



# Allegheny County Immunization Coverage and Health Department Initiatives

Kristen Mertz, MD, MPH  
*Medical Epidemiologist*

Barbara Nightingale, MD  
*Deputy Director for Clinical Services*

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# Objectives

1. Describe burden of disease and vaccination coverage for selected vaccine preventable diseases
2. Provide update on school vaccination coverage in Allegheny County
3. Recognize ACHD immunization initiatives

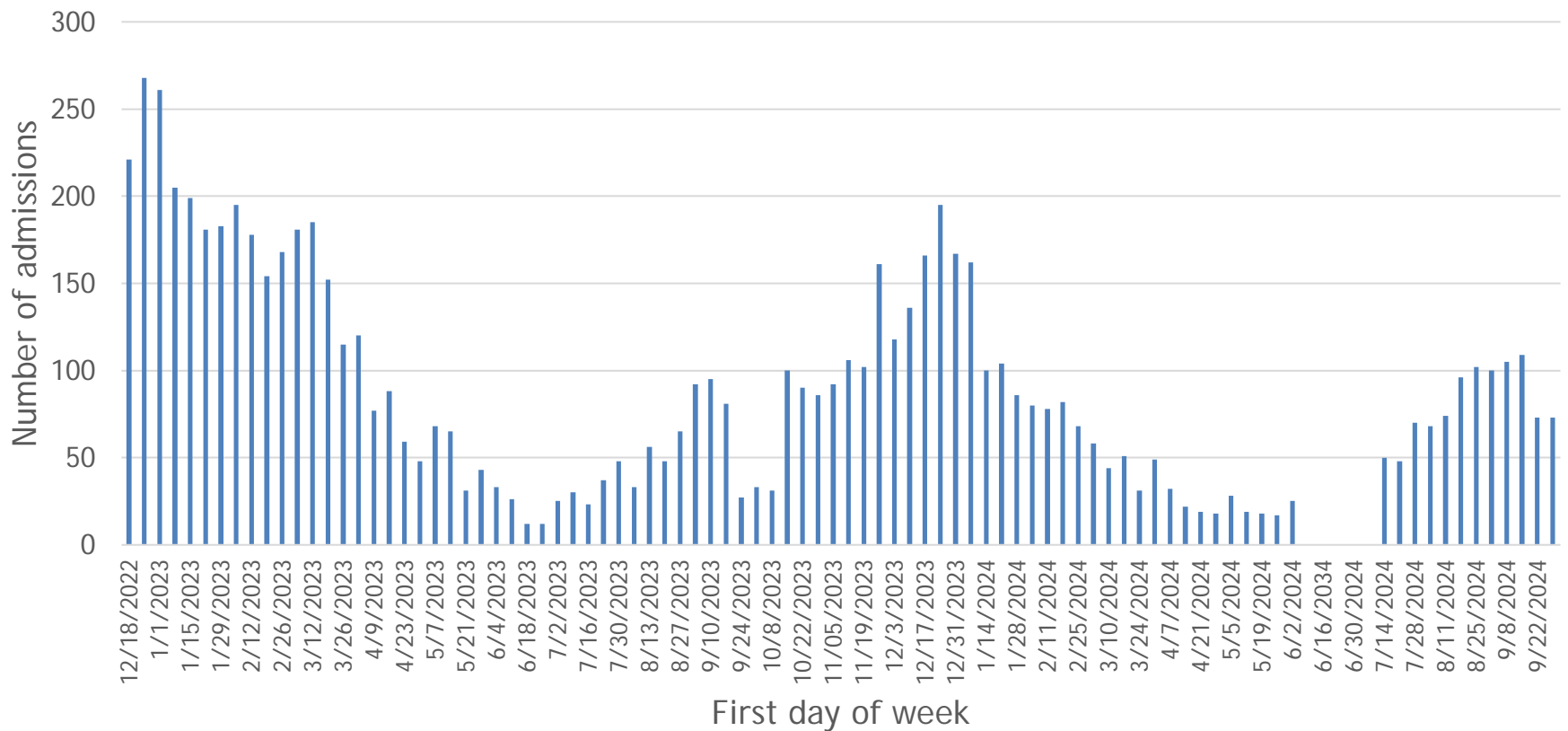


# Case counts and vaccination coverage for selected vaccine preventable diseases in Allegheny County

- COVID-19
- Influenza
- RSV
- Mpox
- HPV
- Required school vaccines



# Hospital admissions\* with confirmed COVID by week, Allegheny Co hospitals, Dec 18, 2022- Oct 5, 2024



Data source: National Healthcare Safety Network

\*All persons admitted with confirmed COVID-19, including residents of other counties



# COVID-19 vaccine coverage

- 2022 bivalent shot
  - US (NIS): 27.1% adults, 18.5% teens
  - Allegheny County: 21.3% overall
- 2023-24 shot
  - US (NIS): 21.6% adults, 14.2% children
  - PA (PA-SIIS): 14.5% adults, 4.6% children
- 2024-25 shot
  - US (NIS): 13.5% , 4.8% children as of Oct 19
  - PA (PIERS): 4.4% adults, 0.7% children as of Sep 30



# COVID-19 vaccination coverage among health care personnel

- 2023-24 shot
  - US data (NHSN)
    - 15.3% among acute care hospital staff
    - 10.5% among nursing home staff
  - PA data (NHAN)
    - 8.4% among acute care hospital staff
    - 9.6% among nursing home staff

