

FOR RELEASE OCTOBER 30, 2020

# The Challenges of Contact Tracing as U.S. Battles COVID-19

Majorities of adults say they would be open to participating in some parts of the process of identifying and isolating coronavirus victims, but others are reluctant to engage fully with public health authorities

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#### **RECOMMENDED CITATION**

Pew Research Center, October 2020, "The Challenges of Contact Tracing as U.S. Battles COVID-19"

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### How we did this

Pew Research Center has intensively studied the impact of the <u>coronavirus outbreak</u>, the public health dimensions of the pandemic and Americans' views about some of the privacy implications of data collection during the outbreak. This report focuses on key parts of the contact tracing process that states are trying to implement to identify, trace the contacts of and isolate those with COVID-19 in order to disrupt how the coronavirus is transmitted.

To explore this, we surveyed 10,211 U.S. adults from July 13 to 19, 2020. Everyone who took part is a member of the 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.

Here are the <u>questions used</u> for this report, along with responses, and its <u>methodology</u>.

# The Challenges of Contact Tracing as U.S. Battles COVID-19

Majorities of adults say they would be open to participating in some parts of the process of identifying and isolating coronavirus victims,

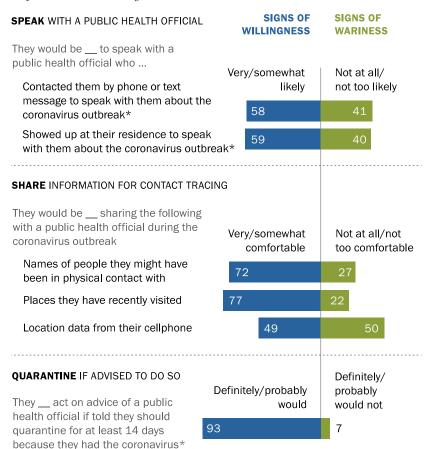
but others are reluctant to engage fully with public health authorities

As states mount large-scale contact tracing efforts to identify and isolate those who have contracted COVID-19, a Pew Research Center survey conducted in July finds that Americans have a variety of views that could complicate the ongoing efforts of public health authorities battling the outbreak.

On the one hand, majorities of Americans say they would be at least somewhat comfortable or likely to engage with some parts of contact tracing programs – long-established public health processes that try to limit the spread of potentially deadly infectious diseases such as AIDS, Ebola and now COVID-19 by disrupting the chain of transmission.

## Some say they would be comfortable or likely to engage with key steps of contact tracing programs during COVID-19, but others are wary or resistant

% of U.S. adults who say ...



\*Based on the half sample of respondents randomly assigned to receive these questions. Respondents received one of the two questions about speaking. They were also randomly assigned to receive this quarantine question or a question about the difficulty they would have if advised to quarantine.

Note: Those who did not give an answer are not shown. Source: Survey of U.S. adults conducted July 13-19, 2020. "The Challenges of Contact Tracing as U.S. Battles COVID-19"

For example, this survey finds that 58% of U.S. adults say they would be very or somewhat likely to speak with a public health official who contacted them by phone or text message to speak with them about the coronavirus outbreak. Roughly three-quarters (77%) report they would be at least somewhat comfortable sharing information with a public health official about the places they have recently visited. A smaller share -49% – say they would be similarly comfortable sharing location data from their cellphone. And fully 93% of adults say they definitely or probably would quarantine themselves for at least 14 days if they were told they should do so by a public health official because they had the coronavirus.

Yet the survey also shows that portions of Americans could be hard to reach and relatively uncomfortable engaging with public health officials as part of the contact tracing process related to the coronavirus outbreak. For instance, 41% of those who were asked about their views on speaking with a public health official who might contact them about the coronavirus outbreak via phone or text say they would be not at all or not too likely to do so. A similar share (40%) of those who were asked about speaking with a public official who showed up at their residence to talk about COVID-19 say the same thing.<sup>1</sup>

Many factors could influence Americans' participation in contact tracing and quarantine programs. This survey asked U.S. adults how they might behave in three major aspects of contact tracing in the context of the coronavirus outbreak: the likelihood that someone would speak with a public health official (i.e., a contact tracer) who contacted them about the coronavirus; the degree of comfort that someone would have in sharing information like the names of people with whom they have been in physical contact and the places they have recently visited, or data from their cellphone that tracked their locations; and their willingness to quarantine for 14 days if they were advised to do so by a public health official. We refer to these three steps as "speak," "share" and "quarantine" throughout this report.

Overall, taking account of the public's wariness with some parts of the contact tracing process, the survey shows that 48% of U.S. adults say they would be comfortable or likely to engage with *all three* key steps – speaking, sharing and quarantining.

If public health officials could break through people's wariness of speaking with a public health official by phone, the results also show that another 21% might be willing. These are the individuals who say they would be very or somewhat comfortable sharing information and

<sup>&</sup>lt;sup>1</sup> Respondents were randomly assigned to receive one of these questions.

definitely or probably would quarantine, but also say they would be less likely to speak with a public health official by phone or text message in the first place.

### Determining who is comfortable or likely to engage with contact tracing programs

This survey looked at Americans' views of three key steps of contact tracing related to the coronavirus outbreak that would be initiated by a public health official. Two different concepts related to people's potential willingness were measured: *likelihood* of speaking with a public health official by phone or text message or quarantining, and *comfort* with sharing information. Together, we use these questions to try to tap into people's "willingness" and "openness" to key steps of contact tracing, compared with their "wariness."

Of course, people's actual cooperation with public health officials dealing with the coronavirus depends on many factors. Some individuals might be willing but uncomfortable. Others might express one view and then act differently upon picking up the phone. Still others might not exactly know what they think or might behave differently based on how the pandemic is affecting their community at the time.

In places in this report that examine how individuals might behave at all three stages of the contact tracing process, we used data from the same random subset of respondents who were asked about 1) the likelihood they would **speak with** a public health official who contacted them by phone or text message to speak with them about the coronavirus outbreak; 2) their comfort **sharing information** about the people with whom they have been in contact and where they have been (either via names of places they've recently visited or location data from their cellphone); and 3) and whether they would act on advice to **quarantine for 14 days** if advised to do so by a public health official because they had the coronavirus. In this report, we refer to these by the shorthand "speak," "share" and "quarantine." (While the full sample of individuals was asked about sharing information, a random subset was asked the relevant "speaking" and "quarantine"-related questions.)

We then looked at the various combinations of responses to those questions. Some say they would be comfortable or likely to engage across the board – that they would be likely to speak, comfortable sharing and would quarantine. Others report they would be likely or comfortable in some ways, but not across the board. A small share tell us would not likely speak or be comfortable sharing anything, and would not quarantine. We use fairly expansive criteria in creating a measure of those comfortable or likely to engage. Individuals must respond that they are "very" or "somewhat" likely to speak with a public health official and "very" or "somewhat" comfortable sharing relevant information and "definitely" or "probably" would quarantine.

A full grid of all the possible combinations of respondent answers can be found below this box. For a complete description of our calculation method, see the section of the report entitled "In all. 48% of adults say they would be comfortable or likely to engage with all three key steps of the contact tracing process."

### About half of Americans say they would be comfortable or likely to engage with the key steps in contact tracing to control COVID-19

% of U.S. adults who say they would do the following

**SPEAK** 

Would be very or somewhat likely to **speak with** a public health official who contacted them by phone or text message to speak with them about the coronavirus outbreak

SHARE

Would be very or somewhat comfortable **sharing information** with a public health official during the coronavirus outbreak

QUARANTINE

% of U.S. adults

Would definitely or probably **quarantine** if advised to do so by a public health official because they had the coronavirus

Yes	Names of contacts <b>AND</b> info about places/location data	Yes	48
Yes	Names of contacts <b>AND</b> info about places/location data	No	1
Yes	Names of contacts <b>OR</b> info about places/location data	Yes	4
Yes	Names of contacts <b>OR</b> info about places/location data	No	*
Yes	No information	Yes	4
Yes	No information	No	1
No	Names of contacts <b>AND</b> info about places/location data	Yes	21
No	Names of contacts <b>AND</b> info about places/location data	No	1
No	Names of contacts <b>OR</b> info about places/location data	Yes	5
No	Names of contacts <b>OR</b> info about places/location data	No	*
No	No information	Yes	9
No	No information	No	4

Note: Based on the half sample of respondents randomly assigned questions about speaking via phone or text and whether they would quarantine. "Names of contacts" refers to the names of people they might have been in physical contact with. "Info about places" refers to the names of places they have recently visited. "Location data" refers to location data from one's cellphone. Those who did not give an answer to questions about any one of the relevant steps are not shown. Since both pieces of location information may accomplish the same end goal, we considered an individual comfortable to engage with this step of the process if they said they were at least somewhat comfortable sharing either of these pieces of location-related information. If individuals only answered one of the location questions, that answer was used to classify them.

Source: Survey of U.S. adults conducted July 13-19, 2020.

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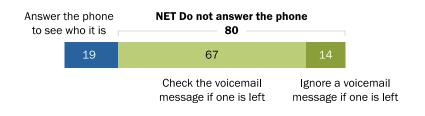
This study also examines several other factors that might affect people's level of engagement and comfort with the contact tracing process. First, it looks at Americans' openness to answering phone calls from unknown numbers and finds some evidence that even starting the contact tracing process might not be easy in many cases. Just 19% of Americans say they generally answer their cellphones when an unknown phone number calls. Some 67% say they don't answer but would

check a voicemail if one is left. And 14% say they generally don't answer and would ignore a voicemail.

At the same time, shares of Americans say people pretend to be someone else in order to steal other people's personal information with some frequency. Some nine-in-ten Americans think it is often (49%) or sometimes (42%) the case that people do this.

### Most Americans don't pick up phone calls from unknown numbers, and roughly half think scams occur often

% of U.S. adults who say that when an unknown number calls their cellphone they generally ...



% of U.S. adults who say they think people pretend to be someone else in order to try to steal people's personal information ...

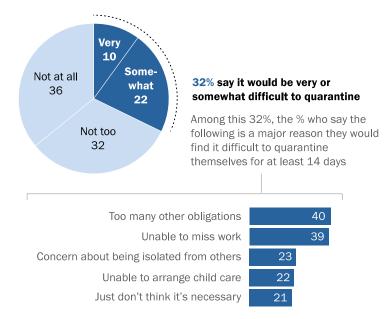


Note: Those who did not give an answer are not shown. Source: Survey of U.S. adults conducted July 13-19, 2020. "The Challenges of Contact Tracing as U.S. Battles COVID-19"

Next, the survey probes another dimension of Americans' views on quarantining specifically, by asking how difficult it would be for people to isolate themselves for 14 days because they had the coronavirus - regardless of whether or not they would actually do so. About three-inten Americans (32%) say it would be very or somewhat difficult to quarantine. Among those who would find it at least somewhat difficult, 40% say that having too many other obligations is a major reason for this difficulty, and about the same share (39%) say being unable to miss work would be a major reason.

# About three-in-ten Americans say they would find it at least somewhat difficult to quarantine if told they had the coronavirus; obligations, work cited as major reasons

% of U.S. adults who say it would be \_\_\_ difficult to be able to act on the advice of a public health official if told they should quarantine themselves for at least 14 days because they had the coronavirus



Note: Based on the half sample of respondents randomly assigned to receive these questions. Those who did not give an answer or who gave other responses are not shown. Source: Survey of U.S. adults conducted July 13-19, 2020. "The Challenges of Contact Tracing as U.S. Battles COVID-19"

Additionally, the July survey looks at people's views about what happens to their personal information once it is in the hands of others. Half of Americans say they are not at all or not too confident that the federal government will keep their personal records safe from hackers or unauthorized users.

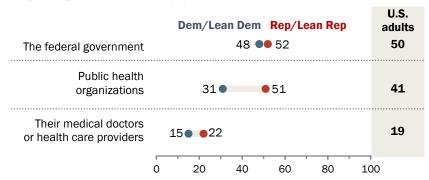
For some, those concerns also apply to public health organizations. About four-inten Americans (41%) say they are not at all or not too confident that public health organizations will keep their personal records safe.

Republicans and those who lean to the Republican Party are more likely to say this than Democrats and Democratic leaners (51% vs. 31%).<sup>2</sup>

The survey finds that people's phone-answering habits as well as their views about their personal records and how

# Roughly half of Republicans are not at all or not too confident public health organizations will keep their records safe, versus about three-in-ten Democrats

% of U.S. adults who are **not at all or not too confident** that \_\_ will keep their personal records safe from hackers or unauthorized users



Note: Those who did not give an answer or who gave other responses are not shown. Source: Survey of U.S. adults conducted July 13-19, 2020.

