National Survey of Organ Donation Attitudes and Practices, 2019

Report of Findings | Issue Date: February 2020





U.S. Department of Health and Human Services Health Resources and Services Administration Healthcare Systems Bureau Division of Transplantation organdonor.gov



2019

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Organ Donation Recipients on Cover Page

The cover of this report features organ donation recipients appearing in the *Made Possible By*¹ public service announcement series. From top-right, clockwise, these organ recipients are:

Roxanne, who received a heart transplant, with her son Kellen Amalia, who received a heart transplant, with her grandson Eddie Blake, age 15, who received a heart transplant at 2 weeks of age, with his mother Robin Steve, who received a double lung transplant Carlee, age 15, who received a heart transplant at age 1 and age 13 Caitlin, age 6, who received a liver transplant at 5 months of age Chris, who received a kidney transplant America, center, who received two kidney transplants

¹ <u>https://www.organdonor.gov/awareness/materials/psas.html</u>

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1.0 Executive Summary

This report describes the main findings from the 2019 National Survey of Organ Donation Attitudes and Practices (NSODAP). The 2019 NSODAP is the fourth survey of national views taken on organ donation and transplantation, following prior surveys published in 1993, 2005, and 2012. The purpose of these surveys is to help the Health Resources and Services Administration (HRSA) better understand and track public beliefs, opinions, and behaviors related to organ donation in America. These surveys include some questions that have remained the same across all years, allowing for the identification of trends over time, as well as some new survey questions, which address emerging issues related to organ donation. A total of 10,000 respondents completed the survey, 2,000 by telephone and another 8,000 online. HRSA contracted the 2019 survey, as well as the surveys published in 2012 and 2005. An executive summary of results, organized by theme, is included. Full survey results are included throughout this report and in supporting tables.

Methodology and comparison to prior surveys

Prior surveys have been conducted by telephone only. The 2019 survey was conducted both by telephone and online. When making statistical comparisons from 2019 to prior survey years, only telephone responses are included. This ensures the mode of survey administration does not influence comparisons over time. While results for many questions show no difference between web and telephone, some do show a mode effect, where telephone and web results differ. For example, telephone respondents were more likely to say they would donate an organ while living than web respondents. These differences are discussed in depth in the trends section. The methodology is described in detail in section 3.0 and Appendix A.

Support for organ donation

Support for organ donation remains high at 90.4%. However, this reflects a decline from the 2012 survey, when 94.9% of respondents supported organ donation, and a slight decline from 2005, when 92.9% supported organ donation. Groups more likely to support organ donation include those age 50 and over, White, or Native American, or those respondents who are college graduates or higher. These results are described in detail in section 4.1.

Donation registration

Half of the respondents had signed up as donors (49.9%). Respondents were more likely to sign up if they were under the age of 50, White or Native American, and had more than a

high school education. Nearly all had signed up through the Department of Motor Vehicles (92.3%) or a similar state motor vehicle administration office. Of those who had signed up on a website, three-quarters (74.2%) signed up using a mobile device. Among those who expressed support for organ donation, nearly half had not signed up as donors (46.2%). These unregistered supporters were more likely to be over the age of 50, of Black or Asian race, or have a high school education or less. These results are described in detail in section 4.2.

Desire to have organs donated

Of those who were not signed up as donors (46.2%), half said they wanted their organs donated after death (50.3%). Respondents ages 18-34 were more likely to want their organs donated (57.2%) than those over the age of 65 (44.4%). These results are described in detail in section 4.3.

Willingness to be an organ donor

Of the respondents who had not signed up but wanted their organs donated, 69.1% said they would be willing to sign up as donors. Respondents under the age of 65 were more likely to be willing to sign up. Only a third of respondents said they would be willing to sign up on a mobile device (33.1%). Those under the age of 50 were more willing to sign up using a mobile device than those age 50 and over. These results are described in detail in section 4.4.

Donating a family member's organs

Close to half of respondents' family members had talked to them about their wishes for organ donation after death (45.6%). Close to nine out of ten would donate a family member's organs if their wishes to donate were known (88.3%), while more than two-thirds said they would donate a family member's organs if their wishes were unknown (68.8%). Respondents were more likely to donate a family member's organs if they were White, Native American, or had at least some college education. These results are described in detail in section 4.5.

Donating hands and face

Close to two-thirds of respondents were willing to donate their hands (64.0%), while fewer than half were willing to donate their face (46.9%), with slightly less support for donating a family member's hands (58.7%) or face (43.6%). Donation of hands or face was more likely from respondents with higher education levels. These results show a decline in likely donation of own hands and face from the 2012 survey, when 80.3% were willing to donate their hands and 58.2% were willing to donate their face. These results are described in detail in section 4.6.

Living donation

Most respondents said they would donate certain eligible organs while living to a family member (86.0%) or close friend (75.7%), but fewer would donate to an acquaintance (54.6%) or stranger (45.5%). Respondents were less likely to donate while living than in 2012, when 93.5% said they would donate to a family member, 85.4% to a close friend, 67.6% to an acquaintance, and 54.7% to a stranger. Web respondents were less likely to donate than phone respondents. Despite this decline, the likelihood of living donation to a friend or stranger had increased since 2005. These results are described in detail in section 4.7.

Beliefs about organ donation

Beliefs about organ donation were divided into beliefs about the benefits of donation, concerns about donation, and the fairness of organ allocation. Belief in the benefits of organ donation was high, with 85.1% believing in the benefits of organ donation overall. Respondents were more likely to agree with the benefits of organ donation if they were women, over the age of 50, White or Native American, or had a high level of education. More respondents agreed with concerns for organ donation (34.7%). This was an increase of 7.9% for telephone respondents since 2012. While belief in the benefits of organ donation has remained stable over time, more respondents expressed concerns related to organ donation. Belief in the fairness of organ donation allocation has remained stable since 2012. Telephone and web responses for beliefs were not significantly different. These results are described in detail in section 4.8.

Organ donation allocation preferences

Four of out five respondents (79.5%) would prefer their organs be allocated based on medical urgency rather than the local area. This was statistically equivalent to the level of support for allocation by medical urgency in 2012. Respondents were even more likely to support allocation by medical urgency if they were registered donors, women, White or Native American, non-Hispanic, older, or had a higher level of education. These results are described in detail in section 4.9.

Knowledge about organ donation

While nearly nine out of ten (89.0%) respondents knew kidneys could be donated while living, only three-quarters (75.4%) knew parts of livers could be donated while living, and fewer than half (45.1%) knew parts of lungs could be donated while living. Although a respondent's education level was not related to knowledge of living kidney donation, it was associated with knowledge of living liver and lung donations. The knowledge of living organ donation also varied by age, with respondents age 65 and above having had more accurate knowledge than younger groups. These results are described in detail in section 4.10.

Age and organ donation

Only three out of ten respondents said there was an age limit to being too old to donate (32.5%) or too old to receive a transplant (30.4%). Of those who said there was an age limit for donation and transplantation, the average age was 67 for donation and 73 for transplantation. Younger respondents gave lower age limits (61 for donation and 68 for transplantation), while older respondents gave older age limits (74 for donation and 79 for transplantation). These results are described in detail in section 4.11.

Presumed consent

More than half of respondents would support a national organ donor system that requires organ donation after a person dies ("presumed consent") unless that person previously refused to participate in this required organ donor system while still alive ("opt-out") (56.3%). This was similar to support for presumed consent in 2012 (51.1%), but significantly more than in 2005 (41.9%). A third would opt out of a presumed consent system (34.4%). Support for presumed consent was highest among those under the age of 35 (65.1%). Black, other/multiple race, and Hispanic respondents, and respondents with a high school degree or less were most likely to say they would opt out of presumed consent if the United States changed to this system. These results are described in detail in section 4.12.

Payments and organ donation

One-third of respondents said payments for donation upon death would make their own donation more likely (34.2%) as well as family donation more likely (34.1%). This reflected a significant increase over 2012 findings when only a quarter said payments would make donation more likely (25.4% own donation; 25.8% family donation), and over 1993, when only one in eight (12.0%) said payments would increase the likelihood of their own or family donation. These results are described in detail in section 4.13.

Sources of information about organ donation

Fewer than half of respondents had heard about organ donation in the past year (46.6%), which was a drop from 2012 (56.0%). Top information sources included news coverage, the Department of Motor Vehicles, talks with friends or family, movies or TV shows, social media, and TV advertising. Older respondents were more likely to have heard about organ donation from news coverage, while younger respondents were more likely to have heard about organ about organ donation through social media. These results are described in detail in section 4.14.

Understanding beliefs about organ donation

Organ donation belief questions were analyzed to understand how individual beliefs cluster together into underlying sets of beliefs. Two strong belief factors emerged: one for

belief in the benefits of organ donation and another for concerns about organ donation. Importantly, these two belief factors were only weakly associated with each other, indicating that people who believe in the benefits of organ donation can also have concerns about organ donation. For example, someone can believe that organ donation saves lives but also be concerned about their loved one's body being "disfigured." A third belief factor was the perceived fairness of organ distribution. These results are described in detail in section 4.15.

Predictors of organ donation

The survey questions that included responses that supported organ donation were analyzed using four mathematical models to look for characteristics about an individual's location, ethnicity, age, gender, education level, and opinions ("beliefs") that could suggest the likelihood that the individual might support organ donation. All four models were strongly predictive of support for organ donation. In all models, two of the three strongest predictors included the belief that a body needed its parts when buried and the belief that most family members support organ donation. Many other beliefs and demographics also contributed to support of organ donation. These results are described in detail in section 4.16.

Demographic profiles of support for organ donation

Demographics were broken into 40 combinations of age, race and ethnicity, and education level. Demographic groups less likely to support organ donation included Black and Hispanic respondents under age 50 with lower education levels. Demographic groups more likely to be unregistered supporters of organ donation included racial/ethnic minorities and several groups over age 50. These results are described in detail in section 4.17.

Trends in organ donation

Overall support for organ donation remains high (90.4%), and belief in the benefits of organ donation also remains high (85.1%). However, these have both decreased slightly since 2012. At the same time, concerns about organ donation, such as that a loved one's body will be disfigured, or that doctors are less likely to save a registered organ donor's life, has risen significantly since 2012. Respondents were less likely to express willingness to donate while living, and less likely to donate their hands or face. These declines occurred for both telephone and web survey respondents, but the decline was greater among web survey respondents. Respondents were also more likely than in 2012 to say payments would increase the likelihood of donation. These results are described in detail in section 4.18.

2.0 Introduction

2.1 Organ Donation and Transplantation in America Today

Organ transplantation offers a unique chance to extend and/or save lives and improve the health of those in need. The number of organ transplants has grown steadily over the past 65 years, with more than 750,000 transplants conducted in the United States since 1988. However, the need vastly outweighs the number of available organs. Approximately 20 people on the national organ transplant waiting list die each day, while every 10 minutes a new person is added to that list.

Figure 1. Annual Number of Patients on Waiting List, Transplants Received, and Living and Deceased Donors in the United States, 1988–2018



Despite a record number of transplants performed in 2018, nearly 113,000 individuals remained on the national transplant waiting list in the United States as of September 2019.¹ Prospective transplant recipients represent all ages, races, and ethnicities. Approximately 62% are men, nearly 60% are from racial/ethnic underrepresented

¹National Data, Organ Procurement and Transplantation Network <u>https://optn.transplant.hrsa.gov/data/view-data-reports/national-data/</u> populations, and 68% on the waiting list are over age 50. Sometimes patients are placed on the waiting list for transplantation of more than one type of organ (multi-organ transplant). As of September 2019, the majority (over 80%) of individuals on the waiting list were waiting for a kidney transplant. Figure 1 shows the number of patients on the waiting list along with the number of donors (living and deceased) and the number of transplants performed in the United States annually since 1988.

While the demand for organs far exceeds the number of organs donated, the national organ transplant waiting list began to shrink in 2015 for the first time since 1988. In 2018, over 36,500 organ transplants were performed in the United States, setting an annual record for the sixth straight year. This growth also represents the sixth consecutive year of increased overall donation, and the tenth consecutive year of increased deceased donation. These trends reflect the public's growing commitment to organ donation, as well as changes in the organ donation landscape designed to increase both deceased and living organ donation.

By enrolling in donor registries, individuals indicate a willingness to donate their organs after their death. Depending on their prior health and the circumstances of their deaths, each deceased donor can save up to eight lives by donating kidneys (2), liver, heart, lungs (2), pancreas, and intestines, and can enhance up to 50 other lives by donating bone and tissue. By 2014, transplantation of hands and face, or other vascularized composite allograft (VCA) transplantations, had become sufficiently advanced that national VCA transplant waiting lists were implemented. VCA-related questions were included in this survey to gauge the public's beliefs on VCA donations. By current estimates, 54% of U.S. adults (more than 145 million people) have joined organ donor registries.² Those wishing to register on a donor registry can do so by mail; online through each State's registry or the national Donate Life America organization; or in person at donor registration drives, their State's Department of Motor Vehicles (DMV), or their State's Secretary of State office. Information on joining organ donor registries is available through the HRSA Organ Donation website (organdonor.gov or donaciondeorganos.gov).⁵

While most organs come from deceased donors (10,721 in 2018), over 6,800 living donors gave organs in 2018. While the number of deceased donors has increased steadily, the number of living donors reached a peak in 2003 then started to decline in 2004 before rebounding over the past couple of years (Figure 2). Living organ donors can donate one kidney or a portion of a liver, lung, pancreas, or intestine.

² Organ Donor Statistics, HRSA

https://www.organdonor.gov/statistics-stories/statistics.html

To reduce certain financial barriers to living organ donation, HRSA has been funding a Reimbursement of Travel and Subsistence Expenses toward Living Organ Donation Program through the National Living Donor Assistance Center (NLDAC) since 2006. NLDAC provides financial assistance to living organ donors who need assistance with donation-related expenses such as housing and travel that might not be reimbursed by the recipient's insurance or other state programs.⁶ Additionally, in 2019, HRSA awarded a demonstration project through a cooperative agreement to assess whether reimbursing lost wages increases individuals' willingness to become living organ donors.



Figure 2. Annual Number of Living and Deceased Donors in the United States, 1988–2018

The organ transplantation field has continued to advance since the last national survey in 2012. The HIV Organ Policy Equity (HOPE) Act, enacted in November 2013, allows research into transplanting organs from HIV-positive (HIV-infected) deceased donors into HIV-positive recipients. As of December 2018, 100 HIV-positive individuals have received organs from 49 HIV-positive donors through research protocols authorized by the HOPE Act.³ In 2014, OPTN approved the first national policies and standards for transplanting

³ 100 people transplanted thanks to HOPE Act, UNOS <u>https://unos.org/news/100-people-transplanted-thanks-to-hope-act/</u>

limbs, faces, and other structures collectively known as vascularized composite allografts (VCAs). VCAs were also added to the definition of organs covered by federal regulation (the OPTN Final Rule) and legislation (the National Organ Transplant Act). Since 2014, transplant centers have performed over 40 VCA transplants. Another advancement, kidney paired donation (KPD) ⁴, now accounts for one in seven living kidney donor transplants. These advances in organ transplantation have increased the number of transplants performed in the United States, contributing to a record number of transplants in 2018.

The number of organ donors has also increased over the years thanks to public education and awareness activities and outreach initiatives aimed at deceased organ donations. Nevertheless, the number of patients in need of life-saving organ transplants continues to exceed the number of available organs. Until science provides the means of creating artificial organs or growing replacement organs, ensuring every patient in need receives a transplant relies on the public's willingness to be an organ donor.

While medical advances have increased treatment options, Americans have become more skeptical of health care overall, with only 15% saying they have a "great deal of confidence" in the medical system.⁵ Americans' top concerns relate to cost. In 2018, 79% of Americans were dissatisfied with health care costs, and a plurality named health care costs the number one health care problem facing the nation today. Unexpected medical bills originating from in-network hospital visits have increased. In 2016, 42% of *in*-network hospital visits resulted in an *out*-of-network surprise medical bill, with an average patient liability of \$2,040.⁶ Both the frequency of patients receiving unexpected medical bills and the amount they owe have increased sharply since 2010. While these trends are not about organ donation and transplantation specifically, they reflect public experiences with and attitudes towards health care overall.

