Annenberg Science and Public Health Knowledge Monitor

Spring 2023

A project of the Annenberg Health & Risk Communication Institute
of the Annenberg Public Policy Center of the University of Pennsylvania

Kathleen Hall Jamieson, Ph.D.
Ken Winneg, Ph.D.
Shawn Patterson Jr., Ph.D.
Patrick E. Jamieson, Ph.D.

April 10, 2023

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Version History

v2.0	April 7, 2023	Spring 2023 Release	Wave 10
v1.0	October 27, 2022	Fall 2022 Release	Wave 8
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Table of Contents

The Annenberg Science and Public Health Knowledge Monitor

The Annenberg Science and Public Health (ASAPH) Knowledge Monitor, a project of the Annenberg Public Policy Center (APPC) of the University of Pennsylvania, tracks national levels of health knowledge and misinformation over time.

Building on the Annenberg Science Knowledge (ASK) surveys, which since 2016 have been focused on health knowledge and misinformation about topics such as the Zika virus, measles, and COVID-19, the ASAPH Knowledge Monitor generates indices of knowledge about such vital health topics as maternal and reproductive health, vaccination, COVID-19, monkeypox, and indications and treatment of heat-related illness. It also provides an ongoing measure of public confidence in the National Institutes of Health (NIH), Centers for Disease Control and Prevention (CDC), and Food and Drug Administration (FDA).

This second ASAPH report is based on 10 waves of a nationally representative panel survey of U.S. adults, first empaneled in April 2021, that was conducted for APPC by SSRS, an independent market research company. The tenth wave was conducted January 10-16, 2023, and has a margin of sampling error (MOE) of ± 3.2 percentage points at the 95% confidence level.

Key Findings

With a vaccine on the horizon for RSV, respiratory syncytial virus, that is designed to protect pregnant people and their fetuses, new research finds that women of childbearing age are more doubtful than other adults about the safety of existing, recommended vaccines that can protect them from two other illnesses: the seasonal flu and COVID-19.

Data from recent waves of the ASAPH panel show that higher percentages of women of childbearing age (18 to 49 years old) do not think that vaccination against COVID-19 and the flu during pregnancy is safe, when compared with women age 50 and older and all adult men.

- **Flu**: The U.S. seasonal flu shot is considered safe for pregnant women by three-quarters (76%) of women of childbearing age who indicate they are vaccinated against the flu but only by 40% of those who did not report having a flu shot.

- **COVID-19**: COVID-19 vaccination during pregnancy is considered safe and effective by 59% of women of childbearing age who report having had the primary series of COVID-19 vaccine shots but only 8% of those who did not report taking COVID vaccines.

- **Uncertainty**: Large numbers of people – especially women age 50 and older – are not sure if the two vaccines are safe during pregnancy. Among women 50 and older, 39% are not sure if the COVID-19 vaccine is safe and effective during pregnancy, and over

half (51%) are not sure if the flu shot is safe for pregnant women.

The Centers for Disease Control and Prevention (CDC) recommends both the flu shot and a COVID-19 vaccine for pregnant people.

"Because the COVID and flu vaccines help protect both those who are pregnant and their infants, dispatching misconceptions about them should be a public health priority," said Kathleen Hall Jamieson, director of the Annenberg Public Policy Center of the University of Pennsylvania. "That women of childbearing age are showing doubt in the safety of current, authorized vaccines is worrisome."

Other Findings

Among the report's other topics and findings:

- **Flu Attitudes**: There are significant differences on attitudes toward flu risks depending on an individual's vaccination status. Asked about the statement "Children do not need the seasonal flu shot because they are at low risk of death from seasonal flu," 73% of adults vaccinated against the flu disagreed, but just 41% of adults who did not report being vaccinated against flu disagreed.

- **Myocarditis & Sudden Cardiac Events**: Nearly half of those surveyed (47%) are not sure whether COVID-19 poses a higher risk for myocarditis than COVID-19 vaccination.

- **Mental Health**: Of those surveyed, 42% say they have known someone in their immediate family diagnosed with a mental health disorder; 24% say they have themselves been diagnosed with a mental health disorder; and 59% say they have known "anyone" who was diagnosed with a mental health disorder.
  - Seniors were the least likely to report knowing anyone with a mental health diagnosis. On self-reporting diagnoses, over a third (37%) of those 18 to 29 years old report a mental health diagnosis, compared with just 11% of respondents 65 and older.

- **Gun Ownership and Suicide**: While studies show an association between handgun ownership and suicide, just under 4 in 10 (39%) survey respondents say that having a gun in a person's home will increase the chances that a person will die by suicide. A third of respondents (33%) say incorrectly that it does not affect the chances that a person will die by suicide, and 27% say are note sure.

Contributions

Data analysis for the Annenberg Science and Public Health Knowledge Monitor was conducted by APPC managing director of survey research Ken Winneg, Ph.D., and research analyst Shawn Patterson Jr., Ph.D. Patrick E. Jamieson, Ph.D., director of APPC's Annenberg Health and Risk Communication Institute, developed the questions in the surveys. Scholars leading the teams that helped to develop pilot panels on Zika, vaccination, and COVID-19 include Dolores Albarracín, Ph.D., director of APPC's Science of Science Communication Division, and Dan Romer, Ph.D., APPC's research director. The cover was designed by APPC senior designer Zachary Reese. The Annenberg Science and Public Health Knowledge Monitor is a project of APPC's Annenberg Health and Risk Communication Division, which is funded by an endowment established for it by the Annenberg Foundation.

The Annenberg Public Policy Center was established in 1993 to educate the public and policy makers about communication's role in advancing public understanding of political, science, and health issues at the local, state, and federal levels.

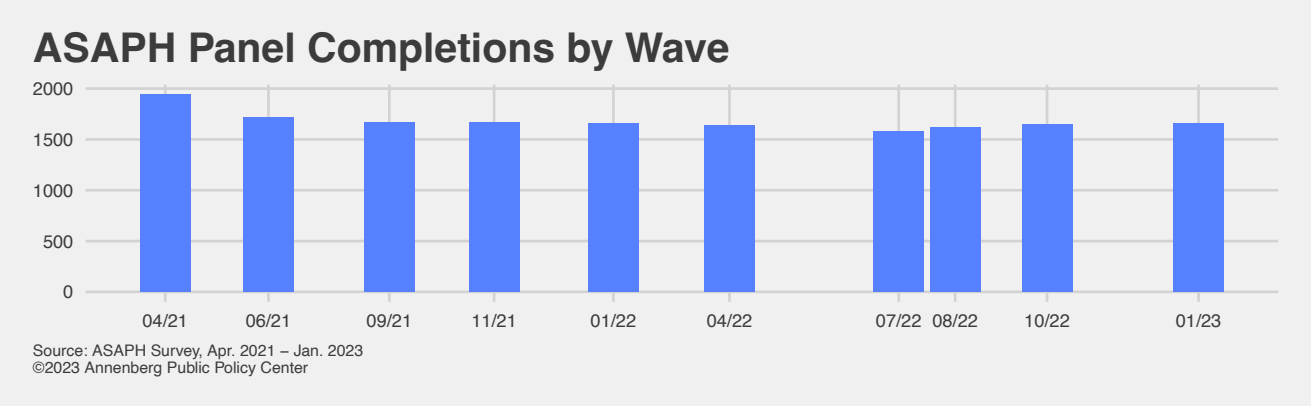
Methodology

The data for the Annenberg Science and Public Health (ASAPH) survey were collected from a nationally representative probability panel survey drawn randomly from the SSRS Opinion Panel of U.S adults, 18 and older. SSRS Opinion Panel members are recruited randomly based on nationally representative address-based sample design (including Hawaii and Alaska). Additionally, hard-to-reach demographic groups were recruited via the SSRS Omnibus survey platform, a nationally representative (including Hawaii and Alaska) bilingual telephone survey designed to meet standards associated with custom research studies.

Both the phone and online surveys were available in Spanish with about 1.7% of the panel using this language. Panel members in our study were not selected for any other studies conducted by SSRS and are considered proprietary. Panelists were invited by email or telephone to participate in the panel and were compensated the equivalent of $15 for their time at each survey wave. The median length of the surveys was 20 minutes. The survey was deemed exempt from review by the Institutional Review Board of the University of Pennsylvania.

Of the 3,476 U.S. adult panelists invited to participate in wave 1 of the survey, 1,941 completed that wave's survey in April 2021 (56% completion rate). The majority completed the survey online rather than by telephone (97% online and 3% by telephone). These 1,941 panelists were recontacted at each subsequent wave unless they dropped from the panel. Post-wave 1 panelist completion rates were high, averaging 84 percent between waves 2 and 10. The number of completes per wave can be seen in Figure 1.

Figure 1



Between waves 8 and 9, The Annenberg Public Policy Center of the University of Pennsylvania (APPC) engaged SSRS in recruiting additional panelists to the ASAPH panel to increase the sample size, account for attrition, and improve the representativeness of the panel. Additional panelists were recruited again via address-based sampling in similar fashion to the initial recruitment as described above. From these recruits, ASAPH randomly selected 74

additional panelists with an educational attainment of a high school degree or less to participate to improve representativeness.

Between waves 9 and 10, APPC engaged SSRS to conduct an engagement survey with the purpose of recruiting additional panelists. The survey was conducted via the SSRS Opinion Panel and invited only newly recruited panelists with an educational attainment of a high school degree or less to participate to improve representativeness. Data collection was conducted from December 6 – December 12, 2022 by web in English only. The survey obtained 60 completes, among which 33 were recruited to the ASAPH Panel. In total, 107 new respondents were added. The reduction in design effect between waves 8 and 10 reflects the improved representativeness of the sample post-replenishment.

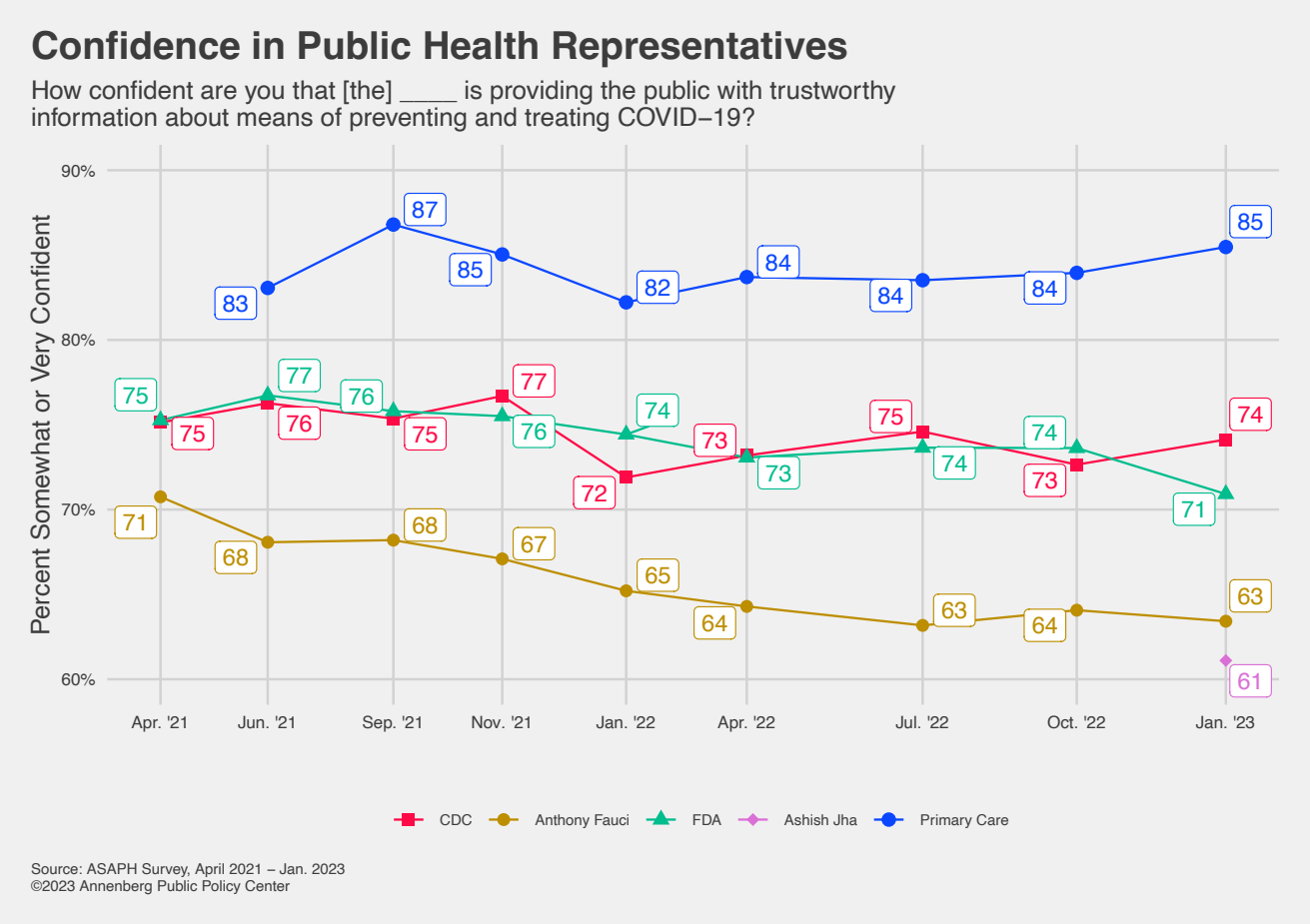
The most recent data in this report are drawn from wave 10 of the study, conducted from January 10-16, 2023, among a sample of 1,657 respondents, 1,611 from the web and 46 by telephone. A total of 1,625 surveys were conducted in English and 32 in Spanish. 2,048 panelists were invited to complete wave 10 of the survey. The response rate was 80.9%. The margin of sampling error (MOE) for total respondents is +/-3.2 percentage points (pp) at the 95% confidence level. For additional methodological detail, see Appendix I.

Confidence in Public Health Institutions and Experts

The Annenberg Science and Public Health (ASAPH) panel has regularly asked respondents to report their level of confidence in those who provide public health information about the treatment and prevention of COVID-19.

Question: In general, how confident, if at all, are you that the following are providing the public with trustworthy information about means of preventing and treating disease/COVID-19?

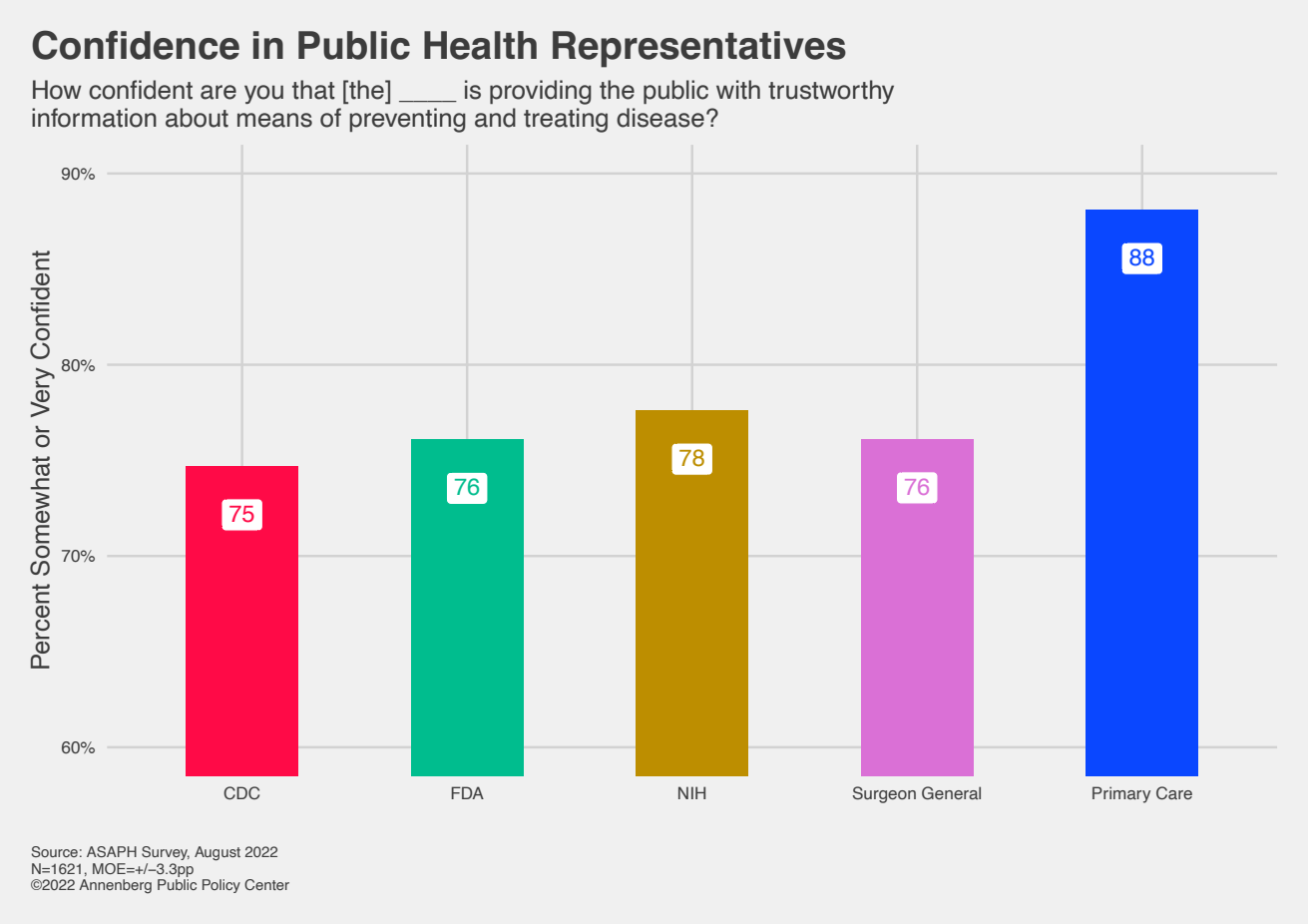
Figure 2



As shown in Figure 2, large majorities remain somewhat or very confident that the Center for Disease Control and Prevention (74%) and the Food and Drug Administration (71%) provide the public with trustworthy information about means of preventing and treating COVID-19. This confidence has remained relatively stable for public health institutions and primary healthcare providers since COVID-19 vaccines became available in April 2021.

Perceptions of Dr. Anthony Fauci, former director of the National Institute of Allergy and Infectious Diseases and former Chief Medical Advisor to President Biden, have stabilized after a period of decline early in the pandemic. Similarly, while public confidence in Dr. Ashish Jha, the White House COVID-19 Response Coordinator, remains high (61%), the public has significantly more confidence in public health institutions and their primary care providers than these specific public health officials.

Figure 3



Similar trends can be seen in confidence in public health institutions to provide trustworthy information about *means of preventing and treating disease* more generally, as displayed in Figure 3. Three quarters of respondents (75-78%) have confidence in specific public health institutions compared to 88% in their primary health care providers.

Over the course of the panel, a number of items have been asked to address confidence in the CDC in specific contexts. These items assessed respondents' belief in a series of conspiracy theories that reflect an underlying skepticism toward public health institutions.

Question: Please indicate if you believe the statement below is true, false, or if you aren't sure.

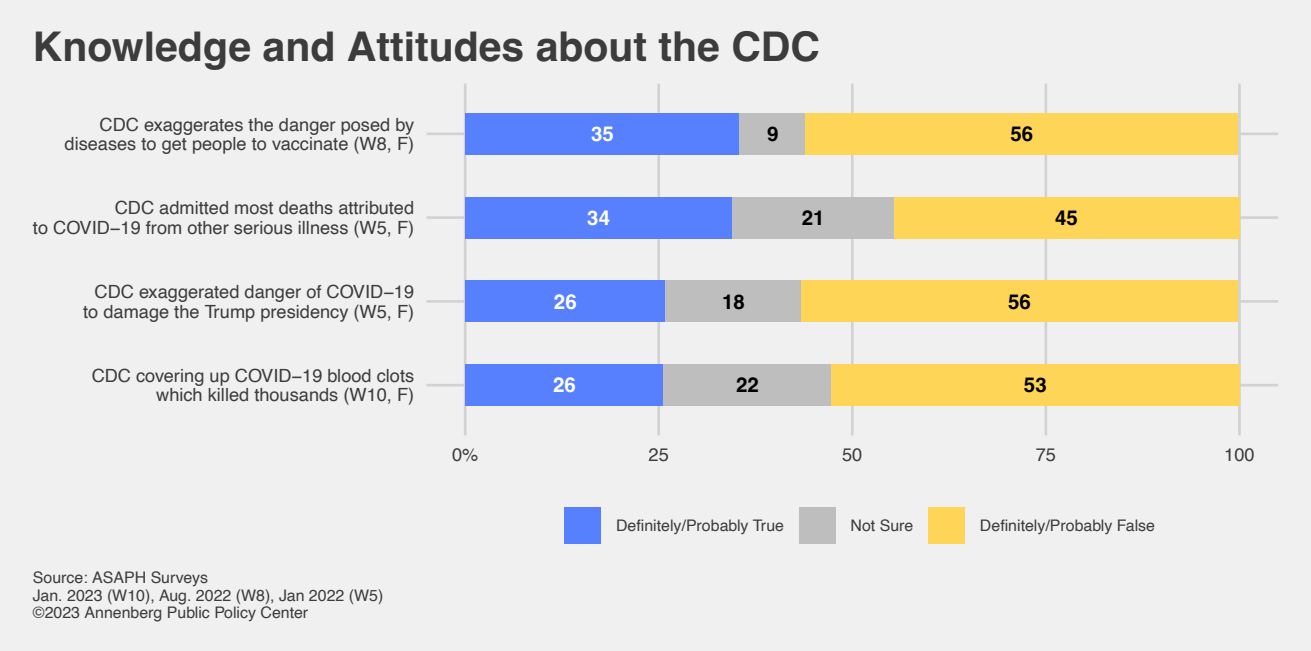
1. Health officials at the U.S. Centers for Disease Control and Prevention (CDC) exaggerate the danger posed by diseases in order to get people to vaccinate.

