

Presentations, videos, and educational activities with an emphasis on environmental science and public health



Environmental Science Videos

[Assessing Toxicity with Yeast](#)

[Evaluating Soil Texture](#)

[Feed Conversion with Mealworms](#)

[Dose-Response by Phytoplankton to Carbon Dioxide](#)

[Conditions Affecting Dissolved Oxygen](#)

X Post

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[Measuring Electricity from a Photovoltaic](#)

[Measuring Work Efficiency](#)

[Microscale Dynamo Demonstration](#)

entropy rider.com

Pathway for link to WHO data:

1. Go to the WHO website: <https://www.who.int/>
2. Go to the “Data” drop down menu and choose the “Global Health Observatory.”
3. Go to “Indicators” page and then scroll to the bottom and click on the link for accessing the “old” Global Health Observatory data. This link is directly under the list of indicators in the new system. If you cannot find the link to the old system, use this direct link:
<https://apps.who.int/gho/data/node.main>
4. Click on “Mortality and global health estimates.” Direct link:
<https://apps.who.int/gho/data/node.main.686?lang=en>


Alternate direct link for WHO data:

Or simply open the following link:

<https://apps.who.int/gho/data/node.main.1?lang=en>

Life Expectancy Comparison:

[عربي](#) [中文](#) **English** [Français](#) [Русский](#) [Español](#)

 **World Health Organization**

[Home](#) [Health topics](#) **Data** [Media centre](#) [Publications](#) [Countries](#) [Programmes](#) [Governance](#) [About WHO](#) [Search](#)

Global Health Observatory data repository

[Data analysis](#)
[By theme](#)
[By category](#)
[By indicator](#)
[By country](#)
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By category

World Health Statistics

In this section:

- Population
- Current health expenditure (CHE)
- Life expectancy and Healthy life expectancy**
- SDG Target 3.1 | Maternal mortality
- SDG Target 3.2 | Newborn and child mortality
- SDG Target 3.3 | Communicable diseases
- SDG Target 3.4 | Noncommunicable diseases and mental health
- SDG Target 3.5 | Substance abuse
- SDG Target 3.6 | Road traffic injuries
- SDG Target 3.7 | Sexual and reproductive health
- SDG Target 3.8 | Achieve universal health coverage (UHC), including financial risk protection
- SDG Target 3.9 | Mortality from environmental pollution
- SDG Target 3.a | Tobacco control
- SDG Target 3.b | Development assistance and vaccine coverage
- SDG Target 3.c | Health workforce
- SDG Target 3.d | National and global health risks
- SDG Target 1.a | Mobilization of resources
- SDG Target 2.2 | Child malnutrition
- SDG Target 5.2.1 | Eliminate violence against women and girls
- SDG Target 6.a | Water- and sanitation-related capacity-building
- SDG Target 6.1 | Drinking water
- SDG Target 6.2 | Sanitation and hygiene
- SDG Target 7.1 | Clean household energy
- SDG Target 11.6 | Clean cities

← Open this link

Life Expectancy Comparison:

World Health Organization

Global Health Observatory data repository

By category > World Health Statistics

Life expectancy and Healthy life expectancy Data by country

Also available:

- Data by WHO region

filter table | reset table
Last updated: 2020-09-28

Download filtered data as: CSV table | XML (simple) | JSON (simple)
Download **complete** data set as: CSV table | Excel | CSV list | more...

Country	Year	Life expectancy at birth (years)			Life expectancy at age 60 (years)			Healthy life expectancy (HALE) at birth (years)			Healthy life expectancy (HALE) at age 60 (years)		
		Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
Afghanistan	2000	50.2	49.0	51.0	13.8	13.0	16.0	11.3	10.9	11.7			
	2001												
	2002												
	2003												

Choose the indicator

Available dimensions

- Indicator
- Sex
- Country
- Year

Options

- ☒ Life expectancy at birth (years)
- ☐ Life expectancy at age 60 (years)
- ☐ Healthy life expectancy (HALE) at birth (years)
- ☐ Healthy life expectancy (HALE) at age 60 (years)

Apply filter

Clear all | Apply | Cancel

Life Expectancy Comparison:

The screenshot shows the WHO Global Health Observatory data repository interface. The top navigation bar includes the WHO logo and language options (Arabic, Chinese, English, Français, Русский, Español). The main navigation bar has links for Health topics, Data, Media centre, Publications, Countries, Programmes, Governance, and About WHO. A search bar is located on the right.

The main content area is titled "Global Health Observatory data repository". Below this, there is a sidebar on the left with links for Data analysis, By theme, By category, By indicator, By country, Metadata, About the Observatory, and Search. The main content area displays "Life expectancy and Healthy life expectancy Data by country". It also includes a link for "Data by WHO region".

A filter table is shown with the following data:

Country	Year	Both sexes	Male	Female
	2016	62.7	61.0	64.5
		61.8	61.7	64.7
		61.5	61.1	64.1
		60.9	60.5	63.6
		60.5	59.9	62.5
		59.9	59.5	62.1
		59.0	58.4	61.0
		58.4	58.0	60.5

A filter overlay is displayed over the table, showing "Available dimensions" (Indicator, Sex, Country, Year) and "Options" (Both sexes, Male, Female). The "Both sexes" option is selected. The overlay includes an "Apply filter" button and a "Clear all | Apply | Cancel" link.

Annotations on the image include a blue arrow pointing from the text "Choose the gender" to the "Sex" dimension in the filter overlay, and another blue arrow pointing from the "Apply filter" button in the overlay to the "Both sexes" option.

Life Expectancy Comparison:

العربي 中文 **English** Français Русский Español



Home Health topics **Data** Media centre Publications Countries Programmes Governance About WHO Search

Global Health Observatory data repository

Data analysis

By theme

By category

By indicator

By country

Metadata

About the Observatory

Search

By category > World Health Statistics

Life expectancy and Healthy life expectancy Data by country

Also available:

— Data by WHO region

filter table | reset table
Last updated: 2020-09-28

Download filtered data as: CSV table | XML (simple) | JSON (simple)
Download complete data set as: CSV table | Excel | CSV list | more...

		Life expectancy at birth (years) ¹
Country	Year	Both sexes
	2016	62.7 ¹
		63.2 ¹
		63.0 ¹
		62.7 ¹
		62.2 ¹
		61.7 ¹
		61.2 ¹
		60.7 ¹
		60.2 ¹
		59.6 ¹
		...

Choose
the year

Available dimensions

Indicator
Sex
Country
Year

Options

- ☒ 2016
- ☐ 2015
- ☐ 2014
- ☐ 2013
- ☐ 2012
- ☐ 2011
- ☐ 2010
- ☐ 2009
- ☐ 2008

Apply
filter

Clear all | Apply | Cancel

Life Expectancy Comparison:

[Data analysis](#)
[By theme](#)
[By category](#)
[By indicator](#)
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By category > World Health Statistics

Life expectancy and Healthy life expectancy Data by country


Also available:

- [Data by WHO region](#)

[filter table](#) | [reset table](#)
Last updated: 2020-09-28

[Download filtered data as: CSV table](#) | [XML \(simple\)](#) | [JSON \(simple\)](#)
[Download complete data set as: CSV table](#) | [Excel](#) | [CSV list](#) | [more...](#)

Download the data



		Life expectancy at birth (years) ¹
Country	Year	Both sexes
Afghanistan	2000	55.9 ¹
Albania	2000	73.1 ¹
Algeria	2000	70.8 ¹
Angola	2000	47.3 ¹
Antigua and Barbuda	2000	72.5 ¹
Argentina	2000	74.0 ¹
Armenia	2000	71.7 ¹
Australia	2000	79.6 ¹
Austria	2000	78.4 ¹
Azerbaijan	2000	66.5 ¹
Bahamas	2000	72.0 ¹
Bahrain	2000	73.2 ¹
Bangladesh	2000	65.5 ¹
Barbados	2000	73.4 ¹

Life Expectancy Comparison:

Follow the same procedure for downloading two files for life expectancy by gender, then copy and paste these items to the same excel file so you can compare differences by gender. These are the items:

- Male life expectancy at birth in 2016
- Female life expectancy at birth in 2016

Life expectancy by gender in alphabetical order:

