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U.S. Public Now Divided Over Whether To Get COVID-19 Vaccine

Concerns about the safety and effectiveness of possible vaccine, pace of approval process

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How we did this

Pew Research Center conducted this study to understand how Americans are continuing to respond to the coronavirus outbreak. For this analysis, we surveyed 10,093 U.S. adults from Sept. 8 to 13, 2020. This report also draws on data from a survey fielded April 29 to May 5, 2020, among 10,957 U.S. adults.

Everyone who took part in either survey is a member of Pew Research Center's American Trends Panel (ATP), an online survey panel that is recruited through national, random sampling of residential addresses. This way nearly all U.S. adults have a chance of selection. The survey is weighted to be representative of the U.S. adult population by gender, race, ethnicity, partisan affiliation, education and other categories. Read more about the ATP's methodology.

See here to read more about the questions used for this report, along with responses, and its methodology.

U.S. Public Now Divided Over Whether To Get COVID-19 Vaccine

Concerns about the safety and effectiveness of possible vaccine, pace of approval process

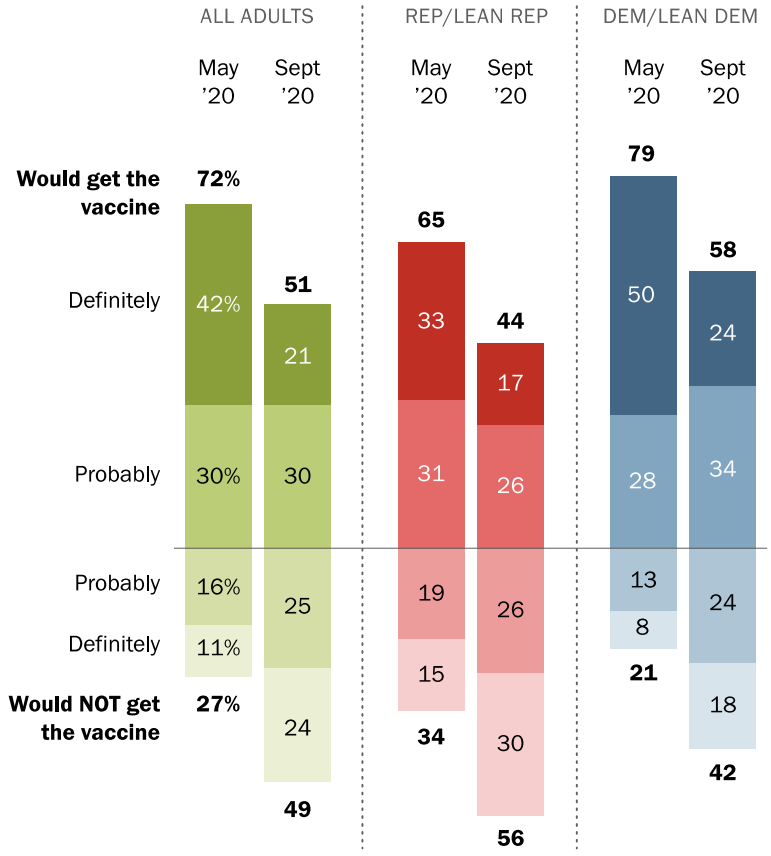
As efforts to develop and test a COVID-19 vaccine spur debate around the timing and release of a federally approved vaccine, the share of Americans who say they would get vaccinated for the coronavirus has declined sharply since earlier this year.

About half of U.S. adults (51%) now say they would definitely or probably get a vaccine to prevent COVID-19 if it were available today; nearly as many (49%) say they definitely or probably *would not* get vaccinated at this time. Intent to get a COVID-19 vaccine has fallen from 72% in May, a 21 percentage point drop.

The share who would *definitely* get a coronavirus vaccine now stands at just 21% – half the share that said this four months ago.

Drop in share of Americans who say they would get a COVID-19 vaccine if it were available to them today

% of U.S. adults who say if a vaccine to prevent COVID-19 were available today, they ...



