VAERS Reporting in West Virginia

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Objectives

This presentation will:

- Describe the structure and purpose of the Vaccine Adverse Event Reporting System (VAERS) and its role in vaccine safety monitoring at the national and state levels
- Highlight key trends and patterns identified in West Virginia VAERS reports and explain how these findings inform state-level immunization strategy and risk communication
- Discuss strengths, limitations, and public health implications of VAERS data analysis for informing vaccine safety communication and immunization policy in West Virginia

VAERS Background

- Established in 1990
- Co-managed by the Centers for Disease Control and Prevention (CDC) and the United States Food and Drug Administration (FDA)
- VAERS accepts and analyzes reports of adverse events after a person has received a vaccination
- Not designed to determine if a vaccine caused a health problem
- Note: The FDA launched the Adverse Event Monitoring System (AEMS) in March 2026 to replace VAERS

Objectives of VAERS

1. Detect new, unusual, or rare vaccine adverse events

1. Monitor increases in known adverse events

1. Identify potential patient risk factors for particular types of adverse events

1. Assess the safety of newly licensed vaccines

1. Determine and address possible reporting clusters

1. Recognize persistent safe-use problems and administration errors

1. Provide a national safety monitoring system

Who Should Report to VAERS?

- Anyone can report
- Healthcare providers are required by law to report to VAERS:
  - Any adverse event listed in the VAERS Table of Reportable Events Following Vaccination that occurs within the specified time period after vaccination
  - An adverse event listed by the vaccine manufacturer as a contraindication to further doses of the vaccine
- Healthcare providers are strongly encouraged to report:
  - Any adverse event that occurs after the administration of a vaccine licensed in the U.S.
  - Vaccine administration errors
- Vaccine manufacturers are required to report to VAERS all adverse events that come to their attention

Example of Reportable Events

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VAERS Table of Reportable Events Following Vaccination*	
Vaccine/Toxoid	**Event and interval** from vaccination**
Tetanus in any combination; DTaP, DTP, DTP-Hib, DT, Td, TT, Tdap, DTaP-IPV, DTaP-IPV/Hib, DTaP-HepB-IPV	A. Anaphylaxis or anaphylactic shock (7 days) B. Brachial neuritis (28 days) C. Shoulder Injury Related to Vaccine Administration (7 days) D. Vasovagal syncope (7 days) E. Any acute complications or sequelae (including death) of above events (interval - not applicable) F. Events described in manufacturer's package insert as contraindications to additional doses of vaccine (interval - see package insert)
Pertussis in any combination; DTaP, DTP, DTP-Hib, Tdap, DTaP-IPV, DTaP-IPV/Hib, DTaP-HepB-IPV	A. Anaphylaxis or anaphylactic shock (7 days) B. Encephalopathy or encephalitis (7 days) C. Shoulder Injury Related to Vaccine Administration (7 days) D. Vasovagal syncope (7 days) E. Any acute complications or sequelae (including death) of above events (interval - not applicable) F. Events described in manufacturer's package insert as contraindications to additional doses of vaccine (interval - see package insert)
Measles, mumps and rubella in any combination; MMR, MMRV, MM	A. Anaphylaxis or anaphylactic shock (7 days) B. Encephalopathy or encephalitis (15 days) C. Shoulder Injury Related to Vaccine Administration (7 days) D. Vasovagal syncope (7 days) E. Any acute complications or sequelae (including death) of above events (interval - not applicable) F. Events described in manufacturer's package insert as contraindications to additional doses of vaccine (interval - see package insert)

How to Report to VAERS?

- Go to www.vaers.hhs.gov
- Click on Report an Adverse Event from the menu on the left hand side
- There are two options to submit a report
  - Online
  - PDF Form
- For further assistance, call 1-800-822-7967 or email vaersinfo@cdc.gov

What is needed to fill out a VAERS report?

