurwitz, E.S., et al. *New England Journal of Medicine* (1981) 304: 1557-1561.

INTUSSUSCEPTION AMONG INFANTS GIVEN AN ORAL ROTAVIRUS VACCINE

TRUDY V. MURPHY, M.D., PAUL M. GARGIULLO, PH.D., MEHRAN S. MASSOUDI, PH.D., M.P.H., DAVID B. NELSON, B.S., AISHA O. JUMAAN, PH.D., M.P.H., CATHERINE A. OKORO, M.S., LYNN R. ZANARDI, M.D., M.P.H., SABEENA SETIA, M.P.H., ELIZABETH FAIR, M.P.H., CHARLES W. LEBARON, M.D., MELINDA WHARTON, M.D., M.P.H., AND JOHN R. LIVINGOOD, M.D., FOR THE ROTAVIRUS INTUSSUSCEPTION INVESTIGATION TEAM*

ABSTRACT

Background Intussusception is a form of intestinal obstruction in which a segment of the bowel prolapses into a more distal segment. Our investigation began on May 27, 1999, after nine cases of infants who had intussusception after receiving the tetravalent rhesus–human reassortant rotavirus vaccine (RRV-TV) were reported to the Vaccine Adverse Event Reporting System.

Methods In 19 states, we assessed the potential association between RRV-TV and intussusception among infants at least 1 but less than 12 months old. Infants hospitalized between November 1, 1998, and June 30, 1999, were identified by systematic reviews of medical and radiologic records. Each infant with intussusception was matched according to age with four healthy control infants who had been born at the same hospital as the infant with intussusception. Information on vaccinations was verified by the provider.

ROTAVIRUS causes severe gastroenteritis and affects most infants in the United States. There are an estimated 3.5 million cases annually among children less than five years of age in this country, leading to 500,000 office visits, 50,000 hospitalizations, and approximately 20 deaths.[1] The morbidity and mortality associated with rotavirus infection are much greater in developing countries.[2]

In prelicensing trials in the United States, the tetravalent rhesus–human reassortant rotavirus vaccine (RRV-TV; RotaShield, Wyeth Lederle Vaccines, Philadelphia) was 80 percent or more effective in preventing severe rotavirus gastroenteritis in infants.[3-5] Although side effects (fever, irritability, decreased appetite, and abdominal cramping) were more common among recipients of RRV-TV three to five days after the first dose than among recipients of placebo, the vaccine was generally well tolerated.[6] In 27 prelicens-

Murphy, T.V., et al. *New England Journal of Medicine* (2001) 344: 564-572.

Narcolepsy and adjuvanted pandemic influenza A (H1N1) 2009 vaccines – Multi-country assessment

Daniel Weibel[a,*], Miriam Sturkenboom[b], Steven Black[c], Maria de Ridder[a], Caitlin Dodd[a], Jan Bonhoeffer[d,e], Ann Vanrolleghem[a], Nicoline van der Maas[f], Gert Jan Lammers[g,h], Sebastiaan Overeem[i], Angela Gentile[j], Norberto Giglio[j], Vanesa Castellano[j], Jeffrey C. Kwong[k], Brian J. Murray[l], Karen Cauch-Dudek[k], Diana Juhasz[k], Michael Campitelli[k], Alexandre N. Datta[m], Ulf Kallweit[n,o], Wan-Ting Huang[p], Yu-Shu Huang[q], Chung-Yao Hsu[r],

Abstract

Background: In 2010, a safety signal was detected for narcolepsy following vaccination with Pandemrix, an AS03-adjuvanted monovalent pandemic H1N1 influenza (pH1N1) vaccine. To further assess a possible association and inform policy on future use of adjuvants, we conducted a multi-country study of narcolepsy and adjuvanted pH1N1 vaccines.

Methods: We used electronic health databases to conduct a dynamic retrospective cohort study to assess narcolepsy incidence rates (IR) before and during pH1N1 virus circulation, and after pH1N1 vaccination campaigns in Canada, Denmark, Spain, Sweden, Taiwan, the Netherlands, and the United Kingdom. Using a case-control study design, we evaluated the risk of narcolepsy

Weibel, D., et al. Vaccine (2018) 16:6202-6212.

The NEW ENGLAND JOURNAL of MEDICINE

ORIGINAL ARTICLE

Clinical Features of Vaccine-Induced Immune Thrombocytopenia and Thrombosis

Sue Pavord, F.R.C.Path., Marie Scully, M.D., Beverley J. Hunt, M.D., William Lester, M.D., Catherine Bagot, M.D., Brian Craven, M.B., B.Ch., Alex Rampotas, M.R.C.P., Gareth Ambler, Ph.D., and Mike Makris, M.D.

ABSTRACT

BACKGROUND

Vaccine-induced immune thrombocytopenia and thrombosis (VITT) is a new syndrome associated with the ChAdOx1 nCoV-19 adenoviral vector vaccine against severe acute respiratory syndrome coronavirus 2. Data are lacking on the clinical features of and the prognostic criteria for this disorder.