Note: Respondents who did not give an answer are not shown.
Source: Survey conducted Sept. 8-13, 2020.
"U.S. Public Now Divided Over Whether To Get COVID-19 Vaccine"

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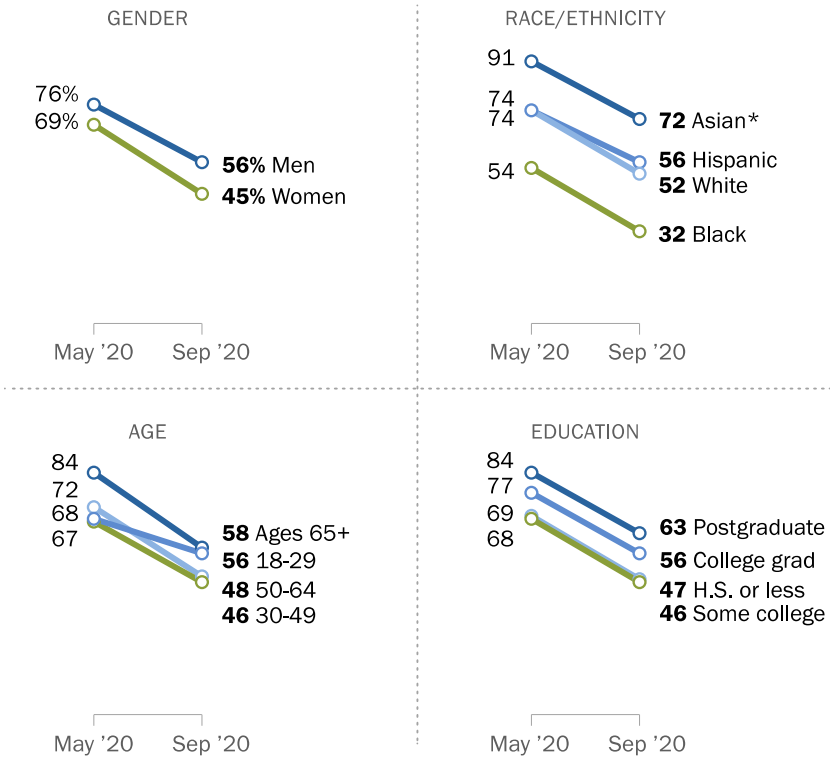
There are widespread public concerns about aspects of the vaccine development process. On the heels of a pledge from nine pharmaceutical companies to ensure that a potential vaccine would meet rigorous standards, the Center survey finds three-quarters of Americans (77%) think it's very or somewhat likely a COVID-19 vaccine will be approved in the United States before its safety and effectiveness are fully understood. And when asked about the pace of the vaccine approval process, 78% say their greater concern is that it will move too fast, without fully establishing safety and effectiveness, compared with just 20% who are more concerned approval will move too slowly, creating unnecessary delays.

The new national survey by Pew Research Center, conducted Sept. 8-13 among 10,093 U.S. adults, finds intent to get a COVID-19 vaccine has declined across all major political and demographic groups.

However, sizable differences across groups remain. Democrats and those who lean to the Democratic Party are 14 percentage points more likely than Republicans and Republican leaners to say they would probably or definitely get a vaccine (58% vs. 44%). And Black adults are much less likely to say they would get a vaccine than other Americans: Just 32% of Black adults say they would definitely or probably get a COVID-19 vaccine, compared with 52% of White adults, 56% of Hispanics and nearly three-quarters (72%) of Asian

Widespread declines in the shares who say they would get a COVID-19 vaccine

% of U.S. adults who say they would definitely/probably get a vaccine for COVID-19 if one were available today