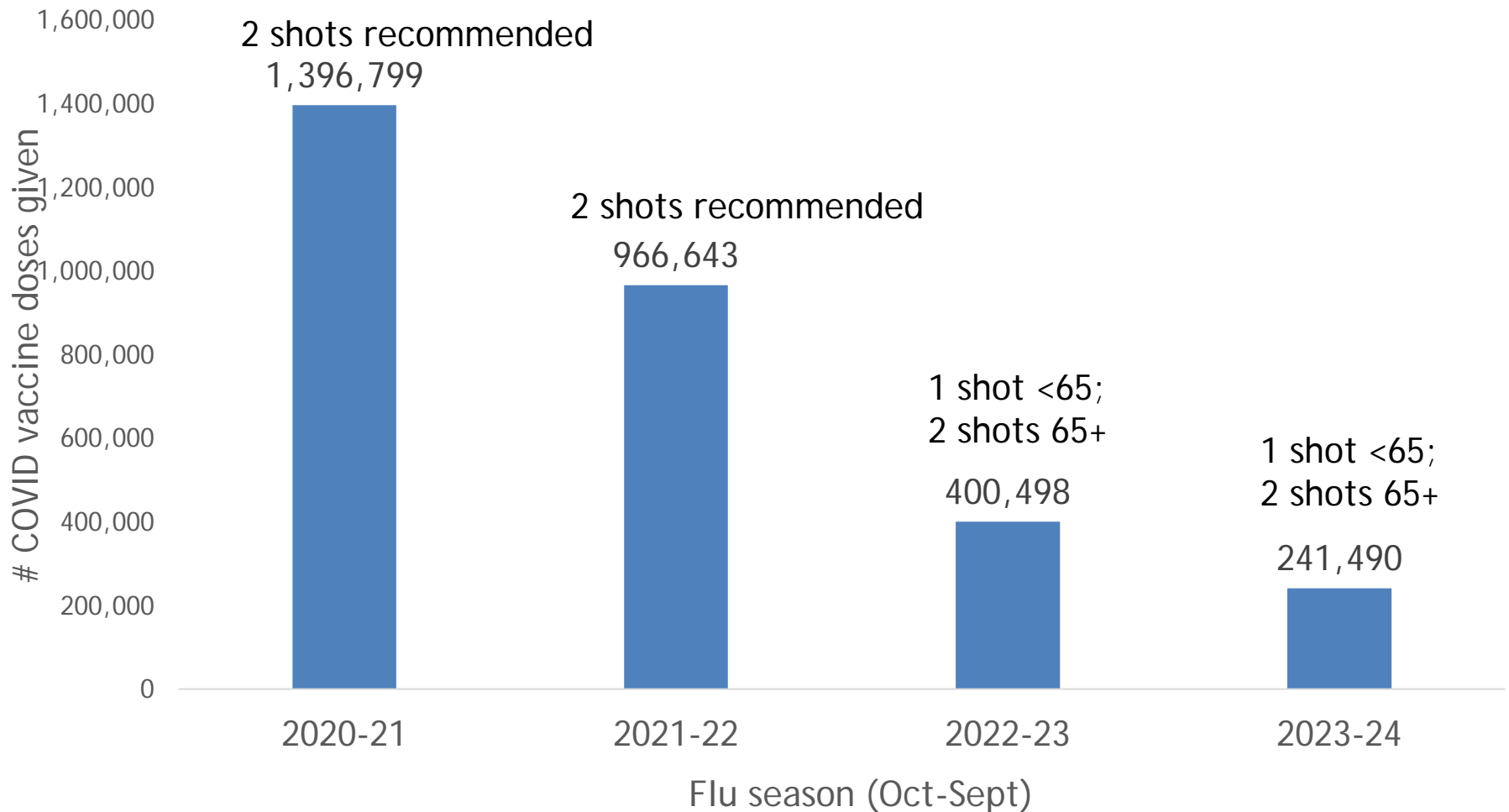


## Percentage of nursing home residents up to date with COVID-19 vaccine as of Oct 27

- 2023-24 shot (NHSN)
  - US: 40.5% nursing home residents had received 2023-24 shot as of Feb 2024
- 2024-25 shot (NHSN)
  - US 24%, PA 25% (as of Oct 27)
  - Allegheny County (as of Oct 20): only 18 of 52 SNFs reported coverage >10%



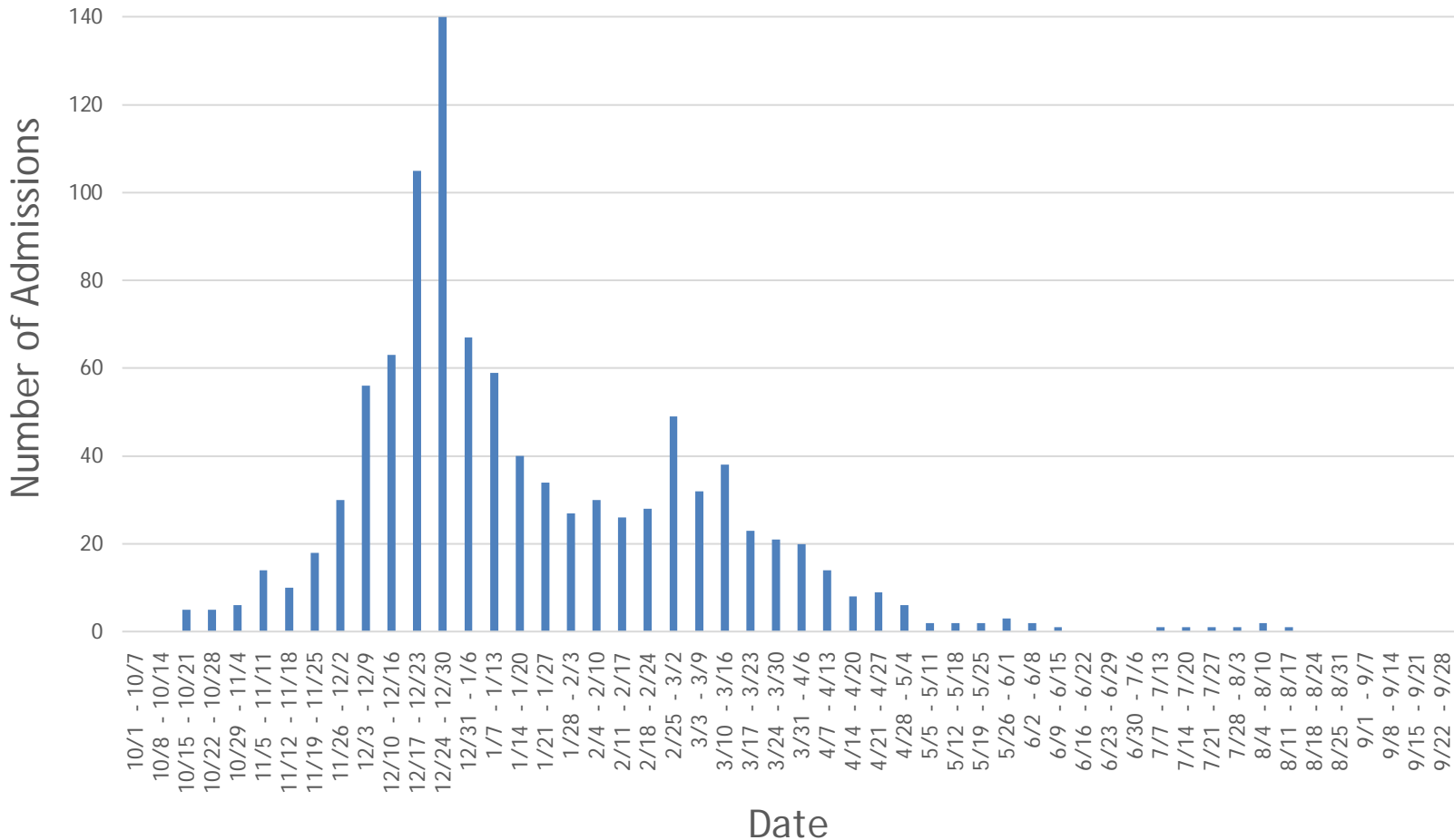
# Number of COVID-19 vaccine doses given to Allegheny County residents, 2020-2024