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prevalent they think scams are relate to whether they would be comfortable or likely to engage with contact tracing steps. Those who usually ignore both calls and voicemails from unknown numbers, those who think people often pretend to be someone else in order to steal others' personal information, and those who are less confident that public health organizations will keep these records safe are less likely to say they would be comfortable or likely to engage with the contact tracing process. For instance, 70% of those who are very confident that public health organizations will keep their personal records safe from hackers or unauthorized users say they would be comfortable or likely to engage with all three steps (likely to speak, comfortable sharing, would quarantine), compared with 21% of those who are not at all confident about the security of this data in the hands of public health organizations.

<sup>&</sup>lt;sup>2</sup> Unless otherwise stated, "Democrats" and "Republicans" in this report include those who lean toward each party.

Moreover, those who had seen or heard a great deal or some about contact tracing and what it entails at the time the survey was fielded are more likely to be "comfortable or likely to engage" with all steps of the process than those with less awareness.

There are also differences among some demographic and partisan groups relating to their stated comfort or likelihood of engaging with the contact tracing process. For example, Democrats are more inclined than Republicans to say they are comfortable or likely to engage with each step in the contact tracing and quarantine process. Some 36% of Republicans say they would be comfortable or likely to engage with contact tracing and quarantine protocols according to our "speak, share, quarantine" definition of engagement, compared with six-in-ten Democrats.3

Breaking down the individual steps, 68% of Democrats say they would be very or somewhat likely to speak with a

### Republicans less likely than Democrats to say they would be likely or comfortable to engage with every step of the contact tracing process

% of U.S. adults who say they would \_\_\_ if contacted by a public health official to speak about the coronavirus

	Rep/Lean Rep Dem/Lean Dem	DIFF
Be very/somewhat likely to speak with a public health official by phone/text message*	49 ● 68	19
Be very/somewhat comfortable sharing names of people they might have been in physical contact with	63 ● ● 81	18
Be very/somewhat comfortable sharing places they have recently visited	70● ● 85	15
Be very/somewhat comfortable sharing location data from their cellphone	40 ● ● 58	18
Definitely/probably act on advice to <b>quarantine</b> if told they had the coronavirus*	97 88 • •	9
Be comfortable or likely to engage with all steps of the process (speak, share, quarantine)**	36 ● ● 60	24
0	20 40 60 80 10	0

<sup>\*</sup>Based on the half sample of respondents randomly assigned to receive these questions.

Source: Survey of U.S. adults conducted July 13-19, 2020. "The Challenges of Contact Tracing as U.S. Battles COVID-19"

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public health official if they were contacted by phone or text about the coronavirus outbreak,

<sup>\*\*</sup>The calculations about people engaging with coronavirus-related contact tracing programs are built around a random half sample of respondents, using questions about the likelihood they would speak with a public health official who contacted them via phone or text message to speak about the coronavirus; their comfort in sharing information about people they'd been in contact with and where they'd been; and their willingness to quarantine if advised to do so by a public health official because they had the coronavirus. Those who did not give an answer for any one of the relevant steps in the process are not shown. For more details about these calculations, see the report section "In all, 48% of adults say they would be comfortable or likely to engage with all three key steps of the contact tracing process."

<sup>&</sup>lt;sup>3</sup> The role of partisanship remains when controlling for other relevant demographic factors for each outcome.

compared with 49% of Republicans, for example. And 88% of Republicans report they would definitely or probably quarantine, compared with 97% of Democrats – with about six-in-ten Republicans (59%) saying they would *definitely* do so, compared with 85% of Democrats.

Americans' stated comfort with or likelihood of engaging with key parts of the contact tracing process varies across other demographic groups as well. In particular, adults with higher incomes are more likely than those with middle or lower incomes to say they would be likely to speak with a public health official and would be comfortable sharing information. For example, 85% of those with relatively high incomes say they would be very or somewhat comfortable sharing the places they have recently visited with a public health official, compared with 73% of those with relatively low incomes who say that. And a similar pattern follows by levels of formal educational attainment.

These are some of the key findings from a Pew Research Center survey of 10,211 U.S. adults conducted July 13-19, 2020, using the Center's <u>American Trends Panel</u>. They add to the body of research the Center has conducted since March about the <u>health</u>, <u>economic</u> and <u>political effects</u> of COVID-19. These findings also relate to survey results from September showing 49% of Americans would <u>definitely or probably not get a coronavirus vaccine</u> if one were available today. Additionally, this material expands on insights about people's wariness about the likely impact of <u>privacy and location-monitoring apps</u> on smartphones in limiting the spread of COVID-19 as techfocused solutions continue to be developed.

The remainder of this report is structured to map the way data collection and analysis might unfold in a <u>contact tracing process</u>. It starts by discussing public awareness of contact tracing, then proceeds to examine people's behavior around calls from unknown numbers (as calls from a public health agency might arrive) and related perceptions of how secure their personal information might be. It then examines people's views about three key steps in the contact tracing process (speak, share, quarantine) and, finally, turns to people's views about how personal, health-related data is protected and used once it is gathered. Extensive tables about how different demographic and other groups responded to all these questions are available in the <u>Appendix</u> to this report.

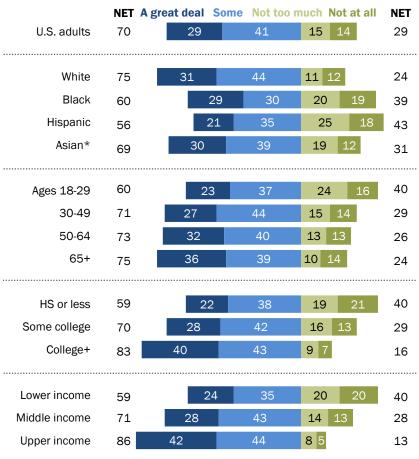
### 70% of Americans say they had at least some awareness of contact tracing as of July

People's views about contact tracing and related issues like privacy and data security could have a critical impact on the success of contact tracing programs and the trajectory of the pandemic. Public health modeling of the spread of COVID-19 has shown that successful contact tracing can depress the number of infections dramatically if those who are infected are quarantined and contacts and places visited are identified.

As public health officials and organizations work to combat misinformation about contact tracing, they also must try to communicate effectively with the public about its goals and purpose. The July survey found that while the majority of Americans said they had heard about this process as of the survey's fielding, another share, though a minority, said they had not heard much or anything. Overall, 70% of Americans had seen or heard at least some about contact tracing as of mid-July, with 29% having heard a

### Seven-in-ten adults had seen or heard at least some about contact tracing as of July

% of U.S. adults who say they had seen or heard \_\_ about public health officials using a process called "contact tracing" to gather information to try to prevent the spread of infectious diseases such as COVID-19



<sup>\*</sup>Asian adults were interviewed in English only.

Note: White, Black and Asian adults include those who report being only one race and are not Hispanic. Hispanics are of any race. Family income tiers are based on adjusted 2018 earnings. Those who did not give an answer are not shown.

Source: Survey of U.S. adults conducted July 13-19, 2020.

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great deal about the process. At the same time, 29% reported hearing nothing at all or not too much about this process.

Majorities across groups had at least some awareness of contact tracing at the time, but not all Americans had seen or heard equal amounts about the process. About four-in-ten Black adults (39%) and Hispanic adults (43%) said they had not heard much or anything at all about contact tracing at the time, while roughly three-in-ten Asian American adults (31%) and about a quarter of White adults (24%) said the same.<sup>4</sup>

Younger Americans and women were also more likely to have less awareness about contact tracing. Some 40% of 18- to 29-year-olds said they had heard not too much or nothing at all as of the survey's fielding, compared with 29% of 30- to 49-year-olds, 26% of 50- to 64-year-olds and 24% of those 65 and older. Roughly three-in-ten men (27%) and women (31%) reported having not seen or heard much, if anything, about this process.

Those who have less formal education and relatively low incomes were also less likely to have heard much about the contact tracing process. Four-in-ten adults with a high school diploma or less formal education had not heard anything at all or had not heard too much as of July, compared with about three-in-ten adults with some college (29%) and 16% of adults with a bachelor's degree or higher. Awareness of contact tracing similarly increases with income level.

Partisan differences in the amount of information heard or seen about contact tracing were present, but were small. About three-in-ten Republicans (31%) said they had heard nothing at all or not much about the topic, compared with 26% of Democrats.

<sup>&</sup>lt;sup>4</sup> This survey includes a total sample size of 298 Asian Americans. The sample includes English-speaking Asian Americans only and, therefore, may not be representative of the overall Asian American population (75% of our weighted Asian American sample was born in another country, compared with 77% of the Asian American adult population overall). Despite this limitation, it is important to report the views of Asian Americans on the topics in this study. As always, Asian Americans' responses are incorporated into the general population figures throughout this report. Asian Americans are shown as a separate group when the question was asked of the full sample. Because of the relatively small sample size and a reduction in precision due to weighting, results are not shown separately for Asian Americans for questions that were only asked of a random half of respondents (Form 1/Form 2) or some filtered questions. We are also not able to analyze Asian American respondents by demographic categories, such as gender, age or education.

### Majority of Americans do not generally answer their cellphone when unknown numbers pop up, but many of them listen to voicemails

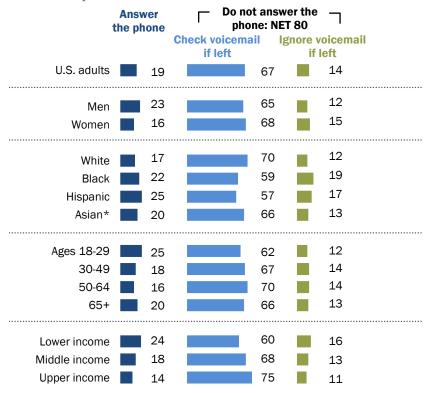
The contact tracing process generally <u>begins</u> when someone who is diagnosed with an infectious disease is asked about the places they have been and the people with whom they have been in contact. Contact tracers then try to track down others who might have come in contact with the infected person. And while some contact tracing efforts rely on text messages or in-person visits, the outreach often begins with a phone call.

In light of general public wariness about <u>calls from</u> <u>unknown numbers</u>, the Center asked in this survey about people's general practice when an unknown number calls their cellphone – as would often be the case when a contact tracer was trying to get in touch.

The results indicate that the first step in the contract tracing process may be challenged by reluctance to answer unknown calls. Only 19% of Americans

### Majority of Americans say they do not generally answer their cellphone for unknown numbers, but many of them do listen to voicemails

% of U.S. adults who say they generally \_\_ when an unknown number calls their cellphone



<sup>\*</sup>Asian adults were interviewed in English only.

Note: White, Black and Asian adults include those who report being only one race and are not Hispanic. Hispanics are of any race. Family income tiers are based on adjusted 2018 earnings. Those who did not give an answer are not shown.

Source: Survey of U.S. adults conducted July 13-19, 2020.

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report they generally would answer the phone to see who it is; another 14% would not answer and ignore a voicemail if one is left. The majority of U.S. adults (67%) would not answer the phone but would check a voicemail if left.

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Small differences are present across demographic groups in terms of general call-answering behavior. Men and younger adults are more likely to answer a call from an unknown number than their counterparts. Black adults (22%) and Hispanic adults (25%) are somewhat more likely to answer the call than White adults (17%), while a fifth of Asian Americans would answer the call from an unknown number. And Black and Hispanic adults are also somewhat more likely to not answer and ignore a voicemail (19% and 17%, respectively) compared with a smaller share of White adults (12%).

# Majorities of Americans think others are often or sometimes out to steal people's information and that their information is less secure than it used to be

This survey also explored the degree to which people are worried about others pretending to be someone else in order to steal people's personal information – an issue that <u>concerns those</u>

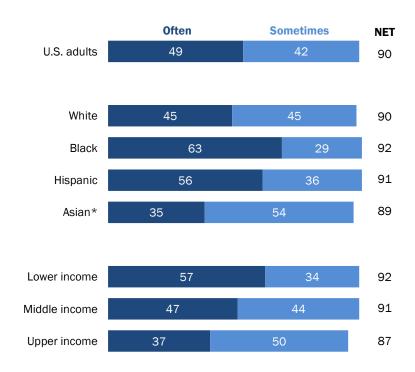
running contact tracing efforts because it could affect people's willingness to answer their phones and provide personal or sensitive information. Some groups are more concerned than others about this prospect.

Fully 90% of Americans think people pretend to be someone else in order to try to steal people's personal information often or sometimes, with roughly half (49%) saying they think this happens often. While these overall shares are fairly consistent across demographic groups, there is more variation across groups on whether people *often* pretend to be someone else to steal information.

Black adults (63%) and Hispanic adults (56%) are more likely than White (45%) or Asian adults (35%) to say

## Nine-in-ten U.S. adults think people often or sometimes pretend to be someone else in order to try to steal personal information

% of U.S. adults who think people \_\_\_ pretend to be someone else in order to try to steal people's personal information



<sup>\*</sup>Asian adults were interviewed in English only.

