EXPANDING FLU VACCINE ACCESS

An Ipsos Point of View





INTRODUCTION

The coronavirus pandemic brought a new intensity to the national dialogue around vaccines and public health. A significant number are still unwilling to get the COVID vaccine, while diminishing <u>public trust</u> in government and public health entities has worsened during the pandemic.

Despite the attention on COVID, other respiratory illnesses, like influenza, are still ongoing health risks. Even as slightly more adults overall got the flu vaccine last season, driven by an uptick among Americans over the age of 50, children and adults under 50 (18-49) were less likely to do so. Meanwhile, the vaccine gap widened between Black and Hispanic communities and white Americans. Preliminary CDC trend data for the 2021-2022 flu season appear to continue the decline in coverage among these groups (please see endnote for a list of flu vaccine manufacturers for the 2021-2022 season).ⁱ The implications of these disparities for broader public health are clear: vulnerable populations and children are at greater risk of illness without the flu vaccine.

But there are solutions. New research shows that some of the unvaccinated are open to taking the flu vaccine in other ways. More specifically, through a nasal spray. Polling commissioned by AstraZeneca on <u>lpsos' KnowledgePanel®</u> found that broadening the availability of a nasal spray to those not already vaccinated could increase flu vaccine uptake by as much as five percent, equating to millions of children and adults under the age of 50 being more likely to get vaccinated.

This comes at a time when nasal sprays are also being considered in the fight against COVID-19 as potential candidates to enhance the effectiveness of booster shots. <u>Researchers</u> across the <u>U.S.</u> and the world are building nasal spray vaccines and boosters to fight the novel coronavirus. This avenue of inoculation is being explored to increase vaccine access, encourage vaccination among those who haven't been boosted or vaccinated, and capitalize on the potential ease of distribution nasal sprays offer.

Where people can get vaccinated also matters. As this research shows, the public is open to getting the vaccine at pharmacies, retail locations, their workplace, and, for children, at school. In other words, the work already happening at schools, businesses, and pharmacies is a vital component of maintaining and expanding—current rates of flu vaccination.



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FLU VACCINATION RATES: THE BIG PICTURE TRENDS

During the pandemic, <u>flu vaccinations</u> increased slightly (1.8%) in the 2020-2021 flu season among adults age 18 and older, according to the most recent CDC data (please see endnote for information on influenza vaccines for the 2020-2021 season).ⁱⁱ At the same time, flu vaccinations fell by five points among children. More specifically, the steepest declines in flu vaccinations among children occurred among Black and Hispanic youth. Historically, flu vaccination rates have been lower among adults under 50 and Black and Hispanic Americans, increasing the risk of death and severe illness from the influenza virus. In fact, the gap in vaccine coverage between white Americans and Black and Hispanic American adults broadened last season, mirroring a similar pattern among adults under 50 and those over 65.

ANNUAL TRENDS IN FLU VACCINATION COVERAGE



Percent who received the flu vaccine

PARENTS ARE CONSISTENTLY LESS LIKELY TO GET THE FLU VACCINE

Percent who are very/somewhat likely to get the flu vaccine this fall or winter or are already vaccinated



Source: Axios-Ipsos Coronavirus Index waves 55 thru 58, surveys conducted October 8-November 22, 2021

Diving deeper, these trends in flu vaccinations among parents are even more pronounced when other demographic factors are taken into consideration, namely <u>partisanship</u>, race and ethnicity, and income level. Notably, less than half of Black and Republican parents said they were likely to get the flu vaccine (for themselves) in the fall and winter of 2021.

Notably, research by the U.S. Department of Health and Human Services and the CDC found that: "additional options for vaccination of children, including use of noninjectable vaccines such as LAIV4, might provide a means to improve coverage..." (please see endnote for more information.)ⁱⁱⁱ Now, new research finds some of these same groups indicate more openness to flu vaccinations if a nasal spray option were available, making it a potentially important tool in expanding vaccine access.

Although the research below focuses on the relationship between a nasal spray option and flu vaccine coverage, it is worth noting that work is being done in the healthcare community to consider nasal sprays in the fight against COVID. After all, lower rates of vaccine coverage are not limited to the flu. Indeed, it is deeply entrenched in some communities and holds acute implications for our collective ability to combat the current pandemic and other common illnesses.

NASAL SPRAY VERSUS THE SHOT

Polling on <u>Ipsos' KnowledgePanel®</u> found that likelihood to get vaccinated for the flu during the 2021-2022 season increased by five percentage points among parents who had not vaccinated their child against the flu when this group was given the option of a nasal spray. In population terms, this means having a nasal spray option could help reach an additional 2.3 million children who would not have been vaccinated against the flu.

