

# The Rise and Impact of Measles in The United States – 2025

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Health Watch USA<sup>sm</sup>

May 21, 2025



# Measles

# Measles



- The CDC reports that there are about 1000 measles cases in the United States.
- “If you talk to people on the ground that is off by a factor of at least 3. It is at least 3000 cases.”

<https://www.msnbc.com/ana-cabrera-reports/watch/rfk-jr-failed-his-first-major-test-doctor-slams-handling-of-measles-outbreak-239534661947>

# Measles

- Most contagious pathogen known to mankind.
- In areas with no community immunity or mitigation strategies, on average every infected individual will spread measles to 12 to 18 others. Ebola is 1.5 to 2.5, Seasonal flu is on average 1.3.
- “For measles, generally 92 to 95 percent of a population needs to be vaccinated to reach herd immunity.”

**In too many areas of the United States, we have lost herd immunity protection.**

<https://www.sciencenews.org/article/one-number-can-help-explain-why-measles-so-contagious>

# Measles



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**Measles** is a highly contagious viral infection that frequently causes a severe flu-like illness accompanied by a rash. Complications occur in 3 in 10 who get measles, and young children are especially vulnerable.

Ear infections and diarrhea are the most common, but as many as 1 in 20 will get pneumonia; about 1 in 1,000 will have brain swelling that can cause deafness and intellectual disability; and nearly 3 in 1,000 will die. Before the vaccine was available in 1963, nearly every child got measles by age 15. The disease sickened 3 million to 4 million people and led to about 500 deaths and 48,000 hospitalizations every year in the U.S.

- <https://www.idsociety.org/ID-topics/infectious-disease/measles/know-the-facts>

# Measles

## Post Infection Immunosuppression

AAFP CME Patient Care Practice & Career Med Student & Resident Events Membership Advocacy News

AAFP / AAFP News / Patient Care / Measles Infection Weakens Global Immune Defenses, Say Studies

### Measles Infection Weakens Global Immune Defenses, Say Studies

<https://www.aafp.org/news/health-of-the-public/20191119measlesimmunity.html>



### Measles does long-term damage to immune system, studies show

Stephanie Soucheray | News Reporter | CIDRAP News, November 1, 2019

[Measles does long-term damage to immune system, studies show | CIDRAP](#)

- Measles can also suppress the immune system for at least a year, [eliminating 11 to 73% of one's antibody](#) reserves.
- Of concern are two recent studies [which found that immune damage](#) can persist for years.

# Measles

## Subacute Sclerosing Panencephalitis (SSPE)

**Dovepress**  
Taylor & Francis Group

Pediatric Health, Medicine and Therapeutics

Open access to scientific and medical research

### Subacute sclerosing panencephalitis – current perspectives

► Pediatric Health Med Ther. 2018 Jun 26;9:67–71. doi: [10.2147/PHMT.S126293](https://doi.org/10.2147/PHMT.S126293)

[Sidra K Jafri](#)<sup>1</sup>, [Raman Kumar](#)<sup>1</sup>, [Shahnaz H Ibrahim](#)<sup>1,✉</sup>

<https://pmc.ncbi.nlm.nih.gov/articles/PMC6027681/>

- Subacute sclerosing panencephalitis is a progressive neurodegenerative disease. It usually occurs 7–10 years after measles infection. The clinical course is characterized by progressive cognitive decline and behavior changes followed by focal or generalized seizures as well as myoclonus, ataxia, visual disturbance, and later vegetative state, eventually leading to death

Diagnosis: Major criteria include 1) raised anti-measles antibody titers in cerebrospinal fluid (CSF) greater than or equal to 1:4 or ratio greater than or equal to 1:256 in serum, and 2) typical or atypical clinical history (typical includes acute or rapidly progressive, subacute progressive, chronic progressive, and chronic relapsing–remitting, while atypical includes seizures, prolonged stage I, and unusual age of presentation that is either in infancy or adulthood).

# CSF Serum Antibody Index

$$\frac{\text{Total IgG (Serum)} \times \text{Specific IgG (CSF)}}{\text{Total IGG (CSF)} \times \text{Specific IGG (Serum)}} = X$$

- Where Total IGG is all IgG against everything.
- Where Specific IgG is IgG against 1 pathogen (e.g. measles).
- If there is only passive diffusion through the blood brain barrier, X will approximate 1.
- If there is intrathecal antibody production, X rises, depending on assay the cutoff will be greater than 2 or greater than 4.