Note: White, Black and Asian adults include those who report being only one race and are not Hispanic. Hispanics are of any race. Family income tiers are based on adjusted 2018 earnings. Those who did not give an answer or who gave other responses are not shown. Source: Survey of U.S. adults conducted July 13-19, 2020.

<sup>&</sup>quot;The Challenges of Contact Tracing as U.S. Battles COVID-19"

this type of attempted theft happens often. Additionally, those with relatively low incomes and less formal education are more likely to say people pretend to be someone else in order to steal others' information often. Roughly six-in-ten of those who have lower incomes say so, compared with about half of those from middle-income households (47%) and about four-in-ten of those with higher incomes (37%).

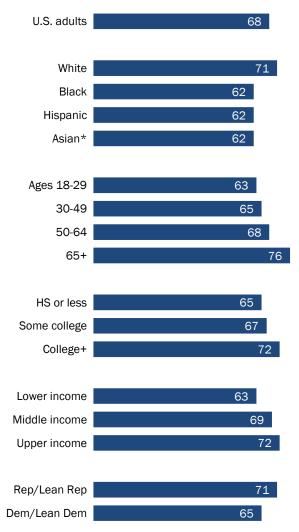
Similarly, 57% of those with a high school education or less, 50% of those with some college and 36% of those with a bachelor's degree or higher say this is often the case. There are no differences in people's views on this when it comes to partisanship.

Beyond their perceptions about people stealing other people's information, a majority of Americans also feel their personal information is less secure than it used to be. This survey finds that roughly two-thirds of Americans (68%) feel their personal information is less secure compared with five years ago. Some 27% say that their information is about as secure as five years ago, while only 5% say that their personal information is more secure than five years ago. These results are in line with those gathered in a 2019 Center poll on Americans' views of privacy.

At least six-in-ten Americans across demographic groups say they feel their information is less secure. However, there are some small differences in shares who say this by race and ethnicity, age, education, income, and partisanship. White adults are more likely to say that their information is less secure today than those of other racial and ethnic groups, with about seven-in-ten White adults (71%) saying this compared with about six-in-ten of those who identify as part of other racial and ethnic groups (62% each of

# About two-thirds of Americans say their personal information has become less secure in last five years

% of U.S. adults who feel their personal information is **less secure** compared with five years ago



\*Asian adults were interviewed in English only.

Note: White, Black and Asian adults include those who report being only one race and are not Hispanic. Hispanics are of any race. Family income tiers are based on adjusted 2018 earnings. Those who did not give an answer or who gave other responses are not shown.

Source: Survey of U.S. adults conducted July 13-19, 2020.

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Black, Hispanic and Asian adults). Older respondents are also more likely than younger adults to

say their information is less secure; 76% of those ages 65 and older say they feel their personal information is less secure now than it was five years ago.

Those with higher levels of formal education and relatively high incomes are also more likely to say their personal information is less secure. Those with a bachelor's degree or higher (72%) are more likely than those with less formal education to say so. And those with higher incomes (72%) and middle incomes (69%) are more likely to say so than those with lower incomes (63%).

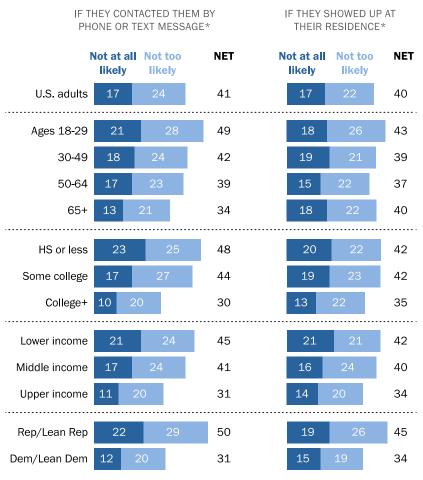
### About four-in-ten adults say they would not be likely to speak with public health officials by phone or text message or at their home

Americans' concerns about the safety of their personal data is an important backdrop to their views about various aspects of contact tracing programs. In addition to coping with Americans' wariness about picking up their phones and their perceptions about the frequency of scams, contact tracers face another struggle: Some adults say they would not be likely to speak with a public health official by phone or text message or in person.

In this survey, Americans were asked specifically about how they would respond to outreach by public health officials trying to contact them to speak about the coronavirus outbreak. Half of respondents were asked how likely they would be to speak with a public health official on the phone or via text message about the coronavirus outbreak. and the remainder were asked how they would respond to a public health official who showed up at their residence. About four-in-ten Americans (41%) who were asked about their likelihood of speaking with a public health official if they

### About four-in-ten Americans say they would not be likely to speak with a public health official by phone or text message about the coronavirus outbreak

% of U.S. adults who say they would be \_\_ to speak with a public health official if they contacted them by phone or text message or at their residence to speak with them about the coronavirus outbreak



<sup>\*</sup>Based on the half sample of respondents randomly assigned to receive these questions. Respondents were randomly assigned to either receive the question about speaking on the phone or via text message, or the question about speaking at their residence. Note: Those who did not give an answer or who gave other responses are not shown. Source: Survey of U.S. adults conducted July 13-19, 2020. "The Challenges of Contact Tracing as U.S. Battles COVID-19"

contacted them by phone or text message say that they would be not at all or not too likely to do this, and 40% of those asked about speaking with an official who showed up at their residence say they would be not at all or not too likely to do the same.

People's stated likelihood of speaking with an official varies somewhat by the mode of contact when examining Americans' views by gender, age, and race and ethnicity. Women and men are about equally likely to say they would talk with a public health official via phone or text message, but women are less likely to report they would speak in person: 44% of women, compared with 36% of men, say they would be not at all or not too likely to speak with a public health official who showed up at their residence. Younger adults are less likely than their older counterparts to say they would speak with a public health official via phone or text, despite their relative willingness to generally answer the phone for unknown numbers. Some 49% of those ages 18 to 29 say they would be not at all or not too likely to speak with a public health official in this manner, compared with 34% of those 65 and older.

There are also differences in people's reported likelihood of speaking with a public health official by income and education. For instance, 30% of Americans with a bachelor's degree or higher say they would be not at all or not too likely to speak by phone or text message, compared with 44% of those with some college and 48% of those with a high school diploma or less; and 35% of those with at least a bachelor's degree say they would be not at all or not too likely to speak in person, compared with 42% each of those with a high school diploma or less or some college. A similar pattern applies by income. Those with relatively low and middle incomes are less likely to say they'd be likely to speak with a public health official about the coronavirus outbreak compared with those from households with the highest incomes.

Finally, there are clear partisan differences in what Americans say about their likelihood of speaking with a public health official, and the differences are larger when the issue is phone- or text-based contact than for in-person contact. Half of Republicans say they would be not at all or not too likely to do so via phone or text, compared with 31% of Democrats. These differences persist when considering ideology. For example, 52% of conservative Republicans versus 26% of liberal Democrats say they would be not at all or not too likely to speak by phone or text, and 47% of conservative Republicans versus 30% of liberal Democrats say the same about speaking with a public health official in person if they showed up at their residence.

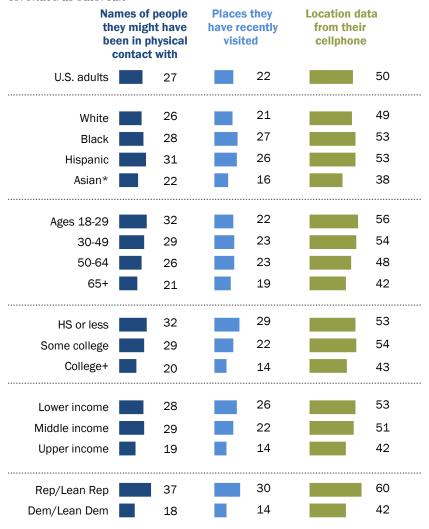
Some express discomfort sharing information with a public health official about where they have been, whom they were in physical contact with

In addition to asking people whether they might engage at all with a public health official during the COVID-19 outbreak, this survey explored another dimension of potential cooperation - comfort with sharing several pieces of relevant information within the contact tracing process. Before they answered this question, individuals were told: "In 'contact tracing,' public health officials interview people who have a confirmed COVID-19 diagnosis in order to identify everyone who has had contact with them, and who are therefore at risk of getting COVID-19." Individuals were asked about their comfort with sharing the names of people they may have been in physical contact with, places they have recently visited and location data from their cellphone.

Roughly three-in-ten Americans say they would be

### A portion of adults say they would be uncomfortable sharing names of contacts or places they have recently visited with a public health official

% of U.S. adults who say they would be **not at all or not too comfortable** sharing \_\_ with a public health official during the coronavirus outbreak



<sup>\*</sup>Asian adults were interviewed in English only.

Note: White, Black and Asian adults include those who report being only one race and are not Hispanic. Hispanics are of any race. Family income tiers are based on adjusted 2018 earnings. Those who did not give an answer or who gave other responses are not shown. Source: Survey of U.S. adults conducted July 13-19, 2020.

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not at all or not too comfortable sharing names of people with whom they have been in physical contact, and 22% express similar discomfort with disclosing the places they have recently visited.

And even as <u>tech companies</u> and governments have worked to research and release <u>technology-focused</u> solutions or supplements to contact tracing, a sizable portion of Americans continue to express discomfort with <u>such efforts</u>. This survey specifically asked about people's comfort sharing *location* data from their cellphones and finds half of all U.S. adults say they would be not at all (29%) or not too (21%) comfortable doing this. (An <u>April 2020 Center survey</u> similarly found that 48% of Americans said it was unacceptable for the government to use people's cellphones to track the location of people who had tested positive for the coronavirus, and 54% said the same for tracking people who had been in contact with a positive case.)

Majorities of Americans from both major parties express comfort sharing the names of people they might have been in physical contact with and the places they recently visited, though Republicans express less comfort than Democrats – with gaps of 15 percentage points or more in the shares of partisans who say they are not at all or not too comfortable sharing such information. Some 37% of Republicans say they would feel not at all (20%) or not too (18%) comfortable sharing names of contacts with a public health official, compared with 18% of Democrats who say the same (6% not at all and 12% not too comfortable). Some three-in-ten Republicans report they would be not at all (17%) or not too (14%) comfortable sharing places they have visited, compared with 14% of Democrats who say they would be not at all (5%) or not too (9%) comfortable doing the same. And 60% of Republicans would be not at all (40%) or not too (20%) comfortable sharing location data from their cellphone, compared with 42% of Democrats (19% and 22%, respectively).

Younger adults express less comfort sharing information than older adults. For example, about a third (32%) of those ages 18 to 29 say they would be not at all or not too comfortable sharing the names of those with whom they have been in contact with a public health official, compared with just 21% of those 65 and older who feel that way. Overall, those under 50 are more likely than those 50 and older to say they are not at all or not too comfortable sharing the names of people they've been in contact with (30% of those 18 to 49 say this vs. 24% of those 50+) and location data from their cellphone (55% vs. 46%). Some 43% of those ages 18 to 29 report being *very* comfortable sharing places they've recently visited, compared with larger shares of other age groups saying the same (48% of those ages 30 to 49, 50% of those 50 to 64 and 57% of those 65 and older).

Those with lower incomes and less formal education also tend to be less likely to be comfortable sharing information. About three-in-ten individuals with lower (28%) and middle (29%) incomes say they would be not at all or not too comfortable sharing names of contacts, compared with 19%

of those with higher incomes. Some 29% of those with a high school diploma or less express a similar lack of comfort with sharing places they've visited, compared with 22% of those with some college and 14% with a bachelor's degree or more education.

# Majority of Americans say they would quarantine for two weeks if told they should do that by a public health official, but some report this would be difficult

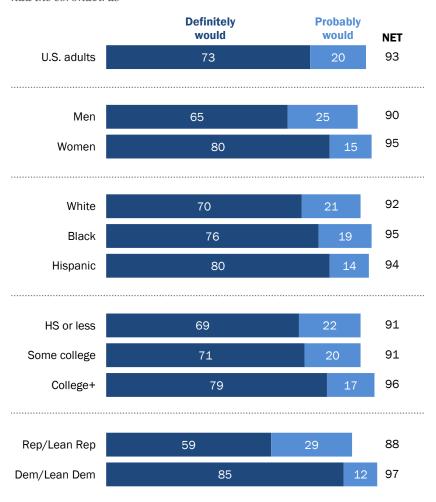
Americans report high levels of willingness to quarantine if advised to do so by a public health official because they had the coronavirus. But they offer mixed reports about how difficult it would be to do this.