Pavord, S., et al. *New England Journal of Medicine* (2012) 385: 1680-1689.

#4: Scientific truths are determined in a scientific venue, not in a congressional hearing

Ron Johnson (R, WI)

Head of Senate Committee on Permanent Investigations

PERMANENT SUBCOMMITTEE ON INVESTIGATIONS

HOW THE CORRUPTION OF SCIENCE HAS IMPACTED PUBLIC PERCEPTION AND POLICIES REGARDING VACCINES

Date: September 9, 2025

Time: 2:00pm

Location: Senate Hart Building, SH-216

Aaron Siri

Science Goes to Congress

- Siri claimed that a study performed by the Henry Ford Health group "found that vaccinated children had a statistically significant increased rate of various serious chronic diseases."

- "For example, vaccinated children had about 3 times the rate of atopic disease, 4 times the rate of asthma, 5 times the rate of neurodevelopmental disorders, and 6 times the rate of autoimmune diseases."

- Siri also claimed that "there were many cases of attention deficit hyperactivity disorder, learning disability, and tics in the vaccinated group. There were none in the unvaccinated group. The foregoing is obviously extremely troubling."

Jake Scott, MD

Science Goes to Congress

- The unvaccinated group was vastly different than the vaccinated group, with less prematurity, and less respiratory disease at birth. In other words, the unvaccinated group was healthier than the vaccinated group before they had ever received vaccines.

- One quarter of the unvaccinated group were only observed through the first 6 months of life, and 75 percent were only observed through 3 years of age, well before doctors could confidently diagnose many chronic medical conditions.

- No consideration was given to the actual number of vaccines or the duration of time between vaccines and the occurrence of disease.

Science Goes to Congress

- Other things didn't make sense. The study was completed in 2020, five years before Ron Johnson's congressional committee hearing. Why hadn't the researchers published it then?

- Also, why weren't the investigators who performed this study at the hearing?

- Aaron Siri knew why. He said the findings were "shoved in a drawer," because the authors feared they would lose their jobs if they opposed a medical establishment that defended vaccines at any cost. This, according to Siri, was a "real world example of how science gets corrupted" by undue influences such as peer pressure and Big Pharma.

HENRY FORD HEALTH®

Henry Ford Health Denounces Claim That System Suppressed Research, Cautions Against Dangerous Viral Disinformation and Misinformation

September 26, 2025

DETROIT – Henry Ford Health, a nationally recognized academic medical center and research institution, has issued a cease-and-desist letter to the makers of an upcoming "documentary" that falsely and dangerously claims the health system suppressed a draft of a research paper because of its results. The health system also condemns the purposeful twisting of information and the spread of disinformation happening on the topic, which poses a direct threat to public health.

#5: Scientific truths are determined in a scientific venue, not by testimonials

Aired April 19, 1982

Lea Thompson
NewsCenter 4

DPT: Vaccine Roulette, April 19, 1982

The pertussis vaccine

- Within months, *DPT: Vaccine Roulette* was shown in brief segments on many local and national news outlets.

- Barbara Loe Fisher, Kathi Williams, and Jeff Schwartz formed Dissatisfied Parents Together (DPT).

Paula Hawkins (R, FL)

The pertussis vaccine

- Media covered the story as fact: pertussis vaccine was causing permanent harm.

- Flood of lawsuits successfully claimed that pertussis vaccine caused SIDS, Reye's Syndrome, coma, "mental retardation," epilepsy, and transverse myelitis.

Pertussis science matures, but too late

- Epidemiological studies during the next 10 years showed no increased risk for epilepsy or developmental delays following pertussis vaccine.

- These studies came far too late to stem the fear of the pertussis vaccine.

Impact of lawsuits

- Price of DTP vaccine rose from $0.19 in 1980 to $12.00 in 1986.
- Number of OPV vaccine makers declined from 3 to 1, of measles vaccine makers from 6 to 1, and of pertussis vaccine makers from 8 to 1. Birth of National Childhood Vaccine Injury Act, which contained the Vaccine Injury Compensation Program.
- By the end of the decade, the number of companies making vaccines for American children dropped from 18 in 1980 to 4 in 1990.

DPT

is a shorter form of

Dissatisfied Parents Together

by allacronyms.com

National
Vaccine
Information
Center
nvic.org
Your Health. Your Family. Your Choice.

De-novo mutations of the sodium channel gene *SCN1A* in alleged vaccine encephalopathy: a retrospective study

Prof Samuel F Berkovic MD [a], Louise Harkin MSc [b c], Jacinta M McMahon BSc [a], James T Pelekanos MBBS [a], Sameer M Zuberi FRCP [d], Elaine C Wirrell MD [e], Deepak S Gill FRACP [f], Xenia Iona DipBiomedSci [b], John C Mulley PhD [b g], Ingrid E Scheffer MBBS [a h]

Findings

SCN1A mutations were identified in 11 of 14 patients with alleged vaccine encephalopathy; a diagnosis of a specific epilepsy syndrome was made in all 14 cases. Five mutations predicted truncation of the protein and six were missense in conserved regions of the molecule. In all nine cases where parental DNA was available the mutations arose de novo. Clinical-molecular correlation showed mutations in eight of eight cases with phenotypes of SMEI, in three of four cases with borderline SMEI, but not in two cases with Lennox-Gastaut syndrome.

