

Dear Mr. Chaves,

Thank you for contacting CDC and sharing your search results.

VAERS did not start receiving reports until mid-1990. People can submit a report any time after experiencing an adverse event after vaccination. This is why VAERS has reports for adverse events (including deaths) prior to 1990, but not as many as post-1990.

Deaths following vaccination are extremely rare. CDC and the Food and Drug Administration (FDA) monitor reports of adverse events and deaths that occur after vaccination using several different systems including the Vaccine Adverse Event Reporting System (VAERS). VAERS is a surveillance system co-administered by CDC and FDA that accepts reports of adverse health events (possible side effects) following vaccination. The system is not designed to determine whether a reported adverse event was caused by vaccination, but it does identify signals or trends that warrant further study. Since VAERS data cannot determine causality, we cannot use it to provide numbers of severe injuries or deaths caused by vaccination. VAERS is the frontline system for vaccine safety monitoring and is part of CDC's vaccine safety infrastructure which involves multiple complementary monitoring systems: (<https://www.cdc.gov/vaccinesafety/index.html>).

Publications on the topic of deaths after vaccination are below. In particular, the attached article (Miller et al. Deaths following vaccination: What does the evidence show? *Vaccine*. 2015;33(29):3288-92) provides an overview and some specific examples.

- Shimabukuro et al., [Safety monitoring in the Vaccine Adverse Event Reporting System \(VAERS\)](#), *Vaccine*. 2015;33(36):4398-4405;
- McCarthy et al., [Mortality Rates and Cause-of-Death Patterns in a Vaccinated Population](#), *American Journal of Preventive Medicine*. 2013;45(1):91-97;
- Moro et al., [Deaths reported to the Vaccine Adverse Event Reporting System \(VAERS\), United States, 1997-2013](#), *Clinical Infectious Diseases*. 2015;61(6):1-8;
- McCarthy et al., [Vaccination and 30-Day Mortality Risk in Children, Adolescents, and Young Adults](#), *Pediatrics*. 2016;137(3):1-8; and
- Xu et al., [A safety study evaluating non-COVID-19 mortality risk following COVID-19 vaccination](#). *Vaccine*. 2023;41(3):844-854

VAERS data has limitations. Please keep in mind:

- VAERS generally cannot determine if the vaccine caused the reported adverse event. While some reported adverse events may be caused by vaccination, others are not and may have occurred coincidentally.
- Underreporting of adverse events may occur. However, serious adverse events are more likely to be reported than non-serious events.
- Reports vary in quality and completeness. They may lack details and contain errors.
- This VAERS data search is for personal use and not intended for scientific publication.

To read more about the strengths and limitations of VAERS, visit <https://vaers.hhs.gov/data/dataguide.html>.

Sincerely,

Staff of the CDC Immunization Safety Office
Atlanta, GA

----- Original Message -----

Sent: 11/21/2023

From: Educator

Subject: VAERS

Question: Why did vaccine deaths for children (17 and under) increase from the low single digits (3-4 per year) to over 100 between 1987 and 1993? One of my students found this during class using your interactive website and I am unable to provide an answer.