

# Tracking Vaccine Uptake during Outbreaks through IIS Data

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Division of Immunization

# Tracking Vaccine Response to Outbreaks: March 2025 Headlines

**abc NEWS** · 4d · on MSN

**US reports highest number of measles cases since 2019: CDC**


In 2019, there was a total of 1,274 reported cases, CDC data shows. If the U.S. surpasses this figure, it would lead to the ...



**USA TODAY** · 2d · on MSN

**US exceeds 700 measles cases as officials struggle to contain outbreaks**


More than 540 measles cases have been reported in Texas, where two unvaccinated children with no underlying health conditions ...



**USA TODAY** · 6h

**Texas clinic opens to combat worst measles outbreak in 30 years**


There have been over 500 measles cases reported in the state of Texas - the worst outbreak in decades. Chloe Kim



**Newsweek** · 5d · on MSN

**Measles Outbreak Update: Infections Surge by Triple Digits**

The U.S. has recorded 105 more measles cases than the previous week, bringing the total for 2025 to 712 confirmed cases.

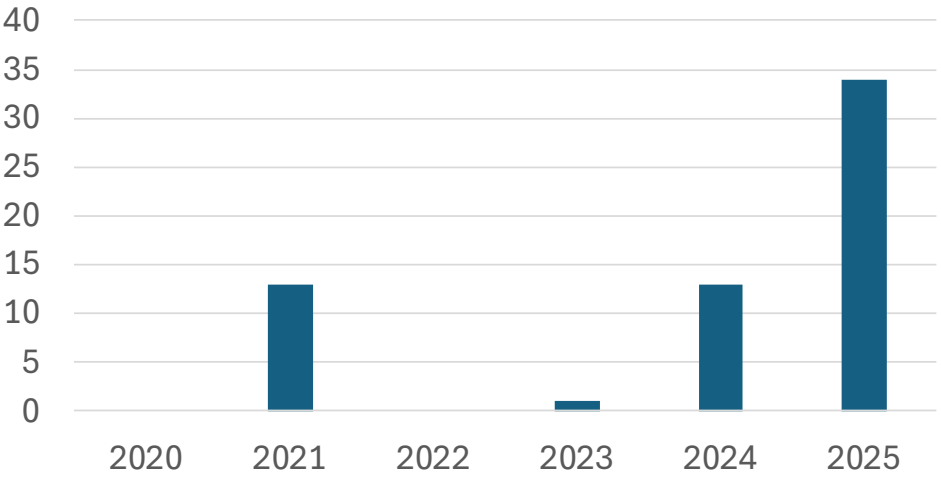


**StarTribune** · 3h

**US measles cases surpass 700 with outbreaks in six states. Here's what to know**

Kansas health officials confirmed five new cases of measles Wednesday in an outbreak in the southwest corner of the state that's linked to Texas and New Mexico.

Annual Measles Media / Data Inquiries



**VDH** VIRGINIA DEPARTMENT OF HEALTH

**Immunization Record Request Form**

150 → 500+

# The Purpose of Tracking Vaccination Uptake



- **Public Health Monitoring:** VDH can track vaccination rates among children, helping to monitor progress toward immunization goals. Identify areas with low coverage and intervene to prevent outbreaks of vaccine-preventable diseases.



- **Transparency:** VDH can make information on vaccination rates accessible to the public, increasing transparency and helping people understand how well their community is protected. It encourages informed decisions regarding vaccinations.



- **Resource Allocation:** VDH can direct resources, such as educational campaigns or vaccine clinics, to improve rates in specific regions or among certain groups.



- **Policy and Decision-Making:** VDH can shape health policies, target populations for outreach, or adjust vaccination campaigns to meet public health needs.



- **Public Awareness and Engagement:** VDH can raise awareness about the importance of vaccines and can motivate parents and guardians to ensure their children are vaccinated.



- **Data-Driven Responses:** VDH can respond quickly to emerging health threats or outbreaks by focusing on regions with low vaccination rates.