2. The U.S. Centers for Disease Control and Prevention, also known as the CDC, has admitted that most of the deaths attributed to COVID-19 were actually caused by other serious illnesses and NOT by the coronavirus.

3. Some health officials at the U.S. Centers for Disease Control and Prevention, also known as the CDC, exaggerated the danger posed by the coronavirus in order to damage the Trump presidency.

4. The CDC is covering up the fact that the COVID-19 vaccines are causing blood clots that have killed thousands of people.

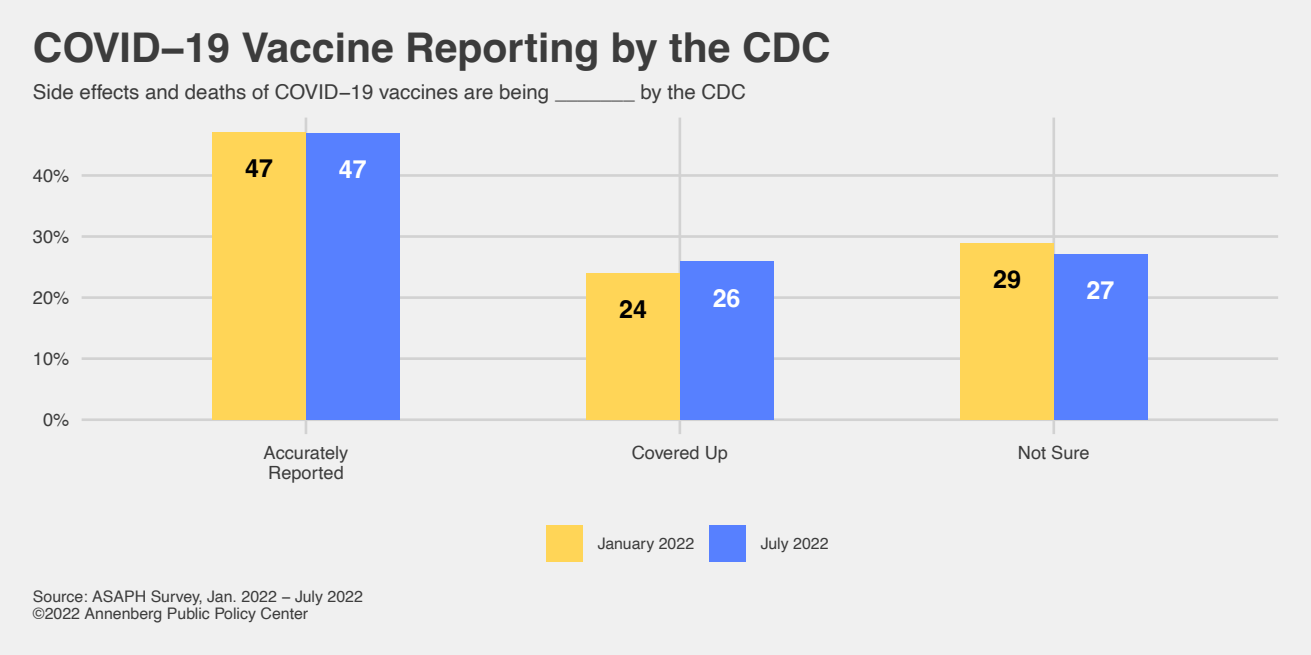
Figure 4



Across all items, the plurality of respondents reported confidence in the CDC, as can be seen in Figure 4. However, about one in five respondents were unsure whether the CDC was misattributing deaths from other serious diseases to COVID-19 (21%), whether the CDC was exaggerating the dangers of COVID-19 to damage the Trump administration (18%), or whether the CDC was covering up the fact that the COVID-19 vaccine caused blood clots which have killed thousands of people (22%).

Similarly, as shown in Figure 5, while a plurality of respondents believe the CDC is accurately reporting the side effects and fatalities associated with COVID-19 vaccination, a greater number are either not sure (29%, 27%) or believe the true numbers are being covered up (24%, 26%). Importantly, these numbers remained stable over the first half of 2022.

Figure 5



The Seasonal Flu

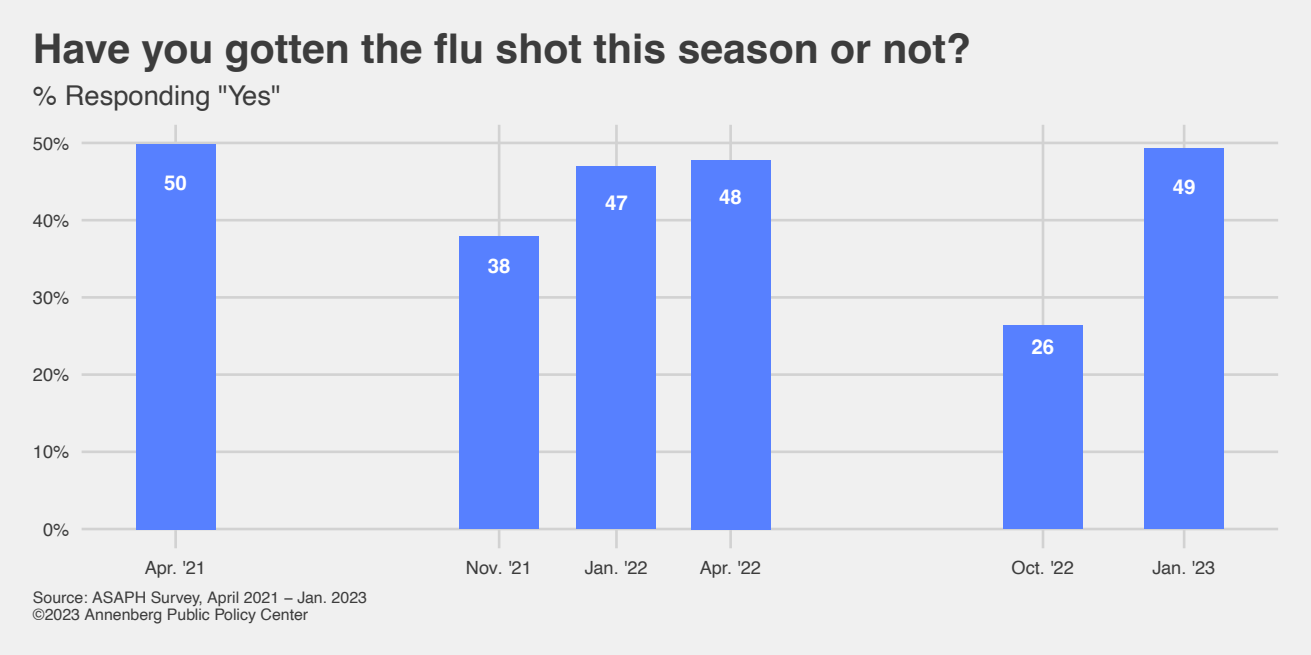
Who Is Getting the Flu Shot?

Question: Have you gotten the flu shot this season or not?

In the January 2023 ASAPH panel, 49% of respondents say they have had a seasonal flu shot, statistically unchanged from 47% in our January 2022 survey and 50% in April 2021, as shown in Figure 6. According to the Centers for Disease Control and Prevention (CDC), nearly 46% of U.S. adults 18 and older had a flu shot as of December 31, 2022.[1] The CDC actively promoted flu vaccination amid concerns that the 2022-23 season would be severe.

[1] "Influenza Vaccination Coverage, Adults." CDC.gov, Feb. 2023.

Figure 6



When the 49% of survey respondents who said they got the flu vaccine were asked why they got the shot (multiple responses were permitted):

- 69% said I get it every year (down from 78% in January 2022)
- 64% said to protect myself against catching the flu (up from 44% in January 2022)
- 8% said to protect myself against COVID-19 (unchanged from 9% in January 2022)
- 25% said because it is recommended by the CDC (response not previously offered)

There are important demographic differences in flu vaccine uptake, as seen in Table 1. Older and better educated adults are more likely to say they got their flu shot this season than their younger and less educated counterparts. We find that the older one is, the more likely one is to report getting the flu shot this season. Three in four of those age 65 or older say they got the shot, significantly higher than 55% of those between the ages of 50 and 64, 38% of those between the ages of 30 and 49, and 33% of those between the ages of 18 and 29.

Table 1: Demographics of Flu Vaccination

	Yes	No
Total	49	51
Age		
18-29	33	67
30-49	38	62
50-64	55	45
65+	75	25
Education		
High School or Less	40	60
Some College	45	55
College	56	44
Post-College	69	31
Gender		
Male	48	52
Female	50	50
Race & Ethnicity		
Asian	56	44
Black	42	58
Hispanic	38	62
Other Race	31	69
White	54	46

By education, a significantly higher proportion of those with some post-graduate education (69%) say they got the flu shot this season compared to 56% of college graduates without a post-graduate education, 45% of those with just some college, and 40% of high school graduates or lower education levels.

By race, Asian (56%) and White (54%) respondents are more likely to say they have gotten the flu shot this season compared to Black (42%) or Hispanic (38%) panelists. In contrast, men (48%) and women (50%) are just as likely to report getting the flu shot this season.

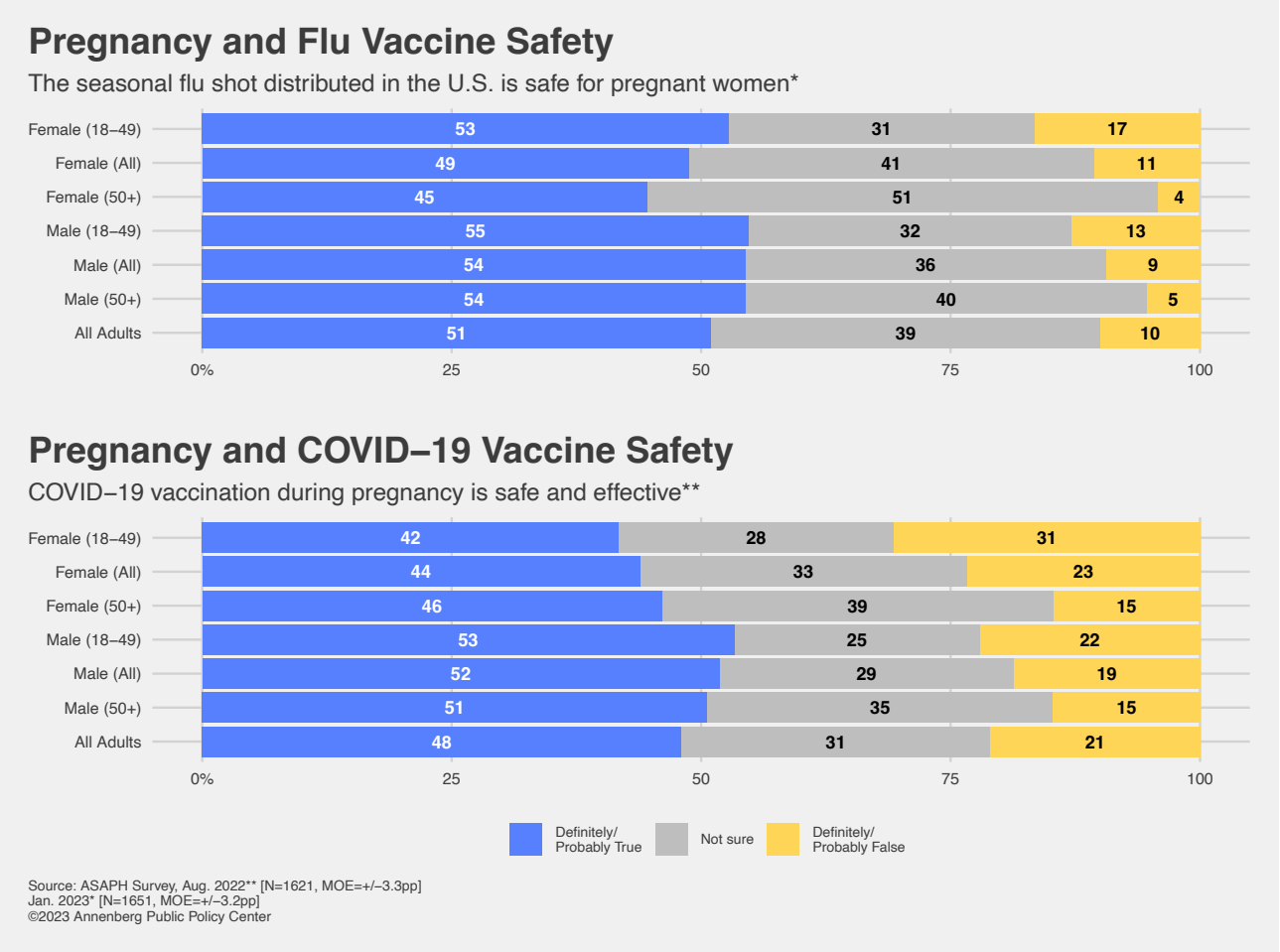
Flu Knowledge and Misinformation

Question: Please indicate if you believe the statement below is true, false, or if you aren't sure. The seasonal flu shot distributed in the U.S. is safe for pregnant women.

The flu shot distributed in the U.S. is generally safe for those who are pregnant.[2] A slim majority of Americans (51%) correctly believe this to be true, yet nearly four in ten (39%) are unsure. Among women, the proportions roughly reflect the total, with 49% of women saying the statement is true and 41% saying they are unsure (see Figure 7).

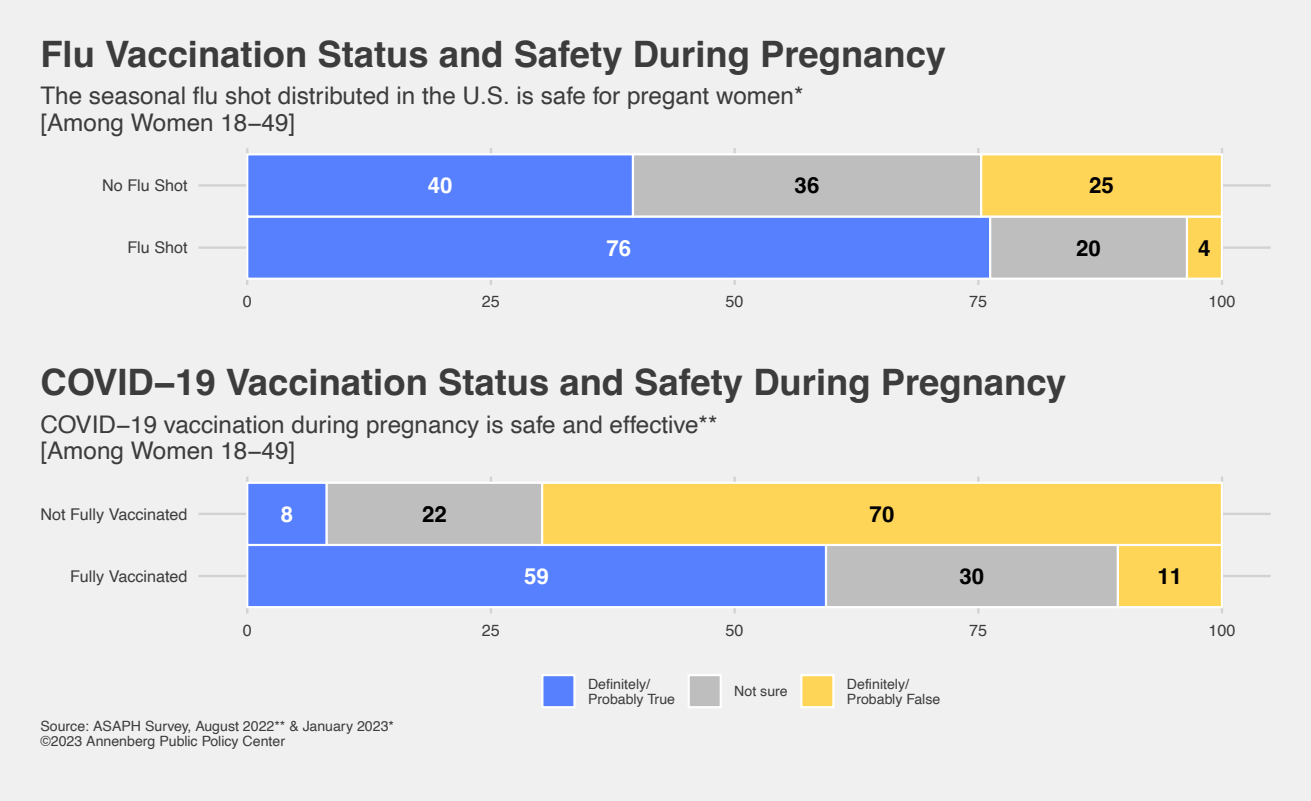
[2] "Influenza (Flu) Vaccine and Pregnancy." CDC.gov, Feb. 2023.

Figure 7



Although a majority of women of childbearing age (between 18 and 49) believe it is true to say that the seasonal flu vaccine is safe for pregnant women (53%), this demographic is more likely than older women or all men to report this as false. While the proportions are relatively small, these women are four times more likely than older women to say the statement is false (17% vs. 4%) and nearly twice as likely to say so than are men (17% vs. 9%). A majority of women age 18 to 49 and men of all ages say the statement is true. Women over the age of 50 are more likely to be uncertain about the flu shot's safety for pregnant women, however (51% vs. 31% of women ages 18 to 49, and 36% of men).

Figure 8



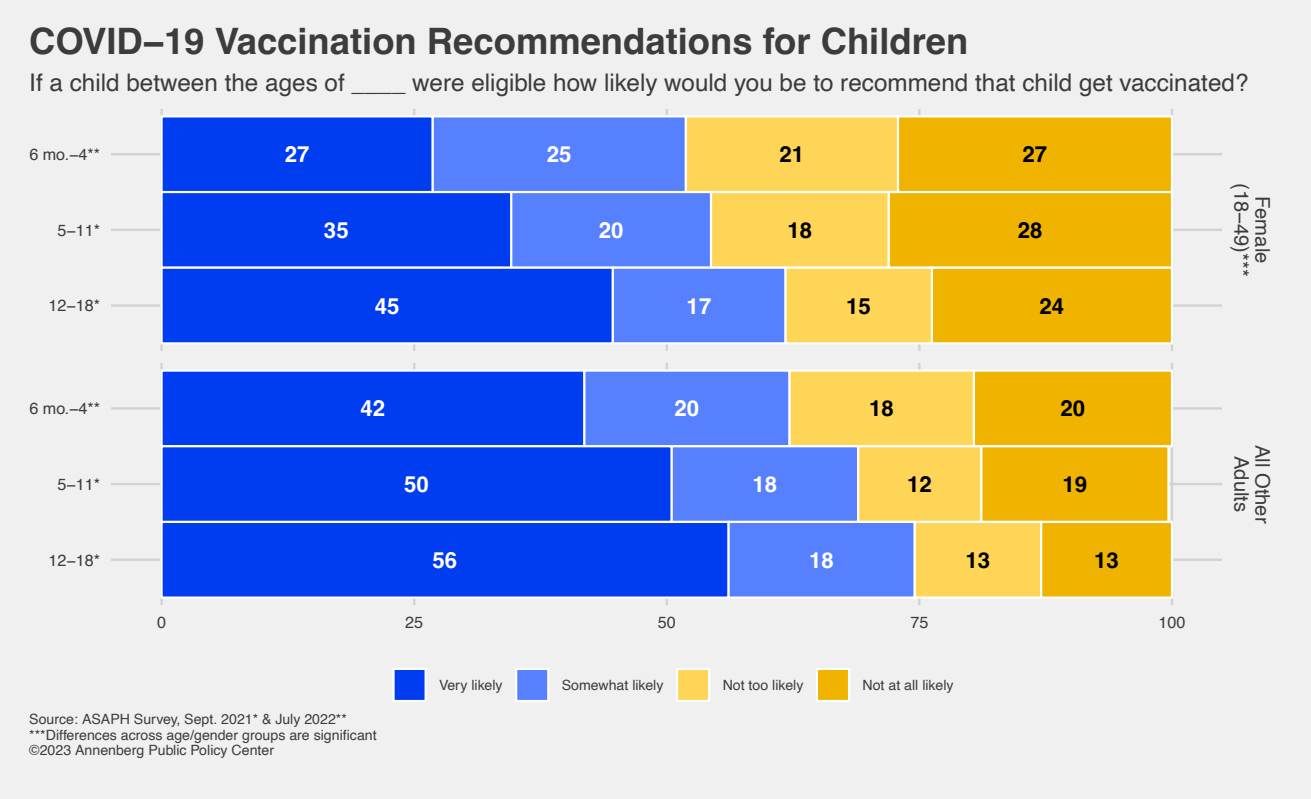
Question: As far as you know, for each of the following vaccines, please indicate how safe, if at all, you think getting it is – The COVID-19 vaccine.