⁵ In Depth Polling Results: Healthcare System, Gallup

⁴ KPD refers to the circumstance where a potential living kidney donor who is incompatible with their intended recipient donates to another transplant candidate in return for which their intended recipient receives a kidney from a compatible living donor. Thus, each candidate receives a kidney, and each donor fulfills their desire to donate a kidney on behalf of their original intended recipient. KPD exchanges may also be initiated by non-directed donors (NDD), which is the most common mechanism through which KPD exchanges move forward. An NDD is a living donor who wishes to donate a kidney to a person in renal failure, but has not committed this donation to a specific patient.

https://news.gallup.com/poll/4708/healthcare-system.aspx

⁶ Assessment of Out-of-Network Billing for Privately Insured Patients Receiving Care in In-Network Hospitals, JAMA

https://jamanetwork.com/journals/jamainternalmedicine/fullarticle/2740802

2.2 Purpose of the Survey

The purpose of this HRSA-contracted survey is to better understand public attitudes and practices related to organ donation in the United States and how these attitudes and practices may be changing over time. The 2019 National Survey of Organ Donation Attitudes and Practices (NSODAP) is the fourth in a series of similar surveys conducted in 1993, 2005, and 2012. Each survey has measured public opinion on a wide range of topics related to organ donation and transplantation, including overall support for organ donation, beliefs about living organ donation, and attitudes towards potential payments associated with organ donation. The survey retains many questions across survey instruments to identify trends over time. When questions were changed, the changes were typically minimal and only where necessary to reflect advances in organ donation and transplantation. Other survey questions have been added or removed based on their current relevance to organ donation. As a result this survey identifies both current attitudes and practices and how those have changed over the past 26 years. These trends reveal valuable insights relevant to public awareness, public policy, and outreach campaigns, both as they relate to the public at large and to specific population subgroups.

2.3 Changes to the Survey

The 2019 survey differs from prior surveys in how it was administered and in some questions asked. While prior surveys were conducted by telephone only, this survey was conducted both by telephone and online. This change in mode was motivated by declining response rates for telephone surveys as well as increasing internet access across the American public. (See section 3.0 and Appendix A for a detailed description of the methodology used.) New survey questions include open-ended questions probing the reasons for the respondents' beliefs, questions assessing their knowledge of living organ donation, and personal characteristics of the respondents, such as health status and religious beliefs. To preserve comparability over time, the majority of survey questions remained unchanged from prior surveys.

2.4 How to Read Tables in this Report

This report includes detailed tables for many survey questions. This page describes how to read and interpret these tables. Each numbered element below refers to a corresponding number on the example table, shown on the next page.

1 Total N – The "Total N" is the number of survey participants who answered each question. It is shown overall and for each demographic group, such as sex and race. These numbers reflect the actual count of survey participants. They are not weighted.

Weighted Results – All survey responses are weighted on key demographics to represent the U.S. adult population as a whole for sex, age, race, ethnicity, education, and census region. For example, Black respondents comprise 10.6% of the NSODAP sample, but 12.7% of the U.S. adult population. Weighting their responses corrects for this difference by having their responses count for 12.7% of the total rather than 10.6%.

3 Data Bars – Colored bars show the proportion of each response, similar to a bar chart. The larger the colored bar, the more people selected this option. If 50% of people selected a certain response, the bar would occupy half (50%) of the available space.

95% Confidence Intervals – The confidence interval is a number range around each result. It indicates that if all U.S. adults were surveyed, there is a 95% chance the final result would fall within the confidence interval. The more certainty in the estimated percent, the narrower the confidence interval. "95% CI Lower" and 95% CI Upper" define the range.

5 Differences between Confidence Intervals – If two confidence intervals do not overlap, it suggests a meaningful difference between these groups. This approach is stricter than traditional significance testing. If the confidence intervals do not overlap, it is equivalent to statistical significance at approximately the *p* < .005 level, meaning there is 99.5% confidence in this difference for the population. Each demographic group has a letter code in the column "95% CI Code." If this group code appears in the column "95% CI Dif.," then these two groups' confidence intervals do not overlap, and there is a meaningful difference between them. In the example table, there is no difference for the sex of the respondent on this question, but there is a difference in results for age, race, ethnicity, and education. For education, the "CG" and "PG" indicate that those with a high school degree or less responded differently than college graduates or postgraduates. The "HS" for college graduates and postgraduates also shows this difference. Those with some college, technical, or a vocational degree ("SC") did not differ from any of the other education groups.

Table 1. Annotated Response Tables

	1	23	4	4	5	5
Q4. Support for Organ Donation	Total N	% Support	95% CI Lower	95% CI Upper	95% CI Code	95% CI Dif.
Total	10,000	90.4	89.7	91.2	N/A	N/A
Sex						
Female (F)	5,301	91.0	90.0	92.0	F	
Male (M)	4,609	90.4	89.3	91.5	М	
Age						
18-34 (A)	3,019	90.8	89.5	92.1	А	С
35-49 (B)	1,908	89.2	87.3	91.1	В	C D
50-64 (C)	2,411	93.6	92.4	94.8	С	A B
65+ (D)	1,942	93.4	92.0	94.8	D	В
Race						
White (W)	6,718	92.9	92.2	93.6	W	BAO
Black (B)	1,059	84.5	81.9	87.0	В	W NA
Asian (A)	1,045	88.2	86.0	90.4	А	W O
Native American (NA)	798	90.2	87.6	92.9	NA	ΒO
Other/Multiple (O)	380	78.3	73.4	83.2	0	W A NA
Ethnicity						
Hispanic (H)	1,104	86.4	83.9	88.9	Н	NH
Non-Hispanic (NH)	8,896	91.3	90.6	92.0	NH	Н
Education						
High School or Less (HS)	2,104	88.3	86.7	89.8	HS	CG PG
Some College/Technical/Vocational (SC)	2,981	90.9	89.7	92.0	SC	
College Graduate (CG)	3,200	92.9	91.9	93.8	CG	HS
Postgraduate (PG)	1,674	92.5	91.1	93.8	PG	HS

Note: The numbers above the header (Example: 1) identify key elements of the table, with descriptions of each element on the previous page.

3.0 Survey Approach and Methodology

Whereas prior surveys used random digit dialing (RDD) to conduct the survey by telephone, the 2019 approach included both telephone and web methods. The telephone survey used address-based sampling (ABS), which samples residential addresses from across the nation, selected through a stratified random sample. A total of 10,000 addresses were sampled, including 5,000 selected at random and 5,000 selected in zip codes with a high prevalence of racial and/or ethnic minorities. This minority oversample allowed for more accurate generalizations for groups with lower population prevalence. Each residential address was associated with one or more telephone numbers for adults age 18 and over, including both landlines and cellphones. When an address was selected for sampling, an interviewer dialed the telephone number at least five times at different times of day, with up to five additional follow-up calls to complete the survey. Respondents could complete the survey in English or Spanish. A total of 2,000 cases were collected by telephone, yielding a raw telephone survey response rate of 7.4% (American Association for Public Opinion Research Response Rate 2) and an adjusted response rate of 11.4% (AAPOR RR 4).⁷

In addition to the telephone survey, another 8,000 cases were collected through a censusbalanced, nationally representative, non-probability web panel of adults. Panel members were recruited through thousands of websites and community organizations across the nation. Panelists were selected to participate in the survey through a random sample of the national panel stratified by age, sex, race, and income, with an oversample for racial and ethnic minorities. The web survey could be completed in English or Spanish.

Post-stratification weights were applied to both the web and telephone samples to make them representative of national census characteristics. Results were calculated through SAS survey procedures to incorporate survey design effects. The full survey methodology is described in Appendix A. All results were analyzed using SAS or SPSS. The final sample composition is described by survey administration mode and key demographics in Figure 3 and Table A1 in Appendix A. An analysis of differences by survey administration is included in Appendix A, and a non-response analysis is included in Appendix B.

⁷ AAPOR Standard Definitions: Final Dispositions of Case Codes and Outcome Rates for Surveys, AAPOR <u>https://www.aapor.org/AAPOR Main/media/publications/Standard-Definitions20169theditionfinal.pdf</u>



Figure 3. Final Sample by Survey Administration Mode and Demographics

Note: Sample demographics are unweighted. Further details are available in Appendix A.

4.0 Findings

4.1 Support for Organ Donation

Q4. Support for Organ Donation

Code	Text
Questio	n
Q4	In general, do you strongly support, support, oppose, or strongly oppose the donation of organs for transplants?
Respon	se options
1	Strongly support
2	Support
3	Oppose
4	Strongly oppose
99	Don't know/Refused

Note: All respondents received this question.

Respondents were asked about their general support for organ donation. Overall, 90.4% of respondents supported or strongly supported organ donation in 2019. This represents a decrease of 4.5 percentage points from 2012, when 94.9% of respondents supported organ donation (Figure 4). This decrease is statistically significant (p < .0001). Support was very similar across telephone (89.7%) and web (90.5%) respondents. The "4.18 Trends in Organ Donation" section explores longitudinal comparisons by mode of survey administration in greater detail.

Support for organ donation was relatively lower among those under the age of 50, those identifying their race as Black, Asian, or Other/Multiple, their ethnicity as Hispanic, and those with a high school degree or less education (see Table 2).



Figure 4. Support for Organ Donation (Q4), 1993–2019

Note: "Support" includes responses of "Strongly support" and "Support." Responses of "Oppose," "Strongly Oppose," and "Don't know/Refused" are counted as not supporting. The "4.18 Trends in Organ Donation" section explores longitudinal comparisons in greater detail.

Q4. Support for Organ Donation	Total N	% Support	95% CI Lower	95% CI Upper	95% CI Code	95% CI Dif.
Total	10,000	90.4	89.7	91.2	N/A	N/A
Sex						
Female (F)	5,301	91.0	90.0	92.0	F	
Male (M)	4,609	90.4	89.3	91.5	М	
Age						
18-34 (A)	3,019	90.8	89.5	92.1	А	С
35-49 (B)	1,908	89.2	87.3	91.1	В	C D
50-64 (C)	2,411	93.6	92.4	94.8	С	A B
65+ (D)	1,942	93.4	92.0	94.8	D	В
Race						
White (W)	6,718	92.9	92.2	93.6	W	BAO
Black (B)	1,059	84.5	81.9	87.0	В	W NA
Asian (A)	1,045	88.2	86.0	90.4	А	W 0
Native American (NA)	798	90.2	87.6	92.9	NA	ΒO
Other/Multiple (0)	380	78.3	73.4	83.2	0	W A NA
Ethnicity						
Hispanic (H)	1,104	86.4	83.9	88.9	Н	NH
Non-Hispanic (NH)	8,896	91.3	90.6	92.0	NH	Н
Education						
High School or Less (HS)	2,104	88.3	86.7	89.8	HS	CG PG
Some College/Technical/Vocational (SC)	2,981	90.9	89.7	92.0	SC	
College Graduate (CG)	3,200	92.9	91.9	93.8	CG	HS
Postgraduate (PG)	1,674	92.5	91.1	93.8	PG	HS

Table 2. Results for Support for Organ Donation (Q4) by Demographic Categories, 2019

4.2 Donation registration

Q13. Signed Up as Organ Donor

Code	Text
Questio	n text
Q13	Have you signed up to be an organ donor?
Respon	se options
1	Yes
2	No
99	Don't know/Refused
Mate. All	reason donta reasized this question

Note: All respondents received this question.

Respondents were asked if they had signed up to be an organ donor. Overall, 50.0% of respondents said they were signed up as organ donors (Figure 5). Prior surveys asked about specific ways people signed up, such as at a DMV or through a signed donor card, but they did not ask about registration status overall. Men and women were equally likely to have signed up as donors. People under the age of 50 were more likely to be signed up than those age 65 and over. White and Native American respondents were more likely to be signed up than Black or Asian respondents. Those with a high school education or less were less likely to be signed up as organ donors than those with higher education levels (see Table 3).



Figure 5. Signed Up as Organ Donor (Q13), 2019

012 Cimed Un as Organ Danar	Total N	0/ Voc	95% CI	95% CI	95% CI	95% CI
Q13. Signed Op as Organ Donor	IOTAIN	% Yes	Lower	Upper	Code	Dif.
Total	10,000	50 .0	48.8	51.2	N/A	N/A
Sex						
Female (F)	5,301	51.6	50.0	53.2	F	
Male (M)	4,609	48.6	46.9	50.4	М	
Age						
18-34 (A)	3,019	52 .3	50.2	54.4	А	D
35-49 (B)	1,908	53.6	50.8	56.3	В	D
50-64 (C)	2,411	49.1	46.8	51.4	С	
65+ (D)	1,942	47.6	45.0	50.1	D	A B
Race						
White (W)	6,718	53.2	51.9	54.6	W	ΒA
Black (B)	1,059	37.9	34.6	41.1	В	W NA
Asian (A)	1,045	38.2	35.0	41.4	А	W NA
Native American (NA)	798	55.6	51.6	59.6	NA	ΒA
Other/Multiple (0)	380	46.4	40.6	52.3	0	
Ethnicity						
Hispanic (H)	1,104	46.6	43.2	50.1	Н	
Non-Hispanic (NH)	8,896	50.7	49.5	51.9	NH	
Education						
High School or Less (HS)	2,104	43.1	40.8	45.4	HS	SC CG PG
Some College/Technical/Vocational (SC)	2,981	52.2	50.2	54.1	SC	HS PG
College Graduate (CG)	3,200	55.2	53.4	57.1	CG	HS
Postgraduate (PG)	1,674	58.9	56.4	61.4	PG	HS SC

Table 3. Results for Signed Up as Organ Donor (Q13), 2019

Supporters of Organ Donation (Q4) Who Are Not Signed Up (Q13)

Respondents who indicated they supported organ donation in Q4 were grouped based on whether they had signed up as organ donors in Q13 or not. Altogether, 46.2% of supporters of organ donation had not signed up as organ donors and were unregistered supporters. Those age 50 and over were more likely to be unregistered supporters than those ages 35-49. Black and Asian respondents were more likely to be unregistered supporters than White, Native American, or other/multiple races respondents. Respondents with less education were more likely to be unregistered. Those with a high school degree or less had the most unregistered supporters, and those with a postgraduate degree had the least unregistered supporters. There were no differences by gender or Hispanic ethnicity (see Table 4). Section 4.17 "Demographic profiles of support for organ donation" provides more details on the demographic profiles of unregistered supporters.

04 by 012 Denotion Supportant Not Signed Up	Total N	0/ Voc	95% CI	95% CI	95% CI	95% CI
Q4 by Q13. Donation Supporters Not Signed Op	I Otal N	% res	Lower	Upper	Code	Dif.
Total	9,080	46.2	45.0	47.5	N/A	N/A
Sex						
Female (F)	4,850	44.9	43.2	46.6	F	
Male (M)	4,177	47.6	45.8	49.4	М	
Age						
18-34 (A)	2,748	44.5	42.3	46.7	А	
35-49 (B)	1,727	42.2	39.3	45.0	В	C D
50-64 (C)	2,247	47.9	45.5	50.3	С	В
65+ (D)	1,818	48.8	46.1	51.4	D	В
Race						
White (W)	6,226	43.7	42.3	45.1	W	ΒA
Black (B)	907	57.6	54.0	61.1	В	W NA O
Asian (A)	923	58.1	54.6	61.6	А	W NA O
Native American (NA)	731	40.4	36.2	44.6	NA	ΒA
Other/Multiple (0)	293	46.5	39.8	53.1	0	ΒA
Ethnicity						
Hispanic (H)	951	48.8	45.1	52.5	Н	
Non-Hispanic (NH)	8,129	45.7	44.5	47.0	NH	
Education						
High School or Less (HS)	1,851	53.6	51.1	56.0	HS	SC CG PG
Some College/Technical/Vocational (SC)	2,702	44.2	42.2	46.2	SC	HS PG
College Graduate (CG)	2,955	41.1	39.1	43.0	CG	HS
Postgraduate (PG)	1,539	36.6	34.1	39.2	PG	HS SC

Table 4. Results for Donation Supporters (Q4) Who Are Not Signed Up (Q13), 2019

Q13A. How Did You Sign Up

Code	Text
Questio	n text
Q13A	How did you sign up? (rotate options)
A	Your State's Department of Motor Vehicles, Motor Vehicle Department, or Secretary of State Office
В	At a donor registration drive or event
С	Through a mobile phone app
D	Through a website
Е	Some other way
Respons	se options
1	Yes
2	No
99	Don't know/Refused

Note: Respondents who received this question answered "Yes" to Signed Up as Organ Donor (Q13).