Much like parents, having an option for a nasal spray flu vaccine encourages some unvaccinated adults between the ages of 18-49 to get the flu vaccine. Here, too, a nasal spray option moves the possibility that this population would get vaccinated by five percentage points. Given the size of the American adult population, that translates into roughly 5 million adults potentially getting the flu vaccine that would not have done so otherwise. That's roughly equivalent to the <u>entire state of Alabama</u> choosing to get the flu vaccine after being on the fence about it.

AMONG THE UNVACCINATED, A NASAL SPRAY OPTION SIGNIFICANTLY **INCREASES LIKELIHOOD TO VACCINATE AGAINST FLU**

Percent likely* to get vaccinated against the flu Among unvaccinated



*Anticipated likelihood projected based on Clancy-scale calibrated response among those not already vaccinated (Mean)

Source Fielding Dates: October 29th - November 12th, 2021

Base: Not Vaccinated Adults 18-49, Children 2-17 (as stated by their Parents) Projected based on Clancy-scale calibrated responses among those not already vaccinated.

Q1. How likely are you [and your child(ren)] to get vaccinated for the flu during this 2021-2022 flu season (Sep'21 - Mar'22)?

Q3. Assuming the flu vaccine were available, not only as a shot, but also as a Nasal Spray, how likely are you [and your child(ren)] to get vaccinated?

Beyond these aggregate numbers, providing the choice of a nasal spray flu vaccine increases the likelihood that some unvaccinated Black, Hispanic, and AAPI adults and children will receive the flu vaccine. Specifically, a nasal spray increases the likelihood that both children and adults in these communities will get

the flu vaccine by five and six percentage points, respectively. In population figures, that could mean that about 1.4 million additional Black, Hispanic, and AAPI children are inoculated against the flu, and 2.3 million more adults in these communities have some protection against the flu.

A NASAL SPRAY OPTION WOULD HAVE A SIGNIFICANT IMPACT ON VACCINATION RATES AMONG BLACK, HISPANIC, AND AAPI COMMUNITIES



*Anticipated likelihood projected based on Clancy-scale calibrated response among those not already vaccinated (Mean)

Source: Fielding Dates: October 29th - November 12th, 2021

Base: Not Vaccinated Adults 18-49, Children 2-17 (as stated by their Parents) 2+ races, non-Hispanic also included in the data.

Projected based on Clancy-scale calibrated responses among those not already vaccinated. Q1. How likely are you [and your child(ren)] to get vaccinated for the flu during this 2021-2022 flu season (Sep'21 – Mar'22)?

Q3. Assuming the flu vaccine were available, not only as a shot, but also as a Nasal Spray, how likely are you [and your child(ren)] to get vaccinated?

Nasal sprays aren't just a potential tool to nudge the unvaccinated towards getting the flu vaccine. This research also shows that a spray option appeals to some people who already received the flu vaccine. They are particularly appealing to parents, with one in four white parents and one in five Black or Hispanic parents who have already vaccinated their children or are extremely likely to do so saying that they would prefer a nasal spray option.

PHARMACIES, SCHOOLS AND WORKPLACES ARE KEY TO BROADENING VACCINE ACCESS

Vaccine availability at pharmacies, schools, and workplaces is critical to nudging unvaccinated adults and families. Ipsos research underlines that vaccine availability at these sites has a measurable impact on people's likelihood to get the vaccine, particularly if they were already at least somewhat open to doing so. Beyond persuading people who haven't gotten vaccinated, focusing efforts at these sites could also have positive implications for reaching people without regular health care providers. As analysis of CDC data shows, vaccination rates have historically been lower among this group than those with regular health care providers.

Pharmacies and workplaces could nudge adults to get vaccinated

Vaccine availability at pharmacies and workplaces produced the most substantial bump in vaccine interest among people who are currently considered least or moderately likely to protect themselves against the flu, emphasizing the importance of these



sites in broader public health efforts. However, these locations are most persuasive to people who are already somewhat open to getting the vaccine, the "moderately likely" cohort. The option of getting vaccinated at a pharmacy or a workplace boosted this group's likelihood of getting vaccinated by 22% and 11%, respectively.

Other locations—like churches, mobile clinics and community centers—fail to make a measurable dent in persuading people who are least likely to get vaccinated, underlining the importance of more trusted sites, like pharmacies and workplaces, in broadening vaccine uptake.

VACCINE AVAILABILITY AT PHARMACIES, SCHOOLS AND WORKPLACES HELPS ENCOURAGE VACCINATIONS AMONG UNVACCINATED ADULTS

Among unvaccinated adults...

Percent who shift from being **least likely** to vaccinate to **moderately/highly** likely to vaccinate when the vaccine is offered at...