Half of the Americans surveyed were asked about whether they would act on the advice of a public health official to quarantine because they had the coronavirus, while the other half were asked about the difficulty of doing so. Over nine-in-ten adults (93%) say they definitely (73%) or probably (20%) would act on advice to quarantine for 14 days if told they had the coronavirus. Just 2% say they definitely would not follow that request, and 5% report they probably would not do so.

Although the vast majority of Americans who identify with either party say that they would definitely or probably quarantine, partisan differences again emerge. Some 88% of Republicans say they would definitely or probably act on advice to quarantine, while 97%

### 73% of Americans say they would definitely act on advice from a public health official to quarantine if they had COVID-19

% of U.S. adults who say they \_\_\_ act on the advice of a public health official if told they should quarantine themselves for at least 14 days because they had the coronavirus



Note: Based on the half sample of respondents randomly assigned to receive this question. White and Black adults include those who report being only one race and are not Hispanic. Hispanics are of any race. Those who did not give an answer or who gave other responses are not shown.

Source: Survey of U.S. adults conducted July 13-19, 2020.

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of Democrats say the same. Republicans are 26 percentage points less likely than Democrats to say they *definitely* would quarantine, with 59% of this group saying so compared with 85% of Democrats.

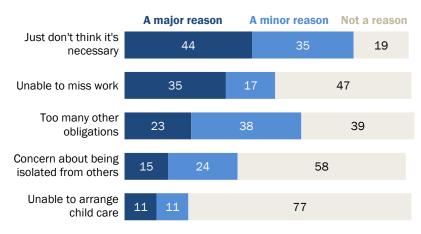
Women are also more likely than men to report they would definitely quarantine (80% vs. 65%). Additionally, Black (76%) or Hispanic adults (80%) are more likely to report this than White adults (70%). And those with at least a bachelor's degree are more likely to report they would definitely quarantine; 79% of college-educated adults say so, compared with 71% of those with some college and 69% of those with a high school diploma or less.

The small share of Americans – 7% – who say they would definitely or probably not quarantine were then asked about possible reasons why they may not act on this advice. Some 44% of this group say a major reason they would be unlikely to quarantine is that they just don't think it would be necessary, while 35% say the same about not being able to miss work.

Smaller shares of those who say it's unlikely they would isolate due to COVID-19 cite having too many other obligations (23%), their concern about being isolated from others (15%) or being unable to arrange child care (11%) as major reasons.

### Some of those who would not likely quarantine say they just don't think it's necessary

Among the 7% of U.S. adults who say they **definitely would not or probably would not act on advice to quarantine**, % who say each statement is \_\_ why they would be unlikely to quarantine themselves for at least 14 days



Note: Based on the half sample of respondents randomly assigned to receive these questions. Those who did not give an answer are not shown.

Source: Survey of U.S. adults conducted July 13-19, 2020.

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Yet of those asked *how difficult* it would be to act on advice to quarantine if told they had the coronavirus, Americans express more varied views. Roughly three-in-ten adults say that it would be very (10%) or somewhat (22%) difficult to quarantine. Men are more likely than women to say so (35% vs. 29%), and younger adults are more likely to say it would be very or somewhat difficult to quarantine than those 65 and older.

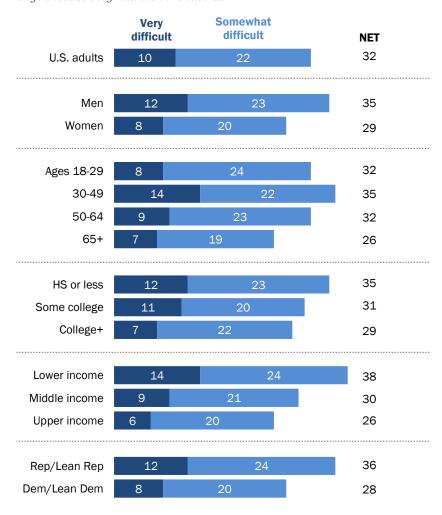
Education and income again play a role when it comes to the difficulty people might have in

quarantining. Some 35% of those with a high school diploma or less report it would be very or somewhat difficult to quarantine, compared with 29% of those with a bachelor's degree. And Americans are less likely to express difficulty as their income rises: 38% of adults from households with lower incomes, 30% of those from households in the middle income category and 26% of those with higher incomes say it would be very or somewhat difficult to quarantine.

The 32% of Americans who said that they would find it very or somewhat difficult to quarantine for 14 days were similarly asked why that would be so. Some 40% of this group said a major reason would be that they have too many other obligations; 39% say the same about being be unable to miss work. Less frequently cited as major reasons were concern about being isolated from others (23%), being unable to arrange child care (22%) and just not thinking it's necessary (21%).

### About three-in-ten Americans say it would be very or somewhat difficult to quarantine if they had COVID-19

% of U.S. adults who say it would be \_\_\_ to be able to act on the advice of a public health official if told they should quarantine themselves for at least 14 days because they had the coronavirus



Note: Based on the half sample of respondents randomly assigned to receive this question. Family income tiers are based on adjusted 2018 earnings. Those who did not give an answer or who gave other responses are not shown.

Source: Survey of U.S. adults conducted July 13-19, 2020.

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### In all, 48% of adults say they would be comfortable or likely to engage with all three key steps of the contact tracing process

A <u>successful contact tracing program</u> is built around people's compliance with key steps of the process. This survey asked people about their attitudes toward three of those steps that would be initiated by a public health official during the coronavirus outbreak. First, they were asked how likely they would be to **speak with** a public health official who contacted them to speak about the coronavirus outbreak by phone or text message. Second, they were asked about how comfortable they would be to **share information** about the names of people with whom they might have been in contact and about where they have been (either via names of places they've recently visited or via cellphone location data). Third, they were asked about whether they would act on advice from a public health official to **quarantine for 14 days** because they had the coronavirus. Our combination of these three steps – speak, share and quarantine – uses data from the random subset of respondents who were asked about all three of these things.<sup>5</sup>

Looking at the various combinations of responses to those questions, this survey finds that **48%** of Americans would be relatively **comfortable or likely to engage** with **all three** of those steps, and **51%** would be relatively resistant to at least one core aspect of the process. In making this calculation, we used a somewhat generous definition of engagement. (The percentages who actually *would* cooperate could be higher or lower.) The 48% referred to in most of this report as "comfortable or likely to engage" with all steps are those who say they would do all of the following in the coronavirus contact tracing process:

- **Speak:** Be very or somewhat likely to speak with a public health official if they were contacted by phone or text message to speak about the coronavirus outbreak.
- **Share names of contacts:** Be very or somewhat comfortable sharing with a public health official the names of people they might have been in physical contact with.
- **Share information about where they have been:** Be very or somewhat comfortable sharing with a public health official information about the places they have recently visited, OR very or somewhat comfortable sharing location data from their cellphone.<sup>6</sup>

<sup>&</sup>lt;sup>5</sup> The same half sample of respondents was randomly assigned to receive questions about speaking with a public health official via phone or text message (as opposed to at their residence) and whether they would quarantine (as opposed to the difficulty of quarantining). While the full sample of individuals was asked about sharing information, only those in the same random subset are used in this portion of analysis so that we can account for all three steps.

<sup>&</sup>lt;sup>6</sup> People were counted as comfortable sharing location information if they either said they would be very/somewhat comfortable sharing the places they have recently visited or would be very/somewhat comfortable sharing location data from their cellphone. They didn't have to express their comfort with sharing both kinds of location data with a public health official in order to be classified as a "comfortable or likely to engage with the process." If they only answered one question about where they've been (places they've visited or sharing location data from their cellphone), that answer was used to classify them.

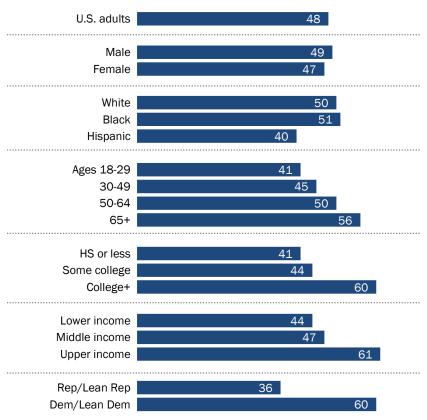
 Quarantine: Definitely or probably would quarantine themselves for at least 14 days if they were told by a public health official they had the coronavirus.

If a more stringent definition of engagement were applied taking only those who said they would be very likely to speak, those who are very comfortable sharing information (about whom they might have been in physical contact with and where they'd been), and those who would *definitely* quarantine – the share of Americans who say they would be comfortable or likely to engage is far lower. Only 16% of Americans would be considered comfortable or likely to engage with all three steps by this more stringent definition. However, for our primary analysis that follows, we use the more "lenient" version – counting one as likely or comfortable to engage with the entire process if they've identified in the top two most likely, comfortable or willing categories.

There are some notable differences among groups

### 48% of Americans say they'd be comfortable or likely to engage with all three key contact tracing steps

% of U.S. adults who say they would be **very or somewhat comfortable or likely to engage** with all three key steps of the process (speak, share, quarantine)\*



\*The calculations about people engaging with coronavirus-related contact tracing programs are built around a random half sample of respondents, using questions about the likelihood they would speak with a public health official who contacted them via phone or text message to speak about the coronavirus; their comfort in sharing information about people they'd been in contact with and where they'd been; and their willingness to quarantine if advised to do so by a public health official because they had the coronavirus. Those who did not give an answer for any one of the relevant steps in the process are not shown. For more details about these calculations, see the report section "In all, 48% of adults say they would be comfortable or likely to engage with all three key steps of the contact tracing process." Note: White and Black adults include those who report being only one race and are not Hispanic. Hispanics are of any race. Family income tiers are based on adjusted 2018 earnings.

Source: Survey of U.S. adults conducted July 13-19, 2020. "The Challenges of Contact Tracing as U.S. Battles COVID-19"

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when it comes to their stated engagement with these three contact tracing activities. Republicans

are less likely than Democrats to say they are comfortable or likely: 36% of Republicans would fall into this group, according to our relatively "generous" definition of stated engagement, compared with six-in-ten Democrats.

In addition, younger adults, Hispanic adults, those with lower incomes and those with less formal education are less likely to be fully comfortable or likely to engage with the process than their counterparts. About four-in-ten adults ages 18 to 29 (41%) say they would be comfortable or likely to engage with all three steps, compared with 56% of those ages 65 and older. And while White and Black adults are similarly likely to fall into this group given their responses – about half of each group expresses full comfort or likelihood engaging – Hispanic adults are less likely to say this (four-in-ten Hispanic adults say so).

Roughly six-in-ten individuals with a bachelor's degree or higher formal education (60%) and those from households with higher incomes (61%) say they would be fully comfortable or likely to engage. Smaller shares of those with lower incomes and less education say the same.

Beyond these differences in stated comfort or likelihood by demographic and partisan breaks, there are also differences in people's comfortable or likely engagement with contact tracing programs based on their awareness of contact tracing, their general behaviors such as willingness to answer their phones when an unknown number calls, and their general views about individuals trying to steal people's personal information.

For example, results from this survey show that people's comfort with or likelihood of engaging with the contact tracing and isolation process (speak, share, quarantine) rises with increased awareness of contact tracing. Some 63% of those who had seen or heard a great deal about contact tracing as of July say they would be comfortable or likely to engage with all three parts of the contact tracing effort that we explore here: that is, speaking with a public health official by phone or text message, sharing names of contacts and names of locations or location data, and quarantining. In contrast, 35% of those who have seen or heard not too much say they would do the same, and only 29% of those who've seen or heard nothing at all say this.

In addition, Americans' comfort with and likelihood of engaging with the process are also related to their general tendency to pick up the phone; for example, 54% of those who would answer a call on their cellphone from an unknown number say they would be comfortable or likely to engage with every step, compared with 33% of those who would ignore both a call and a voicemail.

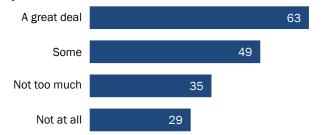
Looking specifically at likelihood of speaking with a contact tracer by phone or text (the first step in the process), 68% of those who would generally answer the phone say they would be very or somewhat likely to speak with a contact tracer by phone or text, compared with 58% of those who would not answer but check a voicemail and 42% of those who would not answer and ignore a voicemail.