This trend is more pronounced for the COVID-19 vaccine. As seen in the August 2022 wave of the survey, just over 4 in 10 women (42%) of childbearing age know that COVID-19 vaccination during pregnancy is safe and effective. But nearly a third (31%) of women of childbearing age incorrectly think it is false. Many more women of childbearing age doubt the safety and effectiveness of COVID-19 vaccination during pregnancy (31%) than older women (15%) or adult men (19%, see Figure 7). We also find large differences among women of childbearing age depending on whether they themselves reported receiving the seasonal flu shot or a primary series COVID-19 vaccination, as shown in Figure 8.

Question: If a member of your household were [12 to 18 years old, between the ages of 5 and 11, under age 5] how likely, if at all, would you be to recommend that that person get vaccinated with one of the COVID-19 vaccines the FDA authorized?

Women of childbearing age are also less likely to recommend COVID-19 vaccination for children of all ages. While all respondents were less likely to recommend COVID-19 vaccination for younger children, compared to all other adults, women aged 18-49 were less likely to recommend COVID-19 vaccination, as shown in Figure 9.

Figure 9



Question: Please indicate if you believe the statement below is true, false, or if you aren't sure. If you haven't gotten a seasonal flu shot by November there is no value in getting the shot.

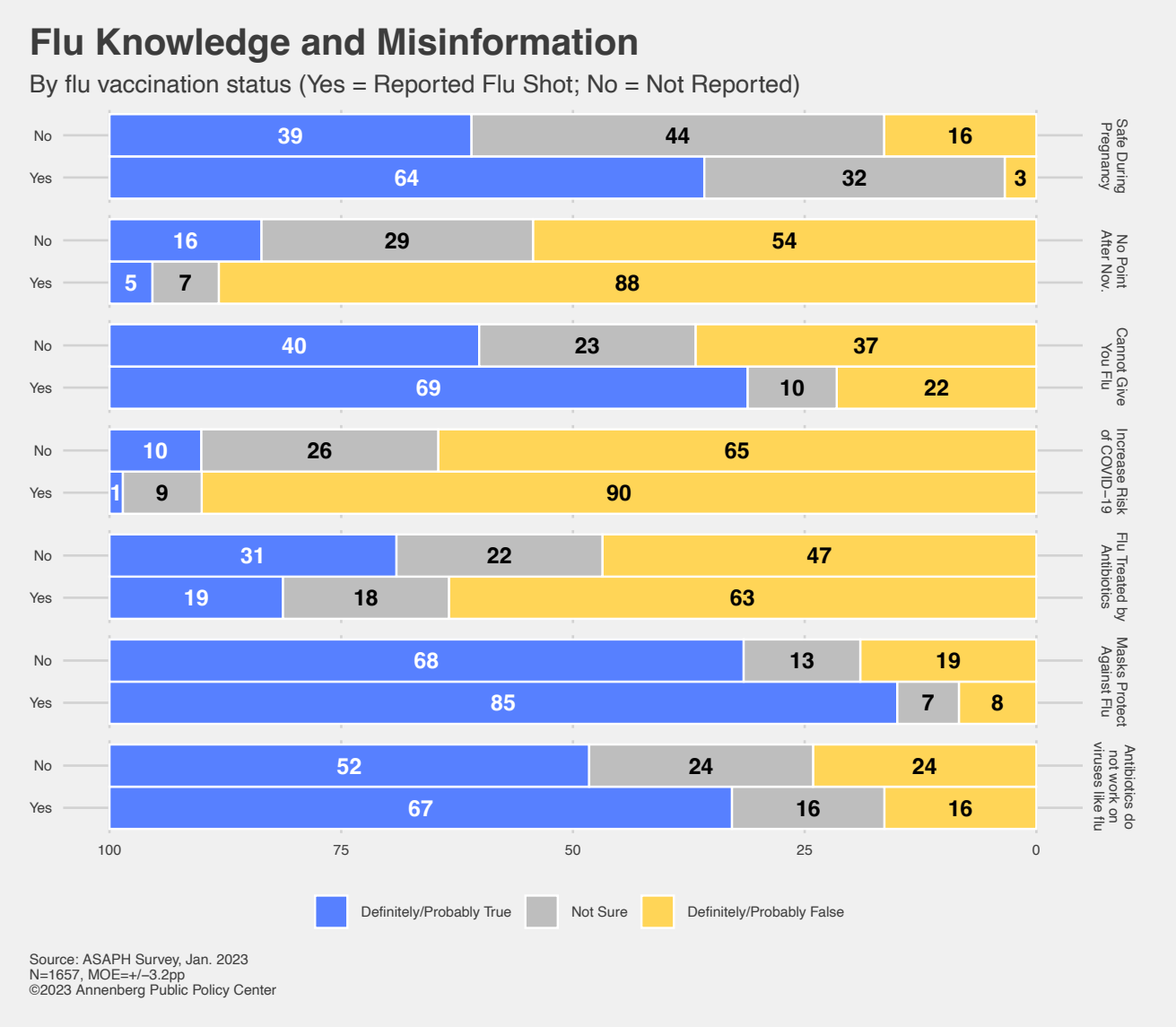
Not getting the flu shot early may contribute to individuals not getting their seasonal flu shot at all. 46% of those who have not gotten their flu shot either believe that waiting until after November for getting the shot would be a waste of time because they consider it to be ineffective (16%) or they just are not sure if that is the case (29%, see Figure 10). While the CDC recommends vaccination in September or October, "if you are not able to get vaccinated until November or later, vaccination is still recommended because flu most commonly peaks in February and significant activity can continue into May."[3]

[3] "Frequently Asked Influenza (Flu) Questions: 2022-2023 Season." CDC.gov, Feb. 2023.

Question: Please indicate if you believe the statement below is true, false, or if you aren't sure. The seasonal flu shot distributed in the US cannot give you flu.

A majority of Americans (54%) are correct in saying that the seasonal flu shot cannot give the recipient the flu (see Figure 11). This is the flu knowledge item with the greatest degree of misinformation, with 29% believing this definitely or probably false. There are clear dif-

Figure 10



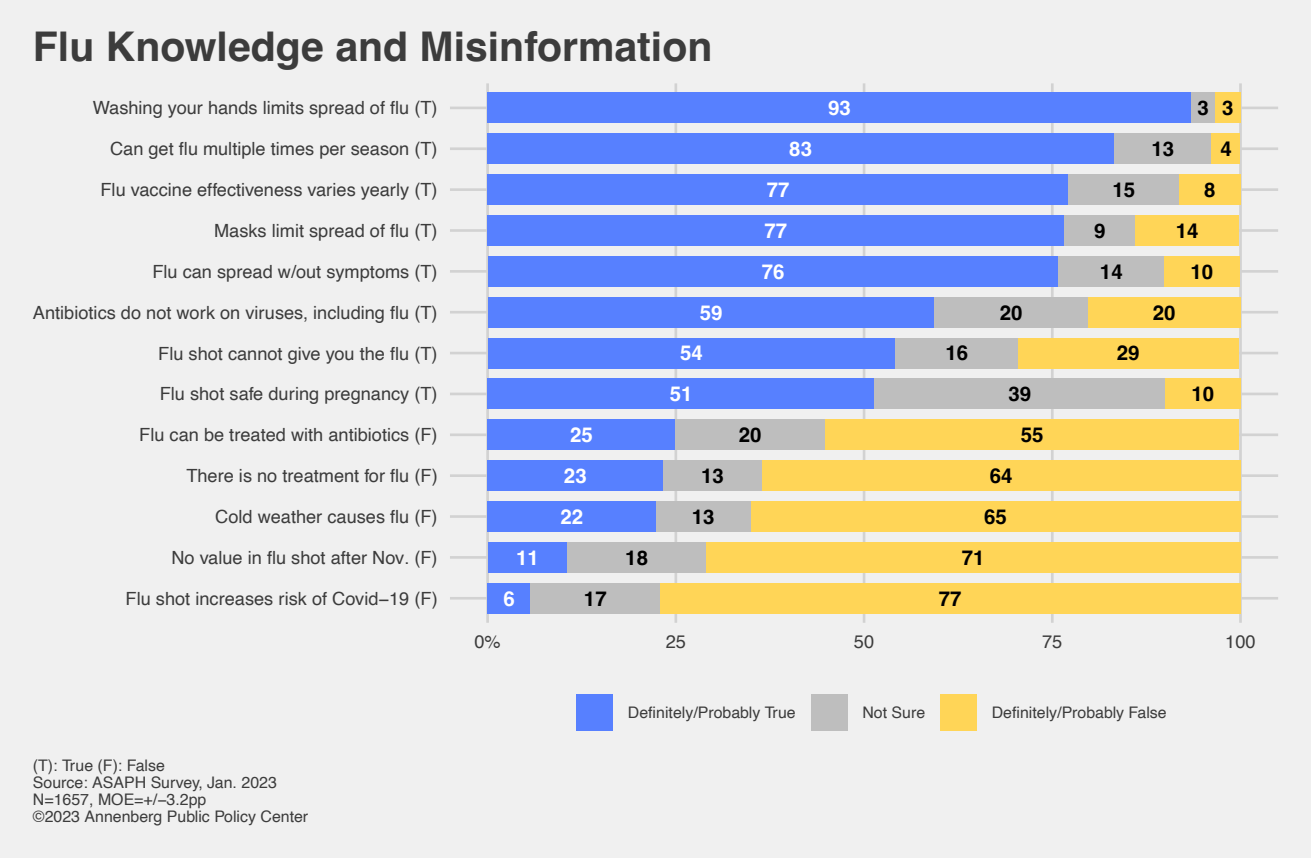
ferences between those who did and did not report receiving the flu vaccination this season: Those who say they have gotten the shot are more than one and a half times as likely to know this than those who report that they have not (69% to 40%, see Figure 10).

Question: Please indicate if you believe the statement below is true, false, or if you aren't sure. The seasonal flu shot distributed in the U.S. increases your risk of getting COVID-19.

While most Americans (77%) know there is no link between getting a seasonal flu shot and becoming infected by the coronavirus[4] and only 6% incorrectly believe this is true, significantly fewer (65%) non-vaccinated adults say such a link is false, compared

[4] "Frequently Asked Influenza (Flu) Questions: 2022-2023 Season." CDC.gov, Feb. 2023.

Figure 11



with 90% of flu shot recipients.

Question: Please indicate if you believe the statement below is true, false, or if you aren't sure. Antibiotics do not work on viruses such as those that cause colds, flu, or COVID-19.

By a margin of 67% to 52%, those who reported getting the seasonal flu shot are significantly more likely than those who have not gotten the shot to correctly believe that antibiotics do not work on viruses such as those that cause colds, flu, or COVID-19.[5]

[5] "Influenza (Flu): Treatment: What You Need to Know." CDC.gov, Feb. 2023.

Similarly, 63% of respondents who received the flu shot know that the flu cannot be treated by antibiotics, compared to only 47% of those who did not report getting the shot.

Question: Please indicate if you believe the statement below is true, false, or if you aren't sure. Wearing a high-quality, well-fitting mask helps limit the spread of flu viruses.

Those who reported getting the seasonal flu shot are also more aware of the efficacy of everyday measures that help in preventing the onset of the flu, such as wearing a high-quality mask and washing your hands. Over four-fifths of those who say they have been vaccinated

for the seasonal flu this season (85%) also know that wearing a high-quality mask is an effective way to prevent flu onset compared with a smaller majority of those who have not reported getting a flu shot this season (68%).

Beliefs and Attitudes toward Flu Vaccination

Question: Please indicate how much you agree or disagree with the following statement: Because Tamiflu is available to treat seasonal flu, there is no longer a need for people to get a flu shot.

Figure 12 presents four different attitudes respondents hold toward flu vaccination. Nearly two-thirds of those surveyed (65%) disagree with the statement that there is no need for a flu shot because they can always use the prescription antiviral medication oseltamivir phosphate, known by its brand name Tamiflu, to treat flu symptoms.

The Food and Drug Administration indicates that Tamiflu is no substitute for the flu vaccine, noting that "getting the flu vaccine is the best way to protect against getting the flu and to control the spread of the flu."[6]

[6] "Tamiflu: Consumer Questions and Answers." FDA.gov, Nov. 2017.

This misconception that Tamiflu can substitute for the seasonal flu shot is more prevalent among those with less education: 55% of those who have high school education or less say they disagree with the statement, compared to 81% of those who indicated a post-graduate education level and 76% of those who say they are college graduates (see Table 3).

Figure 12

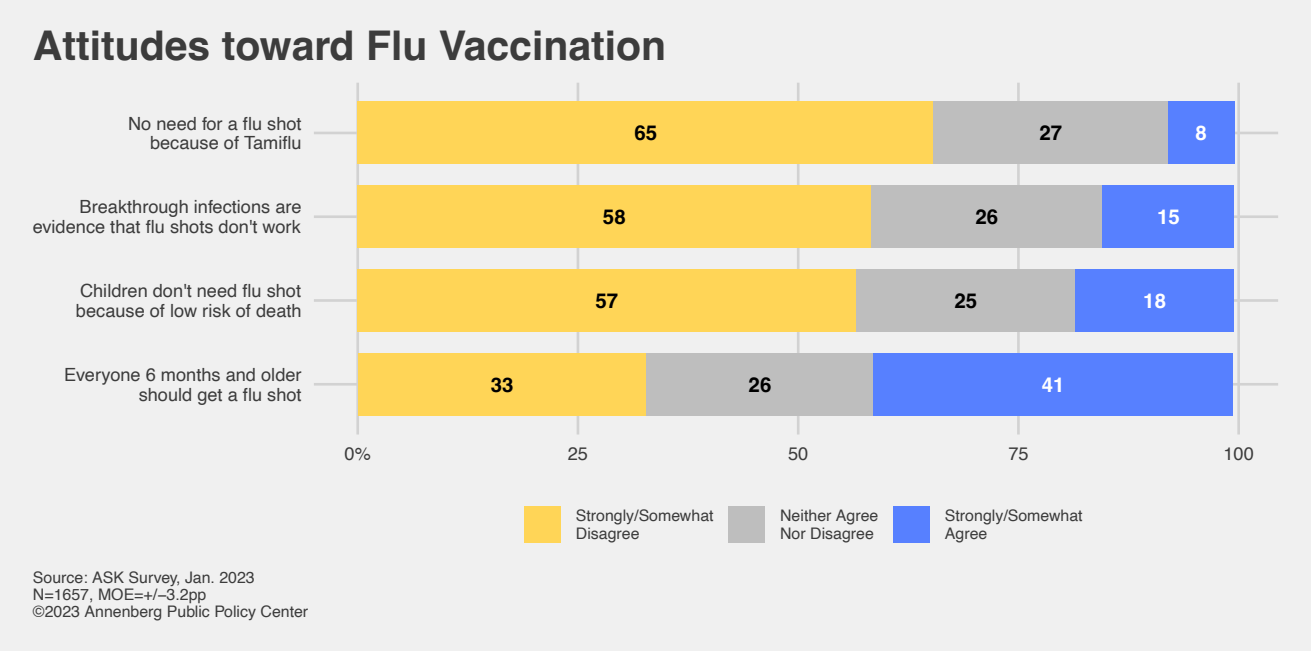


Table 2: No Need for Flu Shot because of Tamiflu Treatment

	Strongly/Somewhat Agree	Strongly/Somewhat Disagree	Neither
Total	8	65	27
Education			
High School or Less	10	55	35
Some College	7	62	29
College	5	76	19
Post-College	5	81	14

Question: Please indicate how much you agree or disagree with each of the following statements: Breakthrough seasonal flu infections are evidence that seasonal flu shots don't work.

Another potential barrier to getting a seasonal flu shot is the belief that breakthrough infections are evidence that the shots don't work. Nearly six in ten adults (58%) disagree with the statement that breakthrough seasonal flu infections are evidence that flu shots don't work – though 15% agree and 26% neither agree nor disagree. This is not the case.[7]

[7] Meissner, Morgan. 2021. "Does a breakthrough infection mean my flu shot didn't work?." Healthline.com, Sept. 28, 2021.

Three-fourths (74%) of those who say they have gotten their flu shot disagree with this sentiment, but almost half as many who say they have not gotten their flu shot (43%) disagree with this statement. Almost a quarter (23%) of the non-vaccinated agree that breakthrough flu infections show that the shots do not work, compared to 7% of those who say they have had the shot (see Figure 13).

Question: Please indicate how much you agree or disagree with each of the following statements: Children do not need the seasonal flu shot because they are at low risk of death from seasonal flu.

The incorrect belief that children do not need the seasonal flu shot because they are at low risk of death from the flu could be another reason why some are resisting getting the flu shot for their children. Nearly one in five (18%) agree with this claim, however, while 57% disagree.

According to the CDC, "millions of children get sick with the flu each year" and thousands are hospitalized, including children younger than five years old. While children with chronic illnesses are much more likely to be hospitalized with the flu, CDC estimates between 130 and 1,200 children die of flu each year.[8]

[8] "Vaccine for flu." CDC.gov, Feb. 2023.

Those reporting the highest level of education are more likely to disagree with the sentiment than less educated adults (74% of post-graduates agree vs. 57% of college graduates, 51% of those with some college education, and 52% of high school grads or less) (see Table 4). Those who report having gotten the seasonal flu shot are significantly more likely to disagree with this statement than those who say they have not gotten the shot (73% vs. 41%).

Figure 13

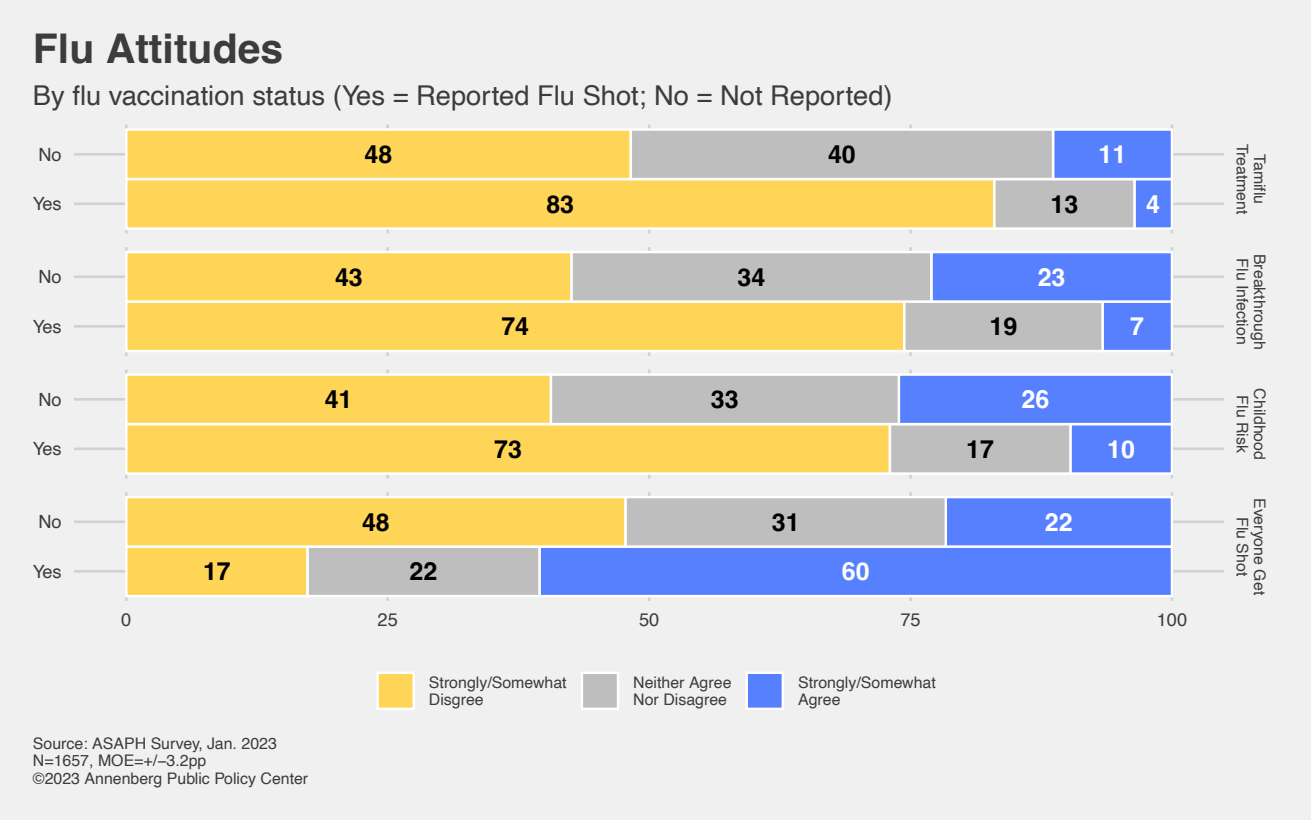


Table 3: Children do not need the seasonal flu shot

	Strongly/Somewhat Agree	Strongly/Somewhat Disagree	Neither
Total	18	57	25
Education			
High School or Less	18	52	29
Some College	22	51	27
College	19	57	24
Post-College	12	74	14

Question: Please indicate how much you agree or disagree with each of the following statements: Every person older than 6 months of age should get a flu shot each year.