Respondents who had signed up as organ donors (Q13) were asked about the specific ways they had signed up. Respondents could say yes to more than one method of signing up. Respondents were overwhelmingly likely to have signed up at a state DMV or similar state motor vehicle administration office, with 93.2% of those signed up using this method. Other methods of signing up include 11.8% who had registered through donor drives, 7.4% through mobile apps, 9.2% through a website, and 10.0% through some other way (Figure 6). Those under 50 as well as Black, Asian, Other/multiple races, and Hispanic respondents were more likely to register through a donor drive, mobile app, or website (see Tables 5-8).



Figure 6. How Did You Sign Up (Q13AA-Q13AE), 2019

Note: Total percentage exceeds 100% since respondents could respond "Yes" to more than one method of signing up.

01244 Cign Un. State DMV	Total N	% Yes	95% CI	95% CI	95% CI	95% CI
Q13AA. Sign Up: State DMV	I OLAI N		Lower	Upper	Code	Dif.
Total	5,234	93.2	92.4	94.1	N/A	N/A
Sex						
Female (F)	2,897	94.0	92.9	95.1	F	
Male (M)	2,310	92.7	91.4	93.9	М	
Age						
18-34 (A)	1,661	91.7	90.1	93.3	А	С
35-49 (B)	1,059	94.9	93.2	96.7	В	
50-64 (C)	1,246	95.4	94.0	96.7	С	А
65+ (D)	1,005	94.2	92.5	95.9	D	
Race						
White (W)	3,772	94.2	93.3	95.0	W	0
Black (B)	407	92.4	89.5	95.4	В	
Asian (A)	413	92.1	89.3	94.8	А	
Native American (NA)	461	95.7	93.2	98.2	NA	0
Other/Multiple (O)	181	83.8	77.7	89.8	0	W NA
Ethnicity						
Hispanic (H)	540	89.8	86.9	92.8	Н	NH
Non-Hispanic (NH)	4,694	93.9	93.1	94.7	NH	Н
Education						
High School or Less (HS)	909	92.4	90.5	94.3	HS	
Some College/Technical/Vocational (SC)	1,563	93.0	91.6	94.4	SC	
College Graduate (CG)	1,770	94.7	93.5	95.8	CG	
Postgraduate (PG)	975	93.4	91.6	95.1	PG	

Table 5. Results for Signing up at State DMV (Q13AA), 2019

012AD Sign Uni Donor Drivo		0/ Voc		95% CI	95% CI	95% CI	95% CI
Q13AB. Sign Up: Donor Drive	I OTAI N		% Yes	Lower	Upper	Code	Dif.
Total	5,234		11.8	10.7	12.9	N/A	N/A
Sex							
Female (F)	2,897		10.8	9.4	12.2	F	
Male (M)	2,310		12.9	11.2	14.6	М	
Age							
18-34 (A)	1,661		14.8	12.7	16.9	А	C D
35-49 (B)	1,059		13.8	11.3	16.4	В	C D
50-64 (C)	1,246		7.2	5.6	8.9	С	A B
65+ (D)	1,005		6.0	4.1	7.9	D	A B
Race							
White (W)	3,772		9.4	8.4	10.5	W	BAO
Black (B)	407		20.2	15.5	24.8	В	W NA
Asian (A)	413		18.1	14.0	22.3	А	W NA
Native American (NA)	461		7.8	4.7	10.9	NA	BAO
Other/Multiple (O)	181		23.2	16.3	30.2	0	W NA
Ethnicity							
Hispanic (H)	540		21.1	17.1	25.1	Н	NH
Non-Hispanic (NH)	4,694		9.9	8.9	10.9	NH	Н
Education							
High School or Less (HS)	909		13.5	11.1	16.0	HS	
Some College/Technical/Vocational (SC)	1,563		10.7	8.9	12.4	SC	
College Graduate (CG)	1,770		11.0	9.4	12.7	CG	
Postgraduate (PG)	975		11.0	8.8	13.2	PG	

Table 6. Results for Signing up at Donor Drive (Q13AB), 2019

Q13AC. Sign Up: Mobile App	Total N % Yes	95% CI	95% CI	95% CI	95% CI	
	E 004		Lower	Upper	Lode	DII.
Total	5,234	7.4	6.5	8.3	N/A	N/A
Sex						
Female (F)	2,897	6.4	5.2	7.6	F	
Male (M)	2,310	8.4	7.0	9.8	М	
Age						
18-34 (A)	1,661	12.2	10.2	14.2	А	C D
35-49 (B)	1,059	8.6	6.5	10.7	В	C D
50-64 (C)	1,246	1.7	0.9	2.5	С	A B
65+ (D)	1,005	1.0	0.3	1.7	D	A B
Race						
White (W)	3,772	5.4	4.5	6.3	W	BAO
Black (B)	407	13.1	9.0	17.1	В	W NA
Asian (A)	413	10.0	6.7	13.4	А	W NA O
Native American (NA)	461	4.0	1.4	6.6	NA	BAO
Other/Multiple (0)	181	20.8	14.5	27.1	0	W A NA
Ethnicity						
Hispanic (H)	540	14.6	11.2	18.0	Н	NH
Non-Hispanic (NH)	4,694	6.0	5.1	6.8	NH	Н
Education						
High School or Less (HS)	909	9.4	7.3	11.4	HS	CG
Some College/Technical/Vocational (SC)	1,563	7.6	6.1	9.2	SC	CG
College Graduate (CG)	1,770	4.7	3.6	5.8	CG	HS SC
Postgraduate (PG)	975	6.5	4.7	8.2	PG	

Table 7. Results for Signing up with Mobile App (Q13AC), 2019

0124D Cign Un. Through Website	Total N	0/ Nos	95% CI	95% CI	95% CI	95% CI
Q13AD. Sign Up: Through website	I Otal N	% Yes	Lower	Upper	Code	Dif.
Total	5,234	9.2	8.2	10.2	N/A	N/A
Sex						
Female (F)	2,897	8.4	7.1	9.7	F	
Male (M)	2,310	10.0	8.5	11.6	М	
Age						
18-34 (A)	1,661	14.0	11.9	16.1	А	C D
35-49 (B)	1,059	10.1	7.9	12.4	В	C D
50-64 (C)	1,246	3.8	2.5	5.1	С	A B
65+ (D)	1,005	2.8	1.6	4.1	D	A B
Race						
White (W)	3,772	7.4	6.4	8.4	W	ΒO
Black (B)	407	13.0	8.9	17.2	В	W NA
Asian (A)	413	12.1	8.4	15.8	А	NA O
Native American (NA)	461	4.2	1.7	6.8	NA	BAO
Other/Multiple (O)	181	22.9	16.3	29.6	0	W A NA
Ethnicity						
Hispanic (H)	540	19.1	15.3	23.0	Н	NH
Non-Hispanic (NH)	4,694	7.2	6.3	8.1	NH	Н
Education						
High School or Less (HS)	909	11.5	9.2	13.8	HS	
Some College/Technical/Vocational (SC)	1,563	8.2	6.7	9.8	SC	
College Graduate (CG)	1,770	7.8	6.4	9.2	CG	
Postgraduate (PG)	975	7.8	5.9	9.7	PG	

Table 8. Results for Signing up Through Website (Q13AD), 2019

0124E Sign Uni Some Other Way	Total N	0/ Voc		95% CI	95% CI	95% CI	95% CI
Q13AE. Sign Up: Some Other way	IOLAIN	% Yes	Lower	Upper	Code	Dif.	
Total	5,234		10.0	9.0	11.0	N/A	N/A
Sex							
Female (F)	2,897		8.8	7.4	10.1	F	
Male (M)	2,310		11.3	9.7	13.0	М	
Age							
18-34 (A)	1,661		11.6	9.6	13.5	А	С
35-49 (B)	1,059		10.3	7.9	12.6	В	С
50-64 (C)	1,246		5.0	3.6	6.4	С	A B D
65+ (D)	1,005		9.3	7.1	11.5	D	С
Race							
White (W)	3,772		7.9	6.9	8.9	W	BAO
Black (B)	407		15.0	10.8	19.2	В	W NA
Asian (A)	413		12.9	9.2	16.6	А	W O
Native American (NA)	461		7.1	4.2	10.1	NA	ΒO
Other/Multiple (0)	181		25.7	18.5	32.9	0	W A NA
Ethnicity							
Hispanic (H)	540		17.7	13.8	21.5	Н	NH
Non-Hispanic (NH)	4,694		8.5	7.5	9.5	NH	Н
Education							
High School or Less (HS)	909		11.8	9.4	14.2	HS	CG
Some College/Technical/Vocational (SC)	1,563		10.5	8.7	12.2	SC	CG
College Graduate (CG)	1,770		6.8	5.5	8.0	CG	HS SC PG
Postgraduate (PG)	975		10.2	8.1	12.2	PG	CG

Table 9. Results for Signing up Some Other Way (Q13AE), 2019

Q13C. Signed Up with Mobile Device

Code	Text				
Question					
Q13C	Did you sign up using a hand-held mobile device such as a smart phone or tablet?				
Response options					
1	Yes				
2	No				
99	Don't know/Refused				

Note: Respondents who received this question answered "Yes" to Sign Up: Through Website (Q13AD).

Of those who signed up as organ donors on a website (9.2%), nearly three-quarters (74.2%) said they did so using a mobile device, such as a smartphone or tablet (Figure 7). Respondents under age 35, Black, or Hispanic were more likely to sign up with a mobile device than those age 50 and over, White, or non-Hispanic. There were no differences by the respondent's sex or education level (see Table 10).



Figure 7. Signed Up with Mobile Device (Q13C), 2019
Q13C. Signed Up with Mobile Device	Total N	% Yes	95% CI	95% CI	95% CI	95% CI
Total	400	74.2	69.4	79.0	N/A	N/A
Sex					,	- /
Female (F)	203	71.1	63.8	78.3	F	
Male (M)	193	77.6	71.2	84.0	М	
Age						
18-34 (A)	192	84.3	78.7	89.9	А	C D
35-49 (B)	92	73.1	63.0	83.2	В	
50-64 (C)	45	50.1	32.4	67.9	С	А
65+ (D)	27	53.8	32.0	75.6	D	А
Race						
White (W)	256	70.5	64.4	76.7	W	В
Black (B)	40	87.5	77.8	97.2	В	W
Asian (A)	44	62.2	45.2	79.2	А	
Native American (NA)	17	52.3	20.3	84.3	NA	
Other/Multiple (0)	43	81.9	69.2	94.6	0	
Ethnicity						
Hispanic (H)	93	86.9	79.5	94.2	Н	NH
Non-Hispanic (NH)	307	67.6	61.5	73.6	NH	Н
Education						
High School or Less (HS)	94	78.6	70.1	87.2	HS	
Some College/Technical/Vocational (SC)	109	78.6	70.8	86.4	SC	
College Graduate (CG)	128	65.7	56.7	74.8	CG	
Postgraduate (PG)	68	61.7	49.2	74.2	PG	

Table 10. Results for Signed Up with Mobile Device (Q13C), 2019

Note: "Total N" is the unweighted number of individuals in this group. Percentages are weighted to national population characteristics. "CI" is the confidence interval. Letters in the columns "95% CI Dif." indicate the confidence intervals for these groups do not overlap, suggesting a meaningful difference in survey responses between these demographic categories. The "Total N" for each demographic category might not equal the full "Total N" if respondents did not answer or answered "other" to the demographic questions.

4.3 Desire to Have Organs Donated

Q5. Want Organs Donated After Death

Code	Text			
Questio	n			
Q5	Would you want your organs to be donated after your death? Would you say definitely yes, probably yes, probably no, or definitely no?			
Response options				
1	Definitely Yes			
2	Probably Yes			
3	Probably No			
4	Definitely No			
99	Don't know/Refused			

Note: Respondents who received this question answered "No," "Don't Know," or declined to answer Signed Up as an Organ Donor (Q13).

Respondents who had not signed up as organ donors (Q13) were asked if they wanted to sign up as an organ donor. Overall, 50.3% of respondents who had not signed up said they wanted their organs donated after death. These results are shown in Figure 8.

Respondents ages 18-34 were more likely to want their organs donated after death than those age 50 and over. White respondents were more likely to want their organs donated than Native American respondents. College graduates were more likely to want their organs donated than those with a high school education or less (see Table 11).



Figure 8. Want Organs Donated After Death (Q5), 2019

OF Wart Organs Danatad Aftar Death		0/ Voc	95% CI	95% CI	95% CI	95% CI
Q5. Want Organs Donated After Death	I Otal N	% Yes	Lower	Upper	Code	Dif.
Total	4,766	50 .3	48.6	52.0	N/A	N/A
Sex						
Female (F)	2,404	48.6	46.3	51.0	F	
Male (M)	2,299	52.5	50.1	55.0	М	
Age						
18-34 (A)	1,358	57.2	54.1	60.3	А	C D
35-49 (B)	849	51.0	46.9	55.2	В	
50-64 (C)	1,165	50.3	47.0	53.7	С	А
65+ (D)	937	44.4	40.7	48.1	D	А
Race						
White (W)	2,946	51.8	49.8	53.9	W	NA
Black (B)	652	46.9	42.7	51.2	В	
Asian (A)	632	51.9	47.6	56.2	А	
Native American (NA)	337	42.6	36.4	48.7	NA	W
Other/Multiple (0)	199	43.6	35.5	51.6	0	
Ethnicity						
Hispanic (H)	564	51.3	46.4	56.1	Н	
Non-Hispanic (NH)	4,202	50.0	48.3	51.8	NH	
Education						
High School or Less (HS)	1,195	47.0	44.0	50.1	HS	CG
Some College/Technical/Vocational (SC)	1,418	52.9	50.1	55.7	SC	
College Graduate (CG)	1,430	55.3	52.5	58.1	CG	HS
Postgraduate (PG)	699	49.4	45.4	53.3	PG	

Table 11. Results for Want Organs Donated After Death (Q5), 2019

Note: "Yes" includes "Definitely Yes" and "Probably Yes." "Total N" is the unweighted number of individuals in this group. Percentages are weighted to national population characteristics. "CI" is the confidence interval. Letters in the columns "95% CI Dif." indicate the confidence intervals for these groups do not overlap, suggesting a meaningful difference in survey responses between these demographic categories. The "Total N" for each demographic category might not equal the full "Total N" if respondents did not answer or answered "other" to the demographic questions.

4.4 Willingness to be an Organ Donor

Q14B. Willing to Sign Up as Organ Donor

Code	Text
Questio	n
Q14B	Would you be willing to sign up as an organ donor?
Respon	se options
1	Yes
2	No
99	Don't know/Refused

Note: Respondents who received this question answered "Definitely Yes" or "Probably Yes" to Want Organs Donated after Death (Q5).

Q14E. Willing to Sign Up on Mobile Device

Code	Text
Questio	n
Q14E	Would you be willing to sign up to be an organ donor through a hand- held mobile device such as a smart phone or tablet?
Respons	se options
1	Yes
2	No
99	Don't know/Refused

Note: Respondents who received this question answered "Definitely Yes" or "Probably Yes" to Want Organs Donated after Death (Q5).

Respondents who had not signed up as organ donors (Q13) but said they wanted their organs donated after death (Q5) were asked if they would sign up as an organ donor, and if they were willing to sign up through a mobile device. Overall, 69.1% of respondents were willing to sign up as organ donors, but only 33.1% were willing to sign up through a mobile device. These results are shown in Figure 9.

Respondents were more willing to sign up if they were ages 18–34 and 50–64 than 65 and over. There were no differences by the respondent's sex, race, ethnicity, or education (Table 12). Younger respondents were far more likely to sign up with a mobile device, with 42.8% of respondents ages 18-34 willing to sign up with a mobile device, 41.0% of those ages 35–49, 26.5% of those ages 50–64, and only 19.0% of those 65 and over willing to sign up with a mobile device. This indicates respondents under the age of 50 are similarly likely to sign up with a mobile device, but those 50 and over and especially 65 and over are far less likely to do so. Willingness to sign up with a mobile device did not differ by the respondent's sex, race, ethnicity, or education (see Table 13).