* Asian adults were interviewed in English only.
Note: Respondents who gave other responses or did not give an answer are not shown. White, Black and Asian adults include those who report being only one race and are not Hispanic. Hispanics are of any race.
Source: Survey conducted Sept. 8-13, 2020.
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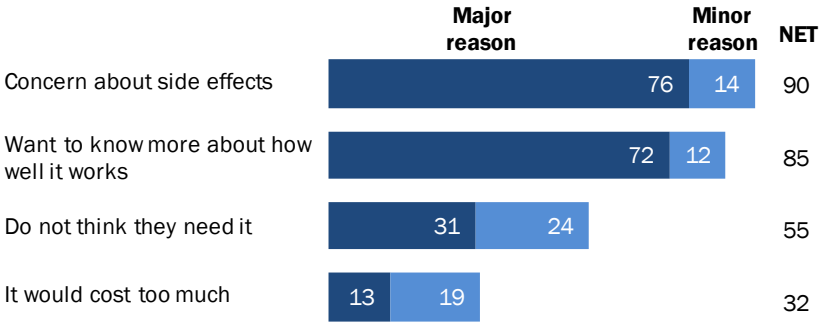
Americans. (Asian adults were interviewed in English only.)

Concerns about side effects and uncertainty around the effectiveness of a vaccine are widely cited as reasons by those who would not get a COVID-19 vaccine if one were available today.

Among the roughly half of Americans who say they would not get a COVID-19 vaccine, 76% say concern about side effects is a major reason why they would definitely or probably not get it.

Concern over side effects, uncertainty about effectiveness top reasons for those not planning to get a COVID-19 vaccine

*Among U.S. adults who say they **probably/definitely would not** get a vaccine to prevent COVID-19, % who say each of the following is a major/minor reason why*



Note: Respondents who gave other responses or did not give an answer are not shown.
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Several vaccines are currently under trial right now. One trial was temporarily put on hold earlier this month for potentially causing side effects in a trial participant, but has since resumed.

A large majority (72%) of those who would not get a COVID-19 vaccine also say a desire to know more about how well it would work is a major reason why they don't currently plan to get a coronavirus vaccine.

Fewer adults cite not thinking they need the vaccine (31%) or the vaccine's cost (13%) as a major reason they would not likely get vaccinated.

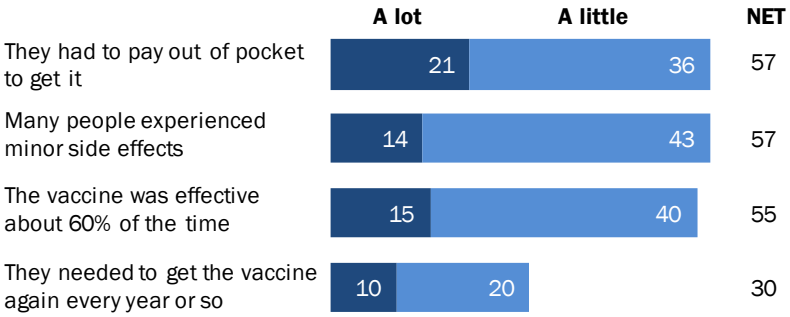
Those who say they *would* definitely or probably get a vaccine for COVID-19 if it were available today see a range of factors that could impact that decision.

Overall, 57% of those planning to get a vaccine say they would be a little (36%) or a lot (21%) less likely to do so if they had to pay out of pocket to get it. About four-in-ten (42%) say out-of-pocket costs would not change their likelihood of getting a vaccine.

Similarly, majorities say that many people experiencing minor side effects (57%) and the vaccine being effective about 60% of the time (55%) would reduce the likelihood of them getting vaccinated at least a little. But fewer than two-in-ten say either of these things would make them *a lot* less likely to get the vaccine. The possible need to get a vaccine again every year or so is not seen as a major deterrent among those planning to get vaccinated: 70% say this wouldn't make a difference to them.

Those planning to get a COVID-19 vaccine say cost, side effects, effectiveness could reduce their likelihood of getting vaccinated

*Among U.S. adults who **probably/definitely would** get a vaccine to prevent COVID-19, % who say each of the following would make them a lot/a little less likely to get the vaccine*



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Researchers are still not sure how effective a COVID-19 vaccine will ultimately be. The U.S. Food and Drug Administration has said it would authorize a COVID-19 vaccine if it was safe and at least 50% effective in preventing the disease or decreasing the severity of infections, although Anthony Fauci, director of the National Institute of Allergy and Infectious Diseases, has said scientists are hoping for a vaccine that is at least 75% effective.