Finally, those who think others often pretend to be someone else to steal others' personal information are less likely to be comfortable or likely to engage with these key contract tracing and isolation steps. Roughly four-in-ten of those who say that people often pretend to be

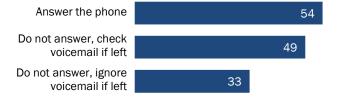
### Several factors tie to whether people say they would be comfortable or likely to engage with the entire contact tracing process

% of U.S. adults who say they would be **very or somewhat comfortable or likely to engage** with all three key steps of the process (speak, share, quarantine)\*

### Among those who say they had seen or heard \_\_ about contact tracing as of July



### Among those who generally \_\_ when an unknown number calls their cellphone



### Among those who think people \_\_ pretend to be someone else in order to try to steal people's personal information



\*The calculations about people engaging with coronavirus-related contact tracing programs are built around a random half sample of respondents, using questions about the likelihood they would speak with a public health official who contacted them via phone or text message to speak about the coronavirus; their comfort in sharing information about people they'd been in contact with and where they'd been; and their willingness to quarantine if advised to do so by a public health official because they had the coronavirus. Those who did not give an answer for any one of the relevant steps in the process are not shown. For more details about these calculations, see the report section "In all, 48% of adults say they would be comfortable or likely to engage with all three key steps of the contact tracing process." Note: Those who did not give an answer are not shown.

Source: Survey of U.S. adults conducted July 13-19, 2020.

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someone else to steal others' personal information say they are also comfortable or likely to engage with the entire process, compared with about half of those who say people sometimes do this (52%) or rarely or never do this (51%).

# About six-in-ten Americans are confident public health organizations will protect their records from hackers or unauthorized users, but Republicans are less confident

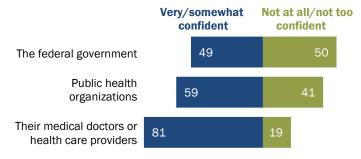
In light of general <u>privacy concerns about tech-based solutions to contact tracing</u>, as well as <u>new findings</u> about general trust in public institutions, the Center survey asked Americans about their confidence in the ability of specific potential collectors and users of contact tracing data to keep their records safe.

Overall, Americans generally feel their doctors and health care providers will keep their personal

records safe from hackers or unauthorized users, with about eight-in-ten Americans expressing confidence that they will do so. A majority feels the same way about public health organizations, though four-inten say they are not at all or not too confident that these organizations will keep their records safe. And roughly half of U.S. adults (49%) are at least somewhat confident in the ability of the federal government to keep their records safe.

# Half of Americans are not confident in the federal government to protect their records, and 41% say the same about public health organizations

% of U.S. adults who are  $\_\_$  that each group will keep their personal records safe from hackers or unauthorized users



Note: Those who did not give an answer are not shown. Source: Survey of U.S. adults conducted July 13-19, 2020. "The Challenges of Contact Tracing as U.S. Battles COVID-19"

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### **Smaller shares of Americans**

are *not at all* confident that these institutions will keep their records safe, but roughly a fifth of Americans (21%) say this about the federal government. Some 15% of Americans say the same about public health organizations, and only 6% are not at all confident that their medical doctor or health care providers will keep their records safe.

While these confidence levels are fairly consistent across most groups, Republicans are more likely than Democrats to express a lack of confidence that public health organizations, their medical doctors or health care providers, and the federal government will keep their personal records safe.

These differences are particularly large for public health organizations: Republicans are 20 percentage points more likely to say that they are at not at all or not too confident that public health organizations will do this, with 51% saying this compared with 31% of Democrats. Republicans are also more likely to be at most not too confident that their doctors or providers will keep their records safe, though the gap between parties is smaller; 22% express at most not too much confidence, compared with 15% of Democrats. An even smaller but significant gap exists between Republicans and Democrats who are not at all or not too confident in the federal

government's ability to keep their records safe (52% vs. 48%).

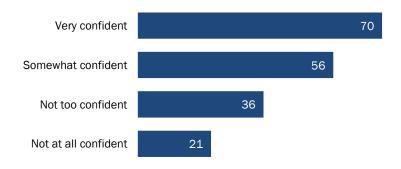
One important consideration, then, is whether those who express less confidence that public health organizations will keep their records safe from hackers or unauthorized users are less likely to say they'd be comfortable or likely to engage with key contact tracing protocols.

This survey finds that this is indeed the case. Examining the group of individuals asked about their comfort or likely engagement with all three steps, we find that fully seven-in-ten of those who are very confident that public health organizations will protect their personal records from hackers or unauthorized users also say that they would be comfortable or likely to engage

### Confidence in public health organizations to keep records safe is related to comfortable or likely engagement with the full contact tracing process

% of U.S. adults who say they would be **very or somewhat comfortable or likely to engage** with all three key steps of the process (speak, share, quarantine)\*

### Among those who say they are \_\_ that public health organizations will keep their personal records safe from hackers or unauthorized users



\*The calculations about people engaging with coronavirus-related contact tracing programs are built around a random half sample of respondents, using questions about the likelihood they would speak with a public health official who contacted them via phone or text message to speak about the coronavirus; their comfort in sharing information about people they'd been in contact with and where they'd been; and their willingness to quarantine if advised to do so by a public health official because they had the coronavirus. Those who did not give an answer for any one of the relevant steps in the process are not shown. For more details about these calculations, see the report section "In all, 48% of adults say they would be comfortable or likely to engage with all three key steps of the contact tracing process." Note: Those who did not give an answer are not shown.

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with all three steps of the process. That compares with smaller shares of those who express less confidence (56% of those who are somewhat confident, 36% of those who are not too confident and 21% of those who are not at all confident).

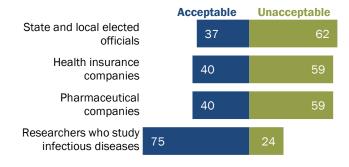
# Three-quarters of Americans think it is acceptable for public health officials to share personal information with infectious disease researchers, yet smaller shares say this for other groups

There has been <u>some controversy</u> about how data tied to coronavirus infections and deaths is being collected and shared with public health officials and researchers. Moreover, researchers themselves are sometimes <u>resistant</u> to data sharing.

This survey shows that threequarters think it is acceptable for public health officials to make personal information that may be collected during the coronavirus outbreak available for use by infectious disease researchers, while smaller shares say the same about pharmaceutical companies (40%), health insurance companies (40%) and state and local elected officials (37%).

### Three-quarters of Americans think it is acceptable for personal information to be made available to infectious disease researchers

% of U.S. adults who think it is **very or somewhat** \_\_\_ for the personal information that may be collected by public health officials during the coronavirus outbreak to be available for use by each group



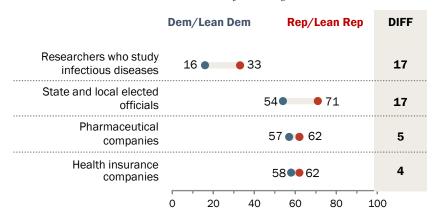
Note: Those who did not given an answer are not shown. Source: Survey of U.S. adults conducted July 13-19, 2020. "The Challenges of Contact Tracing as U.S. Battles COVID-19"

Once again, Republicans and Democrats vary in their views of the acceptability of sharing information with other entities, particularly when it comes to sharing data with state and local elected officials and with researchers who study infectious diseases. Republicans are 17 percentage

points more likely than
Democrats to think it is very or
somewhat unacceptable for
information to be available for
use by state and local elected
officials and by researchers
who study infectious diseases.
Partisans are more similar in
their views of personal
information being made
available to health insurance
companies or pharmaceutical
companies.

### Republicans more likely than Democrats to think it is unacceptable for other organizations or individuals to use information collected by public health officials

% of U.S. adults who think it is **very or somewhat unacceptable** for the personal information that may be collected by public health officials during the coronavirus outbreak to be available for use by ...



Note: Those who did not given an answer or who gave other responses are not shown. Source: Survey of U.S. adults conducted July 13-19, 2020.

<sup>&</sup>quot;The Challenges of Contact Tracing as U.S. Battles COVID-19"

### **Acknowledgments**

This report is a collaborative effort based on the input and analysis of the following individuals. Find related reports online at <a href="mailto:pewresearch.org/internet">pewresearch.org/internet</a>.

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In addition, the project benefited greatly from the guidance of several experts directly involved in contact tracing programs: Beth Noveck, director of the Governance Lab (GovLab) and Chief Innovation Officer of New Jersey, and Esther Dyson, chairman of EDventure Holdings. In addition, we profited from the expertise and advice of the leadership of the Pew Research Center science team – Cary Funk, Director of Research, and Alec Tyson, Associate Director of Research – and from the guidance of Pew Research Center's methodology team, including Andrew Mercer and Nick Bertoni.

### **Appendix: Detailed tables**

### Seven-in-ten adults had seen or heard at least some about contact tracing as of July

% of U.S. adults who say they had seen or heard  $\_$  about public health officials using a process called "contact tracing" to gather information to try to prevent the spread of infectious diseases such as COVID-19

0 1	-					
	NET	A great deal	Some	Not too much	Not at all	NET
U.S. adults	70	29	41	15	14	29
Men	73	30	43	14	13	27
Women	68	29	39	16	15	31
White	75	31	44	11	12	24
Black	60	29	30	20	19	39
Hispanic	56	21	35	25	18	43
Asian*	69	30	39	19	12	31
Ages 18-29	60	23	37	24	16	40
30-49	71	27	44	15	14	29
50-64	73	32	40	13	13	26
65+	75	36	39	10	14	24
HS or less	59	22	38	19	21	40
Some college	70	28	42	16	13	29
College+	83	40	43	9	7	16
Lower income	59	24	35	20	20	40
Middle income	71	28	43	14	13	28
Upper income	86	42	44	8	5	13
Rep/Lean Rep	69	24	44	16	15	31
Conserv Rep	70	25	45	16	13	29
Mod/lib Rep	67	24	43	16	16	32
Dem/Lean Dem	73	35	38	14	12	26
Conserv/mod Dem	68	31	37	16	15	31
Lib Dem	80	41	40	11	8	19
				I		

<sup>\*</sup>Asian adults were interviewed in English only.

Note: White, Black and Asian adults include those who report being only one race and are not Hispanic. Hispanics are of any race. Family income tiers are based on adjusted 2018 earnings. Those who did not give an answer are not shown.

Source: Survey of U.S. adults conducted July 13-19, 2020.

<sup>&</sup>quot;The Challenges of Contact Tracing as U.S. Battles COVID-19"

# Majority of Americans say they do not generally answer their cellphone for unknown numbers, but many of them do listen to voicemails

% of U.S. adults who say they generally \_\_ when an unknown number calls their cellphone

	Answer the phone	Do not answer the phone, check voicemail if left	Do not answer the phone, ignore voicemail if left
U.S. adults	19	67	14
Men	23	65	12
Women	16	68	15
White	17	70	12
Black	22	59	19
Hispanic	25	57	17
Asian*	20	66	13
Ages 18-29	25	62	12
30-49	18	67	14
50-64	16	70	14
65+	20	66	13
HS or less	23	59	17
Some college	19	68	12
College+	15	74	10
Lower income	24	60	16
Middle income	18	68	13
Upper income	14	75	11
Rep/Lean Rep	19	67	13
Conserv Rep	19	67	13
Mod/lib Rep	19	66	14
Dem/Lean Dem	20	66	13
Conserv/mod Dem	21	64	15
Lib Dem	18	70	11

<sup>\*</sup>Asian adults were interviewed in English only.

Note: White, Black and Asian adults include those who report being only one race and are not Hispanic. Hispanics are of any race. Family income tiers are based on adjusted 2018 earnings. Those who did not give an answer are not shown.

Source: Survey of U.S. adults conducted July 13-19, 2020.

<sup>&</sup>quot;The Challenges of Contact Tracing as U.S. Battles COVID-19"

# Nine-in-ten U.S. adults think people often or sometimes pretend to be someone else in order to try to steal personal information

% of U.S. adults who think people \_\_ pretend to be someone else in order to try to steal people's personal information

	NET	<b>N</b>	D 1	Some-	000	NET
U.S. adults	<b>NET</b> 9	Never 2	Rarely 8	times 42	<b>Often</b> 49	<b>NET</b> 90
o.s. addits	9	2	8	42	49	90
Men	12	1	10	43	45	88
Women	7	2	6	41	52	92
White	9	1	8	45	45	90
Black	7	3	4	29	63	92
Hispanic	8	1	7	36	56	91
Asian*	11	4	8	54	35	89
Ages 18-29	13	4	10	39	47	86
30-49	10	1	9	43	46	89
50-64	7	1	6	41	52	93
65+	7	1	6	45	48	92
HS or less	8	2	6	35	57	92
Some college	8	2	6	41	50	91
College+	12	1	11	51	36	87
Lower income	8	3	6	34	57	92
Middle income	9	1	8	44	47	91
Upper income	13	1	12	50	37	87
Rep/Lean Rep	8	1	7	42	49	91
Conserv Rep	7	1	6	44	48	92
Mod/lib Rep	10	2	8	40	50	90
Dem/Lean Dem	11	2	9	42	47	89
Conserv/mod Dem	9	2	7	39	51	91
Lib Dem	13	1	11	47	40	87

<sup>\*</sup>Asian adults were interviewed in English only.