# Measles

HEALTH AND WELLNESS

Measles

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## Parents of child who died of measles still don't support MMR vaccine



**Eduardo Cuevas**  
USA TODAY

Updated March 21, 2025, 4:54 p.m. ET

<https://www.usatoday.com/story/life/health-wellness/2025/03/21/measles-death-parents-child-vaccine/82588858007/>

- There have been three measles deaths in the United States, two of which were in healthy children.
- Thus, it is not just those with comorbidities who are at risk of dying, and the deaths were from not with measles.



## The Need for Herd Immunity:

Most individuals can safely receive the Measles, Mumps and Rubella vaccine, but immunosuppressed patients cannot.

MMR	Live-attenuated vaccine to be given pre-SOT only; generally those born before 1957 (among others) are considered immune
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<https://med.stanford.edu/content/dam/sm/bugsanddrugs/documents/clinicalpathways/Vaccines%20SOT%202022.pdf>

# Inactivated Measles Vaccine

**There is currently not an inactivated version of the vaccine available to be evaluated on transplant patients.**

In addition, individuals vaccinated between 1963 and 1967 may have received a less effective, inactivated (killed) version of the measles vaccine. "Anyone who received the inactivated vaccine or is unsure of the type they received should get one to two doses of the MMR vaccine," Dr. Chan advises.

<https://www.health.harvard.edu/diseases-and-conditions/some-adults-may-need-a-measles-booster-shot-who-should-get-one-and-why>

# Kidney Transplant Patients and VV & MMR

- Is it medically possible to give a subpopulation of solid organ transplant patients a live attenuated MMR vaccine? The answer is “Yes” but requires the pre-vaccination testing and evaluation of the immunological immune status of the patient.

2019 Pediatric Transplantation “Growing evidence **suggests** receipt of live-attenuated viral vaccines after solid organ transplant (SOT) has occurred and is safe and needed due to lapses in herd immunity”

“For consideration of VV and MMR post-transplant, evidence exists only for kidney and liver transplant recipients.” (Not the combined MMRV vaccine)

<https://pubmed.ncbi.nlm.nih.gov/31497926/>

## The immunological criteria for consideration of an MMR in Kidney Transplant patients is summarized by Viganò, et al.

“Patients under “minimum immune suppression and “minimum immune criteria. The “minimum immune criteria” are defined as absolute lymphocyte count  $>1500$  or  $>1000$  cells/ $\mu\text{L}$  in children  $\leq 6$  and  $>6$  years, respectively; CD4  $>700$  or  $>500$  cells/ $\mu\text{L}$  in children  $\leq 6$  and  $>6$  years, respectively; normal IgG levels; ability to produce protective antibodies to inactivated vaccines prior to the administration of live viral vaccines. The “minimum immune suppression” is defined as steroid  $<2$  mg/kg/day or cumulative dosage  $<20$  mg/day, tacrolimus and cyclosporine serum levels  $<8$  ng/mL and  $<100$  ng/mL, respectively.”

“However, post-transplant live vaccines are still not offered by all centres, mainly because of concerns about safety and lack of efficacy data.”

