

Comparison of Concomitant Vaccination Patterns for Flu, RSV, and COVID-19 During the 2023-2024 and 2024-2025 Influenza Seasons

Nana Darkoh, PhD; Sarah M. Sharkey, MPH ; Puru Prabhu, MS; Rosenie Thelus, PhD, MPH



Giving more than one vaccine at a time (concomitantly) reduces missed vaccines.

- CDC guidance states that most people can safely receive the flu, RSV, and COVID-19 vaccines on the same day.
- Vaccine coadministration is an important way to protect against multiple illnesses without needing multiple visits.

We identified patterns in vaccine coadministration using health claims.

200+ Million People Per Year

IQVIA Medical Claims

- 1.5+ billion office-based claims/year
- Covers 96% of US MDs and DOs

IQVIA Longitudinal Pharmacy Claims

- 3.7 billion Rx claims/year
- Covers 94% of US retail pharmacies

Baseline Comorbidities

Up to 1 Year Before Vaccine:

- Chronic respiratory disease (asthma, COPD, cystic fibrosis)
- Cardiovascular disease (heart failure, hypertension, pulmonary hypertension)
- Diabetes
- Immunocompromised (HIV/AIDS, cancer, MS, lupus)
- Obesity

Vaccine Attributes

Flu Seasons

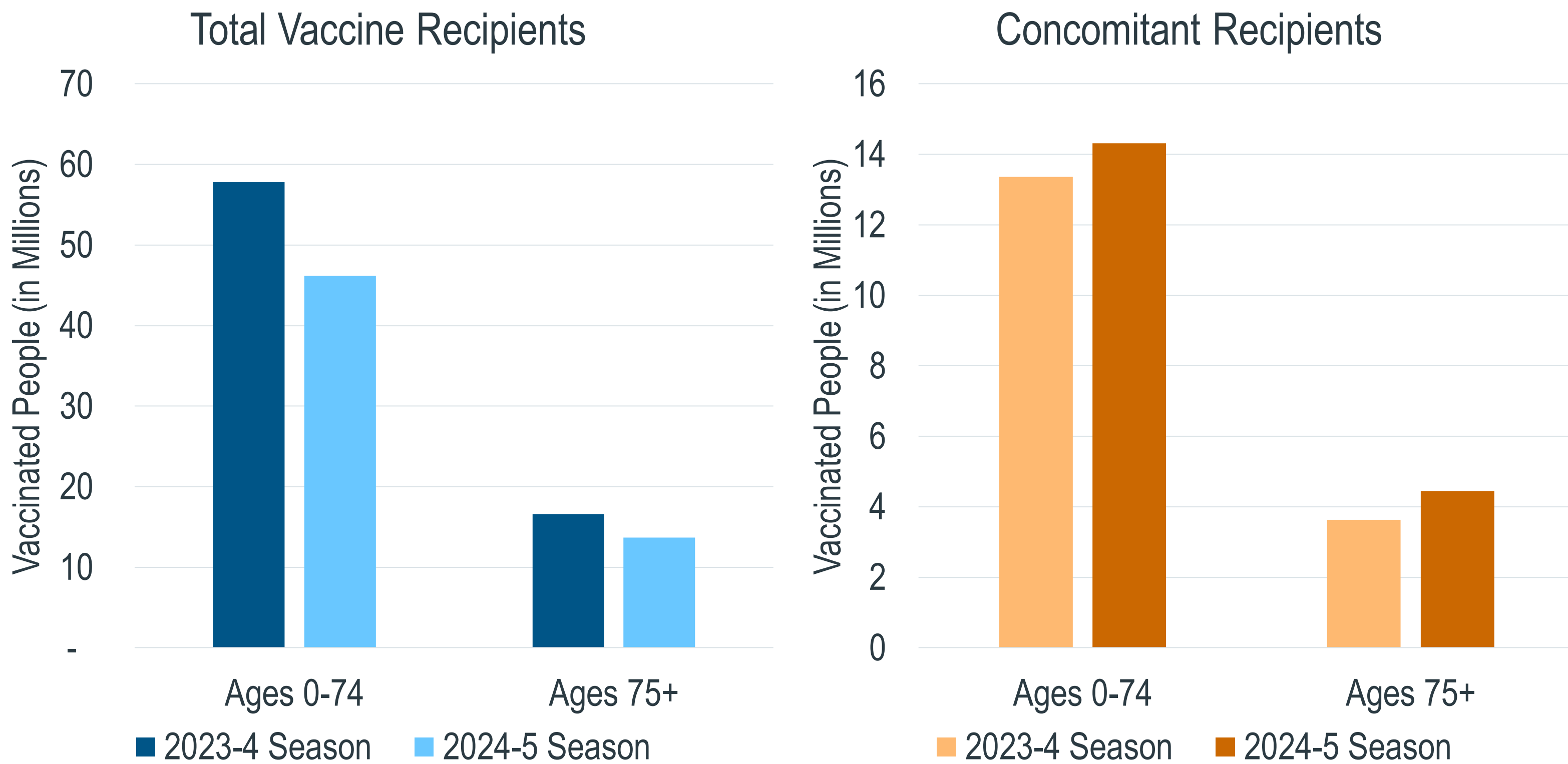
- August 2023-February 2024
- August 2024-February 2025