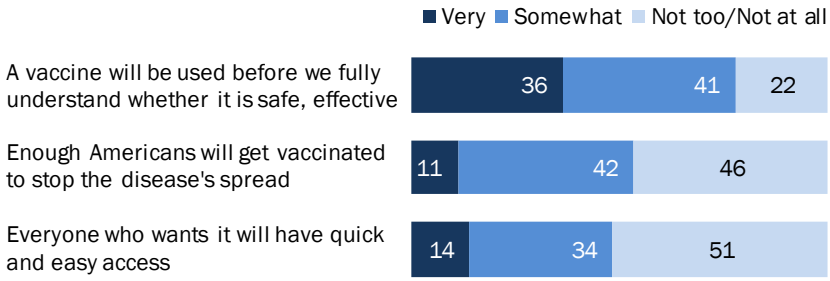
Many Americans think it's likely a vaccine will be used before its safety and effectiveness are fully understood

As Americans look ahead to when a vaccine for COVID-19 is approved in the U.S., many express doubts about how safe and effective a vaccine will be initially.

About three-quarters of Americans (77%) say it is at least somewhat likely that a vaccine for COVID-19 will be approved and used in the U.S. before it's fully known whether it is safe and effective, including 36% who say this is *very* likely to happen. Just 22% say this is not too or not at all likely.

Majority of public thinks it's likely that vaccine will be used before safety, effectiveness fully understood

% of U.S. adults who say each of the following is __ likely once a vaccine for COVID-19 is approved in the U.S.



Note: Respondents who did not give an answer are not shown.
Source: Survey conducted Sept. 8-13, 2020.
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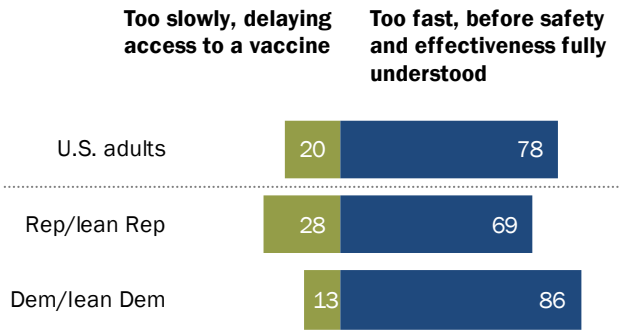
Public assessments are more mixed when it comes to whether enough Americans will get vaccinated to curb the spread of the disease: 53% say this is at least somewhat likely, while 46% think it not too or not at all likely.

Americans also have a mixed outlook on vaccine access. About half of U.S. adults (48%) say it's at least somewhat likely that everyone who wants the vaccine will have quick and easy access to it, while 51% say this is not too or not at all likely.

Consistent with the view that a vaccine may be approved before its safety and effectiveness are fully understood, Americans overwhelmingly say their greater concern is that the approval process will move too fast, rather than too slowly. Nearly eight-in-ten (78%) say their greater concern is that the vaccine approval process will move too fast, without fully establishing that it is safe and effective. Just 20% say they are more concerned the approval process will move too slowly, causing unnecessary delays in access to a vaccine.

Public concern over moving too fast on COVID-19 vaccine approval process

% of U.S. adults who say they are more concerned that approval of a COVID-19 vaccine will move ...



Note: Respondents who did not give an answer are not shown.
Source: Survey conducted Sept. 8-13, 2020.
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While Republicans and Democrats have differed over many aspects of the coronavirus outbreak – including the threat it presents to public health and how quickly to lift restrictions on public activity – majorities of both groups say their greater concern about the vaccine approval process is that it will move too fast, rather than too slowly. About seven-in-ten Republicans (69%) are more concerned about the approval process moving too fast, and an even larger majority of Democrats (86%) share this view.