# Identify Vaccine Preventable Disease Types with Public Interest

Measles

Mumps

Pertussis

Varicella

Hepatitis  
A

Hepatitis  
B

Meningitis

# Tracking Data through an Interactive Dashboard

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Dashboard featuring vaccinations for specific diseases

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State, District and Locality Level Data for Charts

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Age Groups: Under 7, 7 to 14, 15 to 18 and 18 to 24, 25 to 64 and 65+ years old

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Dashboard was inspired by the increase in media coverage and data requests during recent outbreaks and requests from Local Health Districts

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Data source is the Virginia Immunization Information System (VIIS)

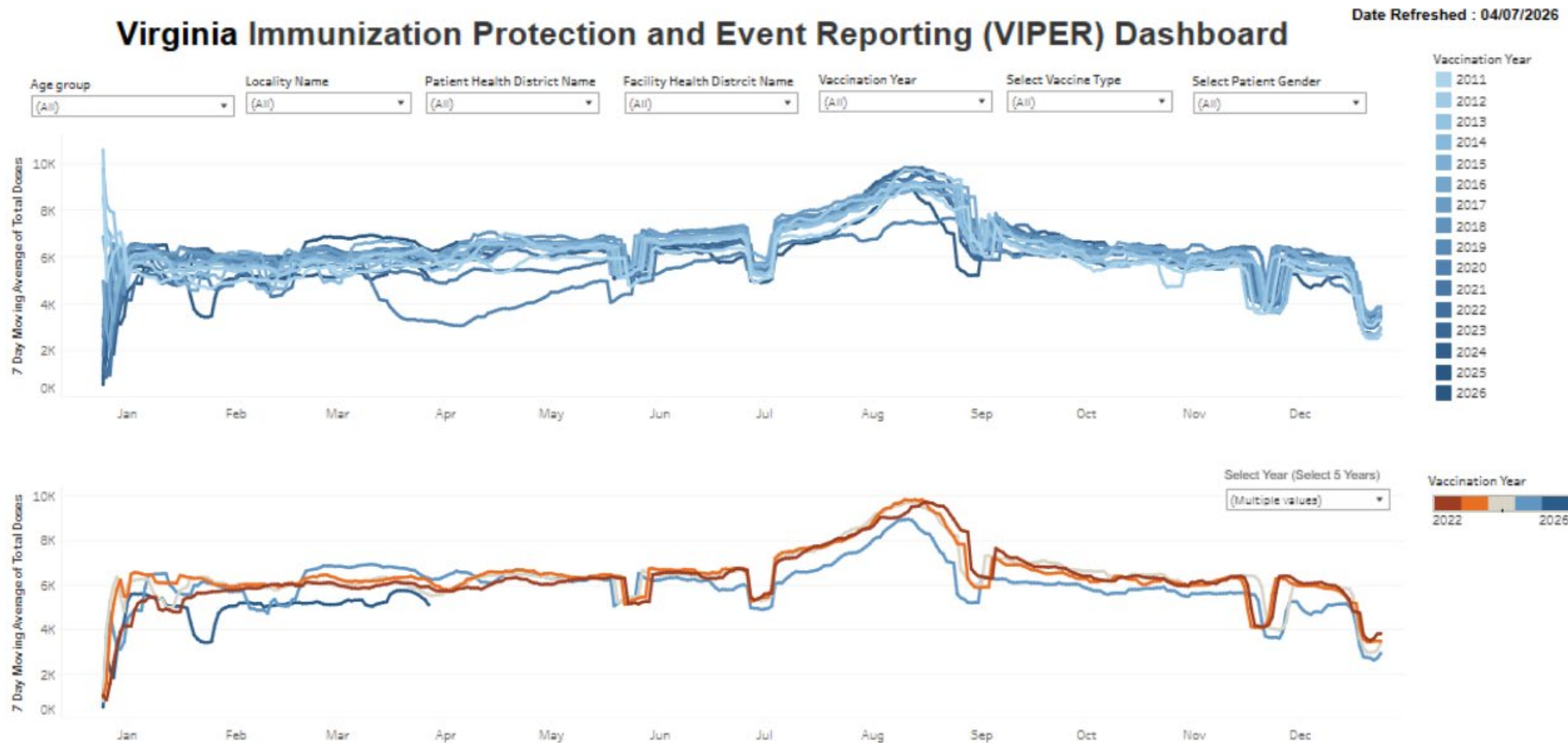
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Dashboard Housed on the VDH Department of Immunization Intranet for use by Health Districts and Central office