# Passive Immunity Measles Virus

## Recommended Dose and Timing of Measles PEP (see footnotes 1-5)

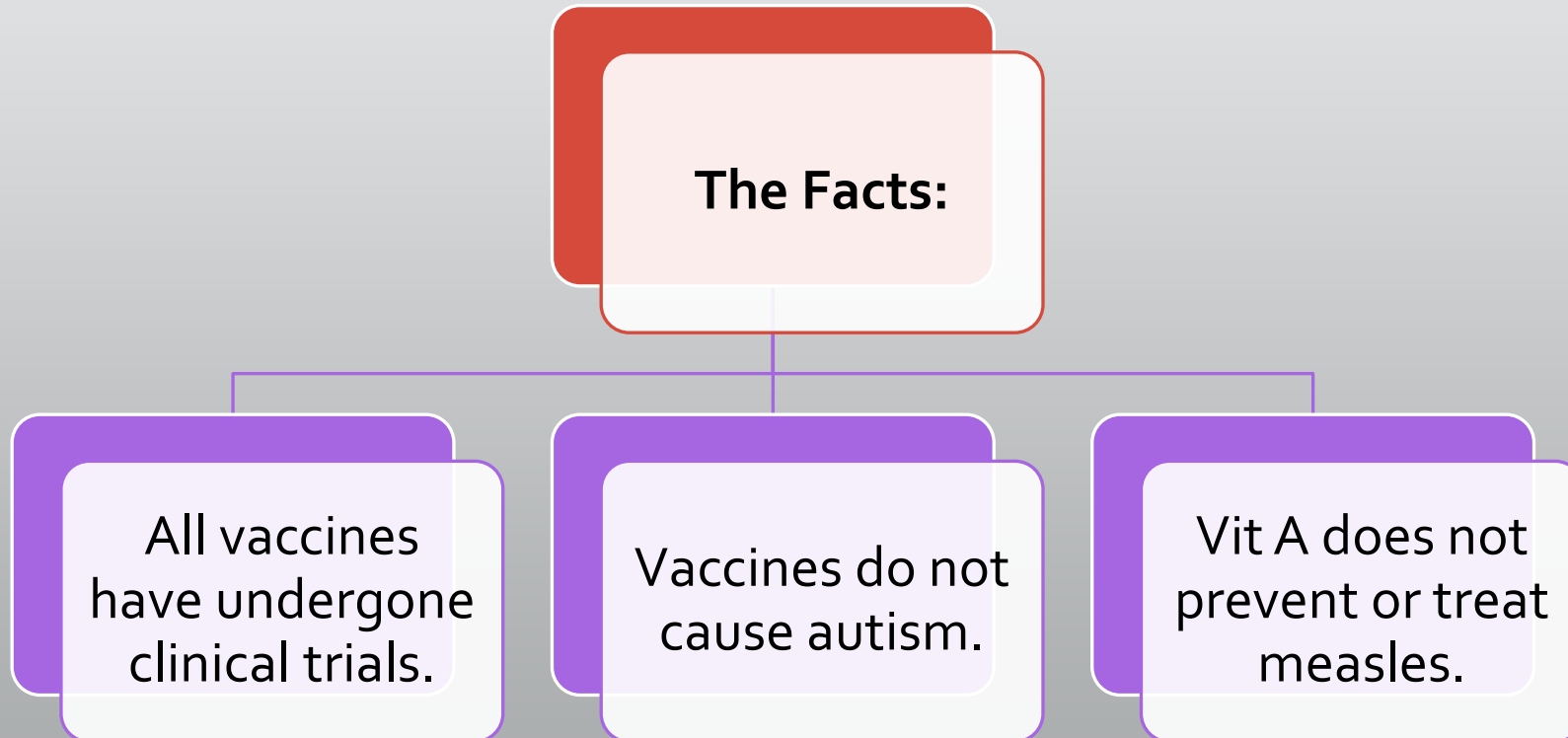
Risk Factor	Time from First Exposure	
	Less than 72 hours	72 hours through day 6
Infant less than 6 months old <sup>1</sup>	Give intramuscular IG (IMIG): 0.5 ml/kg (max dose = 15 mL)	Give IMIG: 0.5 ml/kg IM (max dose = 15 mL)
Infants 6 through 11 months old <sup>1,2</sup>	MMR vaccine preferred over IG	Give IMIG: 0.5 ml/kg IM (max dose = 15 mL)
Susceptible pregnant woman <sup>3</sup>	Give intravenous IG (IVIG): 400 mg/kg	Give IVIG: 400 mg/kg
Severely immunocompromised <sup>3,4</sup>	Give IVIG: 400 mg/kg	Give IVIG: 400 mg/kg
Susceptible close contact over 1 year old <sup>5</sup>	Give MMR vaccine if no contraindications	Can consider giving IMIG : 0.5 mL/kg to those less than 66 pounds

IVIG: Intravenous Immune Globin

Washington State Dept of Health. May 7, 2025.