Cohorts Based on Age*

- 0-74 Years
- 75+ Years

*All people ages 75+ are eligible to receive the RSV vaccine. Among other ages, eligibility is limited to high-risk groups or pregnant people.

Total Flu, RSV, and COVID-19 vaccine uptake decreased between the last two influenza seasons while same-day multi-vaccine concomitance increased. Public safety efforts to enhance seasonal immunity will need to focus on reaching unvaccinated people while building on existing growth in coadministration.



Same-day COVID-19 and flu vaccine was the primary driver of concomitance. More than half (53.8%) of 0-74 year-olds and 23.8% of 75+ year-olds had none of the comorbid conditions we assessed. Opportunities for further investigation may include state-level comparisons based on Medicare/Medicaid legislation and considerations for combinations of comorbidities.

The proportion of concomitancy varies across different age groups and payors (chi-sq p-value <0.0001). Ages 0-17 were the least likely to receive concomitant vaccines (12.3%). Medicare Part D, Medicare, and third-party payors were most likely to receive concomitant vaccines (32.0%, 26.7%, and 25.9% among ages 0-74; 29.7%, 23.8%, and 20.6% among ages 75+, respectively).

	People Aged 0-74			People Aged 75+		
	2023-4	2024-5	% Change	2023-4	2024-5	% Change
Total Vaccine Recipients (N)	57,820,047	46,151,615	-20.2%	16,624,416	13,699,619	-17.6%
Concomitant Recipients (n)	13,366,568 (23.1%)	14,319,180 (31.0%)	7.1%	3,629,464 (21.8%)	4,445,021 (32.4%)	22.5%
Concomitant Vaccines	% of Total (N)			% of Total (N)		
COVID-19 + FLU	19.0%	29.4%	23.5%	13.1%	27.6%	73.3%
FLU + RSV	1.8%	0.7%	-67.9%	4.0%	2.0%	-58.4%
COVID-19 + FLU + RSV	1.2%	0.6%	-58.7%	2.0%	1.8%	-26.9%
COVID-19 + RSV	1.2%	0.3%	-78.5%	2.8%	1.1%	-68.2%
Demographics	% of Concomitant (n)			% of Concomitant (n)		
Sex						
Female	53.4%	54.1%	8.5%	54.4%	54.4%	22.6%
Male	46.6%	45.9%	5.6%	45.6%	45.6%	22.3%
Age Group						
0-17	6.5%	7.0%	14.9%			
18-49	30.6%	31.2%	9.3%			
50-59	14.4%	14.8%	10.0%			
60-64	13.1%	12.4%	0.7%			
65-74	35.3%	34.6%	5.0%			
Urbanicity						
Rural	6.8%	6.9%	8.2%	9.9%	10.4%	28.1%
Urban	93.1%	92.7%	6.7%	90.0%	88.5%	20.4%
Payor						
Cash	0.2%	0.3%	37.4%	0.1%	0.2%	70.9%
FFS Medicaid	1.6%	2.2%	42.0%	0.2%	0.2%	88.2%
Medicare	8.7%	10.8%	32.9%	25.8%	31.5%	49.7%
Medicare Part D	20.9%	18.2%	-7.0%	56.9%	49.8%	7.0%
Mgd Medicaid	2.8%	3.0%	18.2%	0.2%	0.3%	71.6%
Third-Party	65.8%	65.5%	6.8%	16.8%	18.0%	31.3%
Comorbidities	% of Concomitant (n)			% of Concomitant (n)		
Chronic Respiratory Disease	9.6%	10.4%	15.3%	15.7%	15.8%	23.1%
Cardiovascular Disease	27.0%	28.3%	12.3%	59.4%	61.3%	26.3%
Diabetes	12.1%	13.1%	16.1%	24.3%	25.3%	27.7%
Immunocompromised	16.6%	17.0%	10.3%	37.2%	38.3%	25.9%
Obesity	15.6%	17.4%	18.9%	16.0%	17.3%	32.8%