

A circular close-up photograph of a person's bare shoulder. A light-colored adhesive bandage is being applied to the skin by a hand wearing a white medical glove. The person is wearing a grey sweatshirt.

# National Influenza Immunization Study

*2022-23 Season*

Final Report

July 2023

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MR Project #MR22-19-040  
iTracker# 22-0764

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# Objectives and Methodology

- Calculate influenza immunization rates representative of the US population
- Track potential trends in consumers' influenza vaccine attitudes and behaviors
- Assess the impact of changes to national guidelines on adult and pediatric influenza vaccination
- Assess awareness of and interest in:
  - Flublok®, particularly among middle aged consumers
  - Fluzone® High-Dose among elderly consumers
- Understand impressions and impact of other respiratory illnesses on consumer behavior
- Statistical comparisons are made at the 95% confidence level throughout the report
  - Letters signify significant differences between respondent types and arrows indicate significant change direction over previous year



15-minute online survey recruited from multiple panels



3,024 online interviews were completed May 30 – June 13, 2023

\*-Total results are weighted to the current census population



**Completes**

3,024

Adults (n=1199 for 18-64 & n=701 65+)	1,900
Chronically Ill Adults	327
Parents	797

# Social & Digital Research Methodology

- Using our proprietary technology and sifting through major social platforms (including, but not limited to, Facebook, Instagram, TikTok, Reddit, and Twitter), we researched over hundreds of thousands of mentions to understand how people are talking about the flu shot in general.
- In addition to the flu shot in general, we also sought to understand audience metrics, themes and sentiment on Flublok, FluZone, FluZone HD – as well as other commonly vaccinated diseases like RSV.
- Range of analysis: June 2022 – June 2023

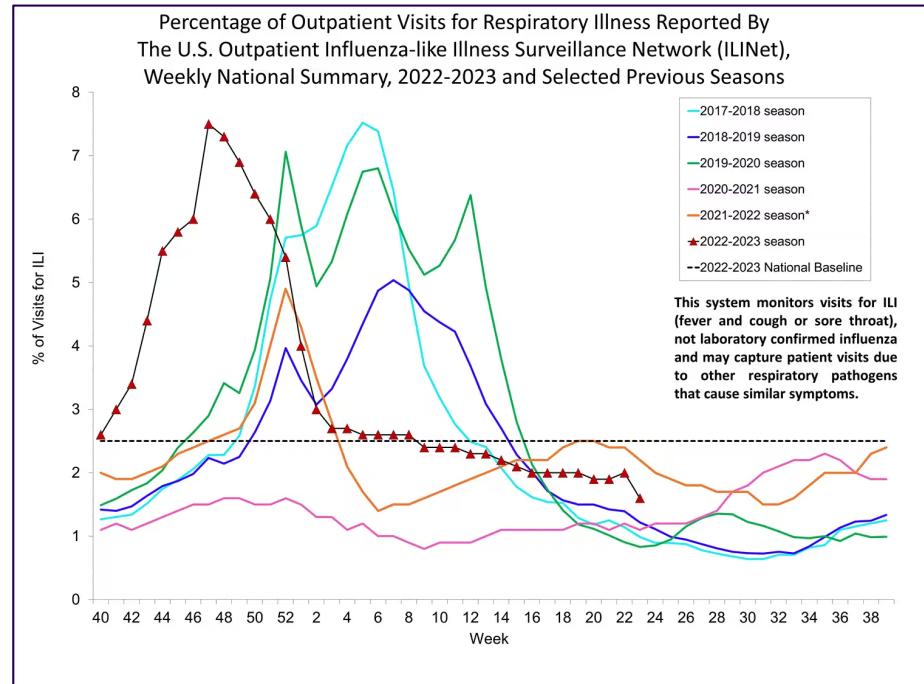


This icon represents insights from social and digital research throughout the report.

# 2022-23 Influenza Season Facts

The CDC notes a higher level of flu virus activity for the 2022-23 season with the dwindling impact of COVID and pandemic restrictions

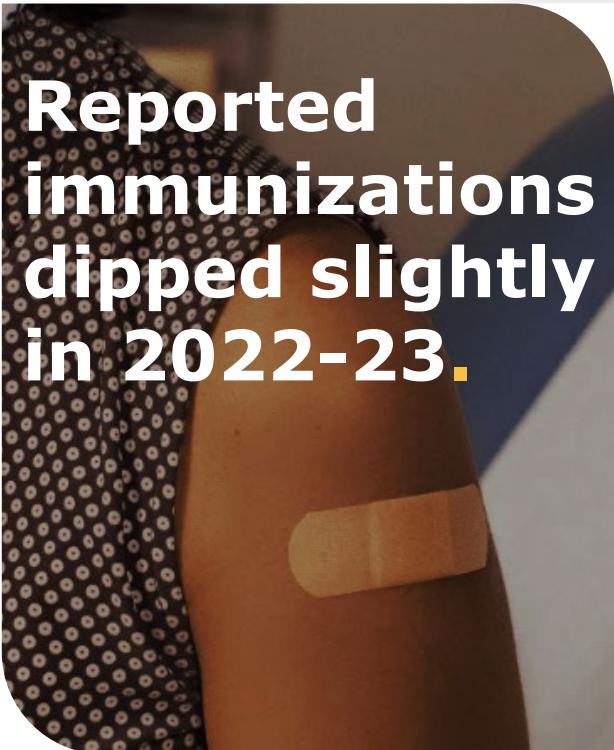
- Flu cases peaked in late November/early December and then dropped quickly at the beginning of 2023.
- Hospitalizations and death figures are now estimated to be similar to pre-COVID seasons



<https://www.cdc.gov/flu/weekly/index.htm>

<https://www.cdc.gov/flu/fluavaxview/dashboard/vaccination-dashboard.html>

## Key Finding 1



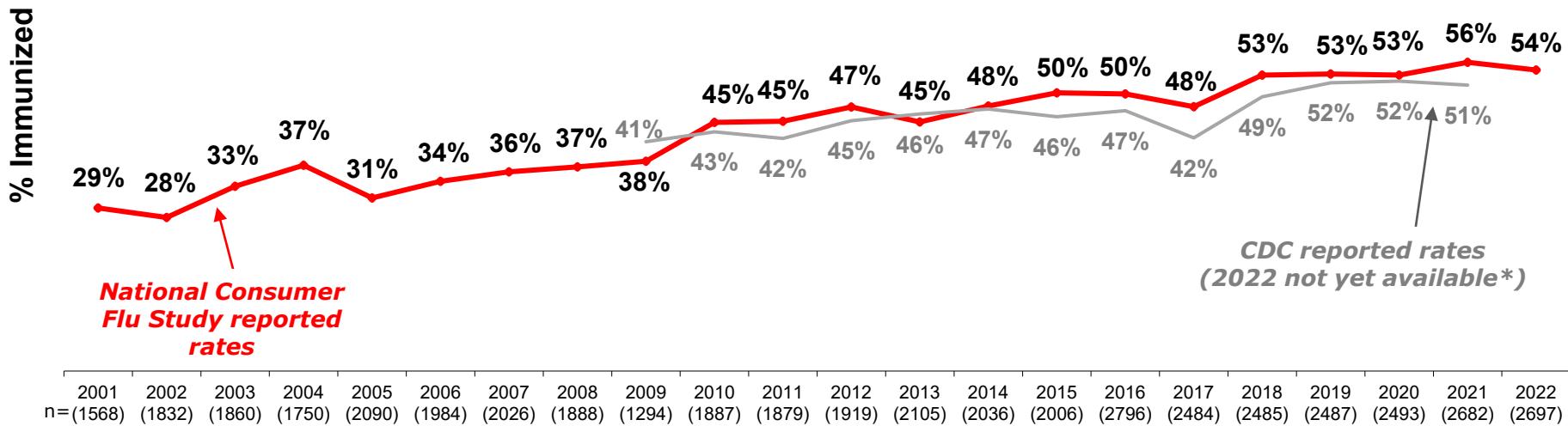
**Reported immunizations dipped slightly in 2022-23.**

**Adults drive the overall lower vaccination rate despite reporting that doctor recommendations for a flu vaccine increased this season**

- Seniors, once the most reliable immunizers, report higher rates of not feeling they need a flu shot and concern around past immunization reactions, perhaps confusing flu shots with COVID vaccines
- That said, more than half of adults were vaccinated in 2022 with a majority citing it being important to their overall health as the key reason they did so.

Consumers report an overall dip in immunization rate this season, down slightly to 54%

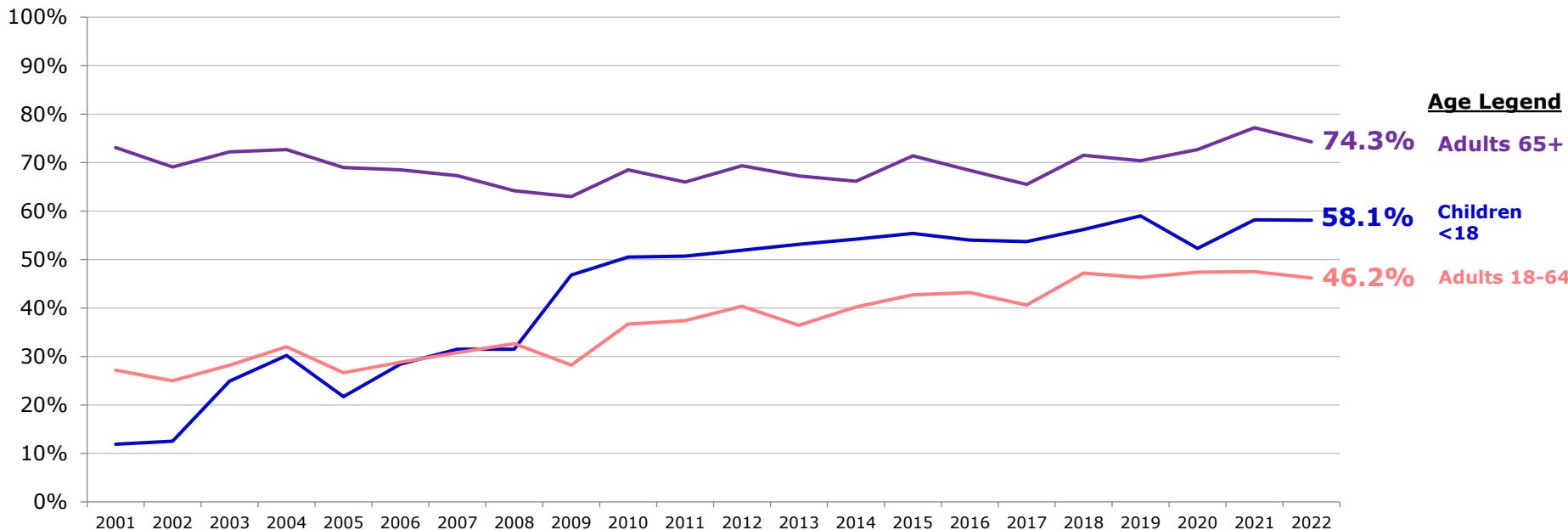
### Total Sample Reported Influenza Immunization Rates (Ages 6 months+) - Trending



\* Full CDC data are expected to become available in September or October 2023, based on past year's releases

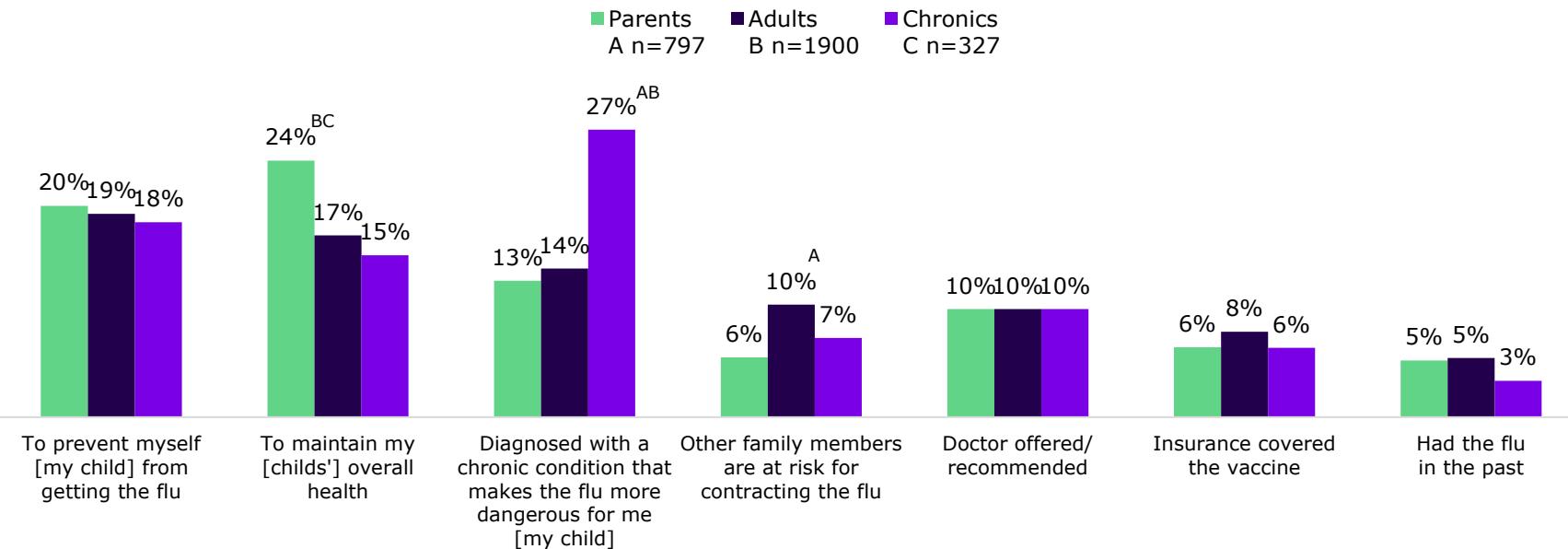
Pediatric rates held steady in 2022-23 while adults noted a slight decline

### Historical Reported Influenza Immunization Rates by Age Group - Trending



Chronics clearly recognize they are at higher risk for complications from the flu as it's the most important factor for more than one-in-four

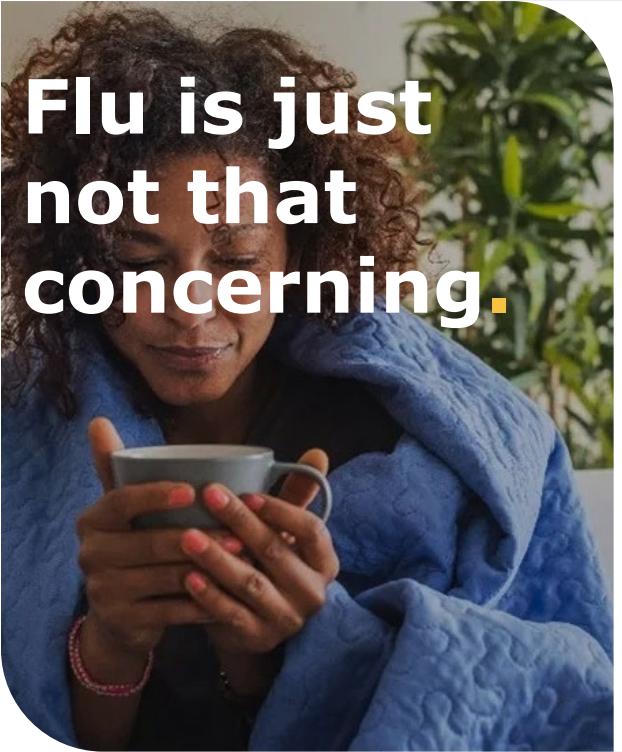
### Single Most Important Motivating Factor to Seek an Influenza Vaccine: 2022-23



*Importance.* Below are factors that may or may not motivate you to seek a flu vaccine [for your child]. Please indicate how important these items are to you by sorting them into one of the following three buckets. \*New 2022      Showing responses  $\geq 5\%$

Letters indicate statistical significance at 95%  
Arrows indicate significant change over previous year

## Key Finding 2

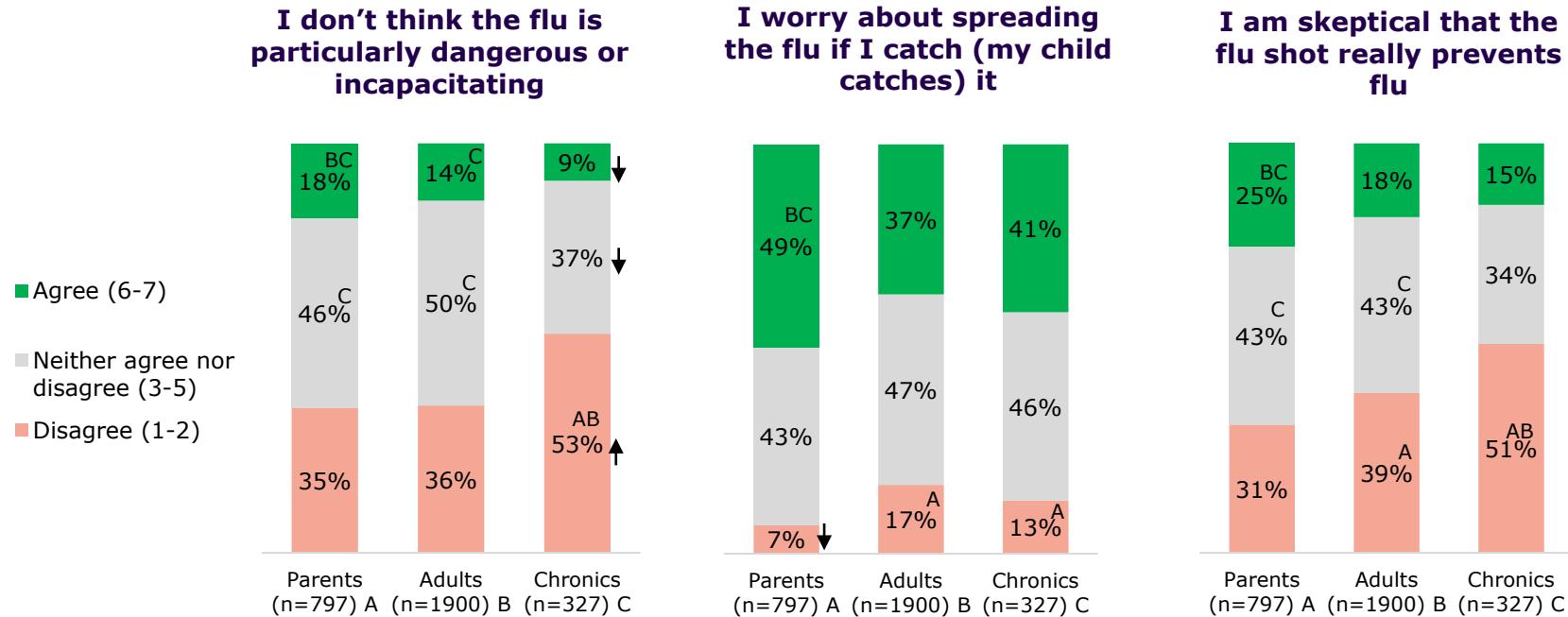


**Flu is just  
not that  
concerning.**

**Consumers are not particularly fearful of respiratory illness outside the chronically ill and elderly**

- There is growing distrust in the value of /need for vaccines over the past few years
- Despite stated intent, the actual rate of flu vaccinations in adults show a slight decline
- RSV is currently low on the radar, outside of expecting moms

Parents are not as convinced that the flu is dangerous or that the vaccine is effective, but they worry the most about spreading the flu should their child catch it



q13. Please rate your agreement with the following statements

**sanofi**

Letters indicate statistical significance at 95%  
Arrows indicate significant change over previous year

A perceived lack of need continues to be the leading reason consumers chose not to vaccinate against the flu this past season

### **Top Reasons Consumers Did Not Get a Flu Immunization**

(among non-immunizers in 2022-23)

	<b>Parents A</b> (n=251)	<b>Adults B</b> (n=761)	<b>Chronics C</b> (n=105)
<b>Don't believe that I need [my child needs] a flu vaccination</b>	<b>31%</b>	<b>31%</b>	<b>29%</b>
I do not [my child does not] like needles	13%	17%	20%
I do not like [for my child] to receive shots	12%	14%	19%
Concerned that I [my child] will get the flu from the flu vaccine	19%	13%	15%
I [my child] got the flu vaccine once and had a bad reaction	12%	13%	20%
Inconvenient to go [take my child] to the doctor	6%	10%	5%
I was worried about [my child] getting the FLU vaccine with the COVID vaccine or booster	10%	9%	10%
I [my child] got the flu from vaccine previously	9%	9%	10%
My [child's] doctor never recommended the vaccine	10% <sup>C</sup>	7%	2%
There are prescription medications available to treat the flu, so I did not feel the vaccine was necessary	10% <sup>C</sup>	6%	2%

q32. Why haven't you / hasn't your child received a flu vaccine this year?

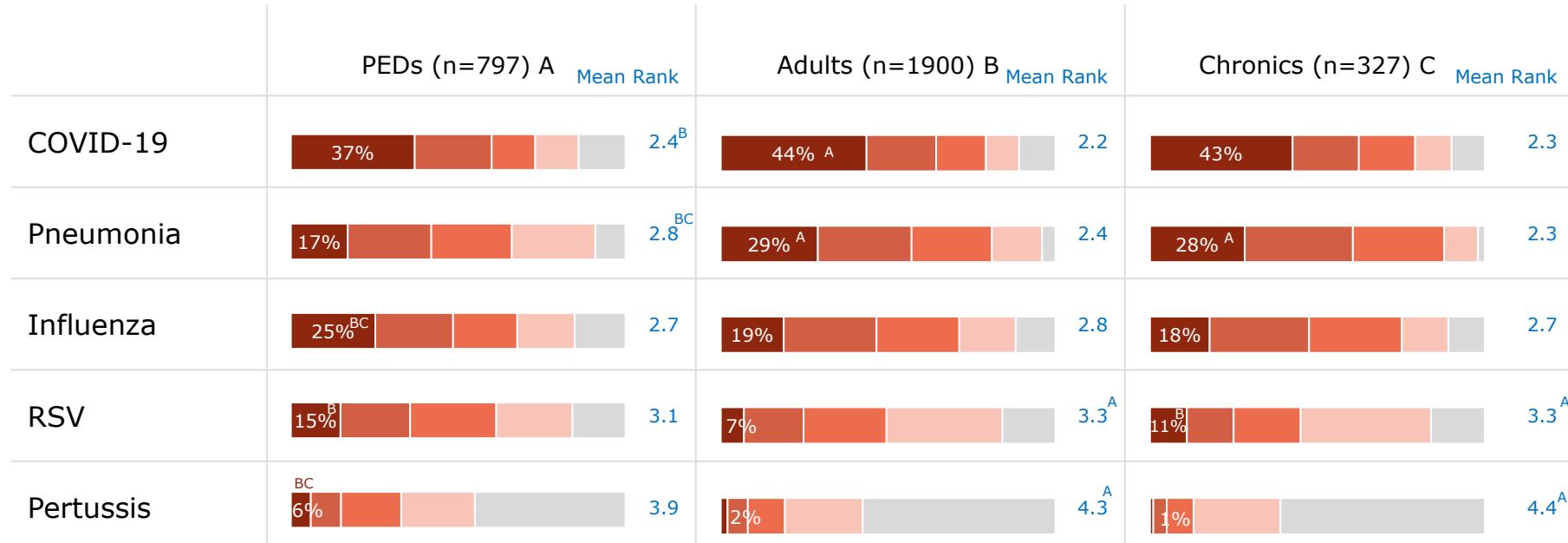


Letters indicate statistical significance at 95%  
Arrows indicate significant change over previous year

Coronavirus is seen as the largest threat to consumers among respiratory illnesses presented, followed by pneumonia and flu

### Perceived Threat Of Major Respiratory Illnesses

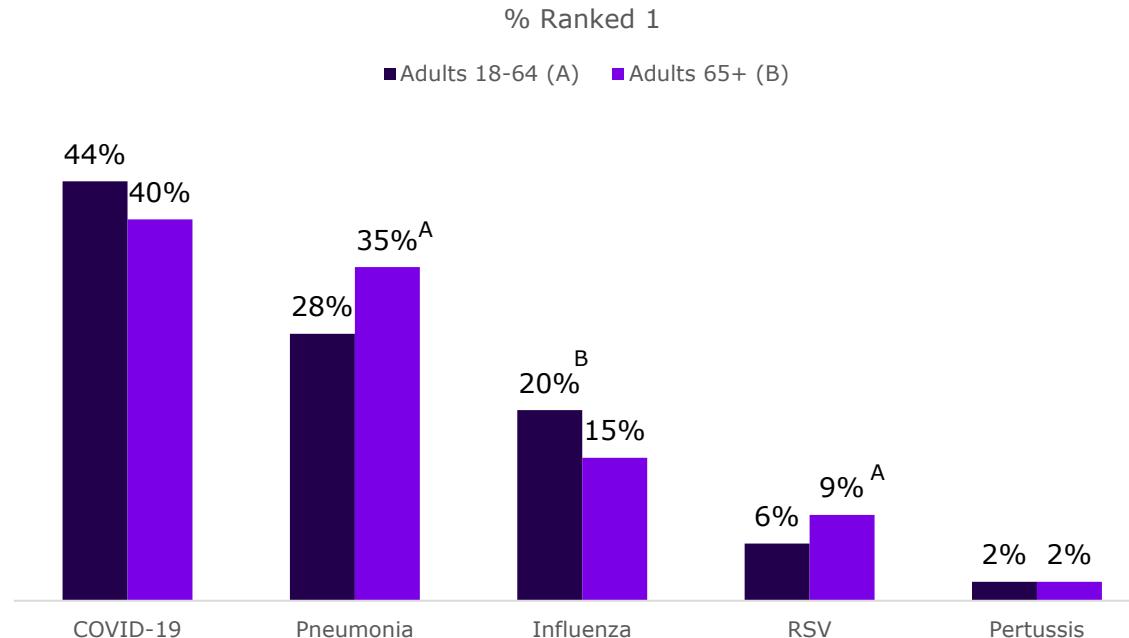
■ Rank 1 ■ Rank 2 ■ Rank 3 ■ Rank 4 ■ Rank 5



RespSerious. And which of these respiratory illnesses do you see as being the biggest threat to your [child's] health? Please rank them. \*New 2022  
Statistical notation shown on Rank 1 only

After COVID, Seniors are more concerned with Pneumonia while 1-in-5 adults under 65 see the flu as the biggest threat to their health

### Perceived Threat Of Major Respiratory Illnesses



*RespSerious. And which of these respiratory illnesses do you see as being the biggest threat to your [child's] health? Please rank them. \*New 2022*



The potential RSV vaccine is top-of-mind for pregnant and new moms, especially those who have first-hand experience with the disease – while a small group is skeptical about the vaccine

**Pregnant moms as well as mothers with young toddlers/kids were mostly ecstatic for a potential RSV vaccine for pregnant moms and kids.**

They hoped they would make a decision soon and noted they would get it if they could especially knowing how life-threatening the disease can be on babies/kids.

**Sample feeds from  TikTok**

*"Please!! I want it. I'm due in late October let me protect my baby."*

*"I'm due in early November and it would give me so much relief if this was approved in time for me to get it!"*

*"YES!! Watching my poor baby in the hospital with RSV was the worst thing ever. I can't wait to get my new baby vaccinated"*



Considering how the first experimental RSV vaccine trial went, **some voiced skepticism over the new RSV vaccine** and noted they'd rather wait before being the first in line. This was more likely to come from those who were wary of vaccines in general.

**Sample feeds from  TikTok**

*"If it happened 60 years ago why did it take till 2008 to figure out what went wrong? Ur narrative is crumbling!"*

*"60 years ago but took them 40 years to figure out what went wrong. Good science there. I'll wait and see what happens. Better to wait and see."*

*"wait until the find out that RSV vaccine will be a mRNA vaccine too oh shit I just let the cat out of the bag"*



The pending RSV vaccine is also at the forefront for those aged 50+ with respiratory issues, especially those who have had RSV before



**Older consumers** who have experienced RSV but didn't fall under the age requirement of 60+ wished they could get the vaccine.



Some teachers also chimed in to share excitement for the RSV vaccine, especially considering how many kids they work with.



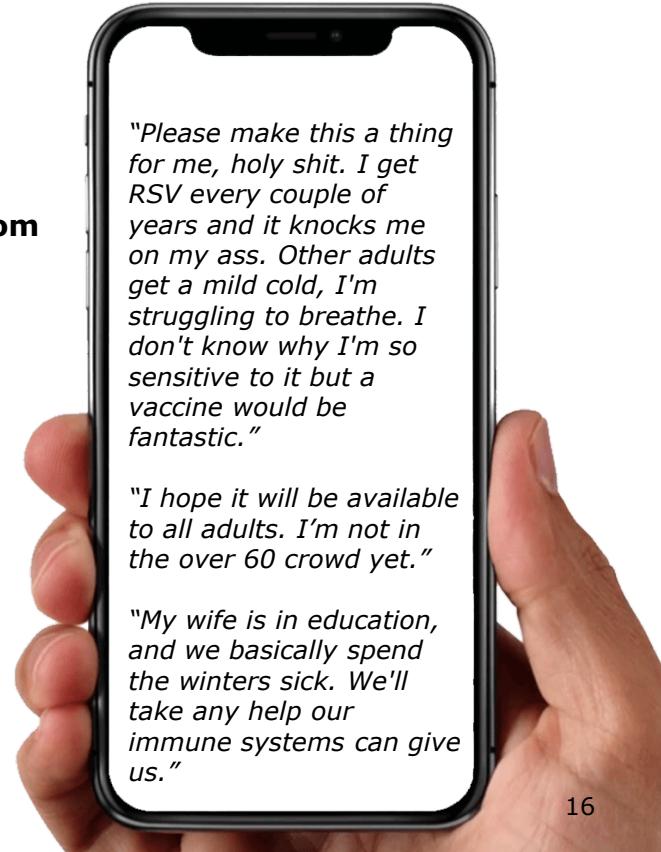
Sample feeds from



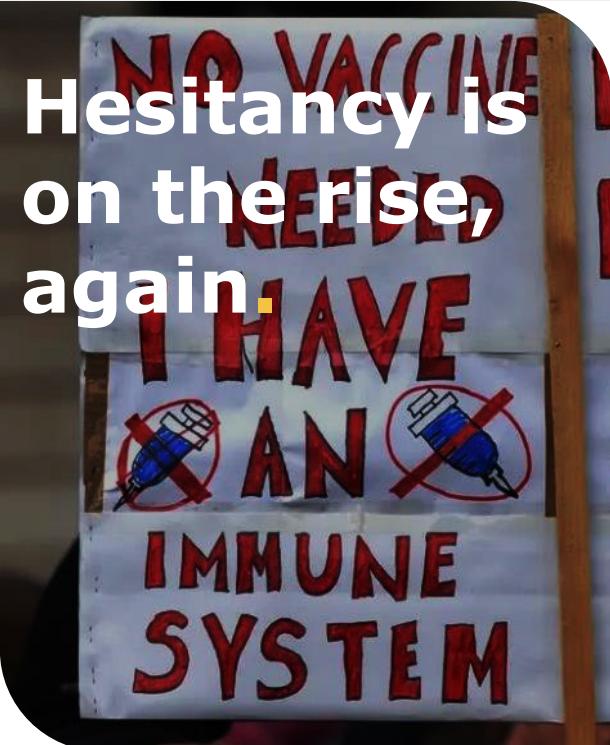
*"Please make this a thing for me, holy shit. I get RSV every couple of years and it knocks me on my ass. Other adults get a mild cold, I'm struggling to breathe. I don't know why I'm so sensitive to it but a vaccine would be fantastic."*

*"I hope it will be available to all adults. I'm not in the over 60 crowd yet."*

*"My wife is in education, and we basically spend the winters sick. We'll take any help our immune systems can give us."*



## Key Finding 3



**After a few seasons of declines, more consumers are reporting apprehensions around flu vaccine efficacy and ingredients**

- Persistent myths need to be continuously addressed and HCPs given talking points to help in their conversations with consumers at point of immunization
- 25% of Parents are skeptical that the flu shot really prevents flu for their children



Digital platforms offer up health information in increasingly digestible formats with consumers eager to engage leaving room for Sanofi to step in

# More adults this year are concerned that they will get the flu from the flu vaccine

## **Top Reasons Consumers Will Not Get a Flu Immunization This Coming Season**

(among those not likely to be vaccinated)

	Parents (n=215)	A (n=598)	Adults B (n=598)	Chronics C (n=98)
Don't believe that I need [my child needs] a flu vaccination	41%	40%	37%	
Concerned that I [my child] will get the flu from the flu vaccine	23%	19% ↑	13%	
I [my child] got the flu vaccine once and had a bad reaction	13%	18%		33% AB↑
I do not [my child does not] like needles	15%	18%		22%
I do not like [for my child] to receive shots	12%	16%		15%
I [my child] got the flu from vaccine previously	11%	10%		16%
Inconvenient to go [take my child] to the doctor	4%	8%		2%
There are prescription medications available to treat the flu, so I do not feel the vaccine was necessary	9%	7%		5%
A healthcare professional recommended [I / my child] not get one	11%	6%		3%
Cost of the vaccine	6%	6%		7%
Do not want [my child] to be around others when getting vaccinated	4%	4%		5%
I don't want to get another vaccination after the COVID vaccine*	8%	13%		6%

\* Only asked of those who already received a COVID vaccine

Q32\_N. Why might you [your child] not seek a flu vaccine this coming year? New 2020



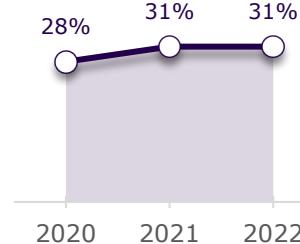
Text indicate statistical significance at 95%  
Arrows indicate significant change over previous year

Adults report a steadily increasing perception of concerns around flu vaccine efficacy and ingredients contributing to fewer Adults being vaccinated

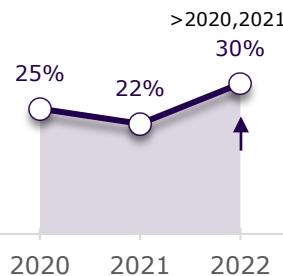
### Trending Reasons Adults Do Not Get a Flu Immunization

(among non-immunizers)

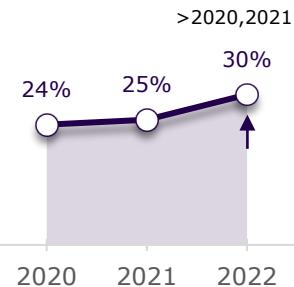
**"Don't believe that I need a flu vaccination"**



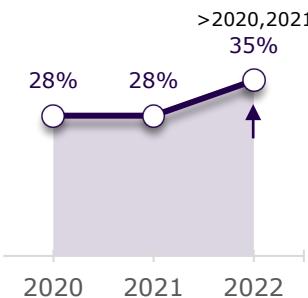
**"Don't believe the vaccine will help to protect me from the flu"**



**"I am skeptical that the flu shot really prevents flu"**



**"I am concerned about potential side effects of getting a flu shot"**



**"Concerned that I will get the flu from the flu vaccine"**



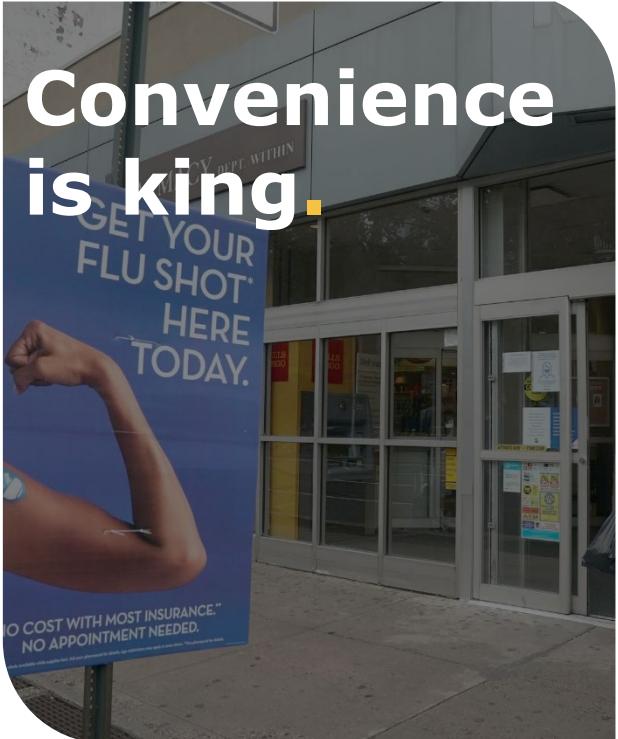
q32. Why haven't you received a flu vaccine this year?

q13. Please rate your agreement with the following statements. Adults Not Vaccinated in Current Season

**sanofi**

Letters indicate statistical significance at 95%  
Arrows indicate significant change over previous year

## Key Finding 4



### For those who do want a flu immunization, convenience is driving more to pharmacy locations

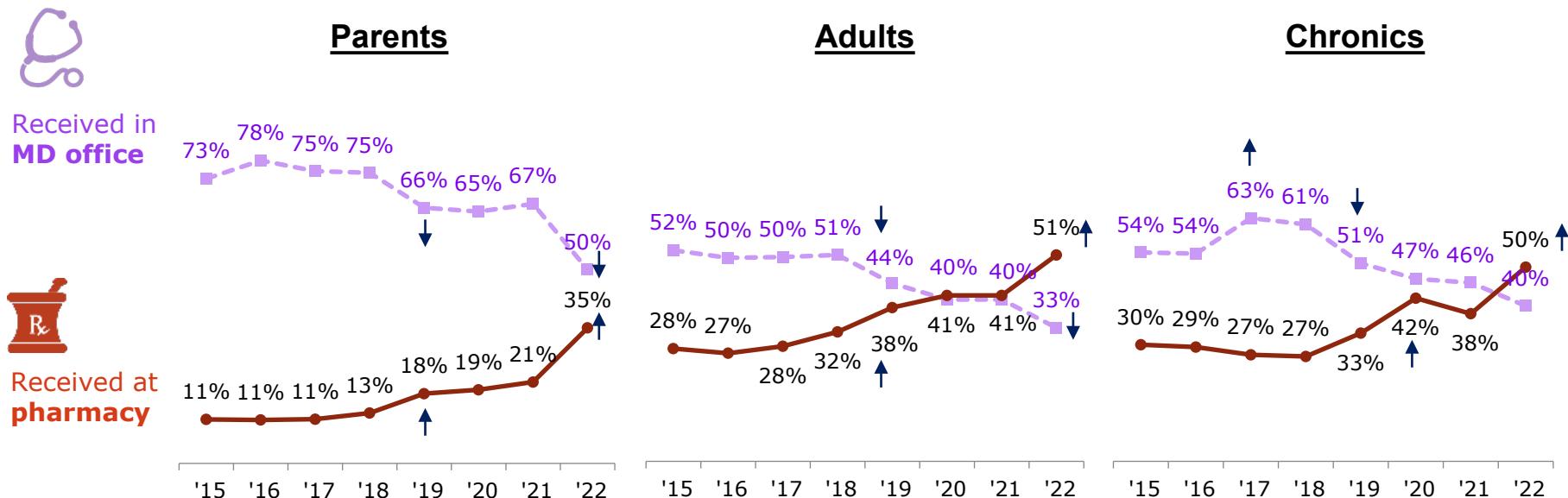
- More than half of adults were vaccinated at a retail location in 2022-23 and report visiting with the purpose of getting a flu shot.
- Even those immunized at their physician's office report doing so because they were there for another, already scheduled visit.



The rise of self-scheduling and self-selecting vaccines increases the need for raised brand/manufacturer awareness among consumers

Pharmacies saw a significant increase in consumers seeking flu vaccinations at their locations

### Location of Flu Immunization: Trending



q38. Where was your [child's] flu vaccine administered?

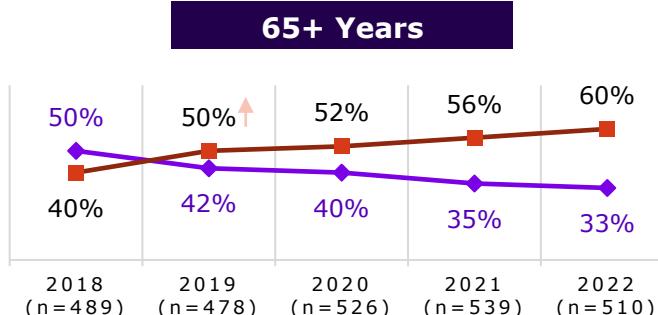
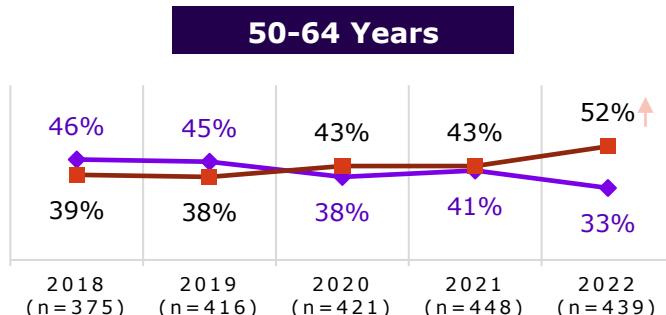
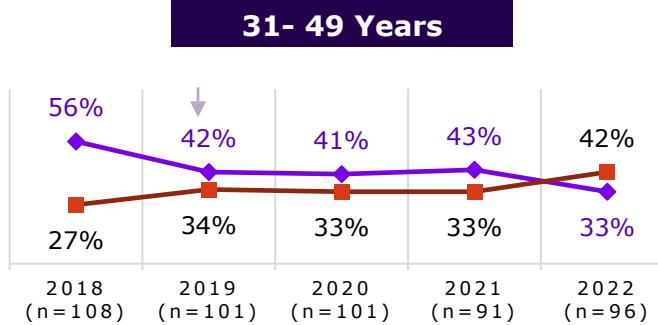
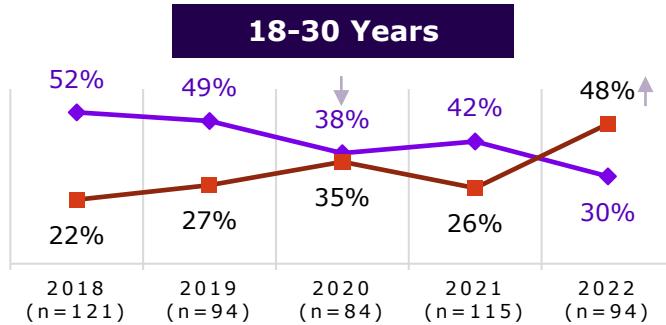
**sanofi**

Arrows indicate significant change over previous year

# Pharmacies were the location of choice among all adult cohorts during 2022-23

Received in MD office  
Received at Pharmacy

## Location of Flu Immunization by Adult Age Bands: Trending



38. Where was your [child's] flu vaccine administered?

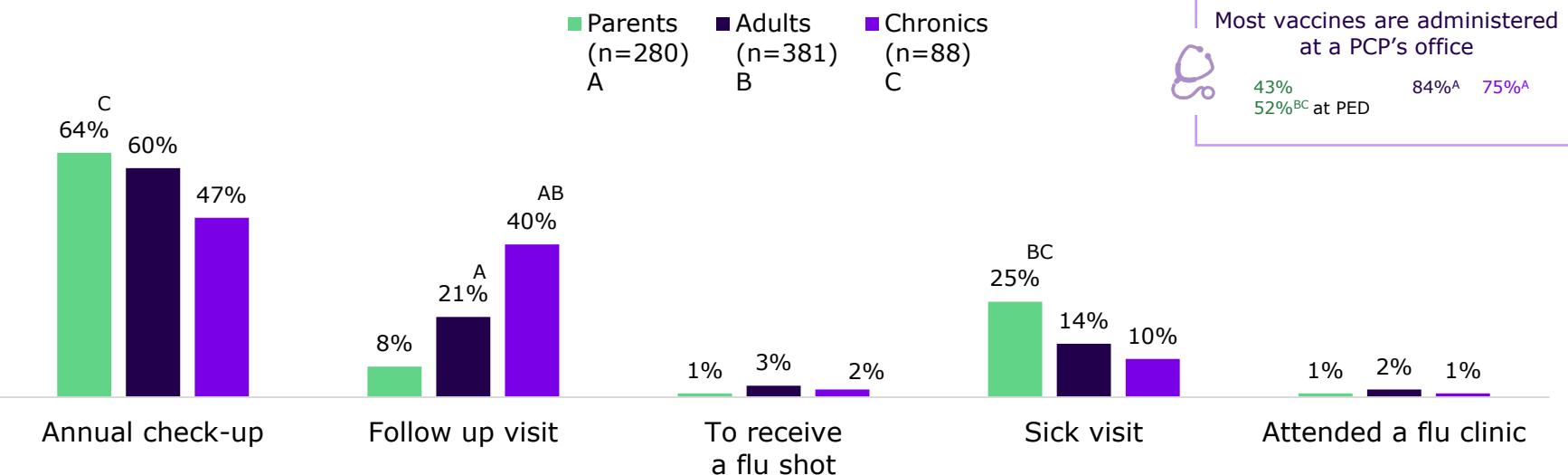
**sanofi**

Arrows indicate significant change over previous year

Few consumers visit their doctor's office solely to receive a flu shot, opting more often to do so at regularly scheduled appointments with very few attending flu clinics

### Reason For Visit When Received Flu Vaccination: 2022-23

#### Doctors Office



q44. Please describe the reason for your [child's] office visit.

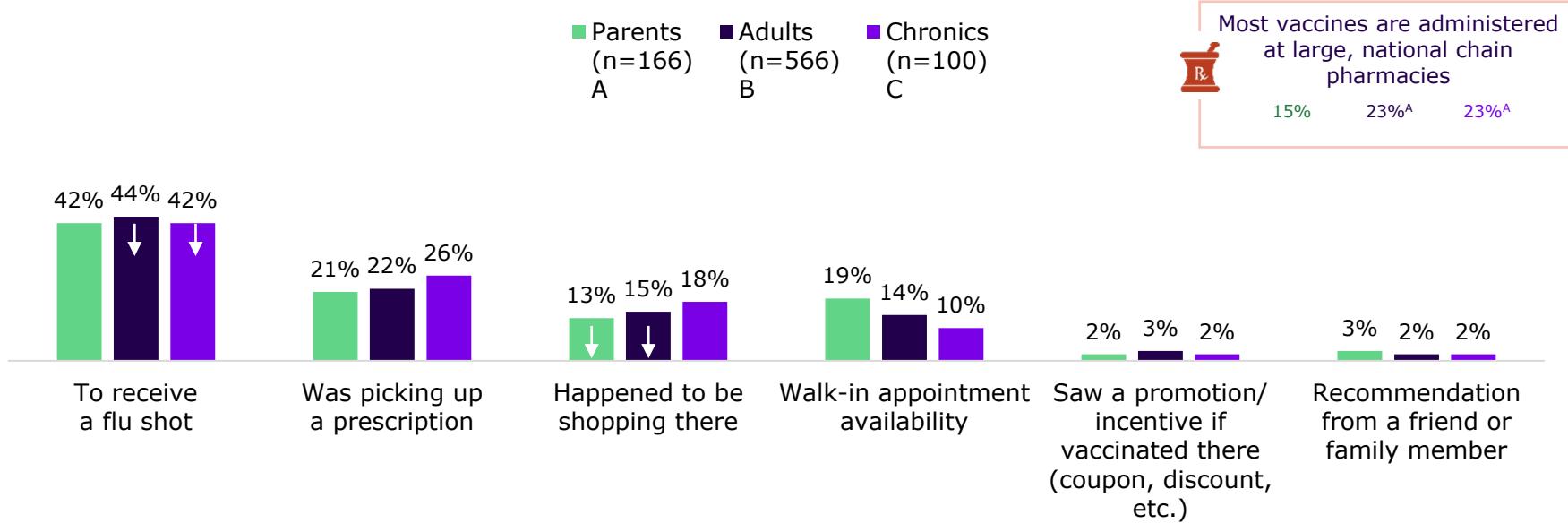
**sanofi**

Letters indicate statistical significance at 95%  
Arrows indicate significant change over previous year

# Despite a drop from Adults, Pharmacy inoculations are done with intent most often, driven by a convenience factor

## Reason For Visit When Received Flu Vaccination: 2022-23

### Pharmacy



q44\_P. Please describe the reason for your [child's] pharmacy visit.



INTERNAL USE

Letters indicate statistical significance at 95%  
Arrows indicate significant change over previous year

Unless already in a physician's office, the most convenient choice for patients to get vaccinations are pharmacies

### Reasons for Flu Immunization by Location – Adults 2022-23

<b>Doctor's office</b> (n=381) A		<b>Pharmacy</b> (n=613) B
48%	Easy/ convenient location/ close by	<b>70% A</b>
<b>48% B</b>	Already there/ combine visits	24%
36%	Vaccine available there	<b>53% A</b>
36%	Covered by insurance	<b>48% A</b>
35%	Quick/ fast	<b>43% A</b>
<b>34% B</b>	Trust the healthcare provider at this location	21%
27%	Usually/ always go there	29%
15%	No waiting/ no appointment needed	<b>29% A</b>
4%	Have the specific brand of flu vaccine I want	4%

38. Where was your [child's] flu vaccine administered? 41. Why did you /your child receive the flu vaccine there?



Letters indicate statistical significance at 95%

Arrows indicate significant change over previous year



# Consumers deciding where to get their flu shot took into consideration convenience, availability, and price

**Pharmacies were the preferred place to get their flu shot based on these three main reasons.**

**Convenience and availability** went hand-in-hand, as many advocated for pharmacies because they could easily make appointments online or walk-in.

**Consumers without insurance or those whose insurance didn't cover flu shots at pharmacies** were curious where they could get their flu shots for free or at a more affordable price. Some shared which pharmacies or stores were giving coupons for flu shots, while others encouraged them to go to their local department of health office.

## Sample feeds from reddit

*"Rite Aid on Third (the one near grocery outlet). Have always had a quick/easy experience scheduling and getting the shots."*

*"Can confirm. Last week paid cash at Duane Reade for my flu shot (insurance doesn't cover it at pharmacies wtf) and it was 70\$ but they gave me a coupon that brought it down to 40\$"*

## Sample feeds from Twitter

*"At the doctor's office (not the pharmacy) waiting on my flu shot. Very slow."*

*"Took mom to get her flu shot this morning and at her Doctors office is took AN HOUR....Could we have walked into a pharmacy and gotten it done in less than 10 minutes??? Sure could, but that would be far to considerate of other peoples time for my mother..."*

*"I just walked into Costco on Friday and got my@flu shot. No appointment."*



# Doctors' offices were often plagued with long wait times, appointment struggles, and out of stock vaccines

People who were trying to get their flu shot at the doctor's office were **frustrated by the long wait times, not having enough vaccine supplies/stock while pharmacies did, etc.** Some were baffled that their health insurance didn't cover flu shots given at the pharmacy (only at the doctor's office), especially since it was easier, quicker, and more convenient to get it there.

Some said they'd rather just pay the out-of-pocket costs for a flu shot at a pharmacy if they didn't have to wait at the doctor's office for a vaccination shot.

Select Parents were disheartened that pharmacies couldn't give flu shots to kids under a certain age, especially as their doctor's office had long wait times.



"Apparently my HMO won't cover a flu shot unless I get it at my doctor's office. Is this standard for ALL HMOs? It seems so backwards from a public health standpoint. I want to get a shot, but I'm young and healthy so it doesn't seem worth taking off of work to go during my doctor's limited hours."

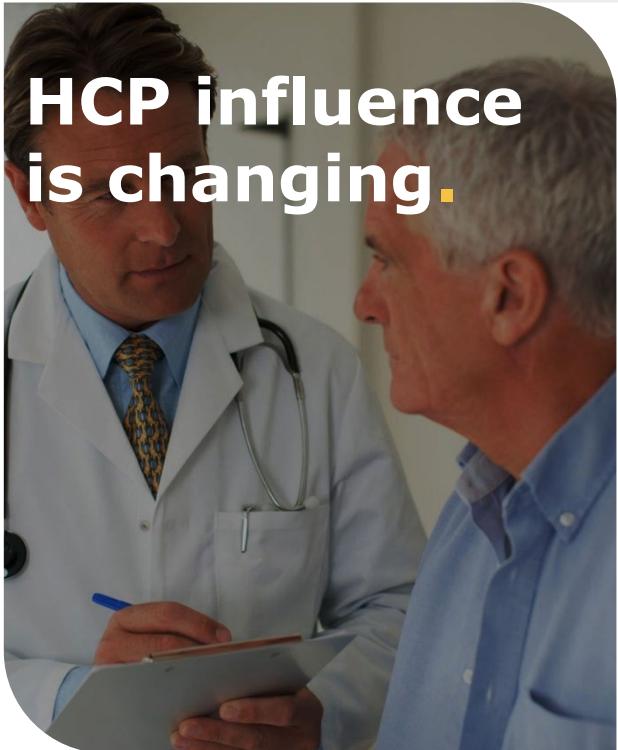


"it was odd today. I had a doctor's appt so thought, I'll get my flu shot at the same time. Doctor's appt was great but no flu shots (they haven't received their stock). I walk out & see that the pharmacy next door 2 the doc's office has flu



"I've been scrambling to get an appointment for a flu shot, because Health Net apparently won't approve shots billed by pharmacies (CVS etc) so I have to go to urgent care or medical office Meanwhile, husband (who is on same insurance) got one no problem at a Kings game last week"

## Key Finding 5



**HCP influence  
is changing.**

**HCP recommendations still positively influence vaccination decisions, but burden may be shifting towards Pharmacists rather than physicians**

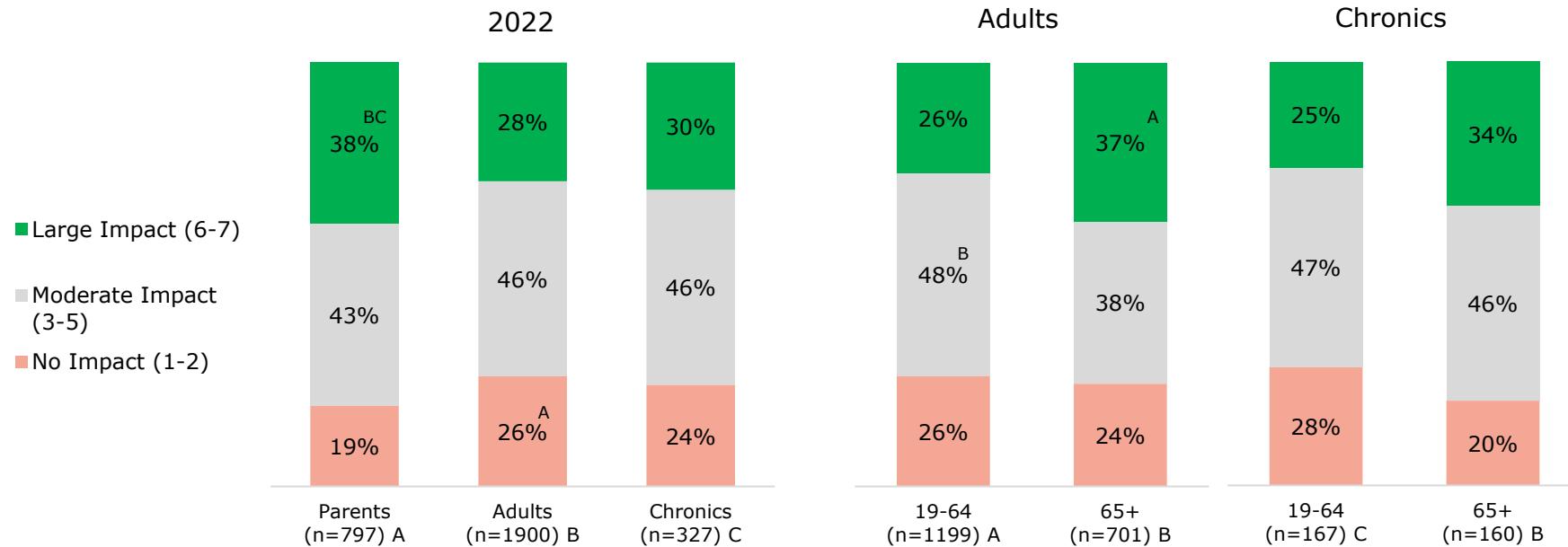
- The rate of recommendations for adults from MDs is reported to be increasing. This is in direct tension with the consumers' own beliefs, likely adding to tension to the patient-MD relationship



Reminders from pharmacies seem to drive higher vaccination rates – a partnership with a pharmacy chain or in-store promotional materials may be highly advantageous

# One-third of Seniors say CDC recommendations have a large impact on the type of flu vaccine they seek for themselves

## Impact of CDC Guidelines on Behavior



*CDCImpact: How much impact do recommendations and guidelines given by the Centers for Disease Control (CDC) have on the type of flu vaccine that you seek? New 2022*

# Consumers are largely unaware of CDC Recommended vaccines and almost half feel their HCP should know, not them

## Awareness of CDC Recommended Vaccines for Those 65+

	<b>Adults 65+ (n=701) A</b>	<b>Chronics 65+ (n=160) B</b>
Don't know	45%	38%
My doctor/pharmacy should know that, not me	42%	50%
Fluzone High-Dose	10%	12%
Flublok	3%	3%
Fluzone	3%	1%
Fluarix	1%	0%
Fluad	1%	0%
FluMist	1%	1%
FluLaval	1%	0%
Afluria	0%	0%
Flucelvax	0%	0%

Base: Those 65+

CDCAware: The CDC recommends that adults 65 and older preferentially receive one of three flu vaccines for the coming flu season (Fall 2023 - Spring 2024). Are you aware of which brands are recommended? New 2022

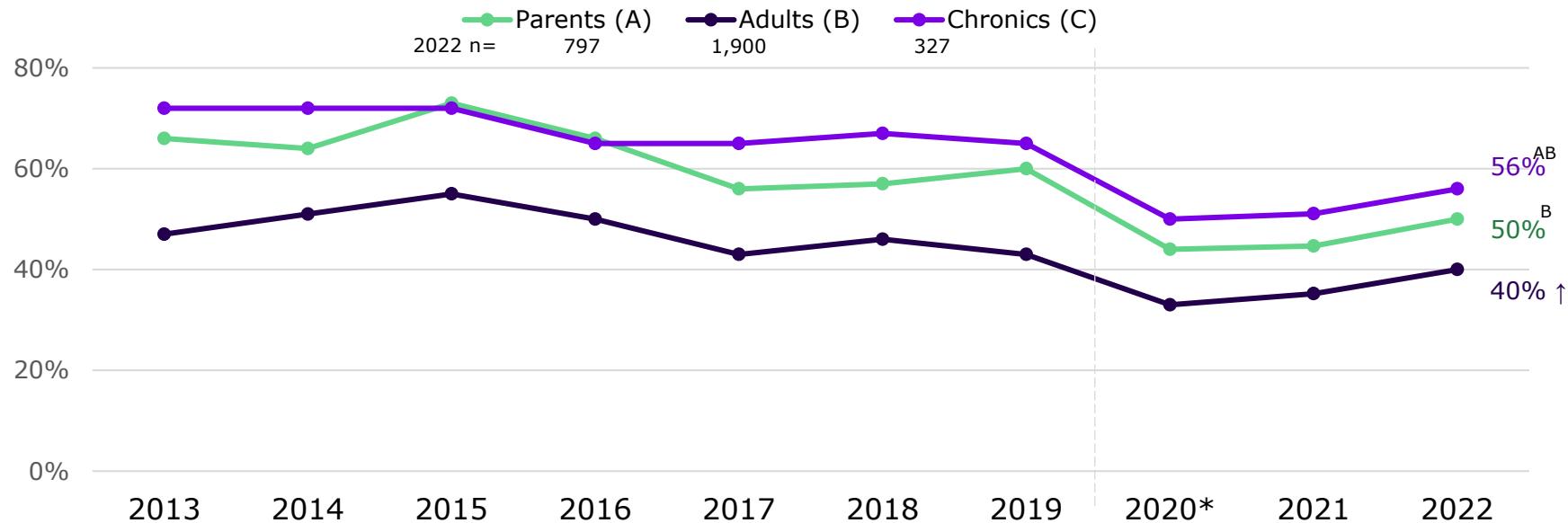
**47%** of Adults 65+ who received a doctor's recommendation in 2022 agree that their doctor should know the CDC recommendations rather than them personally (*n=385*)



**11%** of Adults 65+ and **13%** of Chronics 65+ could correctly identify any of the three recommended influenza vaccines

# Doctor recommendations trended upwards among all cohorts in 2022-23, significantly so among Adults

## Received Doctor Recommendation - Trending



q46. In the past year, have you received any recommendations you [your child] should get a flu immunization? Please select all that apply.