# Hospital admissions\* with confirmed Influenza by week, Allegheny Co hospitals, October 1, 2023 - August 31, 2024



\*All persons admitted with confirmed influenza, including residents of other counties



# Influenza vaccine coverage

- 2023-24 shot
  - US (NIS): 44.9% adults, 55.4% children
  - PA (NIS): 44.7% adults, 57.2% children
- 2024-25 shot to date
  - US (NIS): 24.8% adults, 25.2% children as of Oct 19 (similar to last season)
  - PA (PIERS): 21.0% adults, 25.0% children as of Oct 12

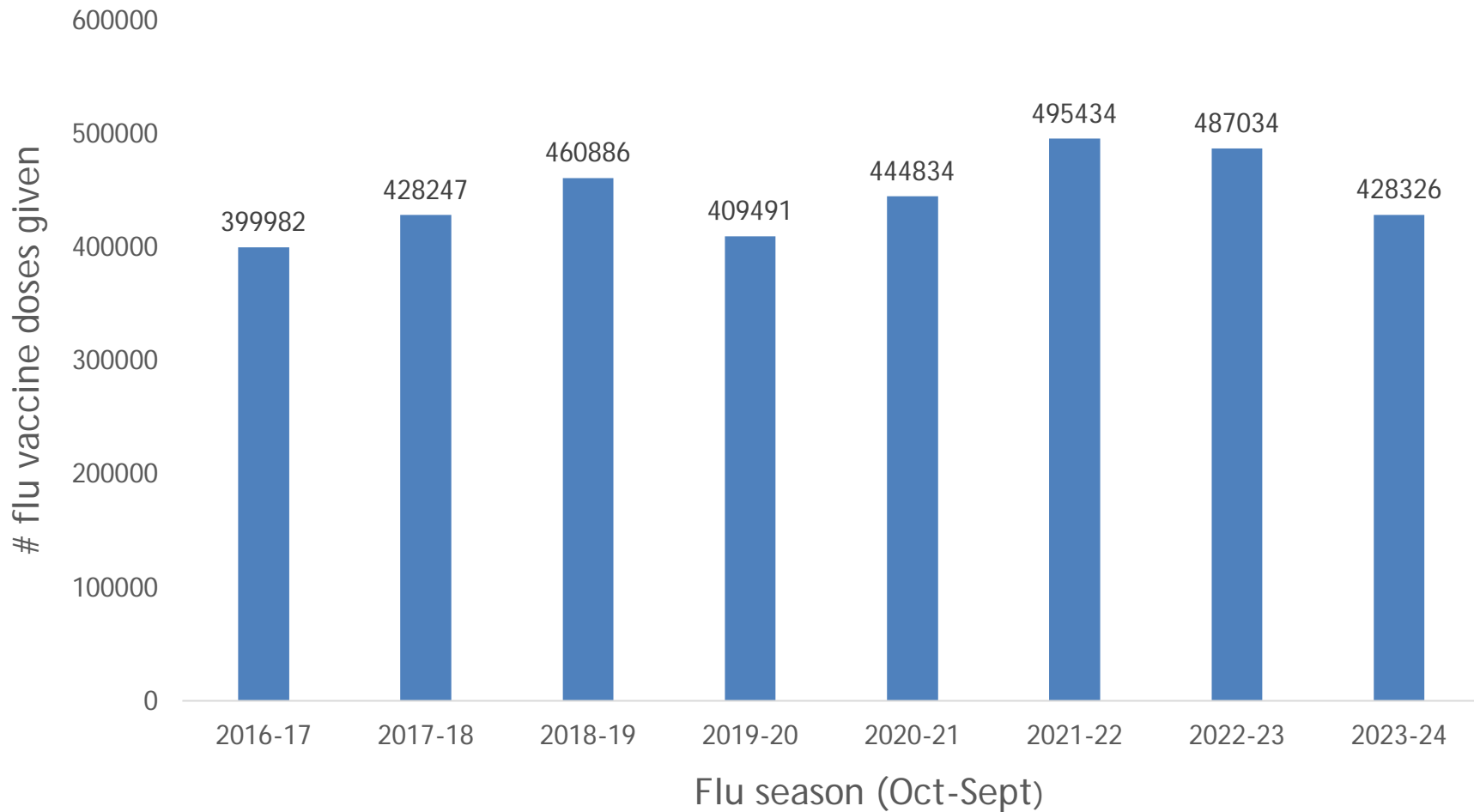


# Flu vaccination coverage among health care personnel

- 2023-24 shot - US data (NHSN)
  - 80.7% among acute care hospital staff
  - 45.4% among nursing home staff
- PA data (NHSN)
  - 84.5% among acute care hospital staff
  - 47.5% among nursing home staff