Just 41% agree that every person older than six months should get a flu shot every year – 33% disagree and 26% neither agree nor disagree. The CDC recommends a flu shot every season for nearly everyone six months and older.[9] Only a fifth (22%) of those who say they have not gotten their seasonal flu shot agree that all people older than six months should get an annual flu shot, compared with 60% of those who say they are vaccinated.

[9] "Frequently Asked Influenza (Flu) Questions: 2022-2023 Season." CDC.gov, Feb. 2023.

Polio

In July of 2022, a case of paralytic poliomyelitis, the disease caused by the polio virus commonly referred to as polio, was confirmed in Rockland County, New York. Wastewater samples from communities near this patient showed that poliovirus was present and circulating in those areas. Viral sequencing later confirmed that the virus consisted of a vaccine-derived poliovirus, suggesting it originated from a weakened live polio virus from an oral polio vaccine, unlike the inactivated poliovirus vaccine used in the United States exclusively since 2000.

Polio was once one of the most feared diseases in the United States, according to the CDC. With the United States joining the list of 30 other countries with circulating vaccine-derived poliovirus (cVDPV), the Annenberg Science and Public Health (ASAPH) panel sought to assess public knowledge and attitudes toward a disease for which there have been no cases related to wild poliovirus at all since 1993.

The polio vaccine used in the United States protects against severe disease in nearly everyone – 99 out of 100 people – who has received all four recommended doses. Among U.S. kindergarten students, the CDC reports that 93% had received all four doses by the 2020-21 school year.[10]

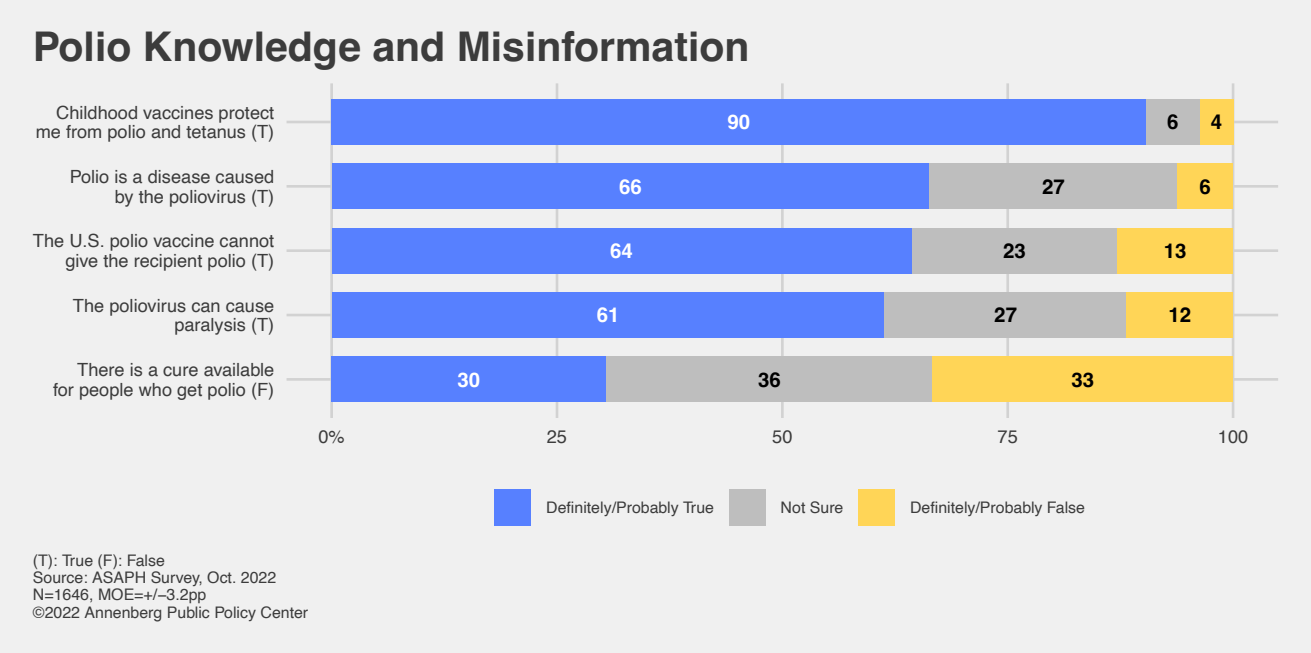
[10] "Polio Vaccination: What Everyone Should Know." CDC.gov, Feb. 2023.

Question: Please indicate if you believe the statement below is true, false, or if you aren't sure.

1. *Vaccines given to me during childhood protected me from diseases such as polio and tetanus.*
2. *Polio is a disease caused by the poliovirus.*
3. *The polio vaccine in the U.S. cannot give the recipient polio.*
4. *The poliovirus can cause paralysis.*
5. *There is a cure available for people who get polio.*

Despite the renewed threat, the October 2022 wave of the ASAPH panel finds that a sizable portion of the U.S. public is unfamiliar with the risks of polio. As shown in Figure 14, nearly two-thirds of respondents (66%) either falsely believe that there is a cure for people who get polio (30%) or are unsure whether such a cure exists (36%). While solid majorities know that polio is caused by the poliovirus (66%), that the U.S. polio vaccine cannot give you polio (64%), and that a side effect of polio includes paralysis (61%), over a third of respondents (33-39%) are either unsure or incorrectly believe these facts to be inaccurate.

Figure 14



Question: As far as you know, are people at a higher risk of infection with poliovirus if they...

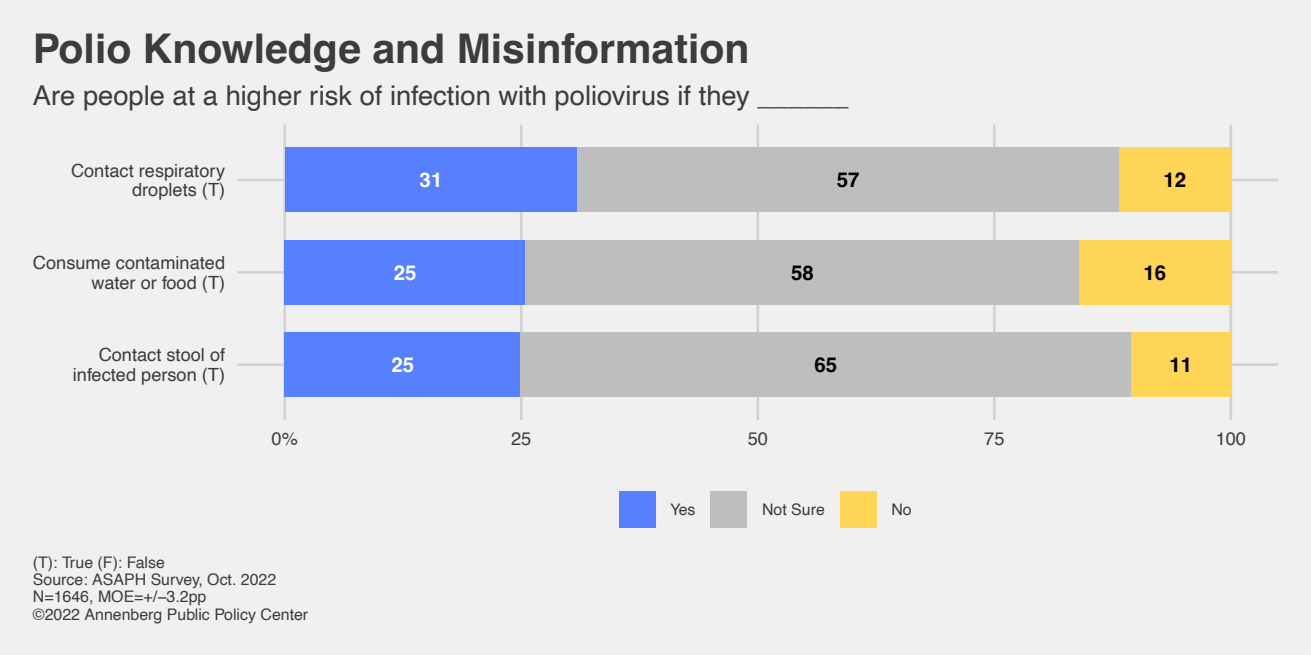
1. consume contaminated water or food?

2. have contact with the stool (poop) of a person infected with the poliovirus?

3. have contact with the droplets produced when a person with poliovirus coughs or sneezes?

There also exists a concerning level of uncertainty surrounding the transmission and communicability of polio. Figure 15 shows that less than a third (31%) know that people are at higher risk of infection with poliovirus if they are in contact with droplets or sneezes from an infected person. But over half (57%) are not sure. Just a quarter (25%) know that people are at higher risk of infection with poliovirus if they consume contaminated food or water, while over half (58%) are not sure. Just a quarter (25%) know a person is at higher risk of infection with poliovirus if they are in contact with the stool of an infected person, with two-thirds (65%) unsure.

Figure 15



Question: Think about how bad it would be for you to have each of the following illnesses. How bad would it be to have…Polio? Skin Cancer? Long COVID? Monkeypox? Measles? COVID-19? The seasonal flu?

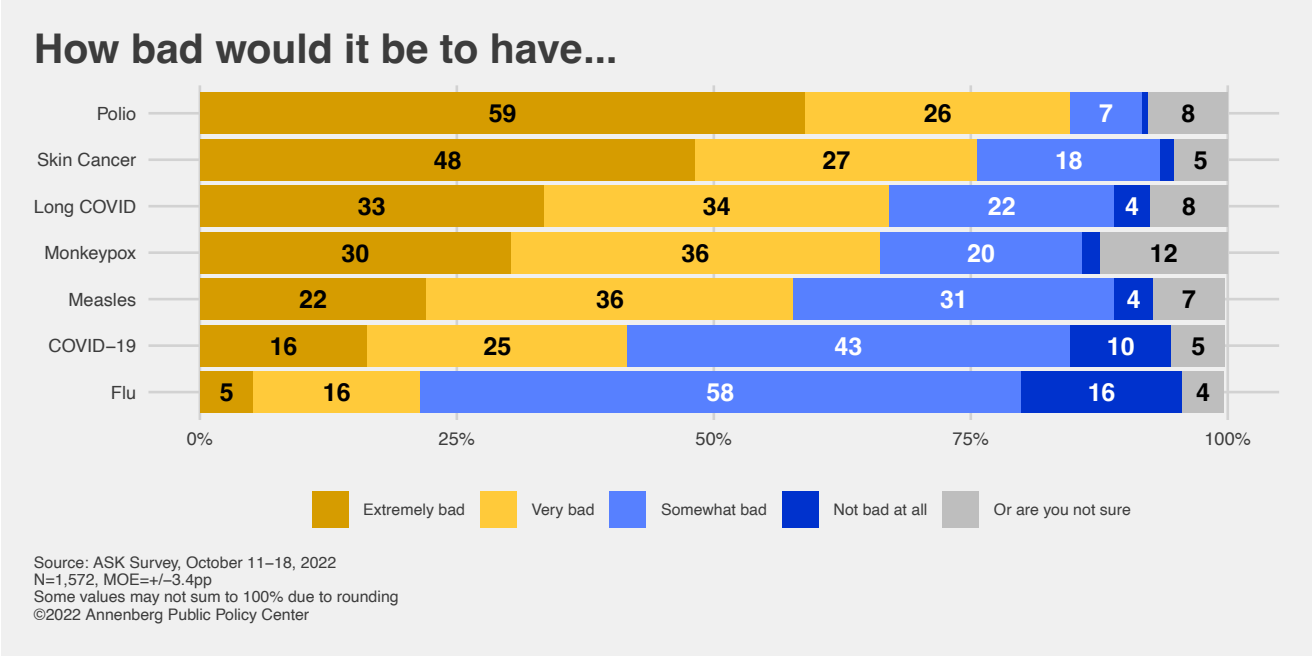
Question: How worried, if at all, are you about you or someone in your family contracting COVID-19/Seasonal flu/RSV/poliovirus in the next 3 months?

Despite this uncertainty, however, the public does recognize the harm of contracting polio. As shown in Figure 16, respondents found that getting polio would be the worst of all diseases we assessed. Nearly six in ten (59%) thought it would be extremely bad to contract polio, compared to 48% who felt the same for skin cancer and only 5% who felt the same for the seasonal flu. That said, the public does not see a large risk of contracting polio. Compared to COVID-19, the seasonal flu, and RSV, where about a third of respondents are worried about their family contracting the disease, only 11% feel similarly about polio (see Figure 17).

As the first row of Figure 14 highlights, respondents also know the best method to prevent suffering from polio – 90% of respondents know it is true that childhood vaccines protect against diseases like polio and tetanus. Moreover 85% of respondents would recommend that an eligible person get vaccinated against polio.[11] However, only 69% of respondents reported being vaccinated against polio. Only 10% reported that they were not, but 22% were not sure.

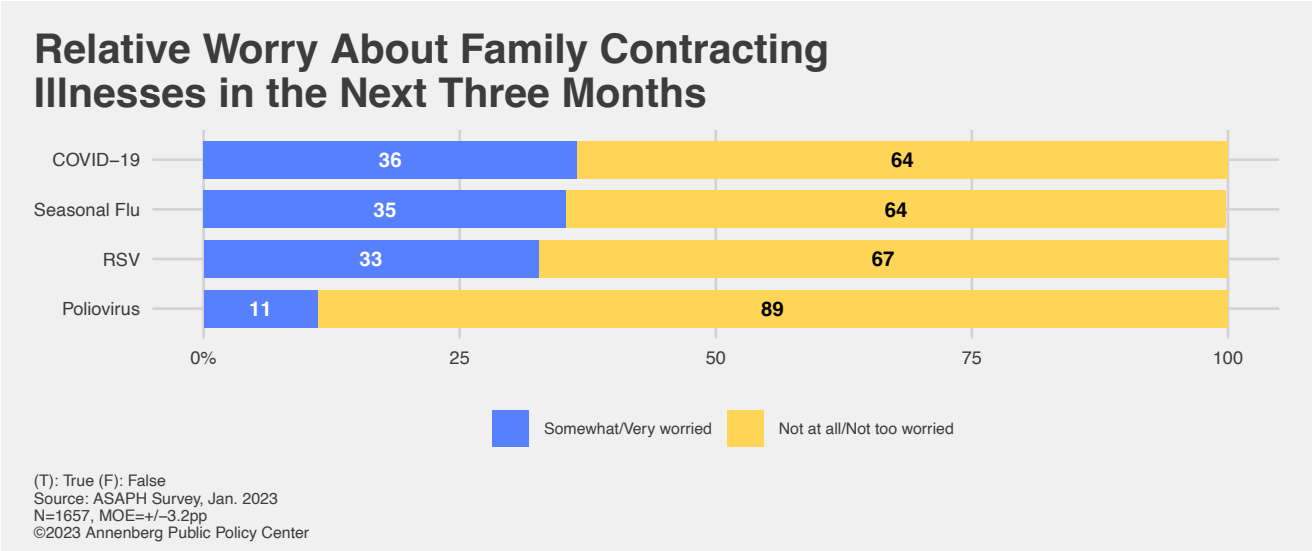
[11] "What U.S. Adults Know and Believe About Polio and the Bivalent Covid Booster." APPC, Nov. 2022.

Figure 16



Source: ASK Survey, October 11–18, 2022
N=1,572, MOE=+/–3.4pp
Some values may not sum to 100% due to rounding

Figure 17



(T): True (F): False
Source: ASAPH Survey, Jan. 2023
N=1657, MOE=+/–3.2pp

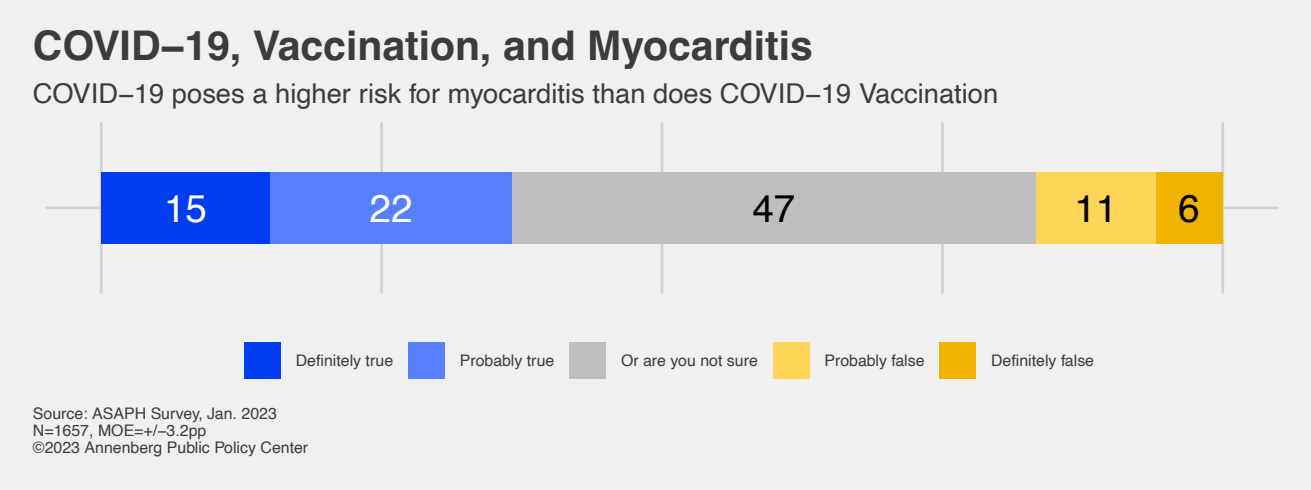
COVID-19

Myocarditis & Sudden Cardiac Events

Question: Please indicate if you believe the statement below is true, false, or if you aren't sure. / COVID-19 poses a higher risk for myocarditis than does COVID-19 vaccination.

Anti-vaccine advocates point to an alleged increase in heart disease, myocarditis, and sudden deaths among younger males, especially athletes, as evidence of the risks of getting the COVID-19 vaccine. As shown in Figure 18, there is widespread public uncertainty about whether or not COVID-19 or COVID-19 vaccination poses a higher risk for myocarditis. Nearly half (47%) of Americans are not sure whether COVID-19 or vaccination against COVID-19 poses a higher risk of myocarditis.