\*Wording changed in 2020 See Notes

Text indicate statistical significance at 95%  
Arrows indicate significant change over previous year

# Doctor recommendations are highest among those over 50, with a significant increase noted in 2022-23 for those 50-64

## **Received Flu Vaccination Recommendation:**

Adults 18+ (2022-23)

	<b>Adults 18-30 (n=199) A</b>	<b>Adults 31-49 (n=199) B</b>	<b>Adults 50-64 (n=801) C</b>	<b>Adults 65+ (n=701) D</b>
<b>Yes</b>	<b>63%</b>	<b>62%</b>	<b>68% ↑</b>	<b>69%</b>
From a doctor	29%	34% ↑	46% AB ↑	55% ABC
From an HCP other than my doctor	15%	13%	10%	9%
From a pharmacist	19%	17%	16%	16%
From the news	12%	9%	11%	15%
From an advertisement	13%	10%	9%	10%
From a friend or family member	19% CD	12%	11%	11%
From some other source	5%	3%	5%	3%
<b>No</b>	<b>37%</b>	<b>38%</b>	<b>32%</b>	<b>31%</b>

q46. In the past year, have you received any recommendations you [your child] should get a flu immunization? Please select all that apply.

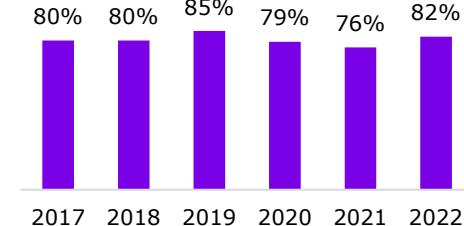
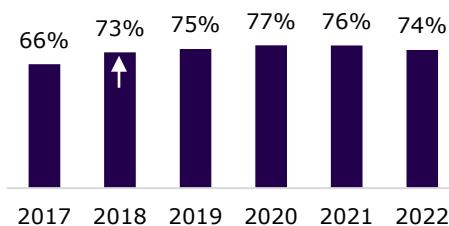
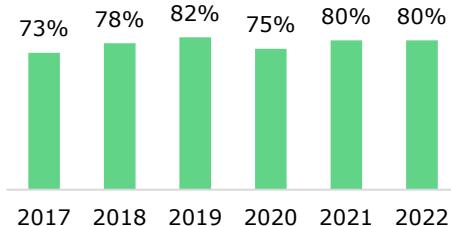


Text indicate statistical significance at 95%  
Arrows indicate significant change over previous year

# Doctor recommendations continue to positively impact immunization rates

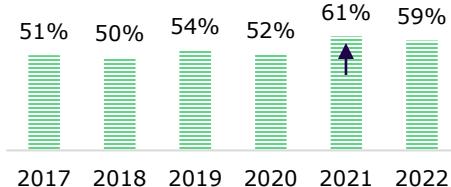
## Percent Vaccinated Among Those Who Did And Did Not Receive A Doctor Recommendation

Received MD recommendation

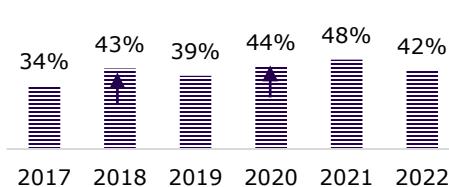


### Parents

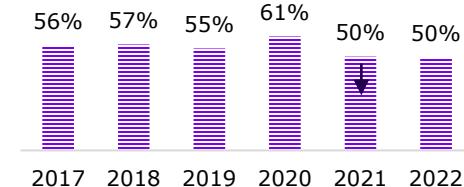
Did Not Receive MD recommendation



### Adults



### Chronics

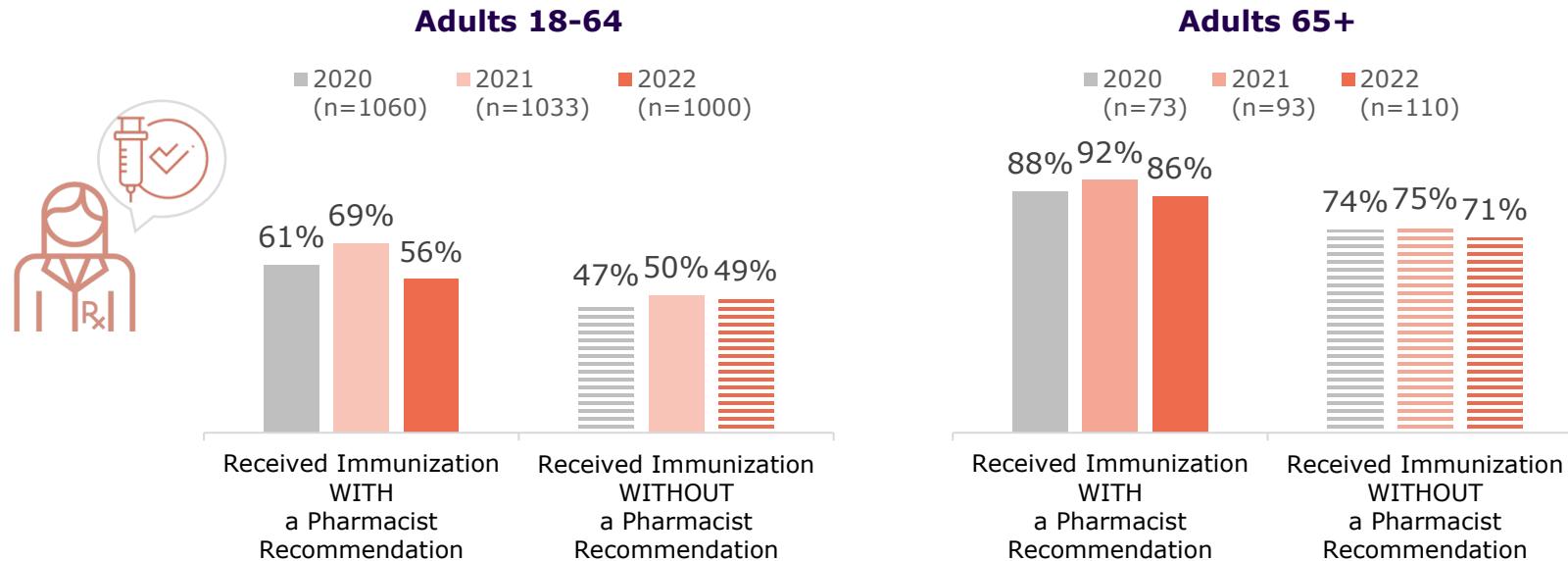


q4: For each year listed, please indicate whether [you/your child] received a flu immunization, did not receive a flu immunization, or if you don't recall.

q46. In the past year, did any of the following recommend that you [your child] get a flu immunization?

# Pharmacist recommendations positively impact immunization rates, particularly among seniors

## Percent Vaccinated Among Those Who Did And Did Not Receive A **Pharmacist Recommendation**: Adults

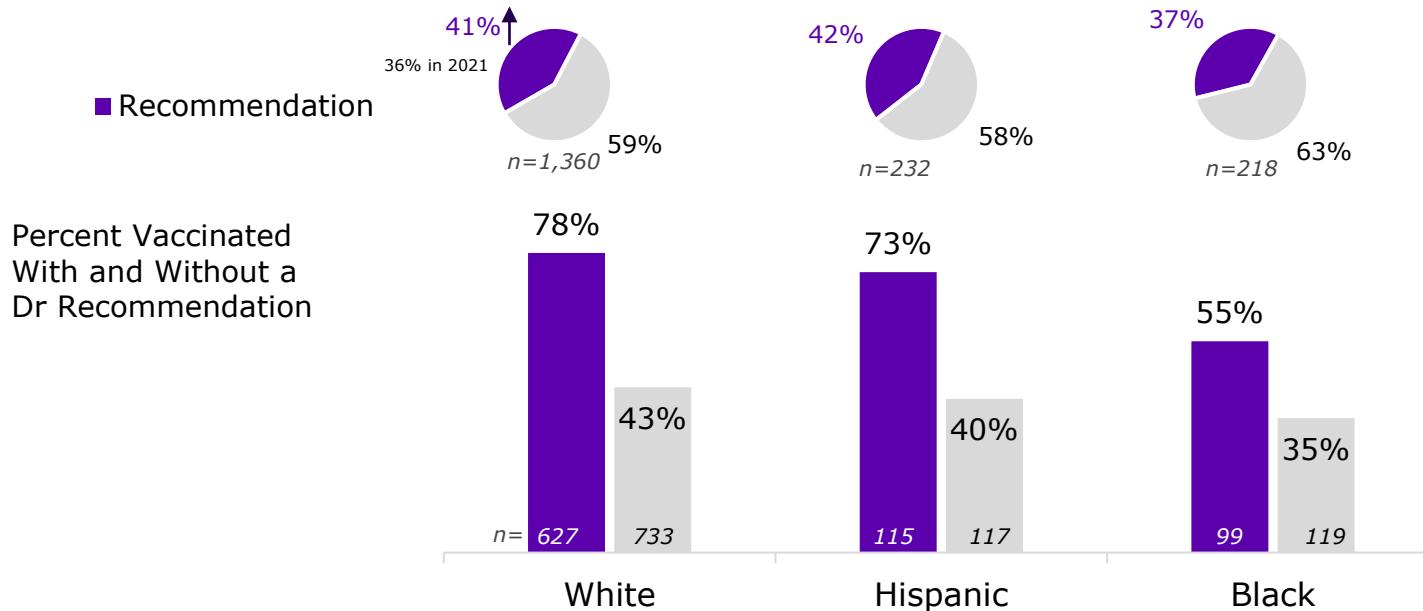


q4: For each year listed, please indicate whether [you/your child] received a flu immunization, did not receive a flu immunization, or if you don't recall.

q46. In the past year, did any of the following recommend that you [your child] get a flu immunization?

# White adults report more doctor recommendations in 2022-23

## Adults 18+ Who Did And Did Not Receive A Doctor Recommendation: 2022-23



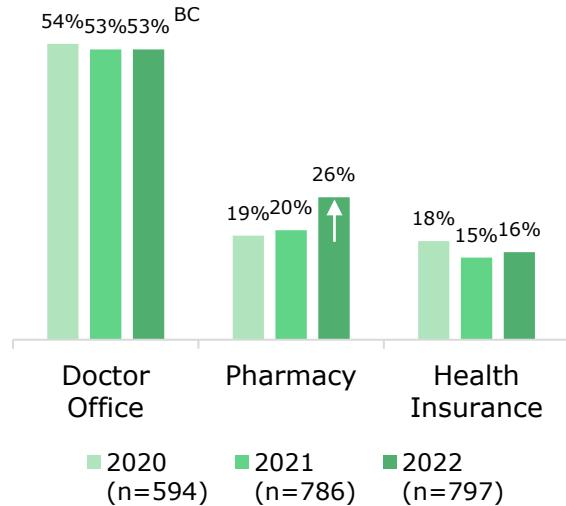
q4: This year - Please indicate whether [you/your child] received a flu immunization, did not receive a flu immunization, or if you don't recall.

q46. In the past year, did any of the following recommend that you [your child] get a flu immunization?

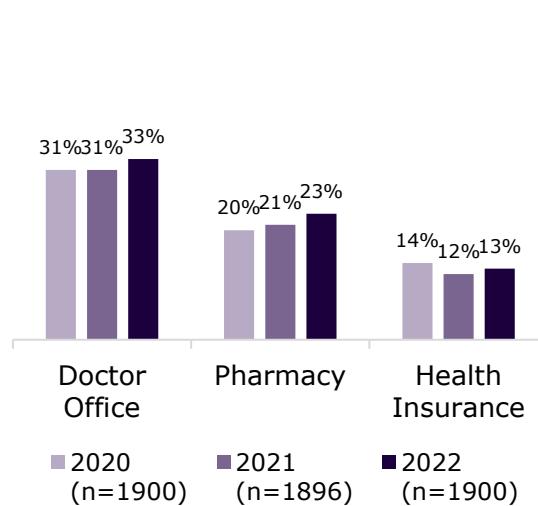
# Reminders from a pharmacy are recalled at higher rates in 2022-23 among Parents

## Received Flu Vaccine Reminders By Source: Trending

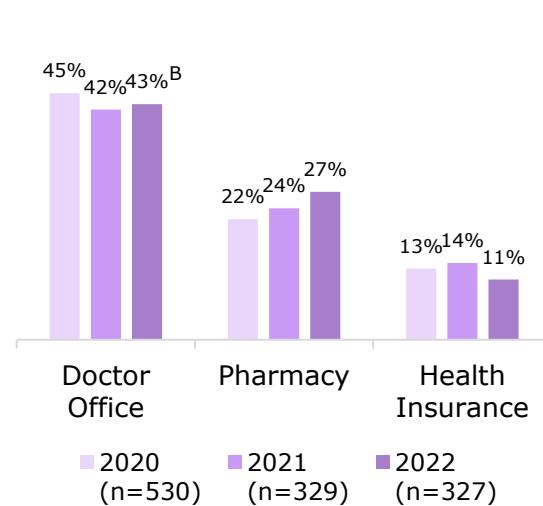
**Parents (A)**



**Adults (B)**



**Chronics (C)**



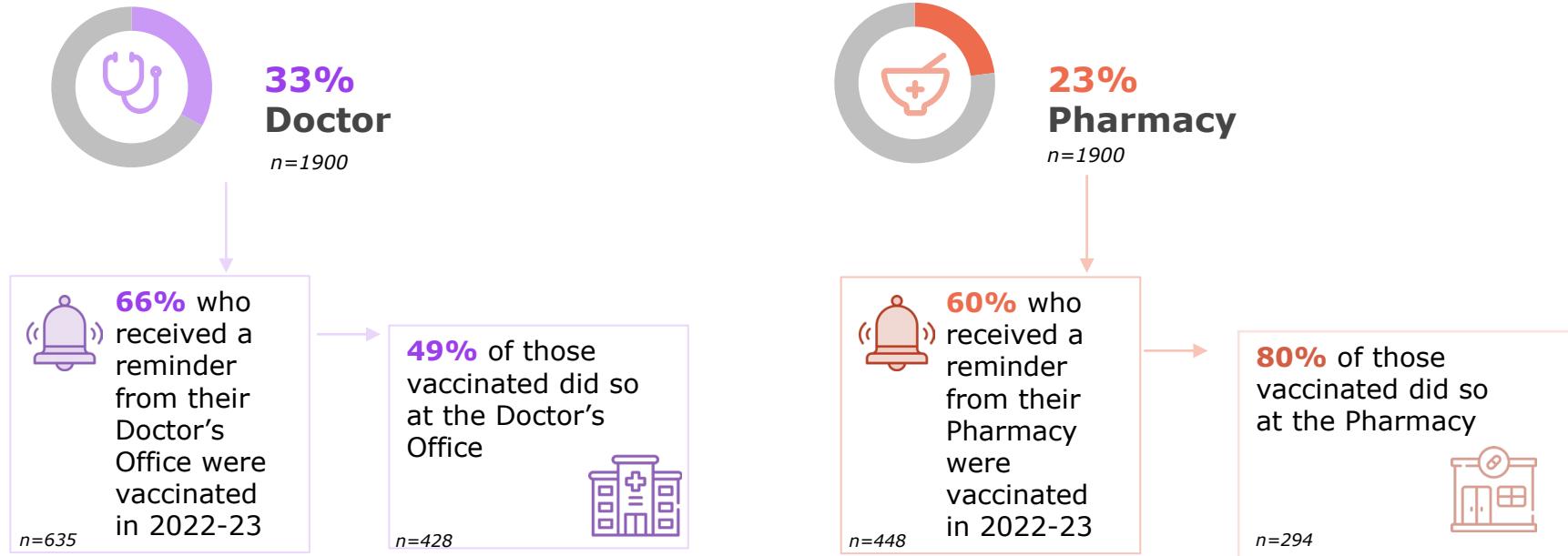
q10. Did you receive any **reminders** to get a flu vaccine [for your child] this season?



Text indicate statistical significance at 95%  
Arrows indicate significant change over previous year

# Pharmacy reminders led to a large number of vaccinations in 2022-23

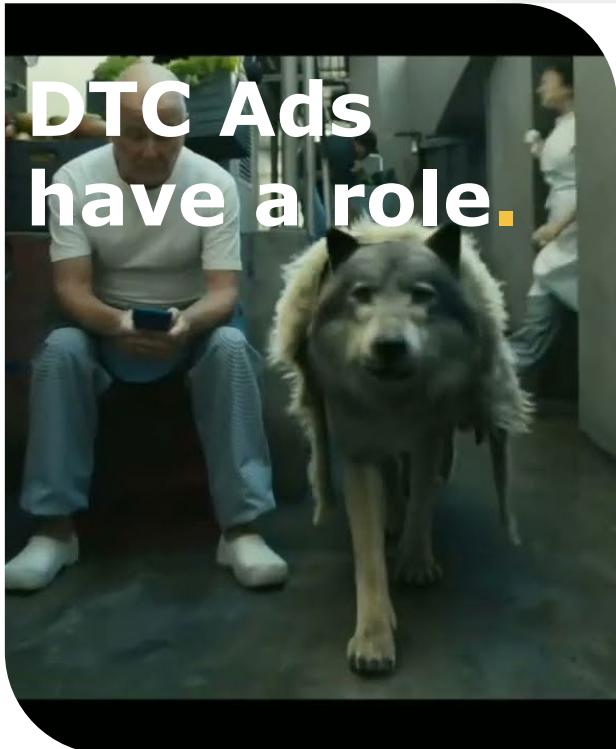
## Source of Flu Vaccine Reminder Impact on Vaccination and Location Among Adults



q10. Did you receive any reminders to get a flu vaccine [for your child] this season? q38: Where was your [child's] flu vaccine administered?

q4. For each year listed, please indicate whether [you/your child] received a flu immunization, did not receive a flu immunization, or if you don't recall.

## Key Finding 6



### **Association of manufacturer as 'brand', particularly for vaccines, is largely a product of the pandemic**

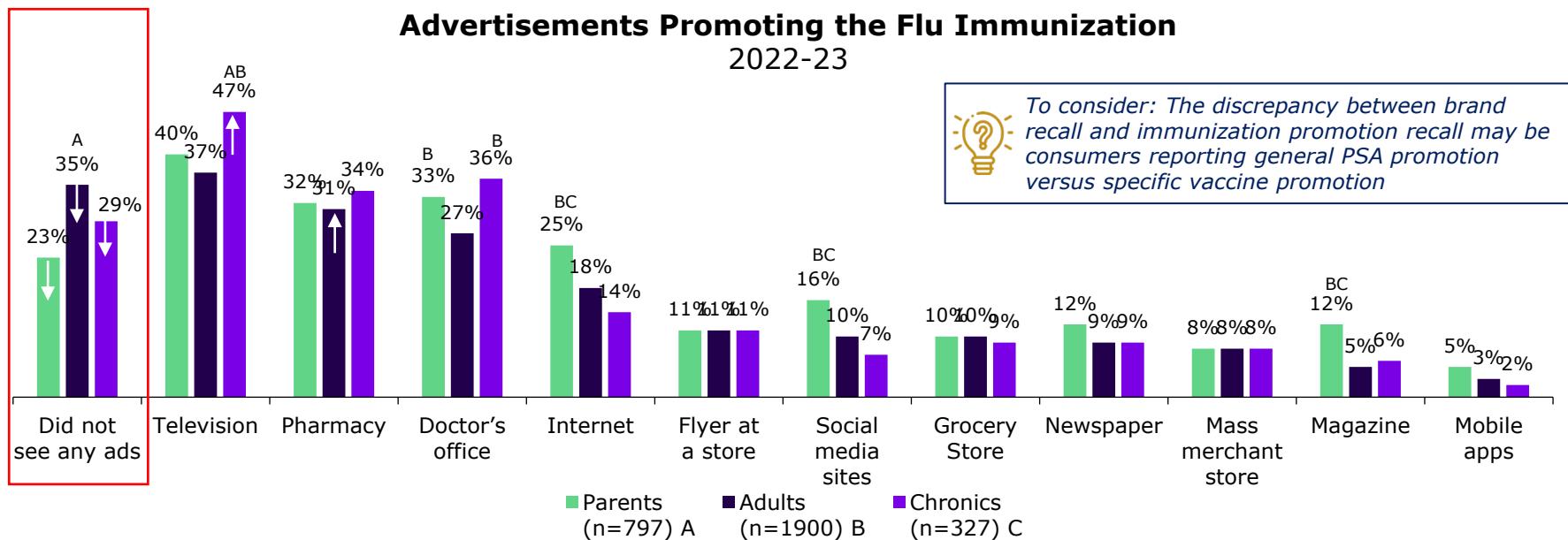
- Prior to this – and still largely today – the general population referred to all vaccines generically as “flu shot” or “pneumonia shot”. As a result, actual brand names will require heavy socialization to be recognized, let alone requested
- Overall brand awareness at time of fielding (*summer/non-flu season*) is low for all flu vaccines.
- Aided, seniors are increasingly able to identify Fluzone High-Dose as a known brand.



Leveraging the corporate Sanofi brand in all marketing efforts could help boost requests as well

# Promotions for influenza vaccination are recalled in higher numbers overall in 2022-23 with TV the most mentioned

Among HCP sources, Adults are least likely to notice promotions but did so at higher rates at the pharmacy than 2021-22



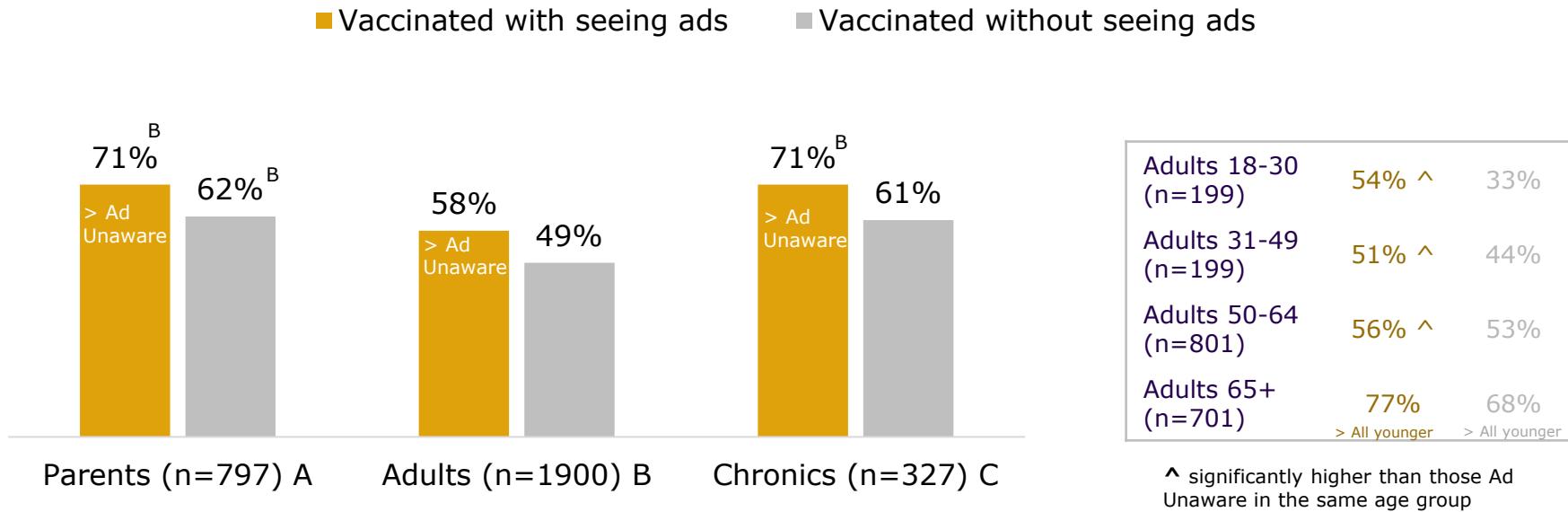
q50. Did you see advertisements promoting the flu immunization in any of the following? Please select all that apply



Letters indicate statistical significance at 95%  
Arrows indicate significant change over previous year

# Advertising has a positive impact on vaccination rates

## Flu Vaccine Ad Aware And Immunization Rates: 2022-23



Base: Total Sample

Q4r1. This year - For each year listed, please indicate whether [you/your child] received a flu immunization, did not receive a flu immunization, or if you don't recall.

q50. Did you see advertisements promoting the flu immunization in any of the following? Please select all that apply

**sanofi**

Text indicate statistical significance at 95%

Arrows indicate significant change over previous year

Unaided awareness of flu vaccine brand names is low, ranging from 0% to 6%, with parents being the most familiar with brands

### Unaided Brand Names Of Flu Vaccines: 2022-23

Coded Verbatims	<b>Parents</b>	<b>Adults</b>	<b>Chronics</b>
	A n=797	B n=1900	C n=327
<b>None</b>	<b>60%</b>	<b>74%<sup>A</sup></b>	<b>76%<sup>A</sup></b>
<b>Brand (Net)</b>	<b>9.4%<sup>BC</sup></b>	<b>2.6%</b>	<b>2.4%↓</b>
Fluzone	6.3% <sup>BC</sup>	1.8%	1.8%
Flublok	3.3% <sup>BC</sup>	1.0%	0.6%
Flulaval	1.9% <sup>B</sup>	0.3%	0.3%
Fluarix	1.8%	1.0%	0.9%
Afluria	2.0%	1.0%	0.6%
Fluad	0.9% <sup>B</sup>	0.1%	0.3%
Fluzone HD	0.6% <sup>B</sup>	0.1%	0.0%
Flucelvax	1.2% <sup>B</sup>	0.0%	0.0%
<b>Manufacturer (Net)</b>	<b>25.3%↑</b>	<b>21.1%↑</b>	<b>20.2%↑</b>
Pfizer	16.8%	13.3%	11.9%
Johnson & Johnson	8.6%	7.4%	8.0%
Moderna	5.6%	5.0%	3.7%
Sanofi (Pasteur)	1.7% <sup>B</sup>	0.4%	0.6%

Base: Total Sample

Q6.A Which brands or company names of influenza (Flu) vaccine come to mind that you are aware of?



Shows mentions over 2%

It is likely that consumers cannot distinguish between the Fluzone and Fluzone HD brands



Consumers continue to incorrectly identify the COVID-19 vaccine as the manufacturer's name vs the actual brand name. Most mentions are for Pfizer.

Among adults 65+, 2.7% say Fluzone and 0.4% say Fluzone High-Dose while 0.2% say Senior Shot and 0.0% High Dose

Letters indicate statistical significance at 95%

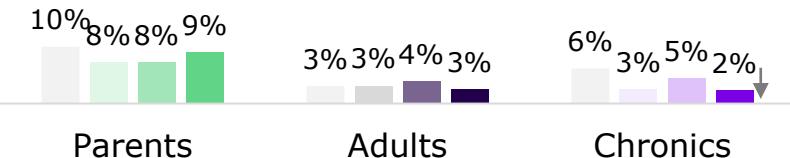
Arrows indicate significant change over previous year

# The association of manufacturer as 'brand' is largely a product of the pandemic

## Unaided Awareness of Brand Names Of Flu Vaccines

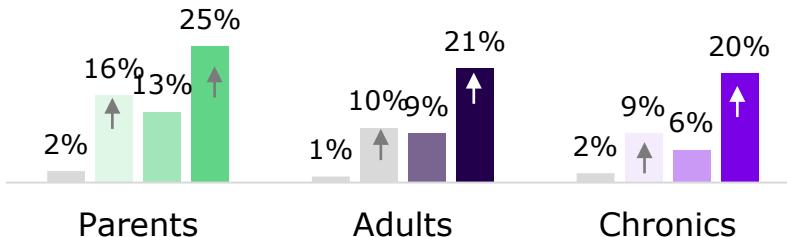
### Named a flu vaccine brand

■ 2019 ■ 2020 ■ 2021 ■ 2022



### Named a pharma manufacturer

■ 2019 ■ 2020 ■ 2021 ■ 2022



### Top Brands Names (2022-23)

Fluzone	6% - 2% - 2%
Flublok	3% - 1% - <1%
Fluarix	2% - 1% - 1%
Fluzone HD	<1% - <1% - 0%

Base: Total Sample

Q6.A Which brands or company names of influenza (Flu) vaccine come to mind that you are aware of?



### Top Manufacturer Names (2022-23)

Pfizer	17% - 13% - 12%
J&J	9% - 7% - 8%
Moderna	6% - 5% - 4%
Sanofi	2% - <1% - <1%
GSK	2% - <1% - 1%

Letters indicate statistical significance at 95%

Arrows indicate significant change over previous year

# Although still low, Sanofi brands have the highest aided awareness of flu vaccine brands among Adults

## Unaided and Aided Brand Awareness: Adults Trending

Unaided - Coded Verbatims	2020 <i>n=1899 A</i>	2021 <i>n=1986 B</i>	2022 <i>n=1900 C</i>
<b>None</b>	<b>83%<sup>c</sup></b>	<b>82%<sup>c</sup></b>	<b>74%</b>
<b>Brand (Net)</b>	<b>3.3%</b>	<b>4.1%<sup>c</sup></b>	<b>2.6%</b>
Fluzone	1.8%	3.1% <sup>AC</sup>	1.8%
Flublok	0.8%	0.4%	1.0% <sup>B</sup>
Fluarix	1.2%	0.7%	1.0%
Afluria	1.5% <sup>B</sup>	0.4%	1.0% <sup>B</sup>
Flulaval	0.4%	0.1%	0.3%
Fluzone High Dose	0.2%	0.1%	0.1%
Fluad	0.4%	0.5% <sup>C</sup>	0.1%
Flucelvax	0.3% <sup>C</sup>	0.6% <sup>C</sup>	0.0%
<b>Manufacturer (Net)</b>	<b>9.7%</b>	<b>9.4%</b>	<b>21.1%<sup>AB</sup></b>
Pfizer	6.2%	6.2%	13.3% <sup>AB</sup>
Johnson & Johnson	5.0%	3.7%	7.4% <sup>AB</sup>
Moderna	2.9%	2.8%	5.0% <sup>AB</sup>
Merck	0.4%	0.3%	1.1%
Novartis	0.0%	0.3%	0.6% <sup>A</sup>
GSK	0.1%	0.5%	0.5%
Sanofi Pasteur	0.0%	0.1%	0.4% <sup>AB</sup>

Base: Total Sample

Q6.A Which brands or company names of influenza (Flu) vaccine come to mind that you are aware of? Q6. Which of the following brands of the influenza vaccine are you aware of?



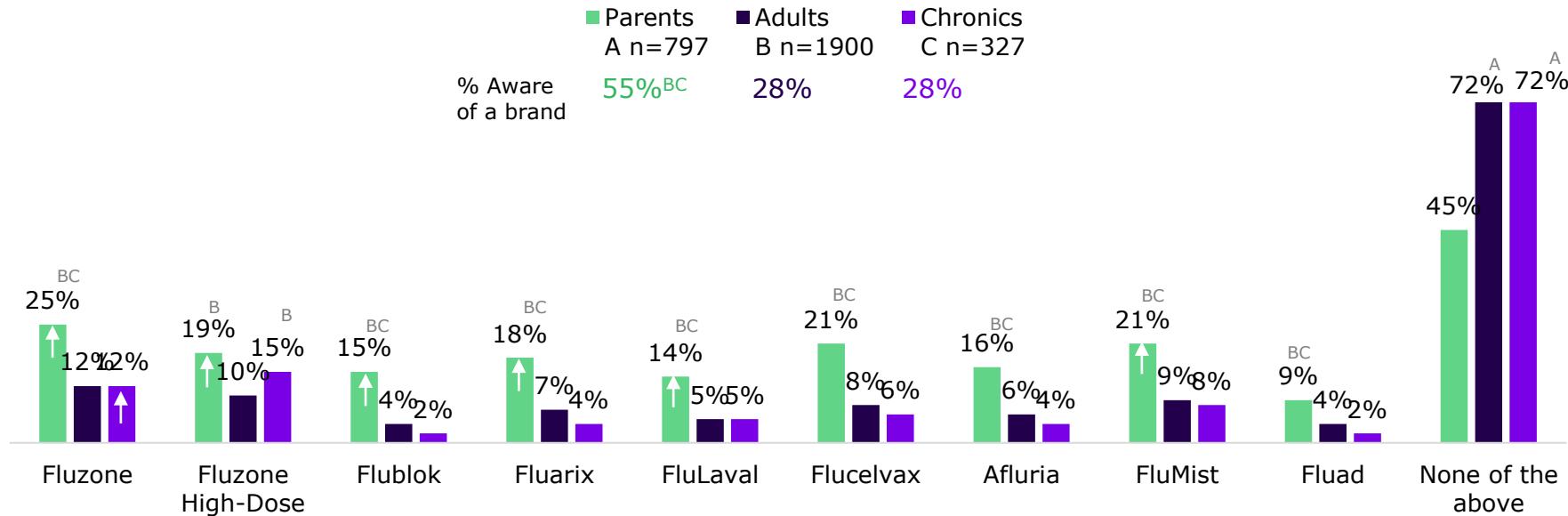
Aided Selection from List of Brands	2020 <i>n=1899 A</i>	2021 <i>n=1986 B</i>	2022 <i>n=1900 C</i>
	<b>None</b>	<b>68%</b>	<b>70%</b>
Fluzone	10%	10%	12%
Fluzone High Dose	10%	8%	10%
Flucelvax	8%	7%	8%
Fluarix	6%	5%	7%
Afluria	7%	7%	6%
Flulaval	5%	4%	5%
Flublok	5%	3%	4%
Fluad	5%	3%	4%

Adults 65+ Only	2020 <i>n=700 A</i>	2021 <i>n=700 B</i>	2022 <i>n=701 C</i>
	<b>Unaided</b>	<b>Fluzone</b>	<b>2.7%</b>
	Flublok	0.0%	0.1%
	Fluzone High Dose	0.0%	0.6%
	Sanofi Pasteur	0.2%	0.1%
<b>Aided</b>	Fluzone High Dose	11%	10%
	Fluzone	5%	8% <sup>A</sup>
	Flublok	0.3%	0.2%

# Parents are more familiar with vaccine brands than general adult populations though many can't name a specific brand

## Aided Brand Names Or Types Of Flu Vaccines: 2022-23



Base: Total Sample

Q6: Which of the following brands of the influenza vaccine are you aware of?

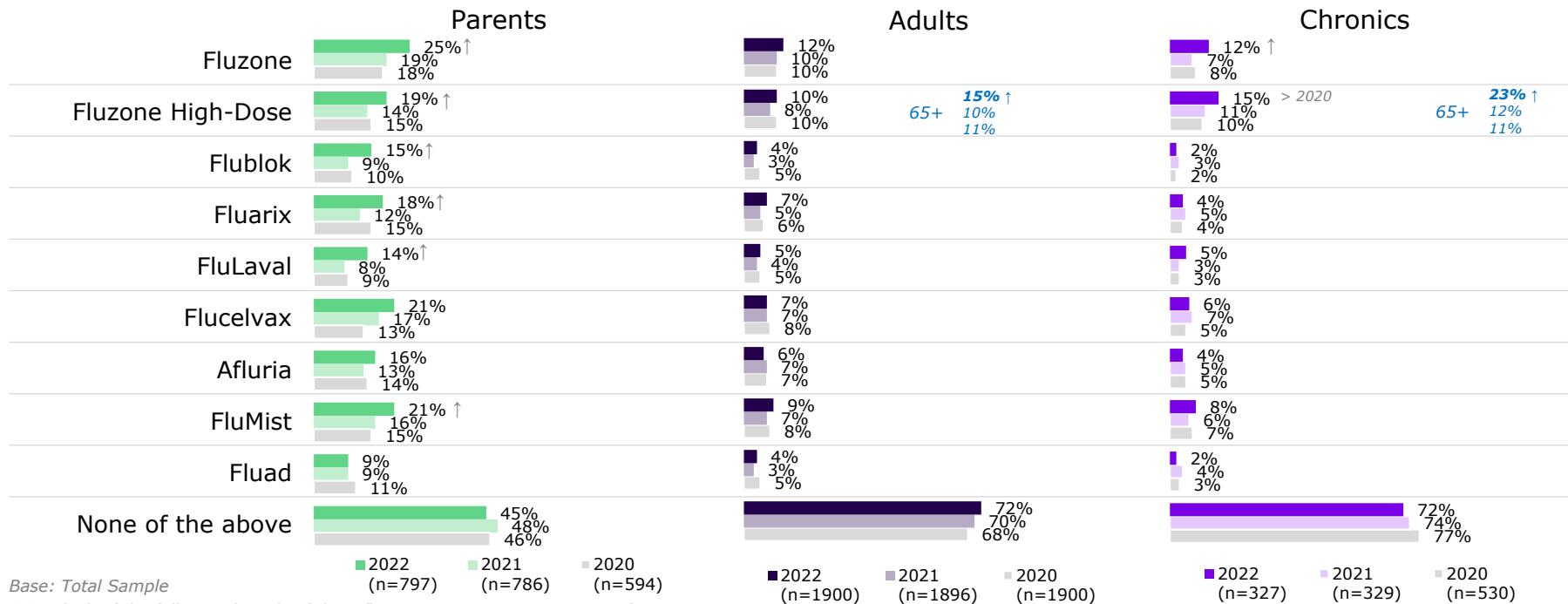


Text indicate statistical significance at 95%

Arrows indicate significant change over previous year

Fluzone and Fluzone HD are the most recalled flu vaccine brand names among Adults and HD has made significant growth over 2020 and 2021 for those over 65

### Aided Brand Names Or Types Of Flu Vaccines: 2022-23



# A minority of consumers are making requests for specific brands of influenza vaccines

## Branded Requests Made Among Those Brand Aware: 2022-23

**Parents**  
(n=344) A



**42%**<sup>BC</sup> made a request for a specific brand

19%<sup>BC</sup> of all Parents

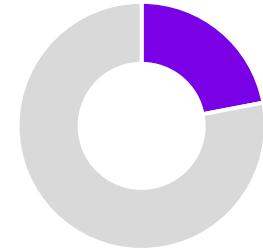
**Adults**  
(n=352) B



**27%** made a request for a specific brand

6% of all Adults

**Chronics**  
(n=73) C



**22%** made a request for a specific brand

5% of all Chronics

Base: Those who received a vaccine this season and were aware of a brand name

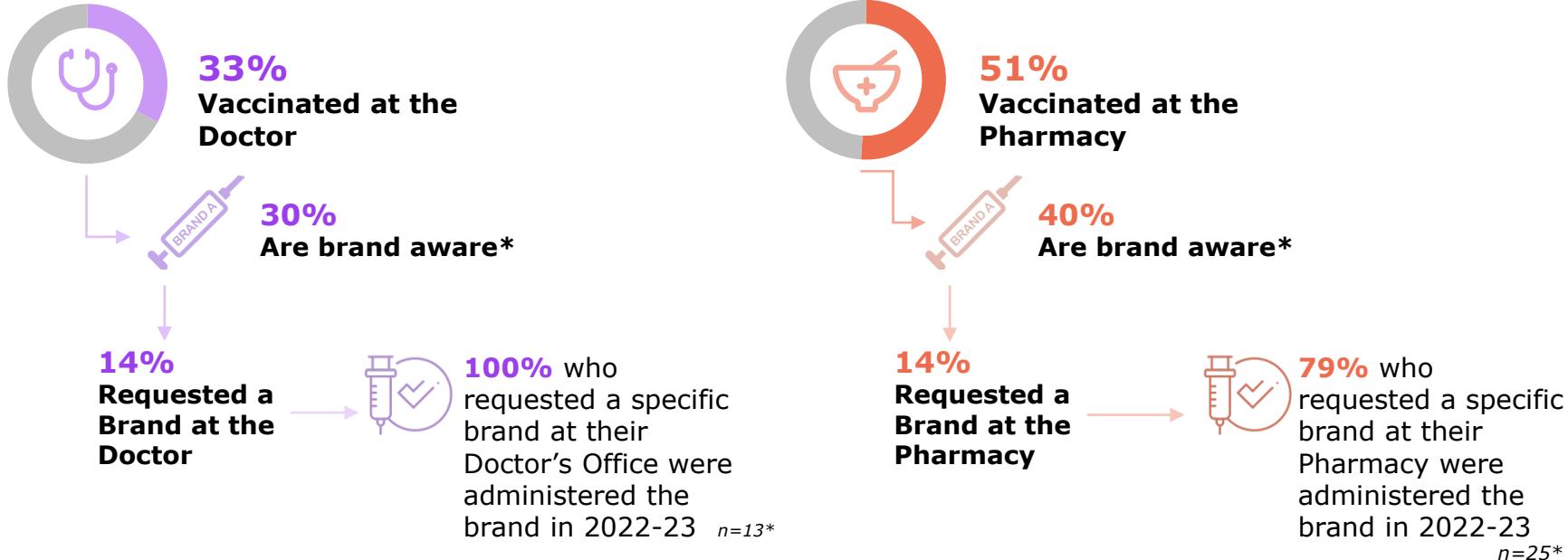
Request. Did you request a specific brand of flu vaccine (by name) this past season (2022-23) from your doctor's office or pharmacy?



To consider: Consumers are now accustomed to being asked "which" COVID vaccine they want (by manufacturer), but probably are not asked which Flu vaccine they want

# Among the very few who requested a specific brand, most were granted their request

## Branded Requests Made Among Immunized Adults 18+: 2022-23 (n=1139)



Base: Those who received a vaccine this season and were aware of a brand name

Request: Did you request a specific brand of flu vaccine (by name) this past season (2022-23) from your doctor's office or pharmacy?

Received: Did you receive the flu vaccine that you requested?

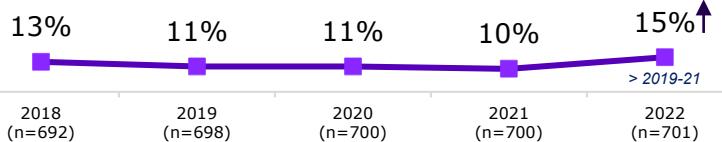
\* Caution: Small sample size

Sample sizes required to report results by brand are too small

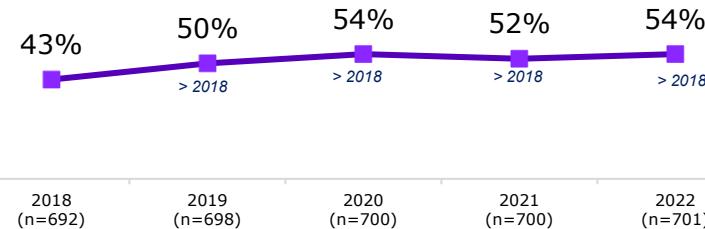
Senior's awareness of Fluzone HD continues to trend upwards, however the percent who are highly likely to seek it next season dropped this year

### Fluzone High-Dose KPI Metrics: Trending Among Total Adults 65+

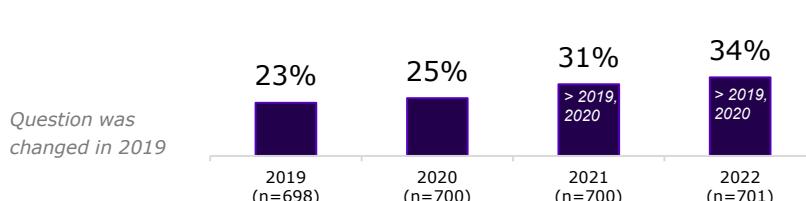
Aided Awareness of Fluzone HD  
(Selected from a list of brands)



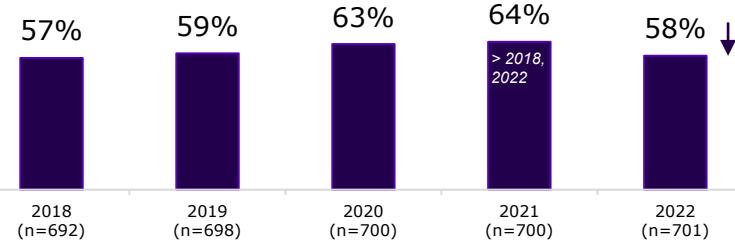
Prompted Awareness of Fluzone HD  
(After Product Description Shown)



HCP Recommendations of Fluzone HD in Past Year  
(After Product Description Shown)



% Highly Interested in Seeking Fluzone HD Next Season  
(After Product Description Shown)



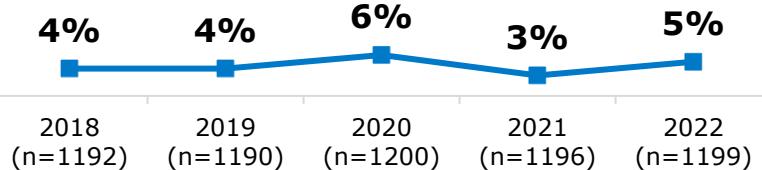
See notes for question wording



Awareness of Flublok remains low, however interest in the brand after seeing the description remains steady over the past several years

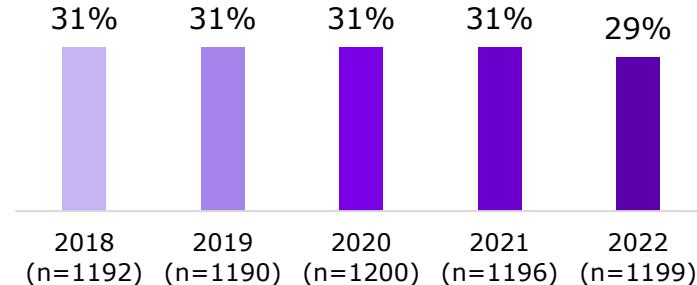
### Adults < 65 Aware of Flublok - Trending

(Selected from a list of brands)



### Interest In Flublok - Trending

(7-10 Box Among Adults < 65)



See notes for question text



Arrows indicate significant change over previous year

## Key Finding 7



**What's in store for the upcoming 2023-24 season?**

**Increasing tension around the need to vaccinate among adults as concerns trend upwards around persistent flu vaccine myths**

- For the 2023-24 season, likelihood remains high for parents to seek a flu immunization for their children
- With RSV of relatively low concern among adults, the newly approved vaccine for those 60+ could contribute to further noise in the fall respiratory market along with COVID boosters
- A significant portion of the population have concerns with multiple vaccines administered concurrently

# Adults and Parents report steady interest in seeking a flu vaccine next season while Chronics report levels back up to pre-COVID levels

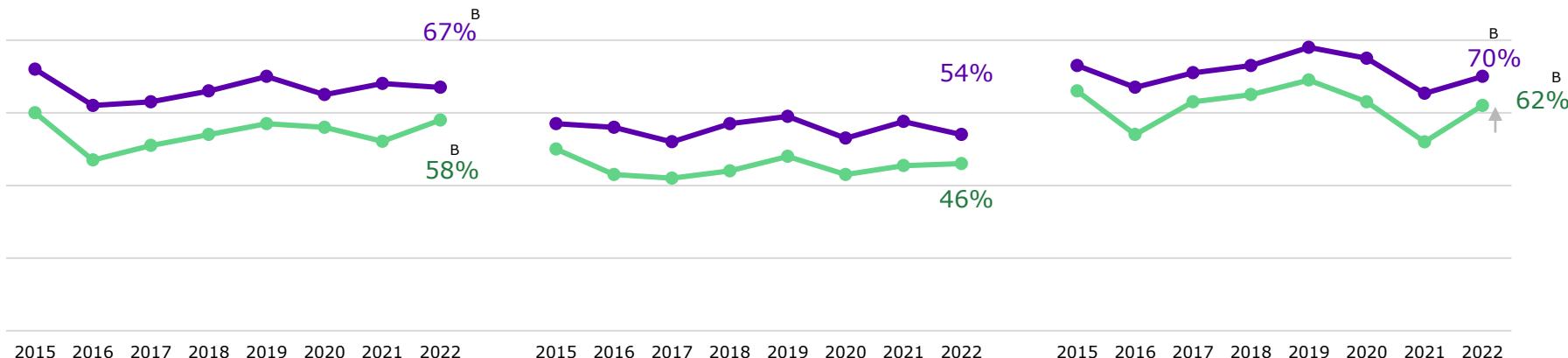
## Top Box Scores (7-10) on Attitudes - Trending

### Parents (A)

### Adults 18+ (B)

### Chronics (C)

—●— Highly likely to seek next season    —●— Flu vaccine is critical to maintaining health

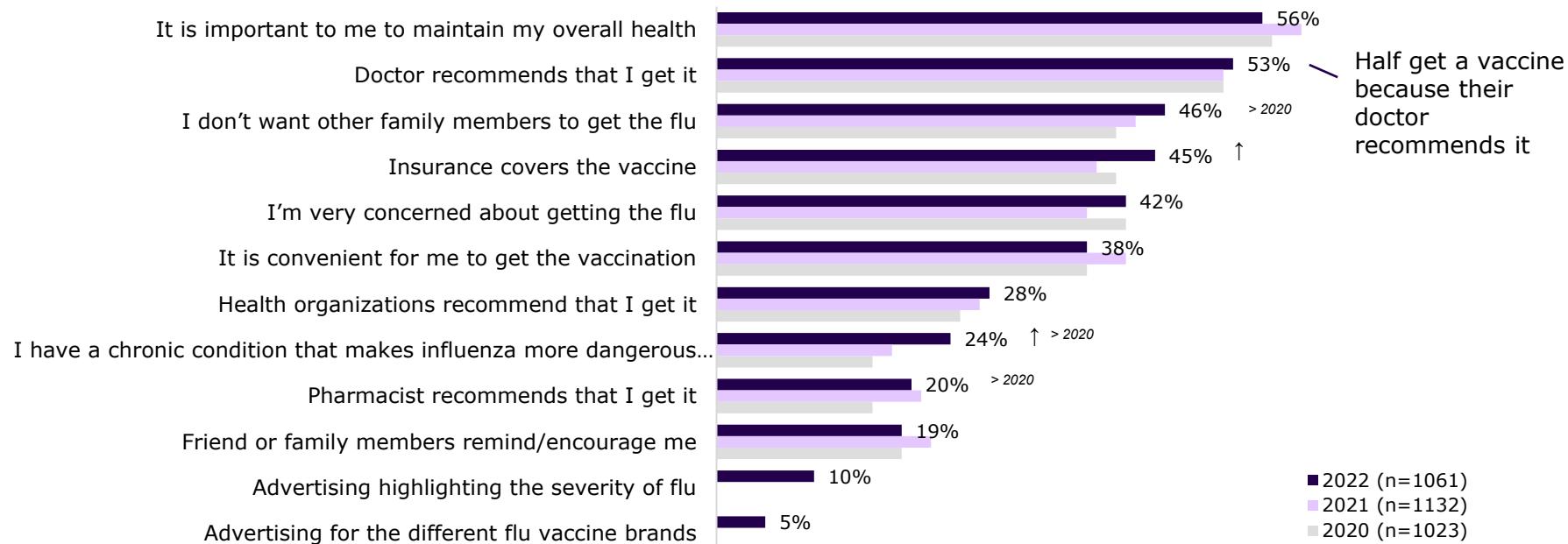


q72. How critical do you consider the flu vaccination to be in maintaining your health [your child's health]?

q74. How likely are you to seek a flu immunization [for your child] next year?