Note: White, Black and Asian adults include those who report being only one race and are not Hispanic. Hispanics are of any race. Family income tiers are based on adjusted 2018 earnings. Those who did not give an answer are not shown.

Source: Survey of U.S. adults conducted July 13-19, 2020.

<sup>&</sup>quot;The Challenges of Contact Tracing as U.S. Battles COVID-19"

### About two-thirds of Americans say their personal information has become less secure in last five years

% of U.S. adults who feel their personal information is  $\_\_$  compared with five years ago

U.S. adults	<b>More secure</b> 5	About the same 27	<b>Less secure</b> 68
Men	5	29	66
Women	5	26	69
White	3	26	71
Black	9	30	62
Hispanic	8	30	62
Asian*	8	29	62
Ages 18-29	6	30	63
30-49	6	29	65
50-64	4	28	68
65+	3	21	76
HS or less	7	29	65
Some college	5	28	67
College+	3	25	72
Lower income	8	29	63
Middle income	4	27	69
Upper income	3	25	72
Rep/Lean Rep	5	24	71
Conserv Rep	4	23	73
Mod/lib Rep	5	25	70
Dem/Lean Dem	6	29	65
Conserv/mod Dem	6	28	65
Lib Dem	5	31	64

<sup>\*</sup>Asian adults were interviewed in English only.

Note: White, Black and Asian adults include those who report being only one race and are not Hispanic. Hispanics are of any race. Family income tiers are based on adjusted 2018 earnings. Those who did not give an answer are not shown.

Source: Survey of U.S. adults conducted July 13-19, 2020.

<sup>&</sup>quot;The Challenges of Contact Tracing as U.S. Battles COVID-19"

# About four-in-ten Americans say they would not be likely to speak with a public health official by phone or text message about the coronavirus outbreak

% of U.S. adults who say they would be  $\_$  likely to speak with a public health official if they contacted them by phone or text message to speak with them about the coronavirus outbreak

	NET	Very	Some- what	Not too	Not at all	NET
U.S. adults	58	25	33	24	17	41
Men	60	25	35	24	15	39
Women	57	25	31	23	19	42
White	59	26	34	24	16	40
Black	60	30	29	22	17	39
Hispanic	53	20	33	25	20	46
Ages 18-29	51	19	32	28	21	49
30-49	57	21	35	24	18	42
50-64	60	30	30	23	17	39
65+	65	31	34	21	13	34
HS or less	52	21	31	25	23	48
Some college	54	23	31	27	17	44
College+	70	32	38	20	10	30
Lower income	54	24	30	24	21	45
Middle income	58	24	34	24	17	41
Upper income	68	32	37	20	11	31
Rep/Lean Rep	49	17	32	29	22	50
Conserv Rep	47	17	30	28	24	52
Mod/lib Rep	52	17	35	29	18	48
Dem/Lean Dem	68	33	35	20	12	31
Conserv/mod Dem	64	28	36	20	15	35
Lib Dem	74	38	35	19	7	26

Note: Based on the half sample of respondents randomly assigned to receive this question. White and Black adults include those who report being only one race and are not Hispanic. Hispanics are of any race. Family income tiers are based on adjusted 2018 earnings. Those who did not give an answer are not shown.

Source: Survey of U.S. adults conducted July 13-19, 2020.

<sup>&</sup>quot;The Challenges of Contact Tracing as U.S. Battles COVID-19"

### Four-in-ten Americans say they would not be likely to speak with a public health official at their residence about the coronavirus outbreak

% of U.S. adults who say they would be \_\_ likely to speak with a public health official who showed up at their residence to speak with them about the coronavirus outbreak

	NET	Vom	Some- what	Not too	Not at all	NET
U.S. adults	NE 1 59	Very 25	<b>wnat</b> 34	22	Not at all	<b>NE</b> 1
o.o. adamo	00	20	0.			.0
Men	64	30	34	20	15	36
Women	55	21	35	24	19	44
White	62	28	34	22	16	37
Black	52	22	30	21	25	47
Hispanic	56	19	37	24	18	42
Ages 18-29	56	18	37	26	18	43
30-49	60	24	36	21	19	39
50-64	62	30	32	22	15	37
65+	59	28	31	22	18	40
HS or less	57	21	36	22	20	42
Some college	57	23	34	23	19	42
College+	65	32	33	22	13	35
Lower income	57	23	34	21	21	42
Middle income	59	24	35	24	16	40
Upper income	66	34	32	20	14	34
Rep/Lean Rep	54	21	33	26	19	45
Conserv Rep	53	20	32	27	20	47
Mod/lib Rep	58	22	36	23	17	40
Dem/Lean Dem	65	30	35	19	15	34
Conserv/mod Dem	61	26	35	19	19	37
Lib Dem	70	36	34	20	10	30

Note: Based on the half sample of respondents randomly assigned to receive this question. White and Black adults include those who report being only one race and are not Hispanic. Hispanics are of any race. Family income tiers are based on adjusted 2018 earnings. Those who did not give an answer are not shown.

Source: Survey of U.S. adults conducted July 13-19, 2020.

<sup>&</sup>quot;The Challenges of Contact Tracing as U.S. Battles COVID-19"

## About a quarter of Americans would be uncomfortable sharing names of people with whom they might have been in physical contact with a public health official

% of U.S. adults who say they would be \_\_ comfortable sharing the names of people with whom they might have been in physical contact with a public health official during the coronavirus outbreak

	NET	Voru	Some- what	Not too	Not at all	NET
U.S. adults	<b>NE</b> 1	Very 43	<b>wnat</b> 29	15	13	NE 1 27
o.o. dddio	12	40	20		10	
Men	71	41	30	15	13	28
Women	73	45	28	14	12	26
White	74	47	27	13	13	26
Black	72	41	30	15	13	28
Hispanic	67	34	33	21	10	31
Asian*	78	43	36	14	8	22
Ages 18-29	67	35	32	18	14	32
30-49	70	41	30	16	14	29
50-64	73	46	28	13	13	26
65+	79	53	25	11	11	21
HS or less	68	37	30	16	15	32
Some college	70	42	28	15	14	29
College+	80	52	28	11	9	20
Lower income	71	39	32	16	13	28
Middle income	71	44	27	15	14	29
Upper income	81	52	29	10	9	19
Rep/Lean Rep	63	33	30	18	20	37
Conserv Rep	61	32	29	17	22	39
Mod/lib Rep	66	34	32	18	16	34
Dem/Lean Dem	81	54	28	12	6	18
Conserv/mod Dem	79	49	30	14	7	21
Lib Dem	85	60	25	10	5	14

<sup>\*</sup>Asian adults were interviewed in English only.

Note: White, Black and Asian adults include those who report being only one race and are not Hispanic. Hispanics are of any race. Family income tiers are based on adjusted 2018 earnings. Those who did not give an answer are not shown.

Source: Survey of U.S. adults conducted July 13-19, 2020.

<sup>&</sup>quot;The Challenges of Contact Tracing as U.S. Battles COVID-19"

### 22% of Americans would be uncomfortable sharing places they have recently visited with a public health official

% of U.S. adults who say they would be  $\_\_$  comfortable sharing places they have recently visited with a public health official during the coronavirus outbreak

	NET	Very	Some- what	Not too	Not at all	NET
U.S. adults	77	49	28	11	11	22
Men	78	48	30	11	11	21
Women	77	51	26	12	11	22
White	79	53	26	9	11	21
Black	72	45	27	16	12	27
Hispanic	73	40	32	16	10	26
Asian*	84	49	35	9	6	16
Ages 18-29	77	43	34	12	11	22
30-49	76	48	28	12	12	23
50-64	77	50	26	11	11	23
65+	81	57	24	10	9	19
HS or less	71	40	31	15	13	29
Some college	77	48	29	11	12	22
College+	86	61	25	7	7	14
Lower income	73	43	31	15	11	26
Middle income	78	51	27	10	11	22
Upper income	85	60	26	7	8	14
Rep/Lean Rep	70	39	30	14	17	30
Conserv Rep	68	38	29	14	18	32
Mod/lib Rep	73	41	32	12	14	26
Dem/Lean Dem	85	60	25	9	5	14
Conserv/mod Dem	82	54	29	11	7	18
Lib Dem	90	68	22	6	4	10

<sup>\*</sup>Asian adults were interviewed in English only.

Note: White, Black and Asian adults include those who report being only one race and are not Hispanic. Hispanics are of any race. Family income tiers are based on adjusted 2018 earnings. Those who did not give an answer are not shown.

Source: Survey of U.S. adults conducted July 13-19, 2020.

<sup>&</sup>quot;The Challenges of Contact Tracing as U.S. Battles COVID-19"

### Half of Americans would be uncomfortable sharing location data from their cellphone with a public health official

% of U.S. adults who say they would be  $\_\_$  comfortable sharing location data from their cellphone with a public health official during the coronavirus outbreak

	NET	Very	Some- what	Not too	Not at all	NET
U.S. adults	49	26	23	21	29	50
Men	49	26	23	20	30	50
Women	49	26	23	22	29	50
White	50	28	22	19	31	49
Black	46	22	25	23	30	53
Hispanic	45	22	24	27	26	53
Asian*	62	29	34	23	15	38
Ages 18-29	43	19	23	24	32	56
30-49	46	24	22	22	31	54
50-64	51	28	23	20	28	48
65+	57	33	23	17	26	42
HS or less	46	22	23	22	31	53
Some college	45	25	20	21	33	54
College+	56	31	25	20	23	43
Lower income	46	23	23	24	29	53
Middle income	48	26	22	20	31	51
Upper income	58	33	25	17	25	42
Dan // ann Dan	40	40	00	00	40	00
Rep/Lean Rep	40	19	20	20		60
Conserv Rep	37	18	19	19	44	63
Mod/lib Rep	45	22	23	21	34	55
Dem/Lean Dem	58 54	32	25	22	19	42
Conserv/mod Dem	54	29	25	24	22	46
Lib Dem	63	38	25	21	15	36

<sup>\*</sup>Asian adults were interviewed in English only.

Note: White, Black and Asian adults include those who report being only one race and are not Hispanic. Hispanics are of any race. Family income tiers are based on adjusted 2018 earnings. Those who did not give an answer are not shown.

Source: Survey of U.S. adults conducted July 13-19, 2020.

<sup>&</sup>quot;The Challenges of Contact Tracing as U.S. Battles COVID-19"

# 73% of Americans say they would definitely act on advice from a public health official to quarantine if they had COVID-19

% of U.S. adults who say they  $\_$  act on the advice of a public health official if told they should quarantine themselves for at least 14 days because they had the coronavirus

		Dofinitoly	Brobobly		Definitely would	
	NET	would	Probably would	not	not	NET
U.S. adults	93	73	20	5	2	7
Men	90	65	25	6	3	9
Women	95	80	15	4	1	5
White	92	70	21	5	3	8
Black	95	76	19	3	2	5
Hispanic	94	80	14	5	1	5
Ages 18-29	91	70	21	7	2	9
30-49	92	71	21	4	3	7
50-64	92	72	20	5	3	8
65+	95	79	16	3	1	4
HS or less	91	69	22	6	3	8
Some college	91	71	20	6	2	8
College+	96	79	17	3	2	4
Lower income	93	75	19	4	2	6
Middle income	91	70	22	6	3	9
Upper income	94	76	19	4	1	6
Rep/Lean Rep	88	59	29	8	4	12
Conserv Rep	86	55	31	9	5	14
Mod/lib Rep	92	66	26	6	3	8
Dem/Lean Dem	97	85	12	2	1	3
Conserv/mod Dem	96	84	12	3	1	4
Lib Dem	98	88	10	1	1	2

Note: Based on the half sample of respondents randomly assigned to receive this question. White and Black adults include those who report being only one race and are not Hispanic. Hispanics are of any race. Family income tiers are based on adjusted 2018 earnings. Those who did not give an answer are not shown. Source: Survey of U.S. adults conducted July 13-19, 2020.

"The Challenges of Contact Tracing as U.S. Battles COVID-19"

### About three-in-ten Americans say it would be very or somewhat difficult to quarantine if they had COVID-19

% of U.S. adults who say it would be \_\_\_ difficult to be able to act on the advice of a public health official if told they should quarantine themselves for at least 14 days because they had the coronavirus

yo. at touct 14 days oc	caace in	eg maa me	00.0			
U.S. adults	<b>NET</b> 68	Not at all 36	<b>Not</b> <b>too</b> 32	Some- what 22	Very 10	<b>NET</b> 32
Men	65	32	33	23	12	35
Women	71	40	31	20	8	29
White	69	34	35	22	9	31
Black	67	42	25	16	17	33
Hispanic	64	40	25	24	11	35
Ages 18-29	68	34	34	24	8	32
30-49	65	35	29	22	14	35
50-64	68	35	32	23	9	32
65+	74	41	33	19	7	26
HS or less	65	36	29	23	12	35
Some college	69	39	29	20	11	31
College+	71	33	38	22	7	29
Lower income	62	38	24	24	14	38
Middle income	70	36	34	21	9	30
Upper income	74	36	38	20	6	26
Rep/Lean Rep	63	33	31	24	12	36
Conserv Rep	63	31	32	25	12	37
Mod/lib Rep	63	33	30	24	13	37
Dem/Lean Dem	72	39	33	20	8	28
Conserv/mod Dem	71	38	32	20	9	29
Lib Dem	73	39	33	21	6	27

Note: Based on the half sample of respondents randomly assigned to receive this question. White and Black adults include those who report being only one race and are not Hispanic. Hispanics are of any race. Family income tiers are based on adjusted 2018 earnings. Those who did not give an answer are not shown.