Berkovic, S.F., et al. Lancet Neurology (2006) 5: 488-492.

#6: If you don’t have the data, claim conspiracy

2016

Andrew Wakefield and colleagues in Vaxxed: From Cover-Up to Catastrophe. Photograph: PR Company Handout

Scene from *VAXXED*: Mother with autistic son

VAXXED

- Released in 2016, the film, which was directed by Andrew Wakefield, claimed a cover-up by a senior scientist at the CDC of a link between the MMR vaccine and autism.

- The documentary claimed that the CDC manipulated and destroyed data on an important study done in Metropolitan Atlanta that supposedly showed that the MMR vaccine caused autism in African-American boys.

- In truth, the increased incidence of autism in African-American boys was because children with autism could not qualify for services unless they had been vaccinated. In other words, the MMR vaccine didn’t cause autism. Rather, the diagnosis of autism caused children to receive the MMR vaccine.

May 27, 2025

Secretary Kennedy @SecKennedy · May 27

Today, the COVID vaccine for healthy children and healthy pregnant women has been removed from @CDCgov recommended immunization schedule. Bottom line: it's common sense and it's good science. We are now one step closer to realizing @POTUS's promise to Make America Healthy Again.

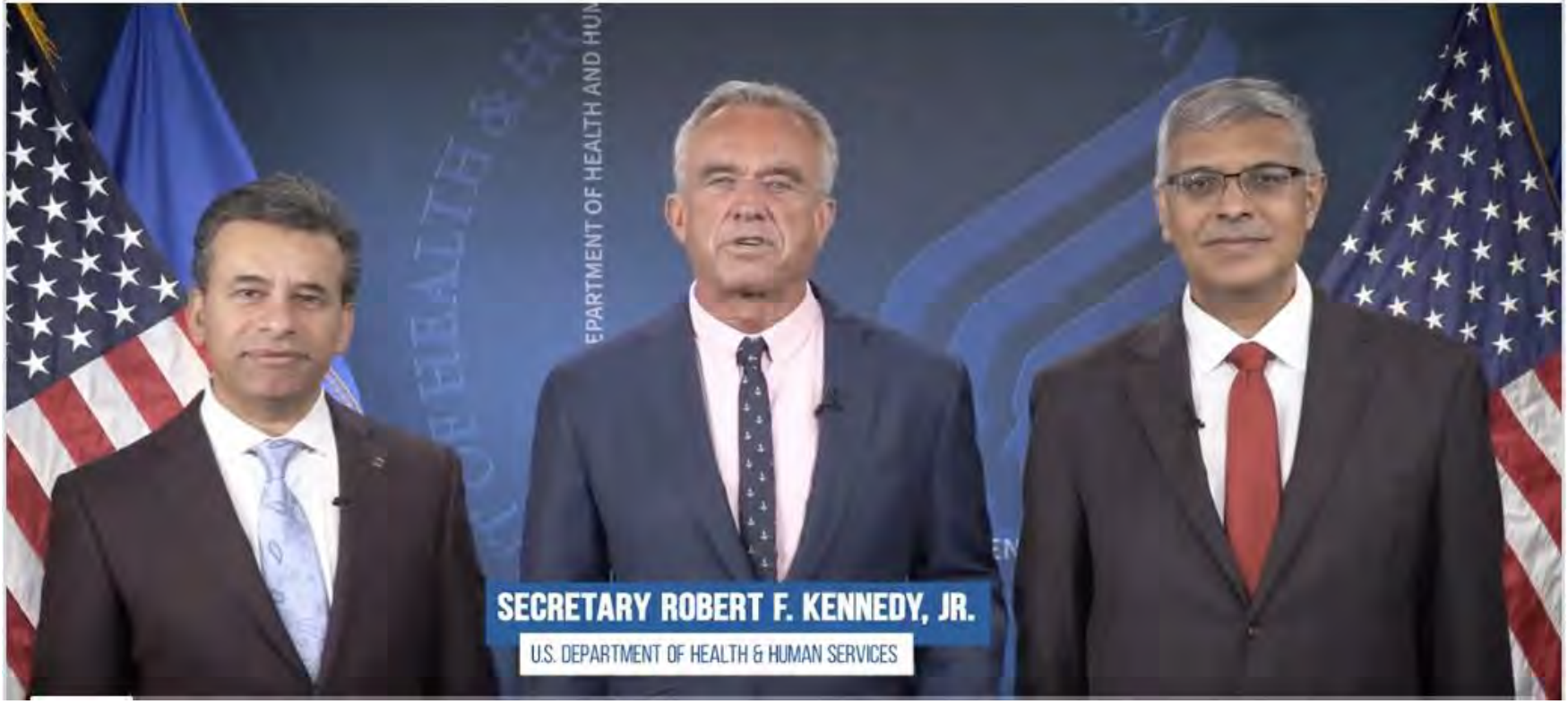
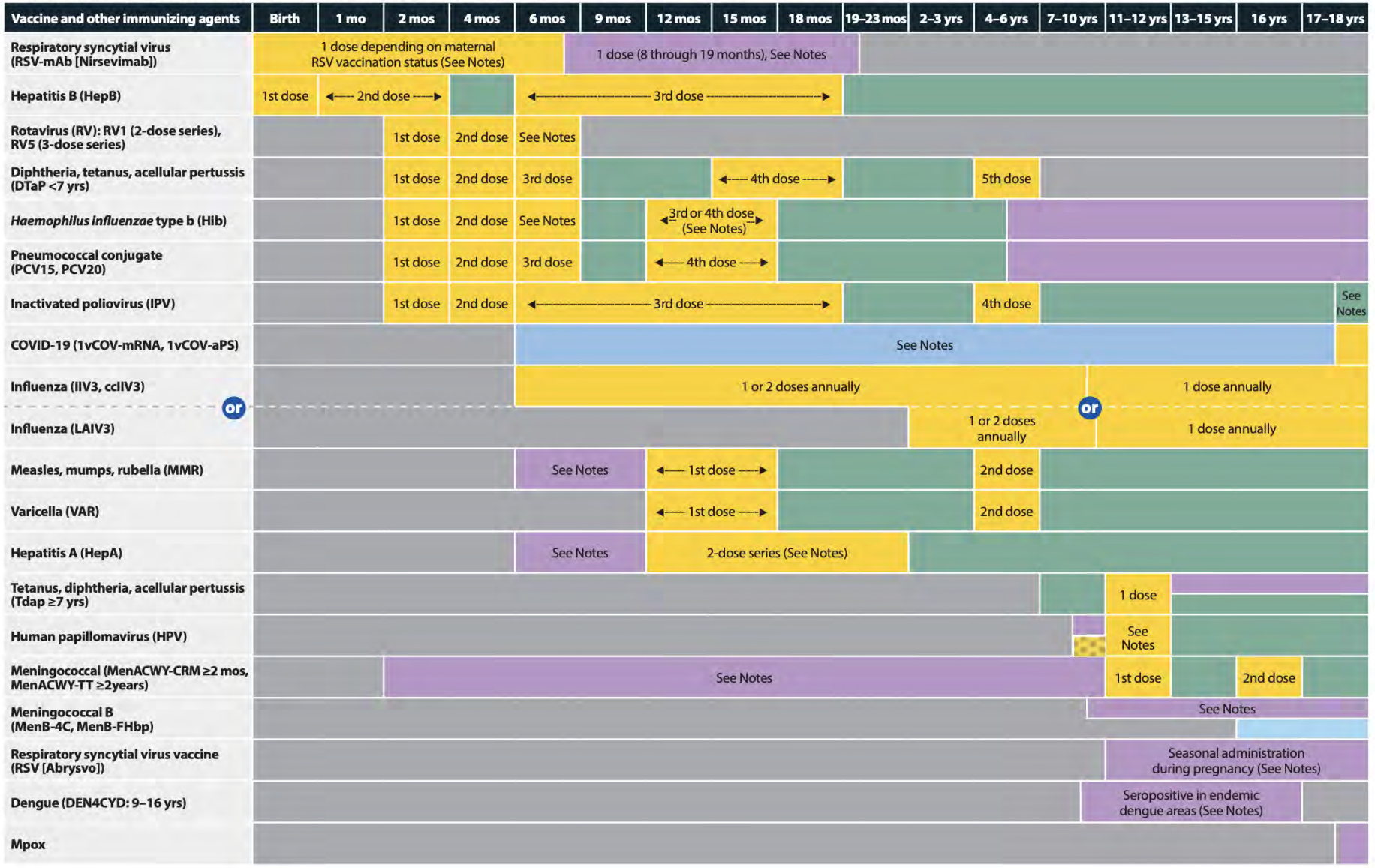


Table 1 Recommended Child and Adolescent Immunization Schedule for Ages 18 Years or Younger, United States, 2025

These recommendations must be read with the notes that follow. For those who fall behind or start late, provide catch-up vaccination at the earliest opportunity as indicated by the green bars.
To determine minimum intervals between doses, see the catch-up schedule (Table 2).