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Virginia Immunization Protection and Event Reporting (VIPER) Dashboard

# VIPER Dashboard: Doses Administered over Time



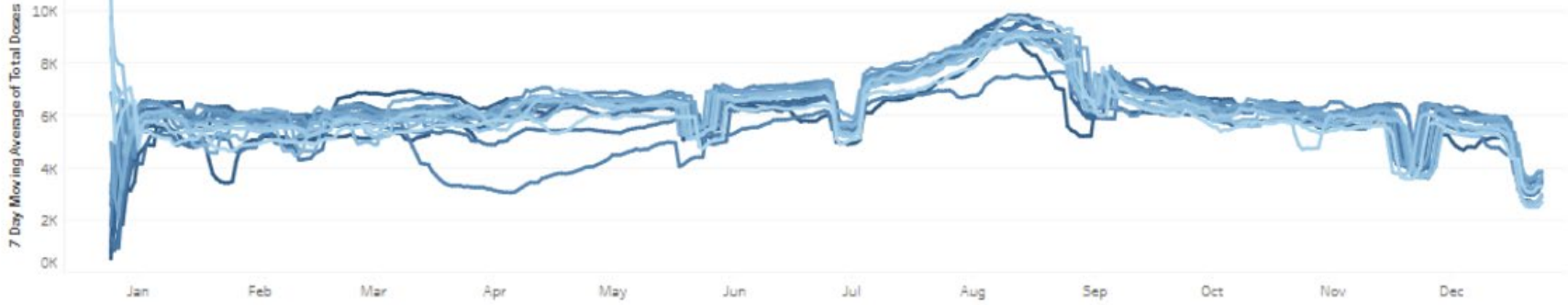
# Dashboard Menus

## Virginia Immunization Protection and Event Reporting (VIPER) Dashboard

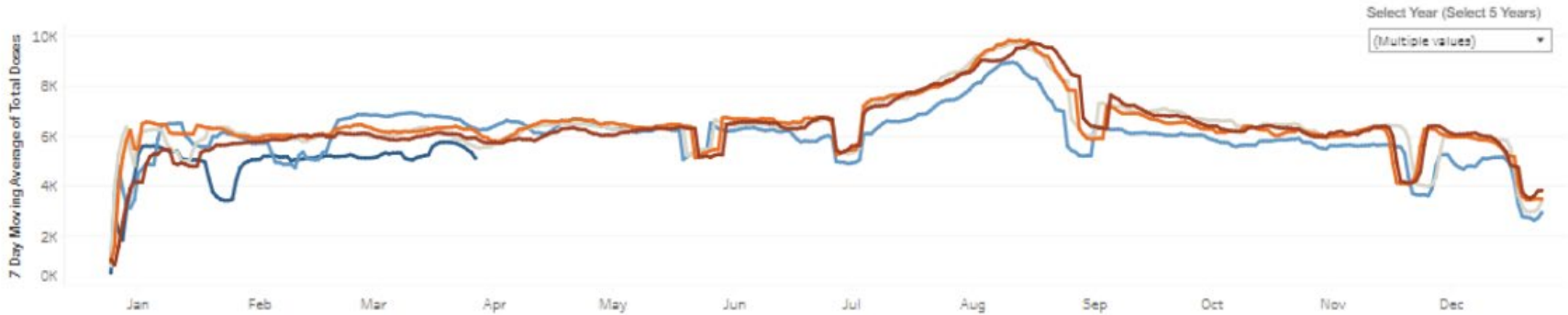
Date Refreshed : 04/07/2026

Age group (All) Locality Name (All) Patient Health District Name (All) Facility Health District Name (All) Vaccination Year (All) Select Vaccine Type (All) Select Patient Gender (All)