	A	B	C	D
1		Life expectancy at birth (years)		
2	Countries,	Male	Female	subtract
3	Afghanista	63.3	63.2	-0.1
4	Albania	76.3	79.9	3.6
5	Algeria	76.2	78.1	1.9
6	Angola	60.7	65.5	4.8
7	Antigua an	74.9	78	3.1
8	Argentina	73.5	79.5	6

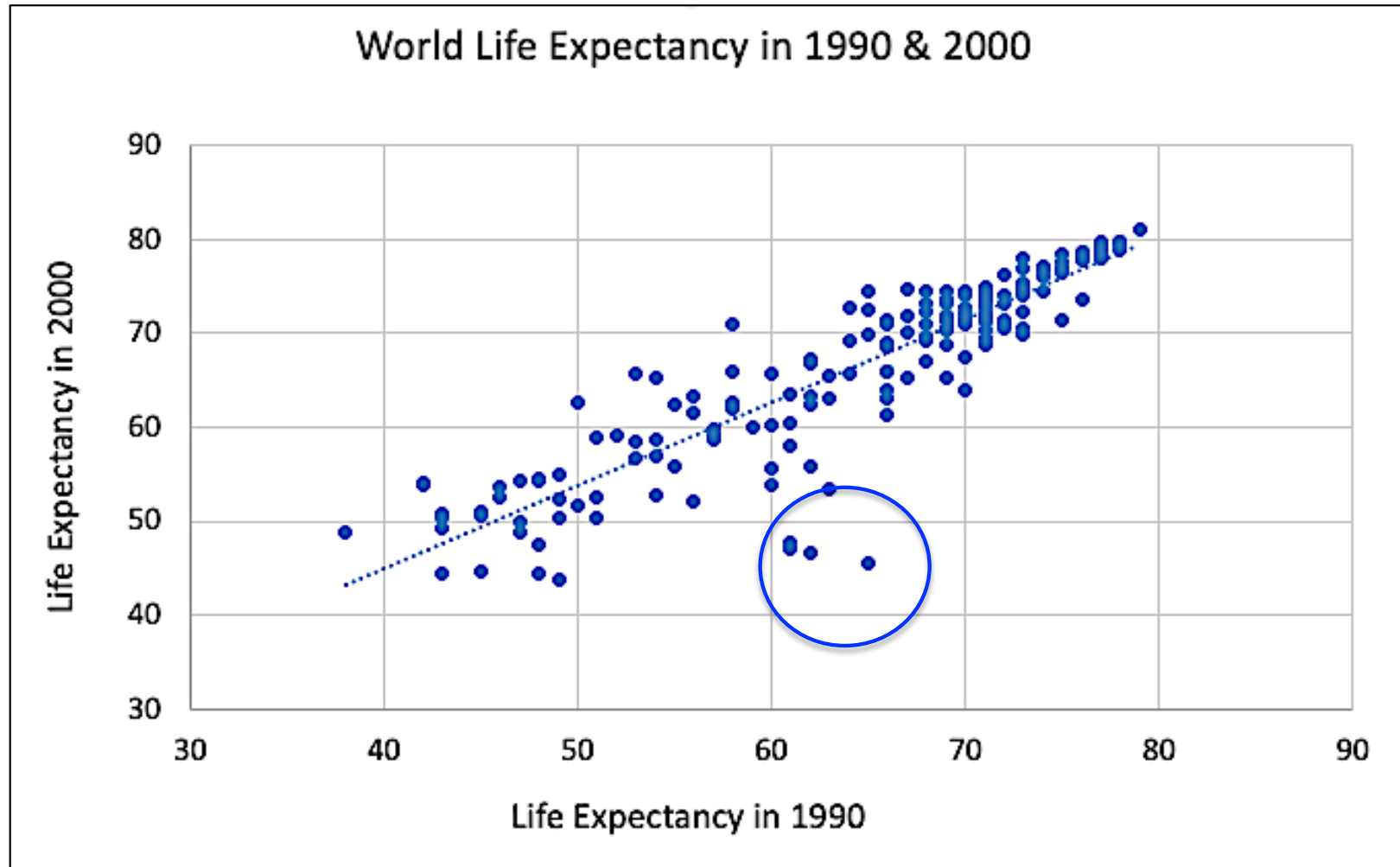
Life expectancy by gender ordered by difference (smallest difference):

	A	B	C	D
1	Qatar	78	76.6	-1.4
2	Afghanistan	63.3	63.2	-0.1
3	Mauritania	68.1	68.7	0.6
4	Mali	62.2	63.4	1.2
5	Haiti	63.3	64.8	1.5
6	Congo	63.8	65.6	1.8
7	Jordan	77	78.8	1.8

Life expectancy by gender ordered by difference (biggest difference):

	A	B	C	D
174	El Salvador	70.6	79.1	8.5
175	Viet Nam	69.6	78.1	8.5
176	Georgia	68.8	77.8	9
177	Mongolia	63.8	72.8	9
178	Latvia	70.6	79.8	9.2
179	Lithuania	71.2	80.4	9.2
180	Eswatini	53.4	63.2	9.8
181	Russian Fe	68.2	78	9.8
182	Ukraine	68	77.8	9.8
183	Belarus	69.7	79.6	9.9
184	Countries, Male		Female	subtract

Life expectancy by graphed by decade:



Why did life expectancy decline in these nations from 1990-2000?

Highest obesity rates according to WHO:

	A	B	C
180	Lebanon	67.9 [63.5-71.9]	
181	United Sta	67.9 [64.5-71.1]	
182	Jordan	69.6 [66.0-73.2]	
183	Saudi Arab	69.7 [65.9-73.4]	
184	Qatar	71.7 [67.0-76.1]	
185	Kuwait	73.4 [69.7-77.0]	
186	Micronesi	75.9 [71.5-80.0]	
187	Samoa	77.6 [73.4-81.6]	
188	Tonga	78.5 [74.3-82.5]	
189	Kiribati	78.7 [74.6-82.6]	
190	Niue	80.0 [76.0-83.7]	
191	Tuvalu	81.9 [78.1-85.3]	
192	Marshall I	83.5 [80.0-86.7]	
193	Cook Islan	84.7 [81.4-87.7]	
194	Palau	85.1 [81.7-88.1]	
195	Nauru	88.5 [85.6-91.0]	

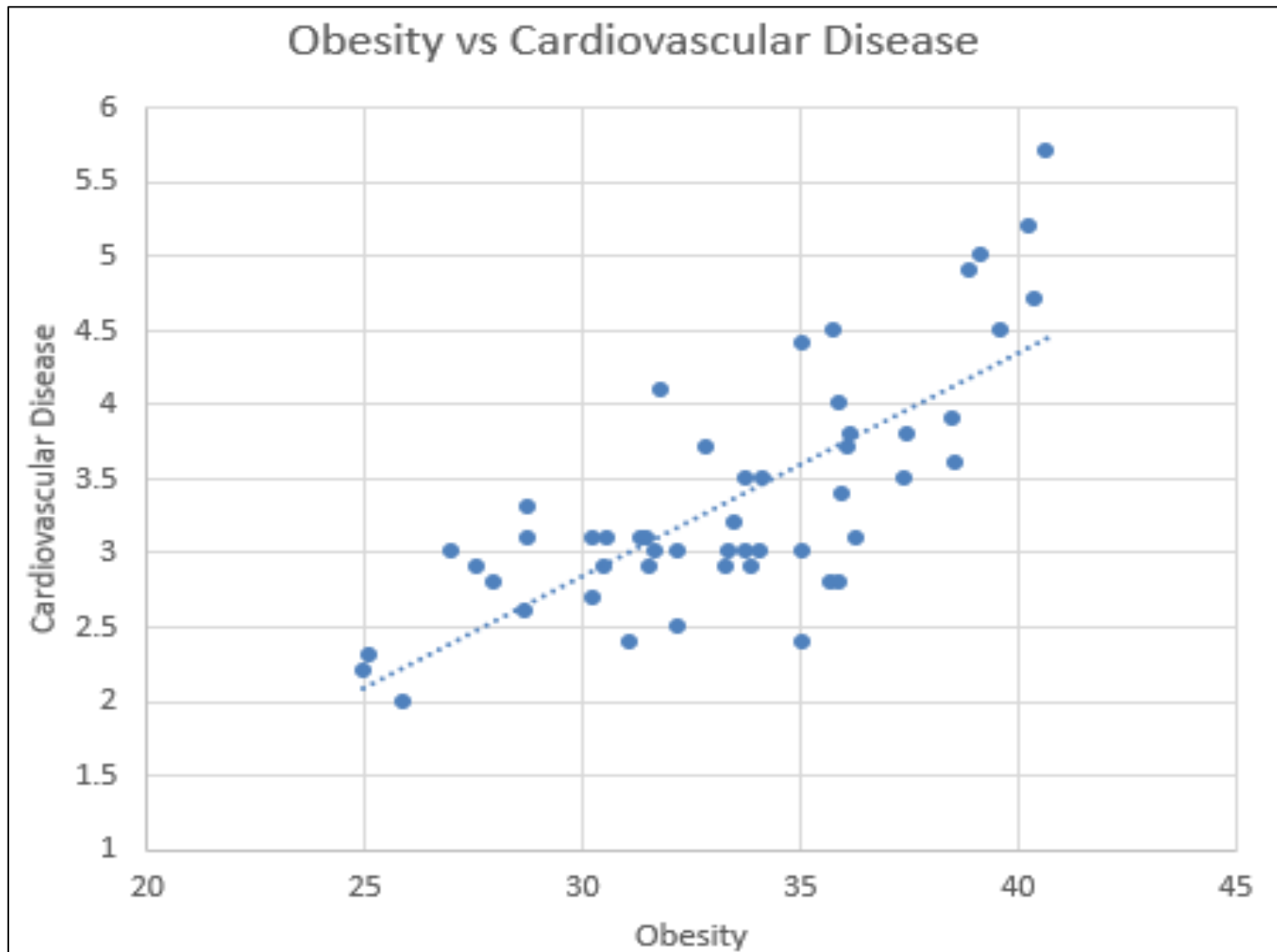
CDC Website Navigation:

1. Go to the Centers for Disease Control website:
www.cdc.gov
2. To collect data on risk factors, open the link for “**Data & Statistics**”, then open the link for “**Overweight and Obesity.**”
3. Scroll down below the map to “**Additional Resources**” and then click on “**Behavioral Risk Factor Surveillance System (BRFSS).**”
4. Under the heading for “**Prevalence Data and Data Analysis Tools**” open the link for “**Prevalence and Trends Data.**” This takes you to an interactive website. Here is the direct link: <https://www.cdc.gov/brfss/brfssprevalence/index.html>

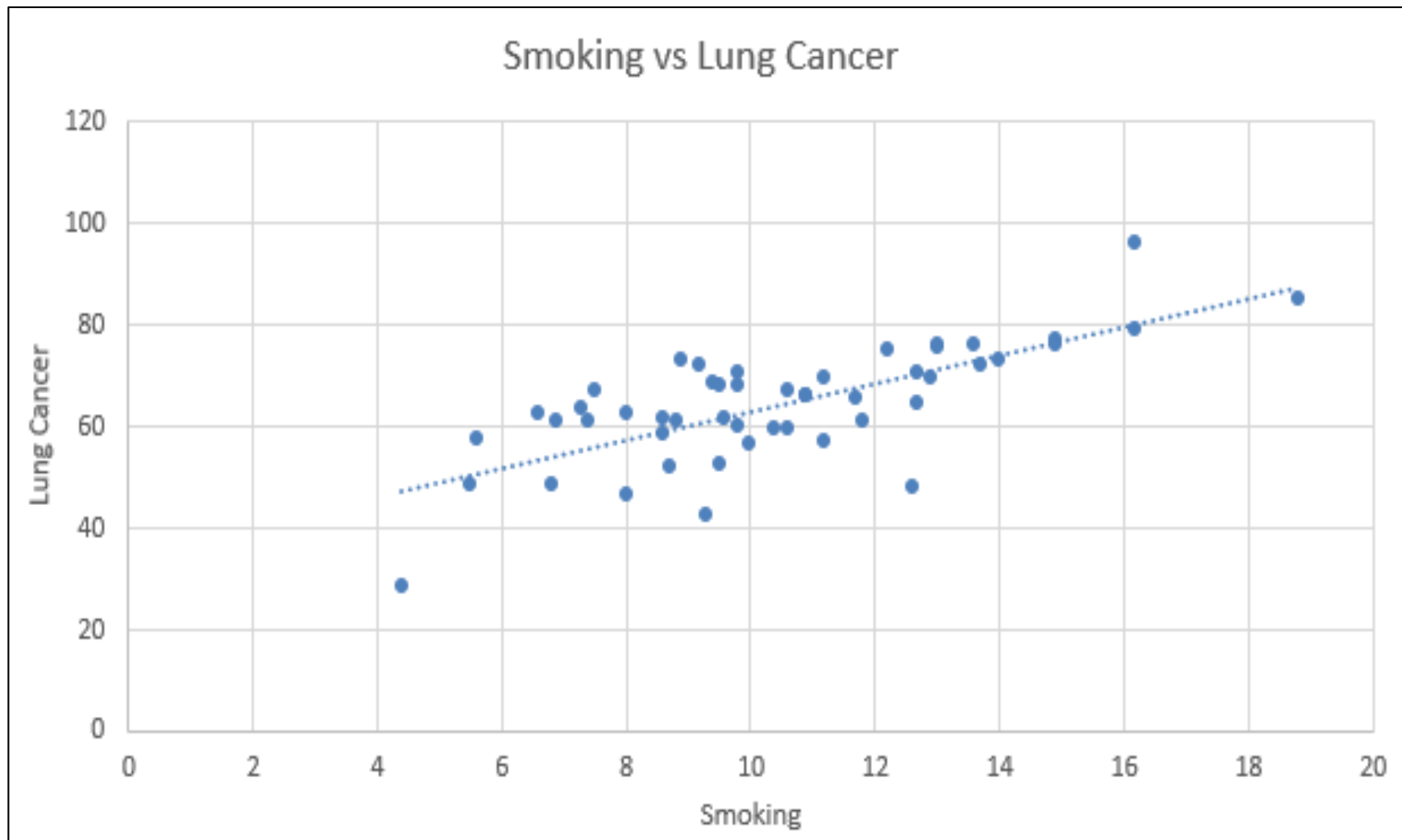
Portion of spreadsheet based on data compiled from CDC:

	A	B	C	D	E	F
1	Location	exercise	obese	cardiovasc.	smoke	lung cancer
2	Alabama	70.2	40.4	4.7	12.7	70.6
3	Alaska	79.9	33.4	3	12.7	64.6
4	Arizona	77.9	31.4	3.1	8.7	52
5	Arkansas	70.7	38.9	4.9	16.2	79
6	California	80.1	27.6	2.9	5.5	48.2
7	Colorado	83.6	25	2.2	8	46.2
8	Connecticut	77.8	30.3	2.7	7.3	63.6
9	Delaware	73.8	33.5	3.2	9.2	72
10	District of Columbia	83.8	25.1	2.3	5.6	57.5
11	Georgia	77.1	33.8	3.5	9.8	68.1
12	Hawaii	80.6	25.9	2	6.8	48.2
13	Idaho	80.1	31.7	3	9.5	52.6