Figure 9. Willing to Sign Up as Organ Donor (Q14B) and Willing to Sign Up on Mobile Device (Q14E), 2019

014D Willingto Cim Un as Organ Danar?	TotalN	0/ Noc	95% CI	95% CI	95% CI	95% CI
Q14B. Willing to Sign Up as Organ Donor?	I Otal N	% res	Lower	Upper	Code	Dif.
Total	2,428	69.1	66.9	71.3	N/A	N/A
Sex						
Female (F)	1,188	68.8	65.6	71.9	F	
Male (M)	1,224	69.5	66.4	72.7	М	
Age						
18-34 (A)	792	71.5	67.7	75.3	А	D
35-49 (B)	454	70.4	65.2	75.6	В	
50-64 (C)	580	73.9	69.7	78.0	С	D
65+ (D)	426	60.5	55.1	65.9	D	A C
Race						
White (W)	1,547	71.4	68.9	73.9	W	
Black (B)	317	65.3	59.5	71.0	В	
Asian (A)	327	65.9	60.1	71.6	А	
Native American (NA)	152	67.3	58.5	76.1	NA	
Other/Multiple (0)	85	56.9	44.6	69.3	0	
Ethnicity						
Hispanic (H)	295	64.7	58.3	71.1	Н	
Non-Hispanic (NH)	2,133	70.1	67.8	72.3	NH	
Education						
High School or Less (HS)	557	67.7	63.4	71.9	HS	
Some College/Technical/Vocational (SC)	743	67.9	64.3	71.5	SC	
College Graduate (CG)	773	72.3	69.0	75.7	CG	
Postgraduate (PG)	348	71.6	66.4	76.8	PG	

Table 12. Results for Willing to Sign Up as Organ Donor (Q14B), 2019

Note: "Total N" is the unweighted number of individuals in this group. Percentages are weighted to national population characteristics. "CI" is the confidence interval. Letters in the columns "95% CI Dif." indicate the confidence intervals for these groups do not overlap, suggesting a meaningful difference in survey responses between these demographic categories. The "Total N" for each demographic category might not equal the full "Total N" if respondents did not answer or answered "other" to the demographic questions.

014E Willing to Sign Up On Mobile Device?		0/ Noc	95% CI	95% CI	95% CI	95% CI
Q14E. Willing to Sign Up Un Mobile Device?	I Otal N	% res	Lower	Upper	Code	Dif.
Total	2,428	33.1	30.8	35.3	N/A	N/A
Sex						
Female (F)	1,188	30.4	27.3	33.5	F	
Male (M)	1,224	35.6	32.4	38.8	М	
Age						
18-34 (A)	792	42.8	38.8	46.9	А	C D
35-49 (B)	454	41.0	35.5	46.4	В	C D
50-64 (C)	580	26.5	22.2	30.7	С	A B
65+ (D)	426	19.0	14.7	23.2	D	A B
Race						
White (W)	1,547	33.3	30.7	36.0	W	
Black (B)	317	30.3	24.6	36.0	В	
Asian (A)	327	36.4	30.6	42.2	А	
Native American (NA)	152	30.8	22.8	38.8	NA	
Other/Multiple (O)	85	33.3	22.0	44.6	0	
Ethnicity						
Hispanic (H)	295	37.5	31.3	43.8	Н	
Non-Hispanic (NH)	2,133	32.0	29.7	34.3	NH	
Education						
High School or Less (HS)	557	33.8	29.5	38.0	HS	
Some College/Technical/Vocational (SC)	743	29.5	26.0	33.1	SC	
College Graduate (CG)	773	36.8	33.1	40.5	CG	
Postgraduate (PG)	348	32.4	27.1	37.8	PG	

Table 13. Results for Willing to Sign Up on Mobile Device (Q14E), 2019

Note: "Total N" is the unweighted number of individuals in this group. Percentages are weighted to national population characteristics. "CI" is the confidence interval. Letters in the columns "95% CI Dif." indicate the confidence intervals for these groups do not overlap, suggesting a meaningful difference in survey responses between these demographic categories. The "Total N" for each demographic category might not equal the full "Total N" if respondents did not answer or answered "other" to the demographic questions.

Q6BB. Is There One Thing That Could Change Your Mind to Want to Be a Donor?

Respondents who did not say "Definitely yes" or "Probably yes" they wanted their organs donated after death (Q5) were asked, "Is there one thing that could change your mind to want to be a donor?" (Q6BB). Respondents' responses to this question were recorded and coded into categories (N=501). Four categories of responses emerged: 1) Yes, with certain conditions (44.3%), 2) Don't know/unsure (9.2%), 3) No, because I am too old or have a serious health condition (17.0%), and 4) No, not at all (29.5%).

Of the 44.3% who said "Yes," 52.7% said if a family member or close friend were in need (23.4% of all responses); 36.5% said if someone were in need (16.2% of all responses); and 10.8% (4.8% of all responses) said if they received a financial benefit. Many of those who said "Yes" expressed skepticism about the medical system and said they would need more information. Of the 29.5% who said "No, not at all," most gave no further explanation, but 8.1% said they believe the medical system was too corrupt (2.4% of all responses), and 6.8% said no because of religions reasons (2.0% of all responses).

These results suggest that only about 30% of those who do not want to become donors are firm in their beliefs. About 40% would donate if they knew someone were in need, especially a family member. About 10% are unsure, and another 17% believe they are ineligible because of their age or health condition. These results are shown in Figure 10.



Figure 10. Would Anything Change Your Mind to Want to Become a Donor (Q6BB), 2019

4.5 Donating a Family Member's Organs

Q9. Family Member Told Wishes for Donation

Code	Text
Questio	n
Q9	Has any member of your family told you about his or her wish to donate or not to donate his or her organs after death?
Respon	se options
1	Yes
2	No
99	Don't know/Refused

Note: Respondents who received this question answered Q6B or Q6C any way other than "N/A, no family."

Respondents were asked if a member of their family had talked to them about their wish to donate or not donate their organs after death. Overall, 45.6% of respondents said their family had spoken to them about organ donation.

Respondents age 18-34 were more likely to have had a conversation with their family than those 50 and over. White, Native American, and Other/multiple races respondents were more likely to have had a conversation than Black or Asian respondents. Respondents with a higher level of education were more likely to have had a conversation with their family than respondents with less education. There were no differences by sex or Hispanic ethnicity (see Table 14).

Two additional follow-up questions asked about respondents' choices to donate a family member's organs if they knew or did not know that family member's wishes (Q10 and Q11).

00 Family Mombor Told Wishos for Donation?	Total N	06 Voc	95% CI	95% CI	95% CI	95% CI
Q9. Failing Member Told Wishes for Donation?	IULAIN	% I ES	Lower	Upper	Code	Dif.
Total	6,902	45.6	44.2	46.9	N/A	N/A
Sex						
Female (F)	3,768	47.5	45.6	49.4	F	
Male (M)	3,092	43.6	41.5	45.7	М	
Age						
18-34 (A)	2,034	49.7	47.2	52.3	А	C D
35-49 (B)	1,340	47.4	44.2	50.7	В	
50-64 (C)	1,692	44.0	41.3	46.8	С	А
65+ (D)	1,426	42.1	39.2	45.1	D	А
Race						
White (W)	4,772	47.2	45.6	48.8	W	ΒA
Black (B)	665	37.2	33.1	41.2	В	W NA
Asian (A)	630	35.2	31.2	39.3	А	W NA O
Native American (NA)	585	47.4	42.9	52.0	NA	ΒA
Other/Multiple (0)	250	48.3	41.1	55.5	0	А
Ethnicity						
Hispanic (H)	716	43.7	39.4	48.0	Н	
Non-Hispanic (NH)	6,186	45.9	44.5	47.4	NH	
Education						
High School or Less (HS)	1,376	40.1	37.3	42.9	HS	SC CG PG
Some College/Technical/Vocational (SC)	2,049	46.4	44.0	48.7	SC	HS CG
College Graduate (CG)	2,238	51.0	48.8	53.2	CG	HS SC
Postgraduate (PG)	1,207	51.2	48.2	54.2	PG	HS

Table 14. Results for Family Member Told Wishes for Donation (Q9), 2019

Note: "Total N" is the unweighted number of individuals in this group. Percentages are weighted to national population characteristics. "CI" is the confidence interval. Letters in the columns "95% CI Dif." indicate the confidence intervals for these groups do not overlap, suggesting a meaningful difference in survey responses between these demographic categories. The "Total N" for each demographic category might not equal the full "Total N" if respondents did not answer or answered "other" to the demographic questions.

Q10. Willing to Donate Family Member's Organs If Their Wish Was Unknown

Code	Text
Questio	n
Q10	If you didn't know your family member's wishes, how likely would you be to donate his or her organs upon his or her death, if it were up to you? Would you be very likely, somewhat likely, not very likely, or not at all likely?
Respon	se options
1	Very Likely
2	Somewhat Likely
3	Not Very Likely
4	Not At All Likely
99	Don't know/Refused

Note: Respondents who received this question answered Q6B or Q6C any way other than "N/A, no family."

Q11. Willing to Donate Family Member's Organs If Their Wish to Donate Was Known

Code	Text
Questio	n
Q11	If a family member had requested that his or her organs be donated upon death, how likely would you be to donate his or her organs, if it were up to you? Would you be very likely, somewhat likely, not very likely, or not at all likely?
Respon	se options
1	Very Likely
2	Somewhat Likely
3	Not Very Likely
4	Not At All Likely
99	Don't know/Refused
Note: Resi	pondents who received this question answered $06B$ or $06C$ any way other than "N/A."

Note: Respondents who received this question answered Q6B or Q6C any way other than "N/A, no family."

Respondents were asked if they would be likely to donate their family member's organs if they did not know the family member's wishes (Q10) and if they did know the family member's wishes (Q11). Overall, 68.8% of respondents said they would donate a family member's organs if the family member's wishes were unknown. If the family member's wishes were known, 88.3% said they would be likely to donate their family member's organs (Q11). These results are shown in Figure 11.

For both questions, women were more likely to donate a family member's organs than men. White and Native American respondents were more likely to donate a family member's organs than Black or Asian respondents. Respondents with a high school education or less were less likely to donate a family member's organs than those with higher education (see Tables 15 and 16).



Figure 11. Willing to Donate Family Member's Organs (Q10, Q11), 2019

010 Denote Femily's Organs Wish Unknown	Total N		95% CI	95% CI	95% CI	95% CI
Q10. Donate Family's Organs, wish Unknown	TOTALN	% LIKely	Lower	Upper	Code	Dif.
Total	6,902	68.8	67.5	70.1	N/A	N/A
Sex						
Female (F)	3,769	71.2	69.5	73.0	F	М
Male (M)	3,092	66.3	64.3	68.3	М	F
Age						
18-34 (A)	2,049	71.6	69.3	73.9	А	С
35-49 (B)	1,348	72.0	69.1	74.9	В	
50-64 (C)	1,691	66.4	63.7	69.1	С	А
65+ (D)	1,410	67.1	64.2	70.0	D	
Race						
White (W)	4,773	71.4	69.9	72.9	W	ΒA
Black (B)	656	58.4	54.2	62.7	В	W NA
Asian (A)	632	54.0	49.7	58.3	А	W NA O
Native American (NA)	593	72.3	68.1	76.5	NA	ВA
Other/Multiple (O)	248	67.6	61.0	74.2	0	А
Ethnicity						
Hispanic (H)	721	69.3	65.4	73.2	Н	
Non-Hispanic (NH)	6,181	68.7	67.3	70.1	NH	
Education						
High School or Less (HS)	1,362	65.1	62.4	67.8	HS	CG PG
Some College/Technical/Vocational (SC)	2,051	68.7	66.6	70.9	SC	CG
College Graduate (CG)	2,241	73.7	71.7	75.7	CG	HS SC
Postgraduate (PG)	1,219	72.5	69.8	75.1	PG	HS

Table 15. Results for Donate Family's Organs, Wish Unknown (Q10), 2019

Note: "Likely" includes "Very Likely" and "Somewhat Likely." "Total N" is the unweighted number of individuals in this group. Percentages are weighted to national population characteristics. "CI" is the confidence interval. Letters in the columns "95% CI Dif." indicate the confidence intervals for these groups do not overlap, suggesting a meaningful difference in survey responses between these demographic categories. The "Total N" for each demographic category might not equal the full "Total N" if respondents did not answer or answered "other" to the demographic questions.

011 Donato Familu's Organs, Wish Known	TotalN	0/ Likoly	95% CI	95% CI	95% CI	95% CI
Q11. Donate Failing's Organs, wish Khown	IOLAIN	% LIKely	Lower	Upper	Code	Dif.
Total	6,872	88.3	87.3	89.3	N/A	N/A
Sex						
Female (F)	3,754	90.3	89.2	91.5	F	М
Male (M)	3,077	86.3	84.8	87.9	М	F
Age						
18-34 (A)	2,038	88.7	87.0	90.5	А	
35-49 (B)	1,339	87.1	84.8	89.4	В	
50-64 (C)	1,683	90.6	88.9	92.3	С	
65+ (D)	1,411	90.0	88.1	92.0	D	
Race						
White (W)	4,754	90.7	89.7	91.7	W	BAO
Black (B)	657	82.6	79.2	86.0	В	W NA
Asian (A)	628	77.2	73.3	81.1	А	W NA
Native American (NA)	587	91.0	88.2	93.7	NA	BAO
Other/Multiple (0)	246	79.1	73.1	85.1	0	W NA
Ethnicity						
Hispanic (H)	707	84.7	81.5	87.9	Н	NH
Non-Hispanic (NH)	6,165	89.0	88.1	90.0	NH	Н
Education						
High School or Less (HS)	1,365	84.7	82.6	86.8	HS	SC CG PG
Some College/Technical/Vocational (SC)	2,046	90.1	88.6	91.5	SC	HS
College Graduate (CG)	2,231	91.5	90.2	92.7	CG	HS
Postgraduate (PG)	1,201	90.1	88.3	91.9	PG	HS

Table 16. Results for Donate Family's Organs, Wish Known (Q11), 2019

Note: "Likely" includes "Very Likely" and "Somewhat Likely." "Total N" is the unweighted number of individuals in this group. Percentages are weighted to national population characteristics. "CI" is the confidence interval. Letters in the columns "95% CI Dif." indicate the confidence intervals for these groups do not overlap, suggesting a meaningful difference in survey responses between these demographic categories. The "Total N" for each demographic category might not equal the full "Total N" if respondents did not answer or answered "other" to the demographic questions.

4.6 Donating Hands and Face

Q15E. Willing to Donate Own Hands or Face

Code	Text
Questio	n
Q15E	Recent medical breakthroughs have resulted in successful face and hand transplants for people who have suffered the loss of limbs or facial disfigurement from traumatic injuries, such as accidents and war. How willing would you be [INSERT ROTATED CHOICES]? Would you say you are very willing, somewhat willing, not very willing, or not at all willing?
Α	Upon your death to donate your hands
В	Upon your death to donate your face
Respon	se options
1	Very Willing
2	Somewhat Willing
3	Not Very Willing
4	Not at all Willing
99	Don't know/Refused

Note: All respondents received this question.

Respondents were asked if they are willing to donate their hands or face after death. Overall, 64.0% of respondents said they are willing to donate their hands and 46.9% were willing to donate their face in 2019 (see Figure 12). This represents a decrease since 2012, when 80.3% would donate their hands and 58.2% would donate their face. This decrease was similar for both telephone and web respondents, indicating a change in public opinion rather than an effect of survey administration mode. Both decreases were statistically significant (p < .0001). Section 4.18 "Trends in Organ Donation" explores longitudinal comparisons by mode of survey administration in greater detail.

White respondents were more willing to donate their hands compared to Black, Asian, or Other/multiple races respondents. Respondents with higher education were also more willing to donate their hands (see Table 17). White respondents were more willing to donate their face than Black respondents. More educated respondents were also more willing to donate their face (see Table 18).

Code	Text
Questio	n
Q15E1	If your family member signed up to be an organ donor, upon his or her death will you also be willing to [INSERT ROTATED CHOICES]? Would you be very willing, somewhat willing, not very willing, or not at all willing?
Α	Donate your family member's hands
В	Donate your family member's face
Respon	se options
1	Very Willing
2	Somewhat Willing
3	Not Very Willing
4	Not at all Willing
99	Don't know/Refused

Q15E1. Willing to Donate Family Member's Hands or Face

Note: All respondents received this question.