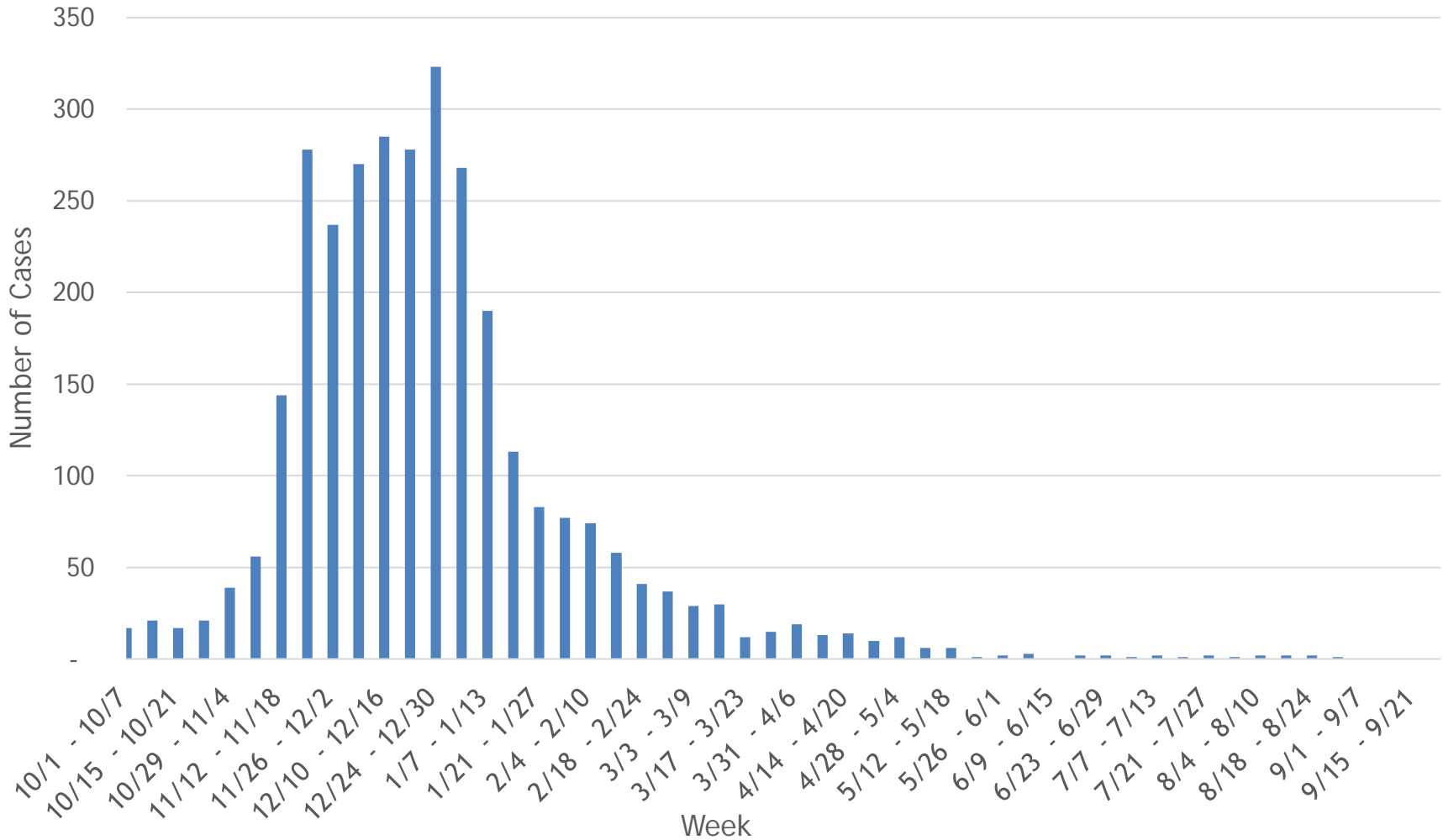


# Number of flu shots given to Allegheny residents, 2016-2024





# Lab-Confirmed Cases of RSV in Allegheny County October 1, 2023 - August 31, 2024





## RSV vaccine coverage among older adults

- % ever receiving an RSV vaccine (as of Oct 19)
  - US (NIS): 37.6% adults 75+, 30.9% 60-74 with high-risk conditions