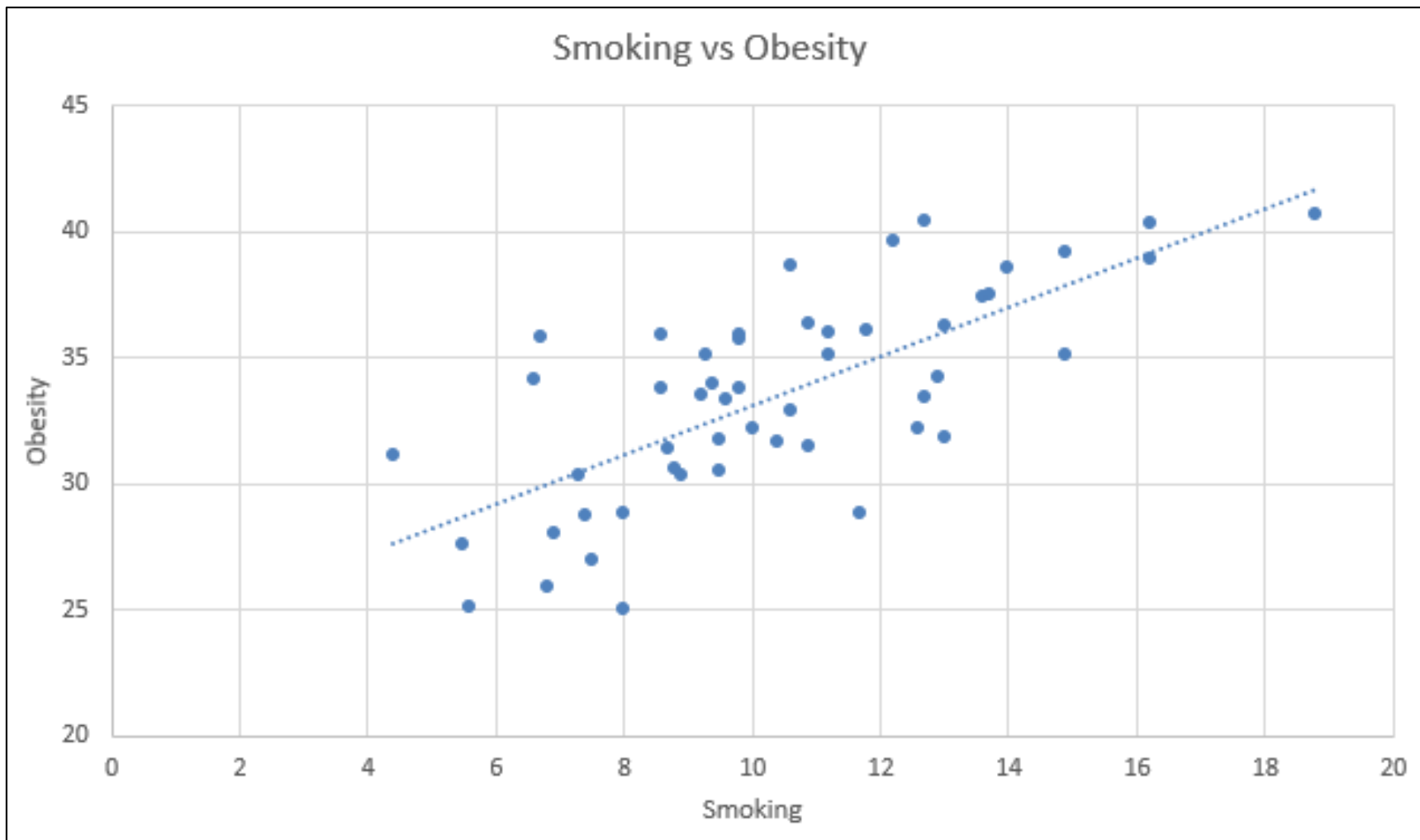
Scatterplot Sample 1: Cause & effect?



Scatterplot Sample 2: Cause & effect?



Scatterplot Sample 3: Cause & effect???



CDC “Wonder” Navigation: <https://wonder.cdc.gov/Welcome.html>

WONDER Systems Topics A-Z Index

- WONDER Online Databases
 - ▶ [AIDS Public Use Data](#)
 - ▶ [Births](#)
 - ▶ [Cancer Statistics](#) ←
 - Deaths:**
 - All Ages:**
 - ▶ [Underlying Cause of Death](#)
 - ▶ [Multiple Cause of Death \(Provisional\)](#)
 - ▶ [Multiple Cause of Death \(Final\)](#)
 - ▶ [U.S. - Mexico Border Area Mortality](#)
 - ▶ [Compressed Mortality](#)
 - ▶ [Fetal Deaths](#)
 - ▶ [Infant Deaths](#)

- National Notifiable Conditions
- ▶ [NNDSS Annual Summary Data Query](#)
- ▶ [NNDSS Annual Tables](#)
- ▶ [NNDSS Weekly Tables](#)
- Reports and References
- ▶ [Prevention Guidelines \(Archive\)](#)
- ▶ [Scientific Data and Documentation \(Archive\)](#)
- Other Query Systems
- ▶ [Healthy People 2010 \(Archive\)](#)
- ▶ [122 Cities Weekly Mortality \(Archive\)](#)

[Index](#)

- ▶ [Daily Land Surface Temperatures](#)
- ▶ [Daily Fine Particulate Matter](#)
- ▶ [Daily Sunlight](#)
- ▶ [Daily Precipitation](#)
- ▶ [Online Tuberculosis Information System](#)
- Population:**
 - ▶ [Bridged-Race Population \(from NCHS\)](#)
 - ▶ [Single-Race Population \(from Census\)](#)
 - ▶ [Population Projections \(from Census\)](#)
 - ▶ [Sexually Transmitted Disease Morbidity](#)
 - ▶ [Vaccine Adverse Event Reporting](#) ←


▶ Denotes numerical data available to query or download

United States Cancer Statistics

Public Information Data

United States Cancer Statistics Data

Current Cancer Statistics

- **Cancer Incidence 1999 - 2021:** By year, state, metropolitan area, age group, race, ethnicity, sex, childhood cancers and cancer site classifications.
 [Data Request](#) [More information](#)
- **Cancer Mortality 1999 - 2021:** By year, state, metropolitan area, age group, race, ethnicity, sex, and cancer site classifications. See below for more information on mortality rate comparisons.
[Data Request](#) [More information](#)
- **Cancer Mortality Incidence Rate Ratios 1999 - 2021:** By year, state, metropolitan area, race, ethnicity, sex, and cancer site classifications. See below for more information on mortality rate comparisons.
[Data Request](#) [More information](#)
- **National Program of Cancer Registries 5 year Relative Survival:** By race, sex, age group and cancer site classifications. Current NPCR 5-year survival statistics are available at
[United States Cancer Statistics: Data Visualizations](#).

United States and Puerto Rico Cancer Statistics, 1999-2021 Incidence Request

Request Form

Results

Map

Chart

About

[Cancer Statistics Data](#)

[Dataset Documentation](#)

[Other Data Access](#)

[Data Use Restrictions](#)

[How to Use WONDER](#)

Save

Reset

Make all desired selections and then click any **Send** button one time to send your request.

1. Organize table layout:

Send

Help

Group Results By

And By

And By

And By

And By

Note:

To include Puerto Rico data you must select the "States and Puerto Rico" button in section 2. Selecting the "States", "Regions", or "MSA" button will exclude Puerto Rico data.

Measures (Default measures always checked and included. Check box to include any others.)

☐ Count

☒ Age Adjusted Rates

☐ 95% Confidence Interval

☐ Standard Error

☐ Crude Rates

☐ 95% Confidence Interval

☐ Standard Error

Additional measure "Population" (denominator) is automatically provided in Results when rates are requested.

Title

4. Select cancers of interest:

Send

Help

Hint: Use Ctrl + Click for multiple selections, or Shift + Click for a range.

Pick between:

☒ Cancer Sites

☐ Leading Cancer Sites

☐ Childhood Cancers

Cancer Sites

Bones and Joints

Soft Tissue including Heart

Skin excluding Basal and Squamous

Melanoma of the Skin

Other Non-Epithelial Skin

Male and Female Breast

Female Breast

Male Breast

Female Genital System

Cervix Uteri

Cornus Uteri

Precision decimal places

Data Access Timeout minutes

Population for Age-Adjusted Rates

1940 U.S. Std. Million

1970 U.S. Std. Million

2000 U.S. Std. Million

World Std. Million

Send

Reset

Melanoma

Race ↓	→ Count ↑↓	↔ Population ↑↓	← Age-Adjusted Rate Per 100,000 ↑↓
American Indian or Alaska Native	3,347	83,367,774	5.6
Asian or Pacific Islander	4,227	351,236,144	1.4
Black or African American	7,147	867,585,718	1.0
White	1,327,330	5,094,629,001	23.2
Other Races and Unknown combined	46,732	Not Applicable	Not Applicable
Total	1,388,783	6,396,818,637	20.3

Myeloma

Race ↓	→ Count ↑↓	↔ Population ↑↓	← Age-Adjusted Rate Per 100,000 ↑↓
American Indian or Alaska Native	2,639	83,367,774	4.9
Asian or Pacific Islander	10,896	351,236,144	3.8
Black or African American	89,751	867,585,718	12.9
White	348,346	5,094,629,001	5.8
Other Races and Unknown combined	4,086	Not Applicable	Not Applicable
Total	455,718	6,396,818,637	6.5

About The Vaccine Adverse Event Reporting System (VAERS)

[Request Form](#)[Results](#)[Map](#)[Chart](#)[Report](#)[About](#)[Dataset Documentation](#) [Other Data Access](#) [Data Use Restrictions](#) [How to Use WONDER](#)

Note: Any use of these data implies consent to abide by the terms of the data use restrictions.