# Adults who consistently get vaccinated for flu recognize it's important for their health and their family members' health as well

## Reasons For Getting Yearly Flu Vaccinations Among Adults

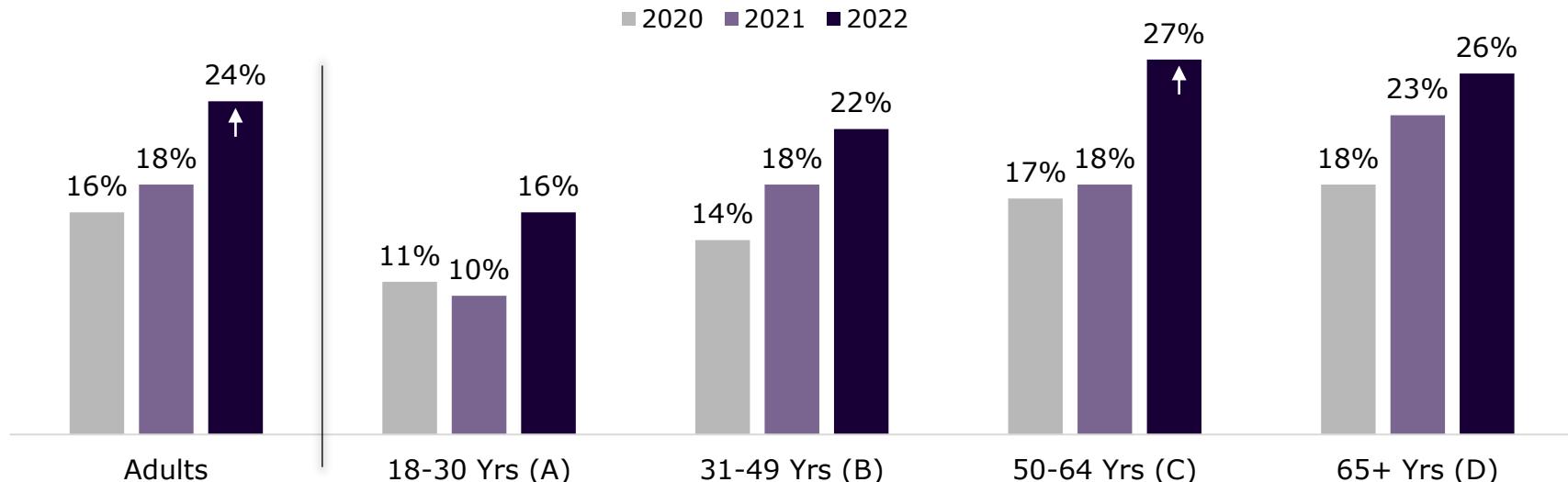


Base: Adults who agree they consistently get their flu vaccine

q18a. What are the main reasons that you consistently get your flu vaccination every year?

# A potential key to vaccination in 2023-24 may be educating consumers on the risks of flu complications with various health conditions

**% Who Receive A Flu Vaccine Consistently Because They Have a Chronic Condition that Makes Influenza More Dangerous for Them**



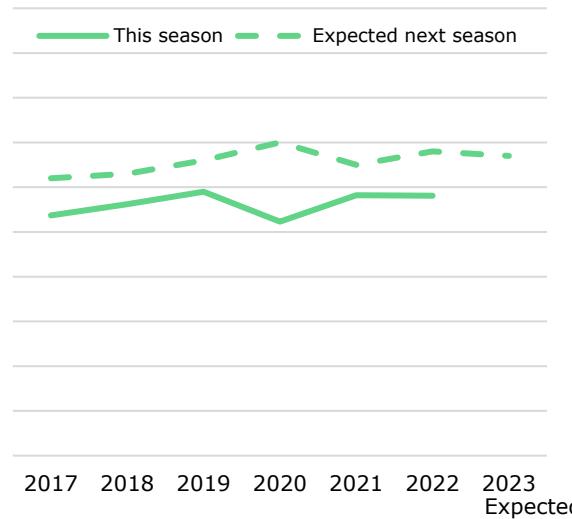
Base: Adults who agree they consistently get their flu vaccine  
q18a. What are the main reasons that you consistently get your flu vaccination every year?

Letters indicate statistical significance at 95% Current Year  
Arrows indicate significant change over previous year

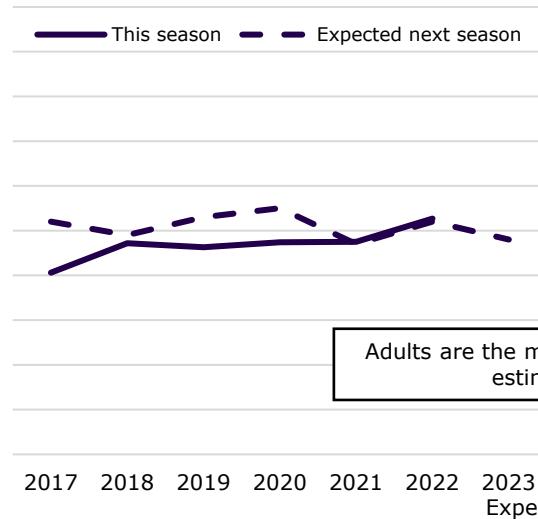
Expectations for immunizing the following season tend to align with the current season's immunization rates

### Historical Reported Influenza Immunization Rates and Intent by Age Group - Trending

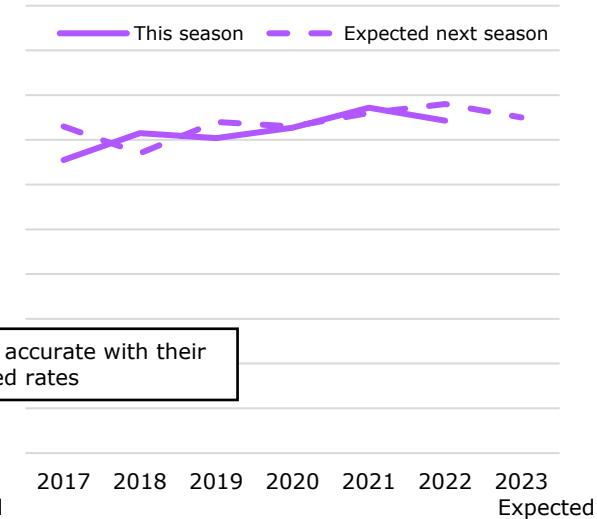
Children < 18



Adults 18-64



Adults 65+



Adults are the most accurate with their estimated rates



Anecdotally, most across social media were pro-flu shot, but detractors had a greater list of reasons why they're not getting it



### Top Reasons to Get the Shot

\*Ranked from most to least mentioned

- Preventive/protective measures especially with the rise of sicknesses
- Had the flu before and know how bad it can be
- Must get it because their work requires it



### Top Reasons Not to Get the Shot

\*Ranked from most to least mentioned

- Didn't work when they got it previously
- Never had the flu or the flu shot so don't need it now
- Potential side effects (under the weather, arm sore/pain, Guillain-Barre syndrome, etc.) not worth it
- Skeptics don't trust big pharma/government after COVID-19
- Want to get the flu shot but out of season so no stock/availability

Adults 50-64 are more likely to feel the vaccination is not necessary while younger adults cite dislike of needles/shots along with it being inconvenient to go to the doctor more often

### **Top Reasons Consumers Will Not Get a Flu Immunization This Coming Season: 2022-23**

(among those not likely to be vaccinated)

	<b>18-30 A (n=95)</b>	<b>31-49 B (n=93)</b>	<b>50-64 C (n=285)</b>	<b>65+ D (n=171)</b>
Don't believe that I need a flu vaccination	38%	35%	49% ↑	40%
Concerned that I will get the flu from the flu vaccine	22%	18%	17%	15%
I got the flu vaccine once and had a bad reaction	12%	22%	16%	24% ↑
I do not like needles	<b>24% c</b>	18%	12%	13%
I do not like to receive shots	22%	12%	15%	15%
I don't want to get another vaccination after the COVID vaccine*	10%	14%	14%	17%
I got the flu from vaccine previously	<b>17% c</b>	6%	7%	<b>14% c</b>
Inconvenient to go to the doctor	<b>15% cd</b>	5%	5%	4%
There are prescription medications available to treat the flu, so I do not feel the vaccine was necessary	12%	3%	8%	9% ↑
A healthcare professional recommended I not get one	4%	9%	4%	8% ↑
Cost of the vaccine	8%	5%	6%	6%
Do not want to be around others when getting vaccinated	3%	<b>6% c</b>	0%	3%

Q32\_N. Why might you [your child] not seek a flu vaccine this coming year? New 2020



\* Only asked of those who already received a COVID vaccine, see notes for bases

Text indicate statistical significance at 95%

Arrows indicate significant change over previous year

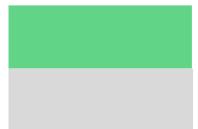
# Fewer Chronic Adult “fence sitters” would be more inclined to seek a vaccine if 2023-24 turned out to be a severe season

## % Who would be more likely to seek a flu vaccine by scenario

Among those who are not initially highly likely to seek a flu vaccine already

### Parents

The flu variants this season are considered more severe than usual



49%  
49%

### Adults

n=676



53%  
52%

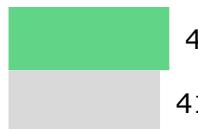
### Chronics

n=114



43%  
61%

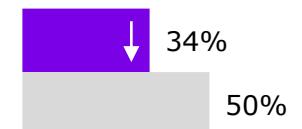
The CDC recommended a specific flu vaccine for your profile (e.g., age group)



43%  
41%



41%  
45%



34%  
50%

■ 2022 n=268 ■ 2021 n=255

■ 2022 n=730 ■ 2021 n=676

■ 2022 n=98 ■ 2021 n=114

Q740. How likely are you to seek a flu immunization next season if... (New 2021)

**sanofi**

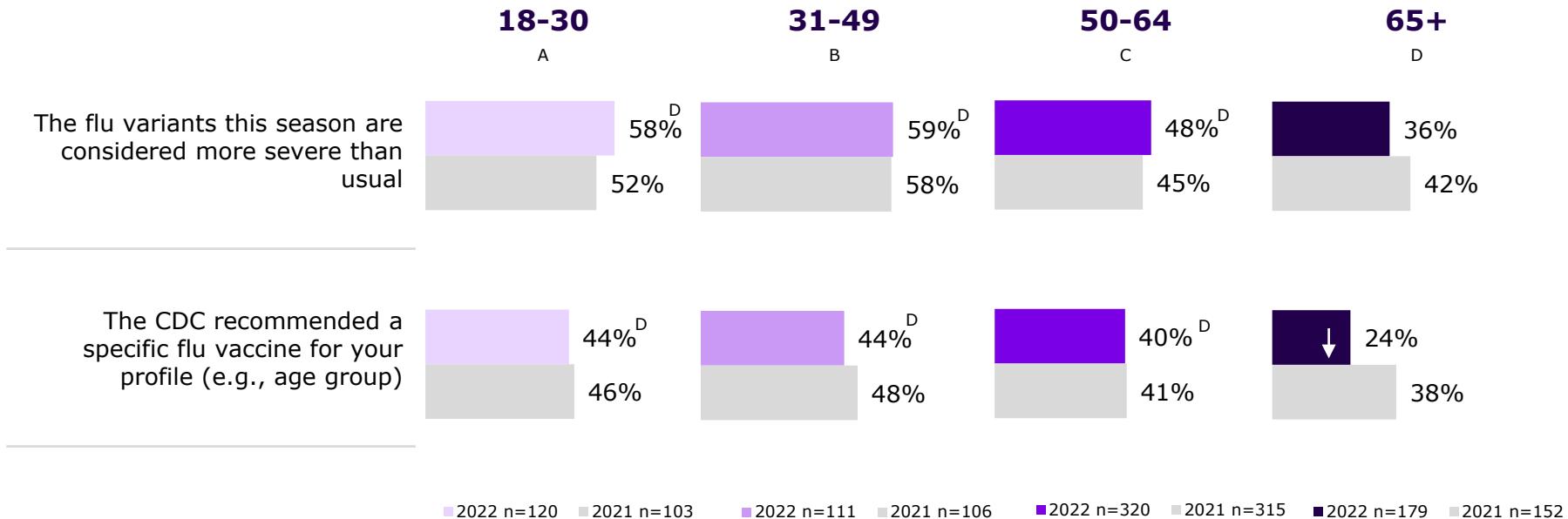
INTERNAL USE

Text indicate statistical significance at 95%  
Arrows indicate significant change over previous year

Seniors who are not committed to a flu vaccine next season are less likely to be influenced by a more severe season or a vaccine specific to their age group than younger cohorts

### % Who would be more likely to seek a flu vaccine by scenario

Among **Adults** who are not initially highly likely to seek a flu vaccine already



Q740. How likely are you to seek a flu immunization next season if... (New 2021)

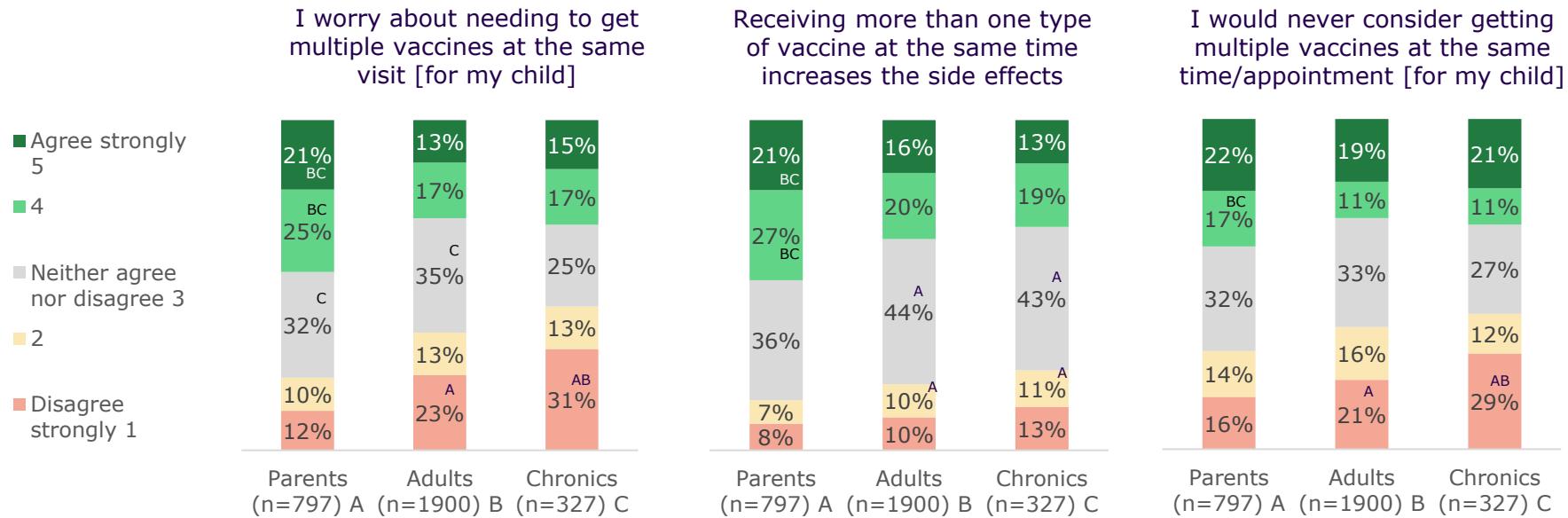


INTERNAL USE

Text indicate statistical significance at 95%  
Arrows indicate significant change over previous year

# Despite having the most experience with multiple vaccines administered at the same visit, Parents have the highest concern over the need

## Level of Agreement: 2022-23



CoAdmin. Please rate your agreement with the following statements on a 1 to 5 scale. \*New 2022



INTERNAL USE

Letters indicate statistical significance at 95%  
Arrows indicate significant change over previous year



# A review of Q4 2022 social media revealed most anti-vax sentiments were from older consumers

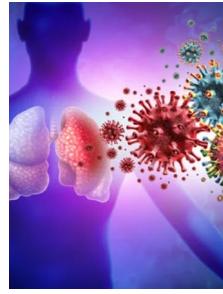
Boomers and Gen X generated 81% of anti-vax associated conversation (in general, including the flu).

This was followed by Millennials and Gen Z at a distant 10% and 9%, respectively.



Gen X and Boomers tend to be extremely vocal on social, especially those who self-identify as Conservative. This group tends to connect only within like-minded communities and avoid pushback.

# Key Chapters



Marketing &  
Media

62

Respiratory  
Infection  
Influences

82

Ethnicity

99

Parents

122

Consumer  
Segments

139

Appendix

156



## Detailed Findings

*Marketing and Media*

# KEY INSIGHTS

## Marketing and Media

**01**

Unaided awareness of flu vaccine brands remains low among consumers with many still mistakenly listing COVID vaccine manufacturers

**02**

More consumers recall seeing ads for flu immunizations this season, with TV and Pharmacy promotions as the leading sources

**03**

Parents report higher rates of brand awareness while Fluzone is the most known flu brand among Adults

**04**

Doctors and Pharmacists remain the most trusted sources of vaccine information

# Recall of flu vaccine news story lines about a severe season were higher among all cohorts

## News Stories or Articles Discussing the Flu Vaccine: 2022-23

	Parents (A) n=797	Adults (B) n=1900	Chronics (C) n=327
Who should receive a flu shot	22%	21%	<b>31% AB</b> ↑
Availability / Where to receive a vaccination	<b>27% B</b>	21%	21%
How bad the flu season is	<b>24% B</b> ↑	18% ↑	<b>26% B</b> ↑
How well the flu shot works	<b>25% BC</b>	16%	16%
The dangers of getting both COVID-19 and the flu	<b>18% B</b>	13%	18%
Recommendations / safe to get COVID-19 and FLU vaccines together	13%	13%	18%
Stories about people who had gotten the flu and died or had complications	<b>12% B</b>	7%	9%
Existence of different types of flu shots	<b>13% B</b>	7%	9%
The flu shot does not work well	<b>11% BC</b>	6%	4%
Did not see any news stories or articles about the flu vaccine	32%	<b>47% A</b>	<b>42% A</b>

q318. Did you see any **news stories or articles** with information about the flu vaccine during this past season?

Please select all that apply



Letters indicate statistical significance at 95%  
Arrows indicate significant change over previous year

# Adults 50+ recall news stories on the severe flu vaccine more often in 2022

## News Stories or Articles

### Discussing the Flu Vaccine: 2022-23

	<b>18-30</b> (n=199) A	<b>31-49</b> (n=199) B	<b>50-64</b> (n=801) C	<b>65+</b> (n=701) D
Who should receive a flu shot	21%	15%	<b>22% B</b>	<b>29% ABC</b>
How bad the flu season is	19%	16%	17% ↑	21% ↑
Availability / Where to receive a vaccination	23%	23%	19%	18%
How well the flu shot works	<b>19% CD</b>	<b>19% CD</b>	12%	12%
The dangers of getting both COVID-19 and the flu	13%	10%	15%	18%
Recommendations / safe to get COVID-19 and FLU vaccines together	10%	10%	15%	<b>19% AB</b>
Stories about people who had gotten the flu and died or had complications	8%	8%	6%	5%
Existence of different types of flu shots	7%	8%	5%	7%
The flu shot does not work well	<b>9% CD</b>	<b>11% CD</b>	3%	2%
Did not see any news stories or articles about the flu vaccine	45%	46%	50%	49%

q318. Did you see any **news stories or articles** with information about the flu vaccine during this past season? Please select all that apply (New 2018)

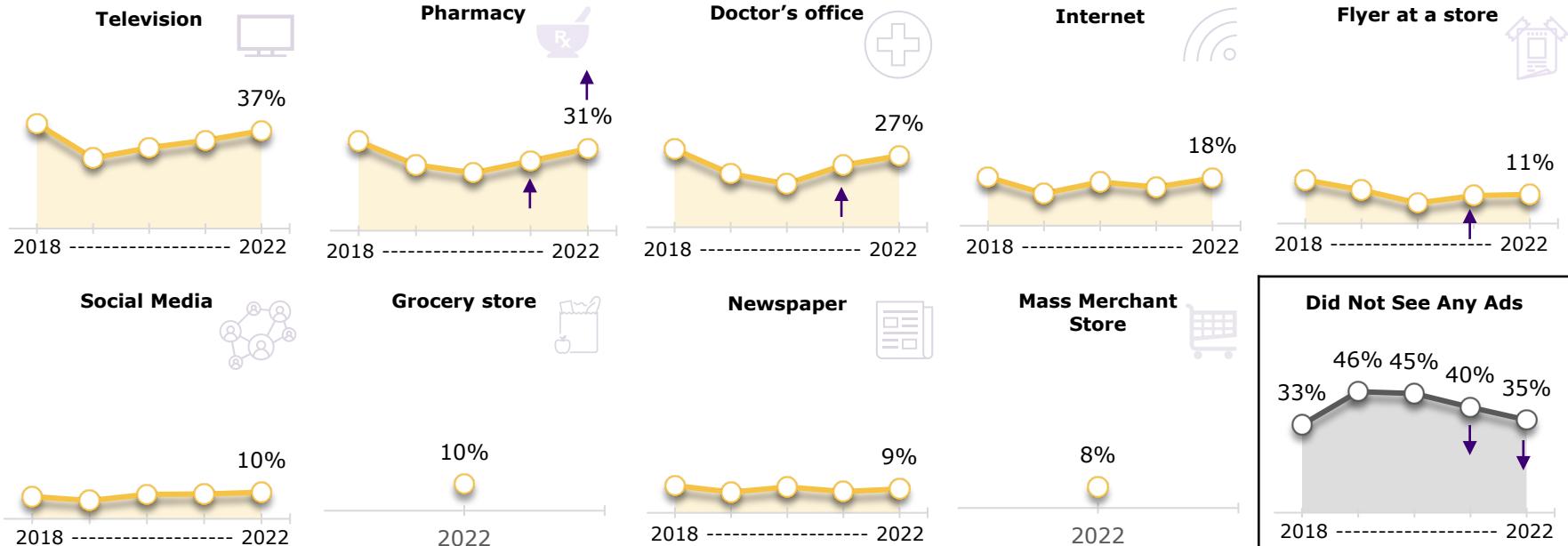


Letters indicate statistical significance at 95%  
Arrows indicate significant change over previous year

# Advertisements Promoting the Flu Vaccine

Adults Trending

## Advertisements Promoting the Flu Vaccine – Adults 18+



Charts showing those over 5%, Other responses include 2022 Magazine 5%, Mobile Apps 3%

q50. Did you see advertisements promoting the flu immunization in any of the following? Please select all that apply. Social media added in 2018, Apps added in 2019

Base: Total Adults: 2017: 1,882; 2018: 1,884; 2019: 1,888; 2020: 1,900; 2021: 1,896 2022: 1900

Arrows indicate significant change over previous year



# Although conversation is low across social platforms, Fluzone's ad generated some organic buzz specifically due to the wolf metaphor

Chatter about the ads using the wolf were minimal and isolated to last fall, when the last ad was circulating. The limited organic conversation was positive, as people found the wolf imagery memorable and impactful.

The timeline shows the following tweets:

- User 1 (10:46 AM - Nov 1, 2022):** I cannot find out who does the wolf voice on the Fluzone commercials -- so good! Any ideas who the talent is? #vomystery
- ispot.tv (10:46 AM - Nov 1, 2022):** Fluzone TV Spot, 'The Flu: Wolf in Sheep's Clothing' Check out Fluzone's 60 second TV commercial, 'The Flu: Wolf in Sheep's Clothing' from the OTC: Allergies, Cold & F...
- User 2 (11:45 PM - Sep 24, 2022):** Fluzone Wolf is awesome. All wolves are awesome, in fact.
- User 3 (9:31 AM - Oct 15, 2022):** This Fluzone commercial is interesting to see on MeTV. Don't mind this wolf, he's just the Flu.
- sanofi (@sanofi) (9:17 PM - Oct 4, 2022):** I comment on ads/ comm .Your Fluzone comm. is cleaver . Love the wolf in sheep's clothing ...

# Older adults are more likely to recall TV ads promoting the flu vaccine while online channels are more common for those under 50

## Advertisements Promoting the Flu Immunization 2022-23: Adults

	<b>18-30</b> (n=199) A	<b>31-49</b> (n=199) B	<b>50-64</b> (n=801) C	<b>65+</b> (n=701) D
Saw advertisements for flu shots (Net)	68%	64%	66% ↑	63%
Television	29%	33%	<b>44% AB</b>	<b>41% A</b>
Pharmacy	27%	29%	32%	34%
Doctor's office	26%	27%	27%	27%
Internet	<b>25% CD</b>	18%	15%	14%
Flyer at a store	11%	14%	9%	9%
Social media sites	<b>15% CD</b>	<b>12% D</b>	8%	6%
Grocery store	9%	11%	9%	9%
Newspaper	<b>12% C</b>	<b>13% CD</b>	5%	7%
Mass merchant store (Walmart, Target, etc.)	7%	8%	9%	10%
Magazine	5%	<b>9% CD</b>	3%	3%
Mobile application	<b>6% CD</b>	<b>4% CD</b>	1%	1%
Did not see any advertisements	32%	36%	34% ↓	37%

q50. Did you see advertisements promoting the flu immunization in any of the following? Please select all that apply

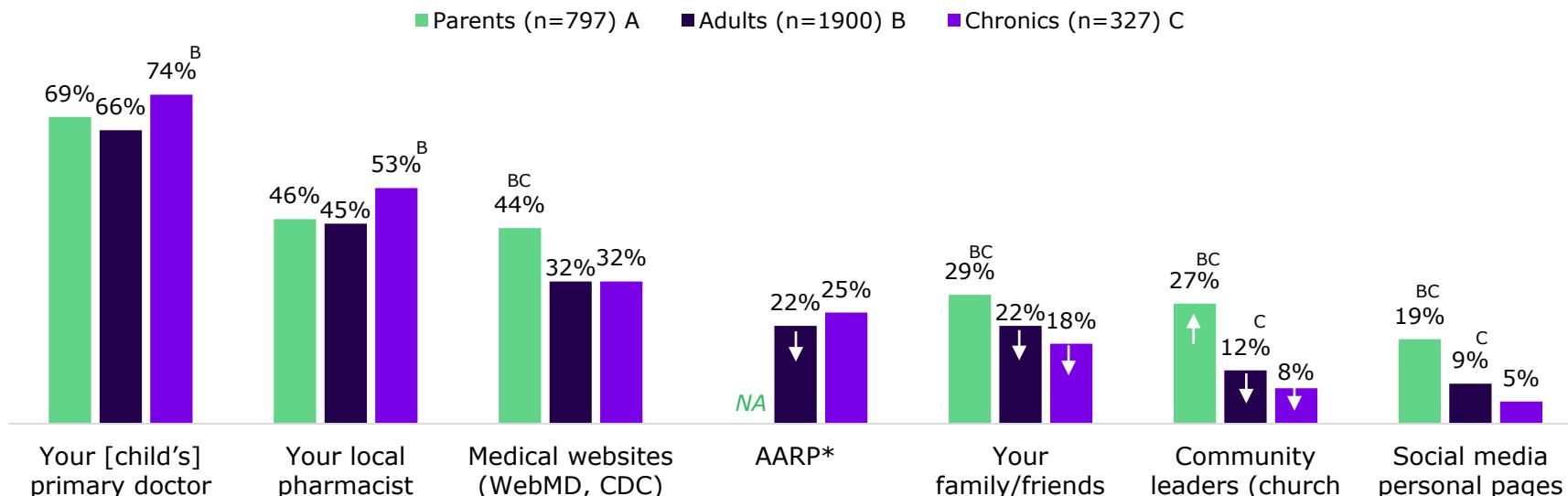


Letters indicate statistical significance at 95%  
Arrows indicate significant change over previous year

# Consumers have the highest trust in their doctors and pharmacists when it comes to flu vaccine information, followed by medical websites

## High Level of Trust In Sources For Flu Vaccine Information: 2022-23

High + Very High



\*AARP asked of Adults 50+ only

Q320. How would you describe the level of trust you have for the following medical professionals/organizations with regards to advice or information about flu shots/vaccinations? New 2020

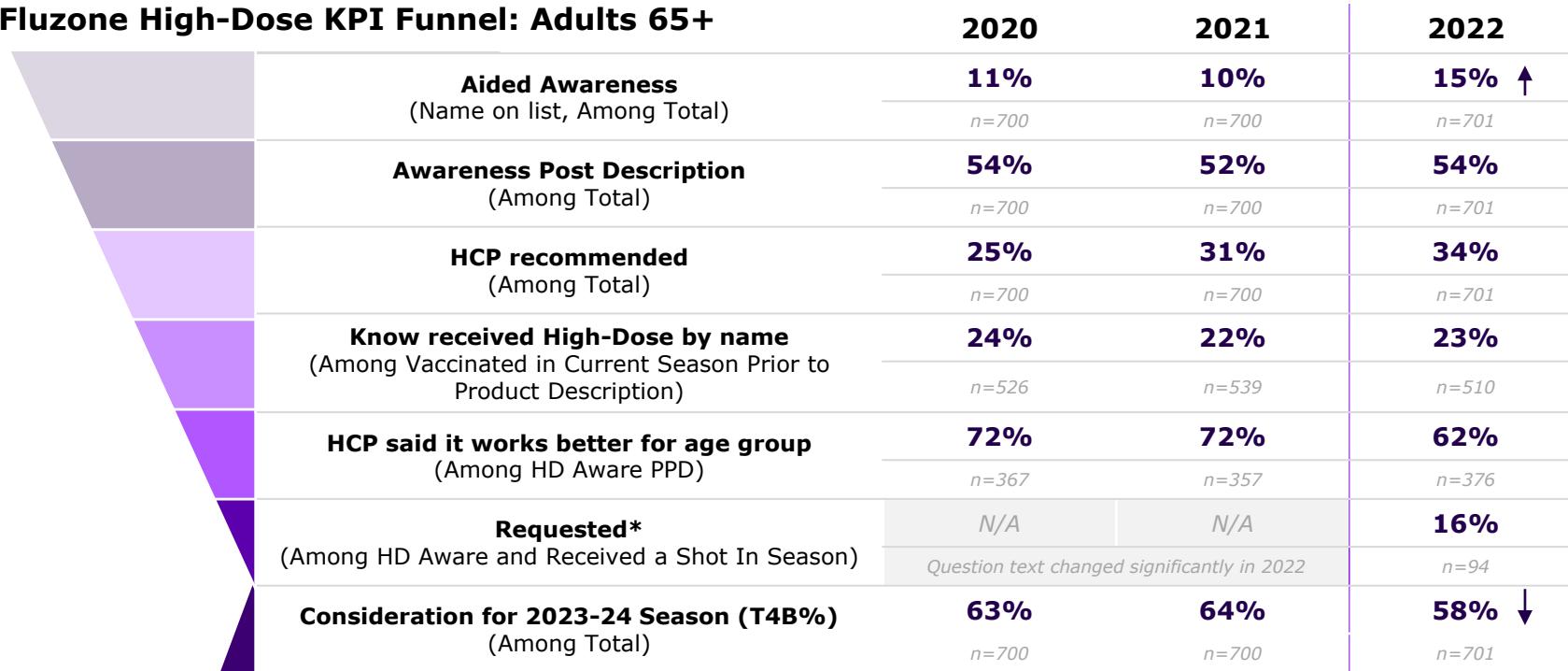
**sanofi**

Letters indicate statistical significance at 95%

Arrows indicate significant change over previous year

# Fluzone High-Dose holds steady on key metrics with aided awareness increasing while consideration drops among Seniors

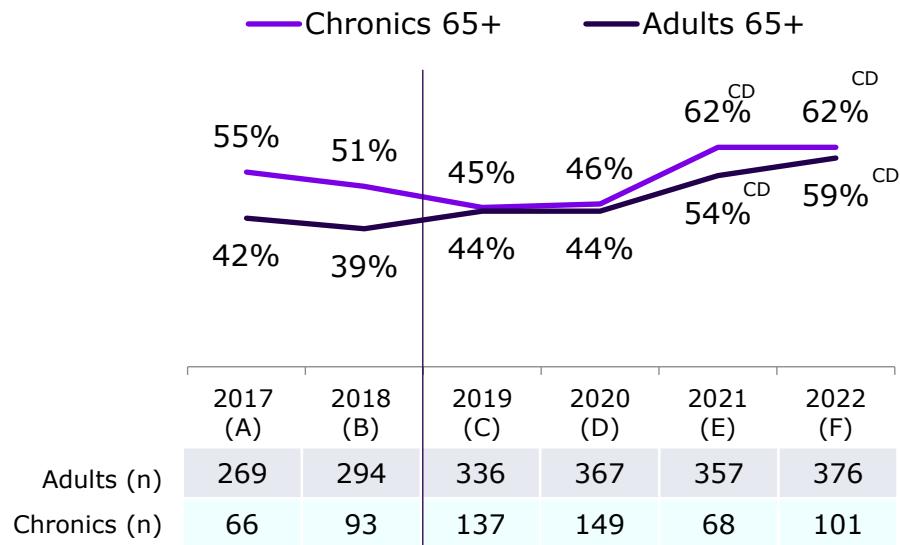
## Fluzone High-Dose KPI Funnel: Adults 65+



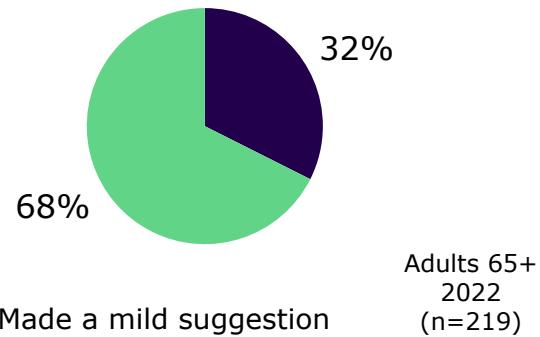
# HCP recommendations of Fluzone High-Dose continue to grow and two-thirds report they received a strong recommendation for HD in 2022

## Physician Recommendations of Fluzone HD

(Among Seniors 65+ Aware of HD)



## Strength of Fluzone HD Recommendations By Doctors



■ Made a mild suggestion

■ Made a strong recommendation

Results are similar across age bands

q210. In the past year, has your doctor recommended Fluzone High-Dose, a higher dose flu vaccine?\* Wording changed in 2019



Letters indicate statistical significance at 95%

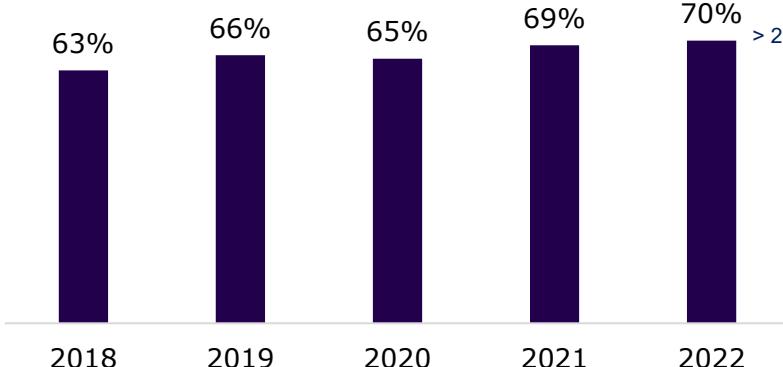
Arrows indicate significant change over previous year

More than two-thirds (70%) of Seniors place high importance on flu vaccines that are specifically made for their age group, while more Chronic seniors see the value (81%)

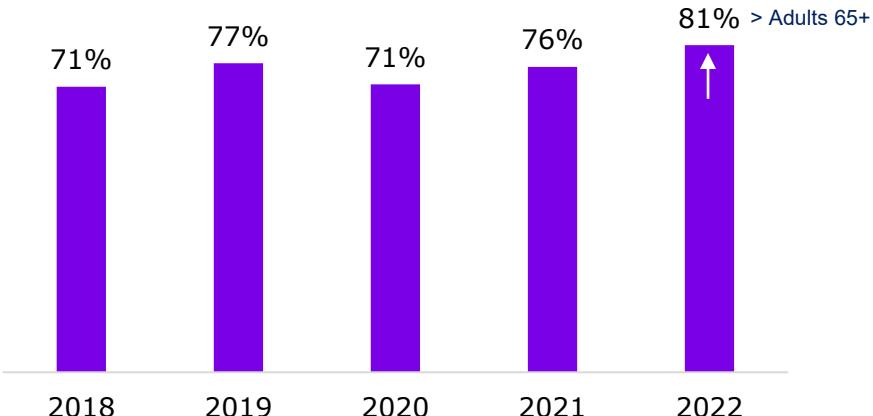
### **Perceived High Value of a Flu Vaccine Specifically Made For Seniors 65+**

(after reviewing product profile, Adults 65+)

**Adults 65+**



**Chronics 65+**



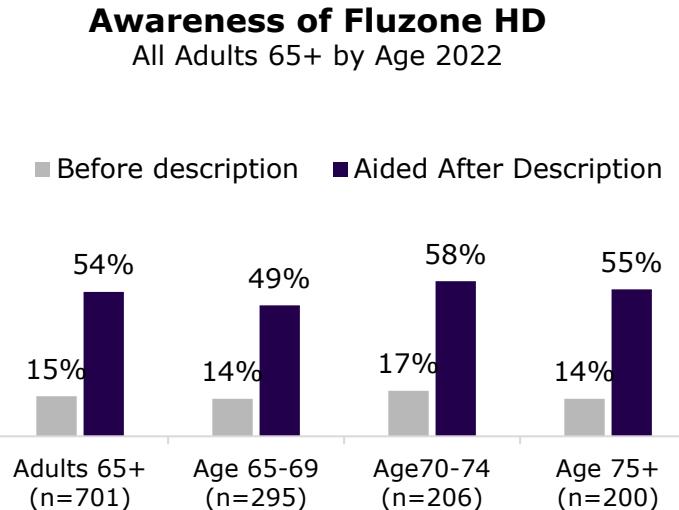
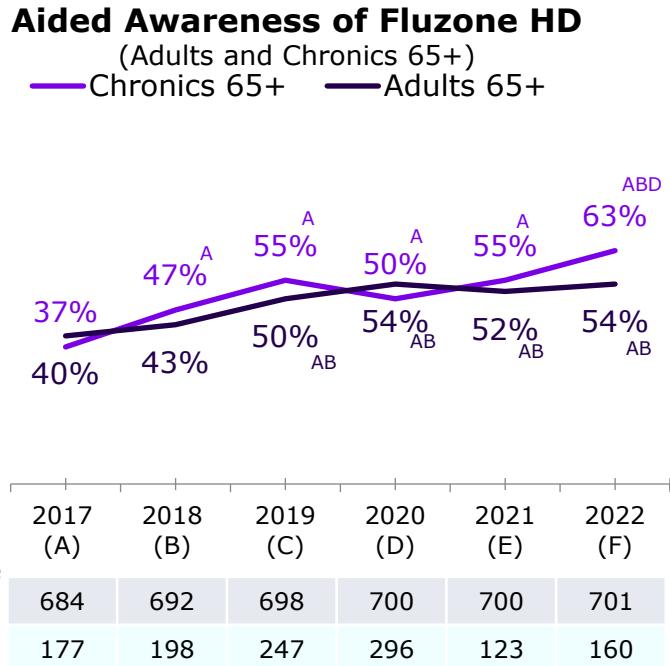
% Selecting Very Valuable 8-10 on 0-10 pt scale

q202. How valuable is an annual influenza vaccine **specifically** made for those 65+?



Letters indicate statistical significance at 95%  
Arrows indicate significant change over previous year

# Aided awareness of Fluzone High-Dose is higher this season among older Chronics (63%)



Awareness Before Description: Selected from list of brand names alone  
*This is not significantly different from prior waves*

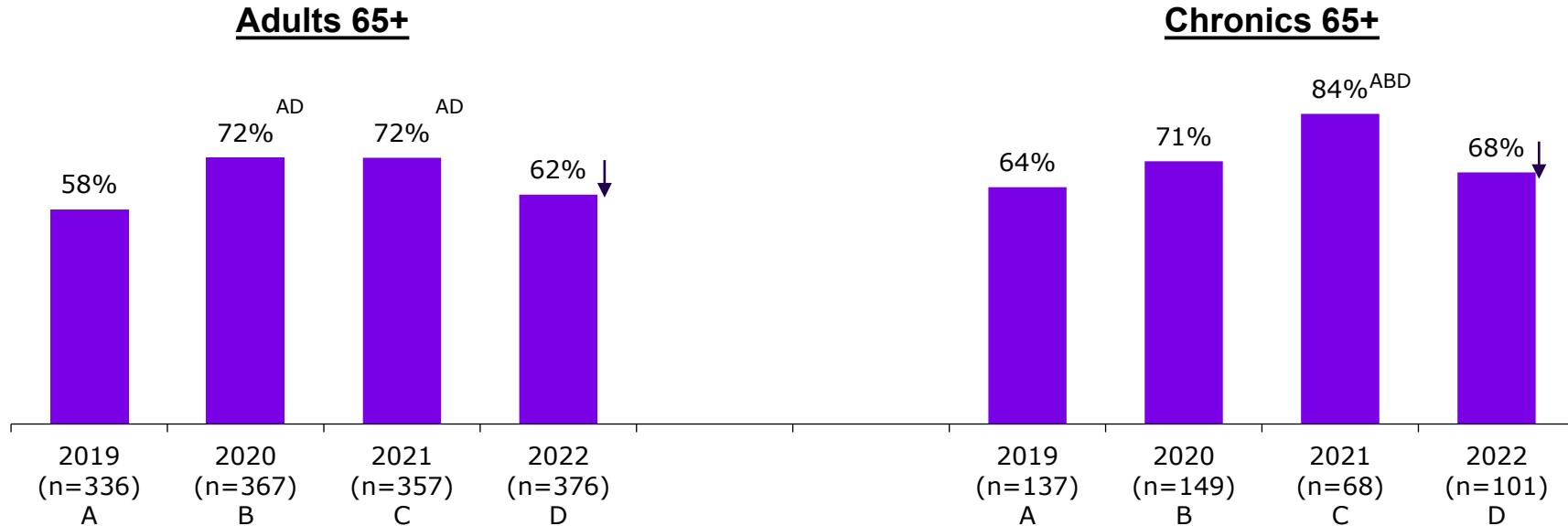
q200. [AFTER VIEWING PRODUCT DESCRIPTION] Prior to this survey were you aware that there was a higher dose flu vaccine for adults 65 and older?  
q6. Which of the following brands of the influenza vaccine are you aware of?



Letters indicate statistical significance at 95%  
Arrows indicate significant change over previous year

Fewer adults (62%) aware of High-Dose were told by their HCP that it is superior to the standard shot

**Percent Whose HCP\* Told Them HD Works Significantly Better for People Their Age vs. Regular Flu Shot**  
 (among those aware of HD)



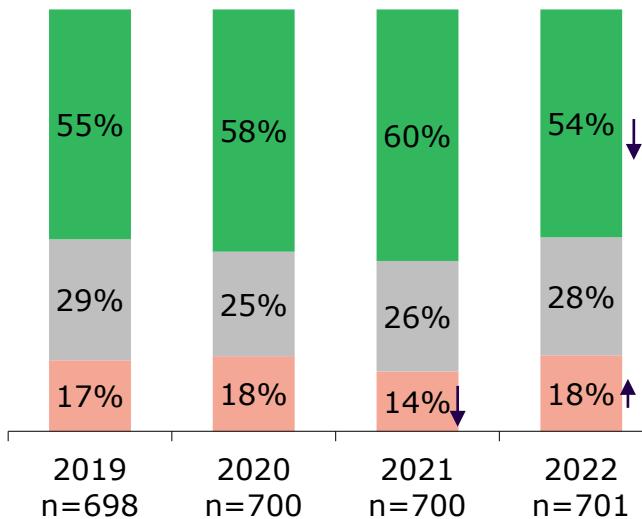
*q204. Did your healthcare provider (doctor, nurse, pharmacist) tell you the higher-dose vaccine works significantly better for people in your age group than the regular flu shot? \* Wording changed in 2020*

Fewer seniors (54%) are likely to seek High-Dose next season; Chronics are more likely (62%) to seek HD

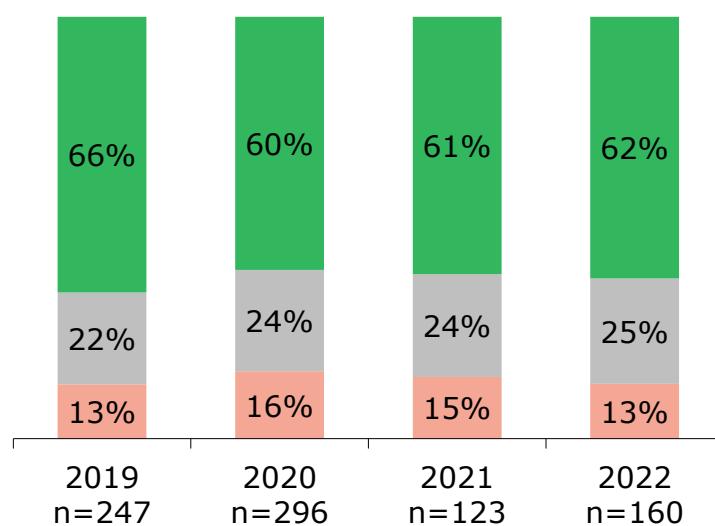
### Likelihood to Seek Fluzone High-Dose Next Season

(after reviewing product profile)

#### Adults 65+



#### Chronics 65+



Base: Adults 65+

q212. How likely are you to seek this higher dose flu vaccine during the upcoming flu season?



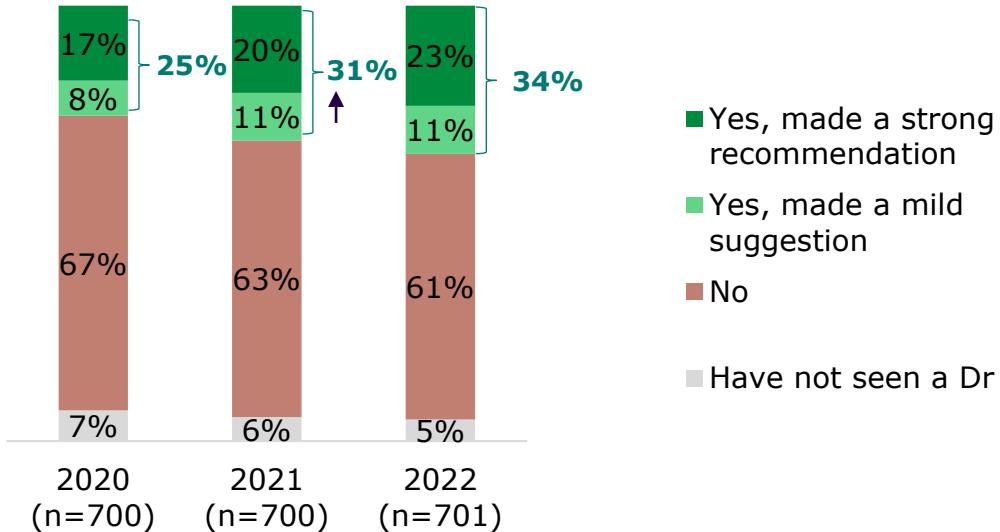
Letters indicate statistical significance at 95%  
Arrows indicate significant change over previous year

# Doctor recommendations of Fluzone High-Dose rose among Chronic Seniors in 2021

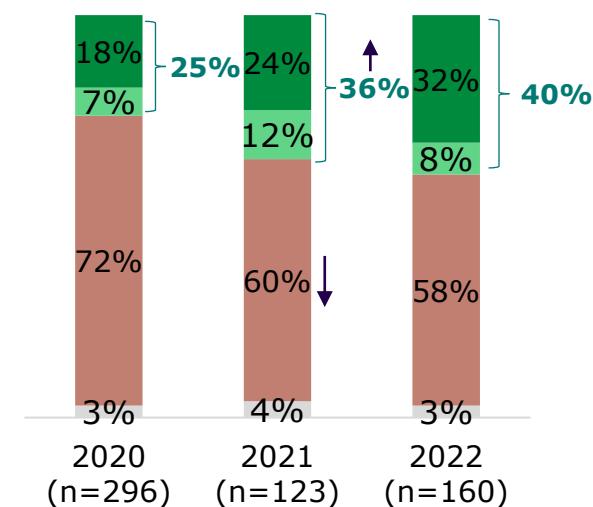
## Doctor Recommended Fluzone High-Dose

Total 65+

### Adults 65+



### Chronics 65+



q210. In the past year, has your doctor recommended Fluzone High-Dose, a higher dose flu vaccine? Options changed 2019

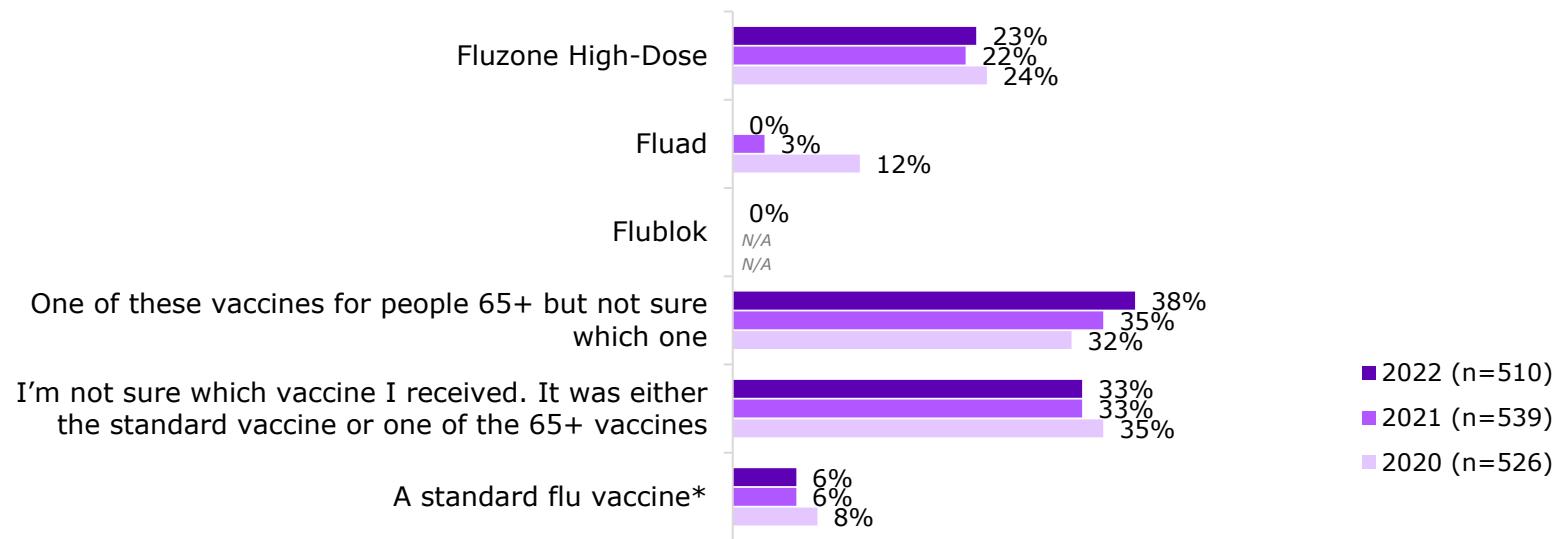
**sanofi**

Letters indicate statistical significance at 95%  
Arrows indicate significant change over previous year

# Fewer seniors report knowing which brand they received this season, but one-quarter (23%) know it was for High-Dose

## Reported Brand Received Among Vaccinated Seniors 65+

\*Before description

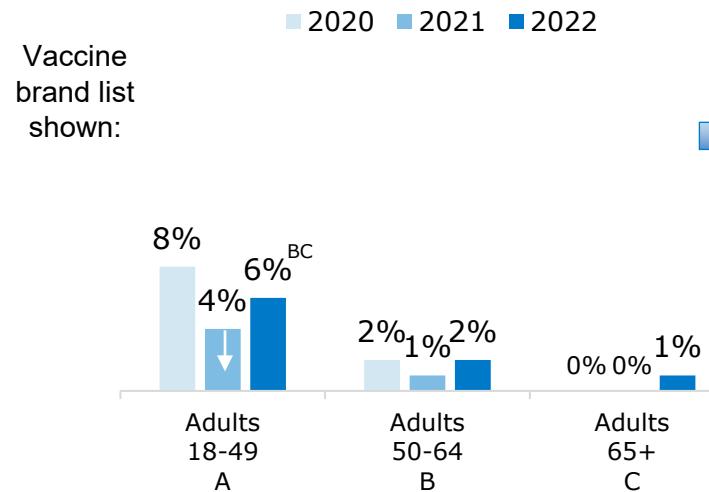


*Text changed in 2022 to remove "for people 65+" from brand names, Flublok added in 2022*

*q62. There are flu vaccines available specifically to people 65 and older in addition to the standard flu vaccine. Which of the following did you receive this flu season?*

# Flublok brand recognition remains highest among younger adults (under 50)

## Aided Awareness of Flublok



### Attributes Associated with Flublok

(Among Adults Aware of Brand Name from List  
-- Aided Awareness of Features Prior to Full Product Description)

	<b>2022-23 Adults (n=50)</b>
Is made differently than other flu vaccines	33%
More effective than the standard flu shot	32%
Preservative free	28%
Is made without eggs/good for people with egg allergies	23%
Works significantly better for people in your age group than the standard flu shot <sup>±</sup>	26% <i>n=28*</i>
Is approved for people 18 years and older	36%
Has three times the antigen/dose of a standard dose flu vaccine	27%
Is recommended for people 65+**	29% <i>n=9*</i>
None of the above	22%

q6. Which of the following brands of the influenza vaccine are you aware of?  
q100. Which of the following, if any, do you associate with the Flublok vaccine?

\*Caution: Small Sample Size

<sup>±</sup>Asked of 50+ only   \*\* Asked of 65+ Only

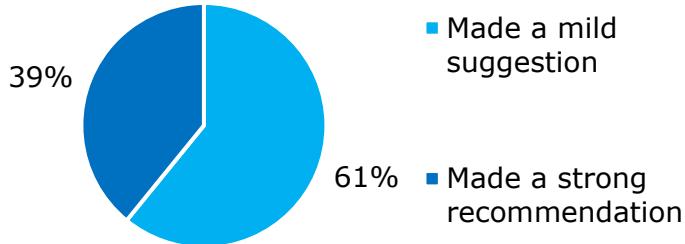
# Fewer Chronics recall a doctor recommendation for Flublok in 2022-23

## Doctor Recommendations of Flublok QIV

(Aided) — Adults 18+ — Chronics 18+



## Strength of Flublok Recommendations By Doctors



Adults 2022  
(n=184)

*q102. In the past year, has your doctor recommended Flublok Quadrivalent, an egg-free, cell-based flu vaccine?  
Wording changed in 2019*

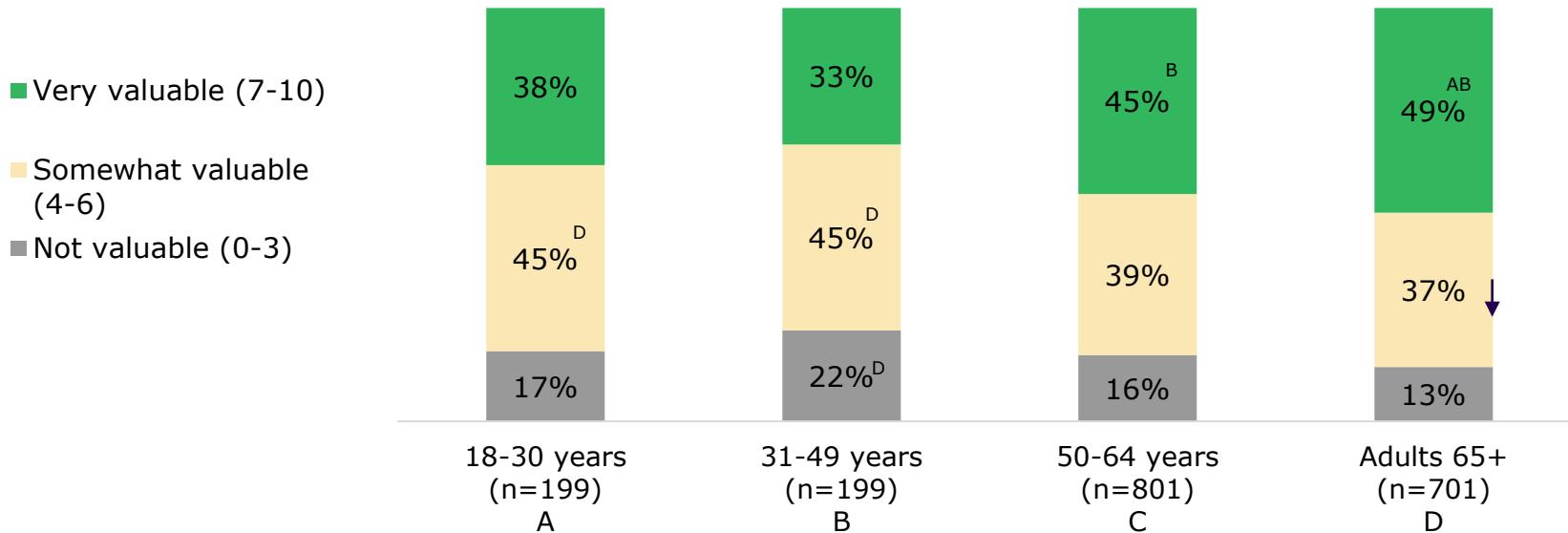


Letters indicate statistical significance at 95%  
Arrows indicate significant change over previous year

# More adults over 50 see great value in flu vaccines that are made without additives

## Perceived Value of a Flu Vaccine Made Without Egg and Other Additives: Adults

(after reviewing product profile, 2022-23 Adults n=1900)

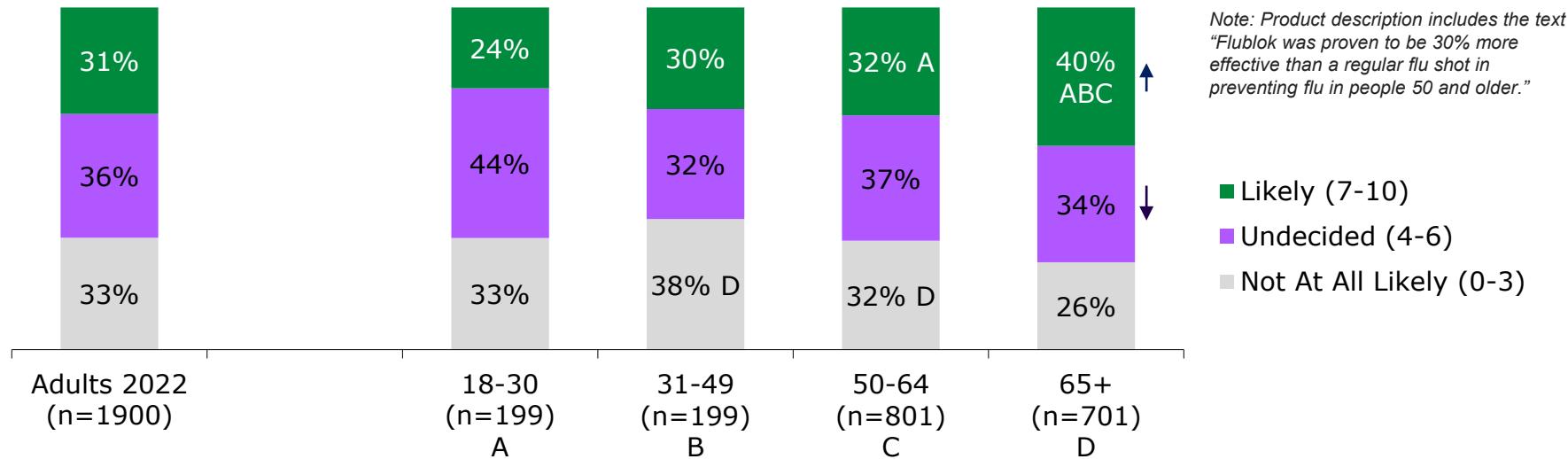


q106. How valuable is an annual influenza vaccine made with cell-based technology and without influenza virus, antibiotics, formaldehyde, preservatives, egg protein, latex, gluten or gelatin?