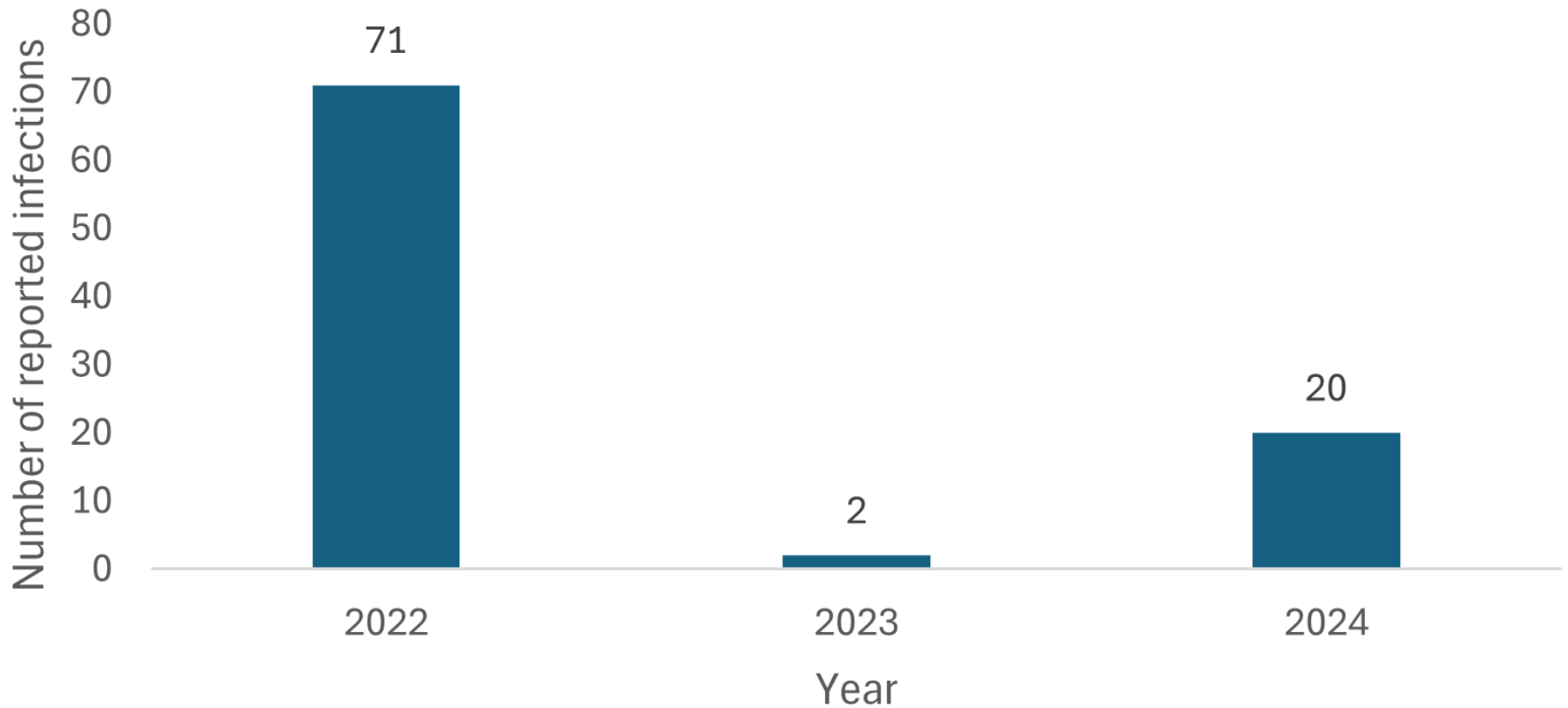


## RSV vaccine coverage among pregnant persons and infants, 2023-2024

- Pregnant and  $\geq 32$  weeks gestation from Sept 22, 2023 through Jan 31, 2024
  - US (Vaccine Safety Datalink): 17.8%
  - Allegheny County: 1,252 RSV shots given to pregnant women
- % infants <8 months receiving nirsevimab: US 41.3%
- Allegheny County data (PIERS): 1,801 nirsevimab shots given



## Reported Mpox Infections by Year, Allegheny County





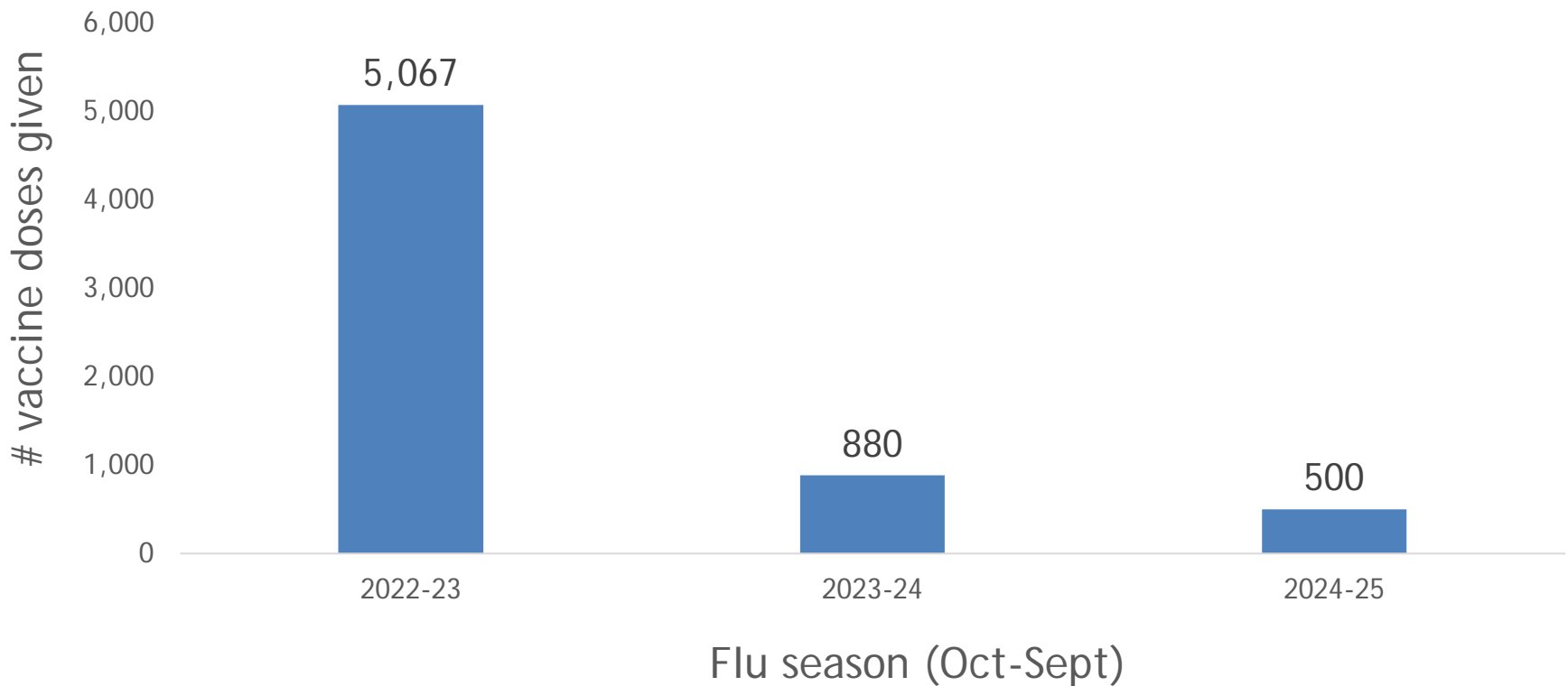


# Jynneos vaccination coverage

- 2 doses recommended for persons at risk for mpox
  - Those exposed
  - MSM with multiple recent partners, a recent STD diagnosis, sex at commercial venue
- Estimated coverage among persons at risk as of Jan 31, 2023 (US)
  - One-dose: 36.7%
  - Two-dose: 22.7%