Respondents were also asked if they would be willing to donate their family member's hands or face after death. Overall, 58.6% of respondents said they would be willing to donate a family member's hands, and 43.6% were willing to donate a family member's face in 2019 (see Figures 12 and 13). These questions were not asked in previous surveys, so no comparison over time is possible. However, respondents were significantly less likely to donate a family member's hands or face than their own hands or face (both p < .0001).

Black respondents were less willing to donate a family member's hands or face compared to White or Native American respondents. Respondents with higher education were also more likely to donate a family member's hands or face (see Tables 19 and 20).



Figure 12. Willing to Donate Own Hands or Face (Q15E), 2019

Figure 13. Willing to Donate Family Member's Hands or Face (Q15E1), 2019



01FEA Willingto Donato Orug Hands?	TotalN	TotalN	N 0/ Willing	95% CI	95% CI	95% CI	95% CI
Q15EA. Willing to Donate Own Hands?	I Otal N	% winng	Lower	Upper	Code	Dif.	
Total	10,000	64.0	62.9	65.1	N/A	N/A	
Sex							
Female (F)	5,301	63.6	62.0	65.1	F		
Male (M)	4,609	65.0	63.4	66.7	М		
Age							
18-34 (A)	3,019	65.3	63.3	67.3	А		
35-49 (B)	1,908	65.9	63.3	68.6	В		
50-64 (C)	2,411	65.4	63.1	67.6	С		
65+ (D)	1,942	64.7	62.1	67.2	D		
Race							
White (W)	6,718	66.1	64.8	67.4	W	BAO	
Black (B)	1,059	59.7	56.4	63.0	В	W	
Asian (A)	1,045	58.6	55.3	61.9	А	W	
Native American (NA)	798	62.5	58.5	66.6	NA		
Other/Multiple (O)	380	55.1	49.3	61.0	0	W	
Ethnicity							
Hispanic (H)	1,104	60.4	57.0	63.8	Н		
Non-Hispanic (NH)	8,896	64.8	63.6	65.9	NH		
Education							
High School or Less (HS)	2,104	59.3	57.1	61.6	HS	SC CG PG	
Some College/Technical/Vocational (SC)	2,981	64.8	63.0	66.7	SC	HS PG	
College Graduate (CG)	3,200	68.1	66.4	69.9	CG	HS	
Postgraduate (PG)	1,674	71.1	68.7	73.4	PG	HS SC	

Table 17. Results for Willing to Donate Own Hands (Q15EA), 2019

Note: "Willing" includes "Very Willing" and "Somewhat Willing." "Total N" is the unweighted number of individuals in this group. Percentages are weighted to national population characteristics. "CI" is the confidence interval. Letters in the columns "95% CI Dif." indicate the confidence intervals for these groups do not overlap, suggesting a meaningful difference in survey responses between these demographic categories. The "Total N" for each demographic category might not equal the full "Total N" if respondents did not answer or answered "other" to the demographic questions.

01FED Willingto Donato oum Eccol	TatalN	Total N		95% CI	95% CI	95% CI	95% CI
Q15EB. Willing to Donate own Face?	I Otal N	% winng	Lower	Upper	Code	Dif.	
Total	10,000	46.9	45.7	48.1	N/A	N/A	
Sex							
Female (F)	5,301	45.7	44.1	47.3	F		
Male (M)	4,609	48.5	46.8	50.2	М		
Age							
18-34 (A)	3,019	45.7	43.6	47.8	А		
35-49 (B)	1,908	48.1	45.3	50.8	В		
50-64 (C)	2,411	48.4	46.0	50.7	С		
65+ (D)	1,942	48.2	45.6	50.7	D		
Race							
White (W)	6,718	48.2	46.9	49.6	W	В	
Black (B)	1,059	41.8	38.4	45.1	В	W	
Asian (A)	1,045	44.1	40.8	47.4	А		
Native American (NA)	798	48.0	44.0	52.0	NA		
Other/Multiple (O)	380	44.7	38.9	50.5	0		
Ethnicity							
Hispanic (H)	1,104	47.2	43.8	50.7	Н		
Non-Hispanic (NH)	8,896	46.8	45.6	48.0	NH		
Education							
High School or Less (HS)	2,104	43.6	41.3	45.9	HS	CG PG	
Some College/Technical/Vocational (SC)	2,981	46.0	44.1	47.9	SC	CG PG	
College Graduate (CG)	3,200	50.5	48.6	52.4	CG	HS SC	
Postgraduate (PG)	1,674	54.7	52.1	57.2	PG	HS SC	

Table 18. Results for Willing to Donate Own Face (Q15EB), 2019

Note: "Willing" includes "Very Willing" and "Somewhat Willing." "Total N" is the unweighted number of individuals in this group. Percentages are weighted to national population characteristics. "CI" is the confidence interval. Letters in the columns "95% CI Dif." indicate the confidence intervals for these groups do not overlap, suggesting a meaningful difference in survey responses between these demographic categories. The "Total N" for each demographic category might not equal the full "Total N" if respondents did not answer or answered "other" to the demographic questions.

01 FE1A Willingto Donato Familula Handa? Tot	Total N	% Willing	95% CI	95% CI	95% CI	95% CI
Q15E1A. Willing to Donate Family's Hands?	I Otal N		Lower	Upper	Code	Dif.
Total	10,000	58.7	57.5	59.8	N/A	N/A
Sex						
Female (F)	5,301	58.5	56.9	60.1	F	
Male (M)	4,609	59.4	57.7	61.1	М	
Age						
18-34 (A)	3,019	57.1	55.0	59.1	А	
35-49 (B)	1,908	61.4	58.8	64.1	В	
50-64 (C)	2,411	60.8	58.5	63.1	С	
65+ (D)	1,942	60.3	57.7	62.8	D	
Race						
White (W)	6,718	60.1	58.7	61.4	W	В
Black (B)	1,059	53.1	49.7	56.4	В	W NA
Asian (A)	1,045	56.4	53.1	59.7	А	
Native American (NA)	798	60.7	56.6	64.7	NA	В
Other/Multiple (0)	380	55.9	50.1	61.8	0	
Ethnicity						
Hispanic (H)	1,104	57.5	54.1	60.9	Н	
Non-Hispanic (NH)	8,896	58.9	57.7	60.1	NH	
Education						
High School or Less (HS)	2,104	54.3	52.0	56.6	HS	SC CG PG
Some College/Technical/Vocational (SC)	2,981	59.4	57.5	61.3	SC	HS PG
College Graduate (CG)	3,200	61.3	59.5	63.1	CG	HS PG
Postgraduate (PG)	1,674	67.8	65.4	70.2	PG	HS SC CG

Table 19. Results for Willing to Donate Family's Hands (Q15E1A), 2019

Note: "Willing" includes "Very Willing" and "Somewhat Willing." "Total N" is the unweighted number of individuals in this group. Percentages are weighted to national population characteristics. "CI" is the confidence interval. Letters in the columns "95% CI Dif." indicate the confidence intervals for these groups do not overlap, suggesting a meaningful difference in survey responses between these demographic categories. The "Total N" for each demographic category might not equal the full "Total N" if respondents did not answer or answered "other" to the demographic questions.

01 FE1D Willing to Donote Family's Face? Total N		95% CI	95% CI	95% CI	95% CI	
QISEIB. Willing to Donate Family's Face?	I OTAI N	% winnig	Lower	Upper	Code	Dif.
Total	10,000	43.6	42.5	44.8	N/A	N/A
Sex						
Female (F)	5,301	41.4	39.9	43.0	F	М
Male (M)	4,609	46.3	44.6	48.1	М	F
Age						
18-34 (A)	3,019	41.3	39.2	43.3	А	С
35-49 (B)	1,908	44.2	41.5	47.0	В	
50-64 (C)	2,411	46.7	44.4	49.0	С	А
65+ (D)	1,942	45.8	43.2	48.3	D	
Race						
White (W)	6,718	44.8	43.5	46.2	W	В
Black (B)	1,059	37.0	33.7	40.3	В	W NA
Asian (A)	1,045	42.9	39.6	46.2	А	
Native American (NA)	798	46.1	42.1	50.1	NA	В
Other/Multiple (0)	380	43.4	37.6	49.2	0	
Ethnicity						
Hispanic (H)	1,104	4 4.2	40.8	47.7	Н	
Non-Hispanic (NH)	8,896	4 3.5	42.3	44.7	NH	
Education						
High School or Less (HS)	2,104	40.3	38.0	42.6	HS	CG PG
Some College/Technical/Vocational (SC)	2,981	42.5	40.5	44.4	SC	CG PG
College Graduate (CG)	3,200	47.1	45.2	48.9	CG	HS SC PG
Postgraduate (PG)	1,674	52.4	49.8	54.9	PG	HS SC CG

Table 20. Results for Willing to Donate Family's Face (Q15E1B), 2019

Note: "Willing" includes "Very Willing" and "Somewhat Willing." "Total N" is the unweighted number of individuals in this group. Percentages are weighted to national population characteristics. "CI" is the confidence interval. Letters in the columns "95% CI Dif." indicate the confidence intervals for these groups do not overlap, suggesting a meaningful difference in survey responses between these demographic categories. The "Total N" for each demographic category might not equal the full "Total N" if respondents did not answer or answered "other" to the demographic questions.

4.7 Living Donation

Q15. Willing to Donate While Living

Code	Text
Questio	n
Q15	Assuming you are medically able, how likely would you be to agree to donate an organ while you are living to [INSERT ROTATED CHOICES]? Would you say very likely, somewhat likely, not very likely, or not at all likely?
Α	A close friend
В	A family member
С	An acquaintance
D	Someone you don't know
Respon	se options
1	Very likely
2	Somewhat likely
3	Not very likely
4	Not at all likely
99	Don't know/Refused

Note: All respondents received this question.

Respondents were asked about their likelihood of donating their organs while living to a close friend, family member, acquaintance, or stranger. Overall, 86.0% say they would donate while living to a family member, 75.7% to a close friend, 54.6% to an acquaintance, and 45.5% to a stranger (see Figure 14). This represents a significant decline since 2012 for all four types of living donation (p < .0001.). Both telephone and web responses declined, but web responses were significantly lower than telephone responses (see section 4.18 for detailed comparison.) This indicates a larger difference in how web and telephone respondents chose to answer this question, with more telephone respondents indicating their likelihood of donating relative to web respondents. The "4.18 Trends in Organ Donation" section presents full results for these questions by mode.

People under age 50 were more likely to donate while living to a close friend. Women were more likely than men to donate their organs while living to a family member. Asian and postgraduate respondents were less likely to donate while living to acquaintances and strangers. Demographic differences in likelihood of living donation are shown in Tables 21–24.



Figure 14. Willing to Donate While Living (Q15), 2019

0154 Living Donation to a Class Eviand?			95% CI	95% CI	95% CI	95% CI
Q15A. Living Donation to a Close Friend?	TOTALN	% LIKely	Lower	Upper	Code	Dif.
Total	10,000	75.8	74.8	76.8	N/A	N/A
Sex						
Female (F)	5,301	77.3	75.9	78.6	F	
Male (M)	4,609	74.7	73.2	76.2	М	
Age						
18-34 (A)	3,019	80.1	78.4	81.8	А	C D
35-49 (B)	1,908	79.0	76.7	81.3	В	C D
50-64 (C)	2,411	74.1	72.0	76.2	С	A B
65+ (D)	1,942	72.7	70.4	75.0	D	A B
Race						
White (W)	6,718	77.2	76.0	78.3	W	A O
Black (B)	1,059	74.0	71.0	77.0	В	
Asian (A)	1,045	70.5	67.6	73.5	А	W NA
Native American (NA)	798	78.8	75.1	82.4	NA	A 0
Other/Multiple (O)	380	68.3	62.9	73.7	0	W NA
Ethnicity						
Hispanic (H)	1,104	74.9	71.9	77.9	Н	
Non-Hispanic (NH)	8,896	76.0	74.9	77.0	NH	
Education						
High School or Less (HS)	2,104	74.3	72.3	76.3	HS	
Some College/Technical/Vocational (SC)	2,981	77.0	75.3	78.6	SC	
College Graduate (CG)	3,200	77.5	76.0	79.1	CG	
Postgraduate (PG)	1,674	75.0	72.8	77.2	PG	

Table 21. Results for Living Donation to a Close Friend (Q15A), 2019

Note: "Likely" includes "Very Likely" and "Somewhat Likely." "Total N" is the unweighted number of individuals in this group. Percentages are weighted to national population characteristics. "CI" is the confidence interval. Letters in the columns "95% CI Dif." indicate the confidence intervals for these groups do not overlap, suggesting a meaningful difference in survey responses between these demographic categories. The "Total N" for each demographic category might not equal the full "Total N" if respondents did not answer or answered "other" to the demographic questions.

015D Living Donation to Family Mambar?			95% CI	95% CI	95% CI	95% CI
Q15B. Living Donation to Family Member?	TOTALN	% LIKEly	Lower	Upper	Code	Dif.
Total	10,000	86.0	85.2	86.8	N/A	N/A
Sex						
Female (F)	5,301	88.7	87.6	89.7	F	М
Male (M)	4,609	83.8	82.5	85.1	М	F
Age						
18-34 (A)	3,019	87.4	85.9	88.8	А	
35-49 (B)	1,908	88.0	86.1	89.8	В	
50-64 (C)	2,411	86.7	85.1	88.3	С	
65+ (D)	1,942	87.2	85.4	88.9	D	
Race						
White (W)	6,718	87.3	86.4	88.2	W	A O
Black (B)	1,059	84.4	81.9	86.8	В	
Asian (A)	1,045	82.8	80.3	85.4	А	W
Native American (NA)	798	86.5	83.3	89.7	NA	0
Other/Multiple (0)	380	78.1	73.3	82.8	0	W NA
Ethnicity						
Hispanic (H)	1,104	84.7	82.2	87.2	Н	
Non-Hispanic (NH)	8,896	86.3	85.4	87.1	NH	
Education						
High School or Less (HS)	2,104	83.8	82.1	85.6	HS	SC CG
Some College/Technical/Vocational (SC)	2,981	87.1	85.8	88.4	SC	HS
College Graduate (CG)	3,200	88.6	87.4	89.8	CG	HS
Postgraduate (PG)	1,674	86.3	84.5	88.1	PG	

Table 22. Results for Living Donation to a Family Member (Q15B), 2019

Note: "Likely" includes "Very Likely" and "Somewhat Likely." "Total N" is the unweighted number of individuals in this group. Percentages are weighted to national population characteristics. "CI" is the confidence interval. Letters in the columns "95% CI Dif." indicate the confidence intervals for these groups do not overlap, suggesting a meaningful difference in survey responses between these demographic categories. The "Total N" for each demographic category might not equal the full "Total N" if respondents did not answer or answered "other" to the demographic questions.

0150 Living Donation to an Acquaintance?	TotalN		95% CI	95% CI	95% CI	95% CI
Q15C. Living Donation to an Acquaintance?	I Otal N	% LIKely	Lower	Upper	Code	Dif.
Total	10,000	54.6	53.4	55.8	N/A	N/A
Sex						
Female (F)	5,301	55.5	53.9	57.1	F	
Male (M)	4,609	54.0	52.3	55.7	М	
Age						
18-34 (A)	3,019	56.0	54.0	58.1	А	
35-49 (B)	1,908	57.9	55.2	60.6	В	
50-64 (C)	2,411	53.3	50.9	55.6	С	
65+ (D)	1,942	52 <mark>.</mark> 9	50.3	55.5	D	
Race						
White (W)	6,718	54.4	53.1	55.7	W	А
Black (B)	1,059	58.3	55.0	61.6	В	А
Asian (A)	1,045	47.2	43.9	50.6	А	W B NA
Native American (NA)	798	58.3	54.2	62.3	NA	А
Other/Multiple (0)	380	54.8	48.9	60.6	0	
Ethnicity						
Hispanic (H)	1,104	56.4	52.9	59.8	Н	
Non-Hispanic (NH)	8,896	54.2	53.0	55.4	NH	
Education						
High School or Less (HS)	2,104	56.0	53.7	58.3	HS	PG
Some College/Technical/Vocational (SC)	2,981	56.1	54.1	58.0	SC	PG
College Graduate (CG)	3,200	53.7	51.8	55.5	CG	PG
Postgraduate (PG)	1,674	48.4	45.8	50.9	PG	HS SC CG

Table 23. Results for Living Donation to an Acquaintance (Q15C), 2019

Note: "Likely" includes "Very Likely" and "Somewhat Likely." "Total N" is the unweighted number of individuals in this group. Percentages are weighted to national population characteristics. "CI" is the confidence interval. Letters in the columns "95% CI Dif." indicate the confidence intervals for these groups do not overlap, suggesting a meaningful difference in survey responses between these demographic categories. The "Total N" for each demographic category might not equal the full "Total N" if respondents did not answer or answered "other" to the demographic questions.