Figure 18



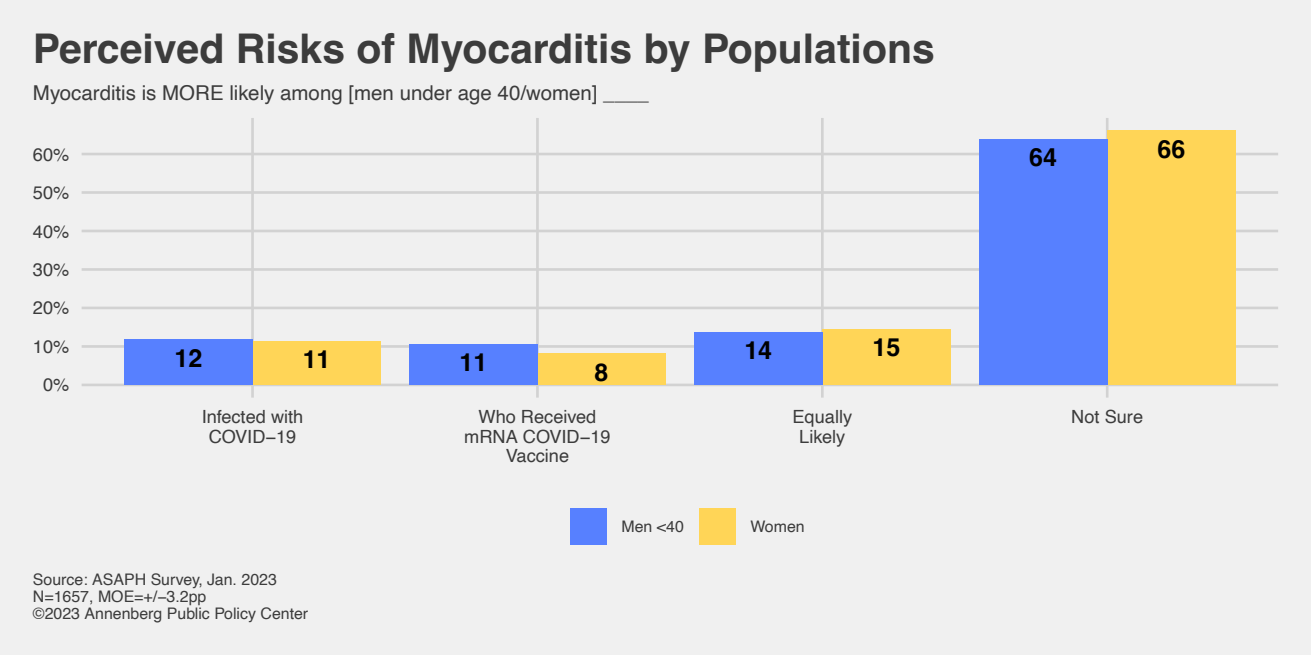
Question: Myocarditis is an inflammation of the middle layer of the heart wall. Which statement comes closest to your view: Myocarditis is MORE likely among [men under 40/women] infected with COVID-19, Myocarditis is MORE likely among [men under 40/women] who take a second dose of an mRNA COVID-19 vaccine, or Myocarditis is EQUALLY likely to occur whether [men under 40/women] take the mRNA vaccine or not, or are you not sure?

While there is some evidence that the risk for developing myocarditis is elevated among men under the age of 40 after a second dose of a mRNA COVID-19 vaccine, there is no such reported link for women.[12] However, the public is uncertain as to the nature of these different risks. As shown in Figure 19, nearly two-thirds of respondents are uncertain whether the risk of myocarditis is elevated in either men under 40 or women of any age. There

[12] "Myocarditis after mRNA COVID-19 Vaccines." CDC.gov, March 2023

are no statistically significant differences in the perceptions of risk experienced by either group.

Figure 19



Question: As far as you know, has the number of young athletes dying of heart problems increased, decreased, or remained about the same in the past three years, or are you not sure?

Question: Based on what you have heard, read, or seen about that event, as far as you know, which of the following is the most likely cause of Damar Hamlin's cardiac arrest? [Asked among those who had heard, read or seen about the Damar Hamlin incident.]

Claims of sudden death of athletes from cardiac events gained visibility in early January, when the NFL player Damar Hamlin collapsed and suffered cardiac arrest after tackling an opposing player during a game. Hamlin survived and was released from the hospital a few days following the injury. After his collapse, some social media, blogs, podcasts, cable news, and pastors raised the possibility that the vaccine may have been the cause of his cardiac arrest.[13]

Despite these anti-vaccine claims, there has been no surge in athlete deaths.[14] While cases of myocarditis have occurred among young males, especially after their second dose of an mRNA vaccine, those cases are rare and most are quickly resolved.[15] Infection with the COVID-19 virus increases the likelihood of myocarditis.[16]

[13] Zakrsewski, Cat and Lauren Weber. 2023. "COVID misinformation spikes in wake of Damar Hamlin's on-field collapse. *The Washington Post*, Jan. 3, 2023.

[14] Spencer, Saranac. 2023. "No Surge in Athlete Deaths, Contrary to Widespread Anti-Vaccine Claims FactCheck.org, Jan. 13, 2023.

[15] Oster, Matthew, et al. 2022. "Myocarditis Cases Reported After mRNA-Based COVID-19 Vaccination in the US From December 2020 to August 2021 *JAMA*, Jan. 25, 2023.

[16] Boehmer, Taga, et al. 2021. "Association Between COVID-19 and Myocarditis Using Hospital-Based Administrative Data — United States, March 2020–January 2021 *MMWR*, Sept. 03, 2021.

Figure 20

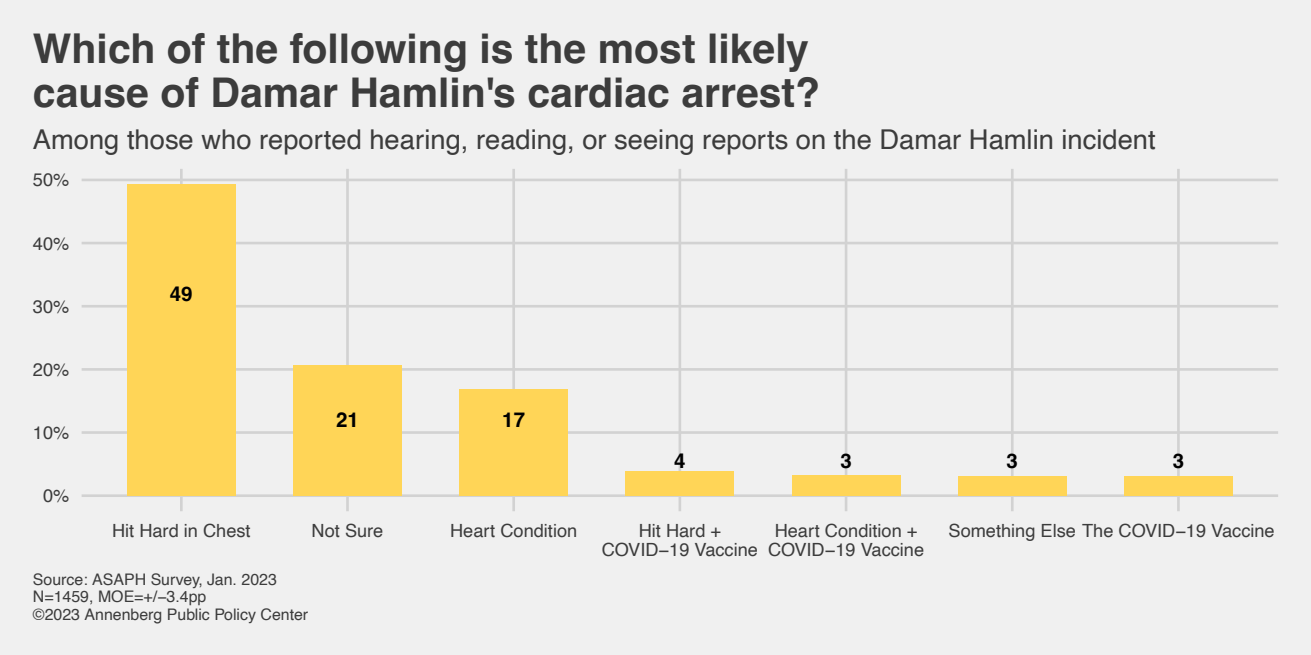
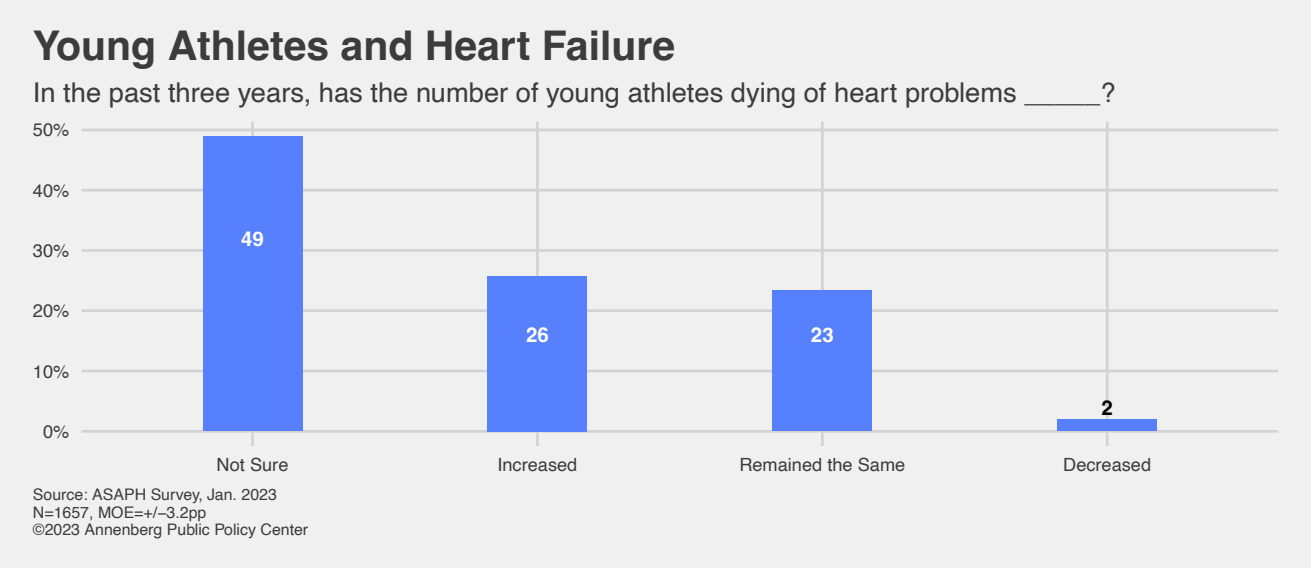


Figure 21



As shown in Figure 20, only 10% of respondents who had heard, read, or seen reports about Damar Hamlin's cardiac arrest believed that COVID-19 vaccines likely played a role in the incident. However, a larger share of the population (26%) believes that there has been an increase in the number of young athletes dying of heart problems in the last three years (see Figure 21). Worrisomely, 49% remain unsure, as shown in Figure 21.

Returning to Normal

In January 2023, the Biden Administration announced that the COVID-19 national and public health emergency declaration would be allowed to expire on May 11, 2023,[17] reflecting a new stage in the COVID-19 pandemic. With trends in cases, hospitalizations, and deaths declining,[18] members of the public increasingly view themselves as returning to pre-pandemic normals.

[17] "Statement of Administration Policy" Executive Office of the President, Jan. 30, 2023.

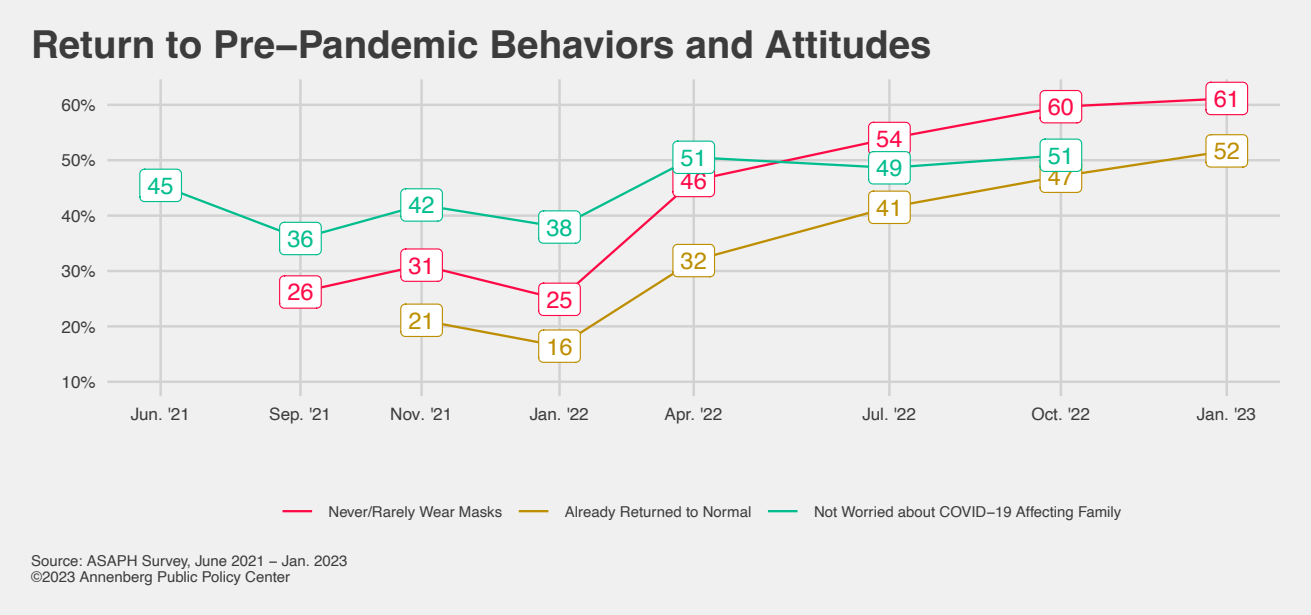
[18] COVID Data Tracker. CDC.gov, March 2023.

Question: When do you expect to be able to return to your normal, pre-COVID-19 life?

Question: When you go to public places where you might encounter other people, how often do you wear a mask or face covering?

Question: How worried, if at all, are you that the health of someone in your family will be seriously affected from getting the coronavirus?

Figure 22



As shown in Figure 22, a majority of respondents (52%) report that they have already returned to their pre-pandemic normal life, 61% report that they never or rarely wear masks when interacting with people in public places, and since April 2022 about half of respondents say that they are not worried about the health of someone in their family being seriously affected from getting the coronavirus.

Mental Health & Suicide Prevention

Prevalence of Mental Health Diagnoses

Question: Has anyone you know ever been diagnosed with a mental health disorder, or are you not sure? Has anyone in your immediate family? Have you?

Figure 23 displays the share of respondents who reported knowing anyone, an immediate family member, or self-reporting with a mental health diagnosis. Most respondents know someone with a diagnosed mental health disorder, with nearly a quarter (24%) of respondents reporting a mental health diagnosis themselves.

Figure 23

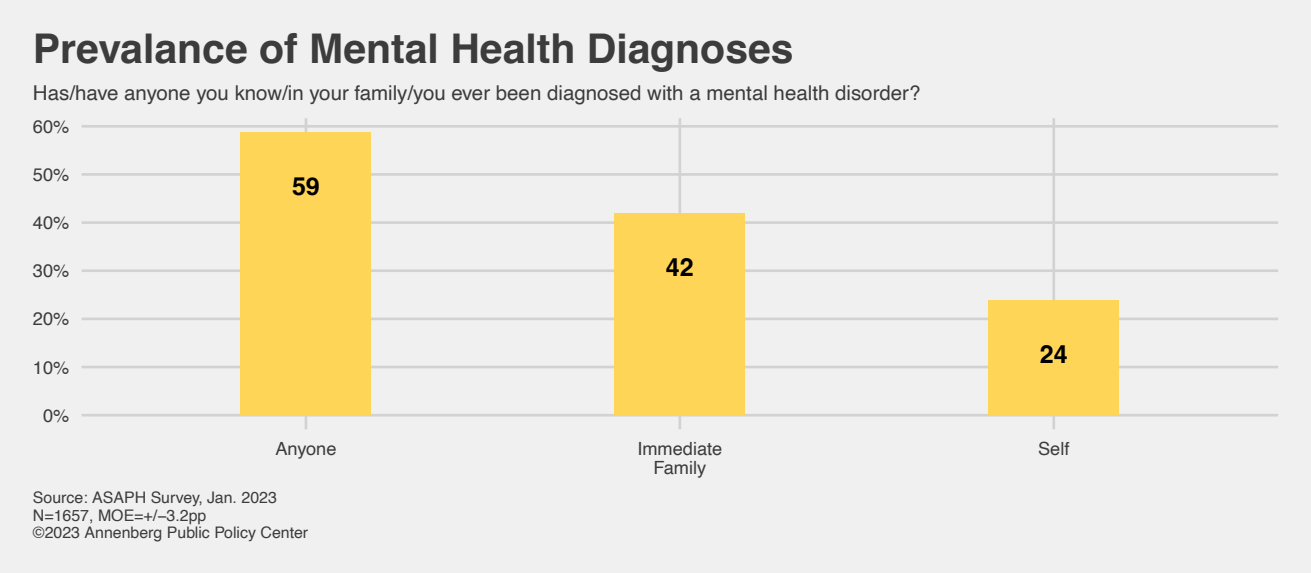
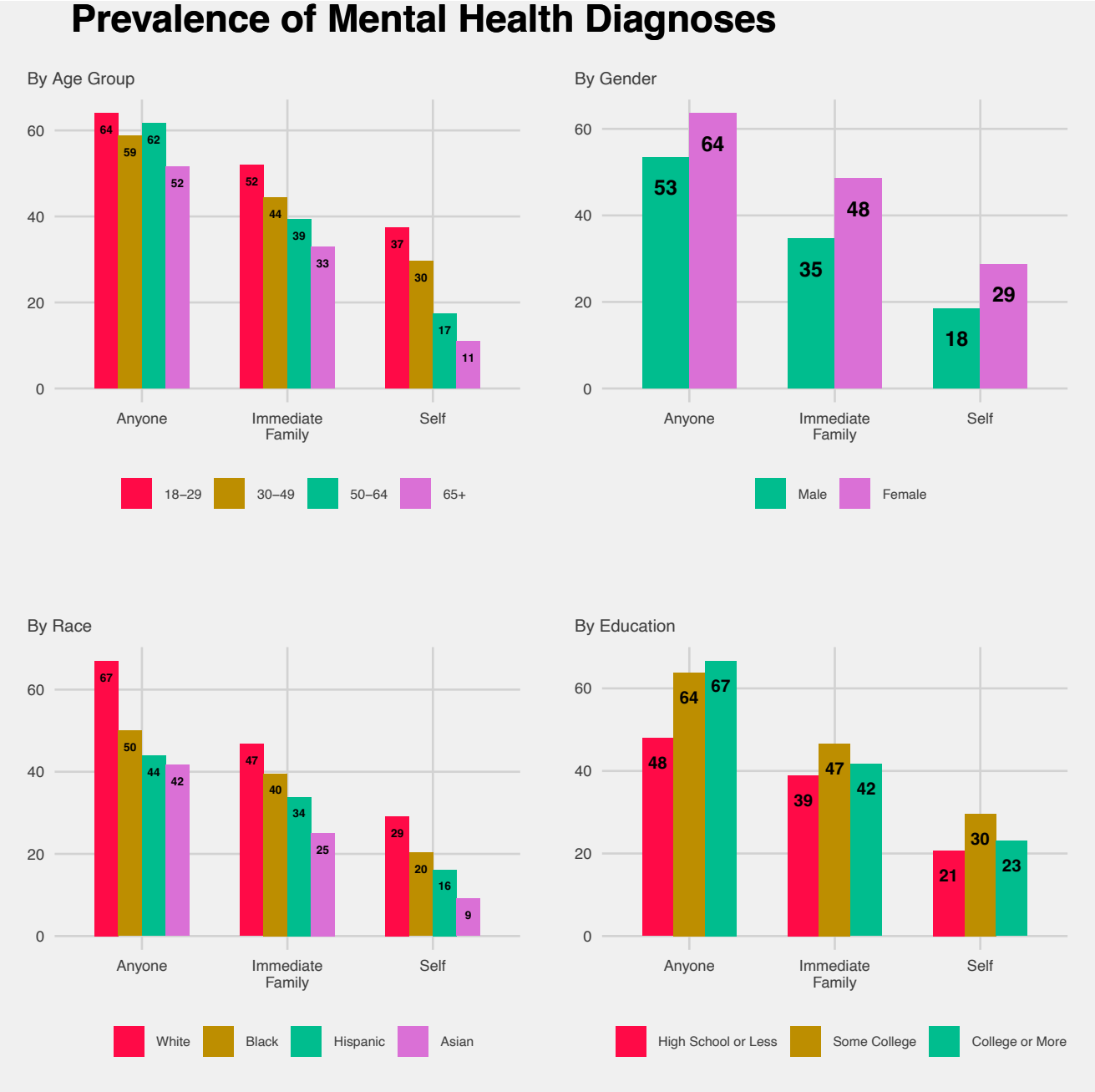


Figure 24 highlights demographic differences in the experienced prevalence of mental health diagnoses. Seniors were less likely to report knowing anyone with a mental health diagnosis. Both in terms of knowing someone in their immediate family or self-reporting a mental-health diagnosis, there is a significant trend with respect to age. The clearest distinctions can be seen in self-reported diagnoses, where over one third (37%) of those 18 to 29 years of age report a mental health diagnosis, compared to only 11% of those 65 and older.

Consistent differences can also be seen by gender and race. In all categories, women and white respondents are more likely to report knowing someone with or having a mental health diagnosis. However, while those with at least some college are more likely to know anyone with a diagnosis, the relationship with education is less clear for those in the immediate family or self-report.