- Vaccination Year
- 2011
- 2012
- 2013
- 2014
- 2015
- 2016
- 2017
- 2018
- 2019
- 2020
- 2021
- 2022
- 2023
- 2024
- 2025
- 2026



Drop Down Menus

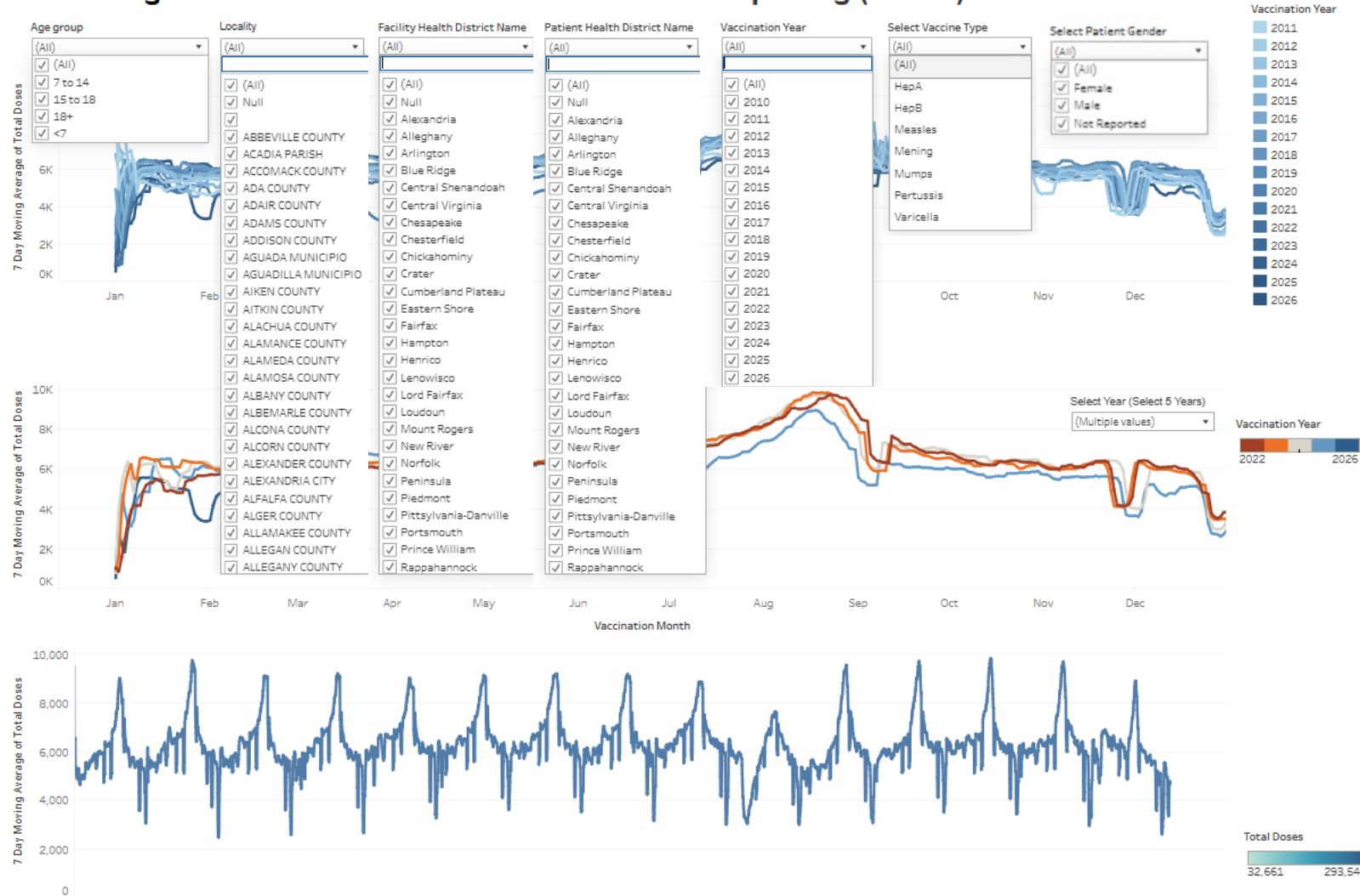


- Vaccination Year
- 2022
- 2025

# Drop Down Menus for Analysis

## Virginia Immunization Protection and Event Reporting (VIPER) Dashboard

Date Refreshed : 02/17/2026



Age Group

Locality

Facility Health District