Intent to get COVID-19 vaccine tied to confidence in development process

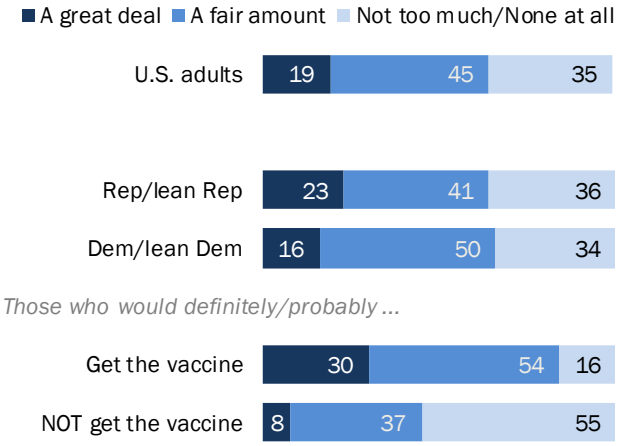
Those who plan to get a COVID-19 vaccine express much greater confidence in the vaccine development process than those who do not plan to get vaccinated.

Overall, 19% of the public has a great deal of confidence that the research and development process in the U.S. will produce a safe and effective vaccine for COVID-19, while another 45% say they have a fair amount of confidence. About a third (35%) say they have not too much or no confidence in this process.

Among those who say they would definitely or probably get a vaccine, more than eight-in-ten express either a great deal (30%) or a fair amount (54%) of confidence in the research and development process. By contrast, 55% of those not planning to get a coronavirus vaccine say they have not too much or no confidence at all in this process.

Those who would get COVID-19 vaccine more trusting of development process

% of U.S. adults who say they have ___ of confidence that the research and development process in the U.S. will produce a safe and effective vaccine for COVID-19



Note: Respondents who did not give an answer are not shown.
Source: Survey conducted Sept. 8-13, 2020.
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Acknowledgments

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Methodology

The American Trends Panel survey methodology

The American Trends Panel (ATP), created by Pew Research Center, is a nationally representative panel of randomly selected U.S. adults. Panelists participate via self-administered web surveys. Panelists who do not have internet access at home are provided with a tablet and wireless internet connection. Interviews are conducted in both English and Spanish. The panel is being managed by Ipsos.

Data in this report is drawn from the panel wave conducted Sept. 8 to Sept. 13, 2020. A total of 10,093 panelists responded out of 11,506 who were sampled, for a response rate of 88%. This does not include three panelists who were removed from the data due to extremely high rates of refusal or straightlining. The cumulative response rate accounting for nonresponse to the recruitment surveys and attrition is 5%. The break-off rate among panelists who logged on to the survey and completed at least one item is 1.7%. The margin of sampling error for the full sample of 10,093 respondents is plus or minus 1.6 percentage points.

American Trends Panel recruitment surveys

Recruitment dates	Mode	Invited	Joined	Active panelists remaining
Jan. 23 to March 16, 2014	Landline/ cell RDD	9,809	5,338	2,302
Aug. 27 to Oct. 4, 2015	Landline/ cell RDD	6,004	2,976	1,334
April 25 to June 4, 2017	Landline/ cell RDD	3,905	1,628	683
Aug. 8 to Oct. 31, 2018	ABS/web	9,396	8,778	6,398
Aug. 19 to Nov. 30, 2019	ABS/web	5,900	4,720	3,023
June 1 to July 19, 2020	ABS/web	1,865	1,636	1,633
	Total	**36,879**	**25,076**	**15,373**

Note: Approximately once per year, panelists who have not participated in multiple consecutive waves or who did not complete an annual profiling survey are removed from the panel. Panelists also become inactive if they ask to be removed from the panel.

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This study featured a stratified random sample from the ATP. The sample was allocated according to the following strata, in order: tablet households, U.S.-born Hispanics, foreign-born Hispanics, high school education or less, foreign-born Asian adults, not registered to vote, people ages 18 to 34, uses internet weekly or less, non-Hispanic Black adults, nonvolunteers and all other categories not already falling into any of the above. Panelists who had not yet completed the annual profile survey were ineligible.

The ATP was created in 2014, with the first cohort of panelists invited to join the panel at the end of a large, national, landline and cellphone random-digit-dial survey that was conducted in both English and Spanish. Two additional recruitments were conducted using the same method in 2015 and 2017, respectively. Across these three surveys, a total of 19,718 adults were invited to join the ATP, of whom 9,942 (50%) agreed to participate.