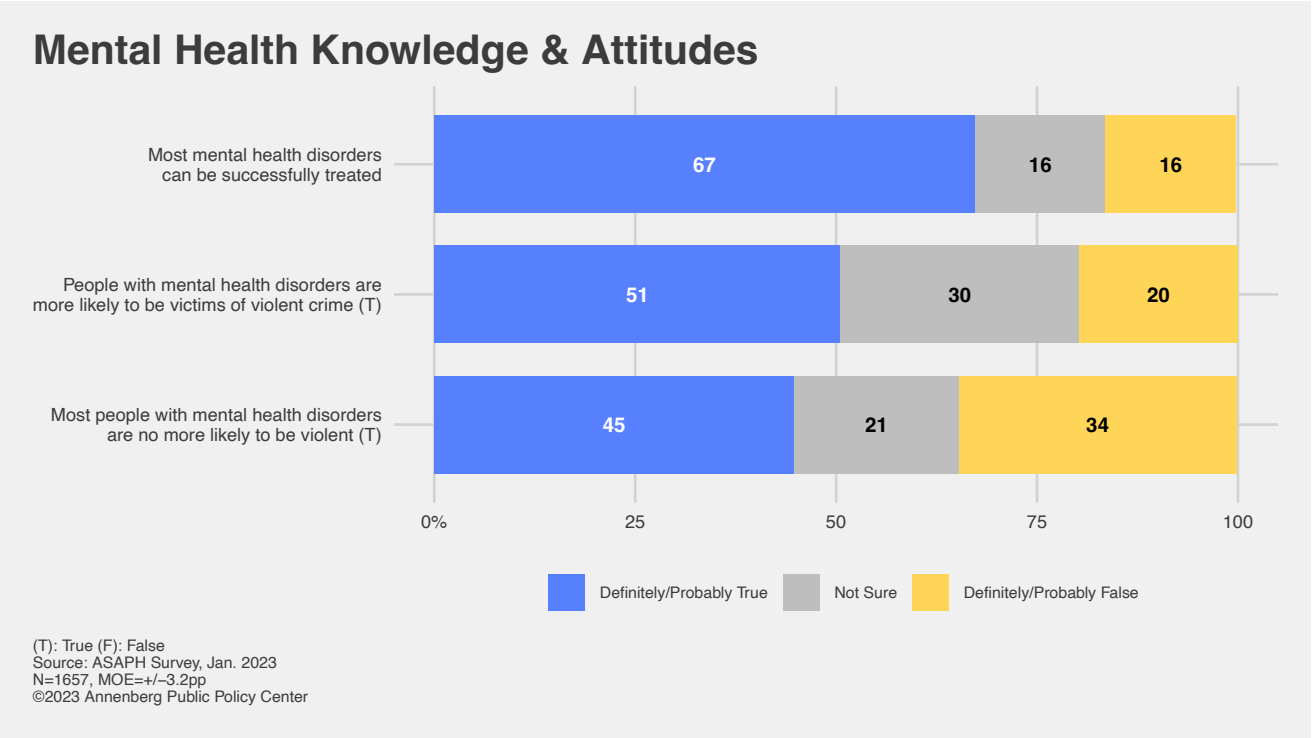
Figure 24


Prevalence of Mental Health Diagnoses
By Age Group
60
40
20
0
64
59
62
52
52
44
39
33
37
30
17
11
Anyone
Immediate Family
Self
18–29
30–49
50–64
65+
By Gender
53
64
35
48
18
29
Male
Female
By Race
67
50
44
42
47
40
34
25
29
20
16
9
White
Black
Hispanic
Asian
By Education
48
64
67
39
47
42
21
30
23
High School or Less
Some College
College or More

Mental Health Knowledge and Attitudes

Whereas panelists are generally optimistic about the ability to successfully treat mental health disorders – two-thirds believe this to be the case – there is considerable uncertainty surrounding issues of violent crime and mental health. A majority of respondents (51%) correctly report that people with mental health disorders are more likely to be the victims of violent crimes, but nearly as many are either not sure or disagree, as shown in Figure 25. Similarly, a majority (55%) either incorrectly assume that people with mental health disorders are more likely to be violent (34%) or are unsure (51%). Combating these misperceptions can help alleviate the taboo surrounding seeking treatment for mental health disorders.

Figure 25



The Holiday Suicide Myth

The holiday-suicide myth, the false belief that suicide rates increase during the year-end holiday season, is pervasive across the population. As seen in Figure 26, 81% of respondents believe that the largest number of suicides occur in December. Despite public perception, the suicide rate was highest in August in both 2021 and 2022.

The average number of suicides per day, aggregated by month between 1999 and 2022, is displayed in Figure 27. The yellow line shows the smoothed trend over time, where each blue dot represents the values for the months of November, December, and January. Across this

period, the holiday months are consistently below trend. And although the U.S. suicide rate increased in 2021 after two years of declines, the average daily suicide rate during the holiday months remained among the lower rates for the year.

Figure 26

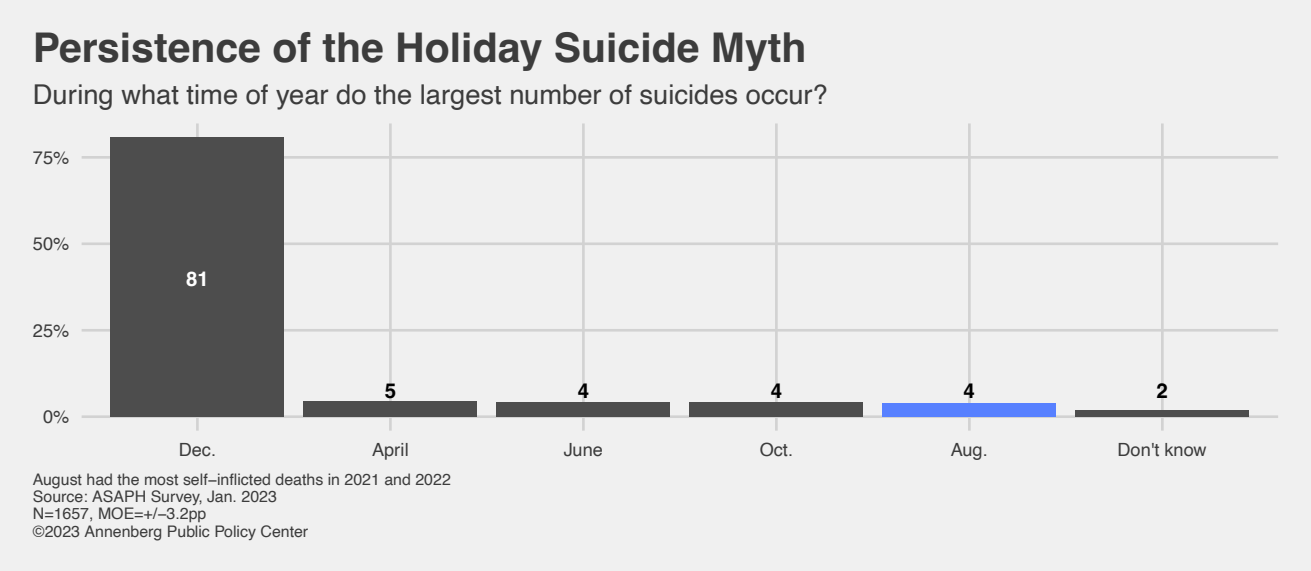
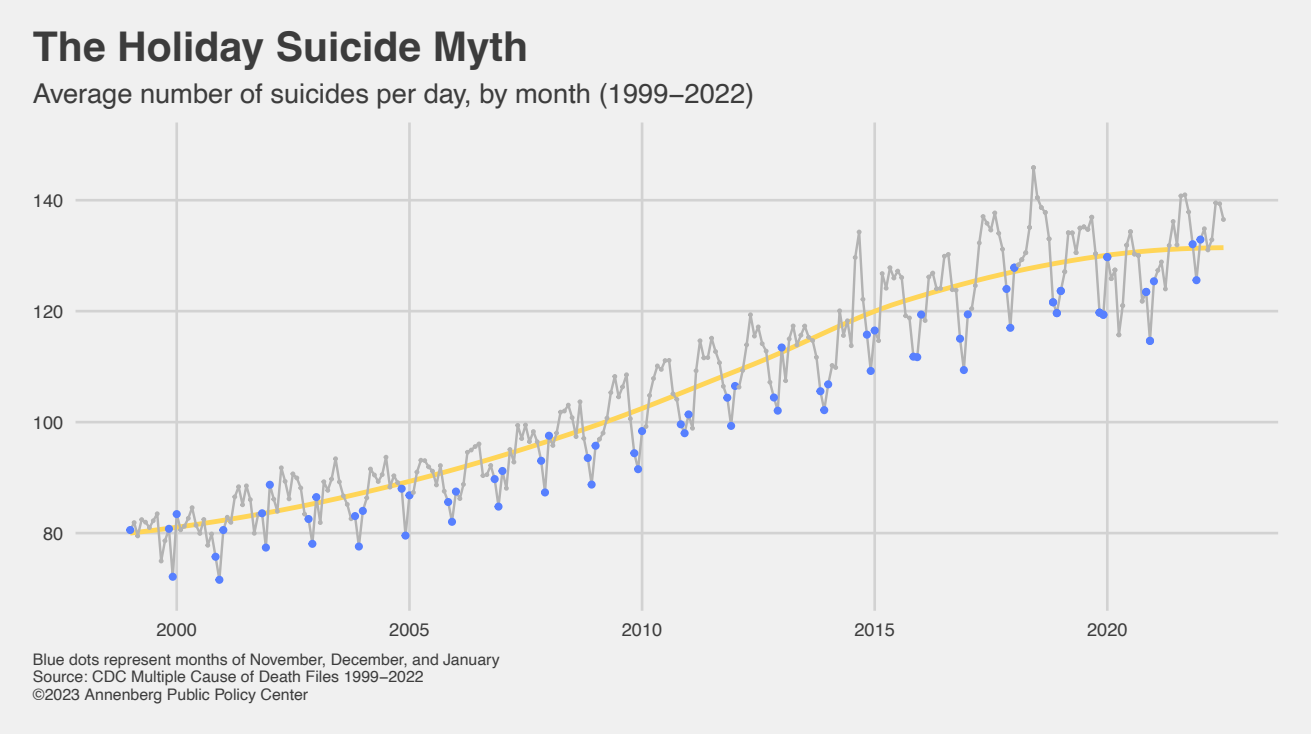


Figure 27



The Annenberg Public Policy Center has long sought to correct the popular misconception linking the holidays with suicide by analyzing newspaper stories to see whether they perpetuated or debunked the holiday-suicide myth. Over the 2021-22 holiday season, only 25 stories made the connection, with 14 of those perpetuating the myth (56%) and 11 debunking it (44%).[19]

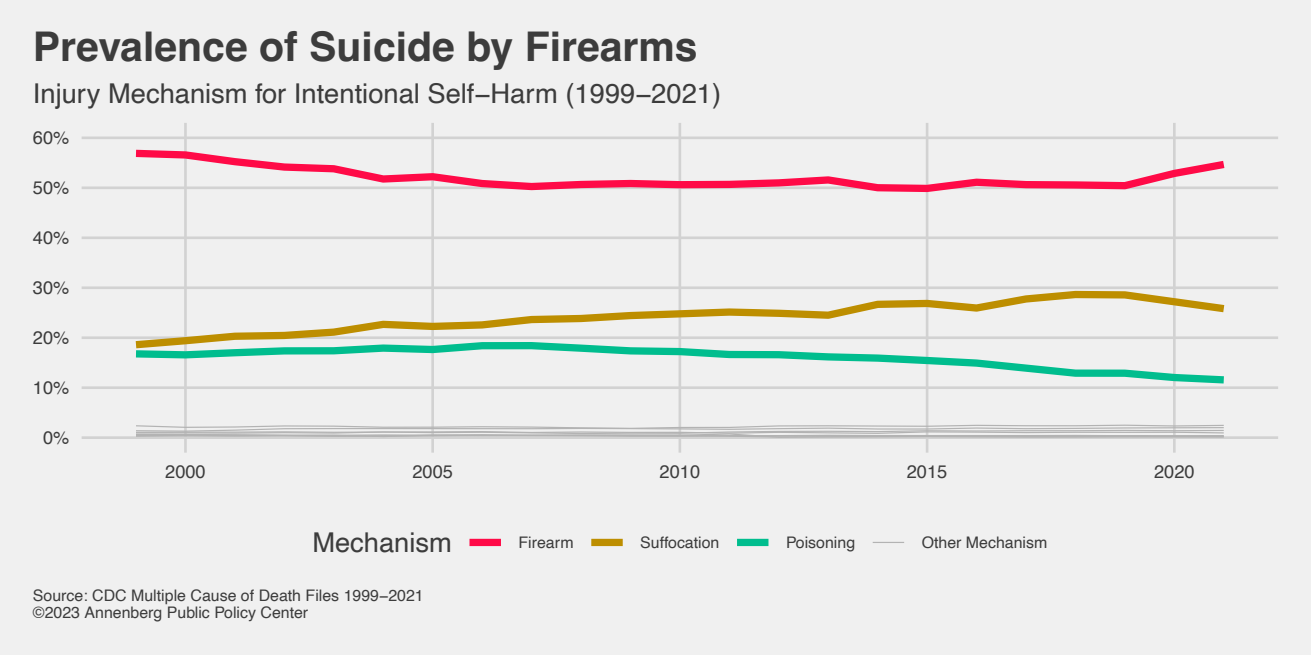
[19] "The Undying Holiday Suicide Myth." APPC, Dec. 2022.

It is important to dispel the holiday-suicide myth because perpetuating the false narrative during the holiday season can have a contagious effect on people contemplating suicide. National reporting recommendations advise journalists not to promote information that can increase contagion, such as reports of epidemics or skyrocketing seasonal increases. Moreover, focusing attention on this period misses actual increases in suicides over the summer that could benefit from greater messaging of mental health resources.

Gun Ownership and Suicide Prevention

Death by self-inflicted gun shot is the most prevalent suicide method in the United States, accounting for over half of all suicides in the past 20 years. In 2021 alone, over 26,000 Americans took their own life by firearm. As shown in Figure 28, no single means of intentional self-harm is comparable to that of firearms.

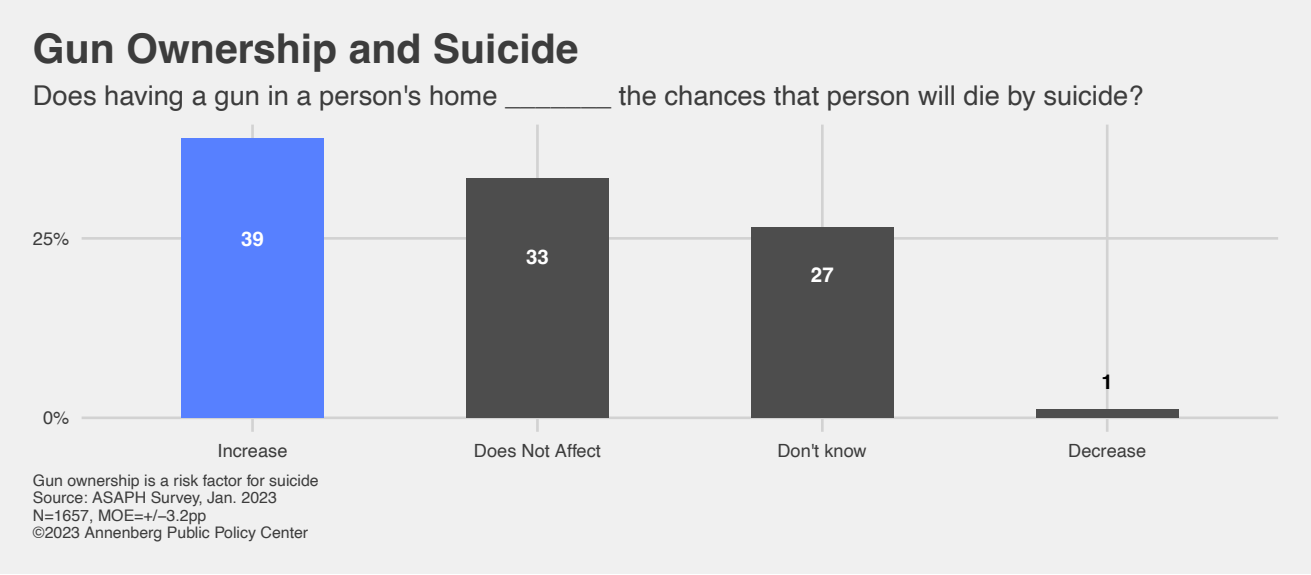
Figure 28



Numerous studies have shown an association between handgun ownership and suicide. In one recent study,[20] men who owned handguns were found to be eight times more likely than men who didn't to die of self-inflicted gunshot wounds. The figure was 35 times greater for women. While the plurality of ASAPH respondents know this to be the case (39%), as shown in Figure 29, a solid majority (61%) are either unsure (27%) or hold incorrect beliefs that household gun ownership does not affect (33%) or decreases (1%) the likelihood that a person will die by suicide.

[20] "Handgun ownership and suicide in California." *New England Journal of Medicine* 382.23 (2020): 2220-2229

Figure 29



Appendix I: Methodology

The data for the Annenberg Science and Public Health (ASAPH) survey were collected from a nationally representative probability panel survey drawn randomly from the SSRS Opinion Panel of U.S adults, 18 and older. SSRS Opinion Panel members are recruited randomly based on nationally representative address-based sample design (including Hawaii and Alaska). Additionally, hard-to-reach demographic groups were recruited via the SSRS Omnibus survey platform, a nationally representative (including Hawaii and Alaska) bilingual telephone survey designed to meet standards associated with custom research studies.

Both the phone and online surveys were available in Spanish with about 1.7% of the panel using this language. Panel members in our study were not selected for any other studies conducted by SSRS and are considered proprietary. Panelists were invited by email or telephone to participate in the panel and were compensated the equivalent of $15 for their time at each survey wave. The median length of the surveys was 20 minutes. The survey was deemed exempt from review by the Institutional Review Board of the University of Pennsylvania.

Of the 3,476 U.S. adult panelists invited to participate in wave 1 of the survey, 1,941 completed that wave's survey in April 2021 (56% completion rate). The majority completed the survey online rather than by telephone (97% online and 3% by telephone). These 1,941 panelists were re-contacted at each subsequent wave unless they dropped from the panel. Post-wave 1 panelist completion rates were high, averaging 84 percent between waves 2 and 10.

The most recent data in this report are drawn from wave 10 of the study, conducted from January 10-16, 2023, among a sample of 1,657 respondents, 1,611 from the web and 46 by telephone. A total of 1,625 surveys were conducted in English and 32 in Spanish. 2,048 panelists were invited to complete wave 10 of the survey. The response rate was 80.9%. The margin of sampling error for total respondents is +/-3.2 percentage points at the 95% confidence level. The design effect (DEFF) is 1.77. See Table A for waves 1-10.[1]

Between waves 8 and 9, The Annenberg Public Policy Center of the University of Pennsylvania (APPC) engaged SSRS in recruiting additional panelists to the ASAPH panel to increase the sample size, account for attrition, and improve the representativeness of the panel. Additional panelists were recruited again via address-based sampling in similar fashion to the initial recruitment as described above. From these recruits, ASAPH randomly selected 74 additional panelists with an educational attainment of a high school degree or less to participate to improve representativeness.

Between waves 9 and 10, APPC engaged SSRS to conduct an engagement survey with the purpose of recruiting additional panelists. The survey was conducted via the SSRS Opinion Panel and invited only newly recruited panelists with an educational attainment of a high school degree or less to participate to improve representativeness. Data collection was con-

[1] Note some field dates have been updated since the Fall 2022 report.

ducted from December 6 – December 12, 2022 by web in English only. The survey obtained 60 completes, among which 33 were recruited to the ASAPH Panel. In total, 107 new respondents were added. The reduction in design effect between waves 8 and 10 reflects the improved representativeness of the sample post-replenishment. These new respondents have been retroactively added to their respective waves. Therefore, findings presented here may differ slightly from previously released results.

Table A - Summary of ASAPH Survey Waves

Wave	Survey	N	MOE	Deff	Fielded	Closed
A-1	ASK 1	1941	2.9	1.76	3/30/21	4/19/21
B-2	ASK 2	1719	3.2	1.83	6/2/21	6/22/21
C-3	ASK 3	1669	3.2	1.83	8/16/21	9/5/21
D-4	ASK 4	1672	3.3	1.86	11/3/21	11/9/21
E-5	ASK 5	1656	3.3	1.86	1/11/22	1/17/22
F-6	ASK 6	1638	3.3	1.87	3/29/22	4/4/22
G-7	ASK 7	1580	3.3	1.82	7/12/22	7/18/22
H-8	MH/CH 1	1621	3.3	1.87	8/16/22	8/22/22
I-9	ASK 8	1646	3.2	1.80	10/11/22	10/18/22
J-10	ASK 9	1657	3.2	1.77	1/10/23	1/16/23

Weighting

Data were weighted by SSRS to represent the adult (18+) population. The data were weighted by first applying a base weight then balancing the demographic profile of the sample to target population parameters.