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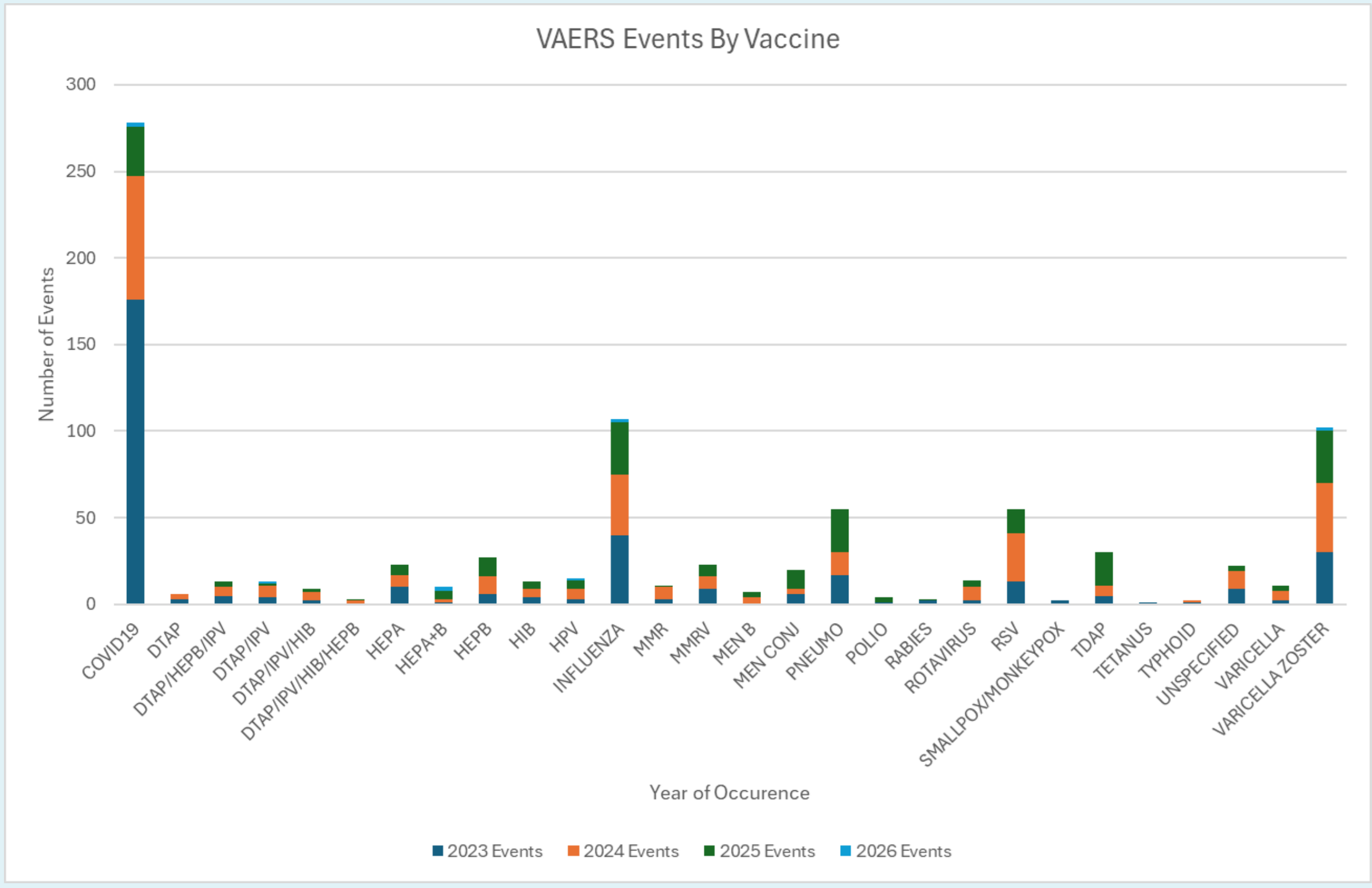
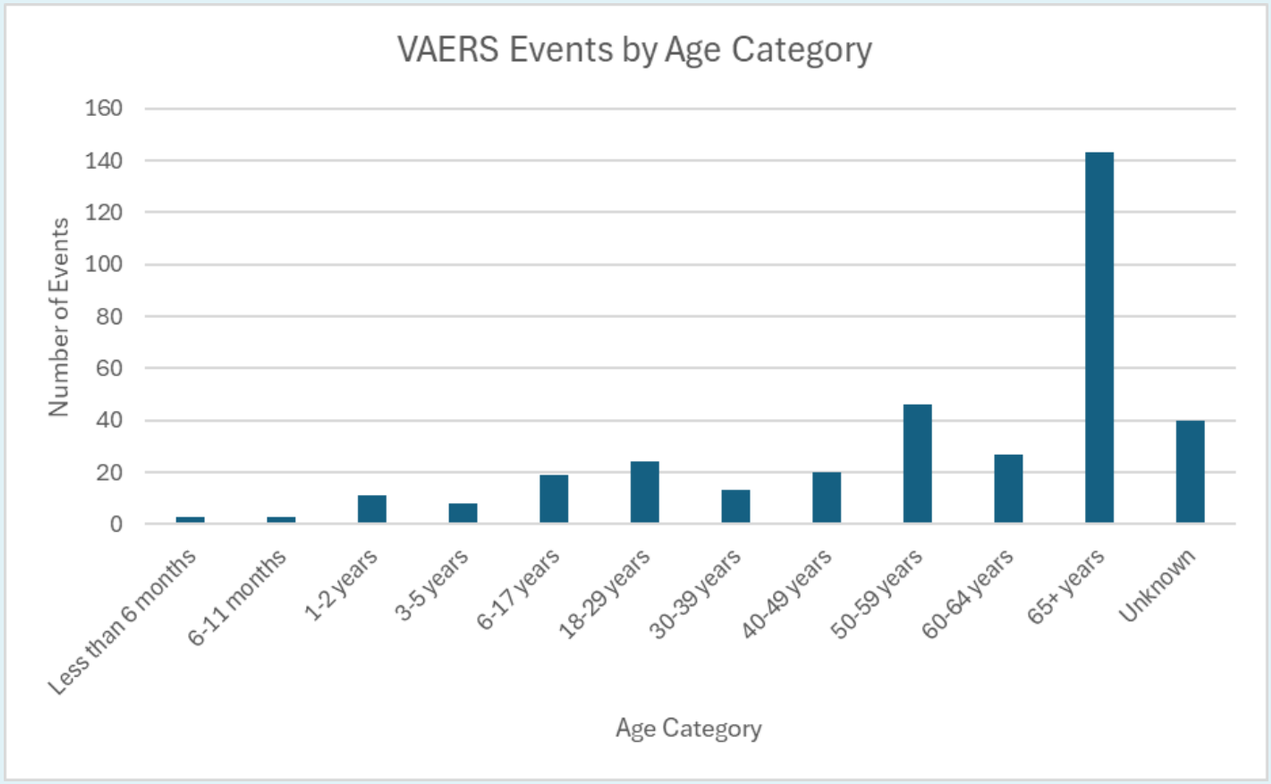
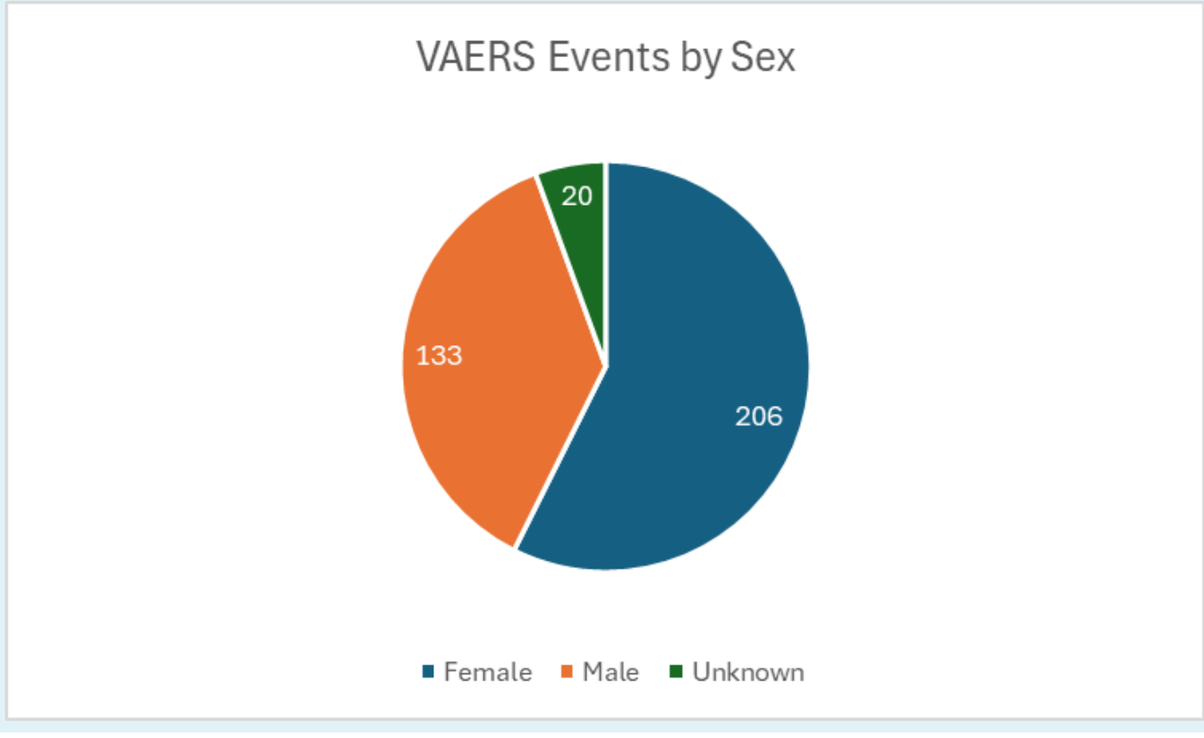
- Patient information
- Vaccine information
- Date, time, and location administered
- Date and time when adverse event(s) started
- Symptoms and outcome of the adverse event(s)
- Medical tests and laboratory results (if applicable)
- Physician’s contact information (if applicable)
- A Checklist can be downloaded from the VAERS website