About VAERS and the Collected Data

The VAERS database contains information on unverified reports of adverse events (illnesses, health problems and/or symptoms) following immunization with US-licensed vaccines. Reports are accepted from anyone and can be submitted electronically at www.vaers.hhs.gov.

Search Current VAERS Data

[VAERS Data Search](#)

The VAERS Data Search allows you to search information from reports collected from 1990 to the present. Instructions on how to search are listed in next section.

[VAERS Report Details](#)

This allows you to search for details on a specific VAERS report. Enter the VAERS ID number assigned to view report information.

The Vaccine Adverse Event Reporting System (VAERS) Request

Request Form

Results

Map

Chart

Report

About

[Dataset Documentation](#)

[Other Data Access](#)

[Data Use Restrictions](#)

[How to Use WONDER](#)

Save

Reset

Make all desired selections and then click any **Send** button one time to send your request.

1. Organize table layout:

Send

Help

Group Results By Year of Onset

And By None

And By None

And By None

And By None

Notes:

- Data contains VAERS reports processed as of **12/27/2024**.
- Must group by VAERS ID when selecting any of the Optional Measures.
- When grouping by **VAERS ID**, results are initially displayed with Events Reported, Percent, and totals not shown.

4. Select location, age, gender:

Send

Help

State / Territory

All Locations
The United States/Territories/Unknown
Alabama
Alaska
Arizona
Arkansas
California

Age

All Ages
< 6 months
6-11 months
1-2 years
3-5 years
6-17 years
18-29 years

Sex

All Genders
Female
Male
Unknown

5. Select other event characteristics:

Send

Help

Event Category

All Events
Death
Life Threatening
Permanent Disability

Recovered

All Events
No
Yes
Unknown

Vaccine Administered By

All Entities
Public
Private
Other

12. Other options:

Send

Help

Export Results ☐ (Check box to download results to a file)

Show Totals ☒

Show Zero Values ☐

Precision 2 decimal places

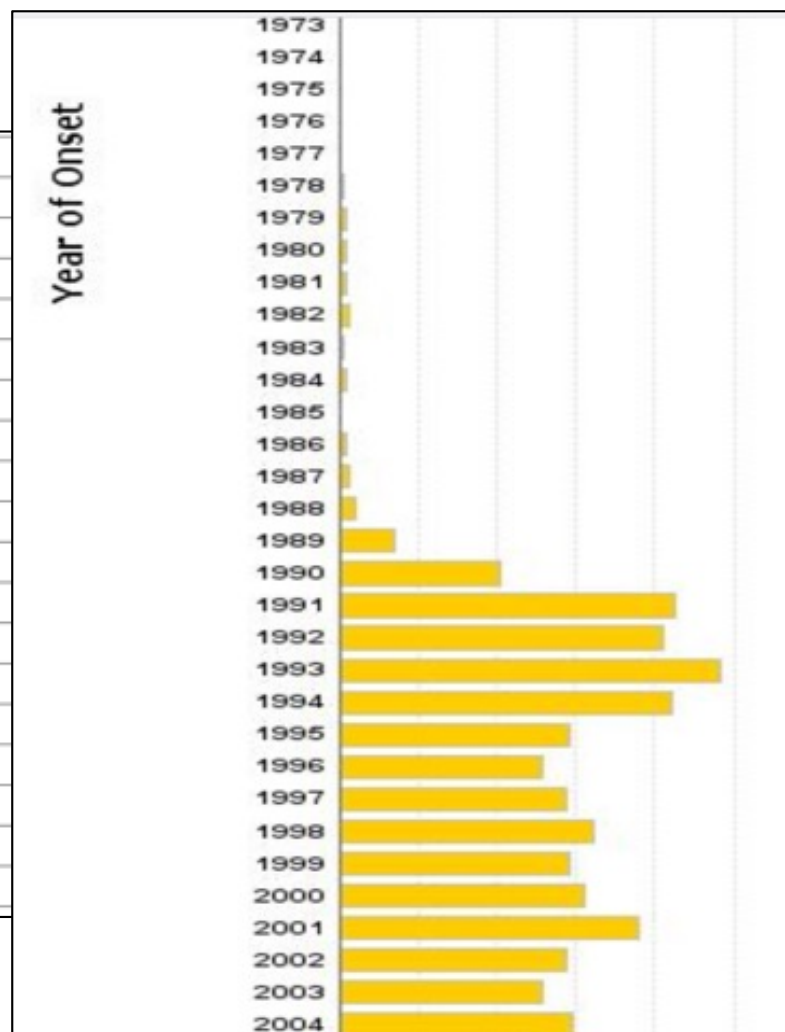
Data Access Timeout 10 minutes

Send

Reset

Vaccine deaths reported for ages 0-17

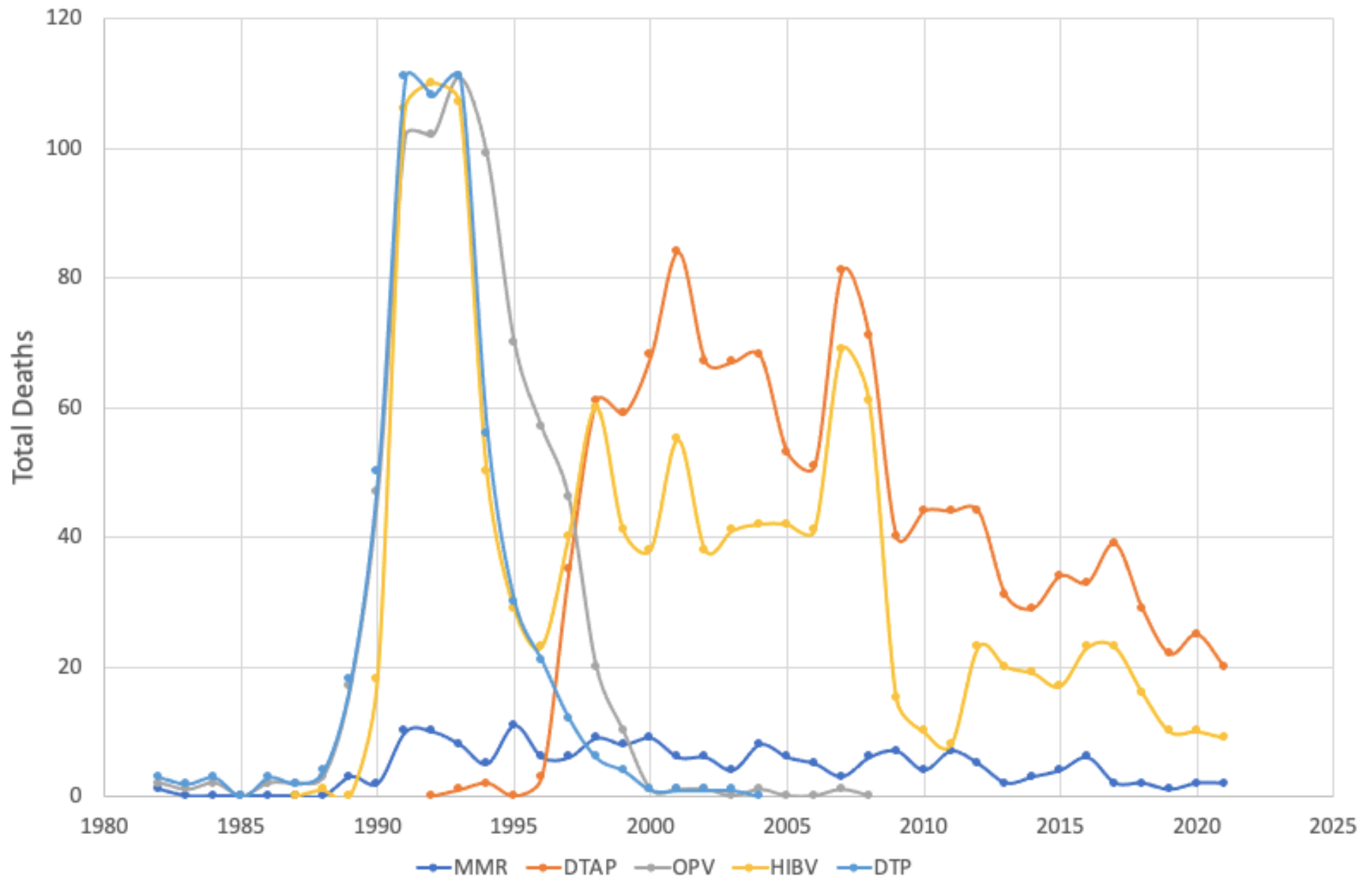
1978	2
1979	3
1980	3
1981	3
1982	4
1983	2
1984	3
1986	3
1987	4
1988	6
1989	21
1990	62
1991	130
1992	125
1993	147
1994	128
1995	89
1996	78
1997	88