The base weight for the SSRS Opinion Panel was the final weight from the first wave of the survey (April 2021). The base weights were then standardized and trimmed at the 2nd and 98th percentiles to prevent individual interviews from having too much influence. With the base weight applied, the probability panel was weighted to balance the demographic profile of the sample to the target population parameters.

SSRS employs a technique called hot decking for missing demographic data. Hot deck imputation replaces the missing values of a respondent randomly with another similar respondent without missing data. These are further determined by variables predictive of non-response that are present in the entire file.[21]

[21] This is conducted using an SPSS macro detailed in Myers, Teresa. 2011. "Goodbye, Listwise Deletion: Presenting Hot Deck Imputation as an Easy and Effective Tool for Handing Missing Data." *Communication Methods and Measures* 5 (4): 297–310.

Weighting was accomplished using SPSSINC RAKE, an SPSS extension module that simultaneously balances the distributions of all variables using the GENLOG procedure.

Data were weighted to distributions of: sex by age, sex by education, age by education, race/ethnicity (for Hispanic include US born and foreign born), census region, civic engagement, frequency of internet usage, population density, religion, voter registration, and party identification.

The main demographic benchmarks were obtained from the 2021 Current Population Survey (CPS). The civic engagement benchmark was derived from September 2017 CPS Volunteering and Civic Life Supplement data. The population density came from Census Planning Database 2020. The internet usage benchmark was obtained from the 2019 American Community Survey (ACS) data. Voter registration parameters come from the 2021 Aristotle RV database. Both the religion and party identification benchmarks come from Pew's 2021 National Public Opinion Reference Survey (NPORS).

These weights reflect current recommendations and best practices from SSRS. In waves 1 through 7, weights did not adjust for religion, voter registration, or party identification. Prior benchmarks for race and internet usage were less granular. Both SSRS and APPC independently analyzed the revised practices and found the differences to be small and statistically insignificant for all our questions in Waves 7 and 8.

Weighting Benchmarks

Variable	Waves 1-7	Wave 8-10
Sex by Age		
Male 18-24	5.70%	5.70%
Male 25-34	9.00%	9.00%
Male 35-44	8.20%	8.20%
Male 45-54	7.70%	7.70%
Male 55-64	7.90%	7.90%
Male 65+	9.90%	9.90%
Female 18-24	5.60%	5.60%
Female 25-34	8.90%	8.90%
Female 35-44	8.40%	8.40%
Female 45-54	8.00%	8.00%
Female 55-64	8.60%	8.60%
Female 65+	12.10%	12.10%
Sex by Education		
Male HS grad or less	19.50%	19.50%
Male Some college	12.70%	12.70%
Male College grad +	16.30%	16.30%
Female HS grad or less	18.40%	18.40%
Female Some college	14.40%	14.40%
Female College grad +	18.80%	18.80%
Registered Voter (18+)		
Yes	NOT USED	77.30%
Not registered no response	NOT USED	22.70%
Party ID (from Panel)		
Rep	NOT USED	27.10%
Dem	NOT USED	31.60%
Ind	NOT USED	25.40%
Other	NOT USED	15.90%
Total Ind Other	NOT USED	41.30%
Religion		
Affiliated	NOT USED	69.00%
Not affiliated	NOT USED	31.00%

Age by Education		
18-34 HS grad or less	11.20%	11.20%
18-34 Some college	9.30%	9.30%
18-34 College grad +	8.80%	8.80%
35-54 HS grad or less	10.90%	10.90%
35-54 Some college	7.90%	7.90%
35-54 College grad +	13.40%	13.40%
55+ HS grad or less	15.80%	15.80%
55+ Some college	9.90%	9.90%
55+ College grad +	12.80%	12.80%
Race/Ethnicity		
White non-Hisp	62.50%	62.50%
Black non-Hisp	12.00%	12.00%
Total Hispanic	16.90%	8.40%
Hispanic US born	8.40%	8.40%
Hispanic foreign born	8.50%	8.50%
Asian non-Hisp	NOT USED	6.10%
Other non-Hisp	8.60%	2.50%
Census Region		
Northeast	17.20%	17.20%
Midwest	20.60%	20.60%
South	38.30%	38.30%
West	23.90%	23.90%
Civic Engagement		
Not engaged	65.50%	65.50%
Civically engaged	34.50%	34.50%
Population Density		
1 Lowest 20%	20.00%	20.00%
2	20.00%	20.00%
3	20.00%	20.00%
4	20.00%	20.00%
5 Highest 20%	20.00%	20.00%
Internet User		
Yes	91.60%	NOT USED
No	8.40%	NOT USED

Internet Freq including non-internet users		
Total Almost constantly Several x day	NOT USED	82.90%
Total All others	NOT USED	17.10%

Appendix II - ASAPH Spring 2023 Summary

Topline Results

April 07, 2023

1 Overview

These studies were conducted for the Annenberg Public Policy Center of the University of Pennsylvania via web and telephone by SSRS, an independent research company. Interviews were conducted among a nationally representative probability sample drawn from SSRS's Opinion panel. Data were weighted to represent the target U.S. adult population. Summaries of the sample size, field dates, and estimated design effects (Deff) of the particular waves can be found in the table below.

A full methodology report can be found in the main document.

Wave	N	MOE	Deff	Fielded	Closed
A-1	1941	2.9	1.76	2021-03-30	2021-04-19
B-2	1719	3.2	1.83	2021-06-09	2021-06-22
C-3	1669	3.2	1.83	2021-08-16	2021-09-05
D-4	1672	3.3	1.86	2021-11-03	2021-11-09
E-5	1656	3.3	1.86	2022-01-11	2022-01-17
F-6	1638	3.3	1.87	2022-03-29	2022-04-04
G-7	1580	3.2	1.82	2022-07-12	2022-07-18
H-8	1621	3.3	1.87	2022-08-16	2022-08-23
I-9	1646	3.2	1.80	2022-10-11	2022-10-18
J-10	1657	3.2	1.77	2023-01-10	2023-01-16

2 Toplines

The remaining portion of this document provides the topline results reported in the release. All values are in percents, rounded to the nearest whole number. As a result, overall and net percentages may not exactly match sum of corresponding percentages. A lowercase e stands in for values that round to 0, but are not exactly 0. Aggregated NET categories are highlighted in grey. Superscript letters indicate statistically significant differences with the corresponding wave.

A1.

A1. In general, how confident, if at all, are you that the following are providing the public with trustworthy information about means of preventing and treating COVID–19? / The U.S. Centers for Disease Control and Prevention (CDC)

Wave	N	NET Unconfident	Not at all confident	Not too confident	NET Confident	Somewhat confident	Very confident	Don't know	Decline
(J) 01/16/23	1657	26	9	17	74	41	33[d]	0	0
(I) 10/18/22	1626	27	9	18	73[d]	38[g]	35	0	e
(G) 07/18/22	1580	25	8	17	75	43[ci]	32[acd]	0	0
(F) 04/04/22	1638	27	9	18	73	38	35	0	0
(E) 01/17/22	1656	28[bd]	9	19	72[bd]	40	32[acd]	0	0
(D) 11/09/21	1672	23[e]	7	16	77[ei]	39	38[jeg]	0	0
(C) 09/05/21	1669	25	7	17	75	38[g]	37[eg]	0	0
(B) 06/22/21	1719	24[e]	7	16	76[e]	41	35	0	0
(A) 04/19/21	1941	25	7	18	75	39	36[eg]	0	e

A2.

A2. In general, how confident, if at all, are you that the following are providing the public with trustworthy information about means of preventing and treating COVID–19? / The Food and Drug Administration (FDA)

Wave	N	NET Unconfident	Not at all confident	Not too confident	NET Confident	Somewhat confident	Very confident	Don't know	Decline
(J) 01/16/23	1657	29[abcd]	8[b]	21	71[abcd]	43[ab]	28[d]	0	e
(I) 10/18/22	1626	26	7	19	74	44[b]	30	0	0
(G) 07/18/22	1580	26	7	19	74	46	28[d]	0	e
(F) 04/04/22	1638	27	7	20	73	43[b]	30	0	e
(E) 01/17/22	1656	26	7	18	74	46	28	0	0
(D) 11/09/21	1672	24[j]	6	19	76[j]	43[b]	32[ajbg]	0	e
(C) 09/05/21	1669	24[j]	6	18	76[j]	45	31	0	e
(B) 06/22/21	1719	23[j]	5[j]	18	77[j]	49[idfi]	28[d]	e	e
(A) 04/19/21	1941	25[j]	6	19	75[j]	48[j]	28[d]	0	e

A3.

A3. In general, how confident, if at all, are you that the following are providing the public with trustworthy information about means of preventing and treating COVID–19? / Dr. Anthony Fauci of the National Institutes of Health (NIH)

Wave	N	NET Unconfident	Not at all confident	Not too confident	NET Confident	Somewhat confident	Very confident	Don't know	Decline
(J) 01/16/23	1657	37[abc]	18[a]	18	63[abc]	27[g]	37[ag]	0	0
(I) 10/18/22	1626	36[a]	18[a]	18	64[a]	28	36[ag]	e	e
(G) 07/18/22	1580	37[abc]	16[a]	21[abcd]	63[abc]	32[j]	31[ajbcdi]	e	0
(F) 04/04/22	1638	36[a]	16[a]	20	64[a]	30	34[a]	0	0
(E) 01/17/22	1656	35[a]	17[a]	18	65[a]	31	34[a]	0	0
(D) 11/09/21	1672	33	16[a]	17[g]	67	31	36[ag]	0	e
(C) 09/05/21	1669	32[jg]	15	17[g]	68[jg]	30	38[g]	0	0
(B) 06/22/21	1719	32[jg]	15	17[g]	68[jg]	30	38[g]	0	0
(A) 04/19/21	1941	29[jefgi]	12[jdefgi]	17[g]	71[jefgi]	29	41[jdefgi]	0	e

A4.

A4. In general, how confident, if at all, are you that your doctor, nurse, or other primary health care provider is providing you with trustworthy information about means of preventing and treating COVID–19?

Wave	N	NET Unconfident	Not at all confident	Not too confident	NET Confident	Somewhat confident	Very confident	I have no primary health care provider	Don't know	Refused
(J) 01/16/23	1657	9	2[e]	7	85	38	48	5	0	0
(I) 10/18/22	1626	10	2[e]	8[c]	84	35	49	6	0	0
(G) 07/18/22	1580	11[c]	2	9[c]	84	36	47	6	0	0
(F) 04/04/22	1638	11[c]	3	8[c]	84	36	47	6	0	e
(E) 01/17/22	1656	12[cd]	4[jbdi]	8[c]	82[c]	37	45[c]	6	0	0
(D) 11/09/21	1672	8[e]	1[e]	7	85	35	50	7	e	0
(C) 09/05/21	1669	8[efg]	3	5[efgi]	87[be]	37	50[e]	5	e	0
(B) 06/22/21	1719	10	2[e]	7	83[c]	35	48	7	0	e

A5.

A5. In general, how confident, if at all, are you that the following are providing the public with trustworthy information about means of preventing and treating COVID–19? / Dr. Ashish Jha, White House COVID–19 Response Coordinator

Wave	N	NET Unconfident	Not at all confident	Not too confident	NET Confident	Somewhat confident	Very confident	Don't know	Refused
(J) 01/16/23	1657	38	13	25	61	36	25	1	e

A1D.

A1D. Q1. In general, how confident, if at all, are you that the following are providing the public with trustworthy information about means of preventing and treating disease? – The U.S. Centers for Disease Control and Prevention (CDC)

Wave	N	NET Unconfident	Not at all confident	Not too confident	NET Confident	Somewhat confident	Very confident	Don't know	Refused
(H) 08/22/22	1621	25	9	16	75	41	34	0	e

A2D.

A2D. Q2. In general, how confident, if at all, are you that the following are providing the public with trustworthy information about means of preventing and treating disease? – The Food and Drug Administration (FDA)

Wave	N	NET Unconfident	Not at all confident	Not too confident	NET Confident	Somewhat confident	Very confident	Don't know	Refused
(H) 08/22/22	1621	24	6	18	76	47	29	0	e

A3D.

A3D. Q3. In general, how confident, if at all, are you that the following are providing the public with trustworthy information about means of preventing and treating disease? – The National Institutes of Health (NIH)

Wave	N	NET Unconfident	Not at all confident	Not too confident	NET Confident	Somewhat confident	Very confident	Don't know	Refused
(H) 08/22/22	1621	22	7	15	78	45	33	0	0

A4D.

A4D. Q5. In general, how confident, if at all, are you that the following are providing the public with trustworthy information about means of preventing and treating disease? – Your doctor, nurse or primary health care provider

Wave	N	NET Unconfident	Not at all confident	Not too confident	NET Confident	Somewhat confident	Very confident	I have no primary health care provider	Don't know	Refused
(H) 08/22/22	1621	6	2	5	88	39	49	5	e	e

A5D.

A5D. Q4. In general, how confident, if at all, are you that the following are providing the public with trustworthy information about means of preventing and treating disease? – The U.S. Surgeon General

Wave	N	NET Unconfident	Not at all confident	Not too confident	NET Confident	Somewhat confident	Very confident	Don't know	Refused
(H) 08/22/22	1621	24	5	18	76	45	31	0	e

Q25.

Q25. Health officials at the U.S. Centers for Disease Control and Prevention (CDC) exaggerate the danger posed by diseases in order to get people to vaccinate.

Wave	N	NET False	Definitely false	Probably false	NET True	Probably true	Definitely true	Or are you not sure?	Refused
(H) 08/22/22	1621	56	31	25	35	25	10	9	e

D30.

D30. The U.S. Centers for Disease Control and Prevention, also known as the CDC, has admitted that most of the deaths attributed to COVID–19 were actually caused by other serious illnesses and NOT by the coronavirus

Wave	N	NET False	Definitely false	Probably false	NET True	Probably true	Definitely true	Not sure	Decline
(E) 01/17/22	1656	45	28	17	34	25	10	21	e
(D) 11/09/21	1672	48	28	20	33	23	11	18	0
(C) 09/05/21	1669	48	30	18	33	24	10	19	0
(B) 06/22/21	1719	48	28	20	33	23	10	19	0
(A) 04/19/21	1941	47	28	20	35	26	9	17	0

D03.

D03. Some health officials at the U.S. Centers for Disease Control and Prevention, also known as the CDC, exaggerated the danger posed by the coronavirus in order to damage the Trump presidency

Wave	N	NET False	Definitely false	Probably false	NET True	Probably true	Definitely true	Not sure	Decline
(E) 01/17/22	1656	56	39	17	26	17	8	18[a]	e
(D) 11/09/21	1672	58	41	17	27	18	9	14	0
(C) 09/05/21	1669	59	41	18	27	18	9	14	0
(B) 06/22/21	1719	58	40	17	28	18	10	15	0
(A) 04/19/21	1941	60	40	20	26	17	10	14[e]	0

FL6.

FL6. Please indicate if you believe the statement below is true, false, or if you aren't sure. The CDC is covering up the fact that the COVID–19 vaccines are causing blood clots that have killed thousands of people. [FALSE]

Wave	N	NET False	Definitely false	Probably false	NET True	Probably true	Definitely true	Or are you not sure?	Decline
(J) 01/16/23	1657	53	32	21	26	19	7	22	0

D59.

D59. Which statement comes closer to your view:

Wave	N	Side effects and deaths caused by the COVID–19 vaccines are being accurately reported by the CDC	Side effects and deaths caused by the COVID–19 vaccines are being covered up by the CDC	Or aren't you sure?	Refused
(G) 07/18/22	1580	47	26	27	e
(E) 01/17/22	1656	47	24	29	0

C4.

C4. Have you gotten the flu shot this season or not?

Wave	N	Yes	No	Don't know	Decline
(J) 01/16/23	1657	49[di]	51[di]	0	0
(I) 10/18/22	1626	26[ajdef]	74[ajdef]	0	0
(F) 04/04/22	1638	48[di]	52[di]	0	e
(E) 01/17/22	1656	47[di]	53[di]	0	0
(D) 11/09/21	1672	38[ajefi]	62[ajefi]	0	0
(A) 04/19/21	1941	50[di]	50[di]	0	e

C5.

C5. Why did you decide to get the flu shot this season? / I get it every year

Wave	N	No	Yes
(J) 01/16/23	898	31[dei]	69[dei]
(I) 10/18/22	500	21[j]	79[j]
(E) 01/17/22	879	22[j]	78[j]
(D) 11/09/21	716	22[j]	78[j]

C5.

C5. Why did you decide to get the flu shot this season? / I wanted to protect myself against catching the flu

Wave	N	No	Yes
(J) 01/16/23	898	36[dei]	64[dei]
(I) 10/18/22	500	52[j]	48[j]
(E) 01/17/22	879	56[jd]	44[jd]
(D) 11/09/21	716	48[je]	52[je]

C5.

C5. Why did you decide to get the flu shot this season? / I want to protect myself against COVID−19

Wave	N	No	Yes
(J) 01/16/23	898	92[i]	8[i]
(I) 10/18/22	500	96[je]	4[je]
(E) 01/17/22	879	91[i]	9[i]
(D) 11/09/21	716	94	6

C5.

C5. Why did you decide to get the flu shot this season? / It is recommended by the U.S. Centers for Disease Control and Prevention (CDC)

Wave	N	No	Yes
(J) 01/16/23	898	75	25

FL11.

FL11. Please indicate if you believe the statement below is true, false, or if you aren't sure. The seasonal flu shot distributed in the U.S. is safe for pregnant women. [TRUE]

Wave	N	NET False	Definitely false	Probably false	NET True	Probably true	Definitely true	Or are you not sure?	Decline
(J) 01/16/23	1657	10	3	7	51	34	17	39	0

Q28.

Q28. COVID−19 vaccination during pregnancy is safe and effective.

Wave	N	NET False	Definitely false	Probably false	NET True	Probably true	Definitely true	Or are you not sure?	Refused
(H) 08/22/22	1621	21	9	12	48	27	21	31	0

G102.

G102. If a member of your household were 12 to 18 years old, how likely, if at all, would you be to recommend that that person get vaccinated with one of the COVID–19 vaccines currently authorized for use in the U.S.?

Wave	N	NET Unlikely	Not at all likely	Not too likely	NET Likely	Somewhat likely	Very likely	Don't know	Decline
(D) 11/09/21	1672	29	16	13	71	18	53	0[c]	0
(C) 09/05/21	278	33	22	10	66	17	49	1[d]	0

G103.

G103. If the FDA were to authorize use of a COVID–19 vaccine for those under 12 years of age...how likely, if at all, would you be to recommend that that person get vaccinated with the COVID–19 vaccine the FDA authorized?

Wave	N	NET Unlikely	Not at all likely	Not too likely	NET Likely	Somewhat likely	Very likely	Don't know	Decline
(C) 09/05/21	383	44	28	16	56	20	36	0	0

G104.

G104. If a child between the ages of 5 and 11 in your household were eligible to get the vaccine, how likely, if at all, would you be to recommend that child get vaccinated with the COVID–19 vaccine the FDA authorized?

Wave	N	NET Unlikely	Not at all likely	Not too likely	NET Likely	Somewhat likely	Very likely	Don't know	Decline
(F) 04/04/22	1638	36	21	15	64	21[e]	44[e]	0[e]	e
(E) 01/17/22	1656	33	21	13	66	17[f]	49[f]	1[f]	0
(D) 11/09/21	1672	35	21	14	65	19	46	e	e

G105.

G105. ...If a child under age 5 in your household were eligible to get the vaccine, how likely, if at all, would you be to recommend that child get vaccinated with the COVID–19 vaccines the FDA authorized?

Wave	N	NET Unlikely	Not at all likely	Not too likely	NET Likely	Somewhat likely	Very likely	Don't know	Refused
(G) 07/18/22	1580	41	22	19	59	22	38	0	0

FL2.

FL2. Please indicate if you believe the statement below is true, false, or if you aren't sure. The effectiveness of the seasonal flu shot distributed in the U.S. can vary from year to year. [TRUE]

Wave	N	NET False	Definitely false	Probably false	NET True	Probably true	Definitely true	Or are you not sure?	Decline
(J) 01/16/23	1657	8	2	6	77	40	38	15	e

FL3.

FL3. Please indicate if you believe the statement below is true, false, or if you aren't sure. The effectiveness of the measles vaccine can vary from year to year. [FALSE]

Wave	N	NET False	Definitely false	Probably false	NET True	Probably true	Definitely true	Or are you not sure?	Decline
(J) 01/16/23	1657	41	19	22	19	17	2	40	e

FL7.

FL7. Please indicate if you believe the statement below is true, false, or if you aren't sure. The seasonal flu shot distributed in the US cannot give you flu. (TRUE)

Wave	N	NET False	Definitely false	Probably false	NET True	Probably true	Definitely true	Or are you not sure?	Decline
(J) 01/16/23	1657	29	11	18	54	22	32	16	e

FL8.