Patient Health District

Vaccination Year

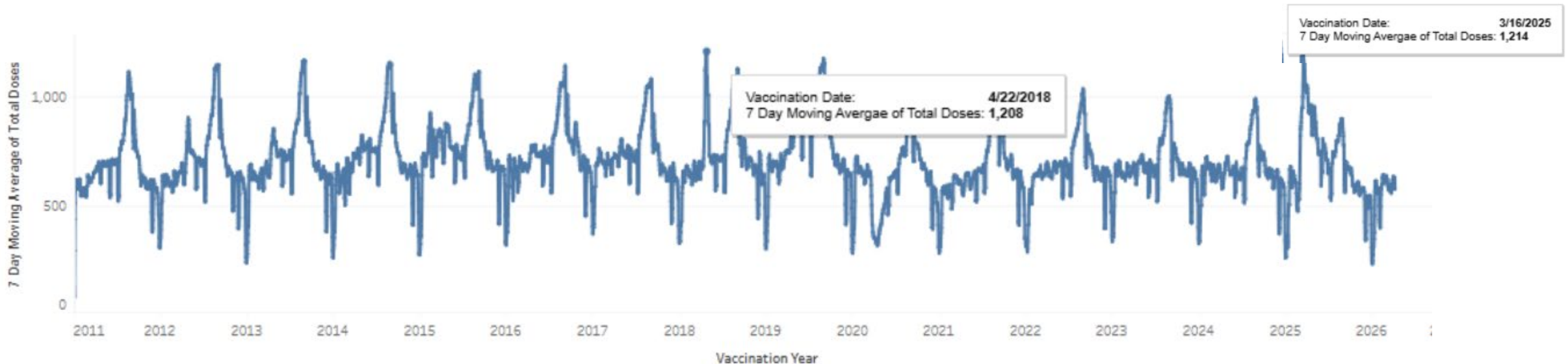
Vaccine Type

Patient Gender

# Annual Number of MMR Doses over time

Two noticeable spikes in MMR Vaccinations occurred in April 2018 and March 2025

- March 2025 corresponded with a Measles outbreak in Texas which drew national attention
- April 2018 corresponded with a Mumps outbreak at a local University