H.R.5546 - National Childhood Vaccine Injury Act of 1986

99th Congress (1985-1986)

Vaccine Related Deaths by Year for Ages 0-17



Dear Mr. Chaves,

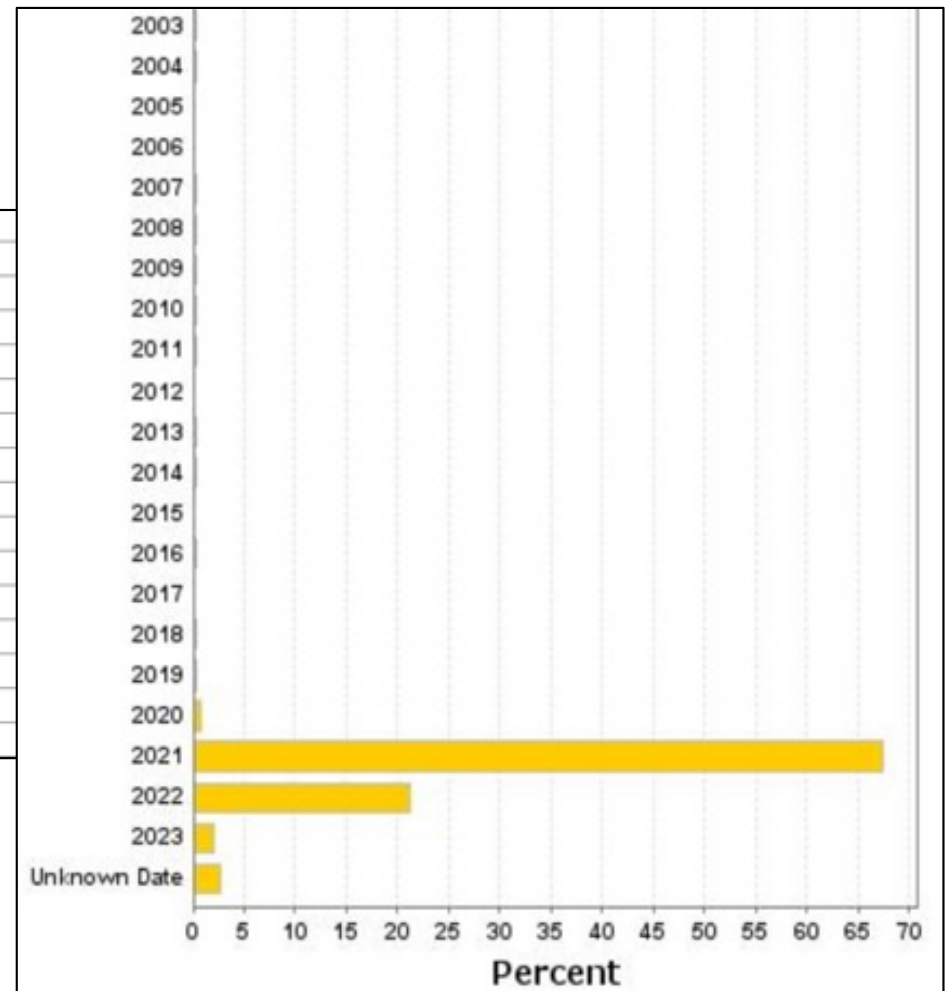
Thank you for contacting CDC and sharing your search results.

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>).

Vaccine deaths reported for ages 18 and up

2007	53
2008	42
2009	73
2010	62
2011	49
2012	32
2013	37
2014	41
2015	36
2016	44
2017	23
2018	41
2019	37
2020	118
2021	11,931
2022	3,745



Dear Mr. Chaves,

Thank you for contacting CDC with your question about the increase in VAERS reports received in 2021.

The frontline system used to collect data and monitor adverse events that occur after vaccination is the Vaccine Adverse Event Reporting System (VAERS). VAERS is a national vaccine safety monitoring system managed by CDC and FDA. VAERS accepts reports of possible side effects (also called “adverse events”) following vaccination. The system is not designed to determine whether a reported adverse event was caused by the vaccine but serves as an early warning system and helps CDC and FDA identify areas for further study.

VAERS accepts all reports of adverse events after vaccination, without regard to whether or not the vaccine caused the event. Because of this and other limitations, data in VAERS generally can’t be used to determine if a vaccine caused the adverse event (including deaths). Importantly, reported events and deaths are not necessarily “due to vaccines”.

VAERS received 49,674 reports in 2020; 752,541 reports in 2021; and 246,500 in 2022.

The authorized and approved COVID-19 vaccines have been administered under the most comprehensive and intensive vaccine safety monitoring effort in U.S. history. It is important to note that VAERS is only one system among many that monitor the safety of US-licensed or authorized vaccines. Each system has different strengths and weaknesses.

For a list of CDC safety monitoring systems, please see [COVID-19 Vaccine Safety Reporting Systems | Vaccine Safety Systems | CDC](#) .

Nevertheless, research by the Agency for Health Research and Quality, indicates that vaccine adverse events are *underreported*.

Electronic Support for Public Health - Vaccine Adverse Event Reporting System (ESP:VAERS)

[Project Final Report \(PDF 96.19 KB\)](#) [Disclaimer](#)

Project Description

Annual Summaries

Publications

Resources

Adverse events from vaccines are common but underreported, with less than one percent reported to the Food and Drug Administration (FDA). Low reporting rates preclude or delay the identification of "problem" vaccines, potentially endangering the health of the public. New surveillance methods for drug and vaccine adverse effects are needed. Proactive, spontaneous, automated adverse event reporting embedded within electronic medical records (EMRs) and other information systems has the potential to speed the identification of problems with new vaccines and yield more careful quantification of the risks of older ones.

Project Details - Completed

- **Grant Number:** R18 HS017045
- **Funding Mechanism(s):** Ambulatory Safety and Quality Program: Enabling Quality Measurement through Health IT (R18)

<https://digital.ahrq.gov/ahrq-funded-projects/electronic-support-public-health-vaccine-adverse-event-reporting-system>

HHS also pays about \$200 million per year for vaccine injuries...

**National Vaccine Injury Compensation Program
Monthly Statistics Report**

Fiscal Year	Number of Compensated Awards	Petitioners' Award Amount	Attorneys' Fees/Costs Payments	Number of Payments to Attorneys (Dismissed Cases)	Attorneys' Fees/Costs Payments (Dismissed Cases)	Number of Payments to Interim Attorneys'	Interim Attorneys' Fees/Costs Payments	Total Outlays
FY 2020	733	\$186,860,677.55	\$20,165,188.43	114	\$5,774,438.88	76	\$5,090,482.24	\$217,890,787.10
FY 2021	719	\$208,258,401.31	\$24,944,964.77	140	\$6,920,048.74	52	\$4,192,522.11	\$244,315,936.93
FY 2022	927	\$195,693,889.57	\$22,992,062.07	102	\$4,868,964.74	56	\$6,329,886.09	\$229,884,802.47
FY 2023	885	\$123,810,693.81	\$35,984,811.55	126	\$6,760,733.64	61	\$7,329,281.69	\$173,885,520.69
FY 2024	1,221	\$149,653,395.87	\$38,812,164.76	125	\$8,759,507.49	51	\$5,550,091.70	\$202,775,159.82
FY 2025	241	\$29,206,706.08	\$7,366,844.28	27	\$2,486,143.10	12	\$1,311,090.18	\$40,370,783.64
Total	11,567	\$4,777,785,057.60	\$356,451,245.26	6,091	\$121,031,299.21	795	\$67,788,957.83	\$5,323,056,559.90

...and COVID vaccine injuries are covered separately.