FL8. Please indicate if you believe the statement below is true, false, or if you aren't sure. The seasonal flu shot distributed in the U.S. increases your risk of getting COVID–19. [FALSE]

Wave	N	NET False	Definitely false	Probably false	NET True	Probably true	Definitely true	Or are you not sure?	Decline
(J) 01/16/23	1657	77	48	29	6	4	1	17	0

FL9.

FL9. Please indicate if you believe the statement below is true, false, or if you aren't sure. It is possible to spread the seasonal flu to others even if you have no symptoms. [TRUE]

Wave	N	NET False	Definitely false	Probably false	NET True	Probably true	Definitely true	Or are you not sure?	Decline
(J) 01/16/23	1657	10	2	8	76	44	32	14	e

FL10.

FL10. Please indicate if you believe the statement below is true, false, or if you aren't sure. The seasonal flu can be effectively treated by antibiotics. [FALSE]

Wave	N	NET False	Definitely false	Probably false	NET True	Probably true	Definitely true	Or are you not sure?	Decline
(J) 01/16/23	1657	55	36	19	25	17	7	20	e

FL11.

FL11. Please indicate if you believe the statement below is true, false, or if you aren't sure. The seasonal flu shot distributed in the U.S. is safe for pregnant women. [TRUE]

Wave	N	NET False	Definitely false	Probably false	NET True	Probably true	Definitely true	Or are you not sure?	Decline
(J) 01/16/23	1657	10	3	7	51	34	17	39	0

FL12.

FL12. Please indicate if you believe the statement below is true, false, or if you aren't sure. Wearing a high–quality, well–fitting mask helps limit the spread off flu viruses. [TRUE]

Wave	N	NET False	Definitely false	Probably false	NET True	Probably true	Definitely true	Or are you not sure?	Decline
(J) 01/16/23	1657	14	6	8	77	35	42	9	e

FL13.

FL13. Please indicate if you believe the statement below is true, false, or if you aren't sure. Because there are multiple strains of the seasonal flu, it is possible to get the flu more than once in a flu season. [TRUE]

Wave	N	NET False	Definitely false	Probably false	NET True	Probably true	Definitely true	Or are you not sure?	Decline
(J) 01/16/23	1657	4	1	3	83	49	34	13	e

FL14.

FL14. Please indicate if you believe the statement below is true, false, or if you aren't sure. There is no treatment for the flu. [FALSE]

Wave	N	NET False	Definitely false	Probably false	NET True	Probably true	Definitely true	Or are you not sure?	Decline
(J) 01/16/23	1657	64	37	26	23	15	8	13	0

FL15.

FL15. Please indicate if you believe the statement below is true, false, or if you aren't sure. Cold weather causes the flu. [FALSE]

Wave	N	NET False	Definitely false	Probably false	NET True	Probably true	Definitely true	Or are you not sure?	Decline
(J) 01/16/23	1657	65	45	20	22	18	4	13	0

FL16.

FL16. Please indicate if you believe the statement below is true, false, or if you aren't sure. If you haven't gotten a seasonal flu shot by November there is no value in getting the shot. [FALSE]

Wave	N	NET False	Definitely false	Probably false	NET True	Probably true	Definitely true	Or are you not sure?	Decline
(J) 01/16/23	1657	71	38	33	11	8	2	18	0

FL17.

FL17. Please indicate if you believe the statement below is true, false, or if you aren't sure.Washing your hands helps you avoid getting sick from or spreading the seasonal flu. [TRUE]

Wave	N	NET False	Definitely false	Probably false	NET True	Probably true	Definitely true	Or are you not sure?	Decline
(J) 01/16/23	1657	3	1	2	93	22	71	3	0

FL18.

FL18. Please indicate if you believe the statement below is true, false, or if you aren't sure.Antibiotics do not work on viruses such as those that cause colds, flu, or COVID–19. [TRUE]

Wave	N	NET False	Definitely false	Probably false	NET True	Probably true	Definitely true	Or are you not sure?	Decline
(J) 01/16/23	1657	20	7	13	59	20	39	20	0

FL119.

FL119. As far as you know, please indicate how effective, if at all, you think the seasonal flu shot distributed in the U.S. is at reducing the risk of getting a severe case of seasonal flu this year.

Wave	N	NET Uneffective	Not at all effective	Not too effective	NET Effective	Somewhat effective	Very effective	Or are you not sure?	Decline
(J) 01/16/23	1657	10	4	6	77	41	37	12	e

FL122.

FL122. As far as you know, please indicate how effective, if at all, you think the seasonal flu shot distributed in the U.S. is at reducing the risk of getting seasonal flu this year.

Wave	N	NET Uneffective	Not at all effective	Not too effective	NET Effective	Somewhat effective	Very effective	Or are you not sure?	Decline
(J) 01/16/23	1657	12	5	7	73	47	27	15	0

D307.

D307. Please indicate how much you agree or disagree with each of the following statements. / Children do not need the seasonal flu shot because they are at low risk of death from seasonal flu.

Wave	N	NET Disagree	Strongly disagree	Somewhat disagree	NET Agree	Strongly agree	Somewhat agree	Neither agree nor disagree	Don't know	Decline
(J) 01/16/23	1657	57	30	26	18	7	11	25	e	e

D308.

D308. Please indicate how much you agree or disagree with each of the following statements. / Breakthrough seasonal flu infections are evidence that seasonal flu shots don't work.

Wave	N	NET Disagree	Strongly disagree	Somewhat disagree	NET Agree	Strongly agree	Somewhat agree	Neither agree nor disagree	Don't know	Decline
(J) 01/16/23	1657	58	34	24	15	3	12	26	1	0

D309.

D309. Please indicate how much you agree or disagree with each of the following statements. / Because Tamiflu is available to treat seasonal flu, there is no longer a need for people to get a flu shot.

Wave	N	NET Disagree	Strongly disagree	Somewhat disagree	NET Agree	Strongly agree	Somewhat agree	Neither agree nor disagree	Don't know	Decline
(J) 01/16/23	1657	65	45	21	8	2	6	27	e	e

D310.

D310. Please indicate how much you agree or disagree with each of the following statements. / Every person older than 6 months of age should get a flu shot each year.

Wave	N	NET Disagree	Strongly disagree	Somewhat disagree	NET Agree	Strongly agree	Somewhat agree	Neither agree nor disagree	Don't know	Decline
(J) 01/16/23	1657	33	20	13	41	19	22	26	1	0

Q18.

Q18. The vaccines given to me during my childhood protected me from diseases such as Polio and Tetanus.

Wave	N	NET False	Definitely false	Probably false	NET True	Probably true	Definitely true	Refused	Unsure
(H) 08/22/22	1621	4	1	2	90	26	65	e	6
(C) 09/05/21	1669	3	1	2	91	23	68	e	6

PO1.

PO1. Please indicate if you believe the statement below is true, false, or if you aren't sure. / Polio is a disease caused by the poliovirus

Wave	N	NET False	Definitely false	Probably false	NET True	Probably true	Definitely true	Or are you not sure	Decline
(I) 10/18/22	1626	6	3	3	66	28	38	27	0

PO2.

PO2. Please indicate if you believe the statement below is true, false, or if you aren't sure. / There is a cure available for people who get polio

Wave	N	NET False	Definitely false	Probably false	NET True	Probably true	Definitely true	Or are you not sure	Decline
(I) 10/18/22	1626	33	17	16	30	20	10	36	0

PO3.

PO3. Please indicate if you believe the statement below is true, false, or if you aren't sure. / The poliovirus can cause paralysis

Wave	N	NET False	Definitely false	Probably false	NET True	Probably true	Definitely true	Or are you not sure	Decline
(I) 10/18/22	1626	12	5	6	61	23	39	27	0

PO4.

PO4. Please indicate if you believe the statement below is true, false, or if you aren't sure. / The polio vaccine in the U.S. cannot give the recipient polio

Wave	N	NET False	Definitely false	Probably false	NET True	Probably true	Definitely true	Or are you not sure	Decline
(I) 10/18/22	1626	13	3	9	64	23	42	23	0

PO101.

PO101. As far as you know, are people at a higher risk of infection with poliovirus if they consume contaminated water or food?

Wave	N	Yes	No	Or are you not sure	Decline
(I) 10/18/22	1626	25	16	58	0

PO102.

PO102. As far as you know, are people at a higher risk of infection with poliovirus if they have contact with the stool (poop) of a person infected with the poliovirus?

Wave	N	Yes	No	Or are you not sure	Decline
(I) 10/18/22	1626	25	11	65	0

PO103.

PO103. As far as you know, are people at a higher risk of infection with poliovirus if they have contact with the droplets produced when a person with poliovirus coughs or sneezes?

Wave	N	Yes	No	Or are you not sure	Decline
(I) 10/18/22	1626	31	12	57	0

PO200.

PO200. Have you been vaccinated against polio, or not, or are you not sure?

Wave	N	Yes	No	Or are you not sure	Decline
(I) 10/18/22	1626	69	10	22	0

D108a.

D108a. Think about how bad it would be for you to have each of the following illnesses. How bad would it be to have Seasonal flu?

Wave	N	NET Bad	Extremely bad	Very bad	NET Not Bad	Somewhat bad	Not bad at all	Or are you not sure	Decline
(I) 10/18/22	1626	22	5	16	74	58	16	4	e

D108b.

D108b. Think about how bad it would be for you to have each of the following illnesses. How bad would it be to have Monkeypox?

Wave	N	NET Bad	Extremely bad	Very bad	NET Not Bad	Somewhat bad	Not bad at all	Or are you not sure	Decline
(I) 10/18/22	1626	66	30	36	22	20	2	13	e

D108c.

D108c. Think about how bad it would be for you to have each of the following illnesses. How bad would it be to have Skin Cancer?

Wave	N	NET Bad	Extremely bad	Very bad	NET Not Bad	Somewhat bad	Not bad at all	Or are you not sure	Decline
(I) 10/18/22	1626	76	48	27	19	18	1	5	e

D108d.

D108d. Think about how bad it would be for you to have each of the following illnesses. How bad would it be to have Long COVID?

Wave	N	NET Bad	Extremely bad	Very bad	NET Not Bad	Somewhat bad	Not bad at all	Or are you not sure	Decline
(I) 10/18/22	1626	67	34	34	25	22	3	8	0

D108e.

D108e. Think about how bad it would be for you to have each of the following illnesses. How bad would it be to have Polio?

Wave	N	NET Bad	Extremely bad	Very bad	NET Not Bad	Somewhat bad	Not bad at all	Or are you not sure	Decline
(I) 10/18/22	1626	85	59	26	8	7	1	8	0

D108f.

D108f. Think about how bad it would be for you to have each of the following illnesses. How bad would it be to have Measles?

Wave	N	NET Bad	Extremely bad	Very bad	NET Not Bad	Somewhat bad	Not bad at all	Or are you not sure	Decline
(I) 10/18/22	1626	58	22	35	35	31	4	7	e

D108g.

D108g. Think about how bad it would be for you to have each of the following illnesses. How bad would it be to have COVID–19?

Wave	N	NET Bad	Extremely bad	Very bad	NET Not Bad	Somewhat bad	Not bad at all	Or are you not sure	Decline
(I) 10/18/22	1626	42	16	25	53	43	10	5	e

MP3A2.

MP3A2. How worried, if at all, are you about you or someone in your family contracting COVID–19 in the next 3 months?

Wave	N	NET Unworried	Not at all worried	Not too worried	NET Worried	Somewhat worried	Very worried	Don't know	Decline
(J) 01/16/23	1657	64	20	44	36	30	7	0	0

MP3B2.

MP3B2. How worried, if at all, are you about you or someone in your family contracting poliovirus in the next 3 months?

Wave	N	NET Unworried	Not at all worried	Not too worried	NET Worried	Somewhat worried	Very worried	Don't know	Decline
(J) 01/16/23	1657	89	52	37	11	8	3	0	e

MP3C2.

MP3C2. How worried, if at all, are you about you or someone in your family contracting RSV (Respiratory Syncytial Virus) in the next 3 months?

Wave	N	NET Unworried	Not at all worried	Not too worried	NET Worried	Somewhat worried	Very worried	Don't know	Decline
(J) 01/16/23	1657	67	24	44	33	26	7	0	0

MP3D2.

MP3D2. How worried, if at all, are you about you or someone in your family contracting seasonal flu in the next 3 months?

Wave	N	NET Unworried	Not at all worried	Not too worried	NET Worried	Somewhat worried	Very worried	Don't know	Decline
(J) 01/16/23	1657	64	18	46	35	30	6	0	e

D59b1.

D59b1. Myocarditis is an inflammation of the middle layer of the heart wall. Which statement comes closest to your view:

Wave	N	Myocarditis is MORE likely among women infected with COVID–19	Myocarditis is MORE likely among women who take a second dose of an mRNA COVID–19 vaccine	Myocarditis is EQUALLY likely to occur whether women take the mRNA vaccine or not	Or are you not sure?	Decline
(J) 01/16/23	1657	11	8	15	66	0

D59b2.

D59b2. Myocarditis is an inflammation of the middle layer of the heart wall. Which statement comes closest to your view:

Wave	N	Myocarditis is MORE likely among men under age 40 infected with COVID–19	Myocarditis is MORE likely among men under age 40 who take a second dose of an mRNA COVID–19 vaccine	Myocarditis is EQUALLY likely to occur whether men under 40 take the mRNA vaccine or not	Or are you not sure?	Decline
(J) 01/16/23	1657	12	11	14	64	0

D59C1.

D59C1. Please indicate if you believe the statement below is true, false, or if you aren't sure. / COVID–19 poses a higher risk for myocarditis than does COVID–19 vaccination.

Wave	N	NET False	Definitely false	Probably false	NET True	Probably true	Definitely true	Or are you not sure?	Decline
(J) 01/16/23	1657	17	6	11	37	22	15	47	e

suddeath1.

suddeath1. As far as you know, has the number of young athletes dying of heart problems increased, decreased, or remained about the same in the past three years, or are you not sure?

Wave	N	Increased	Decreased	Remained about the same	Or are you not sure?	Decline
(J) 01/16/23	1657	26	2	23	49	0

DH1.

DH1. Have you heard, read, or seen reports about a football player named Damar Hamlin who suffered cardiac arrest after being hit on the chest while making a tackle during a football game?

Wave	N	Yes, I have heard, read, or seen reports	No, I have not heard, read, or seen reports	Don't know	Decline
(J) 01/16/23	1657	87	13	0	0

DH2.

DH2. Based on what you have heard, read or seen about that event, as far as you know, which of the following is the most likely cause of Damar Hamlin's cardiac arrest:

Wave	N	An underlying heart condition	Being hit hard in the chest	Having taken a COVID–19 vaccine	A combination of being hit hard in the chest and taking the COVID–19 vaccine	A combination of an underlying heart condition and taking the COVID–19 vaccine	Something else	Or are you not sure?	Decline
(J) 01/16/23	1459	17	49	3	4	3	3	21	0

B4A.

B4A. When in contact indoors with those who are not part of your household how often do you wear a mask or face covering?

Wave	N	Never wear a mask or face covering	Rarely wear a mask or face covering	Sometimes wear a mask or face covering	Often wear a mask or face covering	Always wear a mask or face covering	Or don't you go to places where you might come in contact with those not in your household	Don't know	Decline
(J) 01/16/23	1657	34[cdefg]	27[cde]	18	10[cdef]	8[cdef]	3	0	0
(I) 10/18/22	1626	33[cdefg]	26[cde]	20	10[cdef]	7[cdefg]	3	0	e
(G) 07/18/22	1580	27[jcdefi]	27[cde]	20	12[cde]	11[cdefi]	3	0	0
(F) 04/04/22	1638	23[jcdegi]	24[cde]	21	15[jcei]	15[jcdegi]	2	0	0
(E) 01/17/22	1656	12[jfgi]	13[jdfgi]	18	24[jdfgi]	30[jfgi]	3	0	0
(D) 11/09/21	1672	14[jcfgi]	17[jefgi]	21	18[jegi]	26[jfgi]	3	0	0
(C) 09/05/21	1669	11[jdfgi]	15[jfgi]	20	22[jfgi]	30[jfgi]	2	0	e

C3B.

C3B. When do you expect to be able to return to your normal, pre–COVID–19 life?

Wave	N	Already have	Within the next 1 to 6 months	Within the next year	More than a year from now	Never	Don't know	Decline
(J) 01/16/23	1657	52[defgi]	3[def]	9[defg]	13[defg]	22[df]	e	e
(I) 10/18/22	1626	47[jdefg]	4[def]	12[def]	14[defg]	24[df]	0[e]	e
(G) 07/18/22	1580	41[jdefi]	4[df]	12[jdef]	19[jdei]	23[df]	0[e]	0
(F) 04/04/22	1638	32[jdegi]	12[jdegi]	19[jdgi]	19[jdei]	18[jegi]	e	e
(E) 01/17/22	1656	16[jdfgi]	6[jfi]	20[jdgi]	35[jdfgi]	22[df]	1[dgi]	e
(D) 11/09/21	1672	21[jefgi]	8[jfgi]	24[jefgi]	29[jefgi]	17[jegi]	e[e]	e

I10X.

I10X. How worried, if at all, are you that the health of someone in your family will be seriously affected from getting the coronavirus?

Wave	N	NET Unworried	Not at all worried	Not too worried	NET Worried	Somewhat worried	Very worried	This has already happened	Don't know	Refused
(I) 10/18/22	1626	51[bcde]	17[cde]	34[ce]	46[bcde]	33[c]	12[bcdeg]	4	0	0
(G) 07/18/22	1580	49[cde]	14[cde]	35[bce]	48[cde]	31[cde]	17[cei]	3	0	0
(F) 04/04/22	1638	51[bcde]	16[cde]	35[bce]	47[bcde]	32[c]	15[bcde]	3	0	0
(E) 01/17/22	1656	38[bfgi]	10[bfgi]	27[fgi]	58[bfgi]	36[g]	22[fgi]	4[b]	0	0
(D) 11/09/21	1672	42[cfgi]	11[bfgi]	31[c]	55[cfgi]	36[g]	19[cfi]	3	e	0
(C) 09/05/21	1669	36[bdfgi]	10[bfgi]	26[bdfgi]	62[bdfgi]	39[bfgi]	23[dfgi]	3	0	0
(B) 06/22/21	1719	45[cefi]	15[cde]	30[cfg]	52[cefi]	32[c]	20[fi]	2[e]	0	0

MH17.

MH17. Has anyone you know ever been diagnosed with a mental health disorder, or are you not sure?

Wave	N	Yes	No	Or are you not sure?	Decline
(J) 01/16/23	1657	59	26	15	e

MH18.

MH18. Has anyone in your immediate family been diagnosed with a mental health disorder, or are you not sure?

Wave	N	Yes	No	Or are you not sure?	Decline
(J) 01/16/23	1657	42	45	13	e

MH19.

MH19. Have you ever been diagnosed with a mental health disorder, or are you not sure?

Wave	N	Yes	No	Or are you not sure?	Decline
(J) 01/16/23	1657	24	71	5	e

MH102.

MH102. Please indicate if you believe the statement below is true, false, or if you aren't sure. / Most people with mental health disorders are no more likely to be violent than anyone else. [TRUE]

Wave	N	NET False	Definitely false	Probably false	NET True	Probably true	Definitely true	Or are you not sure?	Decline
(J) 01/16/23	1657	34	7	27	45	32	12	21	e

MH103.

MH103. Please indicate if you believe the statement below is true, false, or if you aren't sure. / People with mental health disorders are more likely to be victims of violent crime than are people overall. [KNOWLEDGE––TRUE]

Wave	N	NET False	Definitely false	Probably false	NET True	Probably true	Definitely true	Or are you not sure?	Decline
(J) 01/16/23	1657	20	4	15	51	40	11	30	0

MH104.

MH104. Please indicate if you believe the statement below is true, false, or if you aren't sure. / Most mental health disorders can be successfully treated. [BELIEF]

Wave	N	NET False	Definitely false	Probably false	NET True	Probably true	Definitely true	Or are you not sure?	Decline
(J) 01/16/23	1657	16	4	12	67	51	17	16	e

MH21.

MH21. As far as you know, during what time of the year do the largest number of self–inflicted deaths ... suicides ... among adults age 18+ occur?

Wave	N	April	December	August	October	June	Don't know	Decline
(J) 01/16/23	1657	5	81	4	4	4	2	e

MH22.

MH22. As far as you know, does having a gun in a person's home...

Wave	N	Increase the likelihood that a person in that household will die by suicide	Decrease the likelihood that a person in that household will die by suicide	Not affect the chances that a person in that household will die by suicide	Or are you not sure?	Decline
(J) 01/16/23	1657	39	1	33	27	0