In August 2018, the ATP switched from telephone to address-based recruitment. Invitations were sent to a random, address-based sample of households selected from the U.S. Postal Service's Delivery Sequence File. Two additional recruitments were conducted using the same method in 2019 and 2020, respectively. Across these three address-based recruitments, a total of 17,161 adults were invited to join the ATP, of whom 15,134 (88%) agreed to join the panel and completed an initial profile survey. In each household, the adult with the next birthday was asked to go online to complete a survey, at the end of which they were invited to join the panel. Of the 25,076 individuals who have ever joined the ATP, 15,373 remained active panelists and continued to receive survey invitations at the time this survey was conducted.

The U.S. Postal Service's Delivery Sequence File has been estimated to cover as much as 98% of the population, although some studies suggest that the coverage could be in the low 90% range.[1] The American Trends Panel never uses breakout routers or chains that direct respondents to additional surveys.

[1] AAPOR Task Force on Address-based Sampling. 2016. "AAPOR Report: Address-based Sampling."

Weighting

The ATP data was weighted in a multistep process that accounts for multiple stages of sampling and nonresponse that occur at different points in the survey process. First, each panelist begins with a base weight that reflects their probability of selection for their initial recruitment survey (and the probability of being invited to participate in the panel in cases where only a subsample of respondents were invited). The base weights for panelists recruited in different years are scaled to be proportionate to the effective sample size for all active panelists in their cohort. To correct for nonresponse to the initial recruitment surveys and gradual panel attrition, the base weights for all active panelists are calibrated to align with the population benchmarks identified in the accompanying table to create a full-panel weight.

Weighting dimensions

Variable	Benchmark source
Age x Gender Education x Gender Education x Age Race/Ethnicity x Education Born inside vs. outside the U.S. among Hispanics and Asian Americans Years lived in the U.S.	2018 American Community Survey
Census region x Metro/Non-metro	2019 CPS March Supplement
Volunteerism	2017 CPS Volunteering & Civic Life Supplement
Voter registration	2018 CPS Voting and Registration Supplement
Party affiliation	Average of the three most recent Pew Research Center telephone surveys
Frequency of internet use Religious affiliation	ATP 2020 ABS recruitment survey

Note: Estimates from the ACS are based on non-institutionalized adults. Voter registration is calculated using procedures from Hur, Achen (2013) and rescaled to include the total U.S. adult population. The ATP 2020 ABS recruitment survey featured 1,862 online completions and 2,247 mail survey completions.

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For ATP waves in which only a subsample of panelists are invited to participate, a wave-specific base weight is created by adjusting the full-panel weights for subsampled panelists to account for any differential probabilities of selection for the particular panel wave. For waves in which all active panelists are invited to participate, the wave-specific base weight is identical to the full-panel weight.

In the final weighting step, the wave-specific base weights for panelists who completed the survey are again calibrated to match the population benchmarks specified above. These weights are trimmed (typically at about the 1st and 99th percentiles) to reduce the loss in precision stemming from variance in the weights. Sampling errors and test of statistical significance take into account the effect of weighting.

The following table shows the unweighted sample sizes and the error attributable to sampling that would be expected at the 95% level of confidence for different groups in the survey:

Margins of error

	Unweighted sample size	Margin of error in percentage points
U.S. adults	10,093	+/- 1.6
Men	4,529	+/- 2.5
Women	5,483	+/- 2.0
White	6,989	+/- 1.8
Black	822	+/- 5.1
Hispanic	1,509	+/- 4.9
Asian*	303	+/- 8.2
18-29	983	+/- 4.7
30-49	3,239	+/- 2.7
50-64	3,022	+/- 2.8
65+	2,804	+/- 2.8
Postgraduate	2,668	+/- 2.5
College grad	2,988	+/- 2.4
Some college	2,980	+/- 2.6
HS or less	1,438	+/- 3.4
Rep/lean Rep	4,129	+/- 2.3
Dem/lean Dem	5,719	+/- 2.2

*Asian adults were interviewed in English only.
Note: The margins of error are reported at the 95% level of confidence and are calculated by taking into account the average design effect for each subgroup. White, Black and Asian adults include those who report being only one race and are non-Hispanic. Hispanics are of any race. Republicans and Democrats include independents and others who lean to each of the parties.
Source: Survey conducted Sept. 8-13, 2020.