COVID-19 claims

For claims associated with the COVID-19 vaccine or other COVID-19 related countermeasures, please file your Request for Benefits with the [Countermeasures Injury Compensation Program](https://www.hrsa.gov/vaccine-compensation/data).

<https://www.hrsa.gov/vaccine-compensation/data>

This query compiles permanent disabilities reported after the MMR.

1. Organize table layout:SendHelp

Group Results By Symptoms ▾
And By None ▾
And By None ▾
And By None ▾
And By None ▾

Notes:

- Data contains VAERS reports processed as of **12/27/2024**.
- Must group by VAERS ID when selecting any of the Optional Measures.
- When grouping by **VAERS ID**, results are initially displayed with Events Reported, Percent, and totals not shown.

BrowseSearchDetails

Vaccine Products

+ LYME (LYME VACCINE (LYMERIX))
+ MM (MEASLES AND MUMPS VIRUS VACCINE, LIVE)
+ MER (MEASLES AND RUBELLA VACCINE)
+ MEA (MEASLES VACCINE)
+ MMR (MEASLES, MUMPS AND RUBELLA VIRUS VACCINE, LIVE)
+ MMRV (MEASLES, MUMPS, RUBELLA, AND VARICELLA VACCINE (PROQUAD))
+ MNQHIB (MENINGOCOCCAL GROUP C & Y + HIB)
+ MENB (MENINGOCOCCAL B VACCINE)
+ MNC (MENINGOCOCCAL CONJUGATE VACCINE)
+ MENBIB (MENINGOCOCCAL GROUPS C AND Y + HAEMOPHILUS B TETANUS TOXOID CO

Currently selected:
All (All Vaccine Products)

5. Select other event characteristics:SendHelp

Event Category

All Events
Death
Life Threatening
Permanent Disability
Congenital Anomaly / Birth Defect *
Hospitalized
Existing Hospitalization Prolonged
Emergency Room / Office Visit **
Emergency Room *
Office Visit *
None of the above

Recovered

All Events
No
Yes
Unknown
Missing

Serious

All Events
Yes
No

Vaccine Administered By

All Entities
Public
Private
Other
Military
Work *
Pharmacy *
Senior Living *
School *
Unknown

* VAERS 2.0 Report Form Only

* VAERS 2.0 Report Form Only
** VAERS-1 Report Form Only

The Vaccine Adverse Event Reporting System (VAERS) Results

Data current as of 12/27/2024

[Request Form](#)[Results](#)[Map](#)[Chart](#)[Report](#)[About](#)[Dataset Documentation](#)[Other Data Access](#)[Help for Results](#)[Printing Tips](#)[Help with Exports](#)[Save](#)[Export](#)[Reset](#)[Quick Options](#)[More Options](#)[API Options](#)[Top](#)[Notes](#)[Citation](#)[Query Criteria](#)

Messages:






▶ **VAERS data in CDC WONDER are updated every month. Hence, results for the same query can change from month to month.**

▶ **These results are for 1,042 total events.**

▶ **Rows with zero Events Reported are hidden. Use Quick Options above to show zero rows.**

Symptoms ↓	→ Events Reported ↑↓	← Percent (of 1,042) ↑↓
ABASIA	20	1.92%
ABDOMINAL DISCOMFORT	6	0.58%
ABDOMINAL DISTENSION	4	0.38%
ABDOMINAL HERNIA REPAIR	1	0.10%
ABDOMINAL PAIN	19	1.82%
ABDOMINAL PAIN UPPER	8	0.77%
ABNORMAL BEHAVIOUR	133	12.76%
ABNORMAL DREAMS	2	0.19%

MMR

Symptoms 	→ Events Reported  	← Percent (of 1,042)  
Total	7,456	715.55%
PYREXIA	321	30.81%
AUTISM	296	28.41%
SPEECH DISORDER	169	16.22%
APHASIA	153	14.68%
ABNORMAL BEHAVIOUR	133	12.76%
CONVULSION	104	9.98%
RASH	100	9.60%
DIARRHOEA	92	8.83%
AUTISM SPECTRUM DISORDER	82	7.87%
CRYING	72	6.91%
LABORATORY TEST ABNORMAL	63	6.05%
VOMITING	62	5.95%
ARTHRALGIA	61	5.85%
DECREASED EYE CONTACT	61	5.85%
IRRITABILITY	60	5.76%
ASTHENIA	58	5.57%
LETHARGY	52	4.99%
SCREAMING	51	4.89%
FATIGUE	47	4.51%
MENTAL RETARDATION SEVERITY UNSPECIFIED	47	4.51%
GASTROINTESTINAL DISORDER	46	4.41%