# Number of Jynneos vaccine doses given to Allegheny County residents, 2022-2024





# Vaccinations required for K-12 school entry in PA

- Diphtheria, tetanus, and pertussis (DTaP/Tdap)
- Polio
- Measles, mumps, rubella (MMR)
- Hepatitis B
- Varicella
- Meningococcal



# Cases of VPDs associated with required school vaccines, Allegheny Co, 2014-2023

Disease	# reported cases
Diphtheria	
Tetanus	
Pertussis	493
Polio	
Measles	10
Mumps	23
Rubella	
Hepatitis B	68 (acute)
Varicella	278
Meningococcal	7



# Student immunization status, 2023-2024

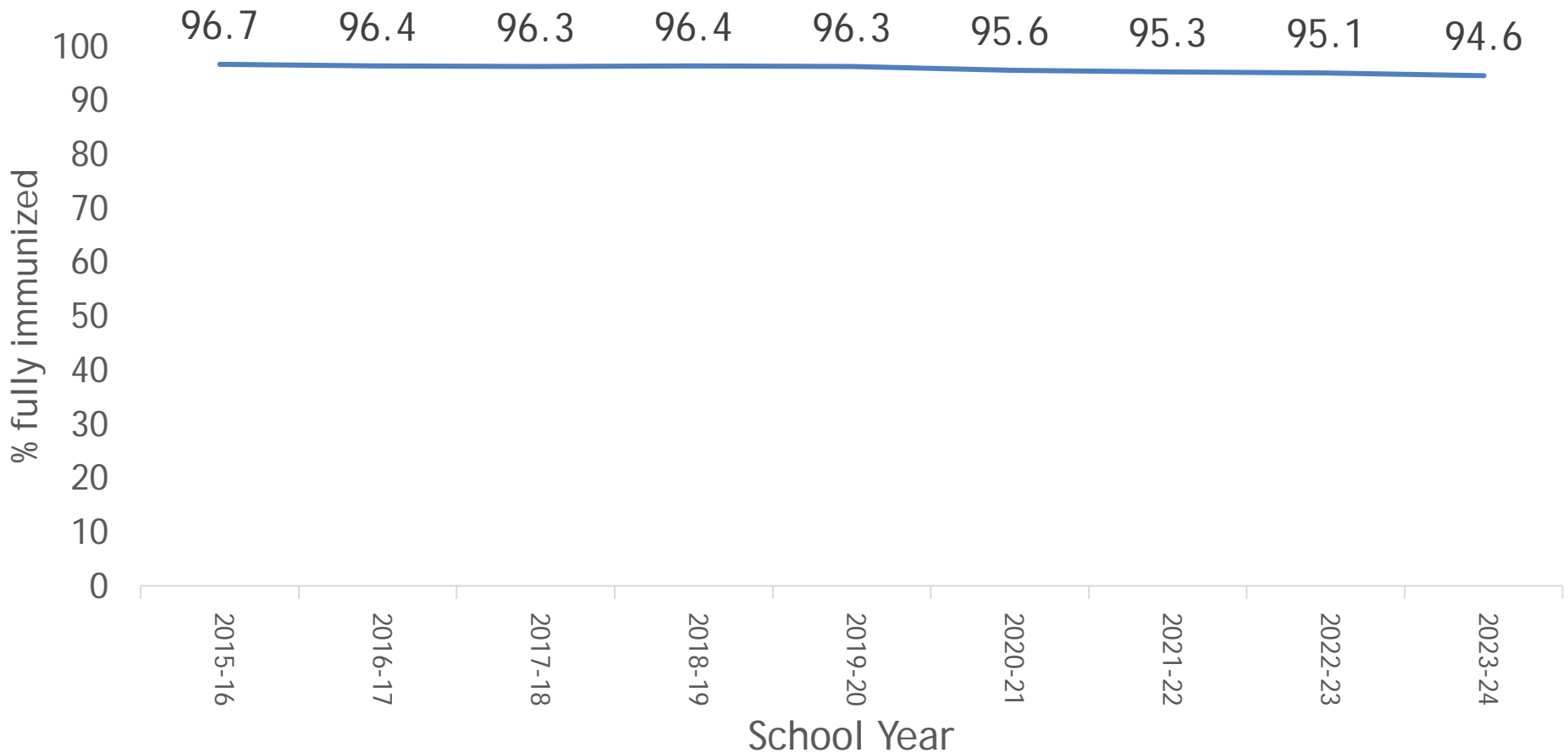
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Status	N	%
Fully Immunized	148,634	94.6
Medical Exemption	689	0.4
Religious Exemption	2,850	1.8
Moral Exemption	2,137	1.4
Homeless Exemption	234	0.1
Provisionally Enrolled	2,323	1.5
Denied Admission	123	<0.1
Missing	59	<0.1
Total Enrollment	157,049	100.0

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# Percentage of students meeting vaccine requirements in Allegheny County, 2014-2023