# A growing number of seniors are highly likely to seek Flublok next season

## Likelihood to Seek Flublok Next Season (2022-23)

Adults (after reviewing product profile)



q108. How likely are you to seek this flu vaccine, Flublok, during the upcoming flu season?

**sanofi**

Letters indicate statistical significance at 95%  
Arrows indicate significant change over previous year



## Detailed Findings

*Respiratory Infection  
Influences*

# KEY INSIGHTS

## Respiratory Infection Influences

**01**

Infectious respiratory infections are well known among consumers and most see COVID as the most significant threat to their health

**02**

RSV is not seen as a main threat to most age groups, however parents of infants express high interest in an RSV vaccine

**03**

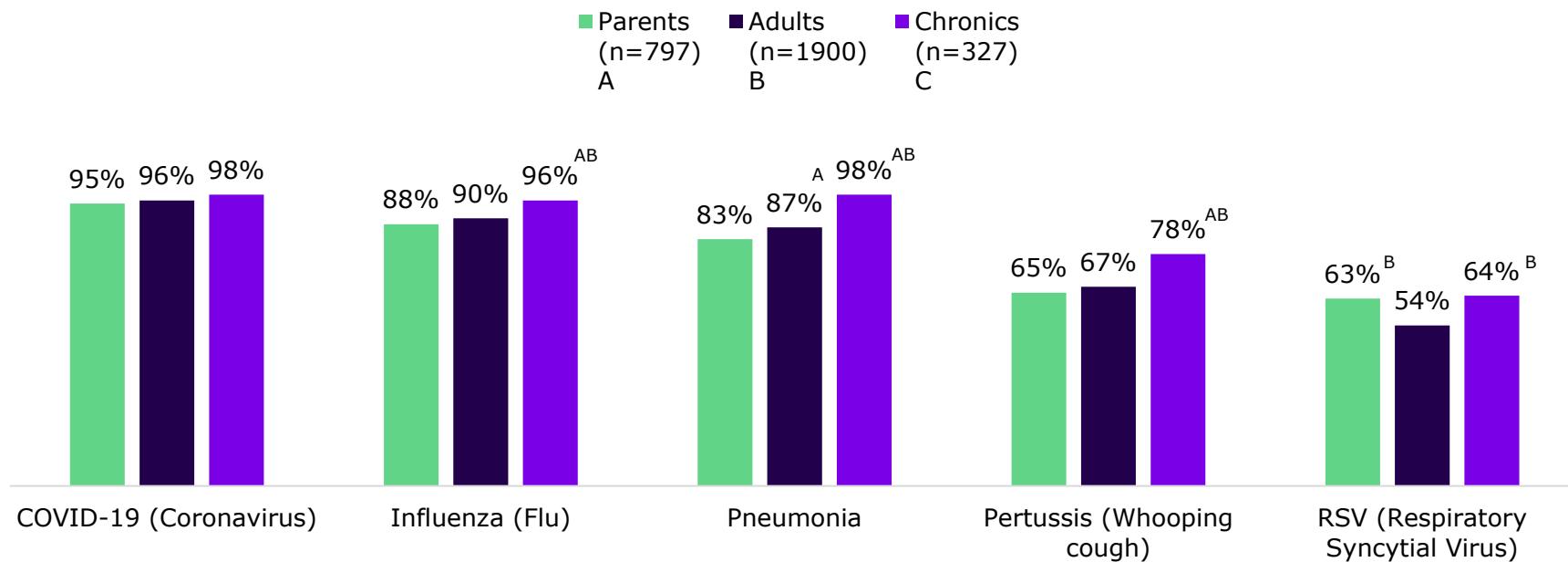
Fewer Adults report COVID vaccinations in 2022 and dropping interest in seeking one in the next 12 months

**04**

Fewer consumers would be interested in an updated flu vaccine made with mRNA, with a third of Adults would be willing to take a combination COVID+FLU vaccine

# Chronic Adults have higher awareness of key respiratory illnesses

## Awareness Of Major Respiratory Illnesses: 2022-23



Resp. Which of the following respiratory illnesses are you aware of? \*New 2022

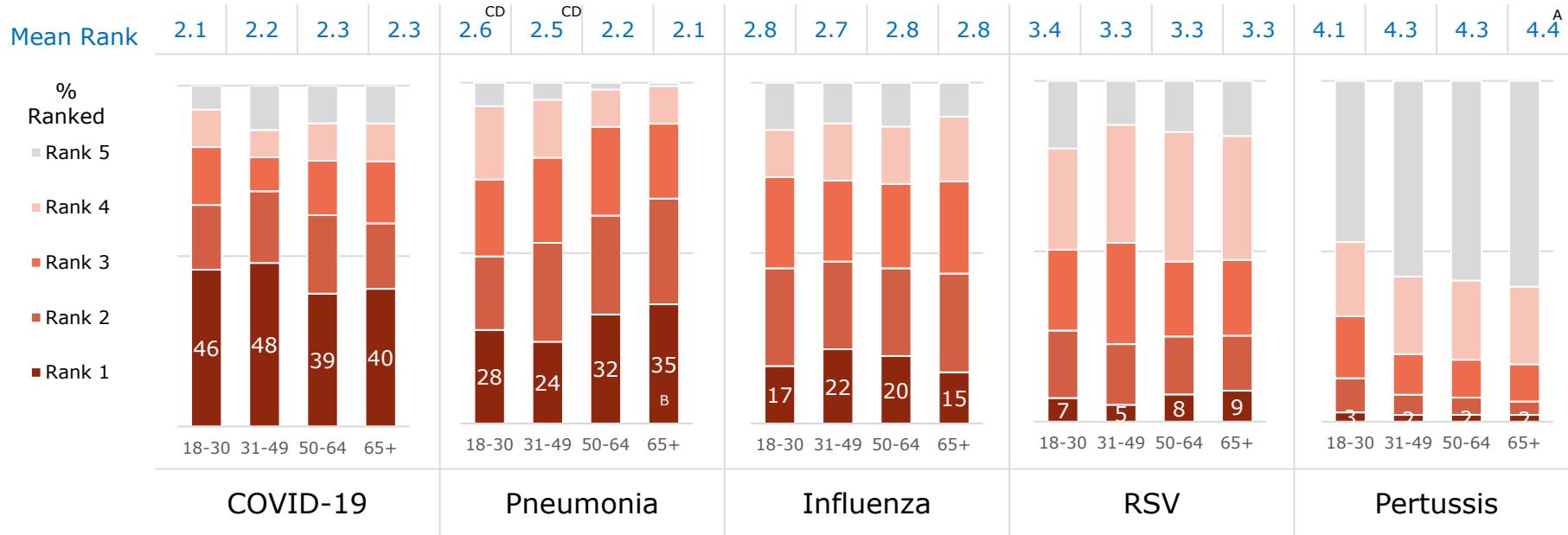


INTERNAL USE

Text indicate statistical significance at 95%  
Arrows indicate significant change over previous year

While Adults agree COVID is the largest threat to their health, seniors are more likely to say pneumonia is a close second

### Perceived Threat Of Major Respiratory Illnesses: Adult by Ages 2022-23



RespSerious. And which of these respiratory illnesses do you see as being the biggest threat to your health? Please rank them. \*New 2022 Statistical notation shown on Rank 1 only

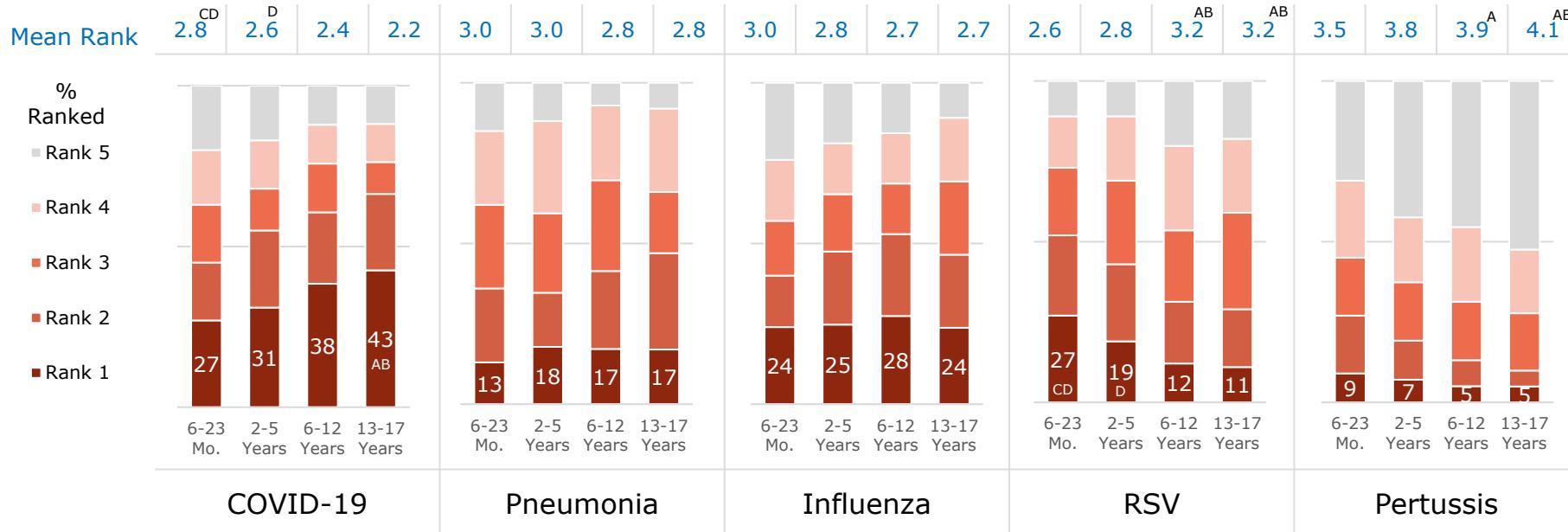


INTERNAL USE

Text indicate statistical significance at 95%  
Arrows indicate significant change over previous year

Parents of infants are most worried about RSV compared to parents of school age children who see COVID as the biggest threat

### Perceived Threat Of Major Respiratory Illnesses: Parents by Child Ages 2022-23

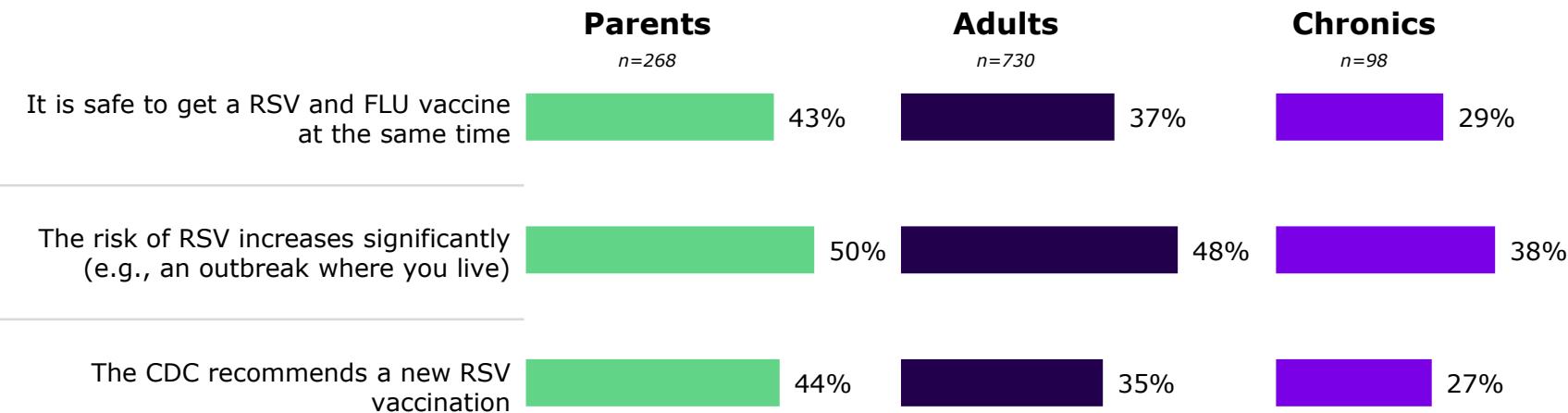


RespSerious. And which of these respiratory illnesses do you see as being the biggest threat to your [child's] health? Please rank them. \*New 2022  
Statistical notation shown on Rank 1 only

# Half of parents undecided about a flu shot would be more likely to seek one out should the risk of RSV be high this coming season

## % Who would be more likely to seek a flu vaccine by scenario: 2022-23

Among those who are not initially highly likely to seek a flu vaccine already



Q740. How likely are you to seek a flu immunization next season if... (New 2022)



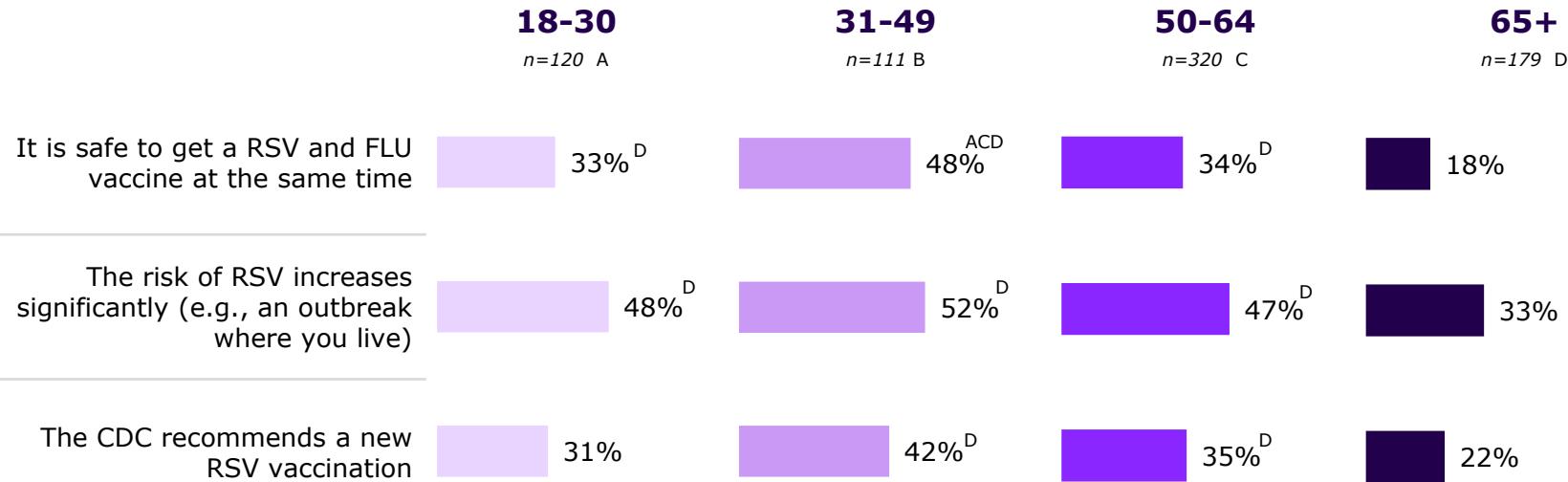
INTERNAL USE

Text indicate statistical significance at 95%  
Arrows indicate significant change over previous year

# Adults 31-49 would be most influenced by a RSV outbreak near them to seek a flu immunization more

## % Who would be more likely to seek a flu vaccine by scenario: 2022-23

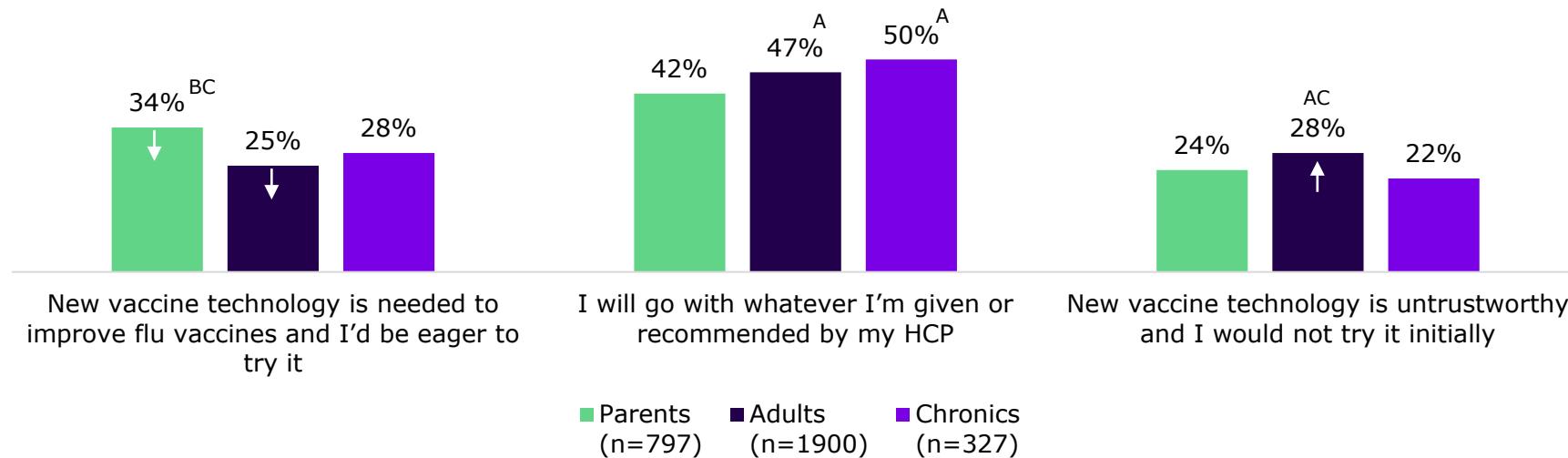
Among **Adults** who are not initially highly likely to seek a flu vaccine already



Q740. How likely are you to seek a flu immunization next season if... (New 2022)

# A quarter of consumers are untrusting in new vaccine technology being applied to flu immunizations

## Attitudes toward Flu Vaccine technology: 2022-23

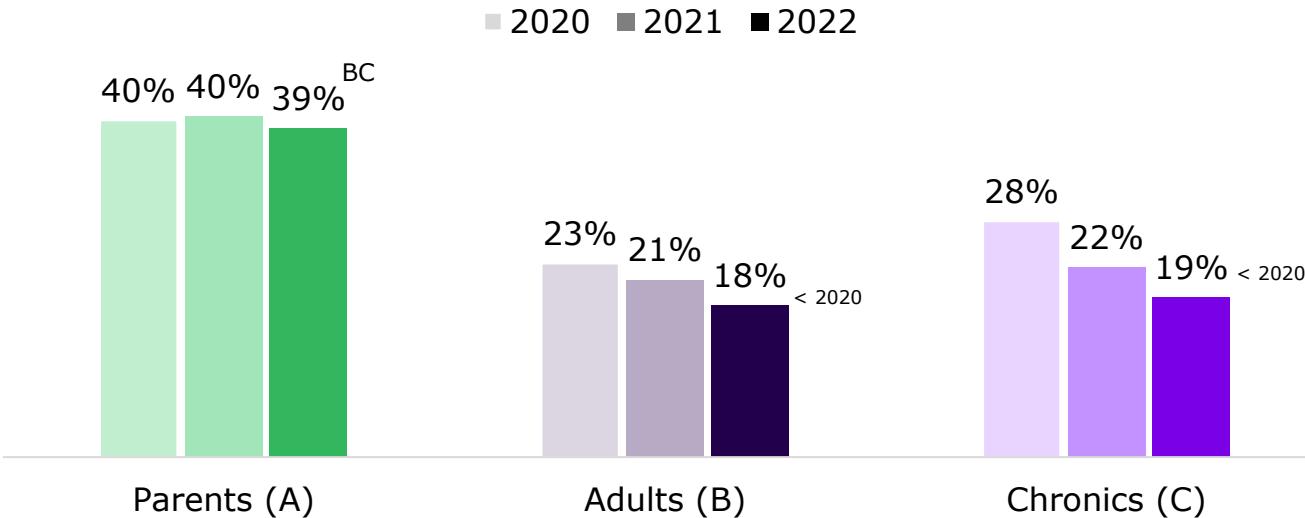


C26. Future flu vaccines may be made with new technology such as mRNA. How do you feel about this? New 2021

# The importance of which company makes a flu vaccine remains steady with Parents while dropping among Adult populations

**"The company that makes the flu vaccine is important to me"**

Top Box Scores (6-7)



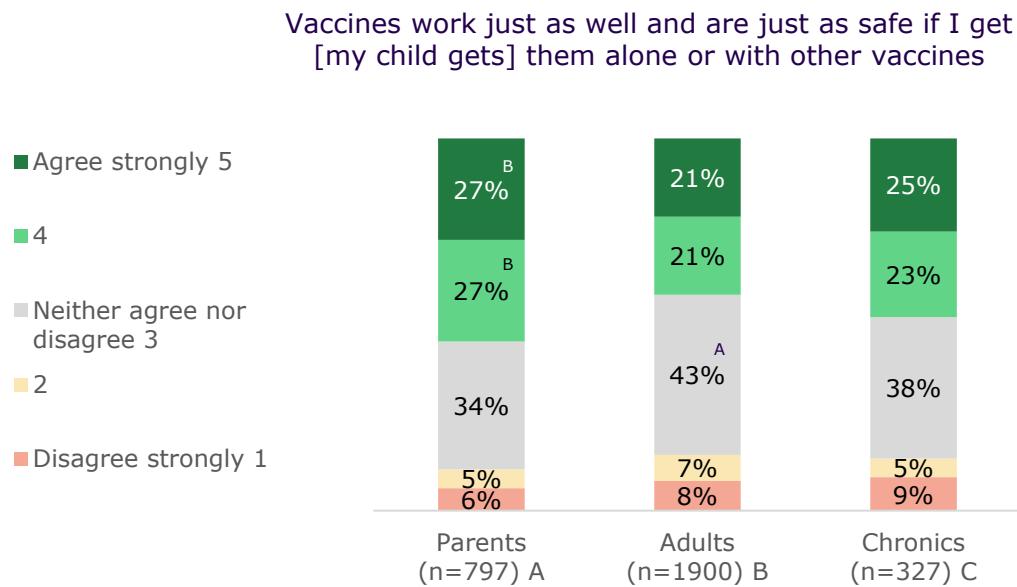
Q13. Please rate your agreement with the following statements:

**sanofi**

Letters indicate statistical significance at 95%  
Arrows indicate significant change over previous year

Parents strongly agree it is safe for multiple vaccines to be administered at the same time, possibly from more recent experience of administering several vaccines during well-child appointments

### Level of Agreement: 2022-23



CoAdmin. Please rate your agreement with the following statements on a 1 to 5 scale. \*New 2022

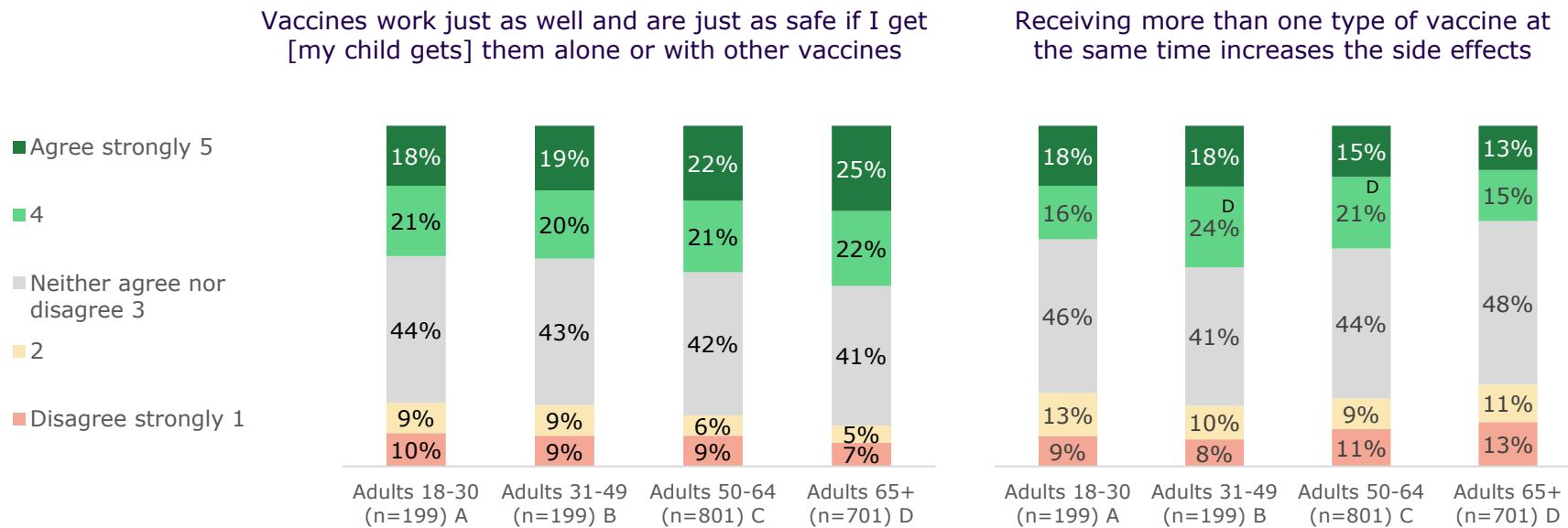


INTERNAL USE

Letters indicate statistical significance at 95%  
Arrows indicate significant change over previous year

# Adults 31-64 are directionally more likely to feel that coadministration would lead to increased side effects

## Level of Agreement: Adults 2022-23



CoAdmin. Please rate your agreement with the following statements on a 1 to 5 scale. \*New 2022

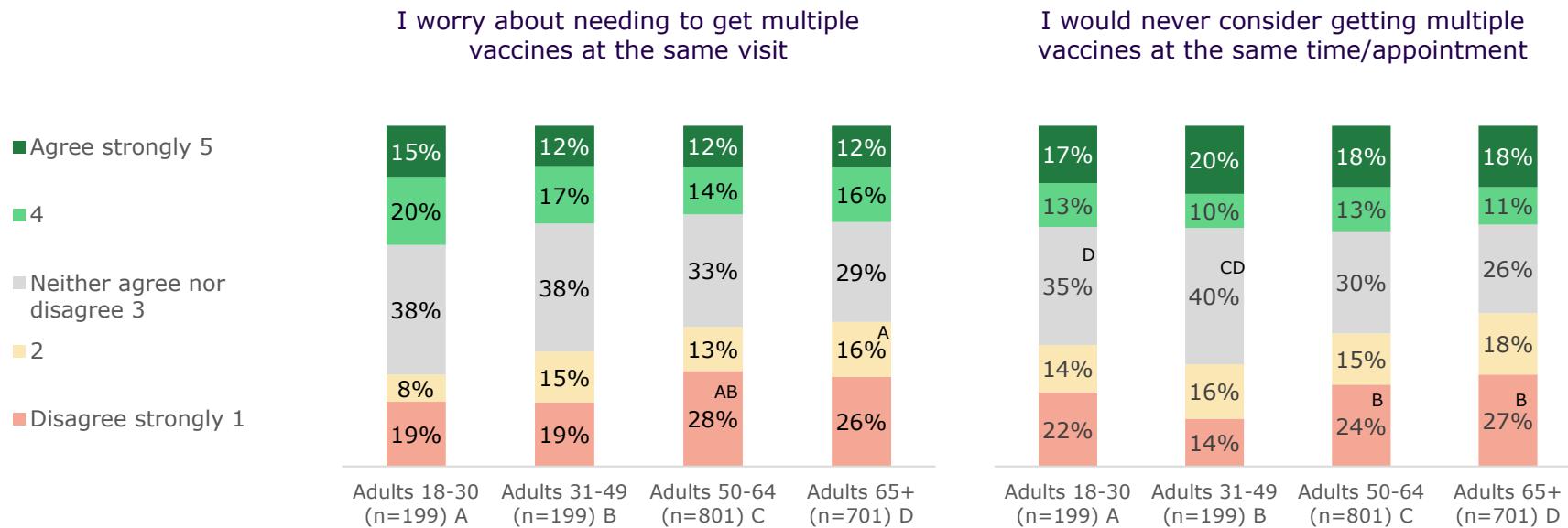


INTERNAL USE

Text indicate statistical significance at 95%  
Arrows indicate significant change over previous year

# Adults of all ages have similar levels of concern around multiple immunizations given at the same time

## Level of Agreement: Adults 2022-23



CoAdmin. Please rate your agreement with the following statements on a 1 to 5 scale. \*New 2022



INTERNAL USE

Text indicate statistical significance at 95%  
Arrows indicate significant change over previous year

# Less than one-third (28%) of Adults are currently likely to ask their doctor about a RSV vaccine

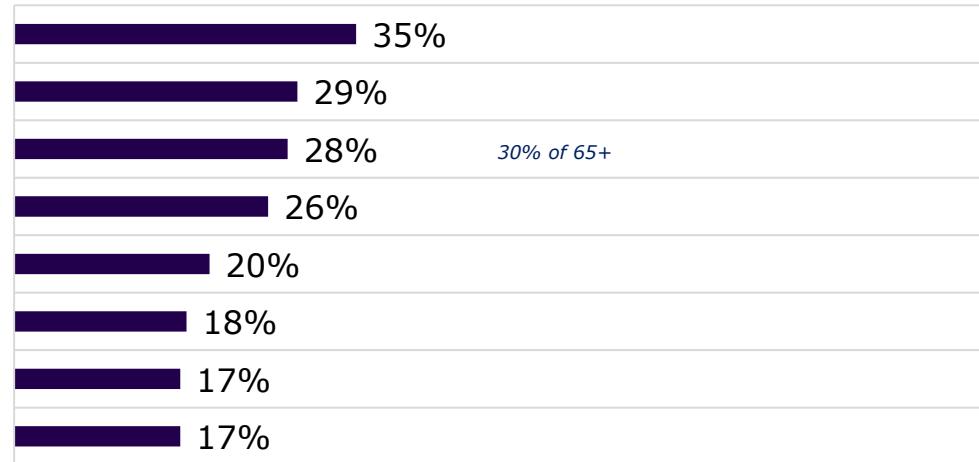
## Vaccines Received Past 12 Months

Adults 18+ (n=1900)

23%*	
19%	
3%	
53% ↓	
11%	
5% ↑	
7%	
7%	
Not sure	3%
None of the above	33% ↑

## Likely To Talk To Doctor About Vaccine In Next 12 Months:

Adults 18+ Not Vaccinated In Past 12 Months – Top Box Scores (4-5)



\* Asked only of adults over 49

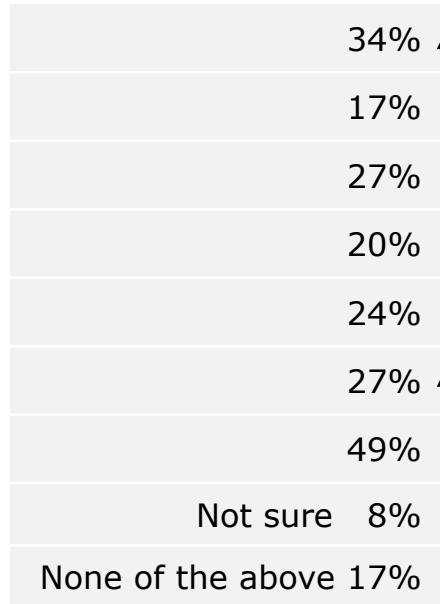
Base: Total Sample q405. Which of the following vaccines have you received in the past 12 months?

Base: Those not vaccinated in P12M, varies by type q406. How likely are you to talk to your doctor about any of the following vaccines in the next 12 months?

# Almost half of parents say they are highly likely to ask about a RSV vaccine in the next year

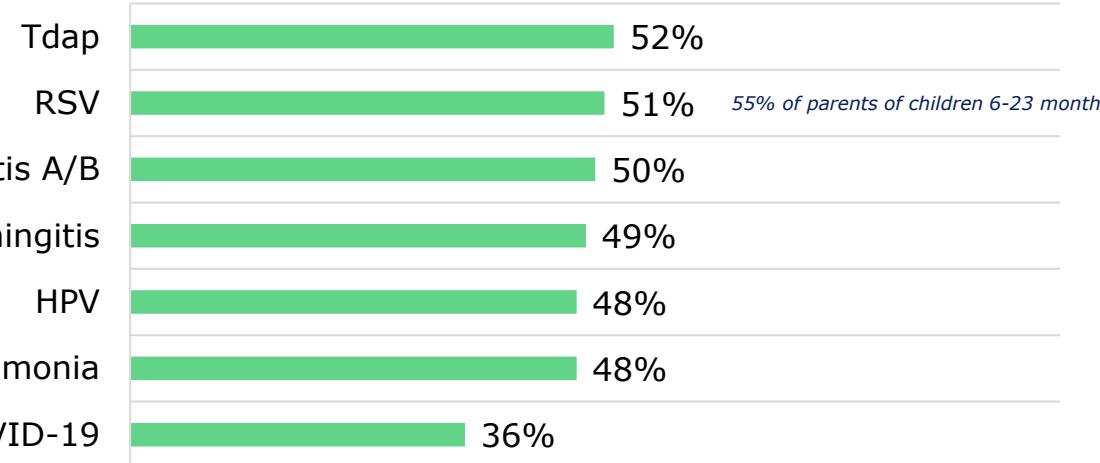
## Vaccines Received Past 12 Months

Parents (n=797)



## Likely To Talk To Doctor About Vaccine In Next 12 Months:

Parents Whose Children Were Not Vaccinated In Past 12 Months – Top Box Scores (4-5)



Base: Total Sample q405. Which of the following vaccines [IF ID=A have you IF ID=B has your child] received in the past 12 months?

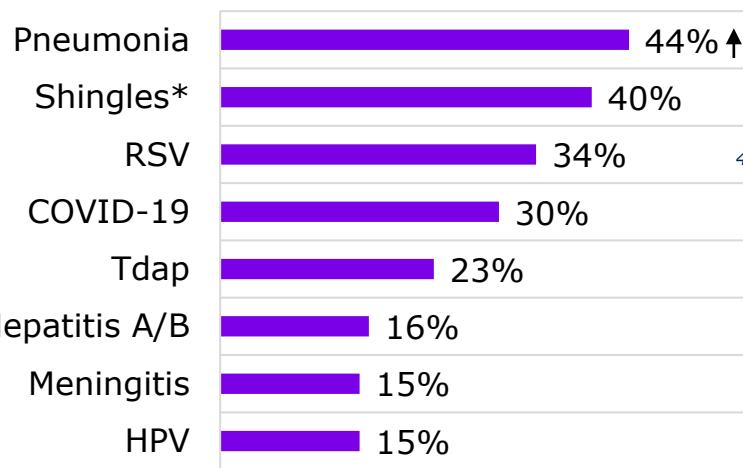
Base: Those not vaccinated in P12M, varies by type q406. How likely are you to talk to your [IF ID=B child's] doctor about any of the following vaccines in the next 12 months?

# Two-fifths of Chronics who have not received a pneumonia vaccine in the past year are likely to do so

## Vaccines Received Past 12 Months Chronics (n=327)

	33%
	24%*
	2%
60% ↓	COVID-19
7% ↓	Tdap
5%	Hepatitis A/B
1%	Meningitis
3%	HPV
Not sure	2%
None of the above	28% ↑

## Likely To Talk To Doctor About Vaccine In Next 12 Months: Chronics Not Vaccinated In Past 12 Months – Top Box Scores (4-5)



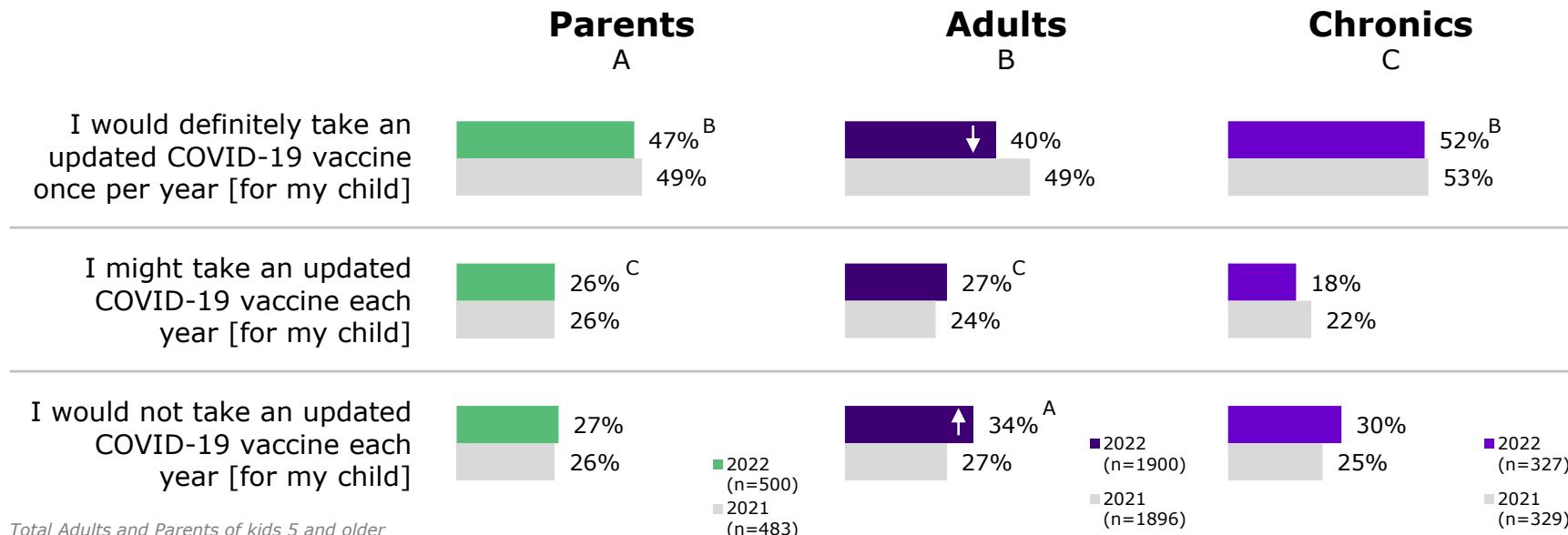
\* Asked only of adults over 49

Base: Total Sample q405. Which of the following vaccines [IF ID=A have you IF ID=B has your child] received in the past 12 months?

Base: Those not vaccinated in P12M, varies by type q406. How likely are you to talk to your [IF ID=B child's] doctor about any of the following vaccines in the next 12 months?

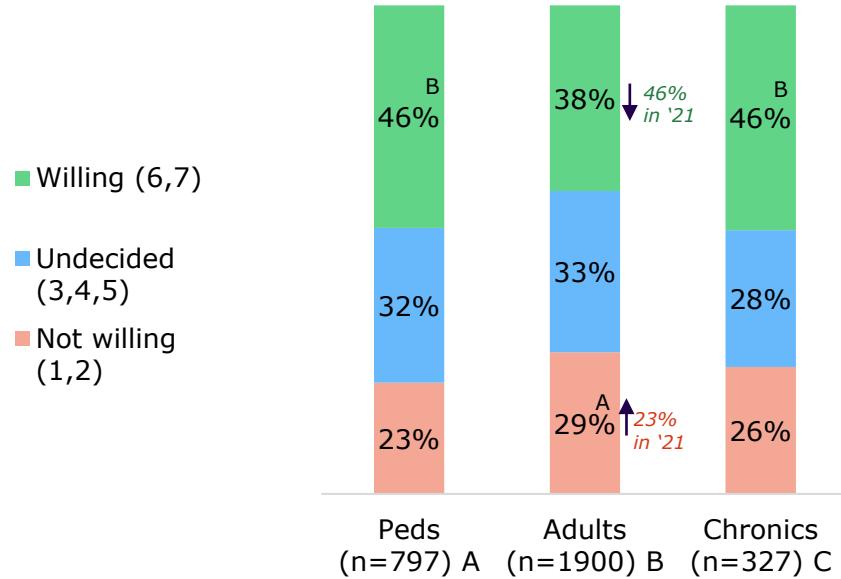
# Fewer adults are interested in taking an updated COVID-19 vaccine annually

## Annual COVID-19 Immunization Interest



# Similarly, almost a third of Adults would not be willing to take a combination COVID+FLU vaccine yearly

## Willingness to take a **combination COVID-19 and Flu vaccine annually: 2022-23**



452. How willing would you be [IF ID=B for your child] to take a combination COVID-19-FLU vaccine as a single-shot every year? (New 2021)

454. Which of the following reasons would be most important to you when considering a combination COVID-19-flu vaccine [IF ID=B for your child]? You may select up to 3. (New 2021)

## Most important when considering a combination Flu + Covid-19 vaccine: 2022-23

	Parents	Adults	Chronics
Known side effect profile	47%	45%	43%
Doctor recommended it for me	41% <sup>B</sup> ↑	36% ↑	45% <sup>B</sup>
Protection against two respiratory illnesses	35%	30%	35%
Convenience of getting two vaccines in one visit	21%	22% ↓	26%
FDA approval (not emergency authorization)	18%	18%	13% ↓
CDC recommendation	16%	15% ↓	14%
Manufacturer of the vaccine	19% <sup>BC</sup>	14%	13%
Price of getting two vaccines in one dose	15% <sup>C</sup>	13% <sup>C</sup>	8% ↓
Pharmacist recommended it for me	4%	7% <sup>A</sup>	8% <sup>A</sup>

Letters indicate statistical significance at 95%

Arrows indicate significant change over previous year



## Detailed Findings

*Ethnicity Deep Dive*



# KEY INSIGHTS

## Ethnicity

**01**

Black Adults are less likely to have received a vaccination in 2022 despite receiving more recommendations to do so this season

**02**

Pharmacies are the preferred location to be vaccinated in 2022 regardless of ethnicity

**03**

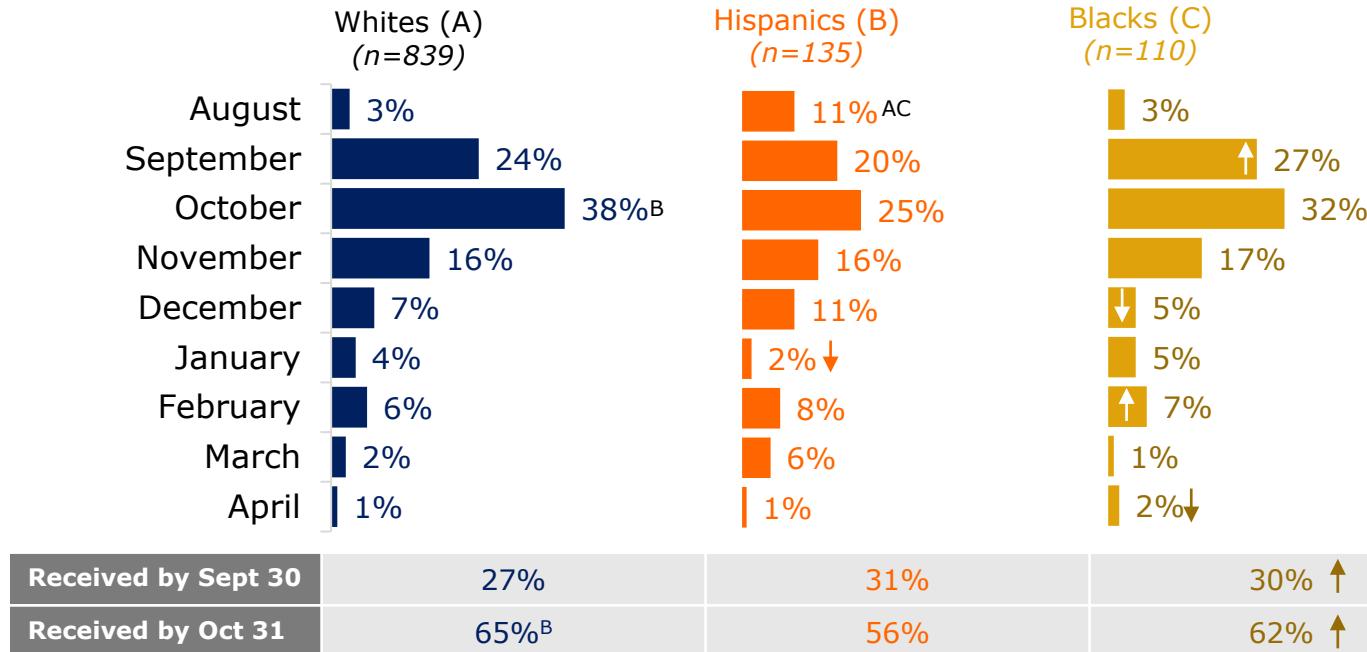
Prevention of illness is a key driver to immunize across ethnicities, Hispanic and Blacks see ads for stronger vaccines as important at higher rates than Whites

**04**

White adults report higher awareness of Pertussis and RSV and Blacks perceive COVID to be the largest threat to their health

# More Blacks sought their immunization in September 2022

## Month Received Flu Immunization for Adults by Ethnicity: 2022-23 Season



q8. In what month did you [your child] receive the flu vaccine this season?



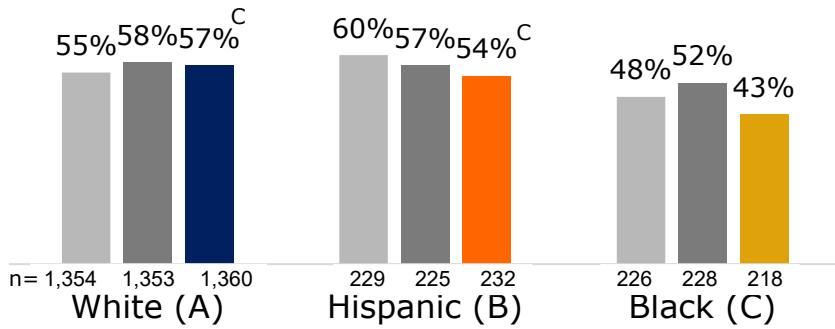
Letters indicate statistical significance at 95%

Arrows indicate significant change over previous year

# Black adults least likely to have been immunized in 2022-23

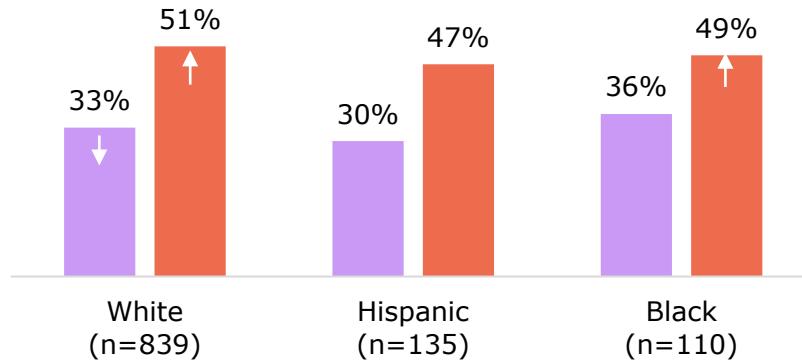
## Received Flu Shot in Season\*: Adults

■ 2020 ■ 2021 ■ 2022



## Location Where Flu Shot Received: Adults 2022

■ Doctor's Office ■ Pharmacy



\* Note: These are reported rates, these are not adjusted like the final rates which are generally slightly lower

Base: Adults

q4r1: This year - Please indicate each year received an Annual flu immunization.

q38: Where was your [child's] flu vaccine administered?

**sanofi**

Letters indicate statistical significance at 95%

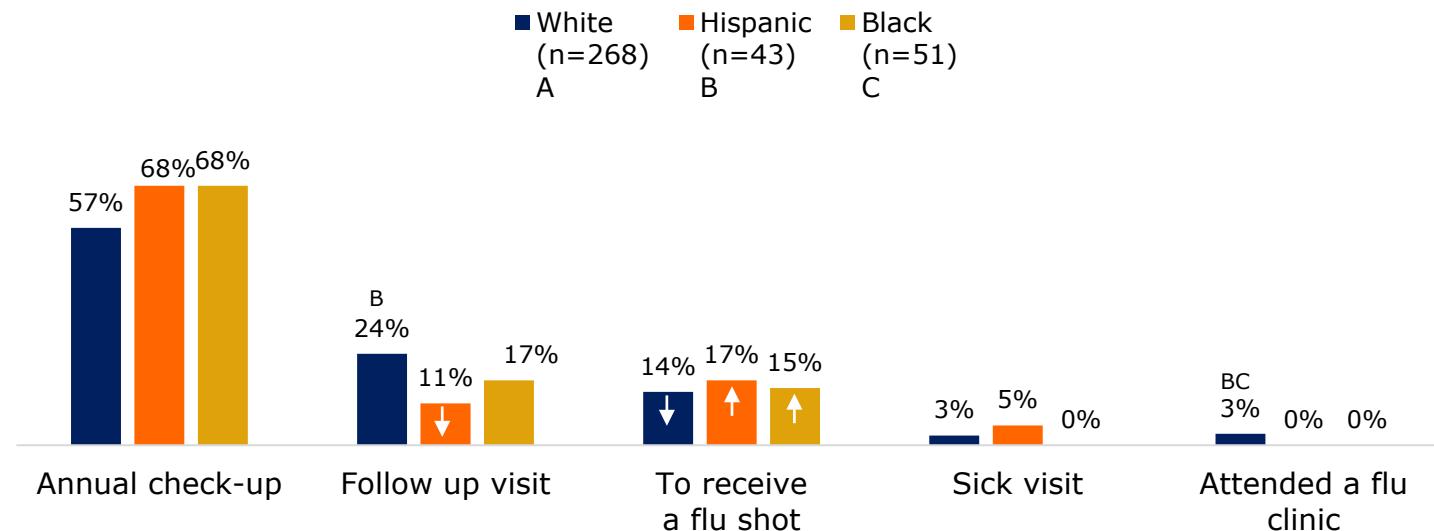
Arrows indicate significant change over previous year

102

While still a small percentage, more Hispanic and Black Adults made appointments with their doctor specifically to receive a flu shot in 2022-23

### **Reason For Visit When Received Flu Vaccination: Ethnicity 2022-23**

#### **Doctors Office**

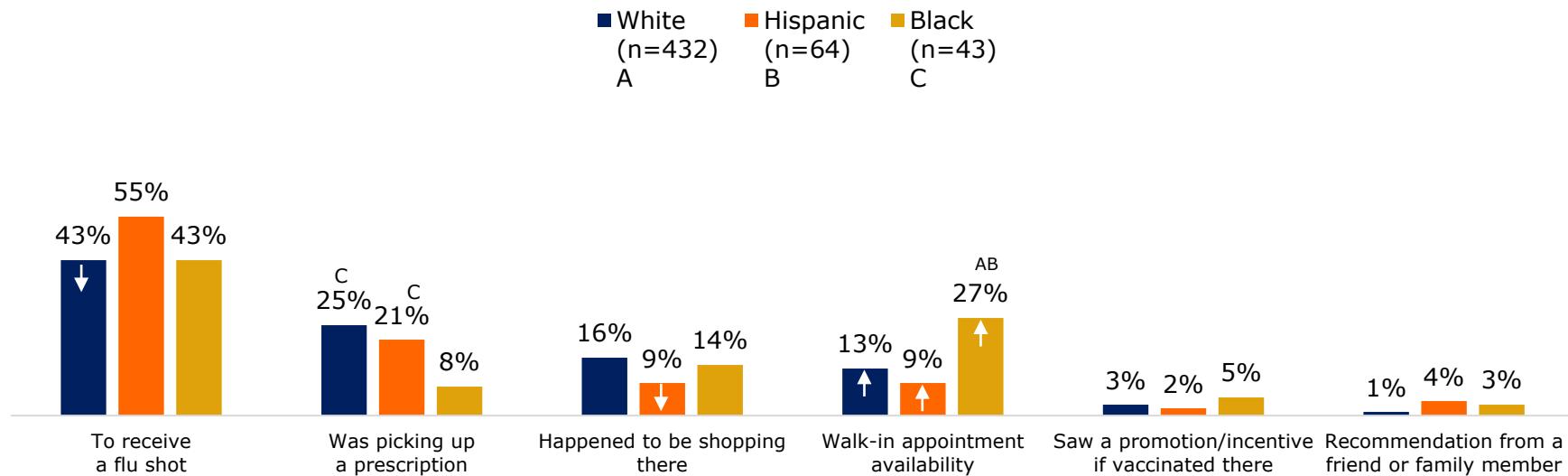


q44. Please describe the reason for your office visit.