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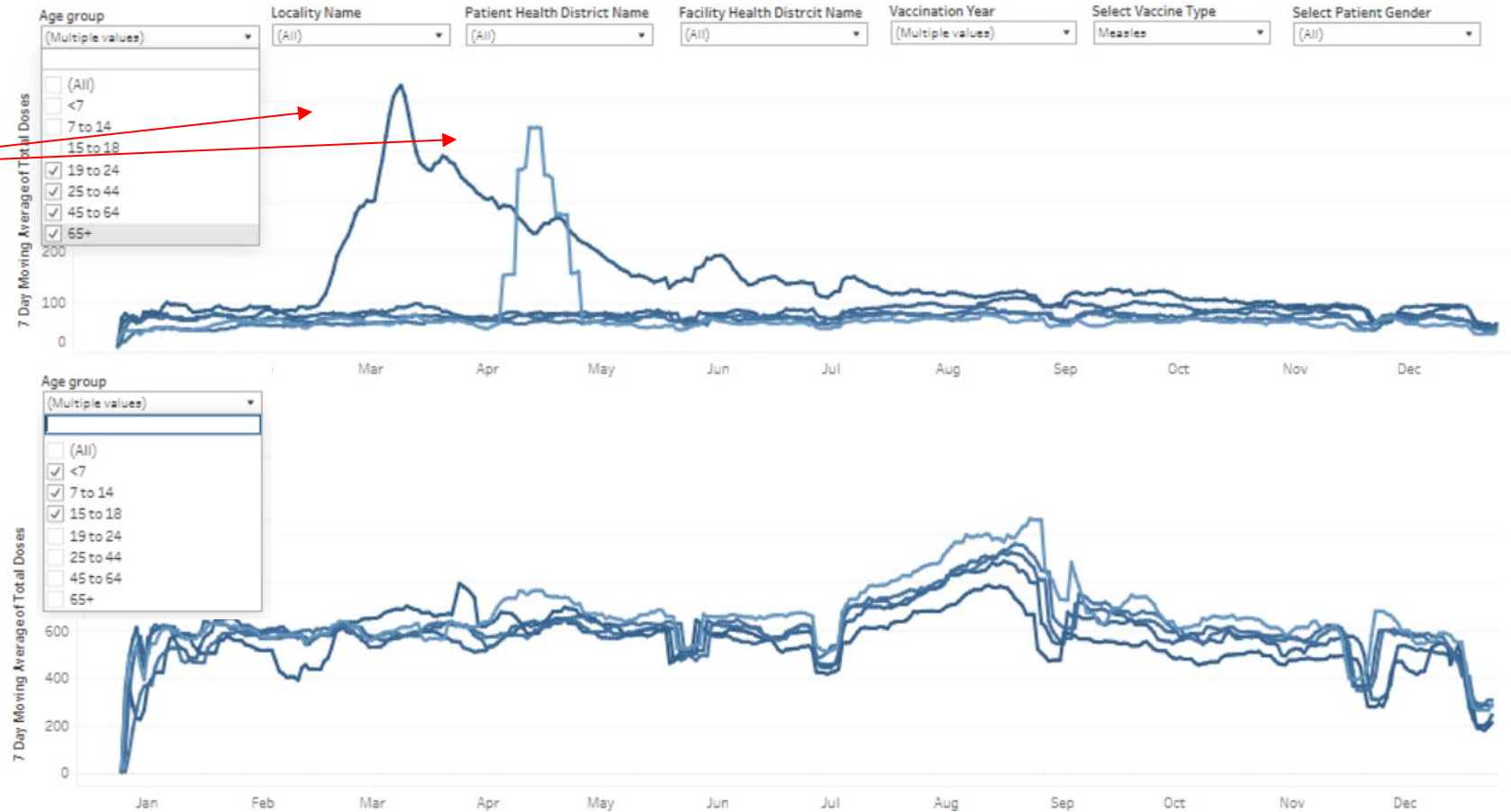
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# MMR Vaccination Doses for 18+ and under 18 years old

## Virginia Immunization Protection and Event Reporting (VIPER) Dashboard

Date Re



Spike in Vaccinations for 18+ years old

Vaccinations for under 18 years old have no corresponding spike

# MMR Uptake by Age Groups

Most Doses are administered to children under 7

Total Vaccine Doses by Age Group

	2018	2022	2023	2024	2025
<7	221,602	200,661	198,940	190,430	185,782
7 to 14	10,335	12,428	14,213	14,166	8,293
15 to 18	6,988	8,278	8,535	8,610	4,743
19 to 24	9,042	3,804	4,316	5,187	4,594
25 to 44	13,010	13,127	14,567	16,197	19,136
45 to 64	3,851	5,993	6,763	7,793	21,359
65+	347	482	662	1,019	9,321
Grand Total	265,173	244,773	247,996	243,402	253,228