015D Living Donation to a Chron gor?		95% CI	95% CI	95% CI	95% CI	
Q15D. Living Donation to a Stranger?	I Otal N	% LIKely	Lower	Upper	Code	Dif.
Total	10,000	45.5	44.3	46.7	N/A	N/A
Sex						
Female (F)	5,301	48.5	46.9	50.1	F	М
Male (M)	4,609	42.6	40.9	44.3	М	F
Age						
18-34 (A)	3,019	48.0	45.9	50.1	А	D
35-49 (B)	1,908	48.1	45.4	50.9	В	D
50-64 (C)	2,411	4 3.8	41.5	46.2	С	
65+ (D)	1,942	41.9	39.3	44.5	D	A B
Race						
White (W)	6,718	4 5.0	43.6	46.3	W	ΒA
Black (B)	1,059	50.2	46.9	53.6	В	W A
Asian (A)	1,045	37.9	34.7	41.2	А	W B NA O
Native American (NA)	798	49.8	45.8	53.8	NA	А
Other/Multiple (O)	380	47.4	41.5	53.2	0	А
Ethnicity						
Hispanic (H)	1,104	48.9	45.4	52.3	Н	
Non-Hispanic (NH)	8,896	44.8	43.6	46.0	NH	
Education						
High School or Less (HS)	2,104	48.8	46.5	51.1	HS	CG PG
Some College/Technical/Vocational (SC)	2,981	45.4	43.5	47.4	SC	PG
College Graduate (CG)	3,200	43.1	41.2	44.9	CG	HS
Postgraduate (PG)	1,674	39.1	36.6	41.6	PG	HS SC

Table 24. Results for Living Donation to a Stranger (Q15D), 2019

Note: "Likely" includes "Very Likely" and "Somewhat Likely." "Total N" is the unweighted number of individuals in this group. Percentages are weighted to national population characteristics. "CI" is the confidence interval. Letters in the columns "95% CI Dif." indicate the confidence intervals for these groups do not overlap, suggesting a meaningful difference in survey responses between these demographic categories. The "Total N" for each demographic category might not equal the full "Total N" if respondents did not answer or answered "other" to the demographic questions.

4.8 Beliefs About Organ Donation

Q12. Agree with These Statements About Organ Donation

Code	Text
Questio	vn
Q12	Now, I am going to read you a number of statements. For each one, please tell me if you strongly agree, somewhat agree, somewhat disagree, or strongly disagree. [ROTATE STATEMENTS]
A	It is important for a person's body to have all of its parts when it is buried.
В	It is important for people to tell their families whether or not they would want their organs to be donated upon death.
С	Most members of my family would support the idea of organ donation.
D	Receiving organ transplants improve people's lives.
E	Organ donation allows something positive to come out of a person's death.
F	A deceased person's next of kin should be able to override the deceased person's wish to donate his or her organs.
G	Organs should be distributed so that the expected life of the organ is similar to the expected life of the recipient. For example, older people should generally get older organs and younger people should get younger organs.
Н	All people who need an organ transplant should be able to receive a transplant.
Respon	se options
1	Strongly Agree
2	Somewhat Agree
3	Somewhat Disagree
4	Strongly Disagree
99	Don't know/Refused

Note: All respondents received this question.

Code	Text				
Question					
Q16	Now I am going to read you several statements. For each one, please tell me whether you strongly agree, somewhat agree, somewhat disagree, or strongly disagree. [ROTATE STATEMENTS]				
Α	Minority patients are less likely to receive organ transplants.				
В	You are worried that a loved one's body would be disfigured if his or her organs were donated.				
C	It is possible for a brain-dead person to recover from his or her injuries.				
D	People who choose to donate a family member's organs end up paying extra medical bills.				
Е	Organ donation helps families cope with their grief.				
F	Every year, thousands of people die due to a lack of donated organs for transplantation.				
G	If you indicate you intend to be a donor, doctors will be less likely to try to save your life.				
Н	A person's wish to donate his or her organs should be honored under all circumstances, even over the objections of surviving family members.				
Ι	Transplants often go to undeserving people.				
J	You would agree to receive an organ transplant if it would save your life.				
К	The U.S. transplant system uses a fair approach to distribute organs to patients.				
Respon	se options				
1	Strongly Agree				
2	Somewhat Agree				
3	Somewhat Disagree				
4	Strongly Disagree				
99	Don't know/Refused				

Q16. Agree with These Statements About Organ Donation

Note: All respondents received this question.

Code	Text
Questio	n
Q22	Now I am going to read you several statements. For each one, please tell me whether you strongly agree, somewhat agree, somewhat disagree, or strongly disagree. [ROTATE STATEMENTS]
A	Given equal need, a poor person has as good a chance as a rich person of getting an organ transplant.
В	Doctors do everything they can to save a person's life before organ donation is even considered.
С	Organ transplantation is an experimental medical procedure.
D	Organ donation is against my religion.
Ε	It is impossible to have a regular funeral service following organ donation.
F	Many people on the national transplant waiting list die because the organ they need isn't donated in time.
Respon	se options
1	Strongly Agree
2	Somewhat Agree
3	Somewhat Disagree
4	Strongly Disagree
99	Don't know/Refused

Q22. Agree with These Statements About Organ Donation

Note: All respondents received this question.

Respondents were asked if they agreed with 25 statements about organ donation and transplantation (Q12x, Q16x, and Q22x). An analysis of these beliefs found that 24 of these 25 belief statements clustered into three larger belief factors, representing a belief in the benefits of organ donation, concerns about organ donation, and a belief in the fairness of how organs are distributed (see section 4.14 "Understanding Beliefs about Organ Donation" and Technical Appendix C for more information). These belief questions are organized below by these three belief factors.

Belief in Benefits of Organ Donation (Q12x, Q16x, Q22x)

Several survey questions were associated with a belief in the benefits of organ donation. On average, 85.1% of respondents agreed with these benefits. This represented a decline of 3.5 percentage points since 2012 (p < .0001). This included a drop of 2.2 percentage points for telephone respondents (p = .017) and a drop of 3.8 percentage points for web respondents (p < .0001). This indicates a slight decrease among the public in the belief in the benefits of organ donation since 2012. Telephone and web respondents were not significantly different. The survey question showing the biggest decrease since 2012 was Q22B "doctors do everything to save a life before organ donation is considered" (91% in 2012 to 84% in 2019, p < .0001). Q12C "most family supports organ donation" showed an increase since 2012 (74% in 2012 to 77% in 2019, p < .0001). Figure 15 shows the results for all questions.

While demographic differences varied by individual questions, in general, women, those 50 and over, Whites or Native Americans, or those with a higher level of education were more likely to agree with the benefits of organ donation. Tables 25–35 show the full demographic results.





Note: The "4.18 Trends in Organ Donation" section explores longitudinal comparisons in greater detail.

22P Doctors Do Evorything to Sava Donors Total		0/ 1000	95% CI	95% CI	95% CI	95% CI
Q22B. Doctors Do Everything to save Donors	IOLAIN	% Agree	Lower	Upper	Code	Dif.
Total	10,000	84.1	83.2	85.0	N/A	N/A
Sex						
Female (F)	5,301	85.1	83.9	86.3	F	
Male (M)	4,609	83.8	82.5	85.1	М	
Age						
18-34 (A)	3,019	81.0	79.3	82.6	А	B C D
35-49 (B)	1,908	85.5	83.6	87.5	В	A D
50-64 (C)	2,411	88.1	86.4	89.7	С	А
65+ (D)	1,942	89.6	88.0	91.2	D	A B
Race						
White (W)	6,718	86.1	85.2	87.0	W	ΒO
Black (B)	1,059	81.0	78.3	83.6	В	W 0
Asian (A)	1,045	82.7	80.1	85.3	А	0
Native American (NA)	798	82.7	79.4	86.1	NA	0
Other/Multiple (0)	380	71.3	66.1	76.6	0	W B A NA
Ethnicity						
Hispanic (H)	1,104	81.2	78.5	84.0	Н	
Non-Hispanic (NH)	8,896	84.7	83.9	85.6	NH	
Education						
High School or Less (HS)	2,104	82.6	80.9	84.4	HS	CG PG
Some College/Technical/Vocational (SC)	2,981	83.4	81.9	84.8	SC	CG PG
College Graduate (CG)	3,200	86.7	85.5	88.0	CG	HS SC
Postgraduate (PG)	1,674	86.7	85.0	88.5	PG	HS SC

Table 25. Results for Doctors Do Everything to Save Donors (Q22B), 2019

Note: "Agree" includes "Strongly Agree" and "Somewhat Agree." "Total N" is the unweighted number of individuals in this group. Percentages are weighted to national population characteristics. "CI" is the confidence interval. Letters in the columns "95% CI Dif." indicate the confidence intervals for these groups do not overlap, suggesting a meaningful difference in survey responses between these demographic categories. The "Total N" for each demographic category might not equal the full "Total N" if respondents did not answer or answered "other" to the demographic questions.

Q12B. Important to Tell Family Wishes	Total N	% Agree	95% CI Lower	95% CI Upper	95% CI Code	95% CI Dif.
Total	10,000	90.1	89.3	90.8	N/A	N/A
Sex						
Female (F)	5,301	92.6	91.8	93.4	F	М
Male (M)	4,609	88.0	86.8	89.1	М	F
Age						
18-34 (A)	3,019	87.9	86.5	89.2	А	B C D
35-49 (B)	1,908	91.2	89.6	92.7	В	A D
50-64 (C)	2,411	92.8	91.5	94.1	С	А
65+ (D)	1,942	95.1	94.0	96.3	D	A B
Race						
White (W)	6,718	91.4	90.6	92.1	W	ΑO
Black (B)	1,059	88.8	86.7	91.0	В	0
Asian (A)	1,045	86.2	83.9	88.5	А	W NA
Native American (NA)	798	91.6	89.1	94.0	NA	A 0
Other/Multiple (0)	380	81.9	77.5	86.2	0	W B NA
Ethnicity						
Hispanic (H)	1,104	88.1	85.9	90.4	Н	
Non-Hispanic (NH)	8,896	90.5	89.8	91.2	NH	
Education						
High School or Less (HS)	2,104	88.8	87.3	90.3	HS	
Some College/Technical/Vocational (SC)	2,981	91.1	90.0	92.2	SC	
College Graduate (CG)	3,200	91.1	90.0	92.2	CG	
Postgraduate (PG)	1,674	90.2	88.6	91.7	PG	

Table 26. Results for Important to Tell Family Wishes (Q12B), 2019

Note: "Agree" includes "Strongly Agree" and "Somewhat Agree." "Total N" is the unweighted number of individuals in this group. Percentages are weighted to national population characteristics. "CI" is the confidence interval. Letters in the columns "95% CI Dif." indicate the confidence intervals for these groups do not overlap, suggesting a meaningful difference in survey responses between these demographic categories. The "Total N" for each demographic category might not equal the full "Total N" if respondents did not answer or answered "other" to the demographic questions.

01(I. Agree to Dessive Ourser if Sours Life	TotalN	0/ 1 0000	95% CI	95% CI	95% CI	95% CI
Q16J. Agree to Receive Organ if Save Life	I Otal N	% Agree	Lower	Upper	Code	Dif.
Total	10,000	87.0	86.2	87.8	N/A	N/A
Sex						
Female (F)	5,301	88.2	87.2	89.2	F	
Male (M)	4,609	86.4	85.2	87.6	М	
Age						
18-34 (A)	3,019	86.7	85.2	88.1	А	С
35-49 (B)	1,908	89.0	87.2	90.8	В	
50-64 (C)	2,411	90.3	88.9	91.7	С	А
65+ (D)	1,942	88.1	86.4	89.8	D	
Race						
White (W)	6,718	88.9	88.1	89.7	W	BAO
Black (B)	1,059	85.4	83.0	87.8	В	W 0
Asian (A)	1,045	82.5	79.9	85.1	А	W
Native American (NA)	798	84.7	81.3	88.1	NA	0
Other/Multiple (0)	380	75.6	70.5	80.6	0	W B NA
Ethnicity						
Hispanic (H)	1,104	84.0	81.4	86.6	Н	NH
Non-Hispanic (NH)	8,896	87.7	86.9	88.5	NH	Н
Education						
High School or Less (HS)	2,104	85.8	84.2	87.5	HS	CG
Some College/Technical/Vocational (SC)	2,981	86.9	85.6	88.2	SC	
College Graduate (CG)		89.0	87.8	90.1	CG	HS
Postgraduate (PG)	1,674	88.5	86.9	90.2	PG	

Table 27. Results for Agree to Receive Organ If Save Life (Q16J), 2019

Note: "Agree" includes "Strongly Agree" and "Somewhat Agree." "Total N" is the unweighted number of individuals in this group. Percentages are weighted to national population characteristics. "CI" is the confidence interval. Letters in the columns "95% CI Dif." indicate the confidence intervals for these groups do not overlap, suggesting a meaningful difference in survey responses between these demographic categories. The "Total N" for each demographic category might not equal the full "Total N" if respondents did not answer or answered "other" to the demographic questions.

01(F. Donation Holns Familias Cone with Crief	Total N	0/ 1 0000	95% CI	95% CI	95% CI	95% CI
Q16E. Donation helps rammes cope with Grief	TOTALN	% Agree	Lower	Upper	Code	Dif.
Total	10,000	77.7	76.7	78.7	N/A	N/A
Sex						
Female (F)	5,301	79.9	78.6	81.2	F	М
Male (M)	4,609	76.0	74.5	77.5	М	F
Age						
18-34 (A)	3,019	74.4	72.5	76.2	А	C D
35-49 (B)	1,908	78.4	76.1	80.8	В	D
50-64 (C)	2,411	81.5	79.6	83.4	С	А
65+ (D)	1,942	84.7	82.8	86.5	D	A B
Race						
White (W)	6,718	79.8	78.7	80.9	W	BAO
Black (B)	1,059	73.2	70.2	76.3	В	W
Asian (A)	1,045	74.0	71.0	77.0	А	W
Native American (NA)	798	75.0	71.2	78.7	NA	
Other/Multiple (0)	380	67.7	62.3	73.1	0	W
Ethnicity						
Hispanic (H)	1,104	75.7	72.7	78.7	Н	
Non-Hispanic (NH)	8,896	78.1	77.1	79.1	NH	
Education						
High School or Less (HS)	2,104	74.4	72.4	76.5	HS	CG PG
Some College/Technical/Vocational (SC)	2,981	77.7	76.0	79.3	SC	CG PG
College Graduate (CG)	3,200	81.0	79.6	82.5	CG	HS SC
Postgraduate (PG)	1,674	83.2	81.3	85.1	PG	HS SC