Range of recommended ages for all children

Range of recommended ages for catch-up vaccination

Range of recommended ages for certain high-risk groups or populations

Recommended vaccination can begin in this age group

Vaccination is based on shared clinical decision-making

No Guidance/ Not Applicable

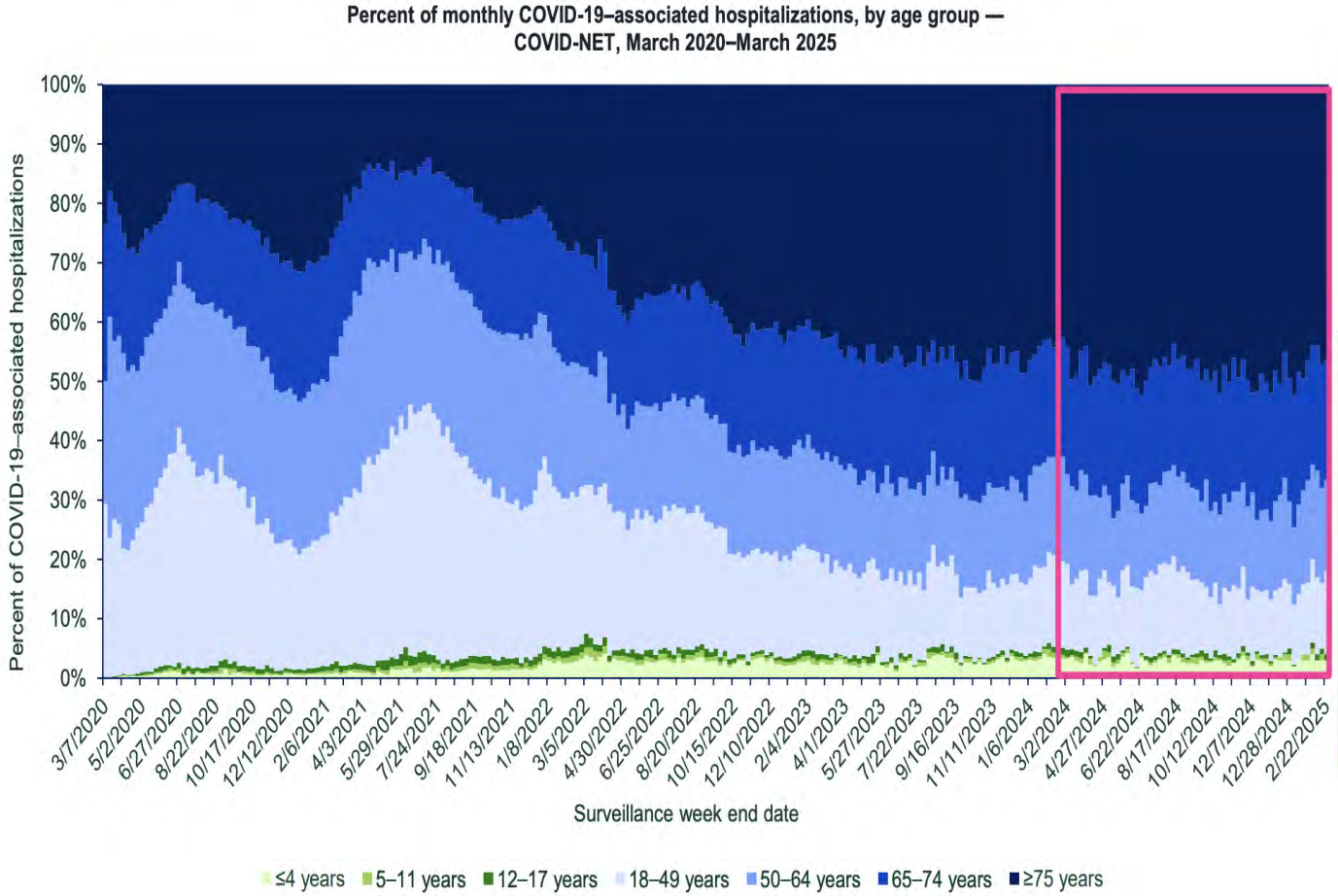
COVID-19–Associated Hospitalizations — COVID-NET, April 2025 Update

Fiona P. Havers, MD, MHS, FIDSA
RESP-NET Hospitalization Surveillance Team
Coronavirus and Other Respiratory Viruses Division