# Black Adults are more likely to say they were vaccinated at the pharmacy because of walk-in appointment availability

## Reason For Visit When Received Flu Vaccination: Ethnicity 2022-23

### Pharmacy



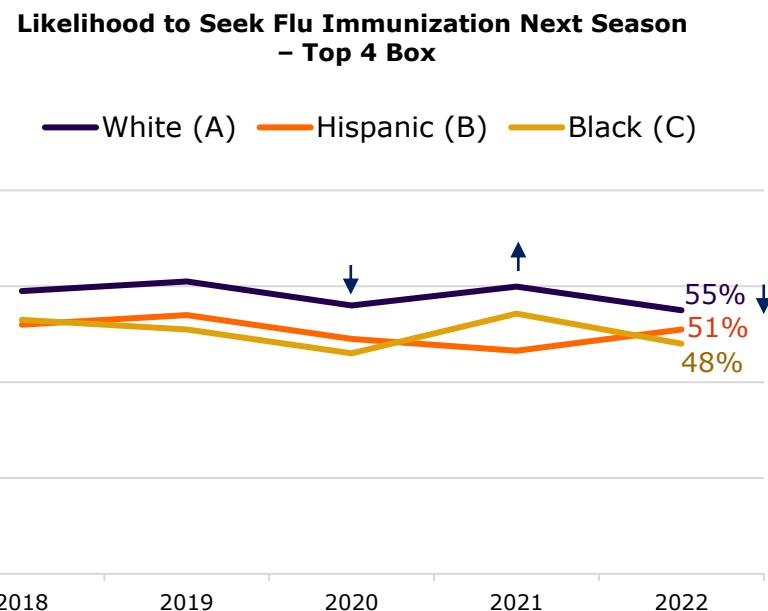
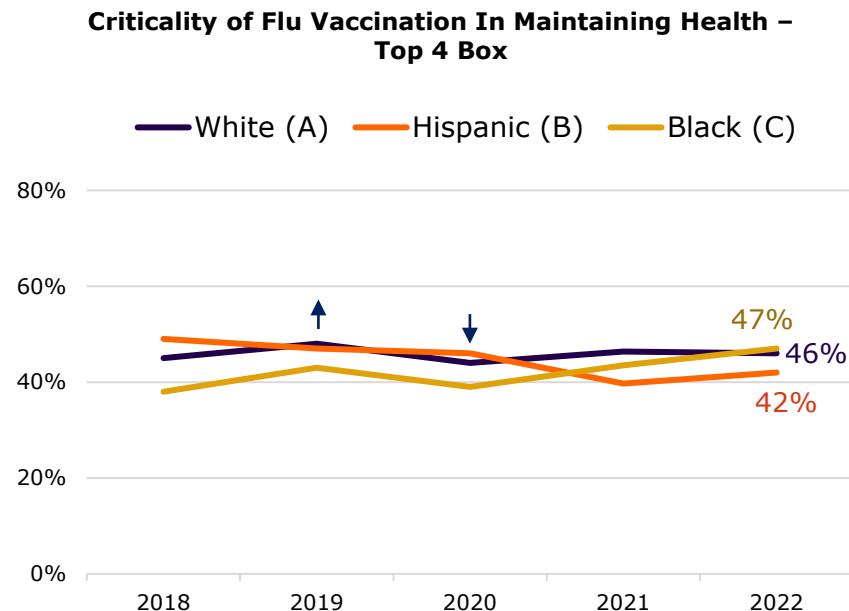
44\_P. Please describe the reason for your pharmacy visit. New 2021

**sanofi**

Letters indicate statistical significance at 95%  
Arrows indicate significant change over previous year 104

# Whites' likelihood to seek a flu vaccination next season is lower this wave

## Flu Immunization Attitudes – Adults: Ethnicity



q72. How critical do you consider the flu vaccination to be in maintaining your health [your child's health]?

q74. How likely are you to seek a flu immunization [for your child] next year?

Letters indicate statistical significance at 95%  
Arrows indicate significant change over previous year 105

# Black Adults are less likely to see getting a flu shot as convenient

## Reasons For Getting Yearly Flu Vaccinations Among Adults:

Ethnicity 2022-23

Sample Size (n)

	White A	Hispanic B	Black C
Sample Size (n)	781	126	105
It is important to me to maintain my overall health	<b>58%<sup>B</sup></b>	48%	51%
Doctor recommends that I get it	55%	49%	53%
Insurance covers the vaccine	<b>49%<sup>C</sup> ↑</b>	40%	30%
I don't want other family members to get the flu	<b>47%<sup>C</sup></b>	43%	34%
I'm very concerned about getting the flu	43%	42%	36%
It is convenient for me to get the vaccination	<b>39%<sup>C</sup></b>	<b>39%<sup>C</sup></b>	26%
Health organizations recommend that I get it	30%	25%	22%
I have a chronic condition that makes influenza more dangerous for me	25% ↑	24% ↑	25%
Pharmacist recommends that I get it	21%	17%	20%
Friend or family members remind/encourage me	<b>20%<sup>C</sup></b>	20%	11%
Advertising highlighting the severity of flu	4%	<b>10%<sup>A</sup></b>	<b>14%<sup>A</sup></b>
Advertising for the different flu vaccine brands	3%	7%	6%

q18a. What are the main reasons that you consistently get your flu vaccination every year?



Letters indicate statistical significance at 95%

Arrows indicate significant change over previous year

# Recommendations to get a flu vaccine are higher among Black Adults with an increased number coming directionally from HCP sources

## Received Flu Vaccination Recommendation: Adults

Ethnicity 2022-23

	<b>White</b> (n=1360) A	<b>Hispanic</b> (n=232) B	<b>Black</b> (n=218) C
<b>Yes</b>	<b>64%</b>	<b>67%</b>	<b>72%<sup>A</sup> ↑</b>
From a doctor	41% ↑	42%	37%
From an HCP other than my doctor	11%	14%	14%
From a pharmacist	17%	14%	17%
From the news	12%	10%	13%
From an advertisement	11%	13%	8%
From a friend or family member	<b>14%<sup>B</sup></b>	7% ↓	<b>14%<sup>B</sup></b>
From some other source	4%	<b>6%<sup>C</sup></b>	2%
<b>No</b>	<b>36%<sup>C</sup></b>	<b>33%</b>	<b>28%↓</b>

q46. In the past year, did any of the following recommend that you [your child] get a flu immunization? Changed in 2020

Letters indicate statistical significance at 95%  
Arrows indicate significant change over previous year

# Hispanic Adults report dislike of needles more so than Blacks; Whites were more likely this year to have a variety of concerns

## Top Reasons For Not Getting Flu Vaccination Among Adults:

Ethnicity 2022-23

	White A (n=521)	Hispanic B (n=97)	Black C (n=108)
Don't believe that I need a flu vaccination	31%	29%	30%
I don't like needles	18% ↑	21% c	11%
I don't like to receive shots	14%	15%	9%
I got the flu vaccine once and had a bad reaction	14% ↑	9%	11%
Concerned that I will get the flu from the flu vaccine	14% ↑	7%	16%
I was worried about getting the flu vaccine with the COVID vaccine or booster	9%	14%	11%
I got the flu from vaccine previously	9%	13%	6%
Inconvenient to go to the doctor	8%	16% a ↑	11%
My doctor never recommended the vaccine	7% ↑	13% c	4%
Cost of the vaccine	4%	8%	3%
There are prescription medications available to treat the flu, so I did not feel the vaccine was necessary	7% c ↑	3%	3%
Preservatives in the vaccine	7% c ↑	4%	3%

Base: Those not vaccinated during current season  
q32. Why haven't you [hasn't your child] received a flu vaccine this year?

Letters indicate statistical significance at 95%  
Arrows indicate significant change over previous year

# HCP recommendations increased in 2022-23 for White and Hispanic Adults as a motivator to be vaccinated against the flu

## **Top Motivations To Getting a Flu Immunization:** Ethnicity 2022-23

(among non-immunizers who would consider getting immunized)

	<b>White A</b> (n=322)	<b>Hispanic B</b> (n=66)	<b>Black C</b> (n=67)
If I had a bad case of the flu the year before.	25%	31%	32%
A recommendation by a physician or other healthcare professional	21% ↑	<b>34% AC</b> ↑	16%
Cost for the immunization being covered by insurance	20%	22%	18%
The immunization being available at another convenient location	19%	19%	24%
News that it was going to be a bad flu season	15%	18%	14% ↑
Not having to receive the vaccine through an injection	15%	19%	13%
The immunization being available at my workplace	10%	16%	11% ↓
Information on a vaccine with better protection	<b>12% C</b> ↑	<b>18% C</b>	5%
A vaccine without any preservatives	8% ↑	10% ↑	6%
A reminder by my health insurance company to be immunized	<b>9% C</b>	7%	2% ↓
Hearing information advising me that I should get a flu immunization	<b>8% C</b>	6%	1%
A recommendation by a friend or family member	6%	8%	3%
An advertisement reminding me to get my influenza vaccine	4%	9%	5%
Recommendation of advisory bodies (CDC, AMA, etc.)	4%	7%	1%
A vaccine geared towards the 50+ population	<b>19% C</b> n=214	18% n=42	9% n=44
A vaccine geared towards the 65+ population	31% n=93	51% n=8*	34% n=11*

q34. Which of the following would encourage you to obtain a flu immunization [for your child]?

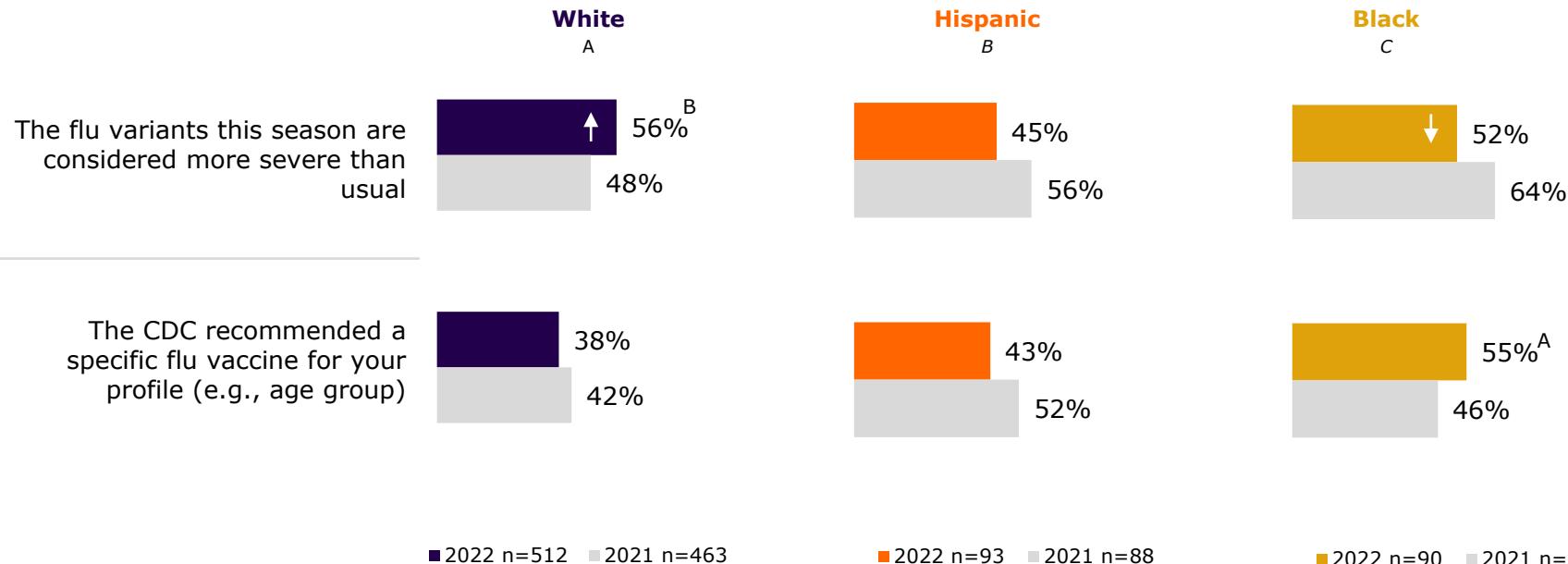
Responses < 5% current year total not shown. Multiple responses accepted.

\* Caution:  
Small Sample

# Black Adults would be more likely to seek a flu vaccine if the flu variants were more severe

## % Who would be more likely to seek a flu vaccine by scenario

Among **Adults** who are not initially highly likely to seek a flu vaccine already



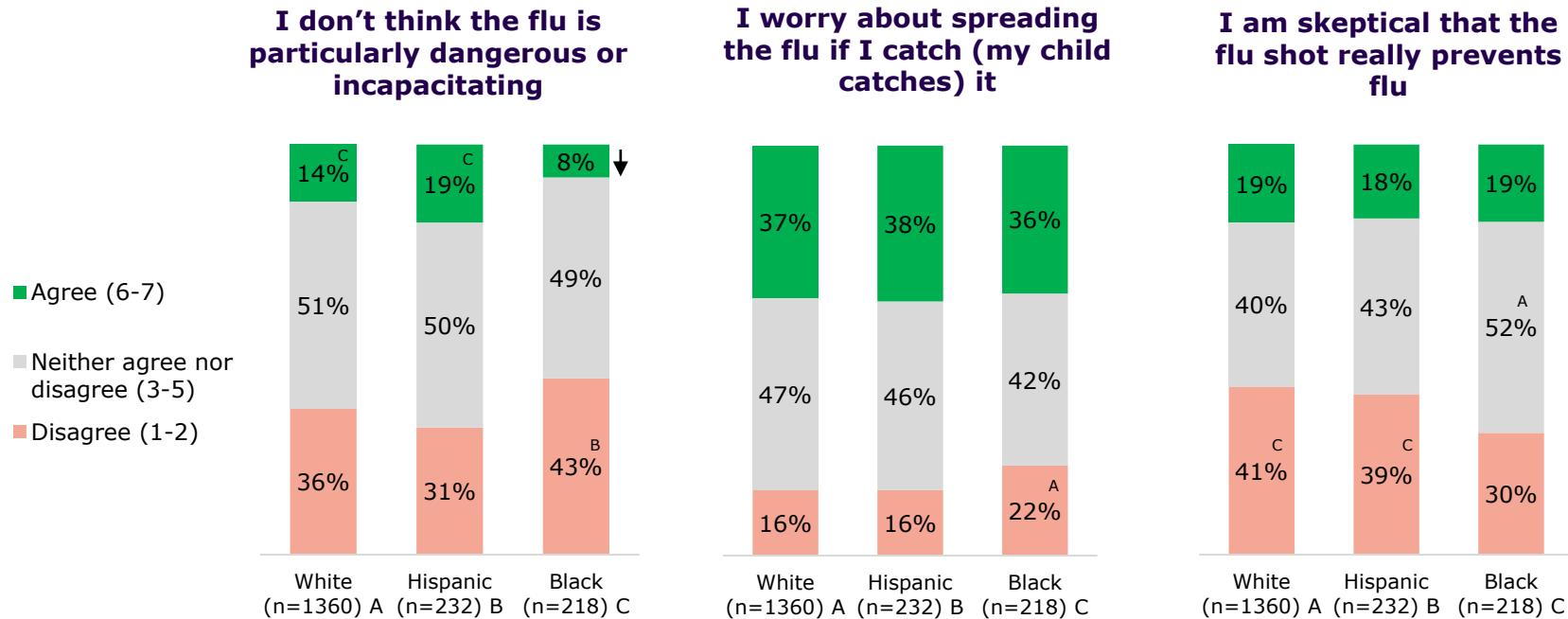
Q740. How likely are you to seek a flu immunization next season if... (New 2021)



INTERNAL USE

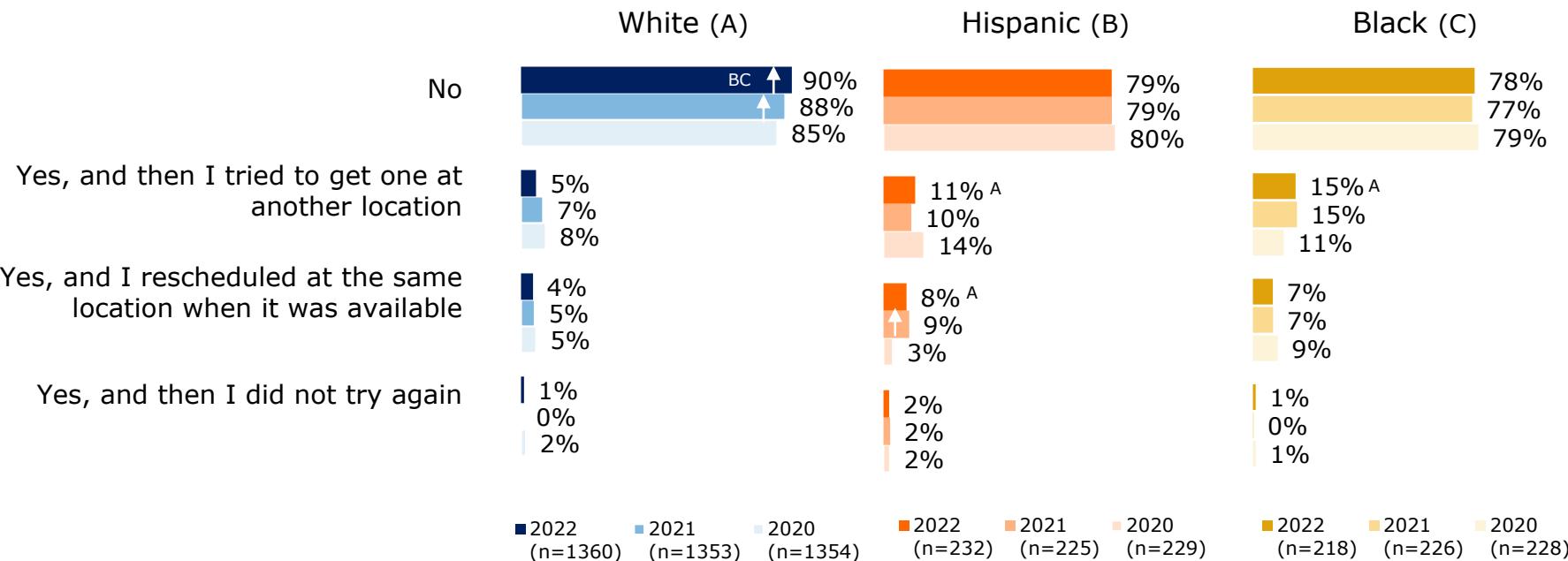
Text indicate statistical significance at 95%  
Arrows indicate significant change over previous year

# A similar percent of Adults are not convinced that the flu is dangerous or that the vaccine is effective, regardless of ethnicity



q13. Please rate your agreement with the following statements: New Statements 2020

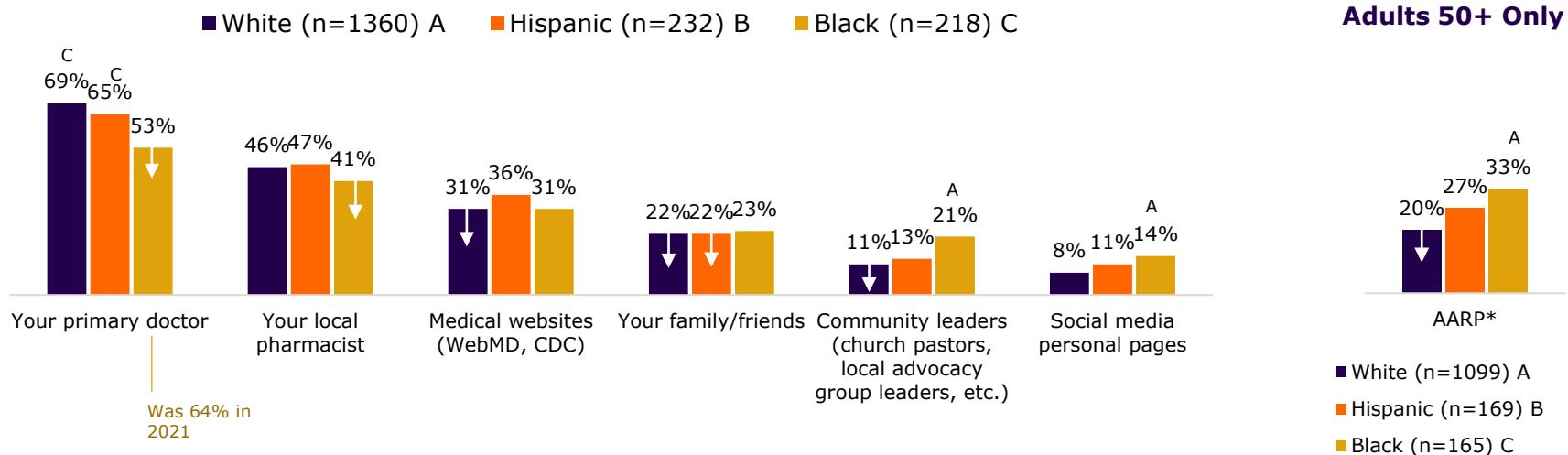
# While not common, minority adults are more likely to report a provider not having a flu vaccine when seeking one



q30. At any point during this flu season, did you try to get a flu immunization [for your child] but found the provider did not have it?

# Black Adults have lower levels of trust in their HCPs compared to 2021-22 when it comes to flu vaccine information

## High Level of Trust In Sources For Flu Vaccine Information: Adults 2022-23

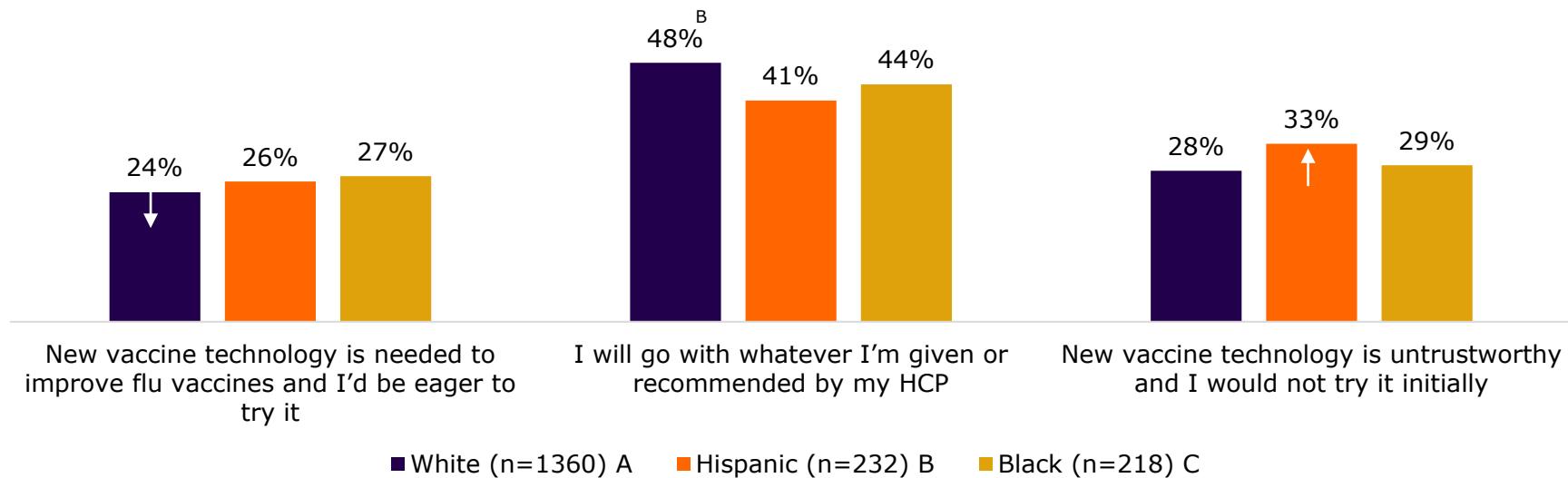


\*AARP asked of Adults 50+ only

Q320. How would you describe the level of trust you have for the following medical professionals/organizations with regards to advice or information about flu shots/vaccinations?

# Hispanic Adults are less accepting of newer technology in flu vaccines this year

## Attitudes around mRNA Vaccine Technology and Future Flu Vaccines by Segment: 2022-23



C26. Future flu vaccines may be made with new technology such as mRNA. How do you feel about this? New 2021

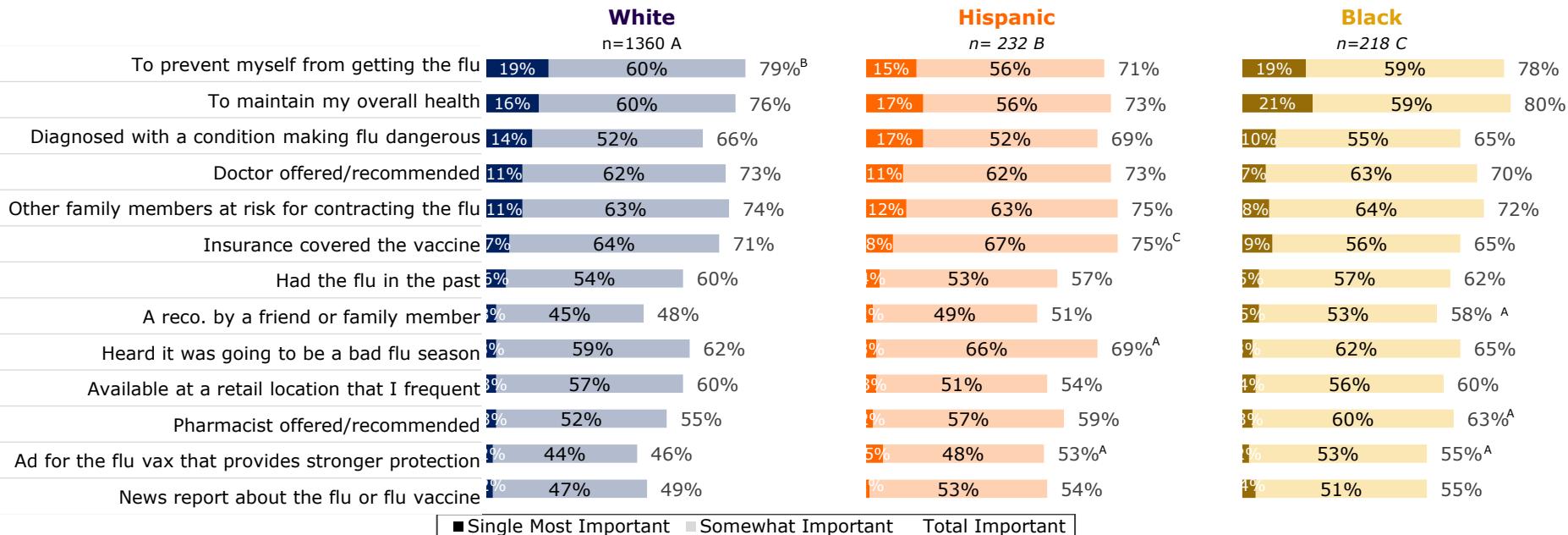


INTERNAL USE

Text indicate statistical significance at 95%  
Arrows indicate significant change over previous year

While prevention and maintaining one's health are key across ethnicities, Hispanic and Blacks see Ads for stronger vaccines as somewhat important at higher rates than Whites

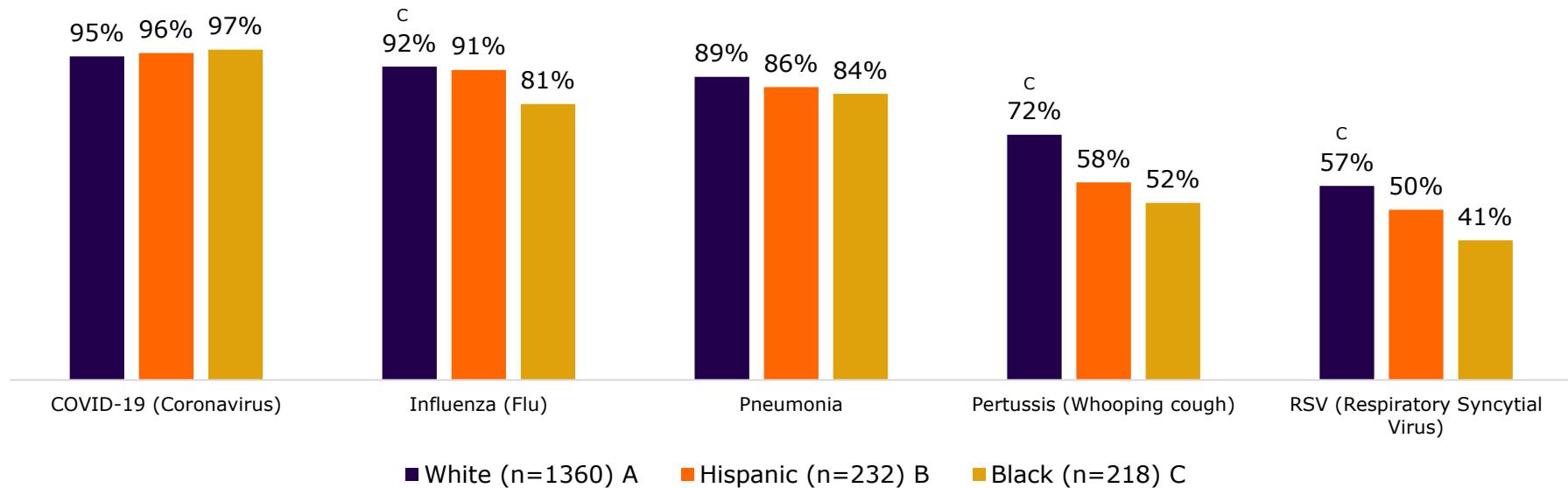
### Importance of Motivating Factors to Seek an Influenza Vaccine: Adults 2022-23



Importance. Below are factors that may or may not motivate you to seek a flu vaccine [for your child]. Please indicate how important these items are to you by sorting them into one of the following three buckets. \*New 2023 Showing responses Single + Somewhat Important (excludes % saying Not at all important)

# White adults report higher awareness of Pertussis and RSV

## Awareness of Different Respiratory Illnesses: 2022-23



Resp[x]. Which of the following respiratory illnesses are you aware of? \*New 2022



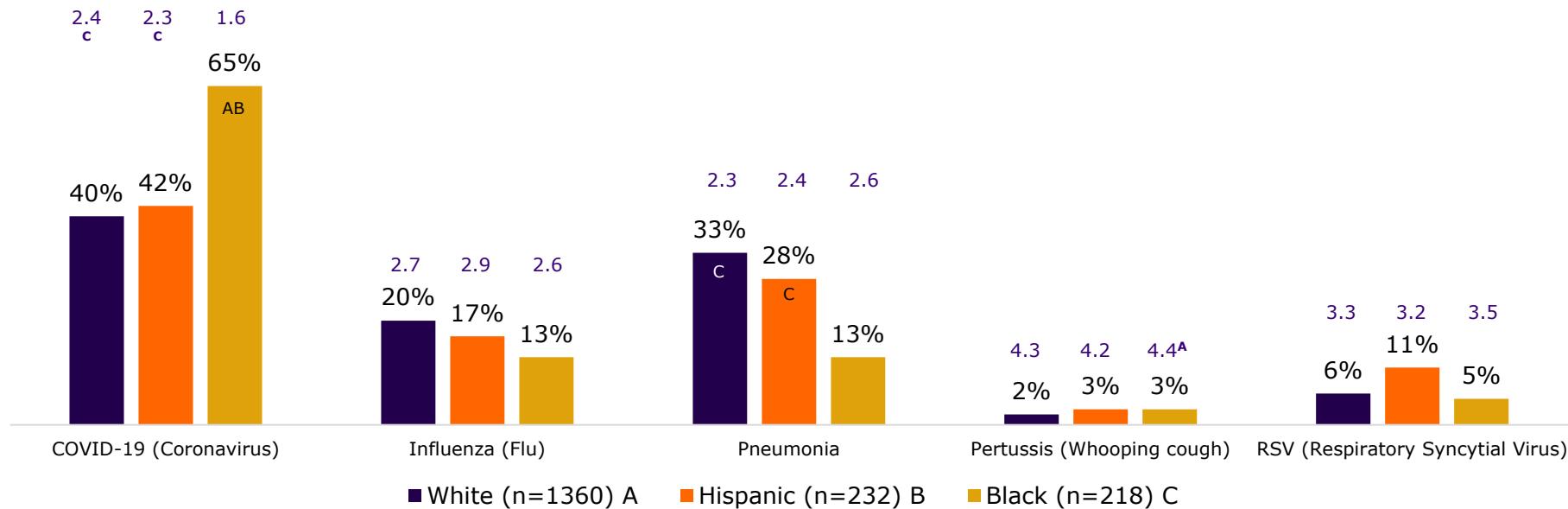
INTERNAL USE

Text indicate statistical significance at 95%  
Arrows indicate significant change over previous year

# Blacks perceive COVID to be the largest threat to their health by far

## Perceived Threat Of Major Respiratory Illnesses By Rank 1: 2022-23

Mean rank on a 1-5 scale, with 1 being greatest threat:

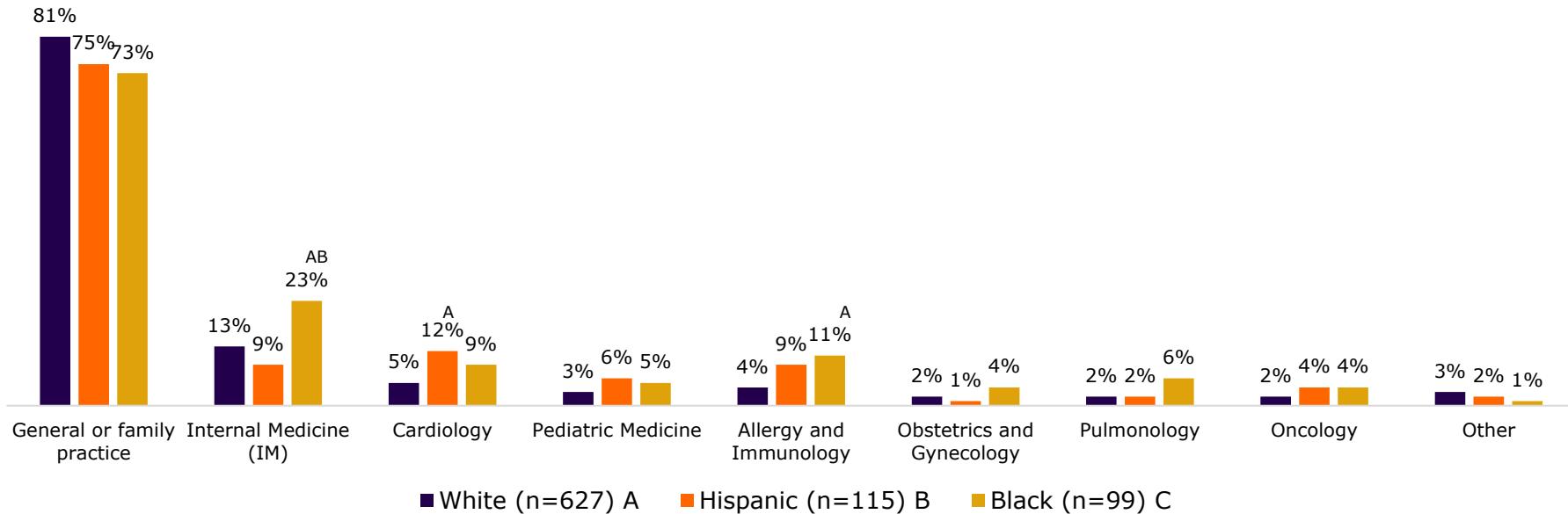


Responsible. And which of these respiratory illnesses do you see as being the biggest threat to your health? Please rank them. \*New 2022

While general practice is by far the leading type of doctor to make recommendations, Blacks report higher numbers of specialists recommending flu vaccines to them

### **Specialty of Doctor That Recommended Flu Vaccine: 2022-23**

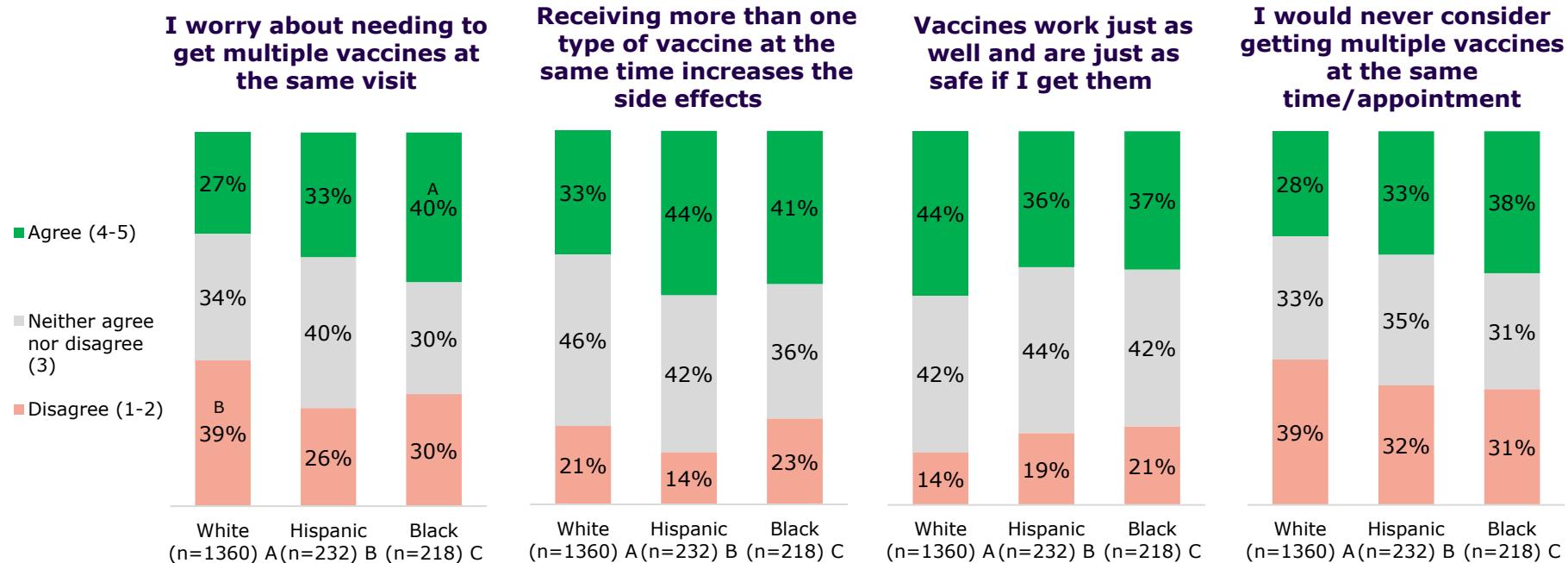
(among adults who received their doctor's recommendation)



Base: Adults who received doctor recommendation

DrRecoType. What was the doctor's specialty that recommended a flu vaccine to [IF ID=A you / IF ID=B your child]? Please select all that apply. \*New 2022

# Black adults are more concerned about needing multiple vaccines administered at the same healthcare appointment



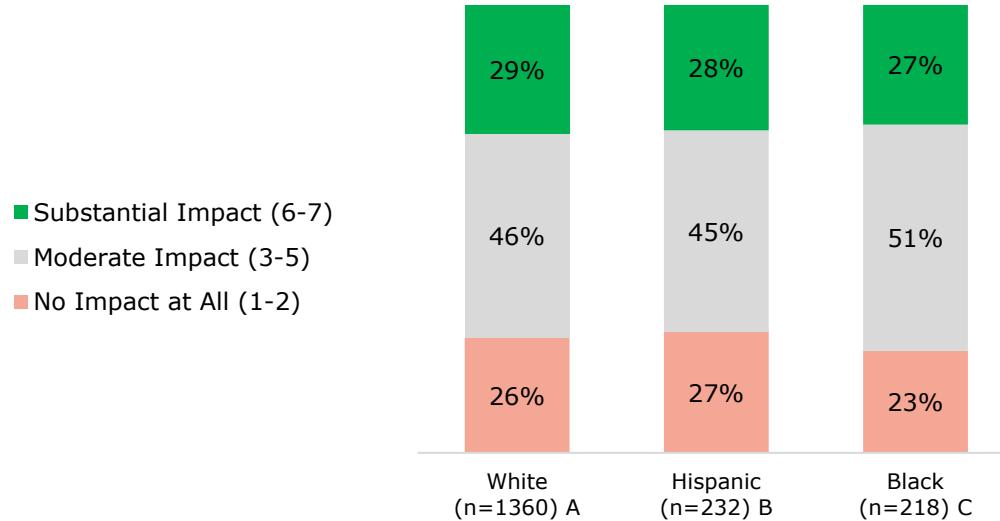
CoAdmin. Please rate your agreement with the following statements on a 1 to 5 scale. \*New 2022



Letters indicate statistical significance at 95%  
Arrows indicate significant change over previous year

# CDC recommendations have similar impact on which influenza vaccine adults seek regardless of race

## Impact of CDC Recommendations and Guidelines on Flu Vaccine Choice: 2022-23



*CDCImpact. How much impact do recommendations and guidelines given by the Centers for Disease Control (CDC) have on the type of flu vaccine that you seek? \*New 2022*



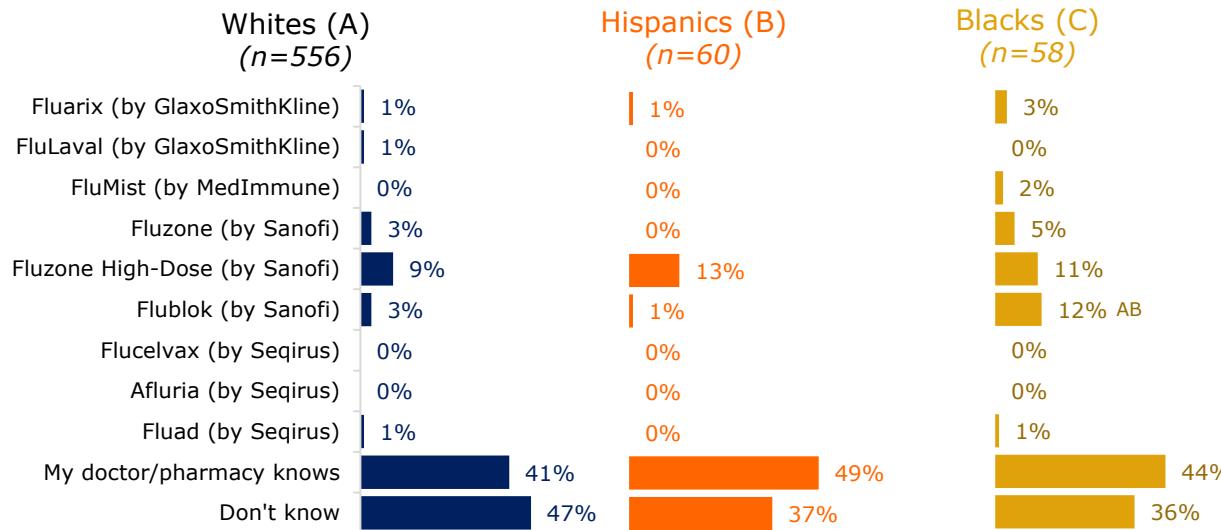
INTERNAL USE

Text indicate statistical significance at 95%  
Arrows indicate significant change over previous year

# Senior awareness is low across ethnicities for which vaccine are recommended for their age

## Awareness of CDC Recommended Flu Vaccines: 2022-23

(among adults 65 years of age or older)



Base: Adults 65+

CDCAware. The CDC recommends that adults 65 and older preferentially receive one of three flu vaccines for the coming flu season (Fall 2023 – Spring 2024). Are you aware of which brands are recommended? \*New 2022





## Detailed Findings

*Parents*

# KEY INSIGHTS

## Parent Behavior and Attitudes

**01**

Parents noted a consistent rate of child vaccinations but with more administered at the pharmacy

**02**

Top reasons for not likely to seek a vaccination for a child in 2023-24 were a perceived lack of need (41%) and the concern of getting the flu from the vaccine (23%) *among those not likely to seek next season n=215*

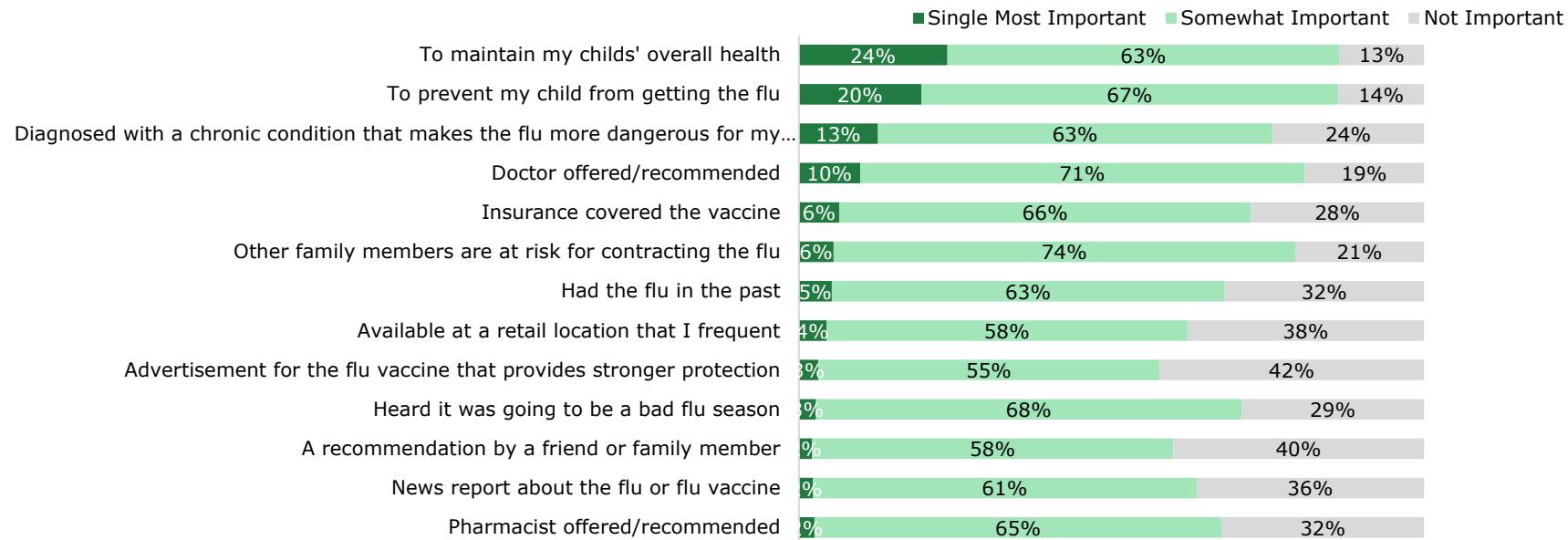
**03**

The lack of need seems to largely be a decision for the family as a whole, not just for the child.

- 3/4 of parents are making the same decision for themselves as their child (half together getting vaccinated, a quarter together not getting a vaccine, with only the last quarter choosing differently for themselves vs their child)

# Overall health concerns top the reasons parents seek a flu immunization for their children

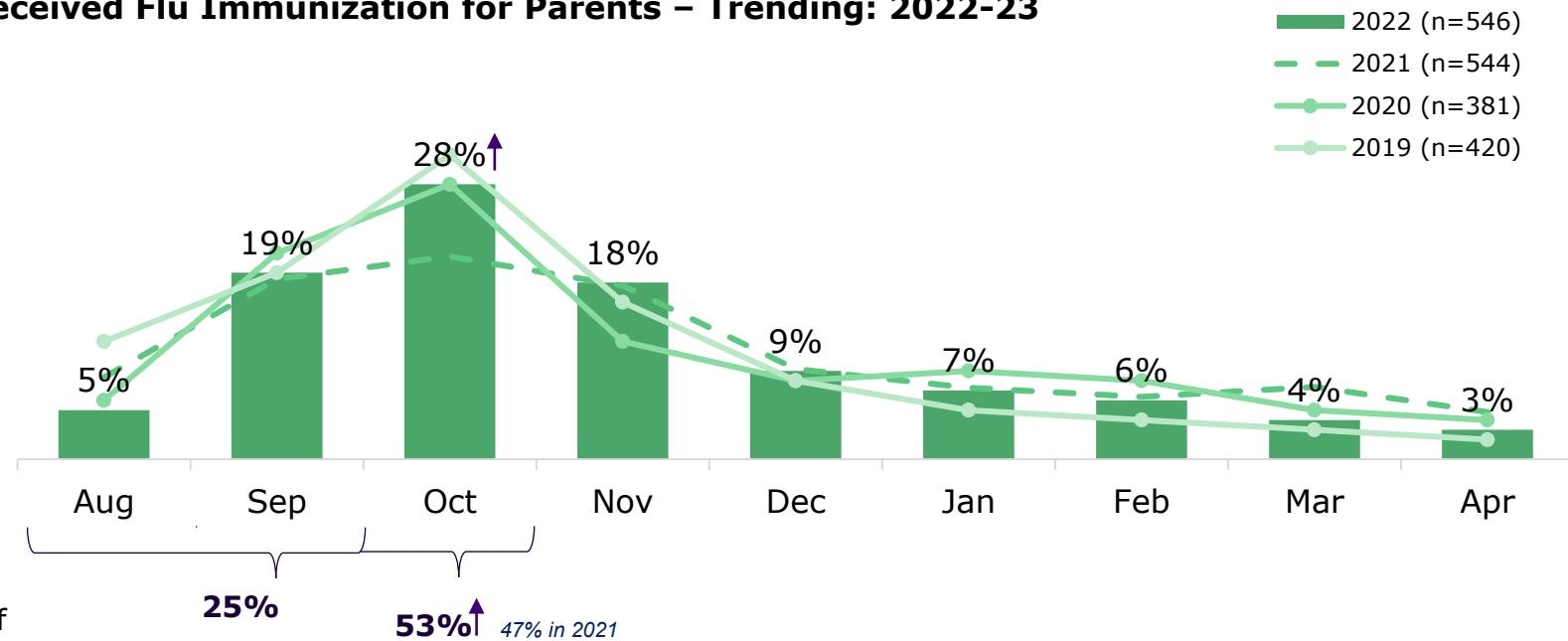
## Importance of Motivating Factors to Seek an Influenza Vaccine: Parents 2022-23



*Importance.* Below are factors that may or may not motivate you to seek a flu vaccine [for your child]. Please indicate how important these items are to you by sorting them into one of the following three buckets. \*New 2022

October activity was higher than in 2021-22 bringing it more inline with other Cohorts

**Month Received Flu Immunization for Parents – Trending: 2022-23**

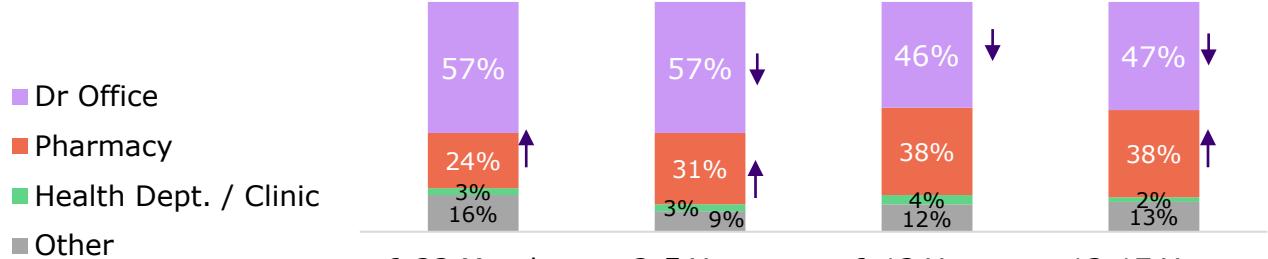


q8. In what month did [you / your child] receive the flu vaccine this season?

Arrows indicate significant change over previous year

# More teens were vaccinated at the pharmacy in 2022-23

## Flu Immunization Location (2022-23)



## Reason For MD Office Visit

(among those who were vaccinated at MD office)

Reason For MD Office Visit	6-23 Months (n=94) A	2-5 Years (n=149) B	6-12 Years (n=154) C	13-17 Years (n=149) D
Annual check-up	<b>78%<sup>CD</sup></b>	<b>79%<sup>CD</sup></b>	<b>56%</b>	<b>59%</b>
For the sole purpose of receiving a flu shot	15%	15%	32%	27%
Follow up visit from another condition	6%	4%	8%	11%
Sick visit	2%	1%	3%	0%
Flu Clinic	0%	1%	0%	3%

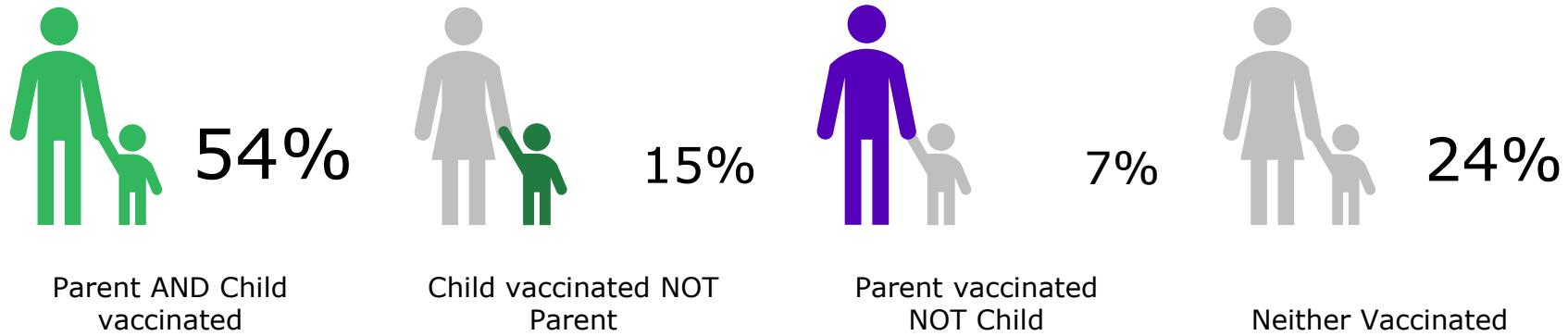
q38. Where was your child's flu vaccine administered?

q44. Please describe the reason for your / your child's office visit.