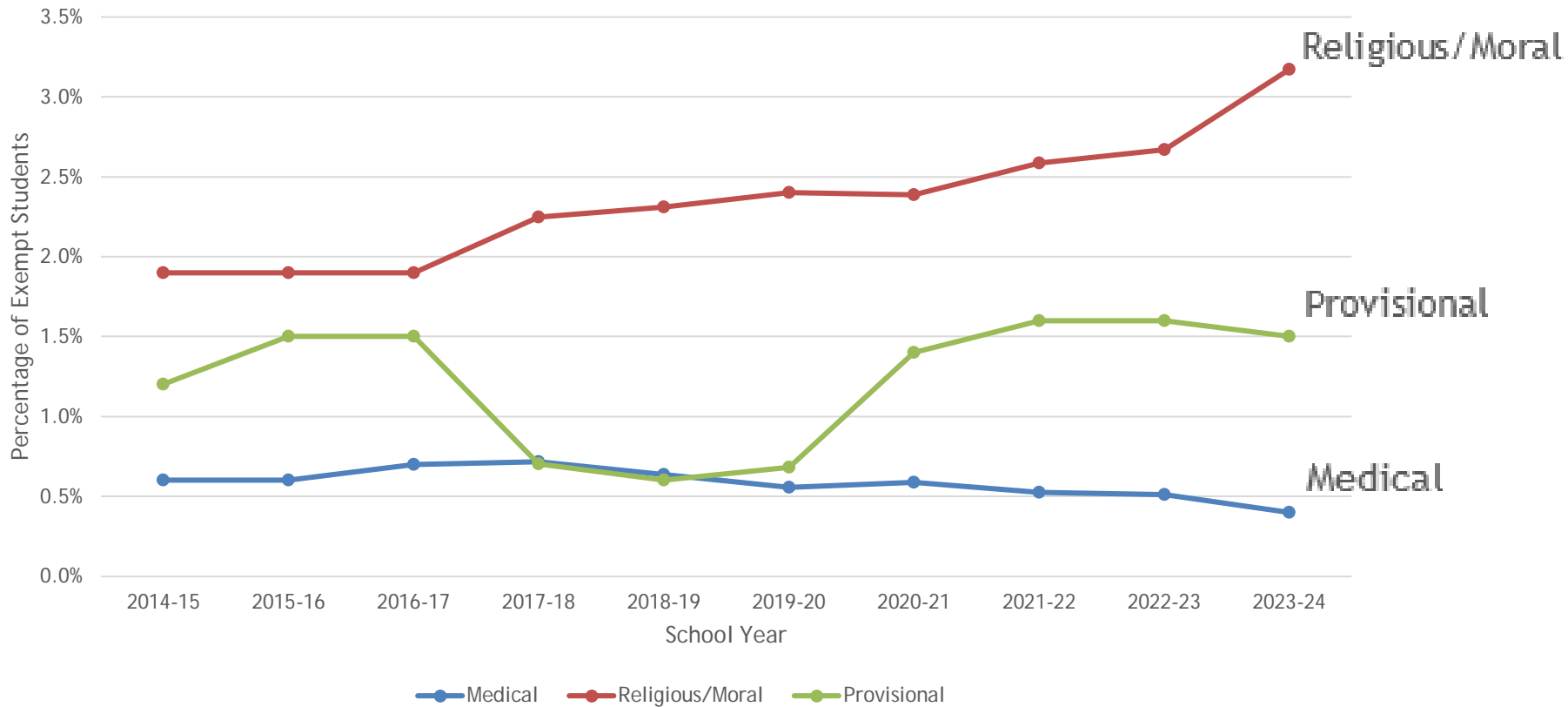


# Fully immunized students by school type, 2014-15 and 2023-24

School type	Fully immunized 2014-15 (%)	Fully immunized 2023-24 (%)
Public	97.2	95.1
Charter	97.9	94.5
Parochial/religious	94.8	91.1
Private/independent	92.9	93.0



# Percentage of students with exemptions, 2014-15 to 2023-24







# Immunization coverage by vaccine type

Grade	Vaccine	% Vaccinated Allegheny County 2023-2024	% Vaccinated US* 2023-2024
K	MMR (2 dose)	94.7	92.7
	VZV (2 dose)	94.3	92.4
	HBV (3 dose)	95.7	n/a
	Polio (4 dose)	94.6	92.6
	DTaP (4 dose)	94.9	92.3 (5 doses)
7th	MCV4 (1 dose)	93.6	n/a
	Tdap (1 dose)	93.6	n/a
12th	MCV4 (2 dose)	92.1	n/a

\*Data source: [Coverage with Selected Vaccines and Exemption Rates Among Children in Kindergarten – United States, 2023-24 School Year | MMWR](#)



# Reasons reported for low vaccination at schools with < 85% coverage (N=48)\*

- Schools with low coverage faced several problems:
  - Distrust of vaccines among parents
  - Difficulties with documentation and reporting

Lack of enforcement	Difficulty Obtaining Records	Difficulty Accessing Vaccine Providers	Parents' Belief in Vaccine Misinformation	Religious or Moral Beliefs
15.2%	37.0%	28.3%	30.4%	30.4%