<https://doh.wa.gov/sites/default/files/legacy/Documents/5100/420-250-MeaslesHCFPEP.pdf>

# Misinformation



# Misinformation

## Kaiser Family Foundation April 2025 Poll

### At Least Half of the Public are Uncertain When it Comes to False Claims About Measles, Saying Such Claims are Either Probably True or Probably False

Do you think each of the following is:

■ Definitely true ■ Probably true ■ Probably false ■ Definitely false

#### False claims about measles and vaccines

The measles, mumps, rubella vaccines, also known as the MMR vaccines have been proven to cause autism in children



Getting the measles vaccine is more dangerous than becoming infected with measles



Vitamin A can prevent measles infections



<https://www.kff.org/health-information-and-trust/poll-finding/kff-tracking-poll-on-health-information-and-trust-the-publics-views-on-measles-outbreaks-and-misinformation/>

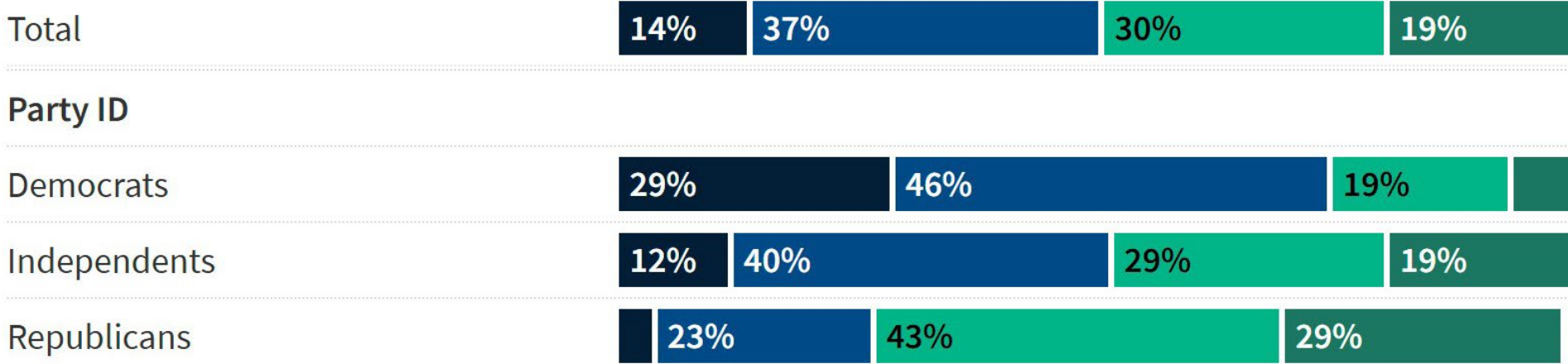
# Misinformation

## Kaiser Family Foundation April 2025 Poll

**About Half of the Public Say They are Worried About the Outbreak of Measles in the U.S., Including Larger Shares of Democrats, Black Adults, and Hispanic Adults**

How worried are you, if at all, about the outbreak of measles in the U.S.?

■ Very worried ■ Somewhat worried ■ Not too worried ■ Not at all worried



<https://www.kff.org/health-information-and-trust/poll-finding/kff-tracking-poll-on-health-information-and-trust-the-publics-views-on-measles-outbreaks-and-misinformation/>

**All vaccines have  
undergone  
clinical trials**

# Even the Polio Vaccine Had a Large Placebo Controlled Clinical Trial

The polio vaccine field trials of 1954, sponsored by the National Foundation for Infantile Paralysis (March of Dimes), are among the largest and most publicised clinical trials ever undertaken. Across the United States, 623 972 schoolchildren were injected with vaccine or placebo, and more than a million others participated as “observed” controls. The results, announced in 1955, showed good statistical evidence that Jonas Salk’s killed virus preparation was 80-90% effective in preventing paralytic poliomyelitis.<sup>1</sup>

Meldrum M. "A calculated risk": the Salk polio vaccine field trials of 1954. *BMJ*. 1998 Oct 31;317(7167):1233-6. doi: 10.1136/bmj.317.7167.1233. PMID: 9794869; PMCID: PMC1114166. <https://pmc.ncbi.nlm.nih.gov/articles/PMC1114166/>



## Randomised controlled trials for Ebola: practical and ethical issues

- “...randomisation is ethical when there is equipoise—when there is genuine uncertainty about whether an untested treatment has benefits or risks that exceed those of conventional care. Equipoise is a useful principle, but it can break down when conventional care offers little benefit and mortality is extremely high. This is precisely the problem with Ebola:”

[https://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(14\)61734-7/fulltext](https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(14)61734-7/fulltext)

# HHS says new vaccines should be tested against placebos. They already are

Redundant testing could reduce protection from infectious diseases

- “But the safety and efficacy of genuinely new vaccines — that is, ones for diseases with no existing approved inoculations — are already assessed through placebo-controlled trials, says pediatric infectious diseases specialist Paul Offit.”
- “Speed is crucial with rapidly evolving viruses, like those that cause COVID-19 and the seasonal flu, she says. HHS indicated to the *Washington Post* that [the new requirement would not apply to flu shots](#), but focused concerns on COVID-19 vaccines.”