Letters indicate statistical significance at 95%  
Arrows indicate significant change over previous year

While half of parents get vaccinated along with their child, often the parent does not

**Parent and Child Immunizations 2022-23 Season**



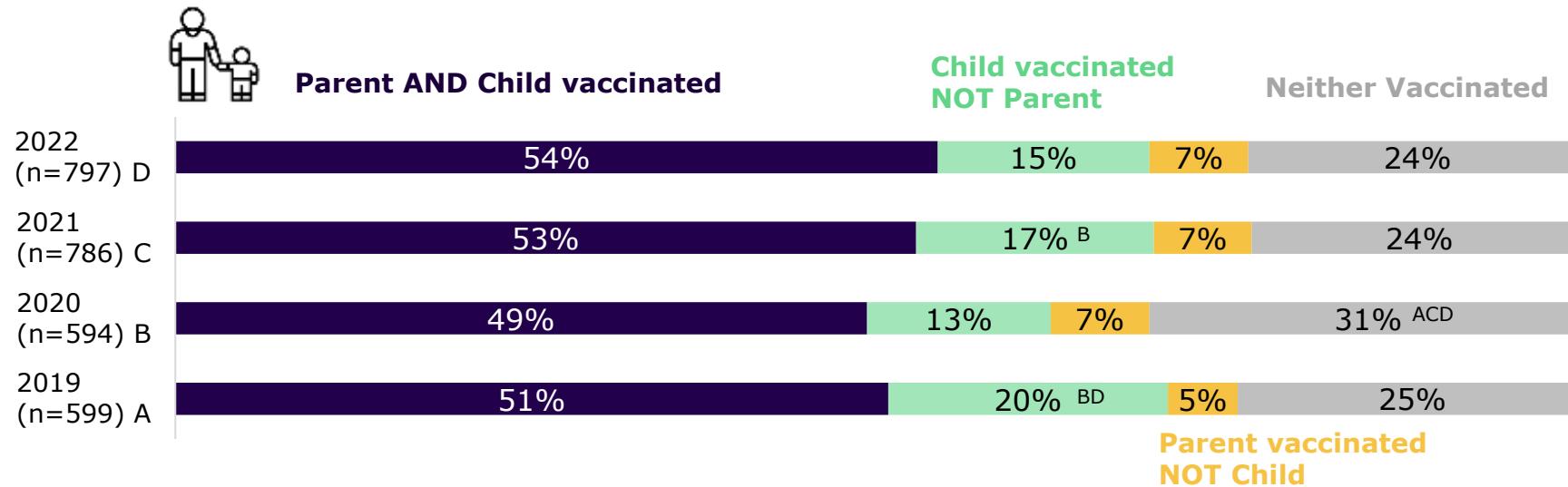
Base: Parents

q266. Now thinking of yourself, did you personally receive a flu immunization this season? New 2019

q4r1: This year - Please indicate each year received an Annual flu immunization

# Reported vaccinations among children and for their parents remained similar to 2021-22

## Parent and Child Immunizations Most Current Season:2022-23



Base: Parents

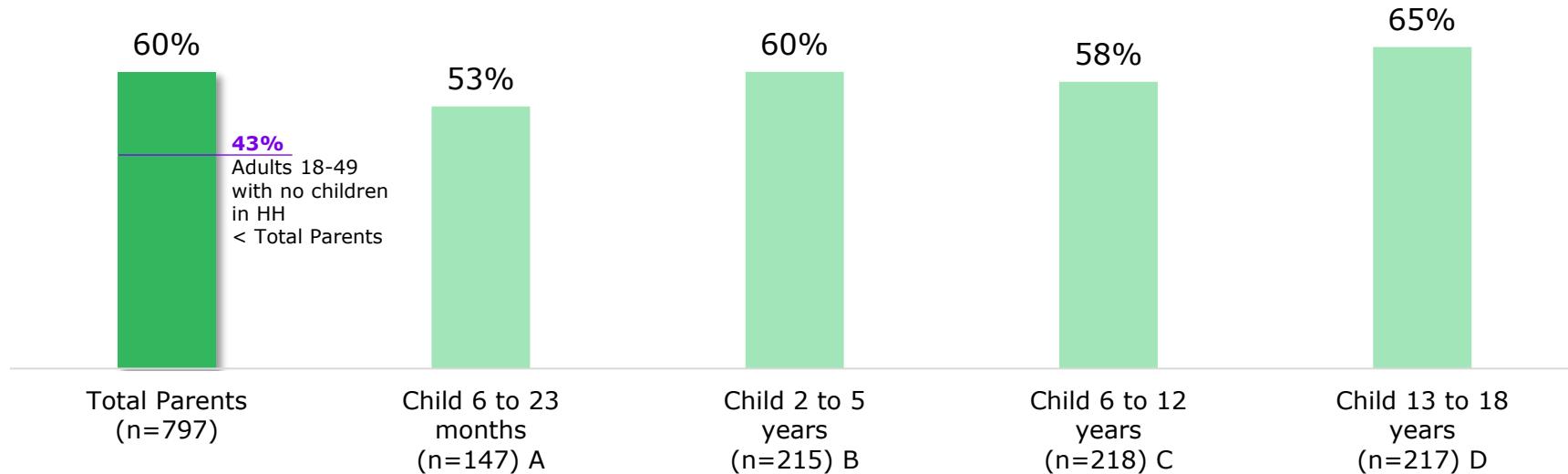
q266. Now thinking of yourself, did you personally receive a flu immunization this season? New 2019

q4r1: This year - Please indicate each year received an Annual flu immunization

Results are similar across Child age ranges

# Parents with children in the household report higher vaccination rates than non-parents of similar age

## Parents' Self Vaccination By Child Age Range 2022-23 Season



Base: Parents

q266. Now thinking of yourself, did you personally receive a flu immunization this season? New 2019

**sanofi**

Letters indicate statistical significance at 95%  
Arrows indicate significant change over previous year

Lack of perceived need and belief that their child will get the flu from the vaccine are leading barriers to immunizations this coming season

### **Top Reasons Adults Will Not Get Child a Flu Immunization This Coming Season: 2022-23**

(among those not likely to be vaccinated n=215)

	Total Parents 2022 n=215	6 to 23 months A n=46	2 to 5 years B n=58	6 to 12 years C n=52	13 to 17 years D n=59
Don't believe that my child needs a flu vaccination	<b>41%</b>	50%	41%	46%	32%
Concerned that my child will get the flu from the flu vaccine	<b>23%</b>	22%	21%	25%	22%
My child does not like needles	<b>15%</b>	9%	17%	15%	15%
My child got the flu vaccine once and had a bad reaction	<b>13%</b>	9%	9%	17%	14%
I do not like for my child to receive shots	<b>12%</b>	15%	19%	12%	8%
My child got the flu from vaccine previously	<b>11%</b>	9%	10%	8%	15% 
A healthcare professional recommended my child not get one	<b>11%</b>	11%	5%	8%	17%
There are prescription medications available to treat the flu, so I do not feel the vaccine was necessary	<b>9%</b>	15%	9%	12%	5%
Cost of the vaccine	<b>6%</b>	4%	3% 	4%	10%
Inconvenient to take my child to the doctor	<b>4%</b>	<b>7% D</b>	<b>9% D</b>	6%	0%
Do not want my child to be around others when getting vaccinated	<b>4%</b>	2%	5%	4%	3%

Q32\_N. Why might you [your child] not seek a flu vaccine this coming year? New 2020

Letters indicate statistical significance at 95%

Arrows indicate significant change over previous year

# Recommendations to vaccinate were up among infants

## Vaccinations Among Parents With And Without Doctor Recommendation

	6-23 months				2-5 years				6-12 years				13-17 years			
	2019	2020	2021	2022	2019	2020	2021	2022	2019	2020	2021	2022	2019	2020	2021	2022
Sample Size (n)	200	148	145	147	200	150	214	215	100	150	217	218	99	150	210	217
Recommendation From Doctor	56%	56%	41%	55% <sup>↑</sup>	56%	49%	51%	54%	66%	39% <sup>↓</sup>	43%	48%	57%	45% <sup>↓</sup>	44%	47%
Sample Size (n)	111	83	60	81	111	73	109	117	66	57	93	105	56	67	92	101
Received Flu Vaccination	82%	76%	75%	72%	84%	78%	83%	79%	79%	77%	80%	79%	84%	72% <sup>↓</sup>	79%	83%
No Recommendation From Doctor	44%	44%	59%	45% <sup>↓</sup>	44%	51%	49%	46%	34%	61% <sup>↑</sup>	57%	52%	43%	55% <sup>↑</sup>	56%	53%
Sample Size (n)	89	65	85	66	89	77	105	98	34	89	124	113	43	83	118	116
Received Flu Vaccination	55%	71%	62%	55%	52%	45%	52%	57%	50%	56%	64%	63%	58%	46%	63% <sup>↑</sup>	56%

"No recommendation" base includes respondents who have not seen a doctor

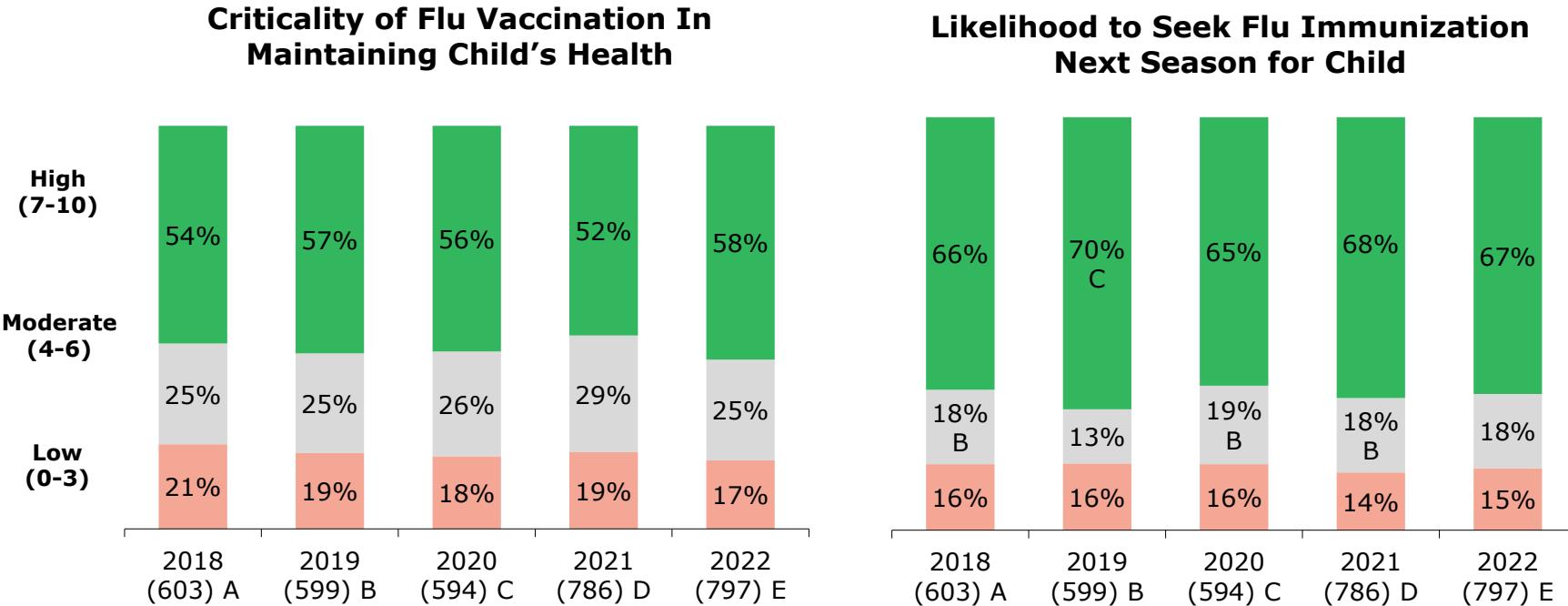
\*Small base size.

q4: For each year listed, please indicate whether [you/your child] received a flu immunization, did not receive a flu immunization, or if you don't recall.

q46. In the past year, did any of the following recommend that you [your child] get a flu immunization?

Arrows indicate significant change over previous year

# Parents attitude towards flu vaccines as critical to their child's health are consistent with recent years



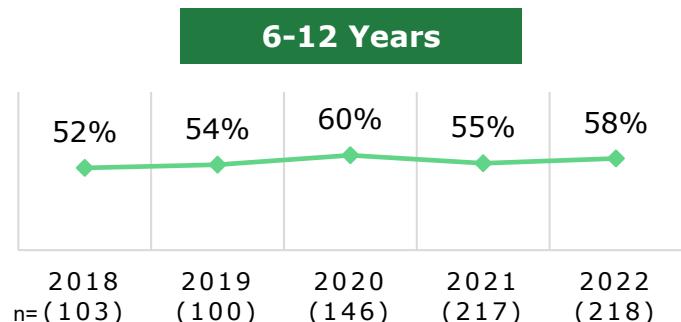
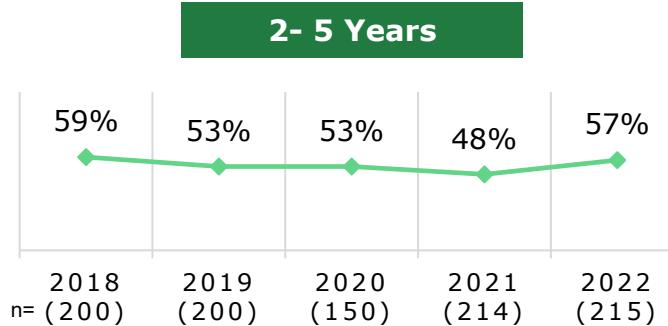
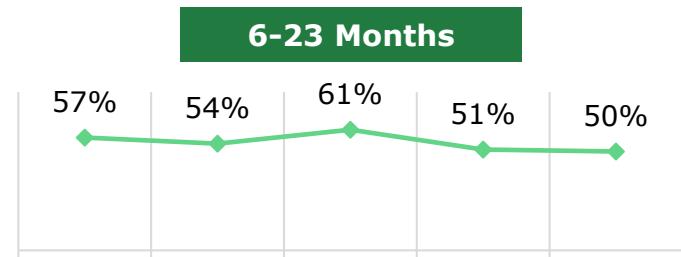
q72: Please indicate how critical you consider the flu vaccination to be in maintaining your (child's) health?

q74: How likely are you to seek a flu immunization [for your child] next year?

Letters indicate statistical significance at 95%

# Criticality of Flu Vaccination In Maintaining Health – Top 4 Box

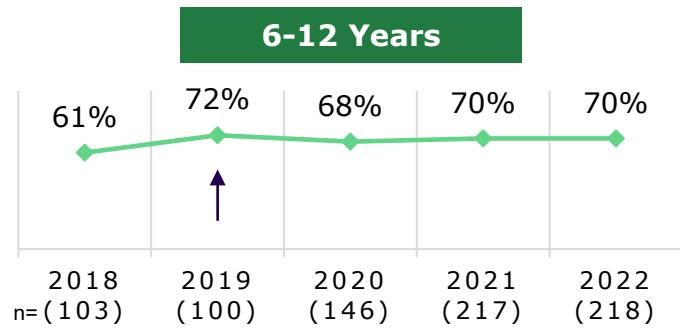
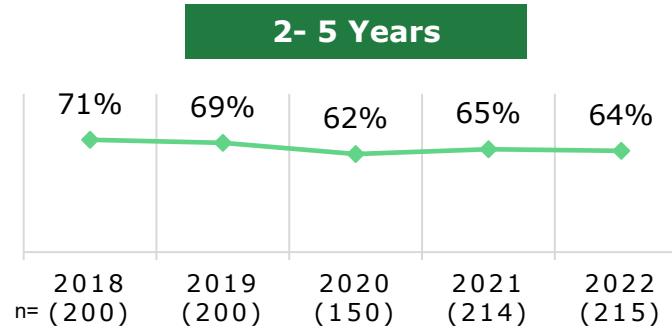
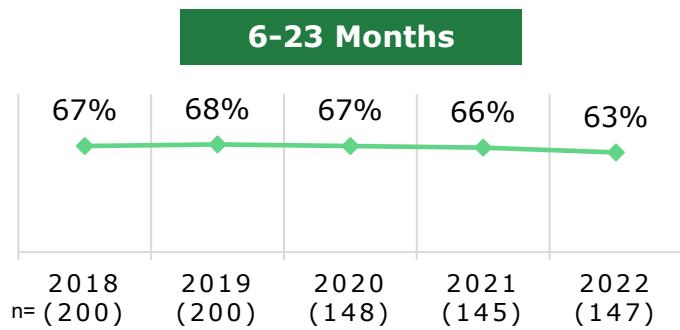
## Children Aged 6 months – 18 Years



q72: Please indicate how critical you consider the flu vaccination to be in maintaining your (child's) health?

# Likelihood to Seek Flu Immunization Next Season – Top 4 Box

## Children Aged 6 months – 18 Years



q74: How likely are you to seek a flu immunization [for your child] next year?

# Parents report higher interest in seeking a flu shot for their children 13-17

## **Flu Vaccination rates/plans among other children who weren't the specific focus of the Parent sample**

% who Received Flu Immunization  
during 2022-23 Season

2 to 5 years old (n=68)	69%
6 to 12 years old (n=169)	69%
13 to 17 years old (n=126)	72%
18+ years old (n=175)	51%

% Highly Likely to Seek a Flu Vaccine  
Next Season 2023-24

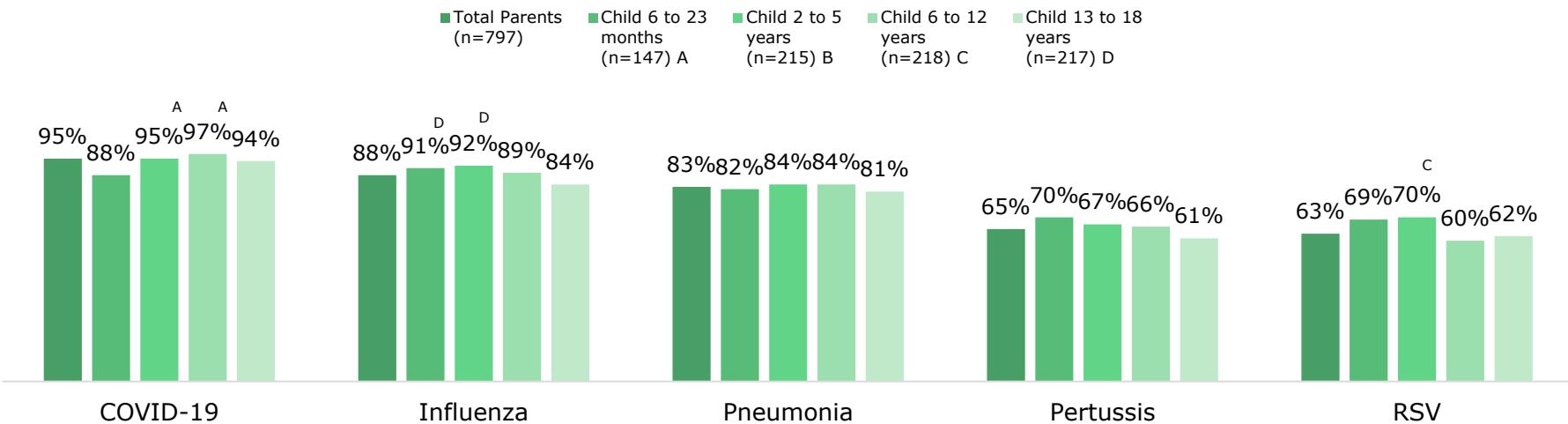
2 to 5 years old (n=68)	68%
6 to 12 years old (n=169)	68%
13 to 17 years old (n=126)	75% ↑
18+ years old (n=175)	59%

268. And thinking of your other children, did they receive a **flu immunization** this season (September 2021 - May 2022? (New 2021)

270. How likely are you to seek a flu vaccine during the upcoming flu season (Fall 2022 – Spring 2023) for your children in the following age groups? (New 2021)

# Parents of younger children are more aware of the flu and RSV infections

## Awareness of Different Respiratory Illnesses: Parents: 2022-23



Resp[x]. Which of the following respiratory illnesses are you aware of? \*New 2022

**sanofi**

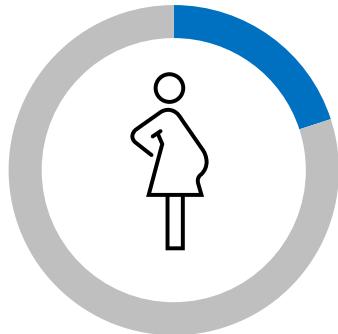
INTERNAL USE

Letters indicate statistical significance at 95%  
Arrows indicate significant change over previous year

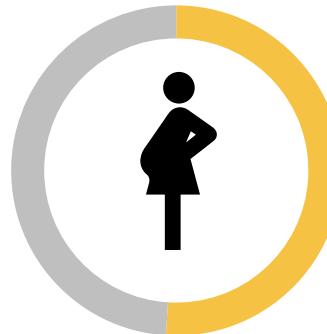
136

Just one third of expecting mothers report having received a Tdap vaccine and half with babies due during flu season are highly likely to seek an influenza vaccine

### Vaccination Coverage of Expectant Mothers: 2022-23



**20%** of Expectant Mothers\* report having had a Tdap vaccine in the past 12 months



**51%** of Expectant Mothers During Flu Season report being highly likely to get a flu shot for themselves this coming season

Considered an Expectant Flu Season Mother if the baby is due from September to February

S8. Are you currently pregnant? S9. What is the baby's estimated due date? (New 2021)

Base: n=20\* Caution Small Sample Size Q405. Which of the following vaccines have you [has your child] received in the past 12 months? (New 2021)

Base: n=51 q74. How likely are you to seek a flu immunization [for your child] next year? / Q270: How likely are you to seek a flu vaccine during the upcoming flu season for yourself?



# Although most pregnant mothers are getting vaccinated, many are using social media to seek advice and clear up common misconceptions

Pregnant moms turned to Reddit to understand first-hand experience from other moms and whether it's **safe to get a flu shot while pregnant**. They were worried that it could potentially harm their baby or that flu shot side effects would make their symptoms worse, but also worried that having the actual flu could have even worse consequences.

## Sample feeds from reddit

*"6 weeks pregnant. Is it too soon for a flu shot? I've miscarried before (due to other reasons) so I am already a bit paranoid."*

*"Is it safe to get the flu shot in second trimester?"*

*"Flu shot when pregnant?"*

**Select pregnant mothers noted they wouldn't be getting any or certain vaccinations (e.g., Tdap, flu, etc.) until after they gave birth.** Some were upset with how they were treated by their OBGYN for refusing the vaccinations, while others were grateful that the staff didn't pressure them after they denied the vaccinations the first time.

## Sample feeds from TikTok

*"no bc i signed the decline paperwork and my OB is STILL asking me about it & reinforcing me why they are so great"*

*"I'm 29 wks and got my tdap yesterday too. Decided against flu for now though."*



## Detailed Findings

### *Consumer Segments*

# KEY INSIGHTS

## Consumer Segments

**01**

Active Compliers and Responsible Dependents continue to immunize at high and consistent rates, and more frequently at the pharmacy in 2022

**02**

A fifth of Active Compliers, the highest among the segments, make an appointment to receive a flu vaccine at their physician's office

**03**

Responsible Dependents may be more inclined to listen to messaging around flu and chronic conditions

**04**

Engaged Skeptics are most concerned about multiple immunizations at the same visit

# Segmentation Study Summary

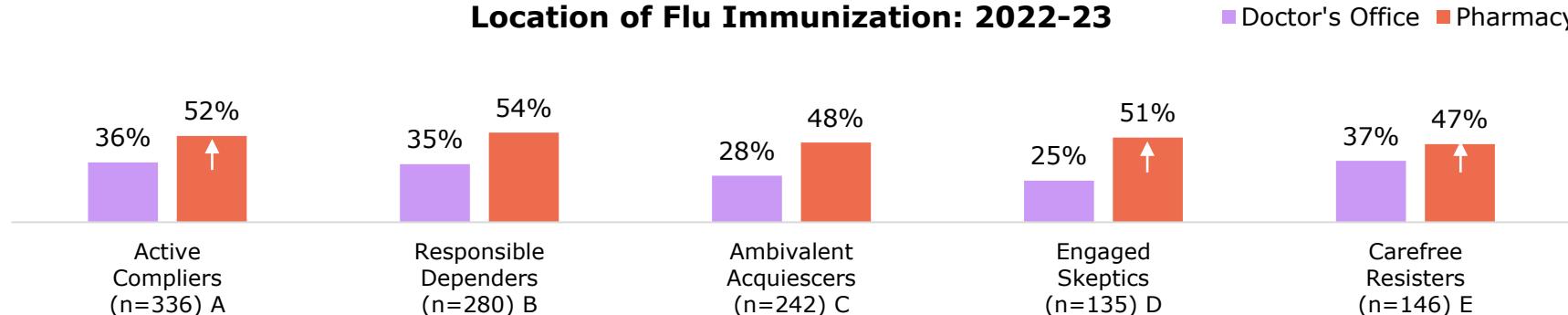
Revisiting the flu vaccine segmentation reveals five updated segments in 2022

Internal

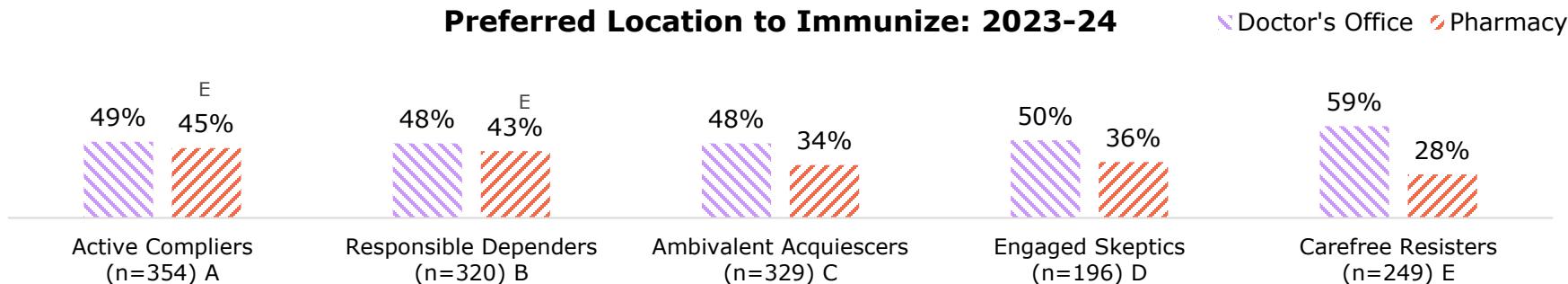
Key Objective		Methodology		Segmentation Drivers	
▪ Understand and segment the adult population regarding influenza immunization to allow for targeted communication		▪ Online surveys conducted among 6,000 adults who are open to flu immunization		- Health consciousness	
	▪ 2,000 in each of 3 key age cohorts (18-49, 50-64, 65+)			- Concern about flu	
	▪ Conducted in February 2022			- Informed about health and wellness	
				- Seek health advice from friends and family	
				- Perceived vulnerability without a flu shot	
1. Active Compliers	2. Responsible Dependents	3. Ambivalent Acquiescers	4. Engaged Skeptics	5. Carefree Resisters	
<p>The flu shot is important to me. I believe in vaccination and almost always get a shot because I'm more susceptible to the flu. You can count on me to get vaccinated.</p>	<p>I know the flu can be serious and I trust the vaccine, so I usually get my shot. My lifestyle depends on it. I know age can be an important factor, and I'm getting up there.</p>	<p>Health isn't top of mind for me. I am moderate on many issues, including the importance of immunization. I don't feel I need it but am fine getting it if pushed.</p>	<p>I'm health-conscious, and I worry about the flu, so the shot is a serious consideration... but I have reservations. I'm younger and hear lots of different opinions which makes me hesitate.</p>	<p>I'm not worried about the flu, but I can be careful and avoid getting sick. I'm not completely against vaccination but it's a low priority. It's rare that I get my shot.</p>	
 <b>Opportunity</b> Use as advocates	 <b>Opportunity</b> High-Dose and Flublok aren't currently valued	 <b>Opportunity</b> Motivation from others drive immunization	 <b>Opportunity</b> Many unvaxxed Trust barriers can be overcome	 <b>Opportunity</b> Protect others	
 <b>Priority</b> Moderate	 <b>Priority</b> Moderate	 <b>Priority</b> High	 <b>Priority</b> High	 <b>Priority</b> Low	
 21% of pop 39 M	 17% of pop 29.4 M	 25% of pop 45.9 M	 22% of pop 53.8 M	 15% of pop 31.9 M	

# Active Compliers, Engaged Skeptics and Carefree Resistors immunized at the pharmacy more in 2022-23

**Location of Flu Immunization: 2022-23**



**Preferred Location to Immunize: 2023-24**

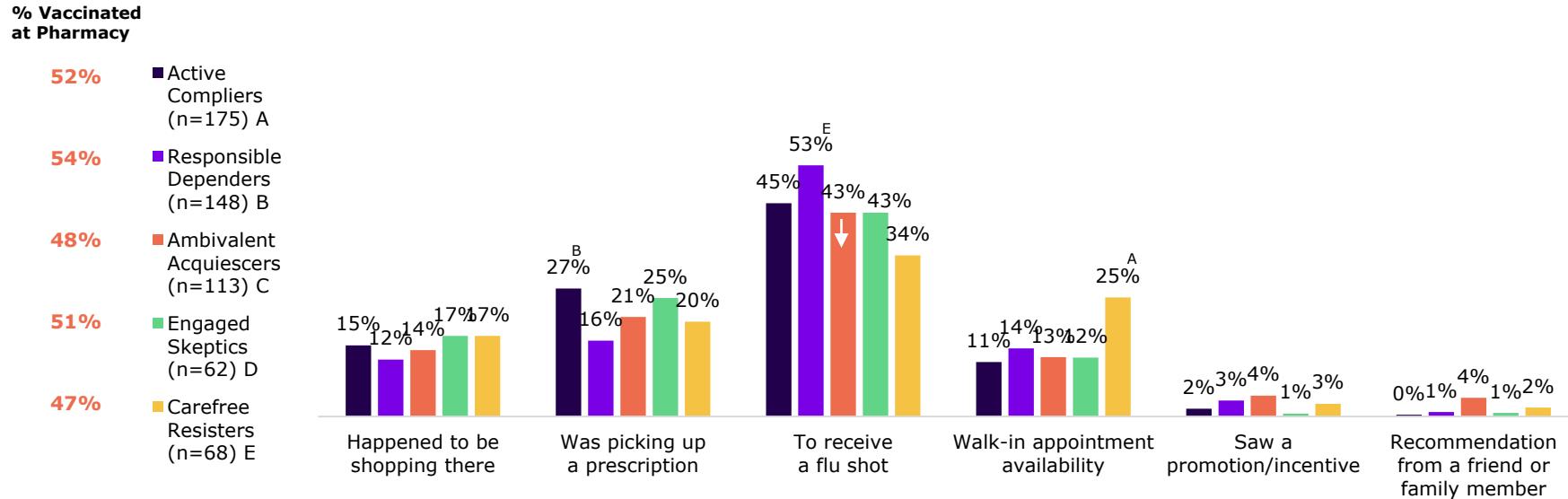


q38. Where was your [child's] flu vaccine administered?

C16. Where would you prefer to have your flu vaccine administered next season?

# Responsible Dependents most actively seek out a flu immunization at the pharmacy

## Reason For Visit When Received Flu Vaccination at the Pharmacy: 2022-23



q38. Where was your [child's] flu vaccine administered?

44\_P. Please describe the reason for [IF ID=A your / IF ID=B your child's] pharmacy visit. New 2021



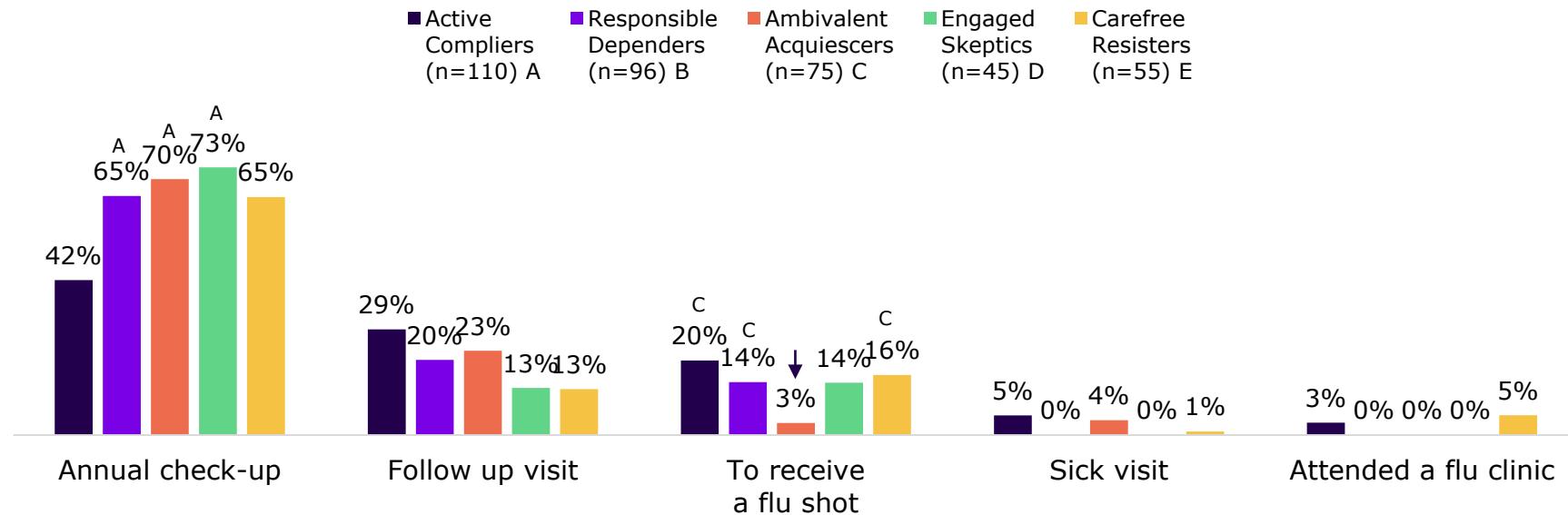
Letters indicate statistical significance at 95%

Arrows indicate significant change over previous year

# Other than Active Compliers who often make a specific appointment, most segments immunize at their annual check-up

## Reason For Visit When Received Flu Vaccination: 2022-23

### Doctors Office



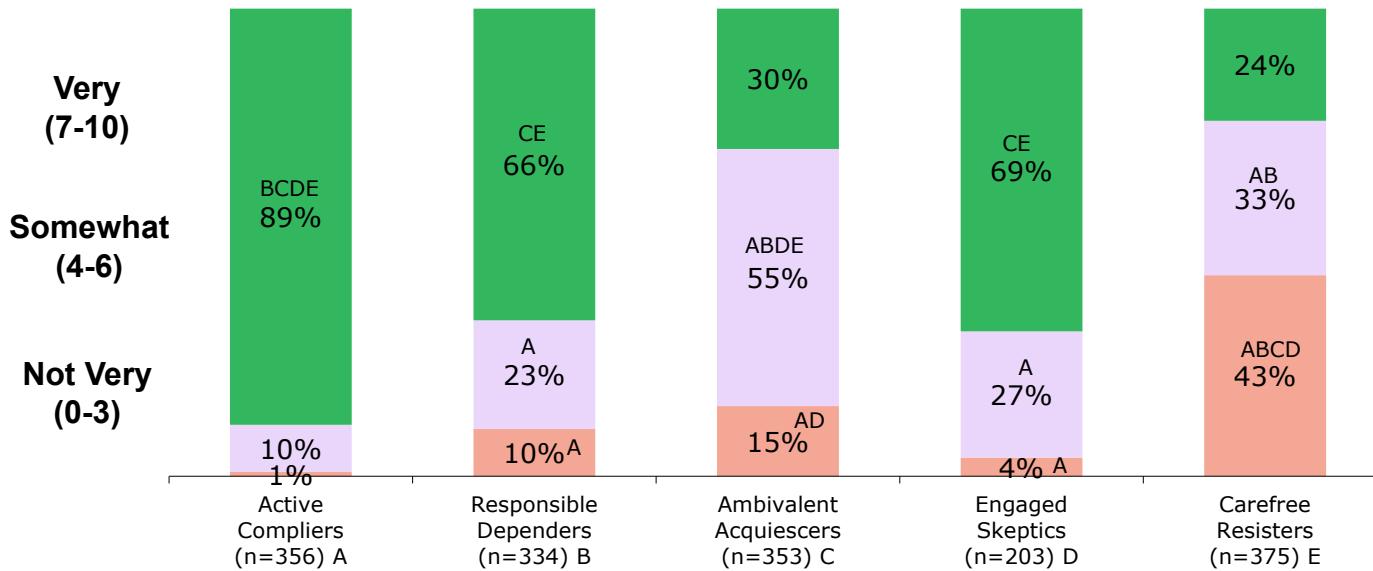
q44. Please describe the reason for your [child's] office visit.

**sanofi**

Letters indicate statistical significance at 95%  
Arrows indicate significant change over previous year

# Half of Ambivalent Acquiescers are not convinced the flu vaccine is critical to their overall health

## Criticality of Flu Vaccination In Maintaining Health: 2022-23



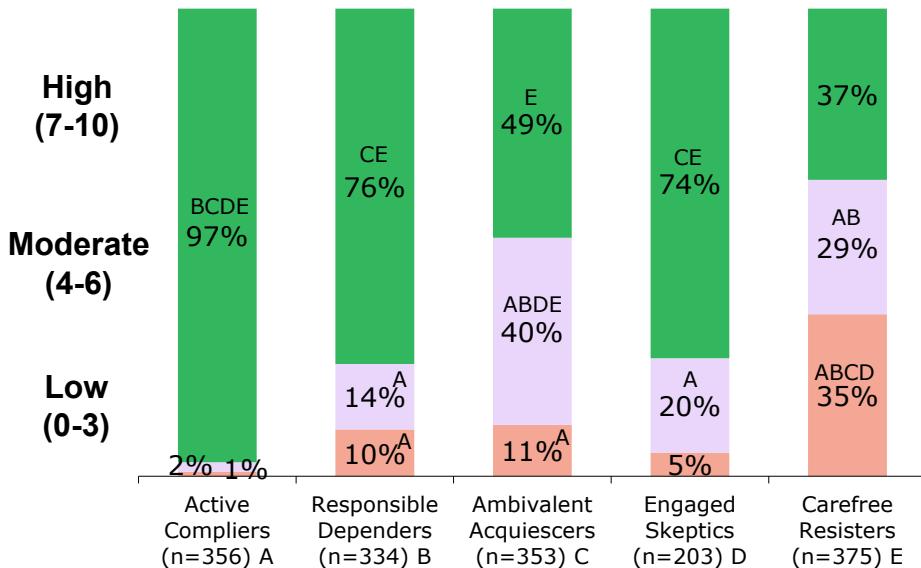
q72: Please indicate how critical you consider the flu vaccination to be in maintaining your health?



Letters indicate statistical significance at 95%  
Arrows indicate significant change over previous year

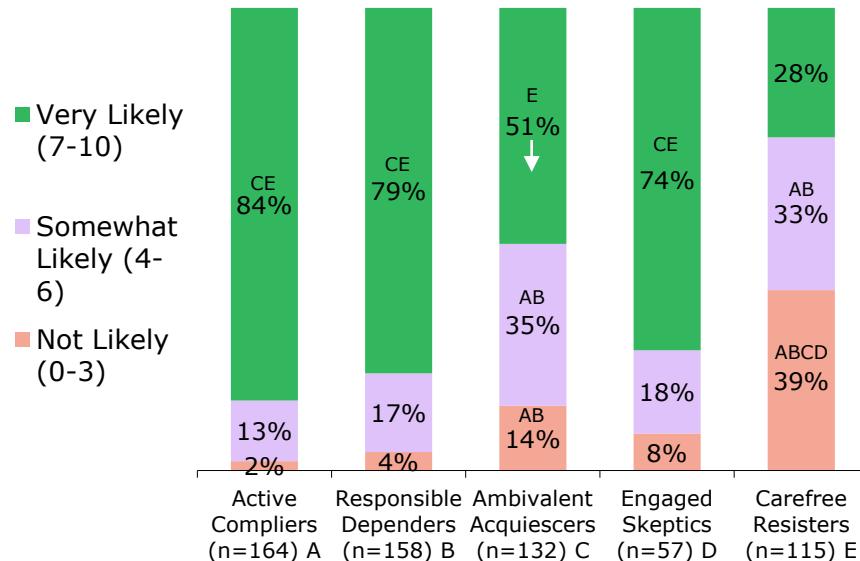
# Active Compliers are both highly likely to seek an immunization and Fluzone HD next season

## Likelihood to Seek Flu Immunization Next Season



## Likelihood to Seek Fluzone HD Next Season

Adults 65+ (after reviewing product profile)



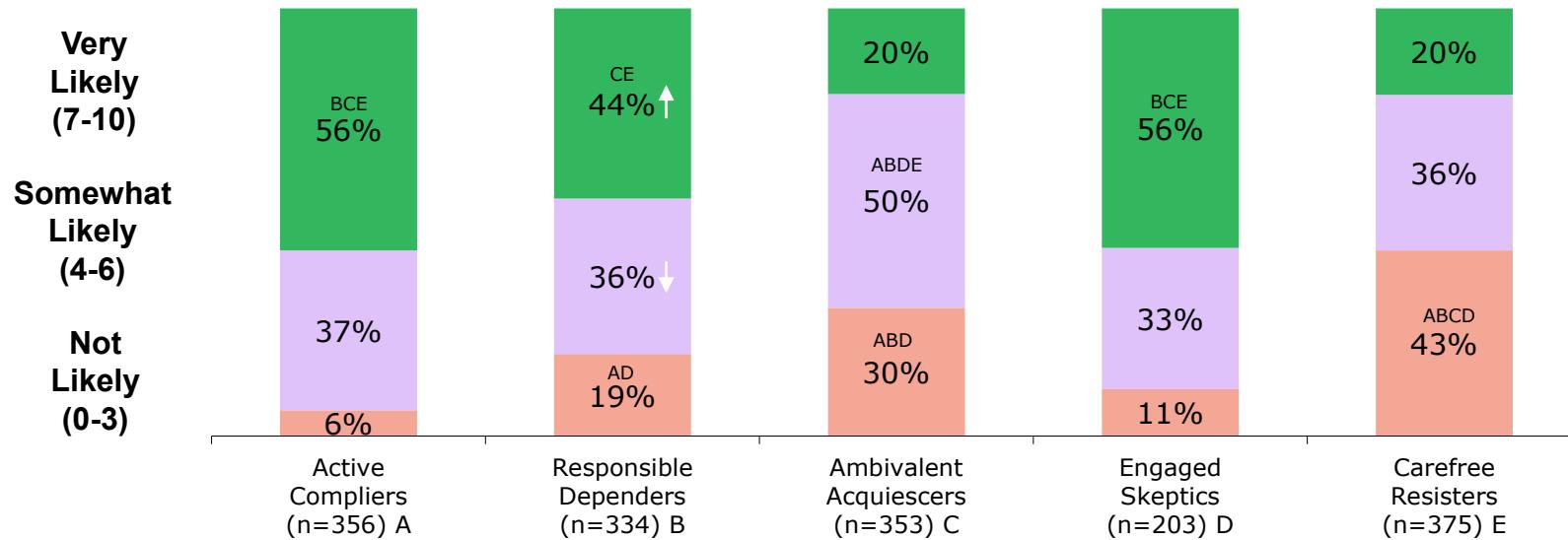
q74. How likely are you to seek a flu immunization [for your child] next year?

q212. How likely are you to seek this higher dose flu vaccine during the upcoming flu season?

# A larger portion of Responsible Dependents report interest in seeking Flublok next season

## Likelihood to Seek Flublok Next Season: 2022-23

Adults (after reviewing product profile)



q108. How likely are you to seek this flu vaccine, Flublok, during the upcoming flu season?

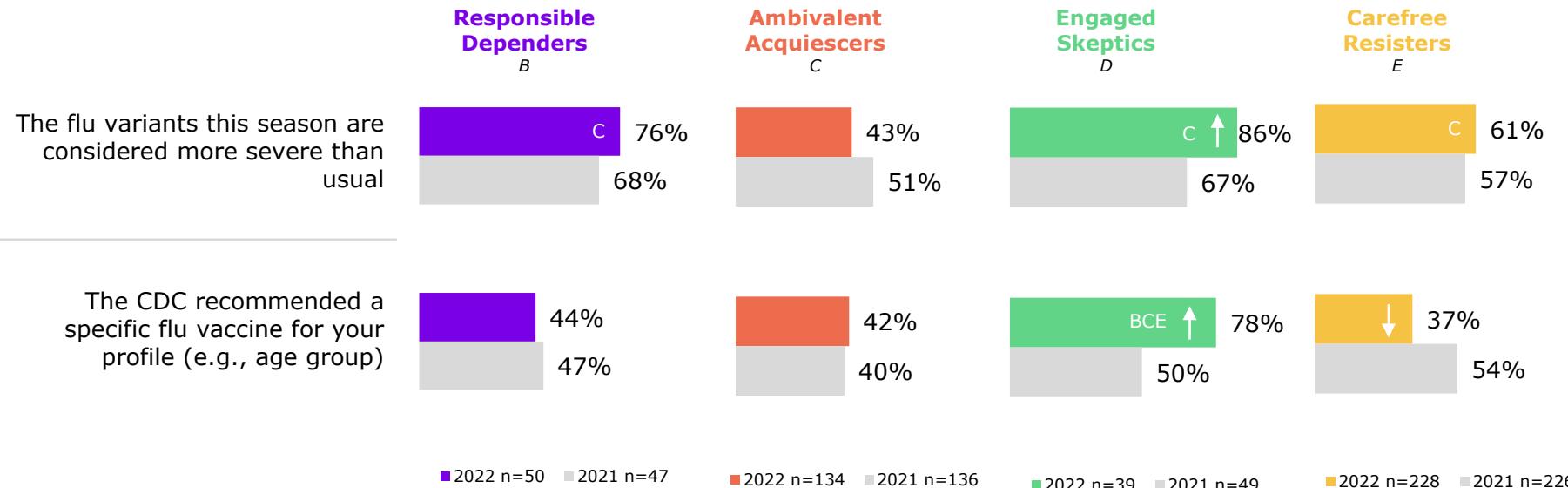
**sanofi**

Letters indicate statistical significance at 95%  
Arrows indicate significant change over previous year

# Ambivalent Acquiescers are the least likely to be swayed this coming season by scenarios presented

## % Who would be more likely to seek a flu vaccine by scenario: 2022-23

Among **Adult Segments** who are not initially highly likely to seek a flu vaccine already



**Active Compliers** Sample Size too small to report for this question (2021 n=5, 2022 n=7)

Q740. How likely are you to seek a flu immunization next season if... (New 2021)

**sanofi**

Letters indicate statistical significance at 95%  
Arrows indicate significant change over previous year

# Ambivalent Acquiescers dislike for shots and needles hinders them from seeking an immunization

## **Top Reasons Consumers Will Not Get a Flu Immunization This Coming Season: 2022-23** (among those not likely to be vaccinated)

	<b>Responsible Dependers</b> (n=35) B	<b>Ambivalent Acquiescers</b> (n=103) C	<b>Engaged Skeptics</b> (n=23*) D	<b>Carefree Resisters</b> (n=71) E
Don't believe that I need a flu vaccination	<b>42%<sup>CD</sup></b>	17%	6%	<b>46%<sup>CD</sup></b>
I got the flu vaccine once and had a bad reaction	17%	9%	<b>49%<sup>CE</sup></b>	16%
I don't like to receive shots	24% ↑	10%	10%	17%
I don't like needles	25%	19%	31% ↑	17%
Concerned that I will get the flu from the flu vaccine	19%	15%	41%	15%
I got the flu from vaccine previously	8%	12%	0%	15%
Inconvenient to go to the doctor	19% ↑	8%	9%	9%
Cost of the vaccine	4%	13% ↑	2%	6%
A healthcare professional recommended I not get one	9%	11%	10%	5%
There are prescription medications available to treat the flu, so I do not feel the vaccine was necessary	1%	9%	15%	7%
I don't want to get another vaccination after the COVID vaccine±	4%	8%	7%	14%
Do not want to be around others when getting vaccinated	0%	6%	1%	1%

\* CAUTION SMALL SAMPLE SIZE

Q32\_New: Why might you not seek a flu vaccine this coming year?

± Only asked of those who already received a COVID vaccine

**Active Compliers** Sample Size too small to report for this question (n=3)



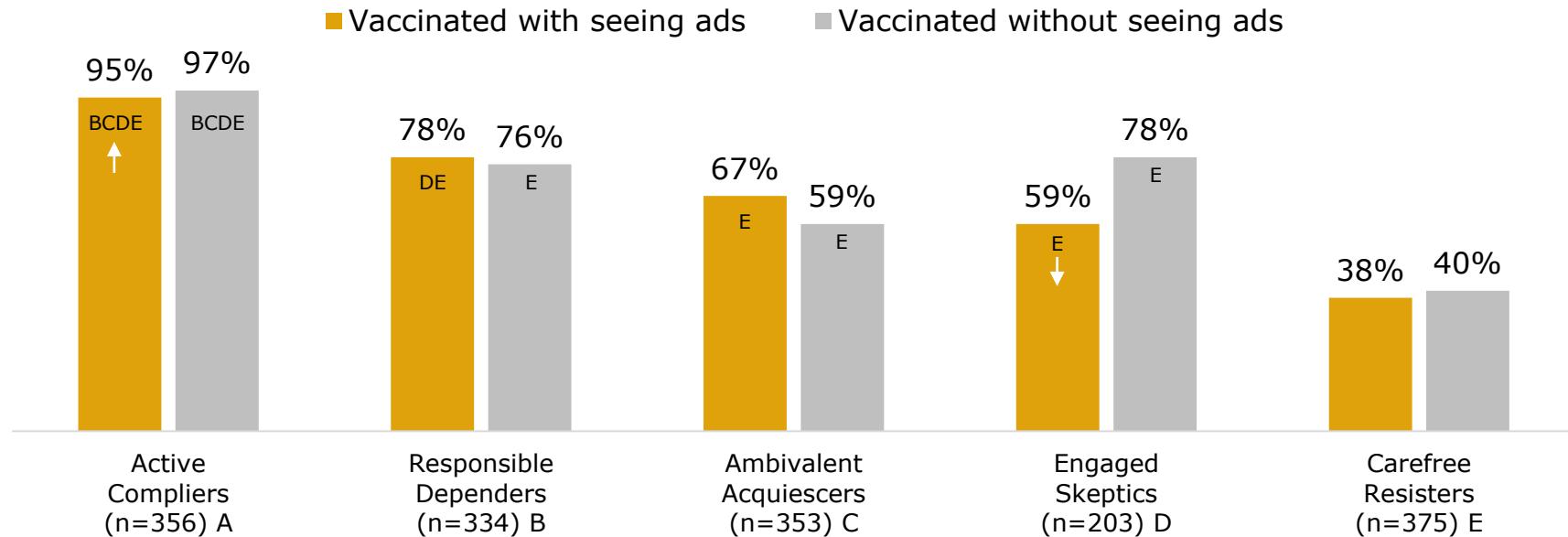
INTERNAL USE

Letters indicate statistical significance at 95%

Arrows indicate significant change over previous year

# Advertising has the most impact on Ambivalent Acquiescers vaccination rates

## Flu Vaccine Ad Aware And Immunization Rates: Segments 2022-23

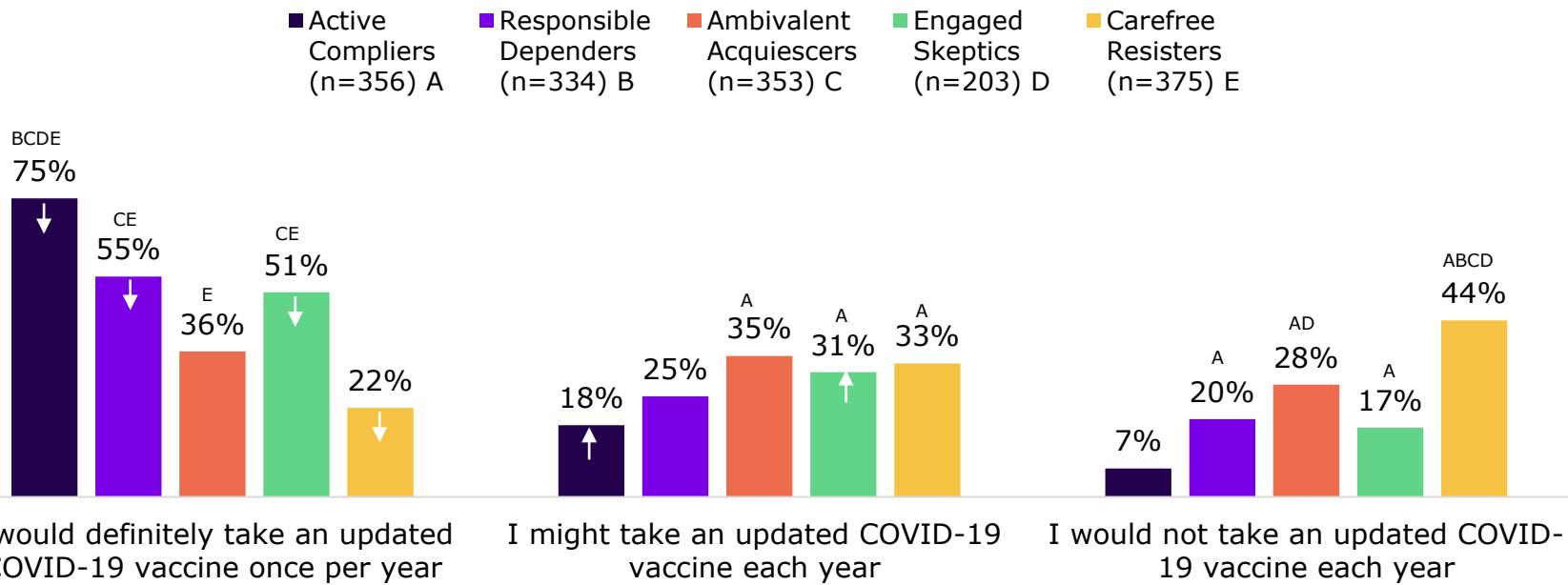


Base: Total Sample 2022

Q4r1. This year - For each year listed, please indicate whether [you/your child] received a flu immunization, did not receive a flu immunization, or if you don't recall.  
q50. Did you see advertisements promoting the flu immunization in any of the following? Please select all that apply

# Most segments show lower interest in an updated Covid vaccine

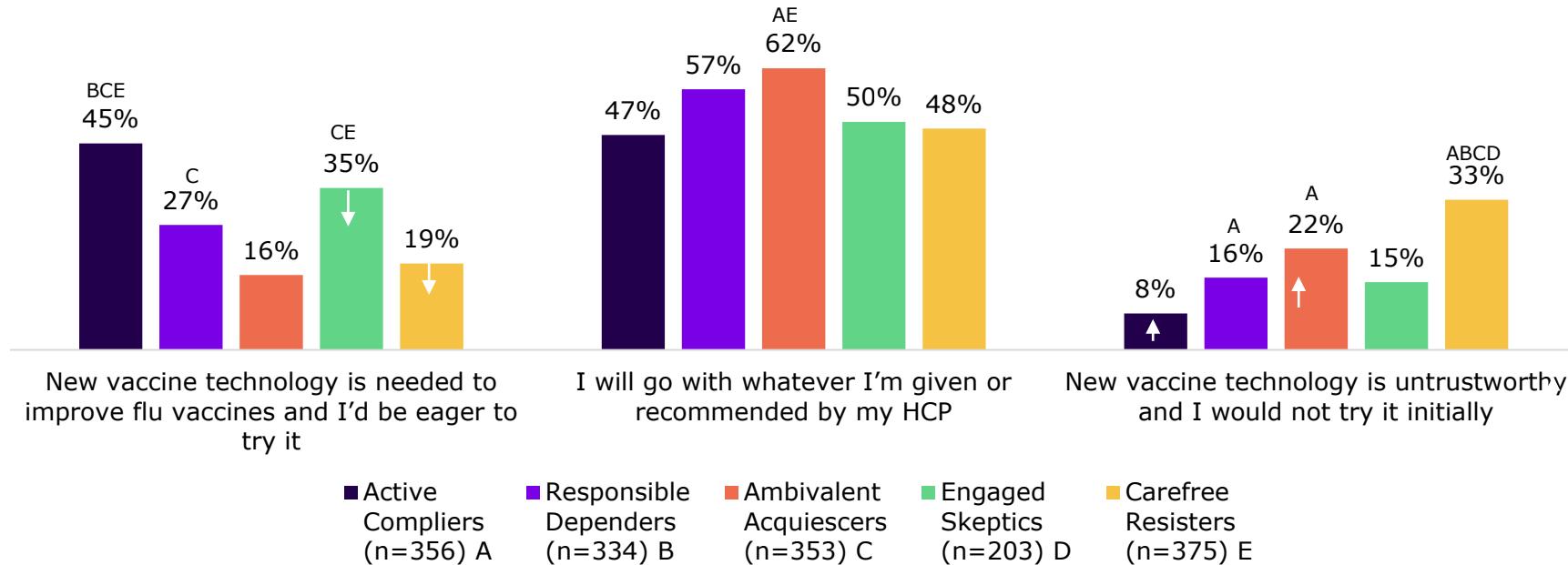
## Annual COVID-19 Immunization Interest By Segment: 2022-23



*Q450. Some healthcare professionals think COVID-19 vaccines may need to be taken annually, similar to the seasonal flu vaccine. Which statement do you most agree with? (New 2021)*

# Engaged Skeptics and Carefree Resistors are less open to technology this year

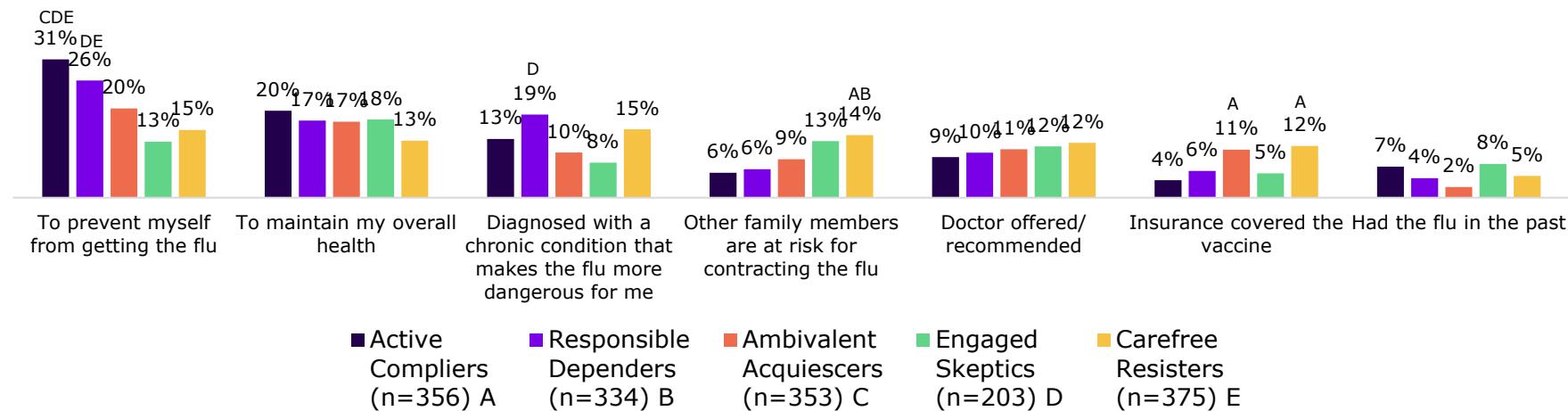
## Attitudes around mRNA Vaccine Technology and Future Flu Vaccines by Segment: 2022-23



C26. Future flu vaccines may be made with new technology such as mRNA. How do you feel about this? New 2021

Active Compliers and Responsible Dependents are more likely to vaccinate to protect themselves while Engaged Skeptics and Carefree Resistors do so to protect others around them