Source: Survey of U.S. adults conducted July 13-19, 2020.

<sup>&</sup>quot;The Challenges of Contact Tracing as U.S. Battles COVID-19"

# Roughly four-in-ten Americans are not at all or not too confident that public health organizations will keep their personal records safe

% of U.S. adults who are \_\_ confident that public health organizations will keep their personal records safe from hackers or unauthorized users

	NET	Voru	Some- what	Not too	Not at all	NET
U.S. adults	NE 1 59	Very 12	<b>wnat</b> 47	26	an 15	NE 1 41
o.o. addito	00		7.	20	10	7.
Men	56	11	45	28	16	44
Women	61	12	49	24	14	38
White	58	10	48	26	16	42
Black	60	15	44	24	16	40
Hispanic	62	16	47	25	12	37
Asian*	63	16	47	29	8	37
Ages 18-29	61	14	47	25	13	39
30-49	58	12	46	26	16	42
50-64	57	11	46	26	17	43
65+	61	10	51	25	13	39
HS or less	59	14	45	25	16	41
Some college	55	9	46	27	17	44
College+	63	11	51	25	12	37
Lower income	60	16	44	25	15	40
Middle income	59	10	48	26	15	41
Upper income	58	11	48	27	15	42
Rep/Lean Rep	49	8	41	29	22	51
Conserv Rep	46	6	40	30	25	54
Mod/lib Rep	54	12	42	29	17	46
Dem/Lean Dem	69	15	53	22	9	31
Conserv/mod Dem	66	14	51	24	10	34
Lib Dem	73	17	56	21	6	27

<sup>\*</sup>Asian adults were interviewed in English only.

Note: White, Black and Asian adults include those who report being only one race and are not Hispanic. Hispanics are of any race. Family income tiers are based on adjusted 2018 earnings. Those who did not give an answer are not shown.

Source: Survey of U.S. adults conducted July 13-19, 2020.

<sup>&</sup>quot;The Challenges of Contact Tracing as U.S. Battles COVID-19"

# Roughly two-in-ten Americans are not at all or not too confident that their medical doctors or health care providers will keep records safe

% of U.S. adults who are  $\_\_$  confident that their medical doctors or health care providers will keep their personal records safe from hackers or unauthorized users

	NET	Vom	Some- what	Not too	Not at all	NET
U.S. adults	NE I 81	Very 32	<b>wnat</b> 49	Not too	ali 6	NE I 19
o.o. dduito	01	32	43	12	O	10
Men	79	31	48	14	7	21
Women	83	33	49	11	6	17
White	83	34	49	12	6	17
Black	77	30	47	11	11	22
Hispanic	78	30	48	15	6	21
Asian*	80	32	48	15	5	20
Ages 18-29	80	35	45	12	7	19
30-49	79	29	49	14	7	21
50-64	82	31	51	12	6	17
65+	84	37	47	11	5	16
HS or less	80	31	49	12	7	20
Some college	80	32	47	13	7	20
College+	84	34	50	12	4	16
Lower income	80	34	46	12	8	20
Middle income	81	32	49	13	6	18
Upper income	83	33	50	12	5	17
Rep/Lean Rep	78	29	49	15	7	22
Conserv Rep	77	30	47	15	8	23
Mod/lib Rep	79	28	51	14	6	20
Dem/Lean Dem	85	36	49	10	5	15
Conserv/mod Dem	83	34	49	11	6	17
Lib Dem	87	38	49	8	4	13

<sup>\*</sup>Asian adults were interviewed in English only.

Note: White, Black and Asian adults include those who report being only one race and are not Hispanic. Hispanics are of any race. Family income tiers are based on adjusted 2018 earnings. Those who did not give an answer are not shown.

Source: Survey of U.S. adults conducted July 13-19, 2020.

<sup>&</sup>quot;The Challenges of Contact Tracing as U.S. Battles COVID-19"

### Half of Americans are not at all or not too confident that the federal government will keep their personal records safe

% of U.S. adults who are \_\_ confident that the federal government will keep their personal records safe from hackers or unauthorized users

	NET	Voru	Some- what	Not too	Not at all	NET
U.S. adults	NE 1 49	Very 8	wnat 41	29	an 21	NE 1
o.o. addito	.0	J				00
Men	49	8	41	29	21	51
Women	50	8	41	30	20	50
White	48	6	43	30	21	51
Black	49	13	36	26	25	50
Hispanic	53	15	38	28	17	46
Asian*	53	9	44	31	15	47
Ages 18-29	45	8	37	31	24	55
30-49	49	9	40	30	21	51
50-64	51	9	42	29	20	49
65+	53	8	44	29	18	47
HS or less	53	11	41	27	20	47
Some college	45	6	39	31	24	55
College+	50	7	43	32	18	50
Lower income	51	12	38	27	22	49
Middle income	49	7	42	30	21	51
Upper income	49	6	44	32	18	51
Rep/Lean Rep	47	8	39	30	23	52
Conserv Rep	44	6	38	31	24	56
Mod/lib Rep	52	10	42	27	20	47
Dem/Lean Dem	51	9	43	30	19	48
Conserv/mod Dem	52	10	42	29	19	48
Lib Dem	51	8	44	31	18	49

<sup>\*</sup>Asian adults were interviewed in English only.

Note: White, Black and Asian adults include those who report being only one race and are not Hispanic. Hispanics are of any race. Family income tiers are based on adjusted 2018 earnings. Those who did not give an answer are not shown.

Source: Survey of U.S. adults conducted July 13-19, 2020.

<sup>&</sup>quot;The Challenges of Contact Tracing as U.S. Battles COVID-19"

# Three-quarters of Americans think it is acceptable for information collected by public health officials to be made available to infectious disease researchers

% of U.S. adults who think it is \_\_\_ for the personal information that may be collected by public health officials during the coronavirus outbreak to be available for use by researchers who study infectious diseases

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	NET	Very accept- able	Somewhat accept- able	Somewhat UNaccept- able	Very UNaccept- able	NET
U.S. adults	75	35	40	13	12	24
Men	74	36	38	14	12	26
Women	77	35	42	12	11	23
White	75	35	40	13	12	25
Black	72	31	40	15	12	27
Hispanic	77	39	38	12	10	22
Asian*	88	41	47	10	2	12
Ages 18-29	76	38	38	13	11	24
30-49	78	37	41	12	9	22
50-64	72	32	40	13	14	27
65+	75	35	40	12	12	25
HS or less	70	28	42	16	13	30
Some college	74	34	39	12	13	26
College+	84	45	39	9	8	16
Lower income	74	33	41	13	12	25
Middle income	75	34	41	13	12	25
Upper income	80	43	37	10	10	19
Rep/Lean Rep	66	23	43	17	17	33
Conserv Rep	64	21	42	17	19	36
Mod/lib Rep	71	27	44	16	13	29
Dem/Lean Dem	84	48	36	9	6	16
Conserv/mod Dem	80	42	38	12	8	20
Lib Dem	90	55	35	6	4	10

<sup>\*</sup>Asian adults were interviewed in English only.

Note: White, Black and Asian adults include those who report being only one race and are not Hispanic. Hispanics are of any race. Family income tiers are based on adjusted 2018 earnings. Those who did not give an answer are not shown.

Source: Survey of U.S. adults conducted July 13-19, 2020.

<sup>&</sup>quot;The Challenges of Contact Tracing as U.S. Battles COVID-19"

## About six-in-ten Americans think it is unacceptable for information collected by public health officials to be made available to state, local elected officials

% of U.S. adults who think it is \_\_\_ for the personal information that may be collected by public health officials during the coronavirus outbreak to be available for use by state and local elected officials

U.S. adults	<b>NET</b> 37	Very accept- able 8	Somewhat accept- able 29	Somewhat UNaccept- able 24	Very UNaccept- able 38	<b>NET</b> 62
Men	37	9	28	23	39	62
Women	37	8	29	25	37	62
White	35	7	28	23	42	65
Black	39	9	29	23	37	60
Hispanic	44	12	32	25	29	55
Asian*	46	10	36	34	19	54
Ages 18-29	38	11	27	28	34	62
30-49	40	9	31	24	36	60
50-64	34	8	26	23	42	65
65+	37	7	30	22	40	62
HS or less	37	9	28	24	38	62
Some college	34	7	27	25	41	66
College+	41	9	32	23	35	58
Lower income	41	11	30	24	35	59
Middle income	35	6	28	25	40	65
Upper income	39	9	30	22	39	61
Rep/Lean Rep	29	5	24	24	46	71
Conserv Rep	26	5	22	24	49	73
Mod/lib Rep	34	6	28	25	41	66
Dem/Lean Dem	45	11	34	24	30	54
Conserv/mod Dem	43	12	32	27	29	57
Lib Dem	48	11	37	21	31	51

<sup>\*</sup>Asian adults were interviewed in English only.

Note: White, Black and Asian adults include those who report being only one race and are not Hispanic. Hispanics are of any race. Family income tiers are based on adjusted 2018 earnings. Those who did not give an answer are not shown.

Source: Survey of U.S. adults conducted July 13-19, 2020.

<sup>&</sup>quot;The Challenges of Contact Tracing as U.S. Battles COVID-19"

# Roughly six-in-ten Americans think it is unacceptable for information collected by public health officials to be made available to health insurance companies

% of U.S. adults who think it is \_\_\_ for the personal information that may be collected by public health officials during the coronavirus outbreak to be available for use by health insurance companies

	NET	Very accept- able	Somewhat accept- able	Somewhat UNaccept- able	Very UNaccept- able	NET
U.S. adults	40	10	30	24	36	59
Men	36	8	28	23	40	63
Women	43	11	32	24	32	56
White	34	7	27	25	40	66
Black	50	18	32	21	28	49
Hispanic	53	16	37	20	26	46
Asian*	54	10	44	23	23	46
Ages 18-29	43	11	32	24	33	57
30-49	39	9	30	25	35	60
50-64	40	10	31	22	37	59
65+	38	10	29	24	37	61
HS or less	48	13	35	21	30	51
Some college	37	9	28	24	39	63
College+	33	7	27	26	40	66
Lower income	50	16	34	20	28	49
Middle income	36	7	29	24	39	63
Upper income	33	6	27	27	41	67
Rep/Lean Rep	38	8	30	23	38	62
Conserv Rep	36	7	29	22	42	64
Mod/lib Rep	42	10	32	25	33	58
Dem/Lean Dem	42	11	31	24	34	58
Conserv/mod Dem	46	13	33	24	29	54
Lib Dem	37	8	29	24	39	63

<sup>\*</sup>Asian adults were interviewed in English only.

Note: White, Black and Asian adults include those who report being only one race and are not Hispanic. Hispanics are of any race. Family income tiers are based on adjusted 2018 earnings. Those who did not give an answer are not shown.

Source: Survey of U.S. adults conducted July 13-19, 2020.

<sup>&</sup>quot;The Challenges of Contact Tracing as U.S. Battles COVID-19"

# Roughly six-in-ten Americans think it is unacceptable for information collected by public health officials to be made available to pharmaceutical companies

% of U.S. adults who think it is \_\_\_ for the personal information that may be collected by public health officials during the coronavirus outbreak to be available for use by pharmaceutical companies

	NET	Very accept- able	Somewhat accept- able	Somewhat UNaccept- able	Very UNaccept- able	NET
U.S. adults	40	9	31	24	35	59
Men	38	8	30	25	37	62
Women	42	10	32	24	33	57
White	35	7	28	25	39	64
Black	47	16	31	21	31	51
Hispanic	52	14	38	21	26	47
Asian*	55	9	46	24	21	45
Ages 18-29	41	10	30	29	30	59
30-49	40	9	31	24	35	59
50-64	39	9	31	21	39	60
65+	40	10	30	24	36	60
HS or less	45	11	33	24	31	55
Some college	37	9	28	24	39	63
College+	38	7	30	25	37	62
Lower income	48	14	34	22	29	51
Middle income	35	6	29	27	37	64
Upper income	37	7	30	23	40	63
Rep/Lean Rep	37	7	30	24	39	62
Conserv Rep	35	7	28	23	42	64
Mod/lib Rep	40	8	33	26	34	59
Dem/Lean Dem	42	11	32	25	32	57
Conserv/mod Dem	47	13	34	23	29	53
Lib Dem	38	8	30	26	35	62

<sup>\*</sup>Asian adults were interviewed in English only.