Percent who shift from being **moderately likely** to vaccinate to **highly likely** to vaccinate when the vaccine is offered at...



Fielding Dates: October 29th – November 12th, 2021; Base: Not Vaccinated Adults 18-49.

Q1. How likely are you [and your child(ren)] to get vaccinated for the flu during this 2021-2022 flu season (Sep'21 – Mar'22)? Q5. Assuming the flu vaccine was offered at the following locations within your community in addition to a physician's office, how likely are you/you and your child(ren)/your child(ren) to get vaccinated for the flu during this 2021 flu season (sep'21 – Mar'22) at each of the following locations?

For families, schools and pharmacies may increase access to the flu vaccine

Likewise, vaccine availability at sites like schools and pharmacies prompts more openness among parents who are initially least or only moderately likely to get their children vaccinated. Among parents who were moderately likely to get their children vaccinated, 13% say they are highly likely to do so at their child's school, and 7% say they are highly likely to get their child vaccinated at a pharmacy. Yet among parents who start out as "least likely" to get their child vaccinated, the availability of the vaccine at schools and pharmacies moves 7% and 4%, respectively, to become more open to getting their child vaccinated. Considering declining vaccine coverage rates among children, and the even greater drop in coverage among Black and Hispanic communities, these numbers are cause for optimism.

Vaccinated people would like to see more location options for the flu vaccine

Where people get vaccinated has implications for not just those who haven't been vaccinated yet; people who are currently vaccinated report a preference for getting vaccinated outside of their primary care physician's office. By far, pharmacies are where most of these adults would like to get vaccinated against the flu, again underlining their importance in broader public health efforts around vaccination. Two in five (42%) would prefer getting the vaccine at a pharmacy, which is 13-points ahead of those who prefer their PCP's office (29%). Following that, 17% would like to get vaccinated at work.

Parents who already vaccinated their children or are very likely to, by and large, prefer the pediatrician (51%) or their PCP's office (24%) for their kids' flu vaccine. That's followed by pharmacies (16%) and schools (5%).

ADULTS ARE MORE LIKELY TO WANT TO GET VACCINATED AT A PHARMACY THAN A PCP'S OFFICE

Among those who have gotten vaccinated/are extremely likely to get vaccinated...



*Other also inlcudes: School, hospital, mobile clinic, clinic, hospital, community center, and pediatrician

Fielding Dates: October 29th – November 12th, 2021

Base: Extremely Likely or Already Vaccinated Adults 18-49, Children 2-17 (as stated by their Parents)

Q4a. Assuming the flu vaccine were available to you at all of the following locations, are you most likely to get the flu vaccine this season? Q4b. Assuming the flu were available to your child(ren) at all of the following locations, where are your child(ren) most likely to get the flu vaccine this season?

CONCLUSION

Lately, much of the public discourse around vaccinating the American public has centered around COVID. In reality, this effort pre-dates the pandemic and affects other common illnesses like the flu. The end result is that certain groups—like younger people and Black, Hispanic, and AAPI communities—remain more at risk of infection due to persistently low rates of flu vaccination. And while some groups, like those over 50, experienced an uptick in flu vaccination rates this past season, others dropped off even further.

As this research shows, diversifying the flu vaccine options and range of vaccination sites promises to expand access to millions of American adults and children who otherwise might not get one. These interventions wouldn't benefit this group of people alone—these new solutions are also appealing to those who are already open to getting the flu vaccine in the first place. As social distancing restrictions are relaxed and places where the flu virus can more easily be transmitted reopen, such as schools and workplaces, making the flu vaccine more accessible to all those who need it will only grow in importance.



WHY THE KNOWLEDGEPANEL®?

As the largest probability-based online panel in the United States, lpsos' KnowledgePanel® offers a uniquely representative overview of the American public. Its 60,000 members provide a statistically valid representation of the total U.S. population, including groups who are traditionally harder to reach, such as Black and African Americans, Latinos, Asian Americans, veterans, and cellphone-only non-internet households, among others. Ipsos provides a web-enabled device to households that do not have internet access at the time of recruitment.

METHODOLOGY

This Ipsos poll commissioned by AstraZeneca was conducted October 29th to November 12th, 2021 by Ipsos using our KnowledgePanel®. This poll is based on a nationally representative probability sample of 2,041 general population adults age 18-49, and 4,672 parents of kids ages 2-17.