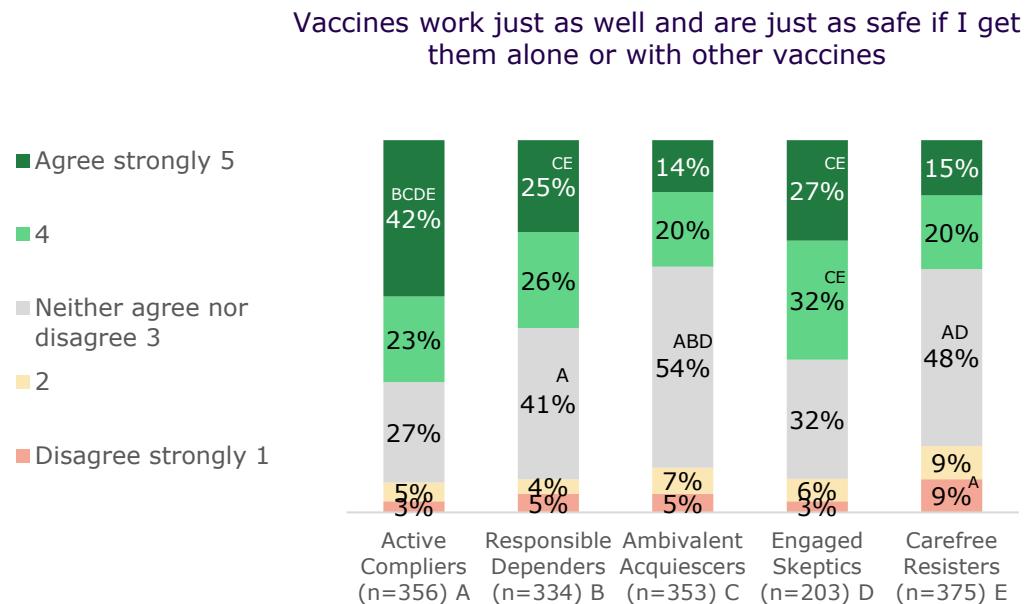
### Single Most Important Motivating Factor to Seek an Influenza Vaccine: 2022-23



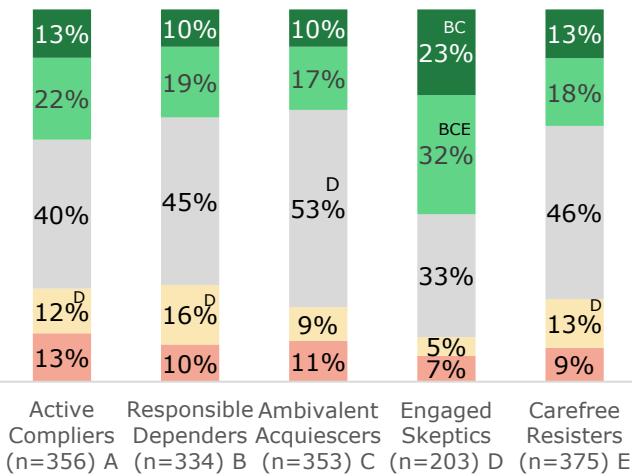
*Importance.* Below are factors that may or may not motivate you to seek a flu vaccine [for your child]. Please indicate how important these items are to you by sorting them into one of the following three buckets. \*New 2022  
Showing responses  $\geq 5\%$

# Active Compliers are least concerned with coadministration of vaccines

## Level of Agreement: Segments 2022-23



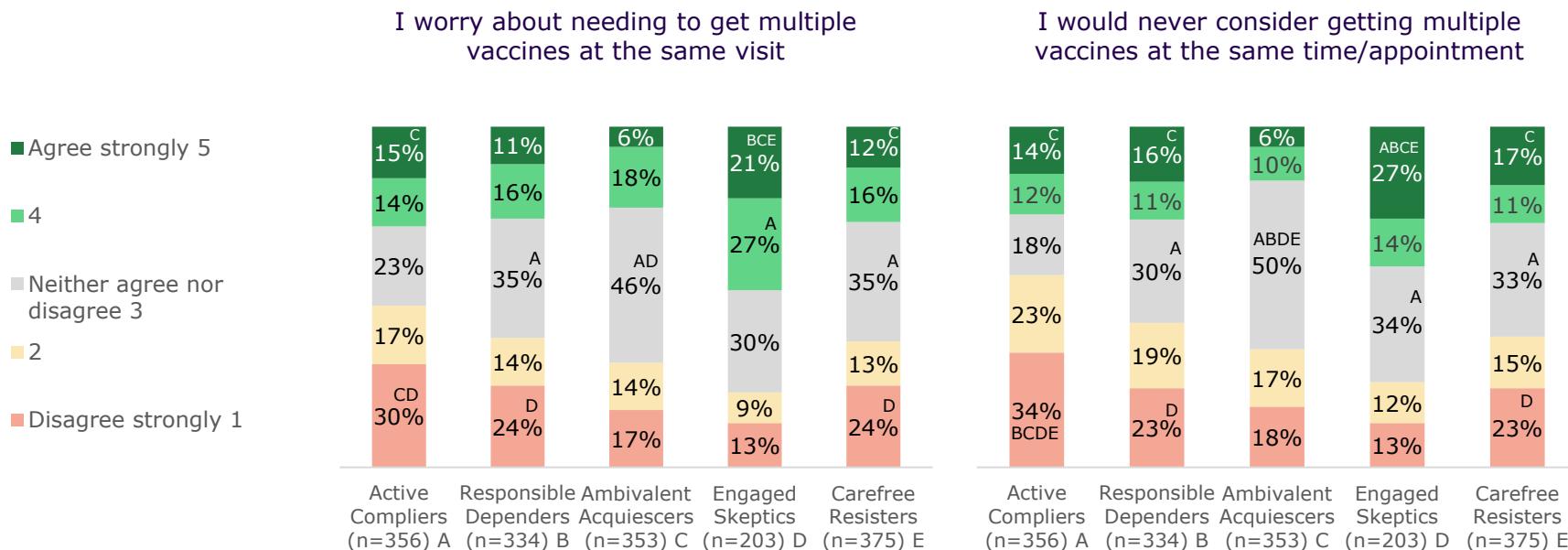
Receiving more than one type of vaccine at the same time increases the side effects



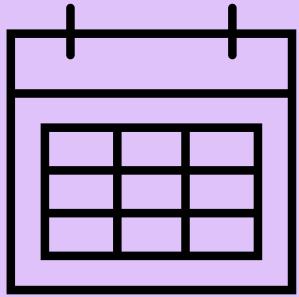
CoAdmin. Please rate your agreement with the following statements on a 1 to 5 scale. \*New 2022

# Engaged Skeptics are most concerned about multiple immunizations at the same visit

## Level of Agreement: Segments 2022-23



CoAdmin. Please rate your agreement with the following statements on a 1 to 5 scale. \*New 2022



## Appendix

*Vaccination Timing,  
Reminders &  
Recommendations*

Women in their early 60s and 70s were less likely to be vaccinated for the flu in 2022-23 while it was young men under 30 who saw significant drops

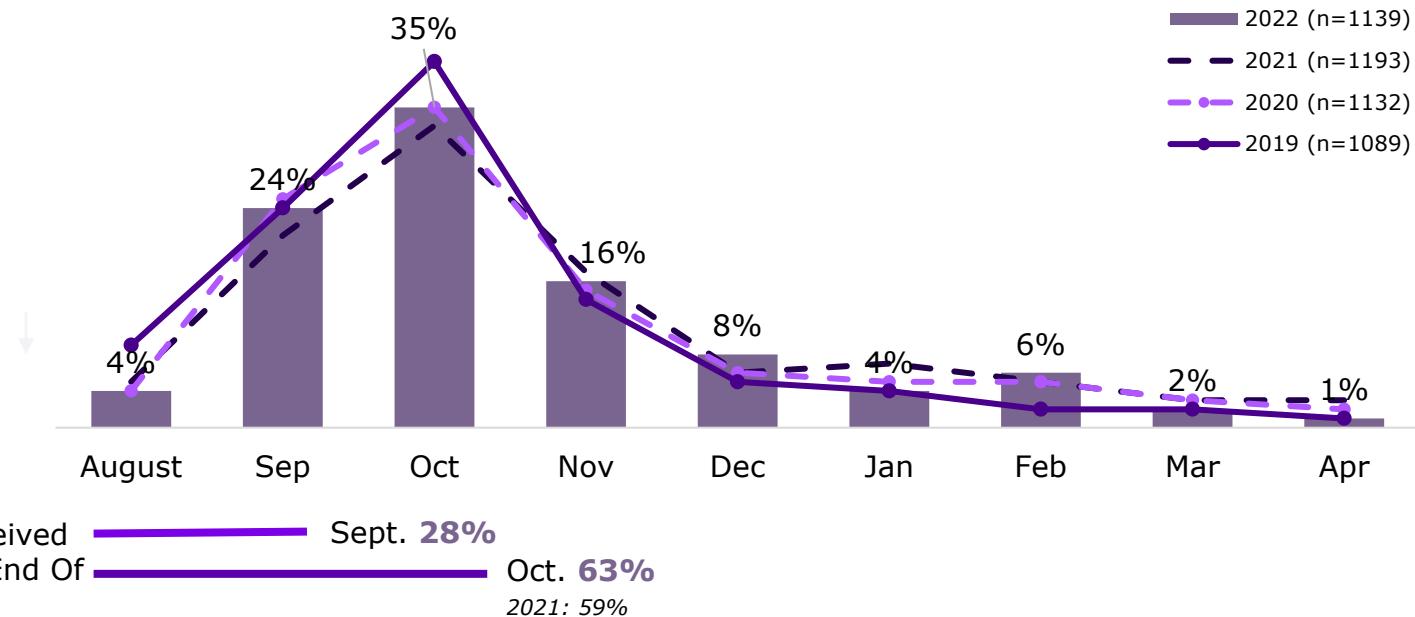
### Influenza Immunization Rates by Gender: Adults 18+ 2022-23 Season



Note: Percentages are raw, before some slight adjustments and weighting are made to the final immunization rates to account for online overestimation and population sizes, so some of these percentages appear slightly higher than final reported total immunization rates by age group.

# September and October remain the most popular months to immunize

## Month Received Flu Immunization for Adults 18+ - Trending

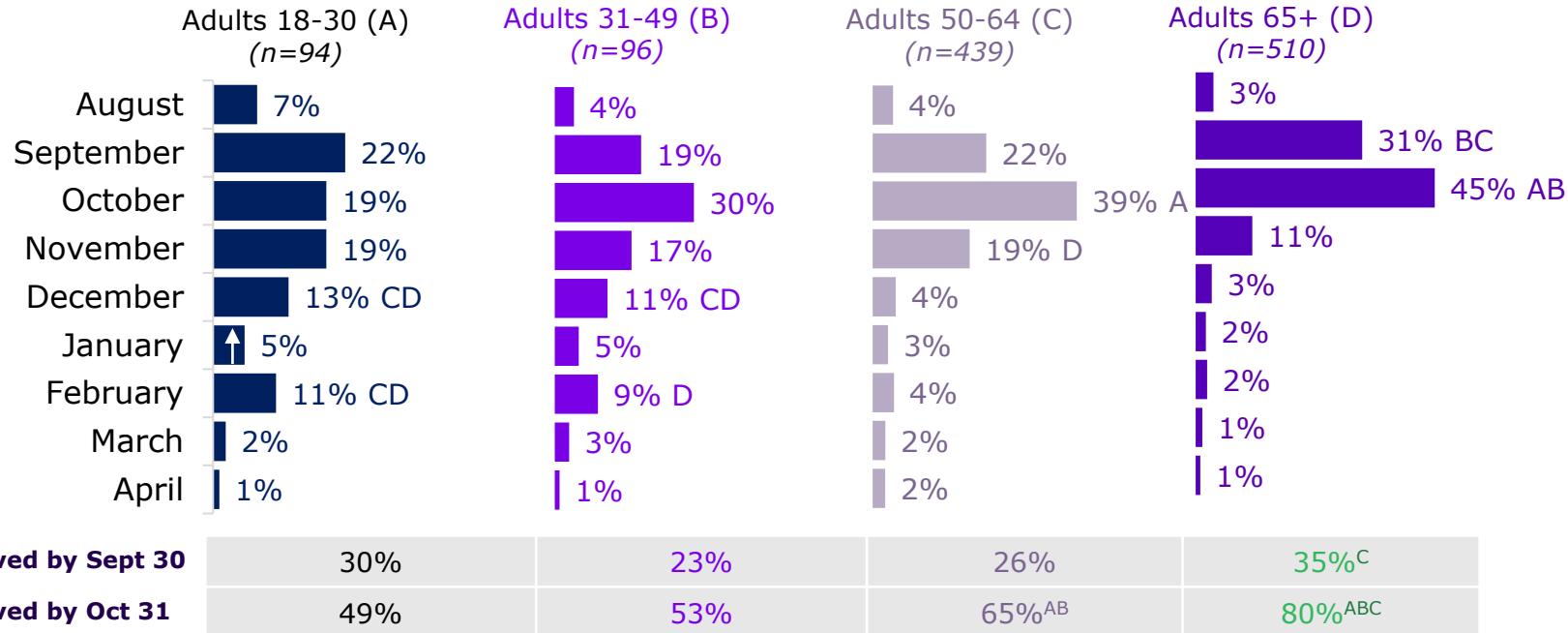


q8. In what month did [you / your child] receive the flu vaccine this season?

Arrows indicate significant change over previous year

# Seniors remain committed to vaccinating earlier in the season

## Month Received Flu Immunization for Adults by Age Groups 2022-23 Season



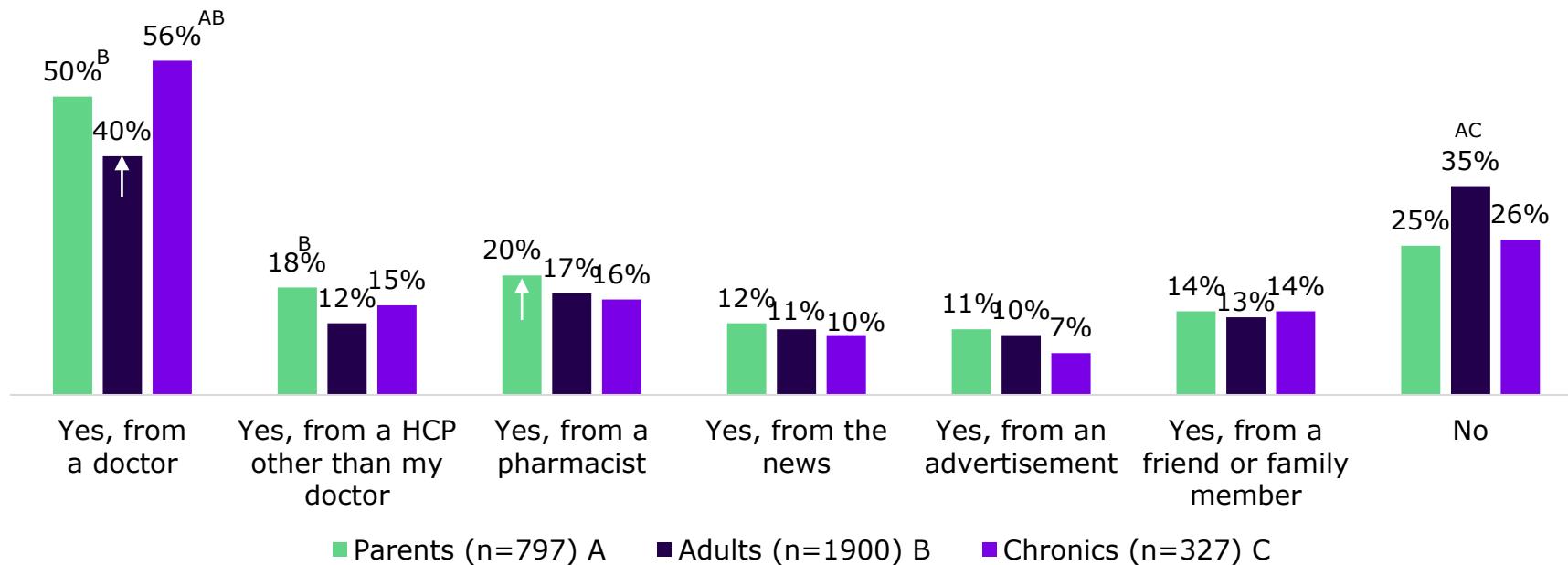
q8. In what month did you [your child] receive the flu vaccine this season?



Letters indicate statistical significance at 95%  
Arrows indicate significant change over previous year

Three-quarters of Parents and Chronics report having received or seen recommendations to get a flu shot this season, most often from a doctor

### Recommendations To Immunize Against Flu: 2022-23 Season

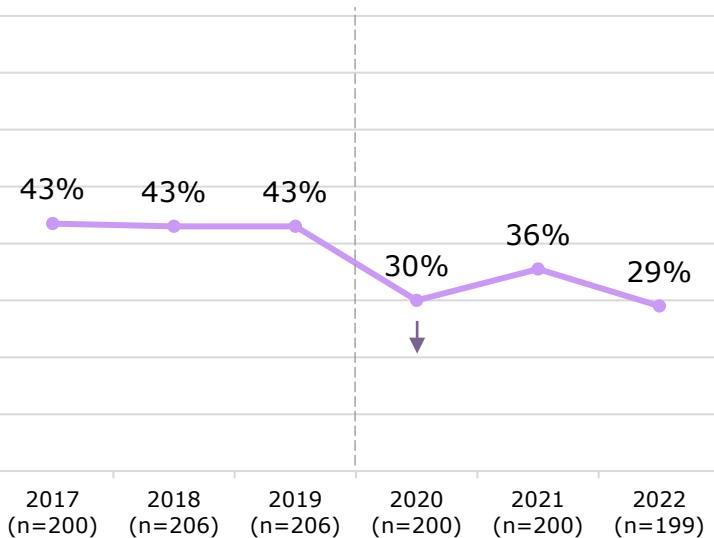


Q46. Have you received or seen any recommendations that you [IF ID=B your child] should get a flu immunization? New Options 2020

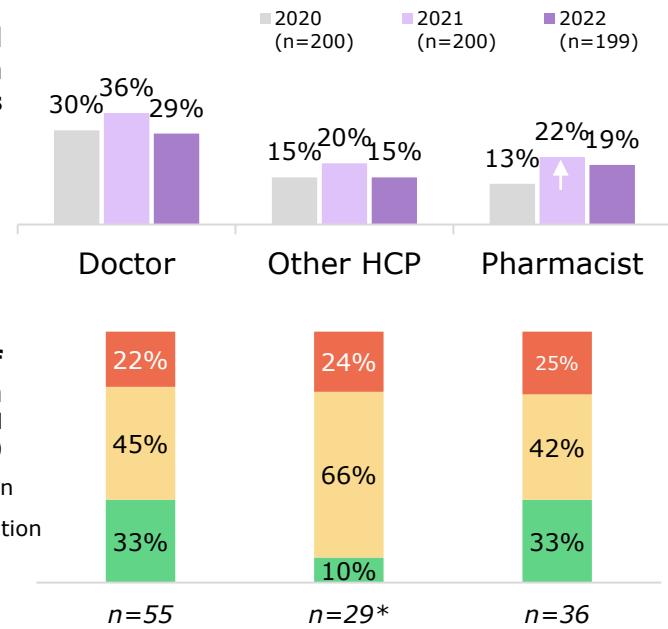
# Physician recommendations of flu shots for consumers 18-30 dropped back down this season

## Flu Vaccine Recommendations by Adult Ages 18-30

### Received Doctor Recommendation: Trending



### Received Recommendation From HCPs



### Strength of Recommendation (among those who received a recommendation)

- Strong recommendation
- Moderate recommendation
- Mild suggestion

\*Wording changed in 2020

Q46. In the past year, have you received any recommendations that you [your child] should get a flu immunization?

Q48. How strong was your healthcare provider's recommendation? Changed in 2022

Adults 50+ are most likely to receive a recommendation from a doctor, most often a GP or IM, while younger adults have a smaller percentage coming from specialists

### Doctor Specialty Who Made the Recommendation: Adults 2022-23

Received a flu vaccination recommendation from a Doctor	29%	34%	46% AB	55% ABC
	<b>Adults 18 to 30 (n=57) A</b>	<b>Adults 31 to 49 (n=67) B</b>	<b>Adults 50 to 64 (n=366) C</b>	<b>Adults 65+ (n=385) D</b>
General or family practice	77%	78%	80%	79%
Internal Medicine (IM)	9%	10%	15%	18%
Cardiology	7% CD	16% CD	1%	2%
Pediatric Medicine	14% CD	6% CD	0%	0%
Allergy and Immunology	9% CD	13% CD	1%	1%
Obstetrics and Gynecology	2%	6% C	1%	0%
Pulmonology	2%	4%	2%	2%
Oncology	4%	4%	2%	1%
Other	0%	1%	4% A	3%

11% of Adults 18-49 with children in the household say a Pediatrician recommended a flu vaccine to them

DrRecoType. What was the doctor's specialty that recommended a flu vaccine to you [your child]? Please select all that apply. \*New 2022



# Primary Care doctors were most likely to make the recommendation to consumers they should be immunized in 2022-23

## Doctor Specialty Who Made the Recommendation: 2022-23

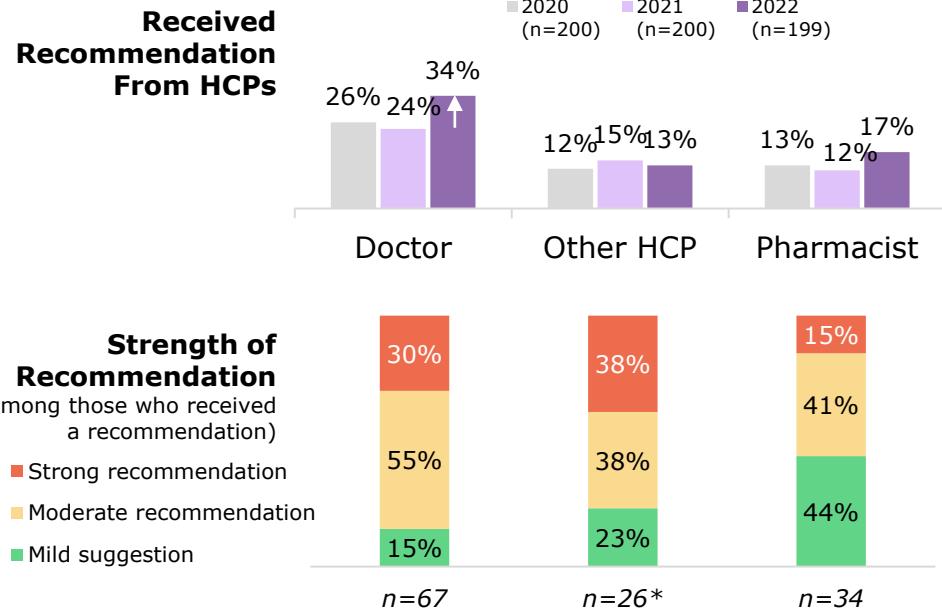
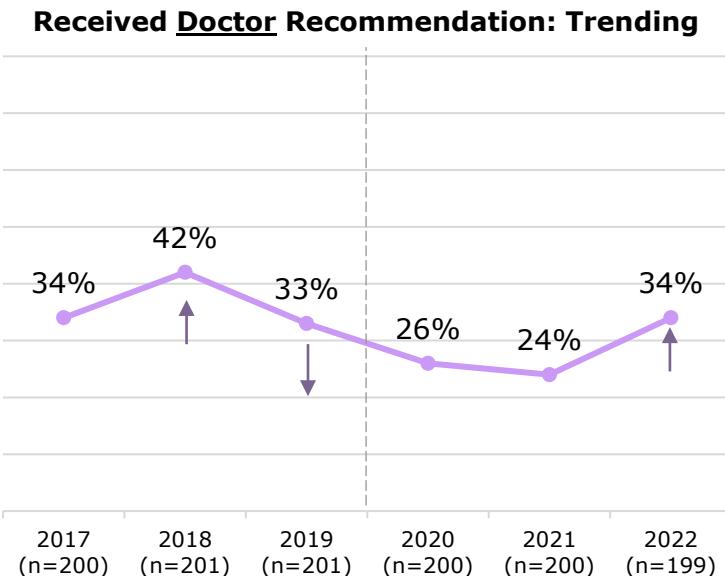
	<b>Parents A (n=404)</b>	<b>Adults B (n=875)</b>	<b>Chronics C (n=184)</b>
General or family practice	50%	<b>79%<sup>AC</sup></b>	<b>71%<sup>A</sup></b>
Internal Medicine (IM)	9%	<b>14%<sup>A</sup></b>	<b>22%<sup>A</sup></b>
Cardiology	6%	6%	4%
Pediatric Medicine	<b>49%<sup>BC</sup></b>	<b>4%<sup>C</sup></b>	1%
Allergy and Immunology	<b>11%<sup>BC</sup></b>	5%	3%
Obstetrics and Gynecology	6%	2%	1%
Pulmonology	4%	3%	6%
Oncology	1%	2%	2%
Other	0%	2%	4%

DrRecoType. What was the doctor's specialty that recommended a flu vaccine to you [your child]? Please select all that apply. \*New 2022



# A third of adults 31-49 received a doctor recommendation in 2022, halting the downward trend of the past four years

## Flu Vaccine Recommendations by Adult Ages 31-49



\*Wording changed in 2020

Q46. In the past year, have you received any recommendations that you [your child] should get a flu immunization?

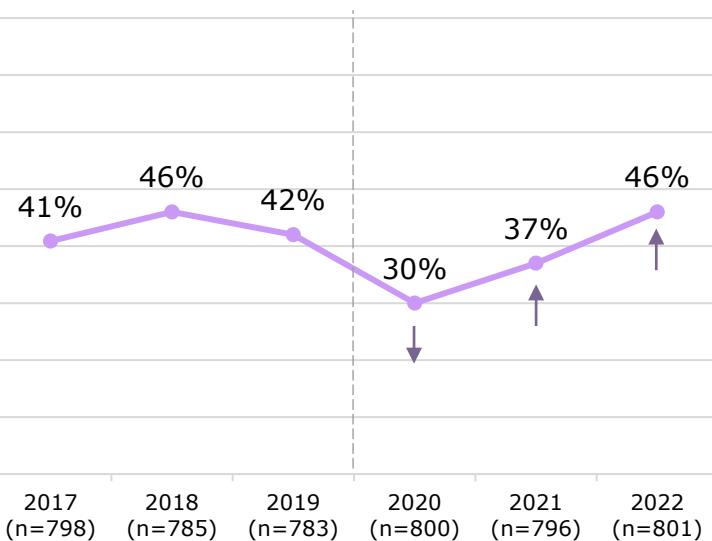
Q48. How strong was your healthcare provider's recommendation? Changed in 2022

Caution: Small Sample Size  
Letters indicate statistical significance at 95%  
Arrows indicate significant change over previous year

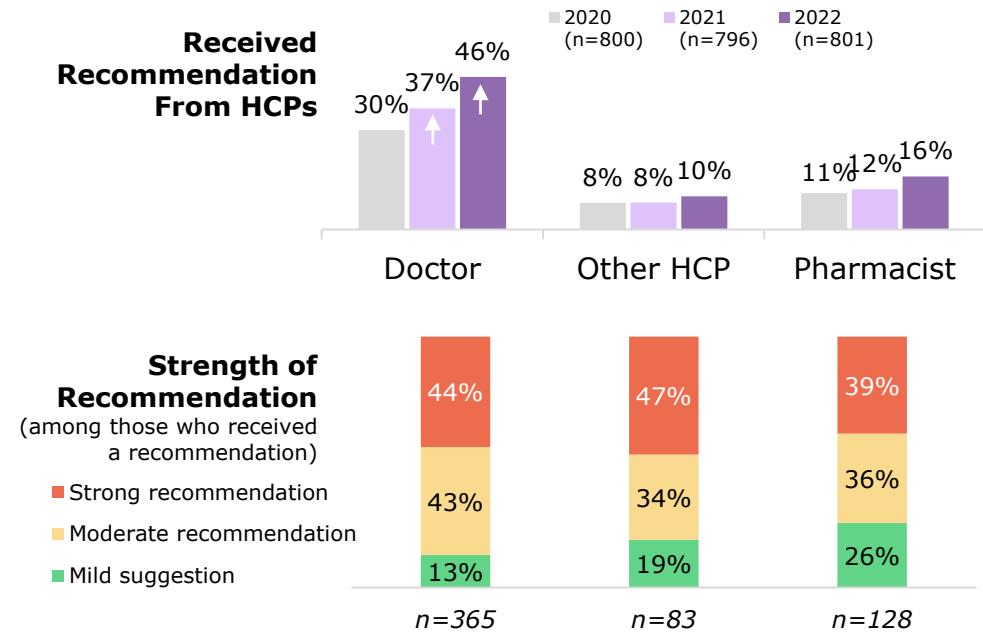
# Doctor recommendations rose significantly for adults 50-64 for a second year in a row

## Flu Vaccine Recommendations by Adult Ages 50-64

### Received Doctor Recommendation: Trending



### Received Recommendation From HCPs



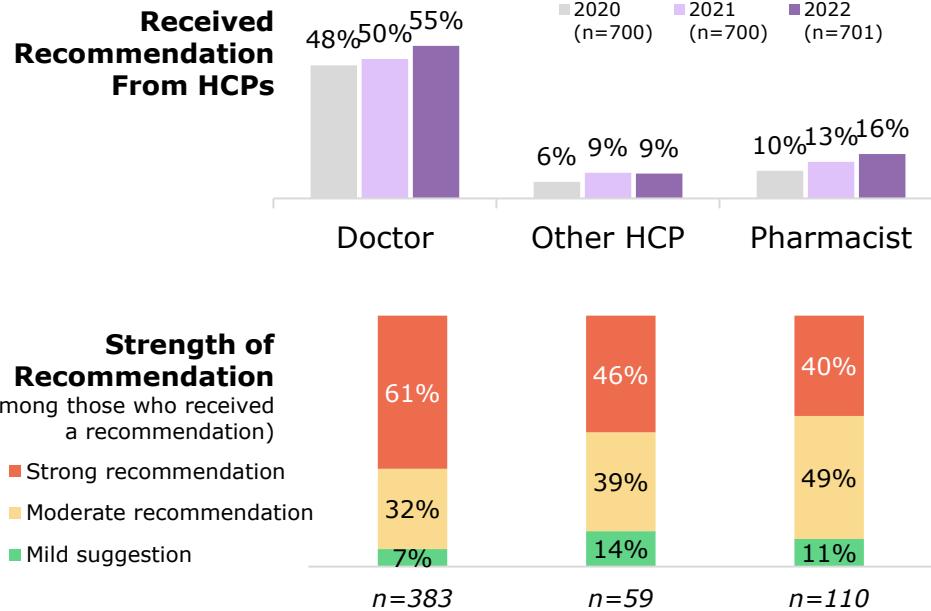
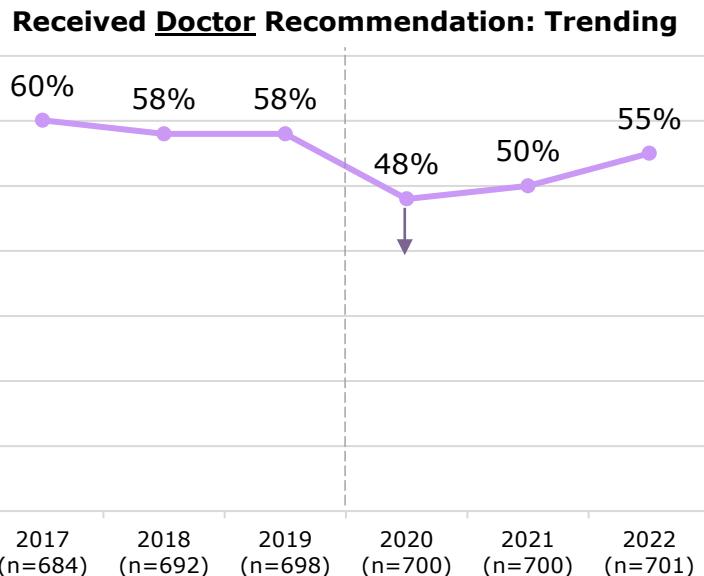
\*Wording changed in 2020

Q46. In the past year, have you received any recommendations that you [your child] should get a flu immunization?

Q48. How strong was your healthcare provider's recommendation? Changed in 2022

# Doctor recommendations for seniors remain the highest of adult cohorts

## Flu Vaccine Recommendations by Adult Ages 65+



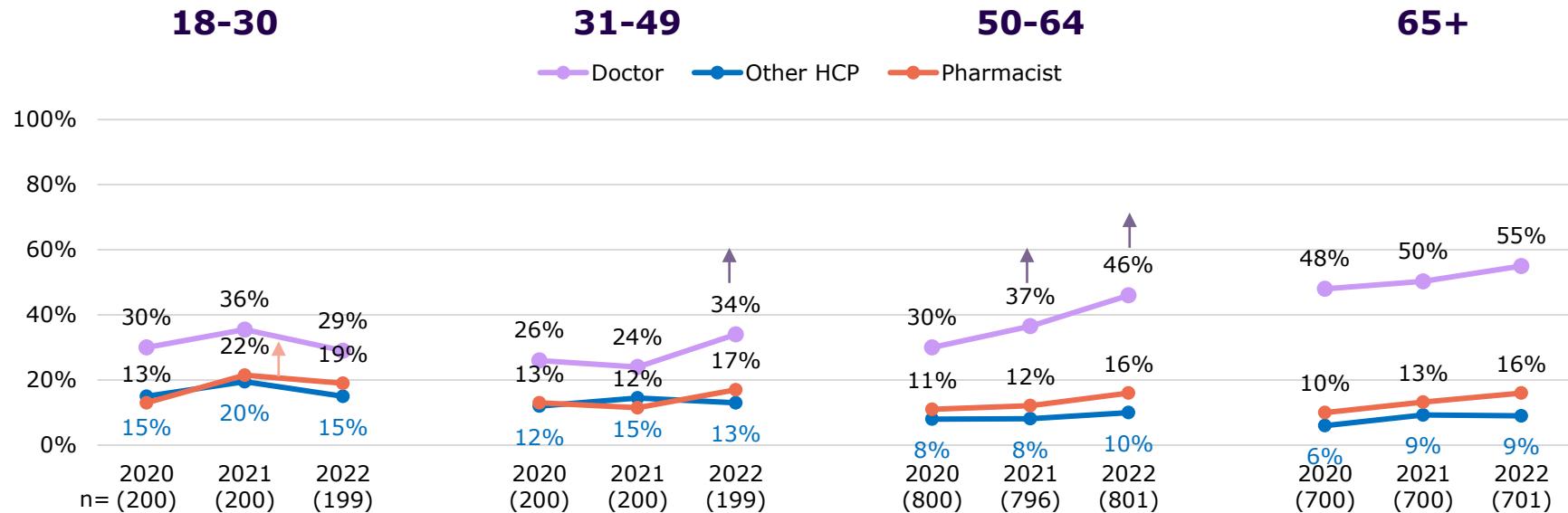
\*Wording changed in 2020

Q46. In the past year, have you received any recommendations that you [your child] should get a flu immunization?

Q48. How strong was your healthcare provider's recommendation? Changed in 2022

# HCP Flu vaccine recommendations dropped among adults 18-30

Received HCP Vaccination Recommendation: Adults 18+ - Trending



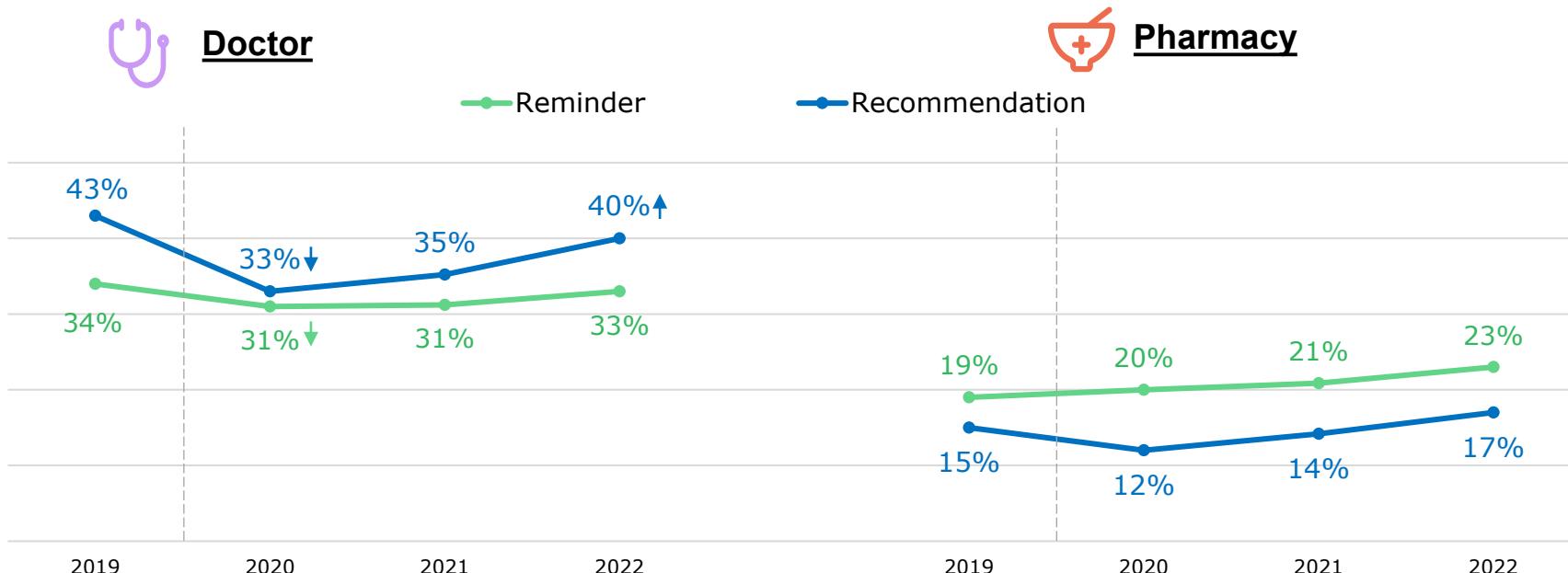
Q46. In the past year, have you received any recommendations that you [your child] should get a flu immunization?

**sanofi**

Letters indicate statistical significance at 95%  
Arrows indicate significant change over previous year 167

Reminders and recommendations to adults are trending upwards from both a doctors office and the pharmacy after declines at the height of the pandemic

### Reminders and Recommendations For Flu Immunization – Adults 18+

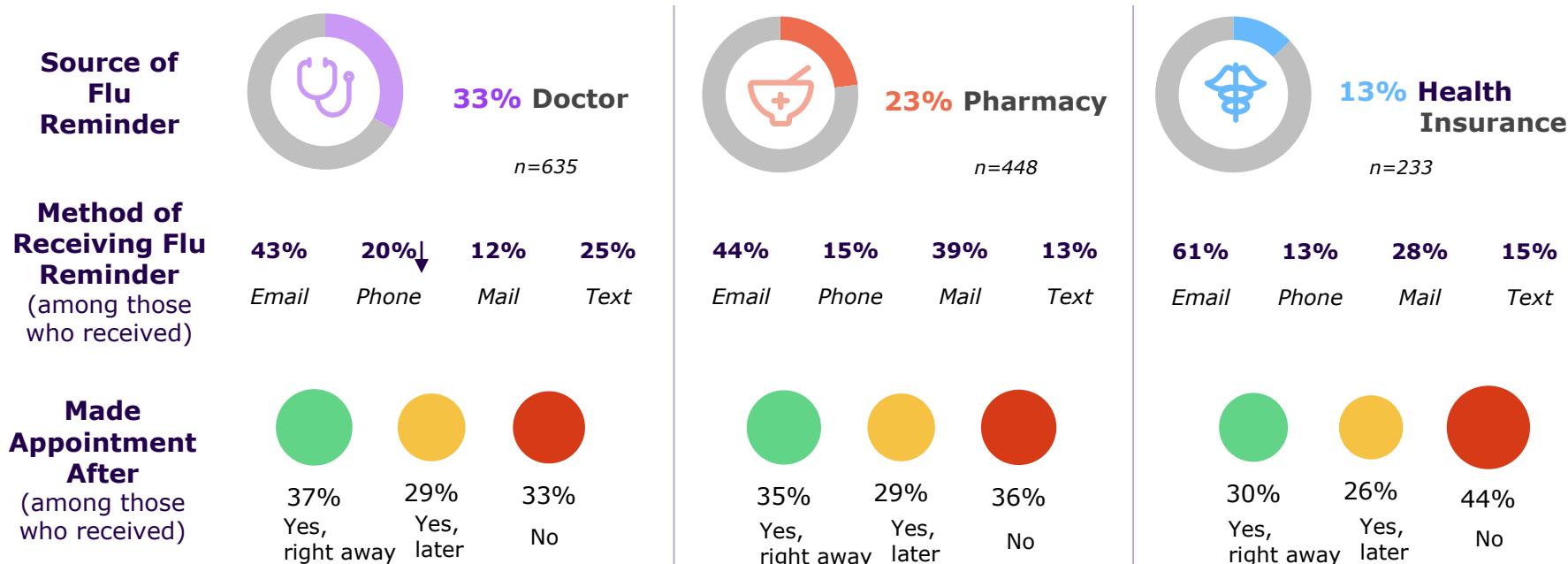


q10. Did you receive any **reminders** to get a flu vaccine [for your child] this season?

q46. In the past year, have you received any recommendations you [your child] should get a flu immunization? Changed 2020

# Adults report receiving flu vaccination reminders via email and one-third take action promptly after receiving a reminder from their HCP

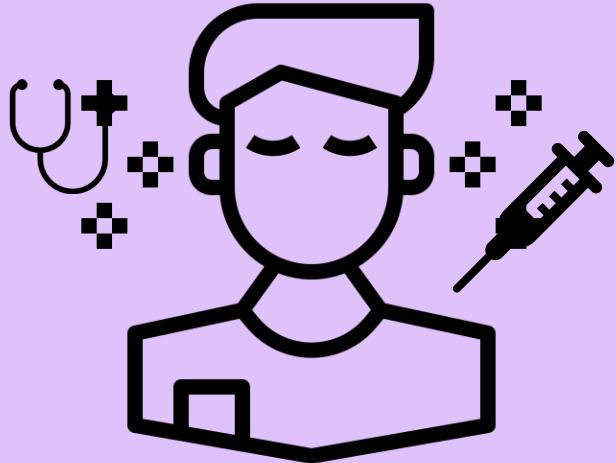
## Flu Vaccine Reminders By Sending Method & Source 2022: Adults 18+ n=1900



q10. Did you receive any reminders to get a flu vaccine [for your child] this season?

q11. How did you get the reminder(s) from [Q10]? q12. What did you do with the reminder(s) from [q10]?

Arrows indicate significant change over previous year

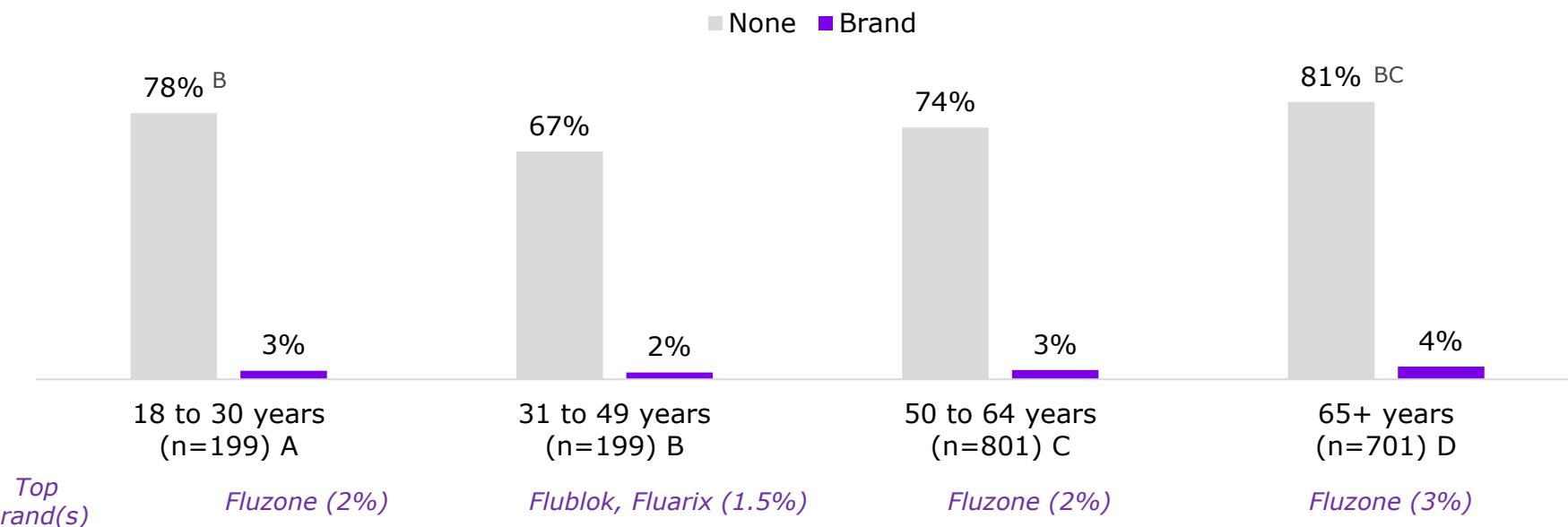


## Appendix

*Consumer Behavior & Attitudes*

# Unaided Brand Awareness

## Unaided Brand Names Or Types Of Flu Vaccines: Adults 2022 -23



Base: Total Sample

Q6.A Which brand names or types of influenza (Flu) vaccine come to mind that you are aware of? New 2019

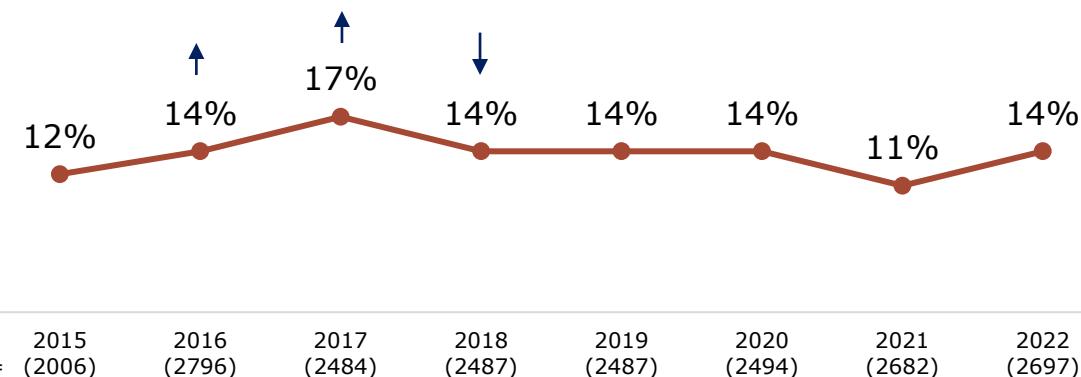
Letters indicate statistical significance at 95%

Arrows indicate significant change over previous year

# Anti-vaxxer percentages increased slightly but are still in line with prior years

## Would Never Get Flu Immunization - Trending

Total Sample (Parents+Adults)



Note: Other studies, such as the recent segmentation study, define anti-vaxxers differently, and this study is more restrictive on the definition (i.e., fewer qualify)

Base: Total Sample

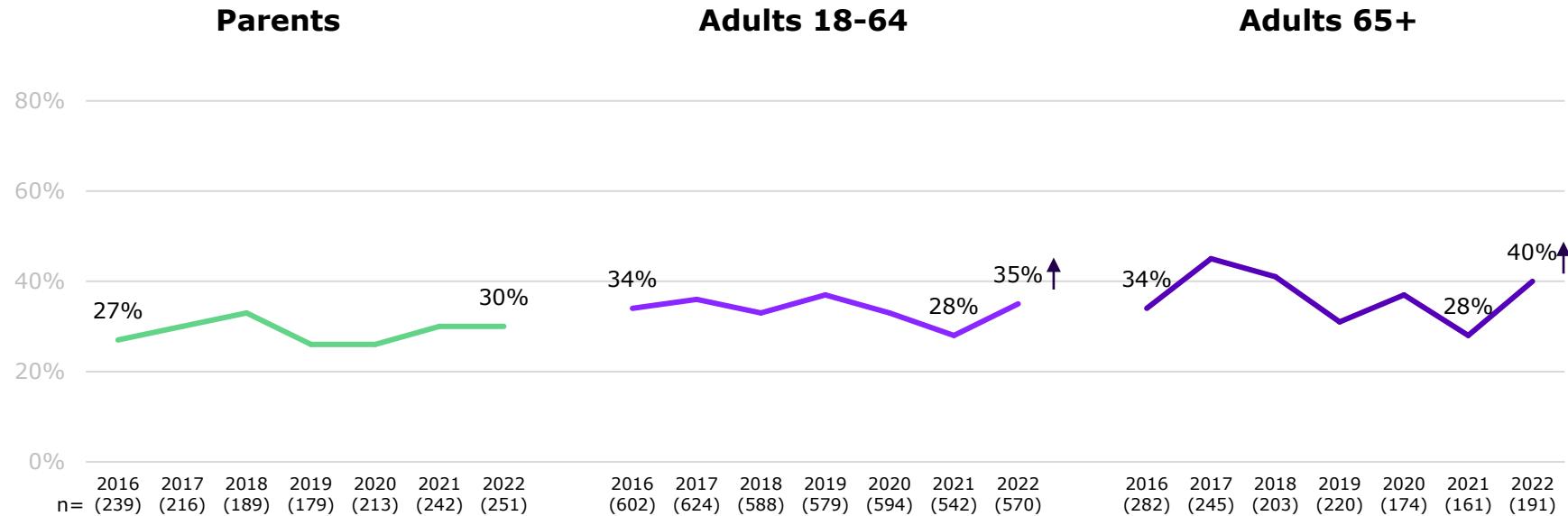
q34. Which of the following would encourage you to obtain a flu immunization [for your child]?

**sanofi**

Arrows indicate significant change over previous year

Among non-immunizers, the percentage who say they would never vaccinate against the flu increases for Adults this year

Would Never Get Flu Immunization - Trending



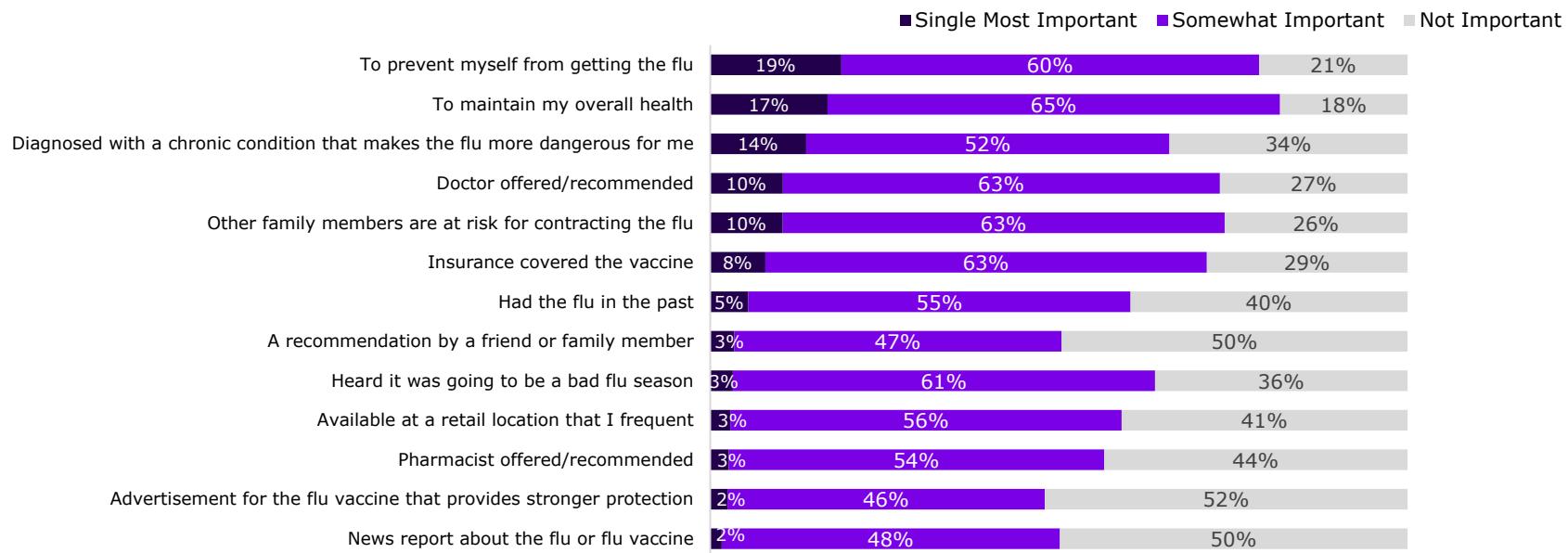
q34. Which of the following would encourage you to obtain a flu immunization [for your child]?

**sanofi**

Arrows show significantly higher/lower percentages compared to other years within age groups at 95%.

# Prevention of flu and maintaining ones health are key drivers for Adults to seek a flu vaccine

## Importance of Motivating Factors to Seek an Influenza Vaccine: Adults 2022-23



*Importance.* Below are factors that may or may not motivate you to seek a flu vaccine [for your child]. Please indicate how important these items are to you by sorting them into one of the following three buckets. \*New 2022

A doctor recommendation continues to be the top motivator; adults are less likely to be motivated by a bad season, which is common after a milder season

### **Top Motivations To Getting a Flu Immunization: 2022-23**

(among non-immunizers who would consider getting immunized)

	<b>Parents</b> (n=174)	<b>A</b>	<b>Adults</b> (n=482)	<b>B</b>	<b>Chronics</b> (n=67)	<b>C</b>
If [my child] had a bad case of the flu the year before	30%		27%		22%	
Cost for the immunization being covered by insurance	19%		20%		16%	
The immunization being available at another convenient location	18%	↑	20%	↑	10%	
A recommendation by a physician or other healthcare professional	27%		22%	↑	15%	
An advertisement reminding me to get my [child] an influenza vaccine	8%		5%		4%	
The immunization being available at my workplace	11%		12%		9%	
News that it was going to be a bad flu season	24% <sup>BC</sup>	↑	15%		10%	
Not having to receive the vaccine through an injection	18%	↑	15%		18%	↑
A vaccine without any preservatives	12%		8%	↑	15%	↑
Information on a vaccine with better protection	19%		12%	↑	10%	
Hearing information advising me that I should [have my child] get a flu immunization	12%		7%		3%	
A recommendation by a friend or family member	12%		6%		7%	
Recommendation of advisory bodies	12% <sup>B</sup>		4%		10%	↑
A vaccine geared towards the 50+ population	--		17%		30% <sup>B</sup>	
A vaccine geared towards the 65+ population	--		33%		29%	

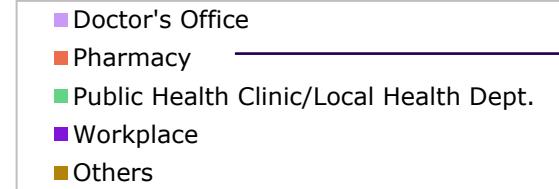
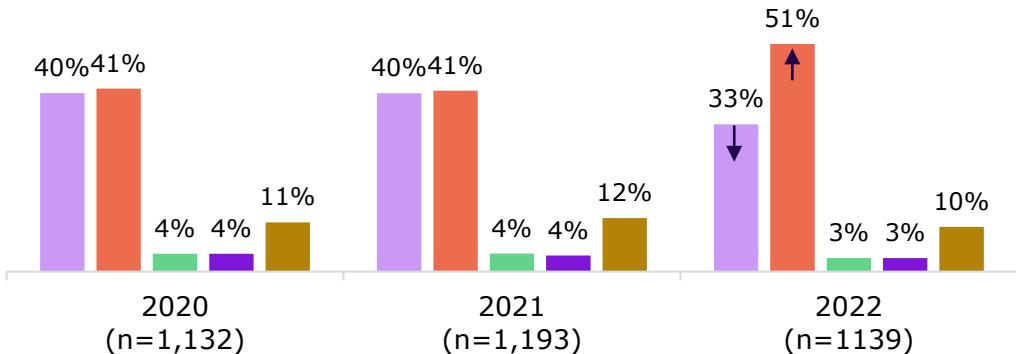
q34. Which of the following would encourage you to obtain a flu immunization [for your child]?