MMR

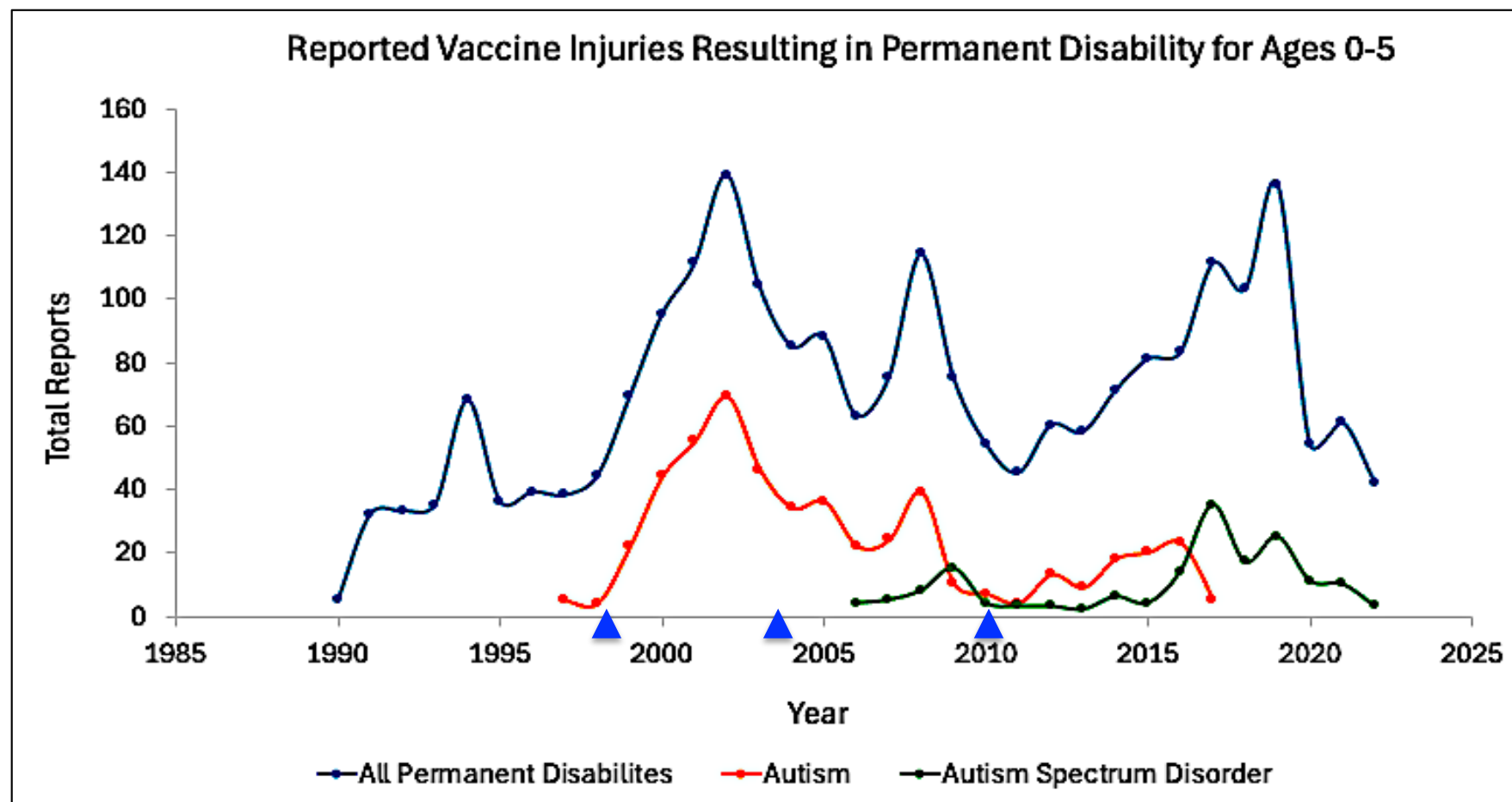
DTAP

Symptoms ↓	→ Events Reported ↑↓	← Percent (of 704) ↑↓
Total	5,299	752.70%
PYREXIA	203	28.84%
AUTISM	181	25.71%
CONVULSION	106	15.06%
SPEECH DISORDER	91	12.93%
ABNORMAL BEHAVIOUR	84	11.93%
APHASIA	78	11.08%
CRYING	76	10.80%
SCREAMING	67	9.52%
IRRITABILITY	56	7.95%
LETHARGY	56	7.95%
DIARRHOEA	54	7.67%
NEURODEVELOPMENTAL DISORDER	53	7.53%
DRUG TOXICITY	45	6.39%
VOMITING	45	6.39%
AUTISM SPECTRUM DISORDER	43	6.11%
NERVOUS SYSTEM DISORDER	41	5.82%
RASH	41	5.82%
DECREASED EYE CONTACT	40	5.68%
LABORATORY TEST ABNORMAL	39	5.54%
AGITATION	38	5.40%
ELECTROENCEPHALOGRAM ABNORMAL	38	5.40%
MENTAL RETARDATION SEVERITY UNSPECIFIED	37	5.26%
SPEECH DISORDER DEVELOPMENTAL	37	5.26%
DEVELOPMENTAL DELAY	36	5.11%
GASTROINTESTINAL DISORDER	35	4.97%
STARING	34	4.83%

IPV (polio)

Symptoms ↓	→ Events Reported ↑↓	← Percent (of 381) ↑↓
Total	2,890	758.53%
PYREXIA	100	26.25%
AUTISM	94	24.67%
CONVULSION	76	19.95%
SPEECH DISORDER	50	13.12%
ABNORMAL BEHAVIOUR	46	12.07%
CRYING	44	11.55%
SCREAMING	33	8.66%
DIARRHOEA	31	8.14%
VOMITING	30	7.87%
ELECTROENCEPHALOGRAM ABNORMAL	27	7.09%
IRRITABILITY	27	7.09%
LABORATORY TEST ABNORMAL	27	7.09%
LETHARGY	27	7.09%
FATIGUE	24	6.30%
RASH	24	6.30%
NEURODEVELOPMENTAL DISORDER	23	6.04%
APHASIA	20	5.25%
DEVELOPMENTAL DELAY	20	5.25%
HYPOTONIA	20	5.25%
MENTAL RETARDATION SEVERITY UNSPECIFIED	20	5.25%
AGITATION	19	4.99%
STARING	19	4.99%
NERVOUS SYSTEM DISORDER	17	4.46%
SPEECH DISORDER DEVELOPMENTAL	17	4.46%
DYSKINESIA	16	4.20%
GASTROINTESTINAL DISORDER	16	4.20%

Most reports of vaccine-induced autism occurred between 1998-2010. This concurs with the publication and retraction of an influential study.

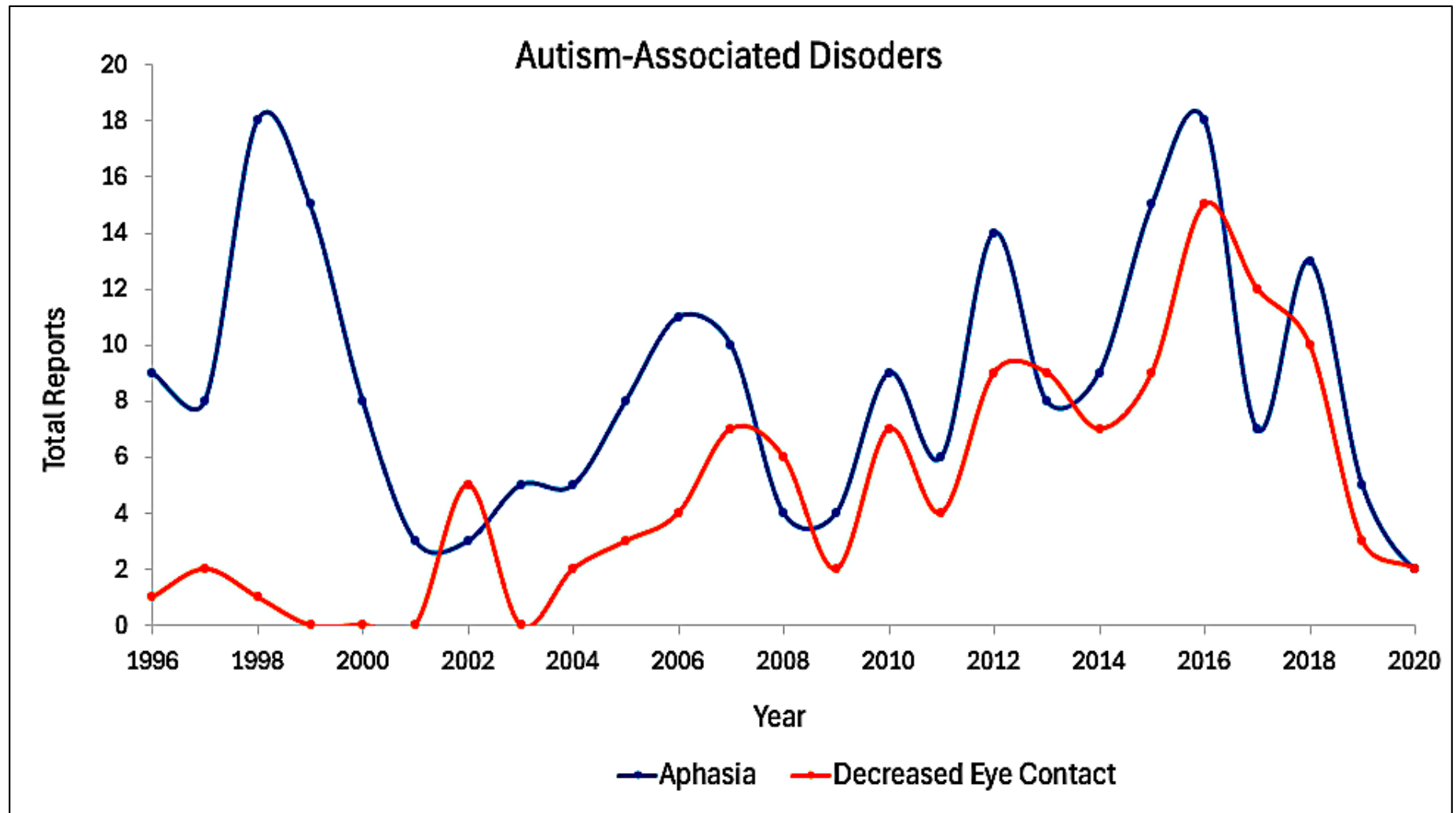


In 1998, British gastroenterologist Andrew Wakefield published preliminary research in the Lancet that linked the MMR vaccine to autism.

In 2004, the Lancet editor raised concerns over integrity of the study.

In 2010, the study was officially retracted.

Nevertheless, many autism-associated disorders are still being reported.



Brain inflammation is an injury recognized by the HHS vaccine court...
 ...and brain inflammation has been linked to cerebral palsy *and autism*.

II. Vaccines containing whole cell pertussis bacteria, extracted or partial cell pertussis bacteria, or specific	A. Anaphylaxis	<4 hours
II. Vaccines containing whole cell pertussis bacteria, extracted or partial cell pertussis bacteria, or specific pertussis antigen(s) (e.g., DTP, DTaP, P, DTP-Hib)	A. Anaphylaxis	≤4 hours.
	B. Encephalopathy or encephalitis	≤72 hours.
	C. Shoulder Injury Related to Vaccine Administration	≤48 hours.
	D. Vasovagal syncope	≤1 hour.

Page 1 of 15

Vaccine	Illness, disability, injury or condition covered	Time period for first symptom or manifestation of onset or of significant aggravation after vaccine administration
III. Vaccines containing measles, mumps, and rubella virus or any of its components (e.g., MMR, MM, MMRV)	A. Anaphylaxis	≤4 hours.
	B. Encephalopathy or encephalitis	5-15 days (not less than 5 days and not more than 15 days).