Advisory Committee on Immunization Practices (ACIP) Meeting

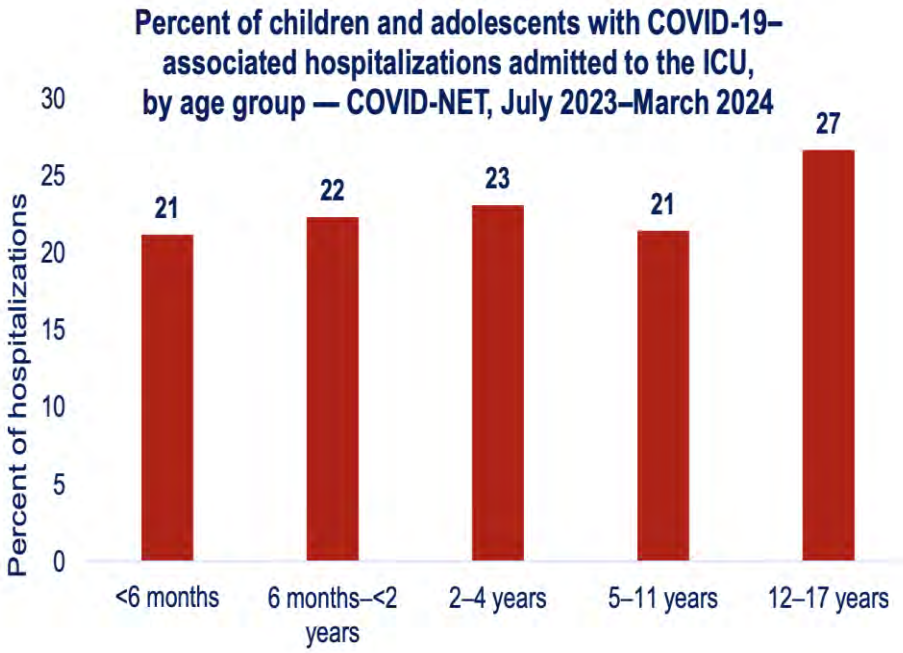
April 15, 2025

During 2024–2025, children and adolescents comprised about 4% of COVID-19–associated hospitalizations.



- ≤17 years = 4.3% of COVID-19–associated hospitalizations during October 2024–March 2025
- ≤4 years = 2.9%
- 5–11 years = 0.6%
- 12–17 years = 0.6%

~1 in 5 children and adolescents with COVID-19–associated hospitalization are admitted to the intensive care unit (ICU)



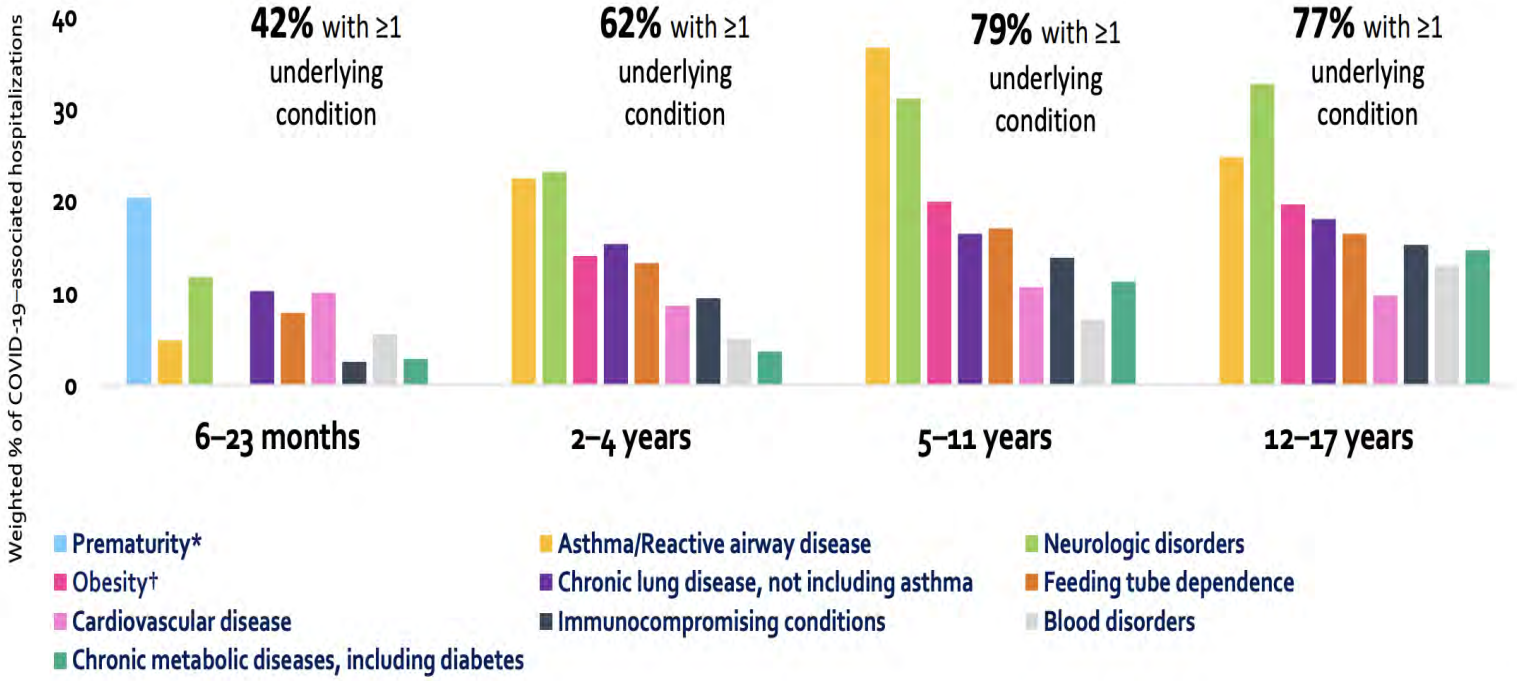
Age category	Among those admitted to ICU, % with no underlying conditions
<6 months	56%
6–23 months	52%
2–4 years	30%
5–11 years	6%
12–17 years	24%

During this period, 7 children with COVID-19–associated hospitalization died in-hospital in the COVID-NET catchment area.

41% of children admitted to the ICU had no underlying conditions, but this varied by age group

Hospitalizations are limited to those with COVID-19 as the presenting complaint upon admission.