Responses < 5% current year total not shown. Multiple responses accepted.

Shaded cells asked of target audience only 50+ n=319, n=40  
65+ n=116, n=14\*\*

# More Adults received a flu immunization at a pharmacy (51%) in 2022 than in earlier seasons, most often citing it's easy/convenient location

## Location of Flu Immunization – Adults 18+

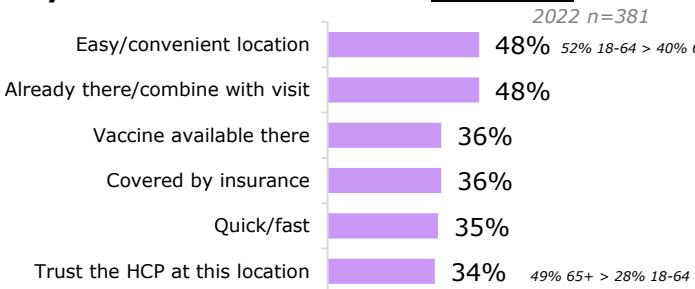


*Top "other" responses include:  
Hospital and Clinics*

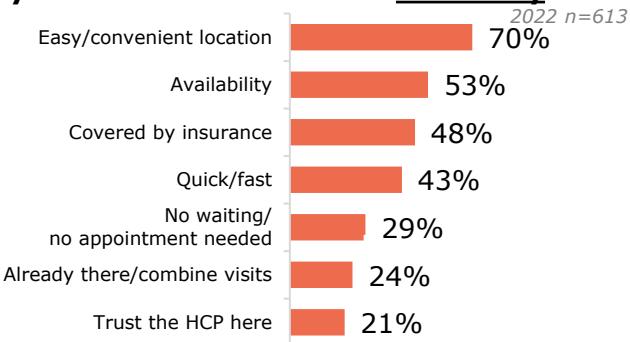
### Pharmacy Type:

*National chain pharmacy 23%  
Grocery or other store pharmacy 9%  
Discount retail store pharmacy 8%  
Clinic within a pharmacy 7%  
Independent pharmacy 4%*

## Why Received Flu Vaccine at Dr. Office



## Why Received Flu Vaccine at Pharmacy



38. Where was your [child's] flu vaccine administered? 41. Why did you /your child receive the flu vaccine there?

# Convenient locations make Pharmacies the vaccination site of choice for many adults

## Reasons for Receiving Vaccination at Various Locations: Adults 2022-23

	<b>Doctor's office</b> (n=381) A	<b>National chain pharmacy</b> (n=302) E	<b>Grocery or other store pharmacy</b> (n=117) F	<b>Discount retail store pharmacy</b> (n=92) G	<b>Clinic within a pharmacy</b> (Minute Clinic, etc.) (n=55) H	<b>Independent pharmacy</b> (n=47) I
Easy/ convenient location/ close by	48%	81% AGH	68% AH	62%	37%	79% AH
Already there/ combine visits	<b>48% EFHI</b>	21%	26%	43% EH	14%	19%
Vaccine available there	36%	56% A	62% AH	58% A	32%	37%
Covered by insurance	36%	51%	51%	52%	33%	34%
Quick/ fast	35%	44%	46%	44%	38%	34%
Trust the healthcare provider at this location	34%	20%	20%	19%	23%	28%
Usually/ always go there	27%	35% H	26%	37% H	7%	22%
No waiting/ no appointment needed	15%	30% A	30%	34% A	22%	25%
Have the specific brand of flu vaccine I want	4%	2%	5%	6%	8%	2%
Other	1%	1%	3%	1%	4%	2%

38. Where was your [child's] flu vaccine administered? 41. Why did you /your child receive the flu vaccine there?



INTERNAL USE

Text indicate statistical significance at 95%  
Arrows indicate significant change over previous year

# Very few consumers were vaccinated at specialist practices

## Specialty of Doctor's Office Where Vaccine Administered: 2022-23

	2022-23 Season		
	Parents A n=280	Adults B n=381	Chronics C n=88
General or family practice	43%	84% A	75% A
Internal Medicine (IM)	2%	9% A	15% A
Cardiology	0%	1%	1%
Pediatric Medicine	52% BC	1%	1%
Allergy and Immunology	2%	2%	1%
Obstetrics and Gynecology	0%	1%	0%
Pulmonology	1%	1%	1%
Oncology	0%	0%	2% AB
Other	0%	1%	3% AB

Q42. You indicated that you [your child] received your [his /her] flu vaccine in a doctor's office. What was this doctor's specialty? \*Added 2022

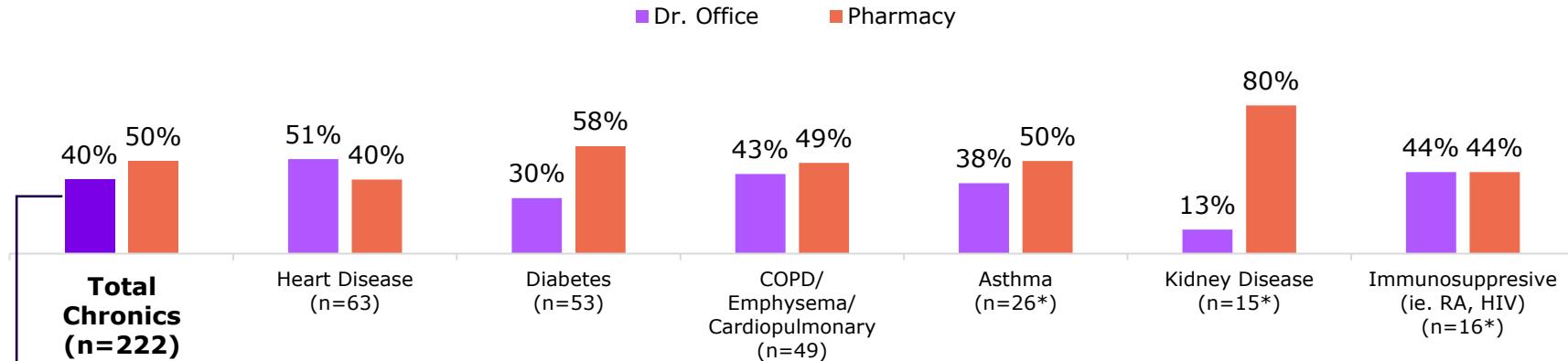


INTERNAL USE

Letters indicate statistical significance at 95%  
Arrows indicate significant change over previous year

# Even Chronic condition sufferers were often immunized at a pharmacy location

## Location of Flu Immunization Among Immunized by Chronic Condition: 2022-23



75% were immunized at a General or family practice  
15% at an Internal Medicine specialist office

\* Caution: Small sample size

Base: Immunized Chronics 2022 n=222

q38. Where was your [child's] flu vaccine administered?



INTERNAL USE

Text indicate statistical significance at 95%

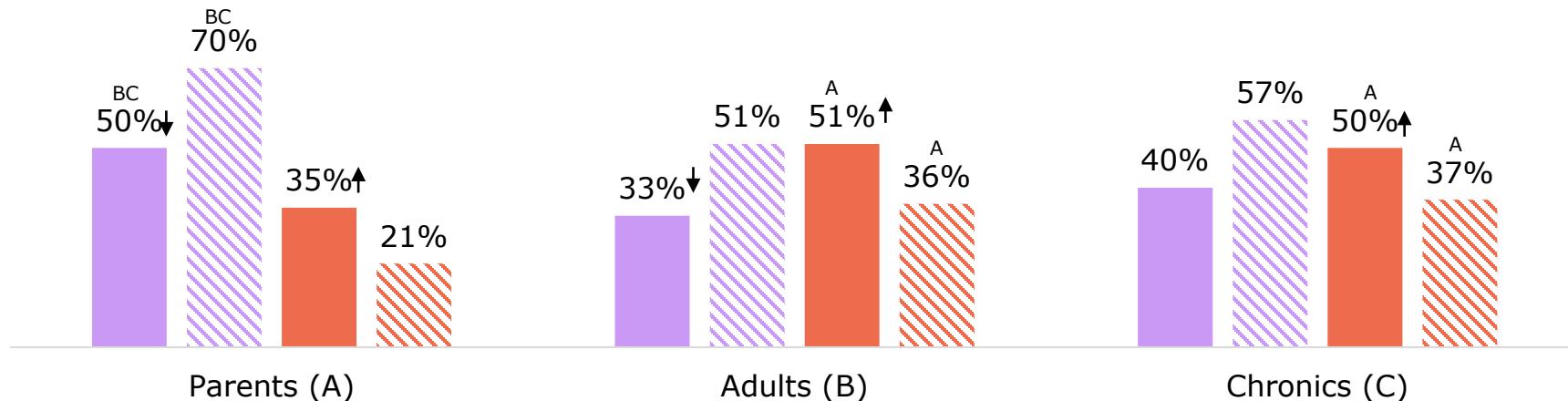
Arrows indicate significant change over previous year

# Consumers, particularly Parents, expect to return to the doctor's office to receive a flu vaccine this coming season

Immunization Site in 2022 and Intentions for 2023 Season

■ Site of vaccine in 2022-23  
 └ Preferred Site to vaccinate in 2023-24

■ Doctor's    └ Doctor's Planned    ■ Pharmacy    └ Pharmacy Planned



q38: Where was your [child's] flu vaccine administered?

C16. Where would you prefer to have your [ child's] flu vaccine administered next season?

All cohorts reported a continuing lack of need as the leading reason they chose not to vaccinate against the flu this past seasons

### **Top Reasons Consumers Did Not Get a Flu Immunization**

(among non-immunizers in 2022-23)

	<b>Parents A</b> (n=251)	<b>Adults B</b> (n=761)	<b>Chronics C</b> (n=105)
Don't believe that I need [my child needs] a flu vaccination	31%	31%	29%
I do not [my child does not] like needles	13%	17%	20%
I do not like [for my child] to receive shots	12%	14%	19%
Concerned that I [my child] will get the flu from the flu vaccine	19%	13%	15%
I [my child] got the flu vaccine once and had a bad reaction	12%	13%	20%
Inconvenient to go [take my child] to the doctor	6%	10%	5%
I was worried about [my child] getting the FLU vaccine with the COVID vaccine or booster	10%	9%	10%
I [my child] got the flu from vaccine previously	9%	9%	10%
My [child's] doctor never recommended the vaccine	10% <sup>C</sup>	7%	2%
There are prescription medications available to treat the flu, so I did not feel the vaccine was necessary	10% <sup>C</sup>	6%	2%

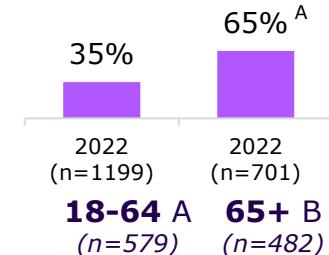
q32. Why haven't you / hasn't your child received a flu vaccine this year?



Letters indicate statistical significance at 95%  
Arrows indicate significant change over previous year

# More adults over 65 report they consistently receive an annual flu shot, most often to maintain their health

**Agree They Consistently Get Flu Vaccination Every Year: 2022-23**  
 (among Adults 18+)



- Seniors are more likely to agree they consistently vaccinate as a result of their doctor recommendation and to maintain their health
- Adults 18-64 report reminders from family and friends and advertising to some extent influence their vaccination more than seniors

**Top Reasons For Getting Yearly Flu Vaccinations**  
 (aided)

Reason	18-64 A (n=579)	65+ B (n=482)
It is important to me to maintain my overall health	48%	74% <sup>A</sup>
Doctor recommends that I get it	46%	72% <sup>A</sup>
Insurance covers the vaccine	40%	57% <sup>A</sup>
It is convenient for me to get the vaccination	32%	53% <sup>A</sup>
I'm very concerned about getting the flu	38%	51% <sup>A</sup>
I don't want other family members to get the flu	43%	53% <sup>A</sup>
Health organizations recommend that I get it	27%	32%
I have a chronic condition that makes influenza more dangerous for me	23% <sup>↑</sup>	26%
Pharmacist recommends that I get it	18%	25% <sup>A</sup>
Friend or family members remind/encourage me	21% <sup>B</sup>	15%
Advertising highlighting the severity of flu	10%	9%
Advertising for the different flu vaccine brands	7% <sup>B</sup>	3%

13. Please rate your agreement with the following statements I consistently get my flu vaccine each year  
 18a. What are the main reasons that you consistently get your flu vaccination every year?

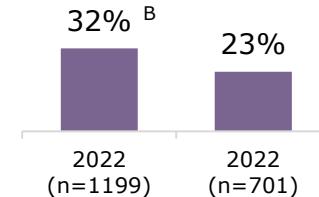
Letters indicate statistical significance at 95%  
 Arrows indicate significant change over previous year

# Adults under 65 report less consistency in receiving a flu vaccination (32%)

- Believing that flu is an unlikely risk (22%) so they don't need it (35%) and not going regularly to their doctor (20%) are common reasons that younger adults miss yearly flu shots
- Adults 65+ also report a sense of unlikelihood of getting the flu (26%) and 24% feel the shot is more dangerous than the flu itself

## Do Not Get Flu Vaccination Every Year: 2022-23

(among Adults 18+)



### Reasons For Not Getting Yearly Flu Vaccinations (aided)

	18-64 A (n=458)	65+ B (n=175)
I am not likely to get the flu	22%	26%
I don't need it	35%	26%
I don't go to the doctor regularly	20% <sup>B</sup>	10%
I get side effects when I get a flu shot	20%	24%
It is not always convenient to get the vaccine	12% <sup>B</sup>	4%
The flu isn't that bad	14%	15%
I sometimes forget to get it	13%	9%
It is more dangerous to receive the shot than get the flu	12%	24% <sup>A</sup> ↑
I get too busy	15%	2%
Doctor does not always recommend	7%	3%
I get it only when I hear it's a bad flu season	7%	6%

13. Please rate your agreement with the following statements I consistently get my flu vaccine each year

18b. Why do you not consistently get your flu vaccination every year? Logic changed 2019

# Those who received a doctor recommendation have higher vaccination rates than those without one in 2022-23

## Vaccinations Among Adults With And Without Doctor Recommendation: 2022-23

	19-30 years				31-49 years				50-64 years				65+ years			
	2019	2020	2021	2022	2019	2020	2021	2022	2019	2020	2021	2022	2019	2020	2021	2022
Sample Size (n)	206	200	200	199	201	200	200	199	783	800	796	801	698	700	700	701
Recommendation From Doctor	43%	30%↓	36%	29%	33%	26%↓	24%	34%	42%	30%↓	37%↑	46%	58%	48%↓	50%	55%
Sample Size (n)	89	60	71	57	67	52	48	67	321	237	287	366	405	339	352	385
Received Flu Vaccination	63%	57%	72%↑	60%	73%	79%	67%↓	72%	76%	77%	76%	72%	83%	87%	87%	87%
No Recommendation From Doctor	57%	70%↑	65%	71%	67%	74%↑	76%	66%	58%	70%↑	63%↓	54%	42%	52%↑	50%	45%
Sample Size (n)	117	140	129	142	134	148	152	132	462	563	509	435	293	361	348	316
Received Flu Vaccination	32%	36%	50%↑	42%	39%	41%	39%	36%	38%	43%	47%	40%	52%	66%↑	67%	57%↓

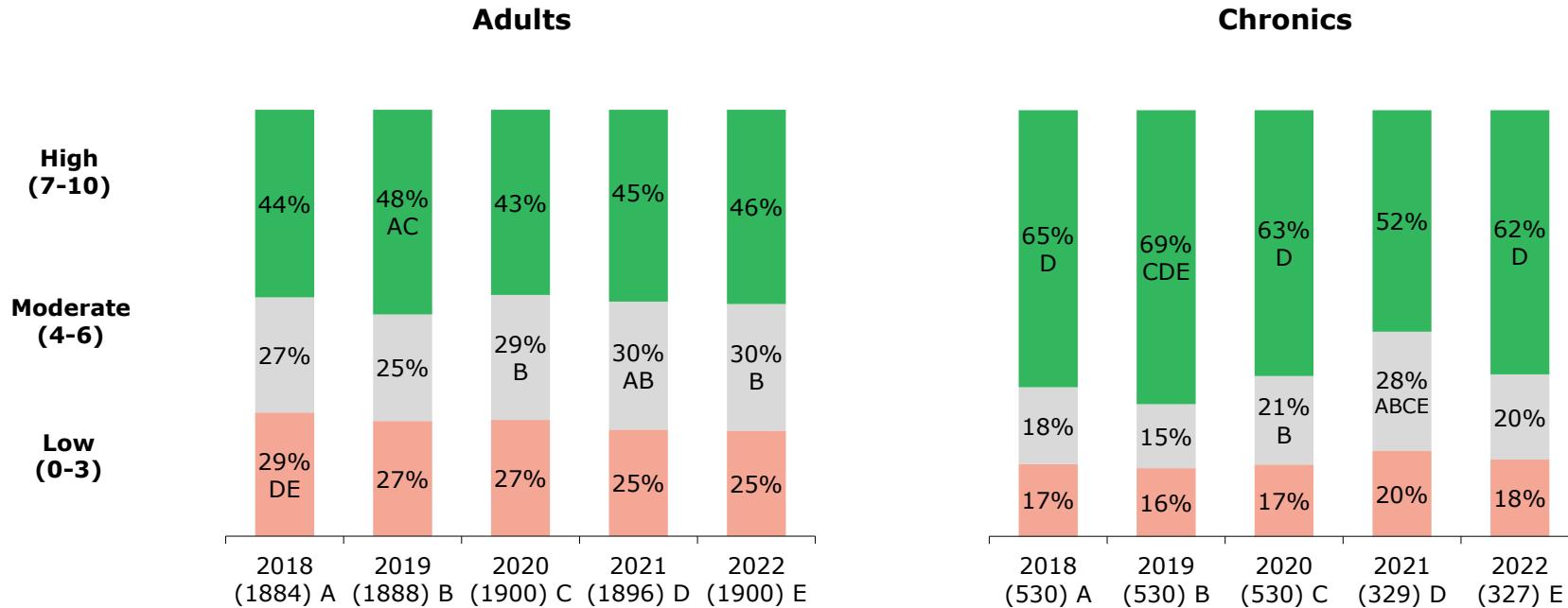
"No recommendation" base includes respondents who have not seen a doctor

\*Small base size.

q4: For each year listed, please indicate whether [you/your child] received a flu immunization, did not receive a flu immunization, or if you don't recall.

q46. In the past year, did any of the following recommend that you [your child] get a flu immunization?

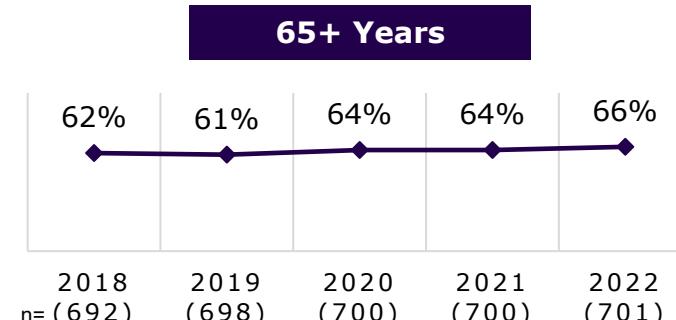
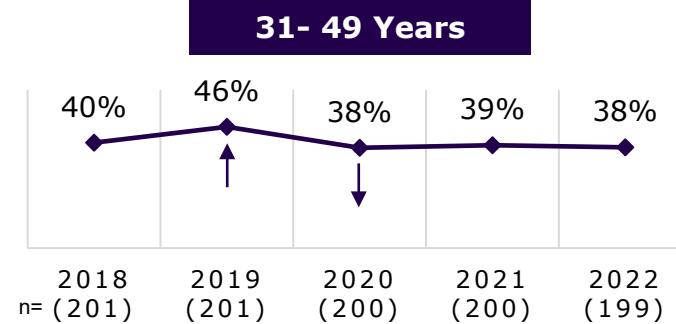
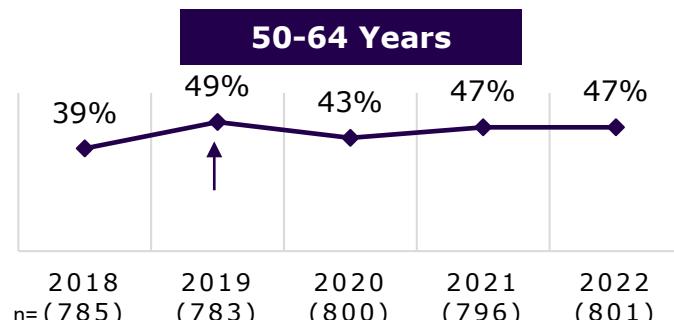
# Criticality of Flu Vaccination In Maintaining Health – In Total



q72: Please indicate how critical you consider the flu vaccination to be in maintaining your (child's) health?

# Criticality of Flu Vaccination In Maintaining Health – Top 4 Box

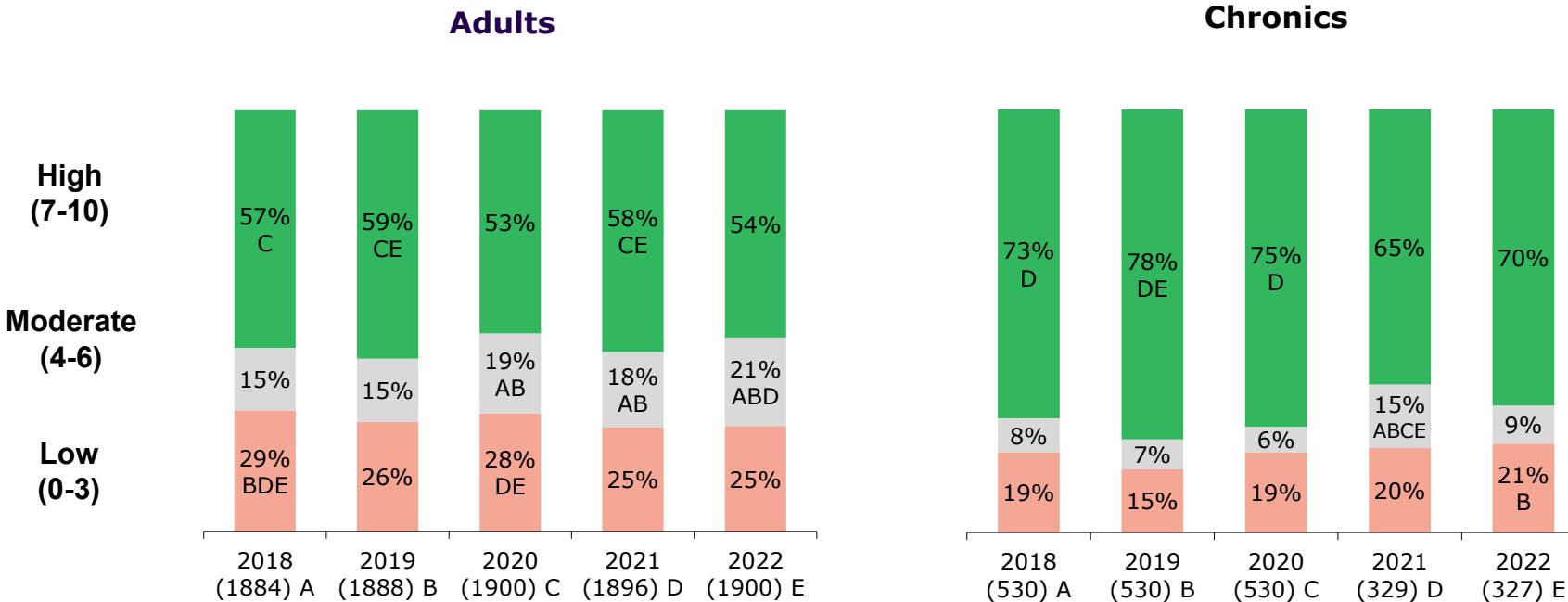
## Adults Aged 18+



q72: Please indicate how critical you consider the flu vaccination to be in maintaining your (child's) health?

Years before 2022 was 19+

# Likelihood to Seek Flu Immunization Next Season – In Total



q74: How likely are you to seek a flu immunization [for your child] next year?

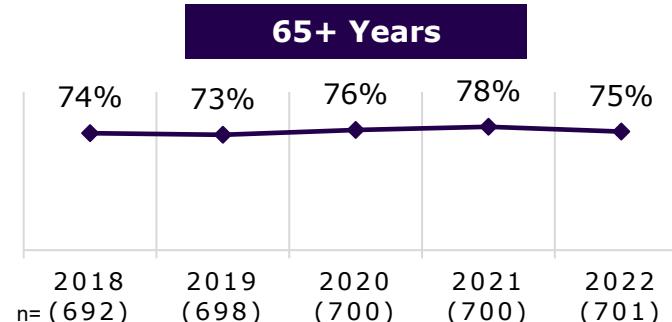
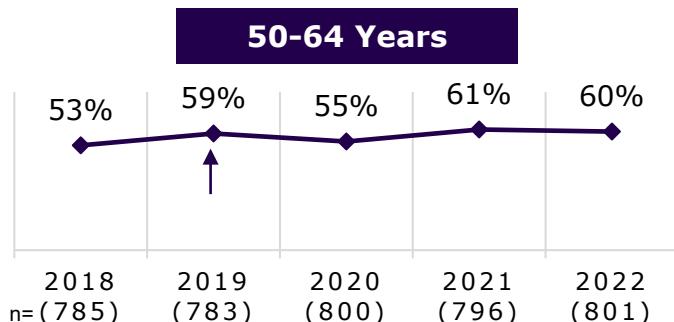
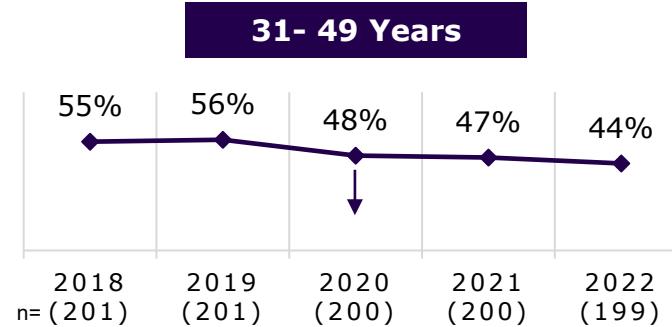
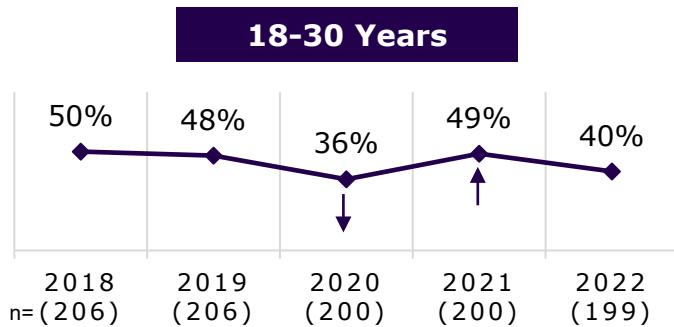
**sanofi**

INTERNAL USE

Letters indicate statistical significance at 95%

# Likelihood to Seek Flu Immunization Next Season – Top 4 Box

## Adults Aged 18+



q74: How likely are you to seek a flu immunization [for your child] next year?

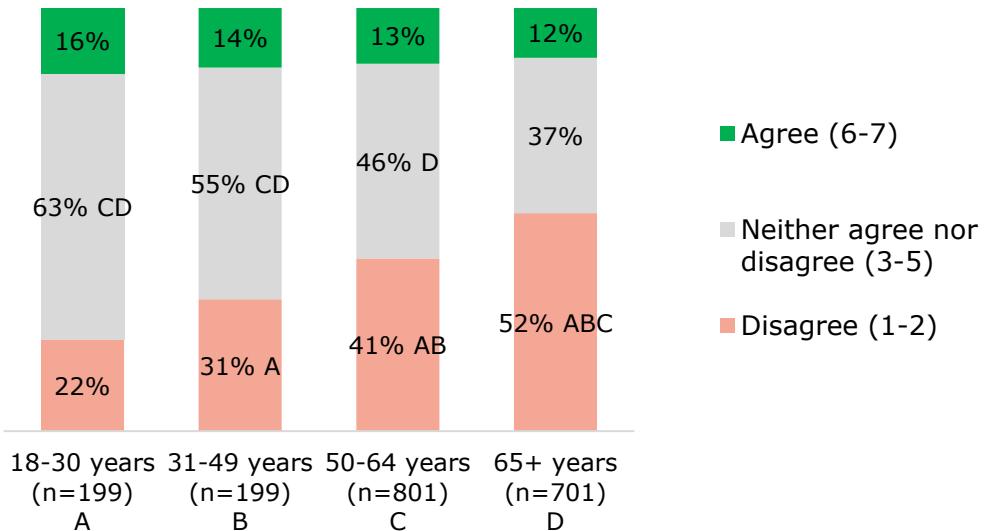
Years before 2022 was 19+



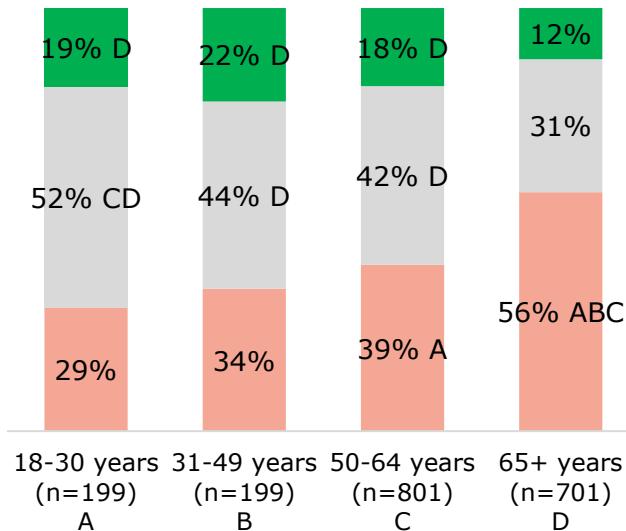
Arrows indicate significant change over previous year

# Older Adults are more likely to see the flu as dangerous and are more convinced the flu shot is effective at preventing the disease

## I don't think the flu is particularly dangerous or incapacitating



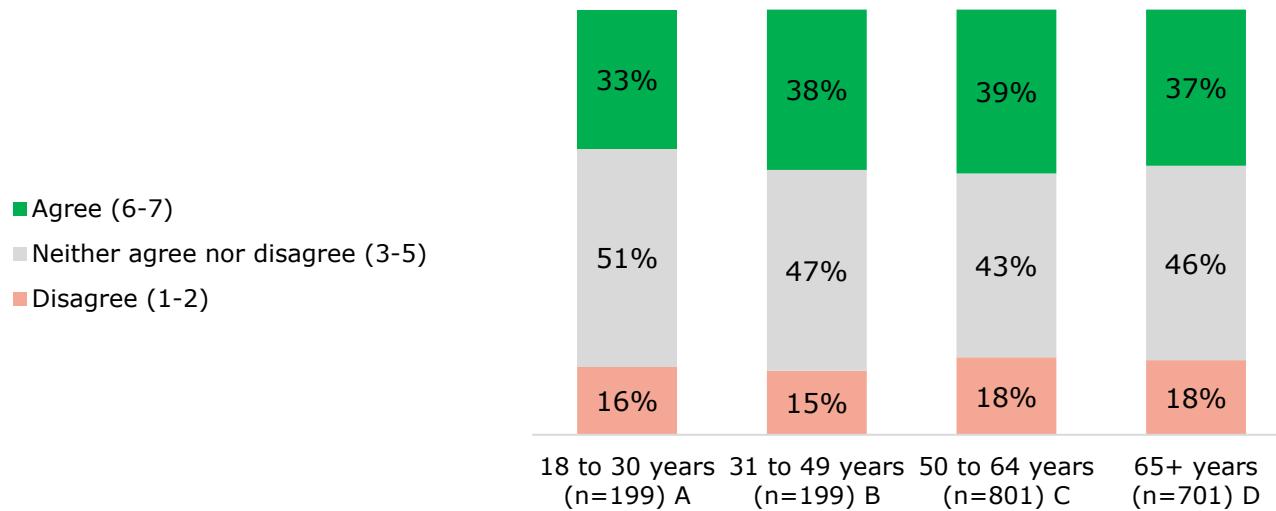
## I am skeptical that the flu shot really prevents flu



Q13. Please rate your agreement with the following statements: New 2020

# Regardless of age, a third of adults worry about spreading the flu to others

## I worry about spreading the flu if I catch it: 2022-23



Q13. Please rate your agreement with the following statements: New 2020

**sanofi**

Letters indicate statistical significance at 95%  
Arrows indicate significant change over previous year

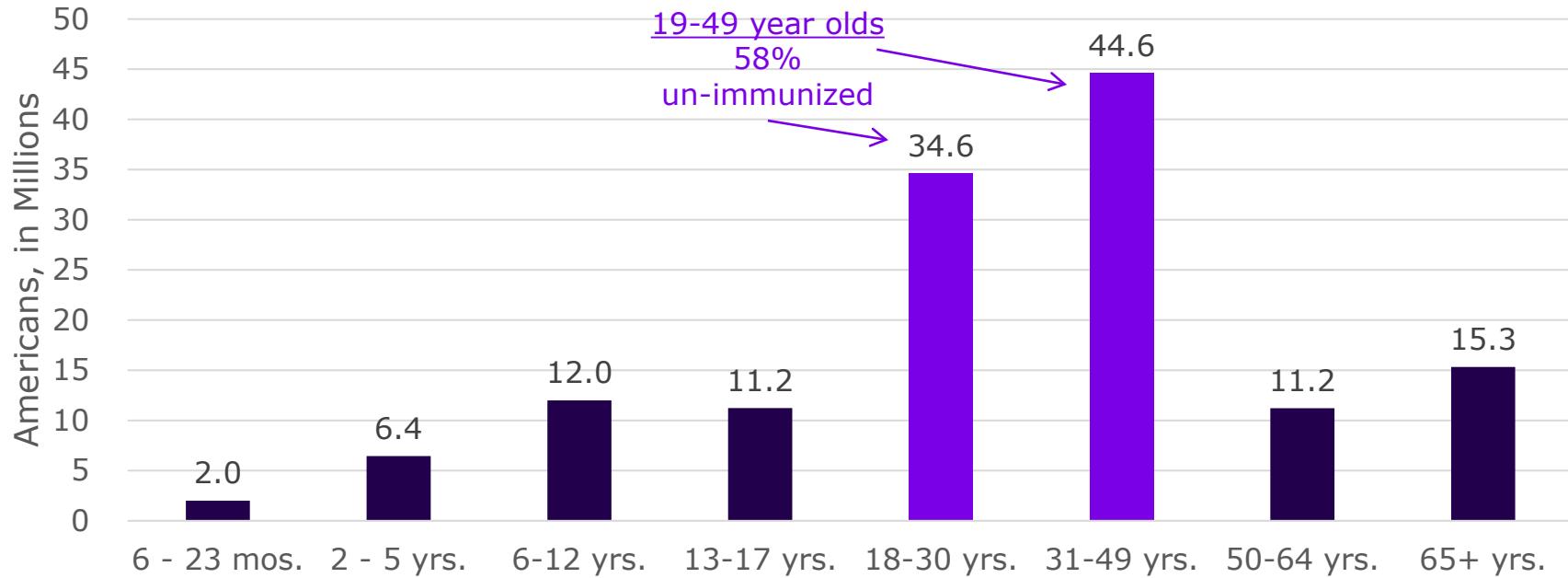


## Appendix

*Flu Immunization Rates  
2022-23*

Younger adults (18-49 years old), a large sub-population with lower influenza immunization rates, continue to represent over half of Americans not immunized

### Americans Not Immunized against Influenza (132 million)

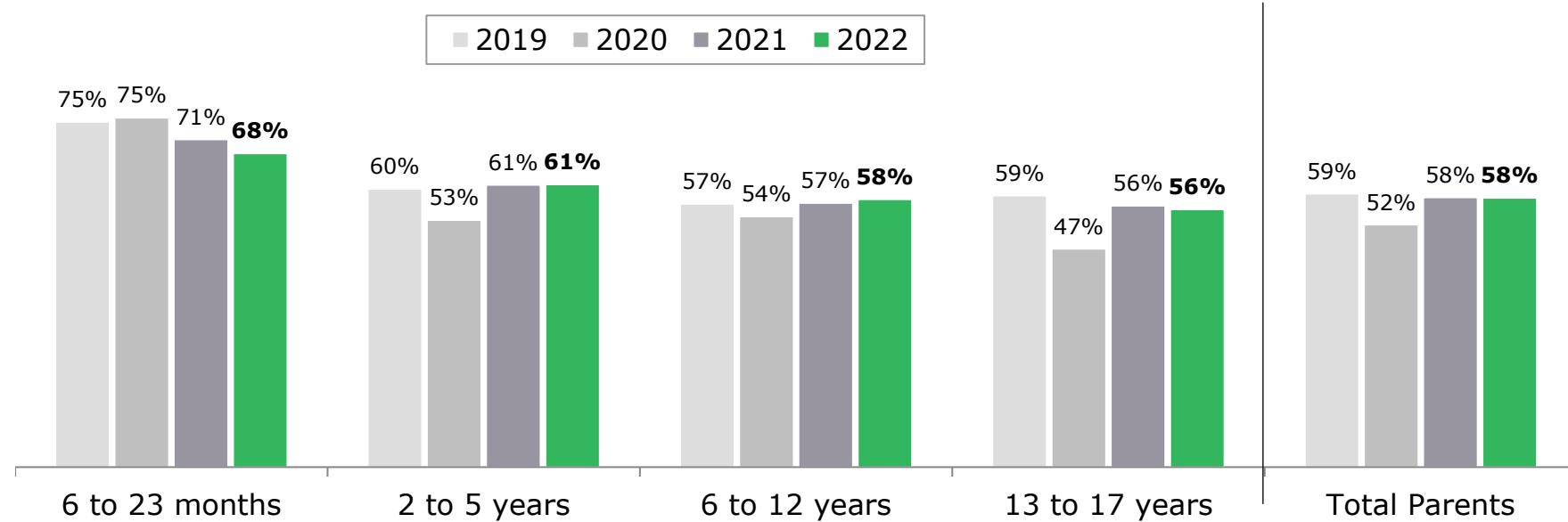


Note: population numbers are from the US Census Bureau (estimates derived from 2020 Census)

While infants continue to drop slightly, immunization rates for other pediatric age groups remained steady with the 2021 season

### Influenza Immunization Rates by Pediatric Age Segments

(% of Parents Who Received an Influenza Immunization)



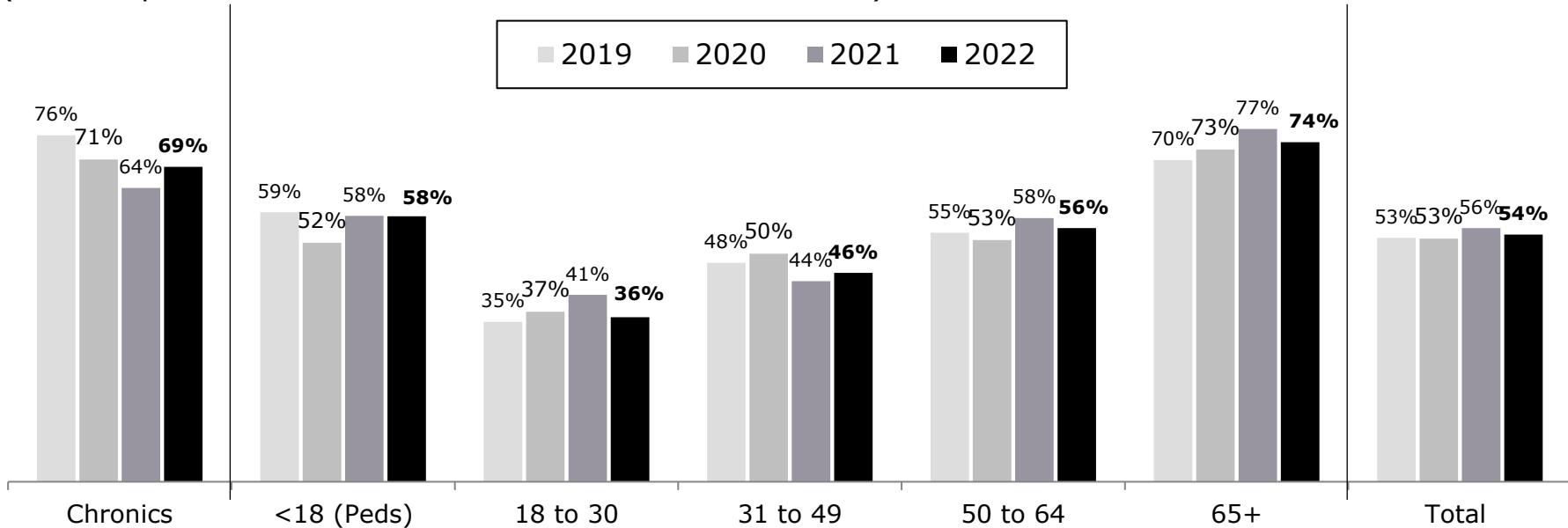
*q4: For each year listed, please indicate whether you received a Flu immunization, did not receive an immunization, or if you don't recall. Reduction Factor Applied*

\* Note: The pediatric immunization rate is based on the population-weighted average of the four pediatric age groups. Years prior to 2022 include 18 year olds

Immunization rates dropped slightly for younger adults but held steady for children; rates for Chronics rose slightly after two seasons of declines

### Influenza Immunization Rates by Age Segments

(% of Respondents Who Received an Influenza Immunization)



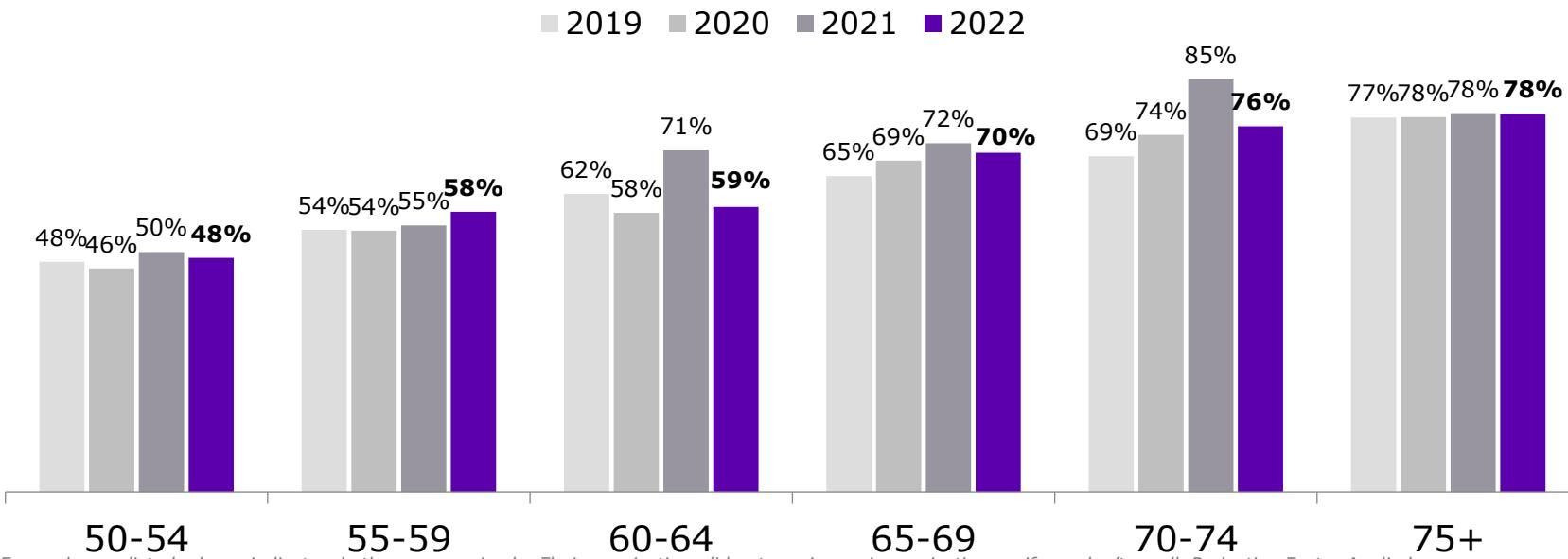
*q4: For each year listed, please indicate whether you received a Flu immunization, did not receive an immunization, or if you don't recall. Reduction Factor Applied*

*\* Note: The overall immunization rate is calculated using a population-weighted average.*

Among the 50+ adults, immunization rates increase as age increases; 60-64 and 70-74 saw declines in 2022

### Influenza Immunization Rates by Older Age Segments

(% of Respondents Who Received an Influenza Immunization)



*q4: For each year listed, please indicate whether you received a Flu immunization, did not receive an immunization, or if you don't recall. Reduction Factor Applied*

\* Note: The pediatric immunization rate is based on the population-weighted average of the four pediatric age groups.



## Appendix

*Flu Immunization &  
Location Trends*

# Location of Flu Immunization: 2022-23 Season

	2022		
	Parents (n=546) A	Adults (n=1139) B	Chronics (n=222) C
Doctor's office	50% BC ↓	33% ↓	40%
Pharmacy NET	35% ↑	51% A ↑	50% A ↑
<i>National chain pharmacy (CVS, Rite Aid, Walgreens, local, etc.)</i>	15%	23% A	23% A
<i>Grocery or other store pharmacy (Publix, Giant, Safeway, Wegmans, Kroger, etc.)</i>	4%	9% A	12% A
<i>Discount retail store pharmacy (Target, Wal-Mart, etc.)</i>	5% ↑	8% ↑	8%
<i>Clinic within a pharmacy (Minute Clinic, etc.)</i>	7% ↑	7% ↑	5%
<i>Independent pharmacy</i>	4%	4%	4%
Public Health Clinic / Local Health Department	3%	3%	1%
My / my spouse's workplace	0%	3% A	2% A
Hospital	6%	5%	3%
VA/military	1%	2%	2%
University or college	0%	0%	0%
My place of residence	1%	1%	1%
School	3%	1%	0%
Church	0%	0%	0%
Don't recall	0%	1% A	1%
Other	1%	1%	0%

q38. Where was your [child's] flu vaccine administered?



# Reasons For Getting Yearly Flu Vaccinations Among Adults: 2022-23

	<b>18-30</b> A	<b>31-49</b> B	<b>50-64</b> C	<b>65+</b> D
<i>Sample Size (n)</i>	75	85	419	482
It is important to me to maintain my overall health	39%	41%	61% <sup>AB</sup>	74% <sup>ABC</sup>
Doctor recommends that I get it	32%	36%	63% <sup>AB</sup>	72% <sup>ABC</sup>
I'm very concerned about getting the flu	25%	36%	48% <sup>A</sup>	51% <sup>AB</sup>
Insurance covers the vaccine	28%	35%	53% <sup>AB</sup> <sup>↑</sup>	57% <sup>AB</sup>
I don't want other family members to get the flu	43%	34%	52% <sup>B</sup>	53% <sup>B</sup>
It is convenient for me to get the vaccination	27%	26%	40% <sup>AB</sup>	53% <sup>ABC</sup>
Health organizations recommend that I get it	25%	25%	30%	32%
Friend or family members remind/encourage me	31% <sup>CD</sup>	19%	17%	15%
Pharmacist recommends that I get it	17%	19%	17%	25% <sup>C</sup>
I have a chronic condition that makes influenza more dangerous for me	16%	22%	27% <sup>↑</sup>	26%
Advertising for the different flu vaccine brands*	11% <sup>CD</sup>	8% <sup>CD</sup>	2%	3%

q18a. What are the main reasons that you consistently get your flu vaccination every year? \*Added 2022

\*Caution: small sample size  
Letters indicate statistical significance at 95%  
Arrows indicate significant change over previous year

# Reasons For Not Getting Yearly Flu Vaccinations Among Adults: 2022-23

	<b>18-30 A</b>	<b>31-49 B</b>	<b>50-64 C</b>	<b>65+ D</b>
<i>Sample Size (n)</i>	82	74	302	175
I am not likely to get the flu	28%	15%	25%	26%
I don't need it*	35%	36%	33%	26%
I get side effects when I get a flu shot*	17%	24%	16%	24%
I don't go to the doctor regularly	27% D	18%	18%	10%
I sometimes forget to get it	17%	11%	11%	9%
The flu isn't that bad	20%	11%	14%	15%
It is more dangerous to receive the shot than get the flu	12%	14%	11%	24% C
It is not always convenient to get the vaccine	17% D	9%	9%	4%
I get too busy	26% BCD	12% D	8% D	2%
I get it only when I hear it's a bad flu season	12%	4%	6%	6%
Sources (news, websites, family, friends) that I trust tell me I don't need it	12% BCD	1%	1% ↓	3%
Doctor does not always recommend	5%	11%	4%	3%
Pharmacist does not always recommend	7% C	1%	1%	2%

q18b. Why do you not consistently get your flu vaccination every year? \*New 2022

Letters indicate statistical significance at 95%  
Arrows indicate significant change over previous year

# Reasons For Not Getting Flu Vaccination Among Adults: 2022-23

	<b>18-30 A</b>	<b>31-49 B</b>	<b>50-64 C</b>	<b>65+ D</b>
Sample Size	105	103	362	191
Don't believe that I need a flu vaccination	30%	26%	36%	35%
I do not like needles	<b>26% CD</b>	17%	12%	9%
I do not like to receive shots	19%	12%	16%	10%
Concerned that I will get the flu from the flu vaccine	13%	15%	13%	11%
I got the flu vaccine once and had a bad reaction	8%	13%	14%	<b>20% A</b>
Inconvenient to go to the doctor	<b>18% BCD</b>	7%	<b>9% D</b>	4%
I was worried about getting the FLU vaccine with the COVID vaccine or booster	10%	12%	6%	8%
I got the flu from vaccine previously	9%	13%	8%	5%
My doctor never recommended the vaccine	12%	5%	6%	7%
There are prescription medications available to treat the flu, so I did not feel the vaccine was necessary	9%	4%	6%	9%
Preservatives in the vaccine	5%	7%	4%	8%
I heard it didn't work as well this year	10%	4%	4%	6%

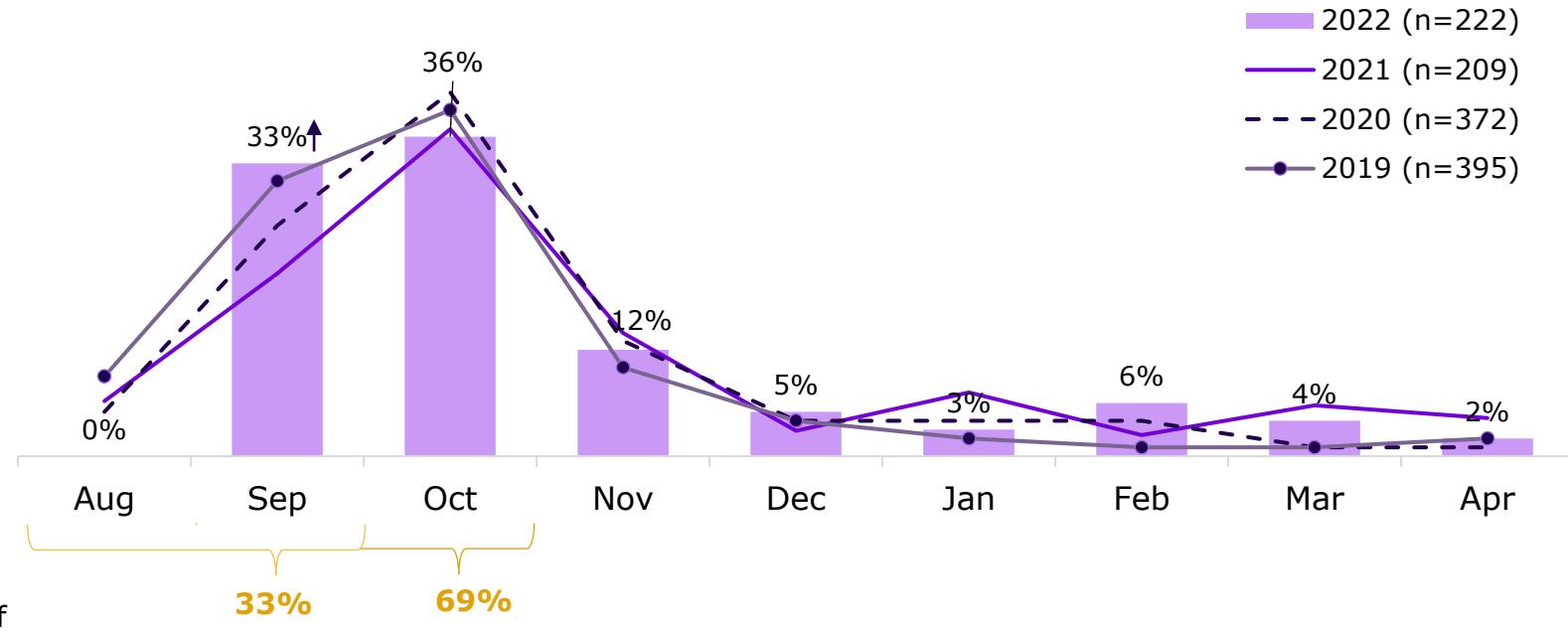
Base: Those not vaccinated during current season

q32. Why haven't you [hasn't your child] received a flu vaccine this year?

Letters indicate statistical significance at 95%

Arrows indicate significant change over previous year

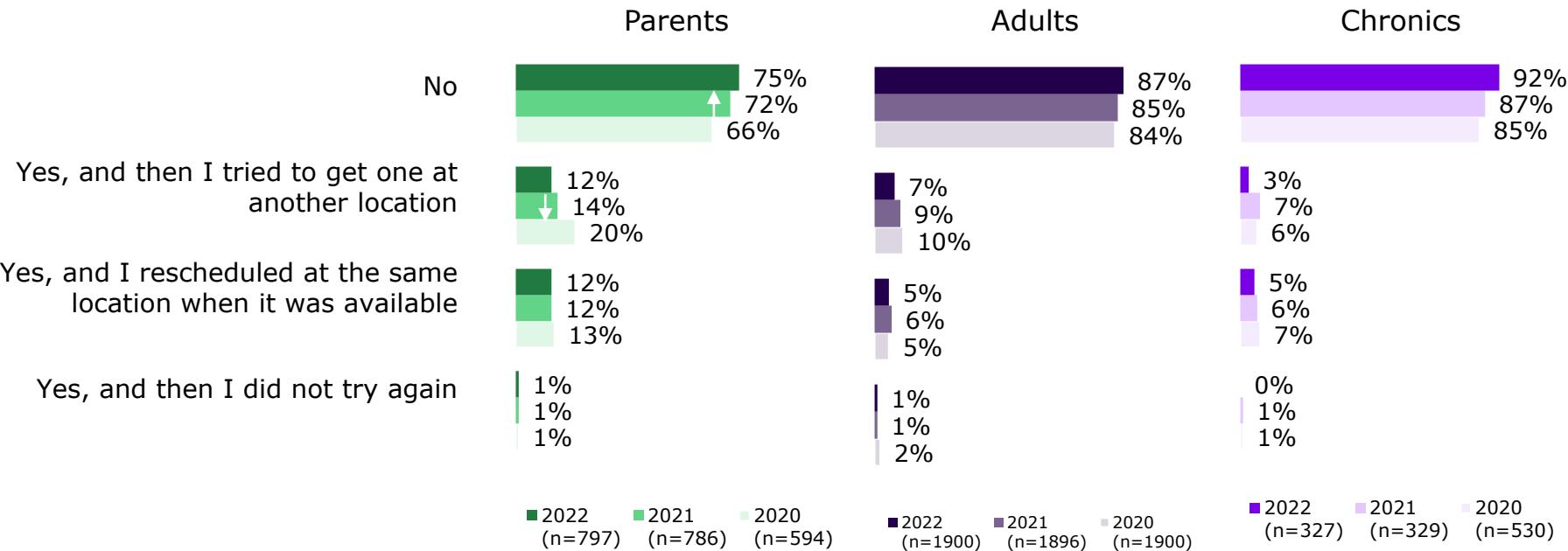
# Month Received Flu Immunization for Chronics - Trending



q8. In what month did [you / your child] receive the flu vaccine this season?

↓ ↑ Arrows indicate significant change over previous year

# Availability of Flu Vaccines



*q30. At any point during this flu season, did you try to get a flu immunization [for your child] but found the provider did not have it?*