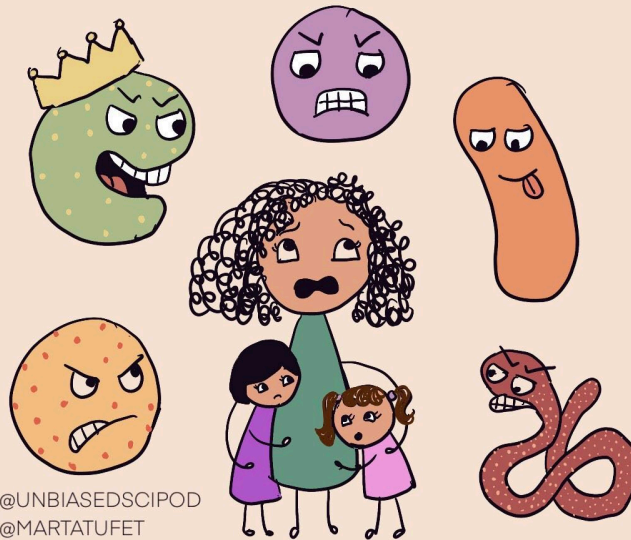
Vaccines aren't under tested — they're tested differently to follow ethical standards



@UNBIASEDSCIPOD  
@MARTATUFET

Insisting on unethical studies doesn't make vaccines safer

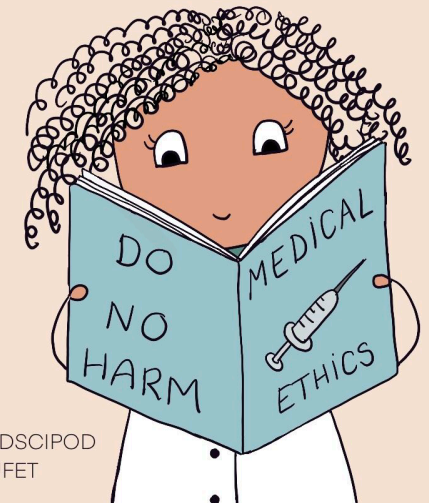
It delays protection and puts more people at risk



@UNBIASEDSCIPOD  
@MARTATUFET

That is why we don't use placebo trials when a vaccine for the disease already exists

Ethical research must protect people — not put them at risk on purpose



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@MARTATUFET

# No Association between MMR Vaccine and Autism

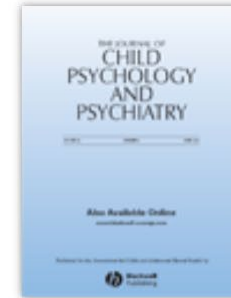


STATENS  
SERUM  
INSTITUT

In a study of more than 650 thousand children registered in the Danish Civil Registration System and Danish Vaccination Registry, 6517 children with autism were identified.

Autism occurred just as frequently in those who were vaccinated as those who were unvaccinated.

<https://en.ssi.dk/news/news/2019/no-association-between-mmr-vaccine-and-autism>



Free Access

## No effect of MMR withdrawal on the incidence of autism: a total population study

**Results:** The MMR vaccination rate in the city of Yokohama declined significantly in the birth cohorts of years 1988 through 1992, and not a single vaccination was administered in 1993 or thereafter. In contrast, cumulative incidence of ASD up to age seven increased significantly in the birth cohorts of years 1988 through 1996 and most notably rose dramatically beginning with the birth cohort of 1993.