During October 2022–April 2024, more older children hospitalized with COVID-19 had underlying medical conditions compared with younger age groups.

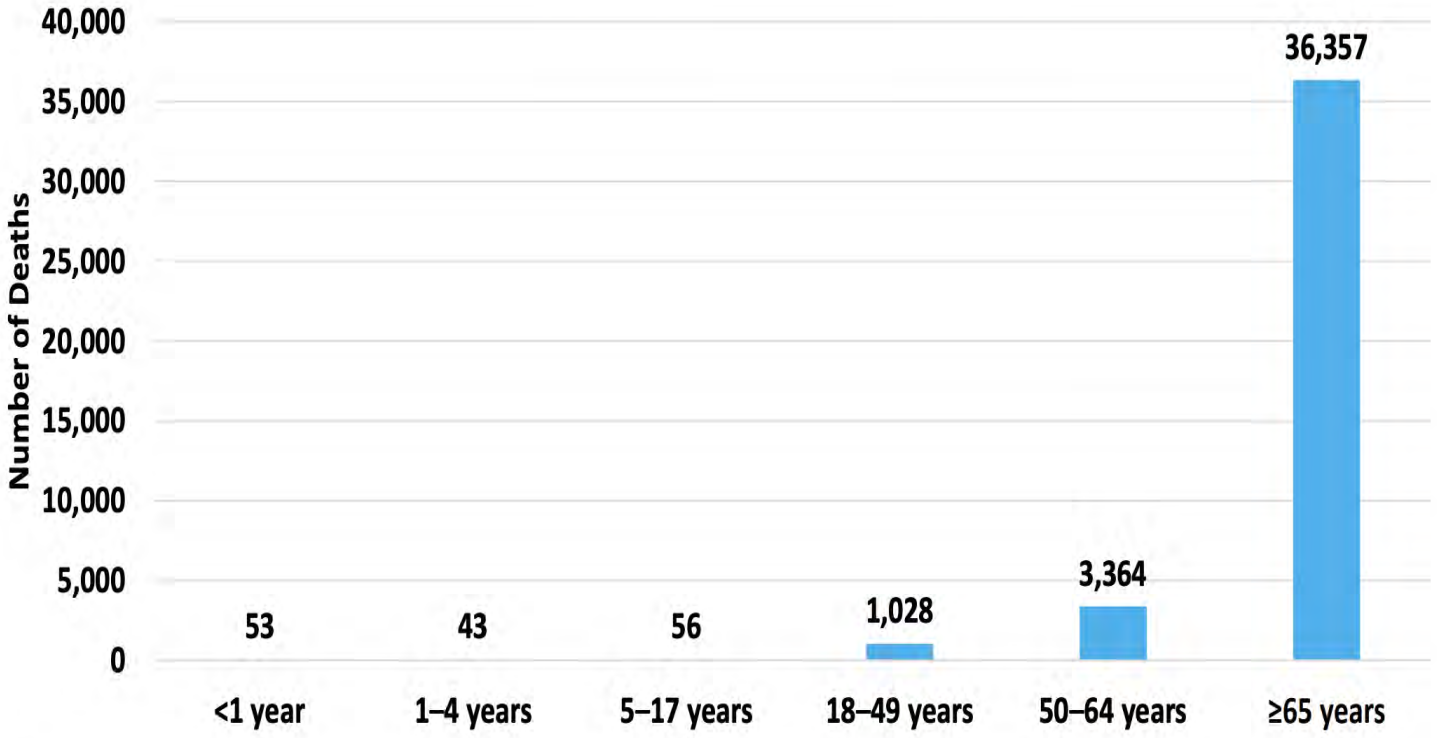


Among children and adolescents ages 6 months–17 years hospitalized with COVID-19, 59% had ≥1 underlying condition.

* Prematurity is only assessed for children aged <2 years. †Obesity is not calculated for children aged <2 years. Data are limited to hospitalizations with COVID-19 as the likely reason for admission. Source: Pre-publication analysis from Rebecca Free and presented at IDWeek 2024. Data reflect the period of October 1, 2022–April 30, 2024.

COVID-NET

Total number of COVID-19 deaths,[1,2] September 2023–August 2024, by age group, United States



1. Provisional data

2. Underlying cause of death Source: Centers for Disease Control and Prevention, National Center for Health Statistics. National Vital Statistics System, Provisional Mortality on CDC WONDER Online Database. Data are from the final Underlying Cause of Death Files, 2018-2023, and from provisional data for 2024, as compiled from data provided by the 57 vital statistics jurisdictions through the Vital Statistics Cooperative Program. Number of deaths includes COVID-19 code (U07.1) as the underlying cause of death. http://wonder.cdc.gov/mcd-icd10-provisional.html, accessed January 16, 2025

August 19, 2025

PEDIATRICS

OFFICIAL JOURNAL OF THE AMERICAN ACADEMY OF PEDIATRICS

Recommendations for COVID-19 Vaccines in Infants, Children, and Adolescents: Policy Statement

Committee on Infectious Diseases

RECOMMENDATIONS

- Infants and children 6 through 23 months of age are at high risk for severe COVID-19.[2-4] The AAP recommends all infants and children in this age group who do not have contraindications* receive 2025-2026 COVID-19 vaccine, as follows:
    - Those who are previously unvaccinated should receive an initial vaccine series.