Table 28. Results for Donation Helps Families Cope with Grief (Q16E), 2019

Note: "Agree" includes "Strongly Agree" and "Somewhat Agree." "Total N" is the unweighted number of individuals in this group. Percentages are weighted to national population characteristics. "CI" is the confidence interval. Letters in the columns "95% CI Dif." indicate the confidence intervals for these groups do not overlap, suggesting a meaningful difference in survey responses between these demographic categories. The "Total N" for each demographic category might not equal the full "Total N" if respondents did not answer or answered "other" to the demographic questions.
012E Donation Allows Desitive From Death Total N 0/ Agree		95% CI	95% CI	95% CI	95% CI	
Q12E. Donation Allows Positive From Death	I Otal N	% Agree	Lower	Upper	Code	Dif.
Total	10,000	90.5	89.8	91.2	N/A	N/A
Sex						
Female (F)	5,301	92.4	91.5	93.3	F	М
Male (M)	4,609	89.3	88.1	90.4	М	F
Age						
18-34 (A)	3,019	89.3	87.9	90.6	А	C D
35-49 (B)	1,908	91.4	89.8	93.0	В	С
50-64 (C)	2,411	94.5	93.4	95.6	С	A B
65+ (D)	1,942	93.4	92.0	94.8	D	А
Race						
White (W)	6,718	92.8	92.1	93.5	W	BAO
Black (B)	1,059	85.8	83.3	88.3	В	W
Asian (A)	1,045	85.8	83.4	88.3	А	W
Native American (NA)	798	90.7	88.0	93.4	NA	0
Other/Multiple (0)	380	79.9	75.3	84.5	0	W NA
Ethnicity						
Hispanic (H)	1,104	86.2	83.8	88.6	Н	NH
Non-Hispanic (NH)	8,896	91.5	90.8	92.1	NH	Н
Education						
High School or Less (HS)	2,104	89.0	87.5	90.4	HS	CG
Some College/Technical/Vocational (SC)	2,981	90.8	89.7	92.0	SC	
College Graduate (CG)	3,200	92.7	91.8	93.7	CG	HS
Postgraduate (PG)	1,674	91.5	90.0	93.0	PG	

Table 29. Results for Donation Allows Positive from Death (Q12E), 2019

016H Wish to Donate Should be Honored Total N	% Agroo	95% CI	95% CI	95% CI	95% CI	
Q10H. WISH to Donate Should be Honored	IOTALIN	% Agree	Lower	Upper	Code	Dif.
Total	10,000	85.8	85.0	86.6	N/A	N/A
Sex						
Female (F)	5,301	87.2	86.1	88.3	F	
Male (M)	4,609	84.9	83.6	86.2	М	
Age						
18-34 (A)	3,019	84.7	83.1	86.2	А	C D
35-49 (B)	1,908	87.5	85.7	89.4	В	
50-64 (C)	2,411	89.0	87.4	90.6	С	А
65+ (D)	1,942	88.4	86.7	90.1	D	А
Race						
White (W)	6,718	87.6	86.7	88.5	W	BAO
Black (B)	1,059	81.8	79.2	84.5	В	W NA
Asian (A)	1,045	81.0	78.3	83.7	А	W NA
Native American (NA)	798	89.3	86.6	92.0	NA	BAO
Other/Multiple (0)	380	77.3	72.5	82.1	0	W NA
Ethnicity						
Hispanic (H)	1,104	81.9	79.2	84.6	Н	NH
Non-Hispanic (NH)	8,896	86.6	85.8	87.5	NH	Н
Education						
High School or Less (HS)	2,104	83.6	81.9	85.4	HS	CG PG
Some College/Technical/Vocational (SC)	2,981	86.6	85.3	88.0	SC	
College Graduate (CG)	3,200	88.1	86.9	89.3	CG	HS
Postgraduate (PG)	1,674	87.3	85.6	89.0	PG	HS

Table 30. Results for Wishes to Donate Should Be Honored (Q16H), 2019

012D Transplants Improve Lives Total N	% Δστορ	95% CI	95% CI	95% CI	95% CI	
Q12D. Transplants improve Lives	I Otal N	% Agree	Lower	Upper	Code	Dif.
Total	10,000	90.8	90.1	91.5	N/A	N/A
Sex						
Female (F)	5,301	92.3	91.3	93.2	F	М
Male (M)	4,609	90.0	88.9	91.0	М	F
Age						
18-34 (A)	3,019	88.6	87.2	89.9	А	B C D
35-49 (B)	1,908	91.9	90.3	93.5	В	A C
50-64 (C)	2,411	95.1	94.0	96.1	С	A B
65+ (D)	1,942	94.5	93.3	95.8	D	А
Race						
White (W)	6,718	92.6	91.8	93.3	W	BAO
Black (B)	1,059	88.2	86.0	90.4	В	W NA O
Asian (A)	1,045	87.2	84.8	89.5	А	W NA
Native American (NA)	798	92.9	90.5	95.2	NA	BAO
Other/Multiple (0)	380	80.5	76.1	85.0	0	W B NA
Ethnicity						
Hispanic (H)	1,104	86.8	84.5	89.2	Н	NH
Non-Hispanic (NH)	8,896	91.7	91.0	92.4	NH	Н
Education						
High School or Less (HS)	2,104	88.8	87.4	90.3	HS	SC CG PG
Some College/Technical/Vocational (SC)	2,981	91.8	90.7	92.9	SC	HS
College Graduate (CG)	3,200	92.6	91.6	93.6	CG	HS
Postgraduate (PG)	1,674	92.2	90.8	93.6	PG	HS

Table 31. Results for Transplants Improve Lives (Q12D), 2019

016F Thousands Die From Lack of Organs Total N	% Agroo	95% CI	95% CI	95% CI	95% CI	
Q10F. Thousands Die From Lack of Organs	TOTALN	% Agree	Lower	Upper	Code	Dif.
Total	10,000	85.0	84.1	85.9	N/A	N/A
Sex						
Female (F)	5,301	86.7	85.6	87.9	F	М
Male (M)	4,609	83.9	82.6	85.2	М	F
Age						
18-34 (A)	3,019	83.0	81.4	84.6	А	C D
35-49 (B)	1,908	85.1	83.1	87.1	В	C D
50-64 (C)	2,411	88.9	87.4	90.5	С	A B
65+ (D)	1,942	89.8	88.2	91.5	D	A B
Race						
White (W)	6,718	87.1	86.2	88.0	W	BAO
Black (B)	1,059	80.7	78.0	83.5	В	W NA
Asian (A)	1,045	81.9	79.2	84.5	А	W 0
Native American (NA)	798	86.9	83.9	89.9	NA	ΒO
Other/Multiple (0)	380	73.7	68.7	78.7	0	W A NA
Ethnicity						
Hispanic (H)	1,104	81.5	78.8	84.2	Н	NH
Non-Hispanic (NH)	8,896	85.7	84.9	86.6	NH	Н
Education						
High School or Less (HS)	2,104	82.6	80.9	84.4	HS	CG PG
Some College/Technical/Vocational (SC)	2,981	85.2	83.8	86.6	SC	
College Graduate (CG)	3,200	87.8	86.5	89.0	CG	HS
Postgraduate (PG)	1,674	88.0	86.3	89.7	PG	HS

Table 32. Results for Thousands Die from Lack of Organs (Q16F), 2019

012C Most Family Supports Organ Donation Total N	0/ Agroo	95% CI	95% CI	95% CI	95% CI	
Q12C. Most Family Supports Organ Donation	I Otal N	% Agree	Lower	Upper	Code	Dif.
Total	10,000	77.1	76.1	78.0	N/A	N/A
Sex						
Female (F)	5,301	78.3	77.0	79.7	F	
Male (M)	4,609	76.3	74.8	77.8	М	
Age						
18-34 (A)	3,019	76.6	74.9	78.4	А	
35-49 (B)	1,908	79.2	76.9	81.4	В	
50-64 (C)	2,411	80.1	78.2	82.1	С	
65+ (D)	1,942	77.9	75.7	80.1	D	
Race						
White (W)	6,718	80.8	79.7	81.9	W	BAO
Black (B)	1,059	63.2	59.9	66.4	В	W A NA
Asian (A)	1,045	69.7	66.6	72.8	А	W B
Native American (NA)	798	76.6	72.8	80.3	NA	В
Other/Multiple (0)	380	69.8	64.5	75.2	0	W
Ethnicity						
Hispanic (H)	1,104	74.8	71.8	77.8	Н	
Non-Hispanic (NH)	8,896	77.5	76.5	78.6	NH	
Education						
High School or Less (HS)	2,104	74.7	72.7	76.7	HS	CG PG
Some College/Technical/Vocational (SC)	2,981	76.6	75.0	78.3	SC	CG PG
College Graduate (CG)	3,200	80.6	79.1	82.0	CG	HS SC
Postgraduate (PG)	1,674	80.5	78.5	82.5	PG	HS SC

Table 33. Results for Most Family Supports Organ Donation (Q12C), 2019

022F Many People Die Needing Organs Total N	Total N	% Δστορ	95% CI	95% CI	95% CI	95% CI
Q22F. Many People Die Needing Organs	TOTALN	% Agree	Lower	Upper	Code	Dif.
Total	10,000	86.5	85.7	87.3	N/A	N/A
Sex						
Female (F)	5,301	88.8	87.7	89.8	F	М
Male (M)	4,609	84.8	83.6	86.1	М	F
Age						
18-34 (A)	3,019	84.9	83.4	86.4	А	C D
35-49 (B)	1,908	85.6	83.6	87.5	В	C D
50-64 (C)	2,411	91.4	90.0	92.8	С	A B
65+ (D)	1,942	91.7	90.2	93.1	D	A B
Race						
White (W)	6,718	88.8	87.9	89.6	W	BAO
Black (B)	1,059	81.0	78.3	83.7	В	W NA
Asian (A)	1,045	82.1	79.5	84.7	А	W NA
Native American (NA)	798	88.6	85.7	91.5	NA	BAO
Other/Multiple (0)	380	76.0	71.2	80.9	0	W NA
Ethnicity						
Hispanic (H)	1,104	84.2	81.7	86.7	Н	
Non-Hispanic (NH)	8,896	87.0	86.1	87.8	NH	
Education						
High School or Less (HS)	2,104	85.7	84.1	87.3	HS	
Some College/Technical/Vocational (SC)	2,981	85.9	84.5	87.3	SC	
College Graduate (CG)	3,200	88.1	86.9	89.3	CG	
Postgraduate (PG)	1,674	88.5	86.8	90.2	PG	

Table 34. Results for Many People Die Needing Organs (Q22F), 2019

01211 All Who Need Should Cat Transplant	H All Who Nood Should Cat Transplant Total N %	% Agree	95% CI	95% CI	95% CI	95% CI
Q12H. All who need Should Get Transplant	TOTALN	% Agree	Lower	Upper	Code	Dif.
Total	10,000	86.3	85.5	87.1	N/A	N/A
Sex						
Female (F)	5,301	87.8	86.7	88.8	F	М
Male (M)	4,609	85.3	84.1	86.6	М	F
Age						
18-34 (A)	3,019	85.7	84.2	87.1	А	С
35-49 (B)	1,908	86.9	85.1	88.7	В	
50-64 (C)	2,411	89.1	87.7	90.6	С	А
65+ (D)	1,942	87.9	86.2	89.6	D	
Race						
White (W)	6,718	87.0	86.1	87.9	W	A O
Black (B)	1,059	87.7	85.5	89.9	В	A O
Asian (A)	1,045	80.8	78.1	83.5	А	W B NA
Native American (NA)	798	86.6	83.7	89.6	NA	А
Other/Multiple (0)	380	80.8	76.3	85.2	0	W B
Ethnicity						
Hispanic (H)	1,104	85.0	82.5	87.4	Н	
Non-Hispanic (NH)	8,896	86.6	85.7	87.4	NH	
Education						
High School or Less (HS)	2,104	85.9	84.3	87.5	HS	
Some College/Technical/Vocational (SC)	2,981	87.6	86.3	88.8	SC	PG
College Graduate (CG)	3,200	87.1	85.9	88.4	CG	PG
Postgraduate (PG)	1,674	83.5	81.6	85.4	PG	SC CG

Table 35. Results for All Who Need Should Get Transplant (Q12H), 2019

Belief in Concerns About Organ Donation (Q12x, Q16x, Q22x)

Several survey questions were associated with a belief in the concerns about organ donation. On average, 34.7% of respondents agreed with these concerns. This is an increase of 9.3 percentage points since 2012 (p < .0001). This included an increase of 7.9 percentage points for telephone respondents (p < .0001) and 9.7 percentage points for web respondents (p < .0001). This shows a sharp increase among the public in the belief in concerns about organ donation since 2012. Telephone and web responses were not significantly different. The survey question showing the biggest change since 2012 was Q16A the belief that minorities less likely to receive organs (30% in 2012 to 48% in 2019, p < .0001). This change of 17.6 percentage points suggests that since 2012, respondents are much more likely to believe minorities are less likely to get transplants they need because of discrimination. Every concern except for Q16C showed a statistically significant change, with more people believing in the concern. Q16C regarding the belief that brain-dead recovery is possible showed no significant change since 2012 (41% in 2012 to 42% in 2019). Figure 16 shows the results for all questions.

Like for belief in benefits of organ donation, demographic differences varied by individual questions. In general, men, those under age 50, Black, Asian or Other/multiple races, Hispanics, or those with lower level of education were more likely to agree with the concerns of organ donation. Tables 36–46 shows the full demographic results.





Note: The "4.18 Trends in Organ Donation" section explores longitudinal comparisons in greater detail.

0164 Minorities Less Likely to Receive Organs	Total N	% Agroo	95% CI	95% CI	95% CI	95% CI
Q16A. MINOPILIES LESS LIKELY to Receive Organs	I Otal N	% Agree	Lower	Upper	Code	Dif.
Total	10,000	47.9	46.8	49.1	N/A	N/A
Sex						
Female (F)	5,301	47.3	45.7	48.9	F	
Male (M)	4,609	48.8	47.1	50.5	М	
Age						
18-34 (A)	3,019	54.8	52.7	56.9	А	B C D
35-49 (B)	1,908	48.7	46.0	51.5	В	A C
50-64 (C)	2,411	41.9	39.6	44.2	С	A B
65+ (D)	1,942	45.2	42.7	47.8	D	А
Race						
White (W)	6,718	44.5	43.2	45.8	W	BAO
Black (B)	1,059	59.2	55.9	62.6	В	W NA
Asian (A)	1,045	57.4	54.1	60.7	А	W NA
Native American (NA)	798	47.9	43.8	51.9	NA	ΒA
Other/Multiple (0)	380	55.1	49.3	61.0	0	W
Ethnicity						
Hispanic (H)	1,104	52.5	49.1	56.0	Н	NH
Non-Hispanic (NH)	8,896	46.9	45.7	48.1	NH	Н
Education						
High School or Less (HS)	2,104	47.8	45.5	50.1	HS	PG
Some College/Technical/Vocational (SC)	2,981	46.2	44.3	48.1	SC	PG
College Graduate (CG)	3,200	48.1	46.3	50.0	CG	PG
Postgraduate (PG)	1,674	52.7	50.2	55.3	PG	HS SC CG

Table 36. Results for Minorities Less Likely to Receive Organs (Q16A), 2019

01(D Warried Loved Orels Dedu Disfigured	Total N		95% CI	95% CI	95% CI	95% CI
Q16B. worried Loved One's Body Distigured	I Otal N	70 Agree	Lower	Upper	Code	Dif.
Total	10,000	30.8	29.7	31.9	N/A	N/A
Sex						
Female (F)	5,301	27.6	26.1	29.0	F	М
Male (M)	4,609	34.6	32.9	36.2	М	F
Age						
18-34 (A)	3,019	39.5	37.5	41.6	А	B C D
35-49 (B)	1,908	34.7	32.0	37.3	В	A C D
50-64 (C)	2,411	22.3	20.3	24.2	С	A B
65+ (D)	1,942	19.7	17.5	21.8	D	A B
Race						
White (W)	6,718	28.2	26.9	29.4	W	B A NA O
Black (B)	1,059	36.7	33.4	40.0	В	W A NA
Asian (A)	1,045	43.6	40.3	46.9	А	W B NA
Native American (NA)	798	23.1	19.6	26.7	NA	WBAO
Other/Multiple (0)	380	39.4	33.6	45.1	0	W NA
Ethnicity						
Hispanic (H)	1,104	38.6	35.2	42.0	Н	NH
Non-Hispanic (NH)	8,896	29.2	28.1	30.3	NH	Н
Education						
High School or Less (HS)	2,104	34.7	32.5	36.9	HS	SC CG PG
Some College/Technical/Vocational (SC)	2,981	30.3	28.5	32.1	SC	HS PG
College Graduate (CG)	3,200	28.6	26.9	30.3	CG	HS PG
Postgraduate (PG)	1,674	23.1	20.9	25.3	PG	HS SC CG