<https://pubmed.ncbi.nlm.nih.gov/15877763/>

# Vit A does not prevent or treat measles

## West Texas children treated for vitamin A toxicity after measles hospitalizations



**Saleen Martin**

USA TODAY

April 4, 2025, 4:06 p.m. ET

- “The children were initially hospitalized due to measles complications. They underwent routine lab testing, which showed abnormal liver function believed to be caused by vitamin A toxicity, according to Dr. Lara Johnson, a pediatric hospitalist and chief medical officer of the Covenant Health-Lubbock service area.” “Some patients reported using vitamin A for both treatment and prevention of measles,”

<https://www.usatoday.com/story/news/health/2025/04/04/texas-vitamin-a-toxicity-measles-patients/82871895007/>

# Federal Response

# Minimizing Measles

- The [Secretary of Health and Human Services](#) even praised a doctor who was treating patients while the doctor was actively infected with measles. This not only places children at risk but downplayed the dangers of the infection.

**AP** The Associated Press + Follow 1.3M Followers

Video shows doctor with measles treating kids. RFK Jr later praised him as an 'extraordinary' healer

Story by MICHELLE R. SMITH • 1mo • 🕒 4 min read

<https://www.msn.com/en-us/health/other/video-shows-doctor-with-measles-treating-kids-rfk-jr-later-praised-him-as-an-extraordinary-healer/ar-AA1Dc94a>


# Not Funding Public Health

 CNN + Follow 2.2M Followers



## Internal Trump administration document reveals massive budget cut proposal for federal health agencies

Story by Sarah Owerhohle and Meg Tirrell, CNN • 1mo •  3 min read 

<https://www.msn.com/en-us/news/us/internal-trump-administration-document-reveals-massive-budget-cut-proposal-for-federal-health-agencies/ar-AA1D40he>

 CBS NEWS + Follow 856.3K Followers

## CDC scraps plan to help Texas schools curb measles over layoffs, employee says

Story by Alexander Tin • 1mo •  4 min read 

<https://www.msn.com/en-us/health/other/cdc-scrap-plan-to-help-texas-schools-curb-measles-over-layoffs-employee-says/ar-AA1D8QWm>

 **LOUISVILLE PUBLIC MEDIA** 89.3 WFPL News | 90.5 WUOL Classical  
91.9 WFPK Music | KyCIR Investigations

## Kentucky could lose nearly \$150 million in health grants after Trump cuts COVID-19 funding

Kentucky Public Radio | By [Sylvia Goodman](#)  
Published March 29, 2025 at 9:55 AM EDT    

<https://www.lpm.org/news/2025-03-29/kentucky-could-lose-nearly-150-million-in-health-grants-after-trump-cuts-covid-19-funding>

- Steep cuts to the Centers for Disease Control and Prevention, which would see its budget reduced by more than 40% under the administration’s proposal.
- The CDC reportedly had to scrap plans to help one Texas school system deal with a measles outbreak because of layoffs.
- CDC is also cutting funding of state health departments. Including 150 million dollars which is proposed to be cut from Health Departments in Kentucky.

# Not Collecting Data

≡ **PROPUBLICA**  
Trump Administration  
**Trump's War on Measurement Means Losing Data on Drug Use, Maternal Mortality, Climate Change and More**  
by Alec MacGillis  
April 18, 2025, 6 a.m. EDT

<https://www.propublica.org/article/trump-doge-data-collection-hhs-epa-cdc-maternal-mortality>

**PROPUBLICA**  
Investigative Journalism in the Public Interest  
**The CDC Buried a Measles Forecast That Stressed the Need for Vaccinations**  
by Patricia Callahan  
March 28, 2025, 4:35 p.m. EDT

<https://www.propublica.org/article/measles-vaccine-rfk-cdc-report>

- Federal Government is not collecting needed data, the out of sight out of mind mentality.
- This has affected everything from [drug use, maternal mortality, to climate change](#).
- Public health has been directly affected, with the [FDA recently not publicizing](#) an E. coli outbreak in our food supply, and the
- [CDC suppressing a measles forecast](#), which also encouraged vaccinations.