West Virginia VAERS Data By Year

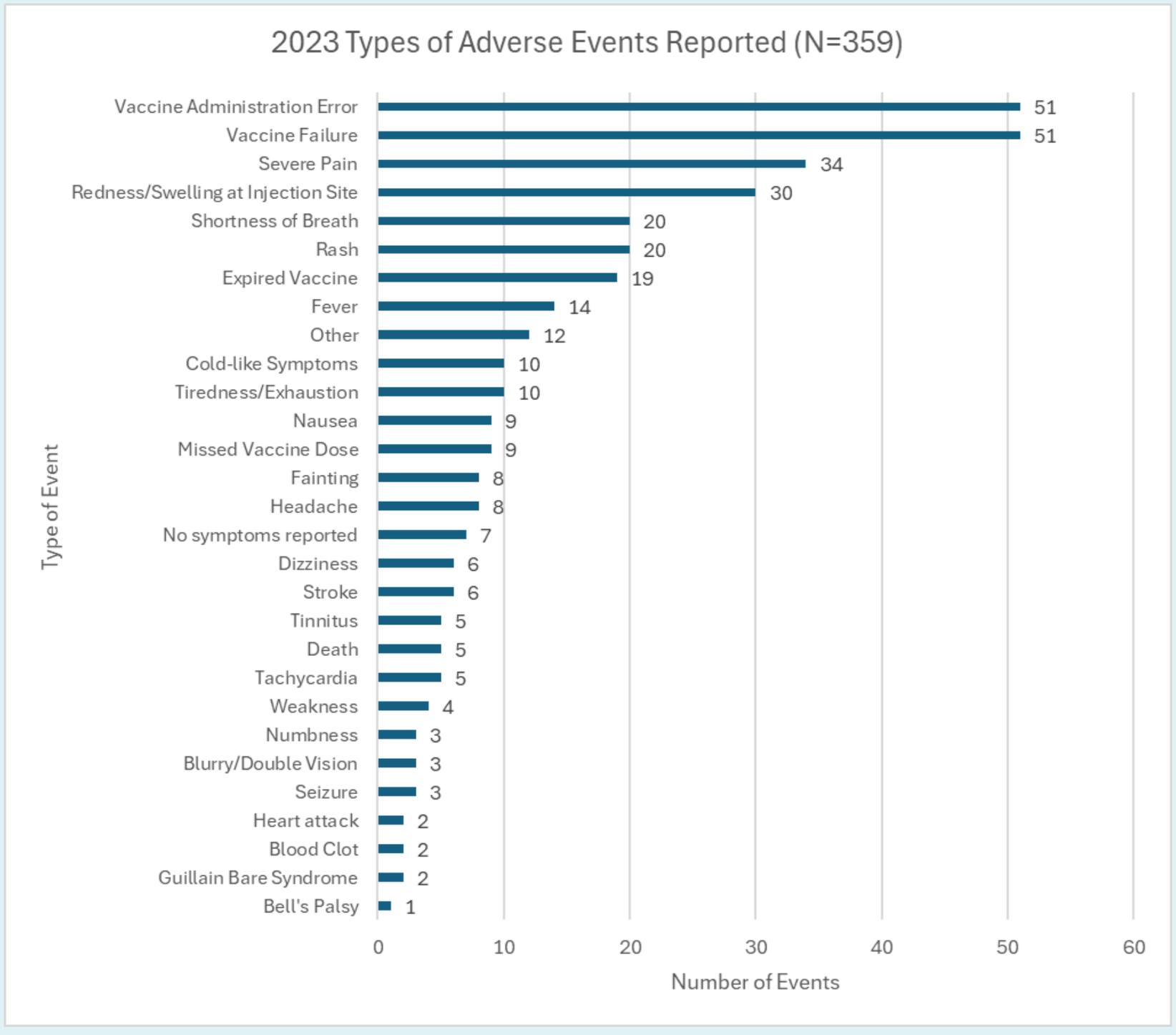


2023 West Virginia VAERS Data

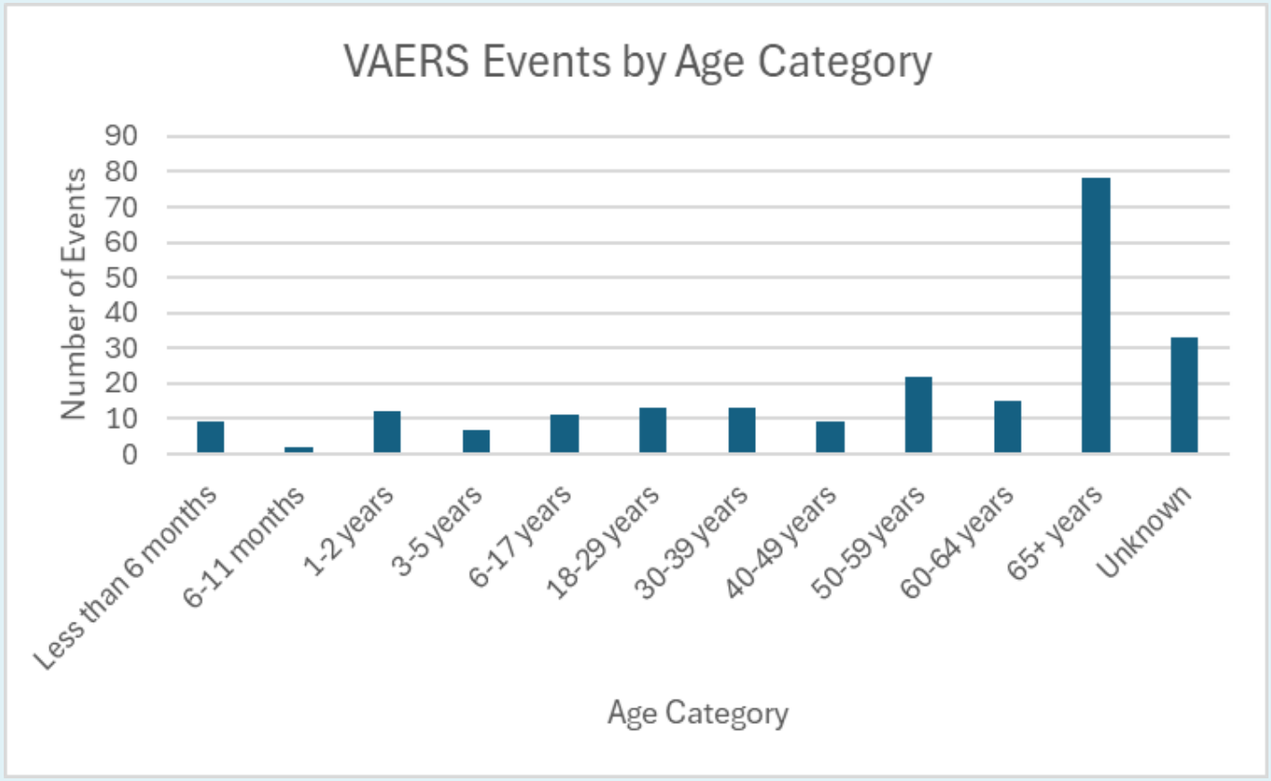


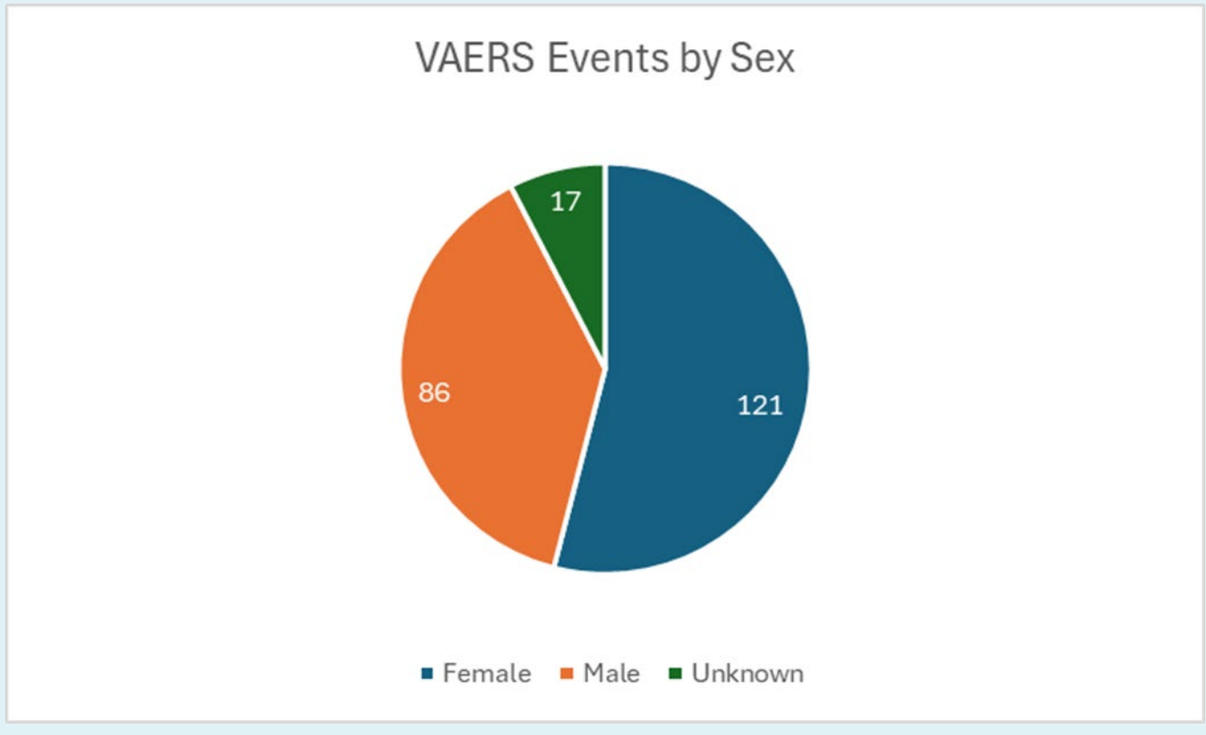


2023 Adverse Events Reported

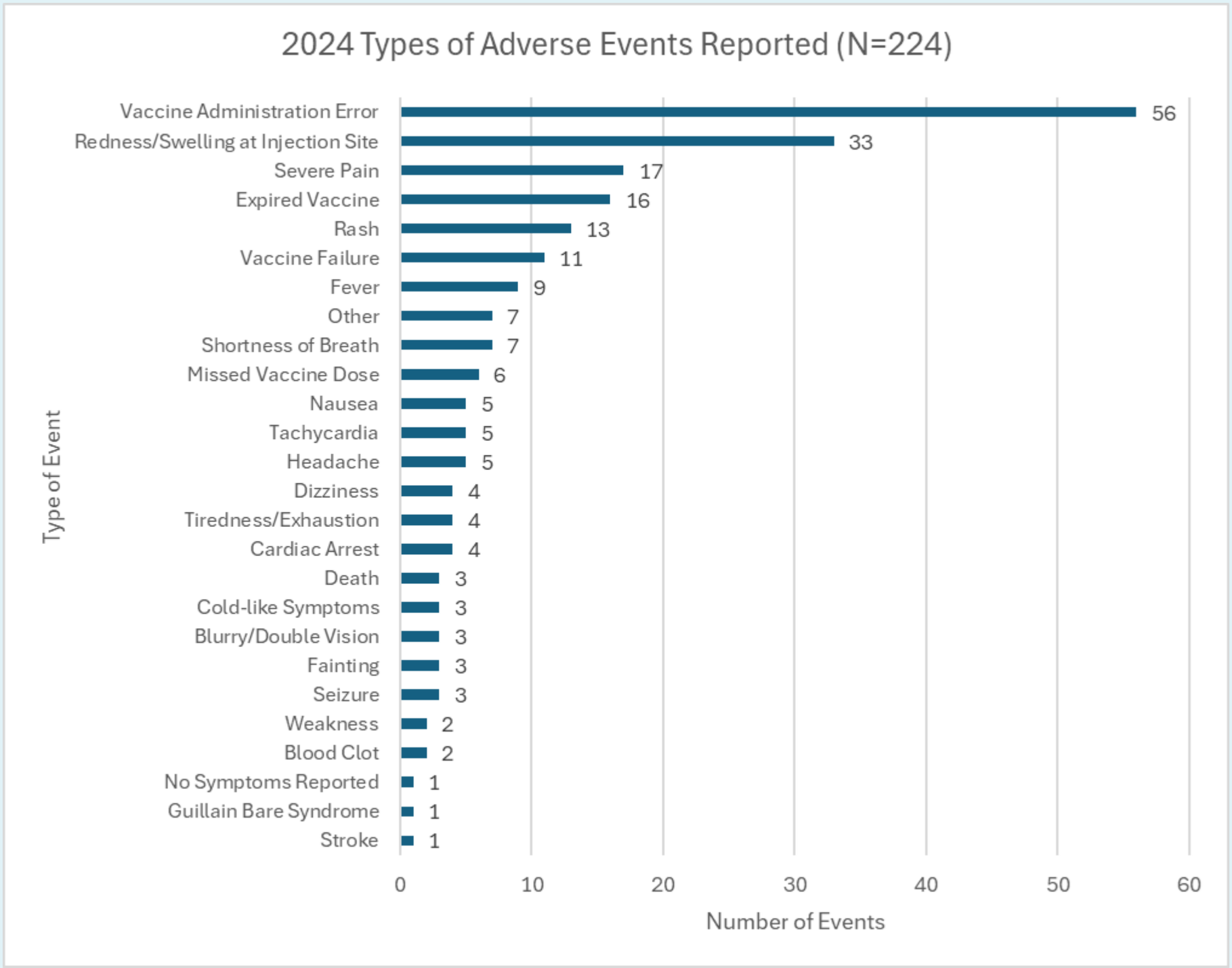


2024 West Virginia VAERS Data

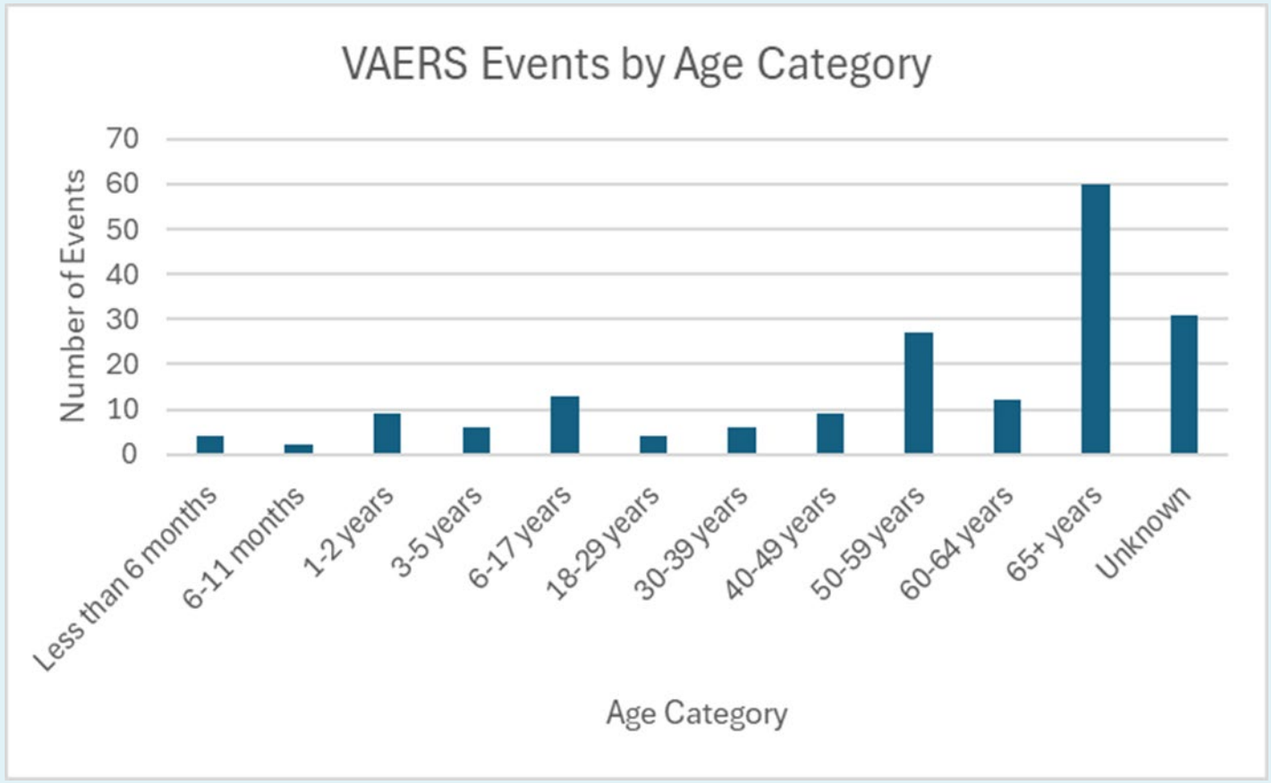


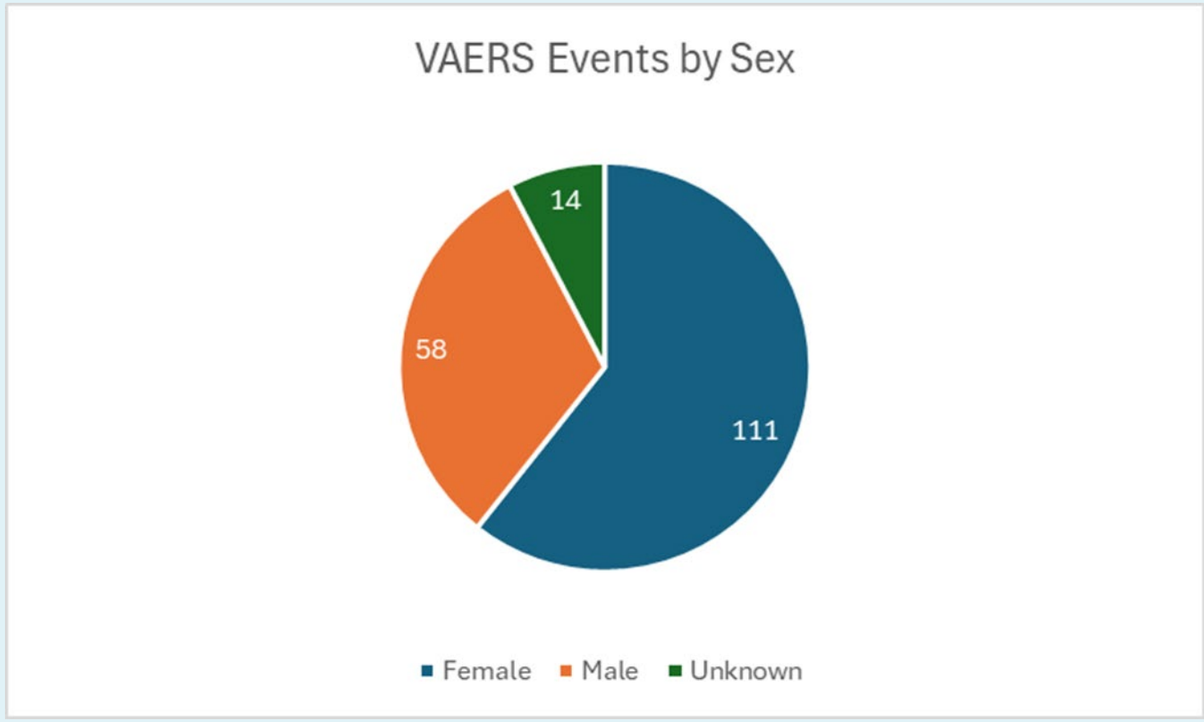


2024 Adverse Events Reported

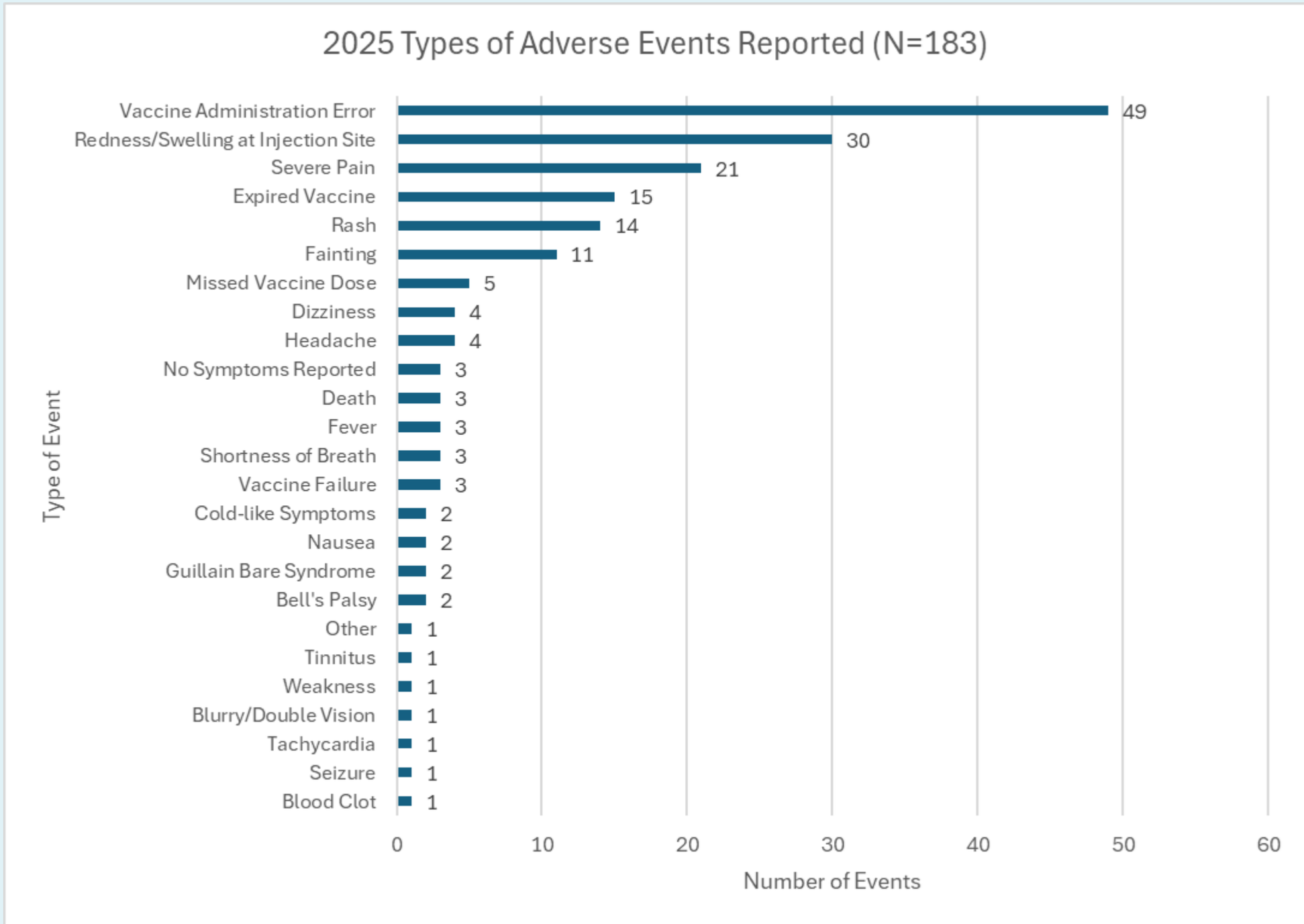


2025 West Virginia VAERS Data