\*Data from 2022-2023 and 2023-24 school years

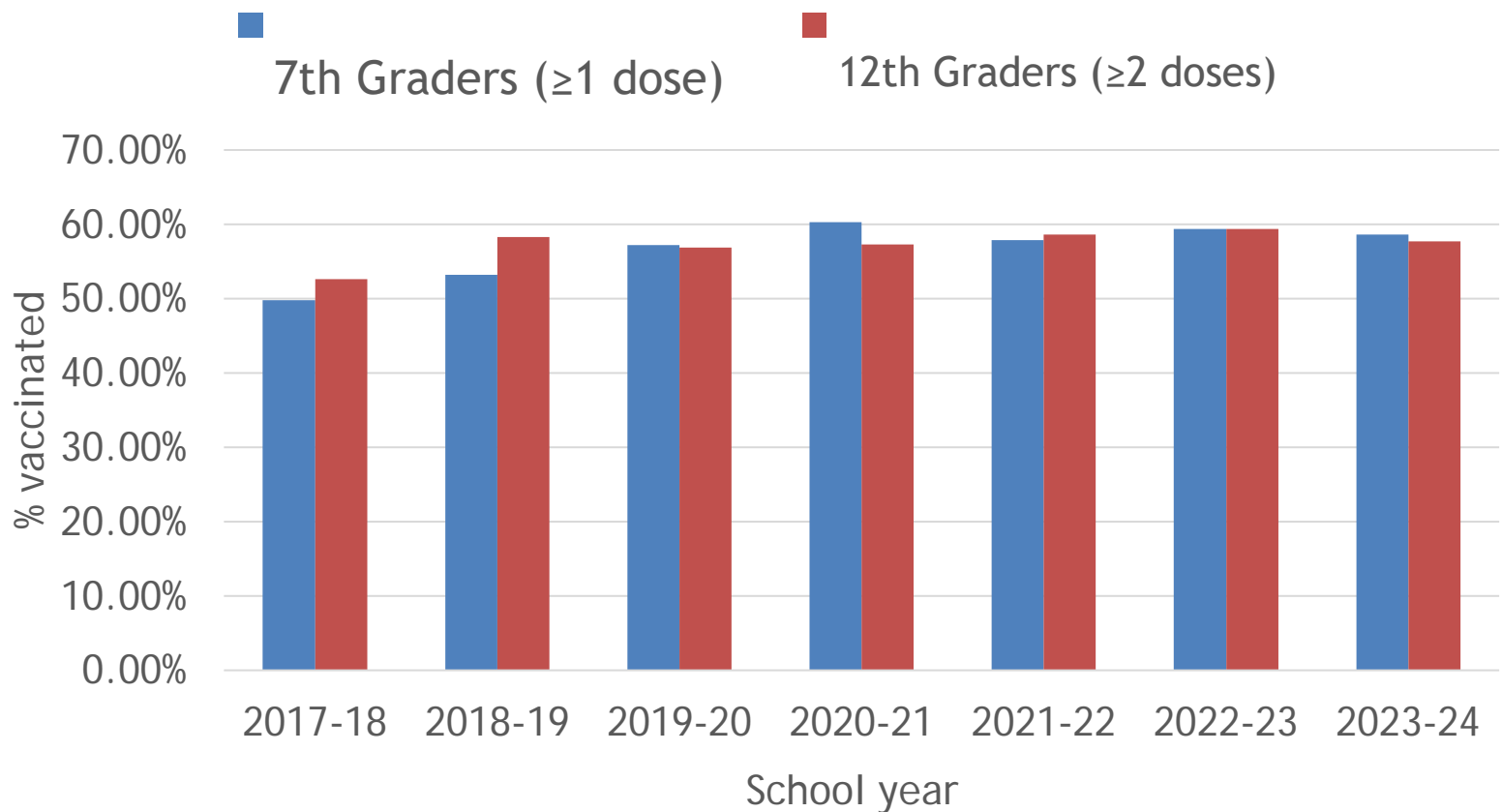


# Human papillomavirus (HPV) vaccine data

- HPV vaccine not required for school entry
- School nurses submit data on HPV vaccine for 7<sup>th</sup> and 12<sup>th</sup> graders



# HPV Vaccine Coverage, 7<sup>th</sup> & 12<sup>th</sup> graders 2017-18 to 2023-24





# Summary

- COVID hospitalizations still surge but only a small % persons get shots; HCWs very reluctant
- Flu vaccination coverage higher than COVID coverage; RSV coverage increasing
- School vaccination coverage still high for required vaccines but showing slow decline
- Coverage among children for ACIP recommended vaccines that are not required is lower (e.g. HPV, COVID, flu)



# ACHD Initiatives

- Vaccines at ACHD Clinics
- Vaccines in the Community
- Promotional Efforts





# ACHD Clinic Initiatives

STI Clinic vaccines  
(Hep A, Hep B,  
mpox, HPV)

Travel Consult  
Improvements

FQHC Referrals



# Emergency Medical Services- Hep A vaccine/Hep C testing

## Locations

- Homeless encampments
- Shelters
- Prevention Point Pittsburgh sites

## Early success (started Oct 2024)

- 2 events
- 18 Hep A vaccines administered
- 14 Hep C antibody tests completed (8 reactive)





# Drug and Alcohol Facilities- Hep A and Hep B Vaccines

2022 survey of DHS-contracted facilities

- 62% reported HBV vaccines (onsite or partner)
- 54% reported HAV vaccines (onsite or partner)

6 site visits (8 reported interest)

- 37 HAV and 28 HBV vaccines



# Senior (65+) High Rise Vaccines

>40 low-income senior high-rise buildings

- Work with housing authorities and landlords

COVID and flu vaccines during respiratory season

- Started February 2021

ACHD clinic staff + Medical Reserve Corps



# Vaccine Home Visits

Vaccine  
Coordinator  
receives calls  
from  
community  
members



Visits  
organized by  
region



Teams  
dispatched to  
provide COVID  
and flu  
vaccines



# Community Vaccine Events

Partnership with community organizations in under-resourced communities

- Examples- Libraries, Farmer's markets, Churches, Community centers, Parks, Family support centers (Urban League collaboration)

2024

- 7 COVID-19/flu clinics
- 2 Mpox clinics
- 5 back-to-school clinics (family support centers)



# In-School Vaccine Pilot

94.6% coverage for required vaccines across Allegheny County

- Lowest in past decade
- Barriers include: Housing insecurity, Language, Healthcare Access

Partnership with schools with vaccination rates <90%

- Work with school nurses to host vaccine clinics at school

Results thus far

- 4 events (middle and high schools)
- 39 students
- 65 vaccines administered



# Evaluation to Combat Vaccine Misinformation and Hesitancy

Comprehensive evaluation of vaccine promotion efforts

Community assessment

- Perception of vaccines
- Barriers to vaccine uptake
- Causes of vaccine hesitancy of priority populations

Create plan with strategies to

- Prevent the spread of misinformation
- Best way to communicate accurate and culturally relevant information related to vaccines




# Vaccine Promotion

**THE BEST WAY TO PREVENT HEPATITIS A AND B IS TO GET VACCINATED!**


Hepatitis can lead to liver disease and other serious conditions.

Call the Allegheny County Health Department for an appointment at **412-578-8062**.



**ALLEGHENY COUNTY HEALTH DEPARTMENT**

Hartley-Rose Building  
425 First Ave., 4th Fl.  
Pittsburgh, PA 15219



**HPV vaccines are recommended between the ages of 9 to 14. HPV can cause certain cancers.**

Call the Allegheny County Health Department for an appointment at **412-578-8062**.

**PRT**  
Pittsburgh Regional Transit



Before heading back to school,

**LET'S CATCH UP ON ROUTINE VACCINES**



**Hepatitis Awareness Week**

Prevent Hepatitis. It's up to you. Check with your doctor to see if you are up to date on vaccination.

- Upcoming 2025 Vaccine Media Campaign
  - Funded by PADOH
  - January 1 to June 30, 2025



**Questions?**