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Sample sizes and sampling errors for other subgroups are available upon request. In addition to sampling error, one should bear in mind that question wording and practical difficulties in conducting surveys can introduce error or bias into the findings of opinion polls.

CORRECTION (Oct. 20, 2020): The methodology section has been updated to reflect the correct cumulative response rate. None of the study findings or conclusions were affected.

Survey question wording and topline

2020 PEW RESEARCH CENTER'S AMERICAN TRENDS PANEL
WAVE 74 September 2020
SCIENCE TOPLINE
September 8-13, 2020
TOTAL N=10,093

OTHER QUESTIONS PREVIOUSLY RELEASED OR HELD FOR FUTURE RELEASE

ASK ALL:
COVID_SCI6E If a vaccine to prevent COVID-19 were available today, would you…

Sept 8-13 2020		Apr 29-May 5 2020
21	Definitely get the vaccine	42
30	Probably get the vaccine	30
25	Probably NOT get the vaccine	16
24	Definitely NOT get the vaccine	11
<1	No answer	1

ASK IF PROBABLY OR DEFINITELY WOULD NOT GET VACCINE [COVID_SCI6E=3,4]:
NOCVACC How much of a reason, if any, is each of the following for why you would **[IF COVID_SCI6E=3:** probably; **IF COVID_SCI6E=4:** definitely**]** NOT get a vaccine to prevent COVID-19? **[RANDOMIZE]**

	A major reason	A minor reason	Not a reason	No answer
a. Concern about side effects				
September 8-13, 2020	76	14	9	<1
b. Do not think I need it				
September 8-13, 2020	31	24	45	1
c. It would cost too much				
September 8-13, 2020	13	19	67	1
d. Want to know more about how well it works				
September 8-13, 2020	72	12	15	1

ASK IF PROBABLY OR DEFINITELY WOULD GET VACCINE [COVID_SCI6E=1,2]:

VACCNCRN How much, if at all, would each of the following influence whether you, personally, would get a vaccine to prevent COVID-19? **[RANDOMIZE]**

	Would make me A LOT less likely to get a vaccine	Would make me A LITTLE less likely to get a vaccine	Would not make a difference	No answer
a. You had to pay out-of-pocket to get it				
September 8-13, 2020	21	36	42	<1
b. The vaccine was effective about 60% of the time				
September 8-13, 2020	15	40	45	<1
c. Many people experienced minor side effects				
September 8-13, 2020	14	43	42	1
d. You needed to get the vaccine again every year or so				
September 8-13, 2020	10	20	70	<1

ASK ALL:

VACCNFDT How much confidence, if any, do you have that the research and development process will produce a vaccine for COVID-19 in the U.S. that is safe and effective?

Sept 8-13 2020	
19	A great deal of confidence
45	A fair amount of confidence
25	Not too much confidence
10	No confidence at all
<1	No answer

ASK ALL:

VACCDEV Thinking about the development of a vaccine for COVID-19, which of the following concerns you more?

Approval of a vaccine will move… [**RANDOMIZE**]

Sept 8-13 2020	
78	Too fast without fully establishing it is safe and effective
20	Too slowly, creating unnecessary delays in providing access to a vaccine
2	No answer

ASK ALL:
VACCHAPPEN Once a vaccine for COVID-19 is approved in the U.S., how likely do you think it is that… **[RANDOMIZE]**

	Very likely	Somewhat likely	Not too likely	Not at all likely	No answer
a. Everyone who wants it will have quick and easy access to a coronavirus vaccine					
September 8-13, 2020	14	34	40	12	<1
b. Enough Americans will get vaccinated to stop the spread of the disease					
September 8-13, 2020	11	42	37	9	1
c. A vaccine will be used before we fully understand whether it is safe and effective					
September 8-13, 2020	36	41	18	5	<1

OTHER QUESTIONS PREVIOUSLY RELEASED OR HELD FOR FUTURE RELEASE