POLITICO

RFK Jr. attacks pediatricians' group over vaccine recommendations

The American Academy of Pediatrics had earlier urged parents to get young children vaccinated against Covid — pushing back against the health secretary's stance.

Kennedy was joined by FDA Commissioner Marty Makary (left) and NIH Director Jay Bhattacharya (right) earlier this year when he rescinded guidance that healthy children get vaccinated against Covid. | Health and Human Services via AP

Secretary Kennedy
@SecKennedy

This is a screenshot from American Academy of Pediatrics' webpage, thanking the organization's top corporate donors. These four companies make virtually every vaccine on the CDC recommended childhood vaccine schedule. AAP is angry that CDC has eliminated corporate influence in decisions over vaccine recommendations and returned CDC to gold-standard science and evidence-based medicine laser-focused on children's health.

President's Circle ($50,000 and above)

MERCK

moderna

Pfizer

sanofi

President's Circle ($50,000 and above)

Abbott

BYHEART

NBC NEWS

Aluminum salts emerge as likely target as health officials scrutinize childhood vaccines

The vaccine ingredient has long been a talking point for anti-vaccine activists. Health Secretary Robert F. Kennedy Jr. has made unsubstantiated claims that it is linked to allergies and autism.

Annals of Internal Medicine

ORIGINAL RESEARCH

Aluminum-Adsorbed Vaccines and Chronic Diseases in Childhood

A Nationwide Cohort Study

Niklas Worm Andersson, MD, PhD; Ingrid Bech Svalgaard, MSc; Stine Skovbo Hoffmann, MD, PhD; and Anders Hviid, MSc, DMSc

Background: Aluminum is used as an adjuvant in nonlive vaccines administered in early childhood. Concerns persist about potential associations between vaccination with aluminum-adsorbed vaccines and increased risk for chronic autoimmunity, atopy or allergy, and neurodevelopmental disorders. Large-scale safety data remain limited.

Objective: To assess the association between cumulative aluminum exposure from early childhood vaccination and risk for autoimmune, atopic or allergic, and neurodevelopmental disorders.

Design: A cohort study linking nationwide registry data on childhood vaccinations, outcome diagnoses, and potential confounders, leveraging the variations in the aluminum content of childhood vaccines over time.

(autism spectrum disorder and attention deficit-hyperactivity disorder).

Results: Cumulative aluminum exposure from vaccination during the first 2 years of life was not associated with increased rates of any of the 50 disorders assessed. For groups of combined outcomes, adjusted hazard ratios per 1-mg increase in aluminum exposure were 0.98 (95% CI, 0.94 to 1.02) for any autoimmune disorder, 0.99 (CI, 0.98 to 1.01) for any atopic or allergic disorder, and 0.93 (CI, 0.90 to 0.97) for any neurodevelopmental disorder. For most individually analyzed outcomes, the upper bounds of the 95% CIs were incompatible with relative increases greater than 10% or 30%.

Limitation: Individual medical records were not reviewed.

Conclusion: This nationwide cohort study did not

Andersson, N.W., et al. Ann of Internal Medicine (2025) 178: 1369-77

Reuters

Exclusive: Medical journal rejects Kennedy's call for retraction of vaccine study

By **Michael Erman** and **Jennifer Rigby**

August 11, 2025 10:48 AM EDT · Updated August 11, 2025

June 9, 2025

POLITICO

RFK Jr. to fire all members of the CDC's vaccine advisory committee

The HHS secretary announced his plans in a Wall Street Journal opinion piece Monday afternoon.

Robert F. Kennedy Jr.'s decision marks one of his most aggressive moves to date to overhaul how the government makes decisions about vaccines. | Jose Luis Magana/AP

Summing Up

- For children born between 1994 and 2023, vaccines have prevented about 1.1 million deaths in American children and 32 million hospitalizations.
- These efforts have also saved about $2.7 trillion in societal costs.
- Expert advisory committees at the FDA, CDC, AAP, IDSA, ACOG, and AAFP, among others have served us well.
- It is incumbent upon expert scientific advisory groups to provide clear, public-facing websites and spokespersons to explain the reasoning behind recommendations. These groups are the single best sources to help the public.

Center for American Progress, January 8, 2025.

Sign up for the VEC newsletters:

- *Parents PACK*
- *Vaccine Update*
- *The VMP Chronicle*
- *The Hilleman Chronicle*

Children's Hospital of Philadelphia
Vaccine Education Center

vaccine.chop.edu

To obtain continuing education credits, go to:

vaccine.chop.edu/credits

Please write this URL down as it is not linked from a page on our site.

Children's Hospital of Philadelphia®
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Programs for classrooms
vaccinemakers.org

Game and info for children
vaxpackhero.org