2018 had higher uptake in the 19 to 24 age range

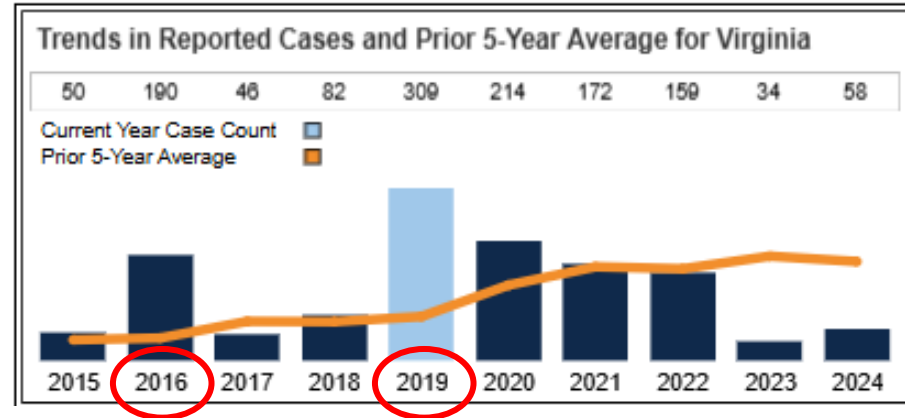
2025 saw much higher uptake in adults, while childhood saw minor declines

# MMR Vaccination Doses for under 18 years old

	2018	2022	2023	2024	2025
January	17,881	14,432	17,964	17,869	15,531
February	16,486	16,642	16,194	17,293	13,845
March	18,033	19,151	18,842	16,443	19,620
April	21,063	17,542	16,969	18,326	19,836
May	20,184	18,159	18,849	17,875	17,822
June	19,349	18,638	18,462	15,930	16,591
July	22,490	19,878	19,371	20,661	18,487
August	31,487	28,286	27,900	25,482	21,243
September	19,843	20,666	18,683	18,090	16,466
October	20,470	17,244	18,054	17,935	15,408
November	17,554	16,172	16,533	14,195	12,031
December	14,083	14,557	13,867	13,107	11,938
Grand Total	238,923	221,367	221,688	213,206	198,818

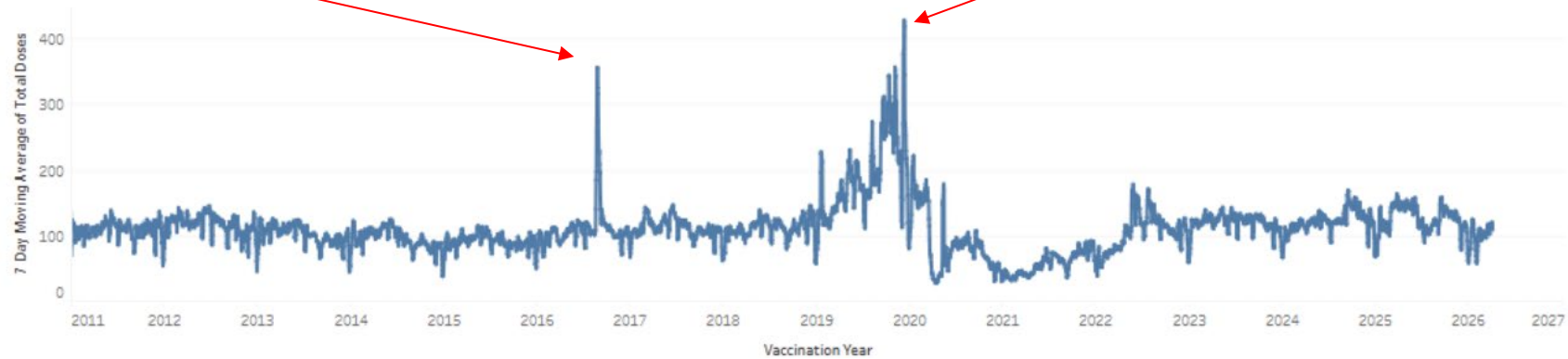
For under 18 the largest spike in vaccinations occur in August, before the school year