# Vaccines Work

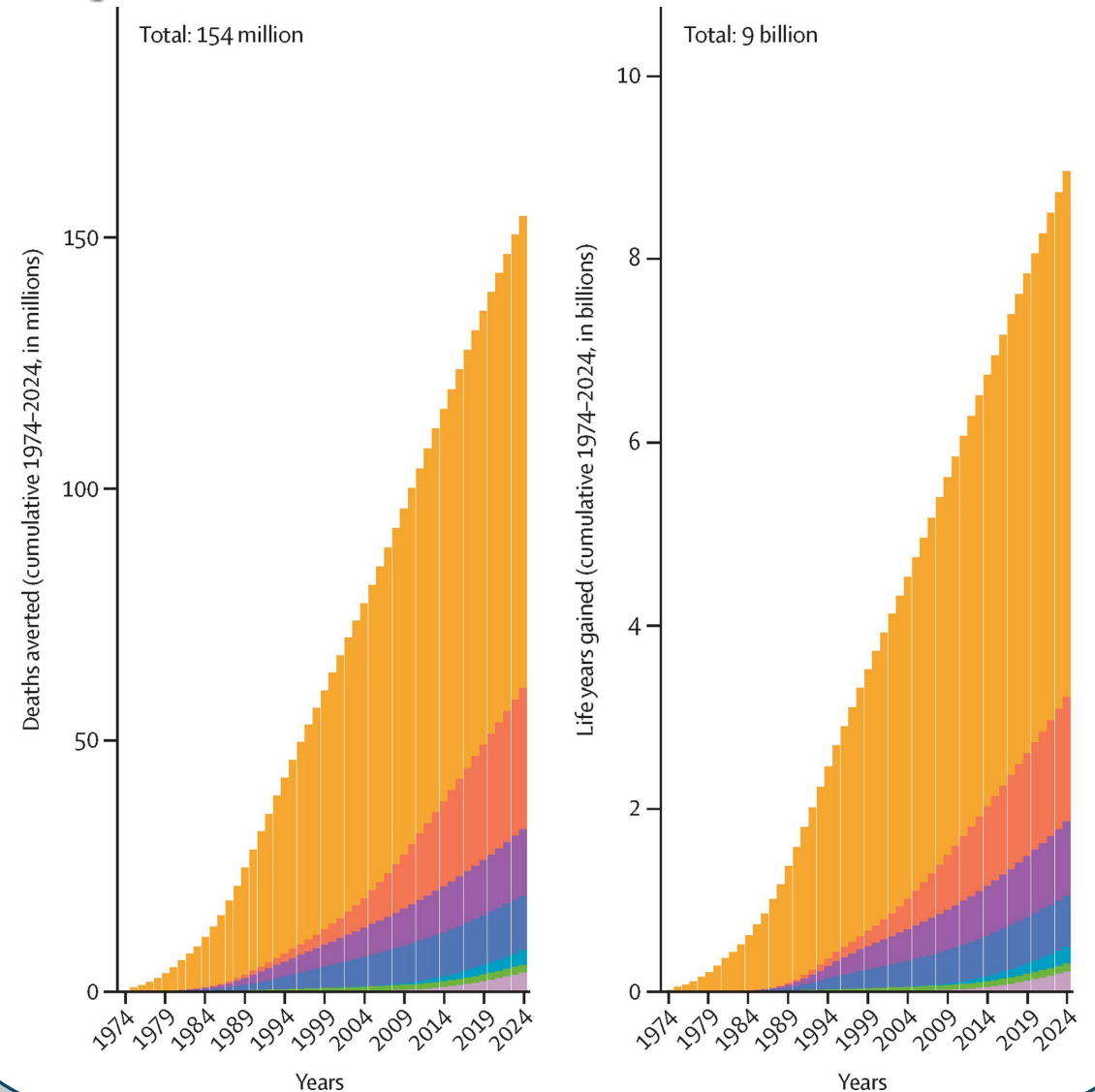
- Vaccines are one of the greatest success stories of modern medicine. Since 1975, an estimated [154 million lives have been saved](#) with vaccines.
- The consequences of our abandonment of public health are only now becoming apparent.
- Unfortunately, it is our children who appear to be paying the heftiest price.

[https://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(24\)00850-X/fulltext](https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(24)00850-X/fulltext)



Measles Pertussis Haemophilus influenzae type B Other disease  
Tetanus Tuberculosis Poliomyelitis

Figure 1 Deaths averted, years of life saved



**IF WE DO NOT  
CHANGE OUR  
DIRECTION,**

**we are likely  
to end up where  
we are headed.**

**Ancient Chinese Proverb**