Note: White, Black and Asian adults include those who report being only one race and are not Hispanic. Hispanics are of any race. Family income tiers are based on adjusted 2018 earnings. Those who did not give an answer are not shown.

Source: Survey of U.S. adults conducted July 13-19, 2020.

<sup>&</sup>quot;The Challenges of Contact Tracing as U.S. Battles COVID-19"

### 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. The panel is being managed by Ipsos.

Data in this report is drawn from the panel wave conducted July 13 to July 19, 2020. A total of 10,211 panelists responded out of 12,981 who were sampled, for a response rate of 79%. No

panelists 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 4.3%. The break-off rate among panelists who logged on to the survey and completed at least one item is 1%. The margin of sampling error for the full sample of 10,211 respondents is plus or minus 1.5 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	2,304	
Aug. 27 to Oct. 4, 2015	Landline/ cell RDD	6,004	2,976	1,335	
April 25 to June 4, 2017	Landline/ cell RDD	3,905	1,628	684	
Aug. 8 to Oct. 31, 2018	ABS/web	9,396	8,778	6,405	
Aug. 19 to Nov. 30, 2019	ABS/web	5,900	4,720	4,682	

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.

35.014

23,440

15.410

Total

#### PEW RESEARCH CENTER

This study featured a stratified random sample from the ATP. The sample was allocated according to the following strata, in order: tablet households, Mexican-born Hispanics, U.S.-born Hispanics, other foreign-born Hispanics, Cuban-born Hispanics, non-internet, high school education or less, not registered to vote, nonvolunteers, people ages 18 to 34, non-Hispanic Black adults, and all other categories not already falling into any of the above.

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 which 9,942 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. 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. For a random half-sample of invitations, households without internet access were instructed to return a postcard. These households were contacted by telephone and sent a tablet if they agreed to participate. A total of 9,396 were invited to join the panel, and 8,778 agreed to join the panel and completed an initial profile survey. The same recruitment procedure was carried out on August 19, 2019, from which a total of 5,900 were invited to join the panel and 4,720 agreed to join the panel and completed an initial profile survey. Of the 23,440 individuals who have ever joined the ATP, 15,410 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.<sup>7</sup> The American Trends Panel never uses breakout routers or chains that direct respondents to additional surveys.

<sup>&</sup>lt;sup>7</sup> AAPOR Task Force on Address-based Sampling. 2016. "AAPOR Report: Address-based Sampling."

#### Weighting

The ATP data was weighted in a multistep process that begins by calibrating the entire panel so that it aligns with the population benchmarks identified in the accompanying table to create a full-panel weight. 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. The next step in the weighting uses an iterative technique that aligns the sample to population benchmarks on the dimensions listed in the accompanying table.

Sampling errors and test of statistical significance take into account the effect of weighting. Interviews are conducted in both English and Spanish.

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.

#### **Weighting dimensions**

**Benchmark** 

Variable

variable	source
Gender	2018 American
Age	Community Survey
Education	,
Race/Hispanic origin	
Born inside vs. outside the U.S. among Asians	
Country of birth among Hispanics	
Years lived in the United States	
Home internet access	
Region x Metropolitan status	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.

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 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:

Group	Unweighted sample size	Weighted %	Plus or minus
Total sample	10,211		1.5 percentage points
Half sample	At least 5,071		2.1 percentage points
Rep/Lean Rep	4,110	45	2.2 percentage points
Half sample	At least 2,035		3.1 percentage points
Dem/Lean Dem	5,761	50	2.0 percentage points
Half sample	At least 2,866		2.8 percentage points
White, non-Hispanic	6,589		1.7 percentage points
Half sample	At least 3,253		2.5 percentage points
Black, non-Hispanic	872		4.7 percentage points
Half sample	At least 423		6.8 percentage points
Hispanic	2,059		4.0 percentage points
Half sample	At least 1,028		5.6 percentage points
Asian, non-Hispanic	298		7.8 percentage points
Half sample	Not reportable		Not reportable

Sample sizes and sampling errors for other subgroups are available upon request. White, Black and Asian adults include those who report being only one race and are non-Hispanic. Hispanics are of any race. Asian adults were interviewed in English only.

#### A note about the Asian American sample

This survey includes a total sample size of 298 Asian Americans. The sample includes English-speaking Asian Americans only and, therefore, may not be representative of the overall Asian American population (75% of our weighted Asian American sample was born in another country, compared with 77% of the Asian American adult population overall). Despite this limitation, it is important to report the views of Asian Americans on the topics in this study. As always, Asian Americans' responses are incorporated into the general population figures throughout this report. Asian Americans are shown as a separate group when the question was asked of the full sample. Because of the relatively small sample size and a reduction in precision due to weighting, results are not shown separately for Asian Americans for questions that were only asked of a random half of respondents (Form 1/Form 2) or some filtered questions. We are also not able to analyze Asian American respondents by demographic categories, such as gender, age or education.

#### **Defining income tiers**

To create upper-, middle- and lower-income tiers, respondents' 2018 family incomes were adjusted for differences in purchasing power by geographic region and for household size. "Middle-income" adults live in families with annual incomes that are two-thirds to double the median family income in the panel (after incomes have been adjusted for the local cost of living and for household size). The middle-income range for the American Trends Panel is about \$37,500 to \$112,600 annually for a three-person household. Lower-income families have incomes less than roughly \$37,500, and upper-income families have incomes greater than roughly \$112,600.

Based on these adjustments, among respondents who provided their income and household size, 32% are lower income, 43% are middle income and 20% fall into the upper-income tier.

For more information about how the income tiers were determined, please see <u>here</u>.

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### **Topline questionnaire**

# PEW RESEARCH CENTER'S AMERICAN TRENDS PANEL W70 JULY 2020 FINAL TOPLINE JULY 13-19, 2020

N=10,211

THE QUESTIONS PRESENTED BELOW ARE PART OF A LARGER SURVEY CONDUCTED ON THE AMERICAN TRENDS PANEL. OTHER QUESTIONS ON THIS SURVEY HAVE BEEN PREVIOUSLY RELEASED OR HELD FOR FUTURE RELEASE.

NOTE: ALL NUMBERS ARE PERCENTAGES UNLESS OTHERWISE NOTED. THE PERCENTAGES LESS THAN 0.5% ARE REPLACED BY AN ASTERISK (\*). ROWS/COLUMNS MAY NOT TOTAL 100% DUE TO ROUNDING.

		Margin of error at 95%
	Sample size	confidence level
U.S. adults	10,211	+/- 1.5 percentage points

#### **ASK ALL:**

CONTACTTRAC1 When an unknown number calls your cellphone, do you generally...

July 13-19, 2020	
19	Answer the phone to see who it is
67	Not answer the phone and check the voicemail message if one is left
14	Not answer the phone and ignore a voicemail message if one is left
1	No answer

#### **ASK ALL:**

CONTACTTRAC2 How often, if at all, do you think people pretend to be someone else in order to try to steal people's personal information?

Often
Sometimes
Rarely
Never
No answer

#### ASK IF FORM 1 (FORM=1) [N=5,071]:

CONTACTPHONEF1 How likely, if at all, would you be to speak with a public health official if they

contacted you by phone or text message to speak with you about the

coronavirus outbreak?

July 13-19, 2020	
25	Very likely
33	Somewhat likely
24	Not too likely
17	Not at all likely

1

#### **ASK IF FORM 2 (FORM=2) [N=5,140]:**

No answer

CONTACTHOMEF2 How likely, if at all, would you be to speak with a public health official if they

showed up at your residence to speak with you about the coronavirus outbreak?

July 13-19, 2020	
25	Very likely
34	Somewhat likely
22	Not too likely
17	Not at all likely
1	No answer

#### **ASK ALL:**

CTKNOW1 How much, if at all, have you seen or heard about public health officials using a

process called "contact tracing" to gather information to try to prevent the

spread of infectious diseases such as COVID-19?

July 13-19, 2020	
29	A great deal
41	Some
15	Not too much
14	Not at all
1	No answer

#### ASK ALL:

SECUR1 Compared with five years ago, do you feel your personal information is...

#### [RANDOMIZE 1 AND 2 WITH 3 ALWAYS LAST]

July 13-19, 2020		<u>June 3-17, 2019</u>
5	More secure	6
68	Less secure	70
27	About the same	24
*	No answer	*

In "contact tracing," public health officials interview people who have a confirmed COVID-19 diagnosis in order to identify everyone who has had contact with them, and who are therefore at risk of getting COVID-19.

#### **ASK ALL:**

SHAREINFO1 How comfortable, if at all, would you be sharing the following with a public health official during the coronavirus outbreak?

		Very <u>comfortable</u>	Somewhat comfortable	Not too <u>comfortable</u>	Not at all comfortable	No <u>answer</u>
a.	Places you have recently visited					
	July 13-19, 2020	49	28	11	11	*
b.	The names of people you might have been in physical contact with July 13-19, 2020	43	29	15	13	*
с.	Location data from your cellphone July 13-19, 2020	26	23	21	29	1

#### ASK IF FORM 1 (FORM=1) [N=5,071]:

HEALTHRECF1

If a public health official told you that you should quarantine yourself for at least 14 days because you had the coronavirus, would you act on that advice?

<u>July 13-19, 2020</u>	
73	Definitely would
20	Probably would
5	Probably would not
2	Definitely would not
*	No answer

#### ASK IF PROBABLY OR DEFINITELY WOULD NOT QUARANTINE (HEALTHRECF1=3-4) [N=247]:

WHYNOTQUARF1 Please indicate if any of the following is a reason you would not quarantine yourself for at least 14 days? **[RANDOMIZE ITEMS]** 

	Haabla ta misa wad	<u>Major reason</u>	Minor reason	Not a reason	No answer
a.	Unable to miss work July 13-19, 2020	35	17	47	1
b.	Unable to arrange childcare July 13-19, 2020	11	11	77	1
C.	Too many other obligations July 13-19, 2020	23	38	39	*
d.	Just don't think it's necessary July 13-19, 2020	44	35	19	2
e.	Concern about being isolated from others July 13-19, 2020	15	24	58	2

#### ASK IF FORM 2 (FORM=2) [N=5,140]:

HEALTHRECF2 If a public health official told you that you should quarantine yourself for at least 14 days because you had the coronavirus, how difficult would it be for you to be

able to act on that advice?

Very difficult
Somewhat difficult
Not too difficult
Not at all difficult
No answer

#### ASK IF VERY OR SOMEWHAT DIFFICULT TO QUARANTINE (HEALTHRECF2=1-2) [N=1,447]:

WHYDIFFICULTF2 Please indicate if any of the following is a reason it would be difficult for you to quarantine yourself for at least 14 days? [RANDOMIZE ITEMS]

		Major reason	Minor reason	Not a reason	No answer
a.	Unable to miss work July 13-19, 2020	39	18	42	1
b.	Unable to arrange childcare July 13-19, 2020	22	11	67	1
c.	Too many other obligations July 13-19, 2020	40	34	25	1
d.	Just don't think it's necessary July 13-19, 2020	21	25	53	*
e.	Concern about being isolated from others July 13-19, 2020	23	33	43	*

#### **ASK ALL:**

RECSAFE

How confident, if at all, are you that the following groups will keep your personal records safe from hackers or unauthorized users? **[RANDOMIZE ITEMS]** 

		Very <u>confident</u>	Somewhat confident	Not too confident	Not at all confident	No answer
<b>ASI</b> a.	K ALL: Public health					
	organizations July 13-19, 2020	12	47	26	15	*
<b>ASI</b> b.	<b>K ALL:</b> Your medical doctors or health care providers July 13-19, 2020	32	49	12	6	*
<b>ASI</b> d.	K ALL: The federal government July 13-19, 2020	8	41	29	21	*

#### ASK ALL:

CVDATAACCEPT

Do you think it is acceptable or unacceptable for the personal information that may be collected by public health officials during the coronavirus outbreak to be available for use by... **[RANDOMIZE ITEMS]** 

		Very <u>acceptable</u>	Somewhat <u>acceptable</u>	Somewhat unacceptable	Very <u>unacceptable</u>	No answer
a.	Researchers who study infectious diseases July 13-19, 2020	35	40	13	12	*
b.	Health insurance companies July 13-19, 2020	10	30	24	36	1
c.	Pharmaceutical companies July 13-19, 2020	9	31	24	35	1
d.	State and local elected officials July 13-19, 2020	8	29	24	38	1