The survey was conducted using KnowledgePanel, the most well-established online probability-based panel that is representative of the adult U.S. population. Our recruitment process employs a scientifically developed addressed-based sampling methodology using the latest Delivery Sequence File of the USPS - a database with full coverage of all delivery points in the U.S. Households invited to join the panel are randomly selected from all available households in the U.S. Persons in the sampled households are invited to join and participate in the panel. Those selected who do not already have internet access are provided a tablet and internet connection at no cost to the panel member. Those who join the panel and who are selected to participate in a survey are sent a unique password-protected log-in used to complete surveys online. As a result of our recruitment and sampling methodologies, samples from KnowledgePanel cover all households regardless of their phone or internet status and findings can be reported with a margin of sampling error and projected to the general population.



The study was conducted in English. A design weight for all selected panelist sample was created to adjust for the probability of selection. The general population adults ages 18-49 and parents of kids ages 2-17 data were weighted separately on several demographic characteristics. The benchmarks came from the 2019 American Community Survey (ACS) from the U.S. Census Bureau, and the benchmarks for metropolitan status came from the March 2020 Supplement of the Current Population Survey (CPS). For General Population Adults ages 18-49, the design weight was used as the pre-weight. The data were weighted, using an Iterative Proportional Fitting (or raking) method, by the following:



- Gender (Male, Female) by Age (18-29, 30–39, 40-49)
- Race/Hispanic Ethnicity (White Non-Hispanic, Black Non-Hispanic, Asian/Pacific Islander Non-Hispanic, Other or 2+ Races Non-Hispanic, Hispanic)
- Education (Less than High School graduate, High School graduate, Some College, Bachelor's and beyond)
- Region (10 market regions)
- Metropolitan status (Metro, non-Metro)
- Household Income (Under \$25,000, \$25,000-\$49,999, \$50,000-\$74,999, \$75,000-\$99,999, \$100,000-\$149,999, \$150,000+)
- Race/Hispanic Ethnicity (White/Other non-Hispanic, Black Non-Hispanic, Hispanic) by gender (Male, Female)
- Race/Hispanic Ethnicity (White/Other non-Hispanic, Black Non-Hispanic, Hispanic) by age (18-44, 45+)
- Race/Hispanic Ethnicity (White/Other non-Hispanic, Black Non-Hispanic, Hispanic) by education (Less than college grad, Bachelor and beyond)
- Have kids age 2-4 (Yes, No)
- Have kids age 5-12 (Yes, No)
- Have kids age 13-17 (Yes, No)

For parents of kids ages 2-17, the data were weighted by the following:

- Gender (Male, Female) by Age (2-4, 5-12, 13-17)
- Race/Ethnicity (White non-Hispanic, Black non-Hispanic, Other non-Hispanic, Hispanic)
- Region (10 sub-regions)
- HH income (Less than \$25K, \$25K-<\$50K, \$50K-<\$75K, \$75K-<\$100K, \$100K-<\$150K, \$150K+)
- HH income (Under \$50K, \$50K-<\$100K, \$100K+) by Age (2-4, 5-12, 13-17)
- Parent's Gender (Male, Female) by Parent's Age (18-39, 40+)
- Parent's Education (HS grad or less, Some college, College grad or higher)

The weights for adults age 18-49 and parents of kids ages 2-17 were separately trimmed to reduce extreme weights and lower the design effect.

The margin of sampling error is plus or minus 2.4 percentage points at the 95% confidence level, for results based on the data of adults ages 18-49. For results based on the parents of kids ages 2-17 data, the margin of sampling error is plus or minus 1.8 percentage points at the 95% confidence level. The margin of sampling error takes into account the design effect, which was 1.26 for adults ages 18-49 and 1.70 for parents of kids ages 2-17. The margin of sampling error is higher and varies for results based on sub-samples. In our reporting of the findings, percentage points are rounded off to the nearest whole number. As a result, percentages in a given table column may total slightly higher or lower than 100%. In guestions that permit multiple responses, columns may total substantially more than 100%, depending on the number of different responses offered by each respondent.



¹ There are currently nine manufacturers (including FluMist) that have released flu vaccines for the 2021-2022 season. The list of FDA-approved manufacturers, and the total number of lots released by the FDA, can be found here: https://www.fda.gov/vaccines-blood-biologics/lot-release/influenza-vaccine-2021-2022-season.

[#] "Table 1. Influenza Vaccines - United States, 2020–21 Influenza Season*." Centers for Disease Control and Prevention, Centers for Disease Control and Prevention, 20 Aug. 2020, <u>https://www.cdc.gov/flu/professionals/acip/2020-2021/acip-table.htm</u>.

Grohskopf, Lisa A, et al. "Update: ACIP Recommendations for the Use of Quadrivalent Live Attenuated Influenza Vaccine (LAIV4) - United States, 2018–19 Influenza Season." Centers for Disease Control and Prevention, Centers for Disease Control and Prevention, 7 June 2018, https://www.cdc.gov/mmwr/volumes/67/wr/mm6722a5.htm.