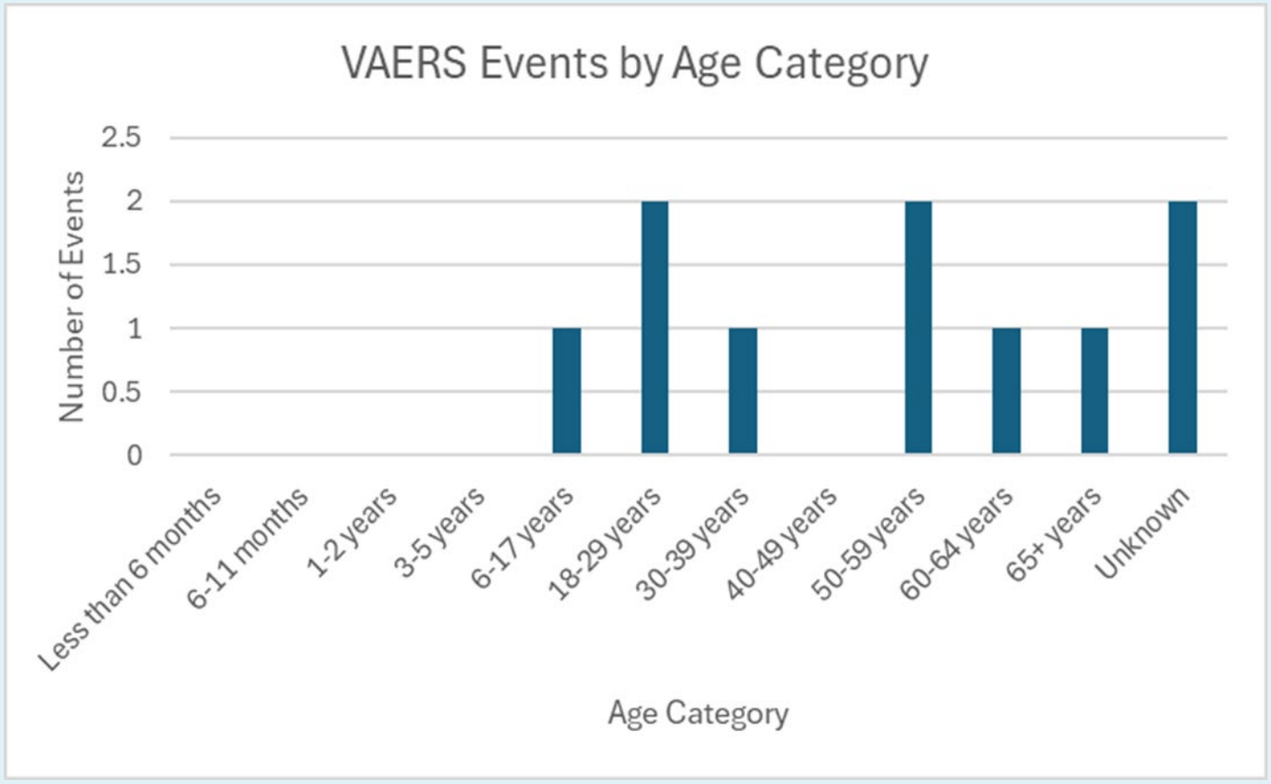


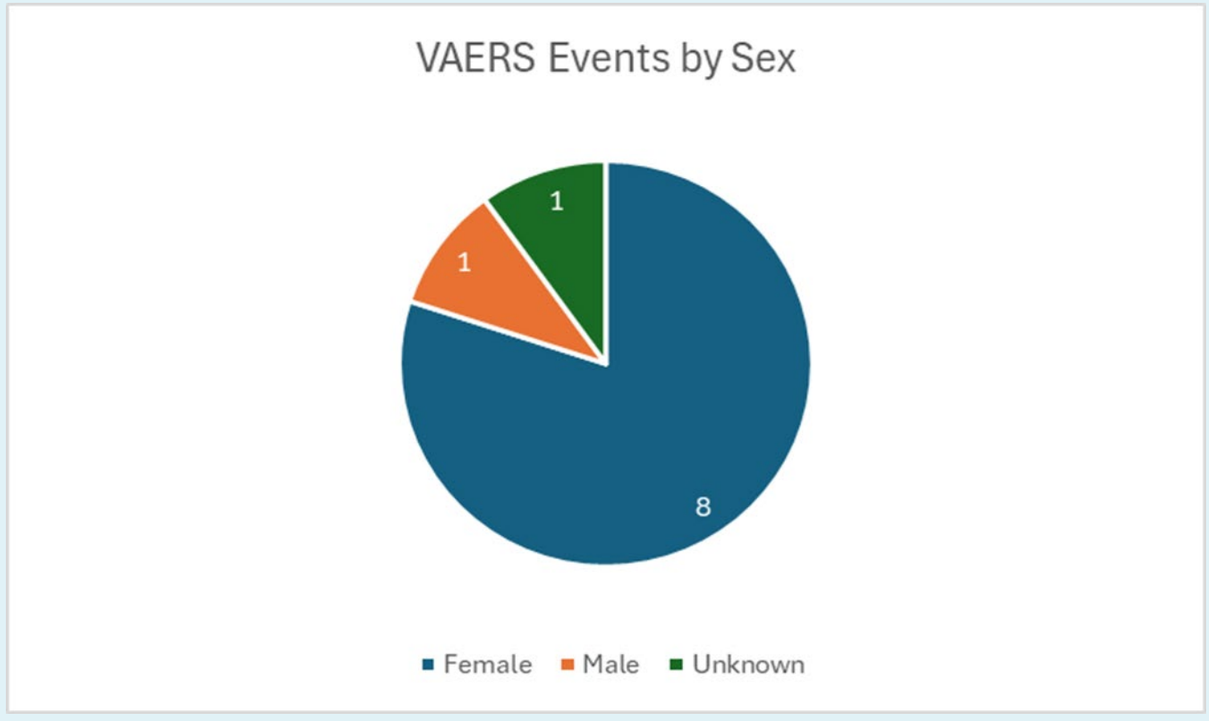


2025 Adverse Events Reported

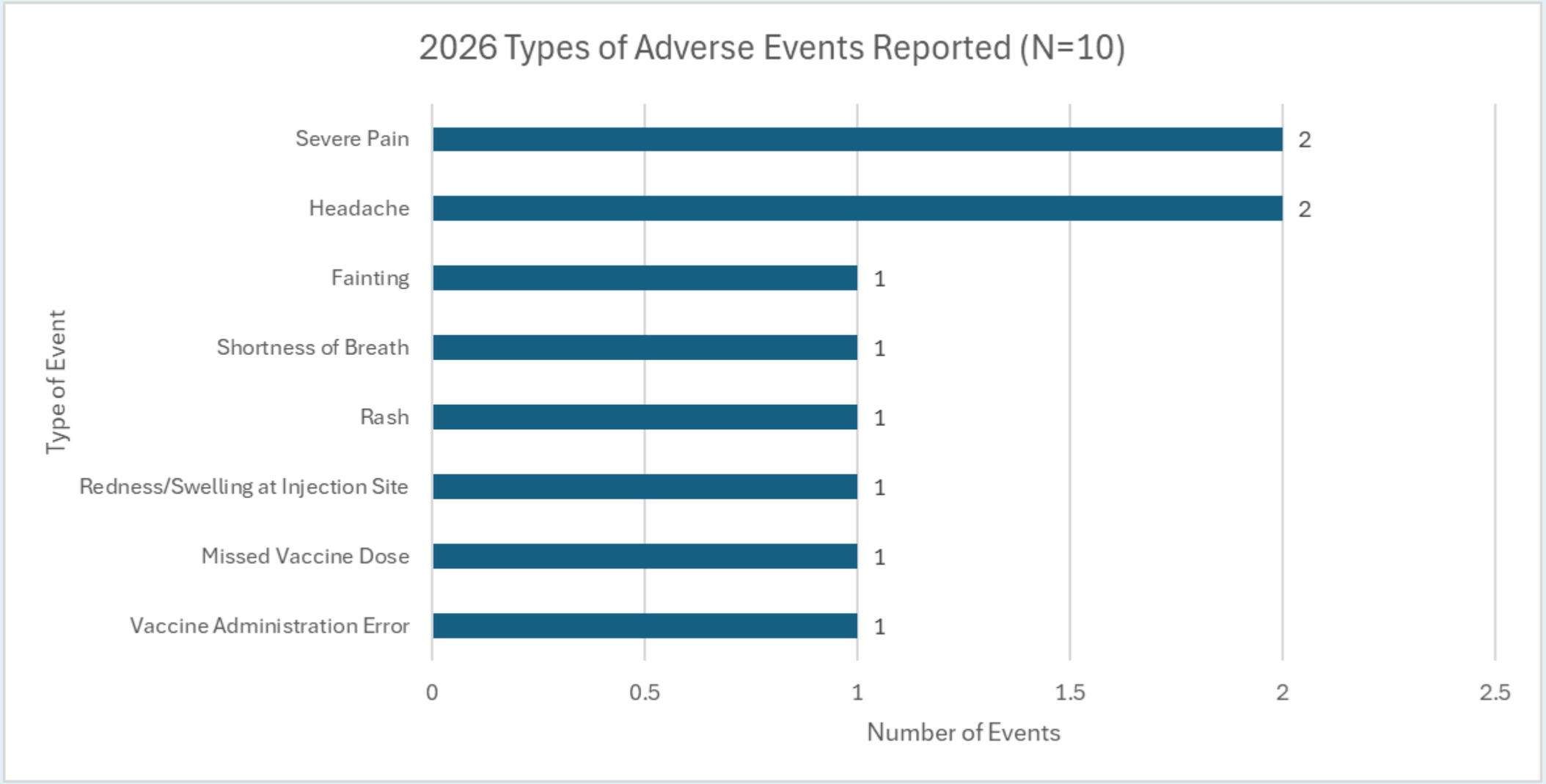


2026 West Virginia VAERS Data





2026 Adverse Events Reported



Strengths of VAERS

- Collects national data from all U.S. states and territories
- Accepts reports from anyone
- The VAERS form collects information about the vaccine, the person vaccinated, and the adverse event
- Data are publicly available