# Increase in Adult Hepatitis A Vaccine Uptake during Outbreaks

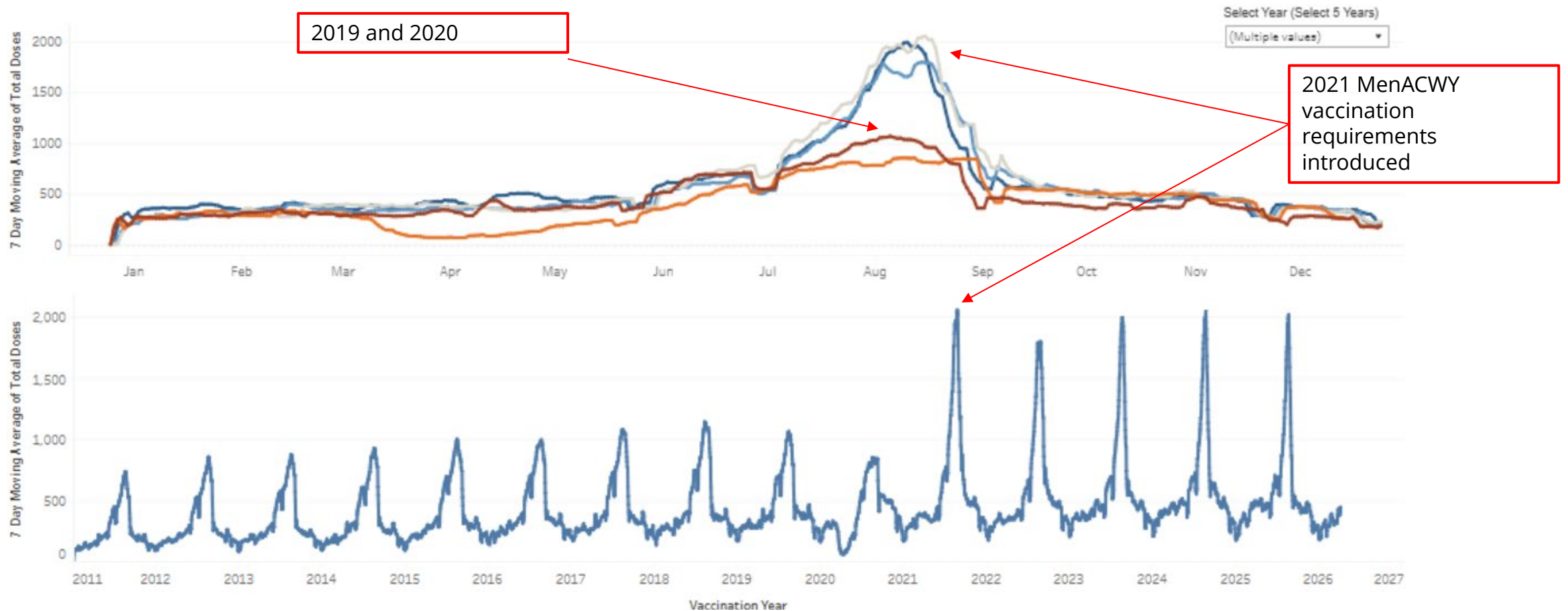


2016 vaccination spike following an outbreak

2019 vaccination spike following an outbreak



# Increase in MenACWY Vaccination following school requirements



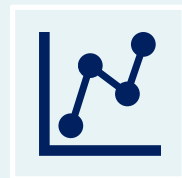
# Limitations



The Data tracks the total number of doses administered meaning that there could be one person receiving duplicate doses



Vaccines administered outside of Virginia may not be included in VIIS.



Data Quality efforts are being identified and will continue to be addressed to improve these dashboards.

# Summary



There is a noticeable increase in Vaccination uptake during outbreaks and increased media coverage



During periods of increased vaccination, there distinct are differences by Age Groups and other demographics



VIIS provides a meaningful way to track how Virginians are responding to disease outbreaks

# Acknowledgments

Christy Gray: Director of Division of Immunization

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