- Can be used as an early warning system to identify rare adverse events
- Is a tool for identifying potential vaccine safety concerns that need further study using more robust data systems

Uses of VAERS Data at the State Level

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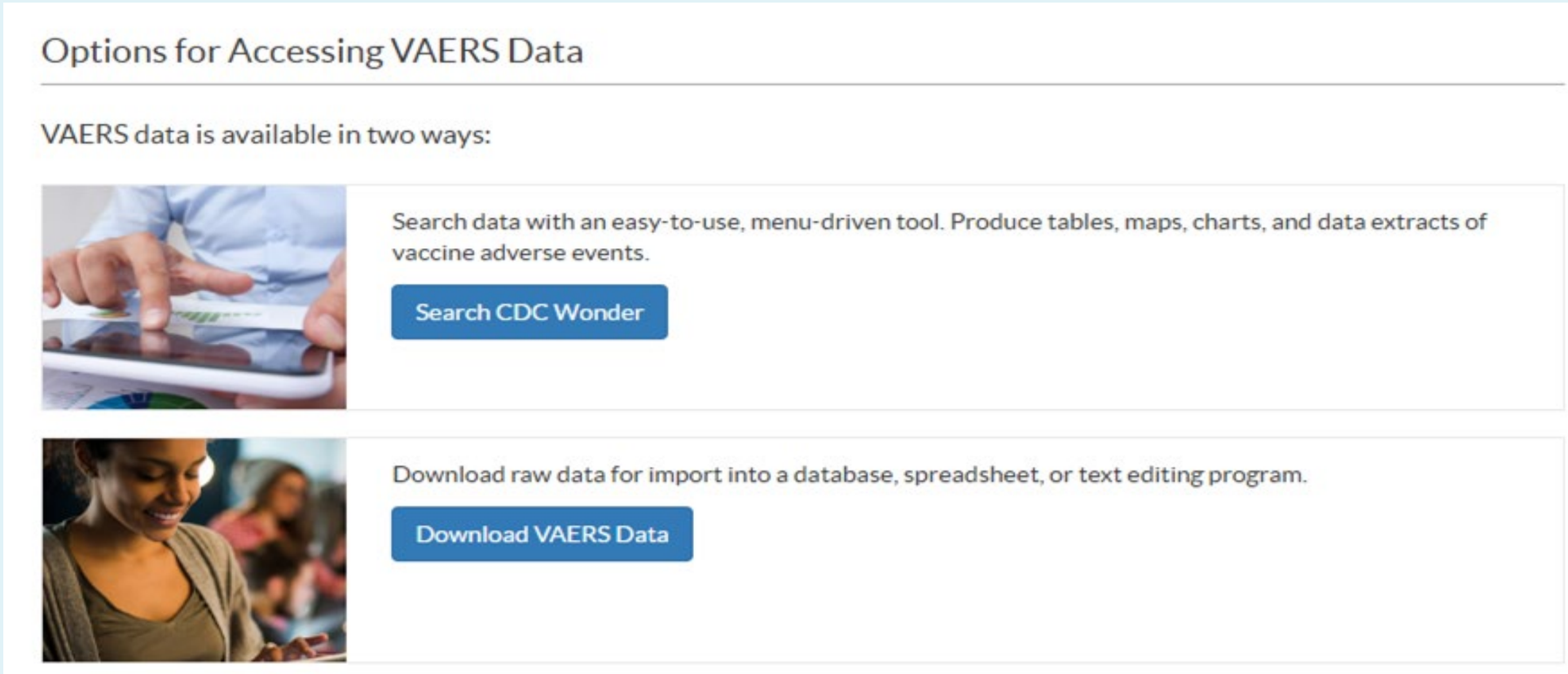
- Safety Signal Detection
- Targeted Risk Communication
- Adjusting Vaccine Policies
- Investigating Clusters
- Rapid Response to Emergencies
- Identifying Administrative Errors

Limitations of VAERS

- It is a passive system
- It is generally not possible to find out from VAERS data if a vaccine caused the adverse event
- Subject to underreporting, overreporting, and inconsistent data quality
- Serious adverse events are more likely to be reported than non-serious events
- Data cannot be used to determine rates of adverse events

How to Access VAERS Data

- Go to www.vaers.hhs.gov
- Click on VAERS Data from the menu on the left hand side
- Choose one of the two available options



Key Takeaway Points

- Each year reviewed showed the most adverse events reported in the 65+ years old age category
- The vaccines mentioned in most VAERS reports each year were COVID19, influenza, and varicella zoster
- The most common adverse event reported each year was vaccine administration errors
- Working with providers to educate on proper vaccine administration and storage could alleviate some reports
- Educating providers to check expiration dates before vaccine administration to reduce administration of expired vaccines
- Reminding providers to check vaccine history for patients before administering vaccines
- Ensure that providers are reviewing common side effects of vaccines with patients

Contact Information

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Vaccine Adverse Event Reporting System (VAERS) in West Virginia

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