Table 37. Results for Worried Loved One's Body Disfigured (Q16B), 2019

022E Impossible to Have Euroral	TotalN		95% CI	95% CI	95% CI	95% CI
Q22E. Impossible to have Funeral	I Otal N	% Agree	Lower	Upper	Code	Dif.
Total	10,000	30.4	29.3	31.5	N/A	N/A
Sex						
Female (F)	5,301	29.6	28.1	31.1	F	
Male (M)	4,609	31.2	29.6	32.8	М	
Age						
18-34 (A)	3,019	36.2	34.2	38.3	А	C D
35-49 (B)	1,908	32.8	30.2	35.5	В	C D
50-64 (C)	2,411	24.1	22.1	26.1	С	A B
65+ (D)	1,942	24.6	22.3	26.9	D	A B
Race						
White (W)	6,718	28.6	27.3	29.8	W	B A NA
Black (B)	1,059	36.2	32.9	39.5	В	W NA
Asian (A)	1,045	36.1	32.8	39.3	А	W NA
Native American (NA)	798	23.4	19.9	27.0	NA	WBAO
Other/Multiple (O)	380	35.3	29.6	41.1	0	NA
Ethnicity						
Hispanic (H)	1,104	36.4	33.0	39.8	Н	NH
Non-Hispanic (NH)	8,896	29.1	28.0	30.2	NH	Н
Education						
High School or Less (HS)	2,104	33.7	31.4	35.9	HS	SC CG PG
Some College/Technical/Vocational (SC)	2,981	29.2	27.4	31.0	SC	HS
College Graduate (CG)	3,200	28.6	26.9	30.3	CG	HS
Postgraduate (PG)	1,674	25.5	23.3	27.8	PG	HS

Table 38. Results for Impossible to Have Funeral (Q22E), 2019

124 Important for Rody to Have Its Parts Total N		95% CI	95% CI	95% CI	95% CI	
Q12A. Important for Body to Have its Parts	I Otal N	% Agree	Lower	Upper	Code	Dif.
Total	10,000	33.1	31.9	34.2	N/A	N/A
Sex						
Female (F)	5,301	30.9	29.4	32.5	F	М
Male (M)	4,609	35.5	33.8	37.2	М	F
Age						
18-34 (A)	3,019	40.1	38.0	42.2	А	C D
35-49 (B)	1,908	37.7	35.0	40.4	В	C D
50-64 (C)	2,411	25.3	23.2	27.4	С	A B
65+ (D)	1,942	23.0	20.7	25.3	D	A B
Race						
White (W)	6,718	28.6	27.4	29.9	W	BAO
Black (B)	1,059	46.7	43.4	50.1	В	W NA
Asian (A)	1,045	47.1	43.7	50.4	А	W NA
Native American (NA)	798	26.9	23.3	30.6	NA	BAO
Other/Multiple (0)	380	44.2	38.3	50.1	0	W NA
Ethnicity						
Hispanic (H)	1,104	40.6	37.2	44.0	Н	NH
Non-Hispanic (NH)	8,896	31.4	30.3	32.6	NH	Н
Education						
High School or Less (HS)	2,104	39.3	37.1	41.6	HS	SC CG PG
Some College/Technical/Vocational (SC)	2,981	31.3	29.4	33.1	SC	HS PG
College Graduate (CG)	3,200	28.5	26.8	30.1	CG	HS
Postgraduate (PG)	1.674	24.6	22.4	26.8	PG	HS SC

Table 39. Results for Important for Body to Have Its Parts (Q12A), 2019

0166 Doctors Loss Likely to Save Dopors	Total N	0/ Agroo	95% CI	95% CI	95% CI	95% CI
Q16G. Doctors Less Likely to Save Donors	I Otal N	% Agree	Lower	Upper	Code	Dif.
Total	10,000	31.9	30.7	33.0	N/A	N/A
Sex						
Female (F)	5,301	32.1	30.6	33.7	F	
Male (M)	4,609	31.7	30.1	33.4	М	
Age						
18-34 (A)	3,019	40.5	38.4	42.6	А	C D
35-49 (B)	1,908	36.3	33.6	39.0	В	C D
50-64 (C)	2,411	23.6	21.6	25.6	С	A B
65+ (D)	1,942	21.7	19.4	23.9	D	A B
Race						
White (W)	6,718	28.7	27.5	30.0	W	BAO
Black (B)	1,059	42.6	39.2	46.0	В	W NA
Asian (A)	1,045	36.8	33.6	40.1	А	W NA
Native American (NA)	798	26.6	23.1	30.1	NA	BAO
Other/Multiple (0)	380	41.6	35.8	47.5	0	W NA
Ethnicity						
Hispanic (H)	1,104	39.4	36.0	42.8	Н	NH
Non-Hispanic (NH)	8,896	30.2	29.1	31.4	NH	Н
Education						
High School or Less (HS)	2,104	37.1	34.9	39.4	HS	SC CG PG
Some College/Technical/Vocational (SC)	2,981	29.7	27.9	31.5	SC	HS PG
College Graduate (CG)	3,200	29.2	27.5	31.0	CG	HS PG
Postgraduate (PG)	1,674	24.2	22.0	26.4	PG	HS SC CG

Table 40. Results for Doctors Less Likely to Save Donors (Q16G), 2019

022D Organ Donation is Against my Deligion			95% CI	95% CI	95% CI	95% CI	
Q22D. Organ Donation is Against my Religion	I Otal N		% Agree	Lower	Upper	Code	Dif.
Total	10,000		18.6	17.6	19.5	N/A	N/A
Sex							
Female (F)	5,301		16.9	15.6	18.2	F	М
Male (M)	4,609		20.4	19.0	21.8	М	F
Age							
18-34 (A)	3,019		23.2	21.4	25.0	А	C D
35-49 (B)	1,908		23.1	20.7	25.6	В	C D
50-64 (C)	2,411		12.6	11.0	14.2	С	A B D
65+ (D)	1,942		8.6	7.1	10.2	D	A B C
Race							
White (W)	6,718		16.2	15.2	17.2	W	BAO
Black (B)	1,059		23.9	20.9	26.9	В	W NA
Asian (A)	1,045		24.6	21.7	27.6	А	W NA
Native American (NA)	798		14.9	11.9	17.9	NA	BAO
Other/Multiple (O)	380		28.8	23.3	34.2	0	W NA
Ethnicity							
Hispanic (H)	1,104		26.4	23.2	29.5	Н	NH
Non-Hispanic (NH)	8,896		16.9	16.0	17.8	NH	Н
Education							
High School or Less (HS)	2,104		21.7	19.7	23.7	HS	SC CG PG
Some College/Technical/Vocational (SC)	2,981		17.2	15.7	18.7	SC	HS
College Graduate (CG)	3,200		16.5	15.1	17.8	CG	HS
Postgraduate (PG)	1,674		15.2	13.3	17.1	PG	HS

Table 41. Results for Organ Donation Is Against My Religion (Q22D), 2019

01(D. Deersle Whe Derecte Der Erstrie Dille			95% CI	95% CI	95% CI	95% CI
Q16D. People who Donate Pay Extra Bills	I OTAI N	% Agree	Lower	Upper	Code	Dif.
Total	10,000	34.1	33.0	35.2	N/A	N/A
Sex						
Female (F)	5,301	32.2	30.7	33.7	F	М
Male (M)	4,609	36.2	34.5	37.9	М	F
Age						
18-34 (A)	3,019	43.3	41.3	45.4	А	B C D
35-49 (B)	1,908	36.5	33.8	39.2	В	A C D
50-64 (C)	2,411	27.3	25.2	29.4	С	A B
65+ (D)	1,942	23.3	21.0	25.5	D	A B
Race						
White (W)	6,718	32.0	30.7	33.3	W	B A NA O
Black (B)	1,059	37.0	33.7	40.4	В	W A NA
Asian (A)	1,045	46.8	43.4	50.1	А	W B NA
Native American (NA)	798	27.0	23.6	30.5	NA	WBAO
Other/Multiple (0)	380	41.7	35.9	47.5	0	W NA
Ethnicity						
Hispanic (H)	1,104	41.1	37.6	44.5	Н	NH
Non-Hispanic (NH)	8,896	32.6	31.4	33.7	NH	Н
Education						
High School or Less (HS)	2,104	38.2	35.9	40.4	HS	SC CG PG
Some College/Technical/Vocational (SC)	2,981	31.9	30.1	33.7	SC	HS PG
College Graduate (CG)	3,200	33.2	31.5	35.0	CG	HS PG
Postgraduate (PG)	1,674	27.5	25.2	29.8	PG	HS SC CG

Table 42. Results for People Who Donate Pay Extra Bills (Q16D), 2019

0220 Organ Transplantation is Experimental	TotalN		95% CI	95% CI	95% CI	95% CI
Q22C. Organ Transplantation is Experimental	TOTALN	% Agree	Lower	Upper	Code	Dif.
Total	10,000	32.5	31.4	33.6	N/A	N/A
Sex						
Female (F)	5,301	32.2	30.6	33.7	F	
Male (M)	4,609	32.9	31.2	34.6	М	
Age						
18-34 (A)	3,019	42.3	40.2	44.4	А	B C D
35-49 (B)	1,908	36.6	33.9	39.4	В	A C D
50-64 (C)	2,411	22.2	20.2	24.2	С	A B
65+ (D)	1,942	22.1	19.9	24.4	D	A B
Race						
White (W)	6,718	28.9	27.7	30.2	W	BAO
Black (B)	1,059	41.1	37.8	44.5	В	W NA
Asian (A)	1,045	41.6	38.2	44.9	А	W NA
Native American (NA)	798	28.1	24.4	31.8	NA	BAO
Other/Multiple (0)	380	46.7	40.8	52.6	0	W NA
Ethnicity						
Hispanic (H)	1,104	41.5	38.1	45.0	Н	NH
Non-Hispanic (NH)	8,896	30.5	29.4	31.7	NH	Н
Education						
High School or Less (HS)	2,104	40.0	37.7	42.3	HS	SC CG PG
Some College/Technical/Vocational (SC)	2,981	30.5	28.7	32.3	SC	HS CG PG
College Graduate (CG)	3,200	26.5	24.9	28.2	CG	HS SC
Postgraduate (PG)	1,674	23.0	20.8	25.1	PG	HS SC

Table 43. Results for Organ Transplantation Is Experimental (Q22C), 2019

012F Femily Override Wishes to Denote			95% CI	95% CI	95% CI	95% CI
Q12F. Family Override wisnes to Donate	I Otal N	% Agree	Lower	Upper	Code	Dif.
Total	10,000	30.5	29.4	31.6	N/A	N/A
Sex						
Female (F)	5,301	28.9	27.4	30.5	F	М
Male (M)	4,609	32.4	30.7	34.1	М	F
Age						
18-34 (A)	3,019	36.9	34.8	38.9	А	C D
35-49 (B)	1,908	36.2	33.5	38.9	В	C D
50-64 (C)	2,411	23.3	21.3	25.4	С	A B
65+ (D)	1,942	19.6	17.5	21.7	D	A B
Race						
White (W)	6,718	27.1	25.9	28.4	W	BAO
Black (B)	1,059	37.4	34.0	40.7	В	W NA
Asian (A)	1,045	39.6	36.3	42.9	А	W NA
Native American (NA)	798	25.5	21.9	29.2	NA	BAO
Other/Multiple (0)	380	46.1	40.2	52.0	0	W NA
Ethnicity						
Hispanic (H)	1,104	39.1	35.6	42.5	Н	NH
Non-Hispanic (NH)	8,896	28.7	27.6	29.8	NH	Н
Education						
High School or Less (HS)	2,104	36.2	33.9	38.4	HS	SC CG PG
Some College/Technical/Vocational (SC)	2,981	28.3	26.5	30.1	SC	HS PG
College Graduate (CG)	3,200	27.3	25.7	29.0	CG	HS PG
Postgraduate (PG)	1,674	22.7	20.6	24.9	PG	HS SC CG

Table 44. Results for Family Override Wishes to Donate (Q12F), 2019

0161 Transplants Often Co to Undecoming	Total N		95% CI	95% CI	95% CI	95% CI
Q101. Transplants Often Go to Ondeserving	IOLAIN	% Agree	Lower	Upper	Code	Dif.
Total	10,000	31.4	30.3	32.5	N/A	N/A
Sex						
Female (F)	5,301	28.7	27.2	30.2	F	М
Male (M)	4,609	34.4	32.7	36.1	М	F
Age						
18-34 (A)	3,019	35.5	33.5	37.6	А	C D
35-49 (B)	1,908	36.0	33.3	38.7	В	C D
50-64 (C)	2,411	24.3	22.3	26.3	С	A B
65+ (D)	1,942	26.1	23.8	28.5	D	A B
Race						
White (W)	6,718	29.5	28.2	30.7	W	BAO
Black (B)	1,059	34.3	31.1	37.6	В	W
Asian (A)	1,045	37.2	33.9	40.4	А	W
Native American (NA)	798	32.5	28.7	36.3	NA	
Other/Multiple (0)	380	40.5	34.6	46.4	0	W
Ethnicity						
Hispanic (H)	1,104	37.6	34.2	41.1	Н	NH
Non-Hispanic (NH)	8,896	30.1	28.9	31.2	NH	Н
Education						
High School or Less (HS)	2,104	35.4	33.2	37.7	HS	SC CG PG
Some College/Technical/Vocational (SC)	2,981	28.9	27.1	30.7	SC	HS
College Graduate (CG)	3,200	29.3	27.6	31.0	CG	HS
Postgraduate (PG)	1,674	28.1	25.8	30.4	PG	HS

Table 45. Results for Transplants Often Go to Undeserving (Q16I), 2019

01(C. Droin Dood Dorson Can Dosovor			95% CI	95% CI	95% CI	95% CI
Q16C. Brain-Dead Person Can Recover	I Otal N	% Agree	Lower	Upper	Code	Dif.
Total	10,000	42.1	40.9	43.2	N/A	N/A
Sex						
Female (F)	5,301	40.8	39.2	42.3	F	
Male (M)	4,609	43.5	41.8	45.3	М	
Age						
18-34 (A)	3,019	50.3	48.2	52.4	А	C D
35-49 (B)	1,908	46.6	43.9	49.3	В	C D
50-64 (C)	2,411	33.4	31.2	35.7	С	A B
65+ (D)	1,942	33.3	30.9	35.8	D	A B
Race						
White (W)	6,718	39.2	37.9	40.5	W	BAO
Black (B)	1,059	51.0	47.7	54.4	В	W NA
Asian (A)	1,045	49.8	46.5	53.1	А	W NA
Native American (NA)	798	38.0	34.1	41.8	NA	BAO
Other/Multiple (O)	380	50.0	44.2	55.9	0	W NA
Ethnicity						
Hispanic (H)	1,104	46.9	43.4	50.3	Н	NH
Non-Hispanic (NH)	8,896	41.0	39.8	42.2	NH	Н
Education						
High School or Less (HS)	2,104	45.5	43.2	47.8	HS	CG PG
Some College/Technical/Vocational (SC)	2,981	41.8	39.9	43.7	SC	PG
College Graduate (CG)	3,200	40.0	38.1	41.8	CG	HS PG
Postgraduate (PG)	1,674	34.4	32.0	36.9	PG	HS SC CG

Table 46. Results for Brain-Dead Person Can Recover (Q16C), 2019

Belief in Fairness of Organ Donation (Q22A, Q16K)

Two survey questions related to the fairness of how organs are distributed. These were Q22A, "Belief that both rich and poor have equal chances for a transplant," and Q16K, "The donation system is fair." Q22A showed no significant change from 2012. However, Q16K showed a slight increase, from 64.6% in 2012 to 66.6% to 2019 (p = .034). This suggests that slightly more respondents believe the organ donation system is fair than in 2012. This increase in perceived fairness might appear to contradict the increase in people who believe minorities are less likely to receive organ transplants (Q16A). However, Q16K refers to the fairness of the donation system specifically, while Q16A can refer to discrimination from any source. Figure 17 shows the results for Q16K and Q22A.

For Q16K, White respondents were more likely to say the system was fair than Black or Native American respondents. For Q22A, White, Asian, Other/multiple races, Hispanic, and those with a high school degree or less were more likely to say rich and poor have equal chances at getting a transplant. Tables 47 and 48 show the demographic results for Q16K and Q22A.





Note: The "4.18 Trends in Organ Donation" section explores longitudinal comparisons in greater detail.

01 (IV Transvelant Cristern Distributes Fairly	Total N 0/ Agree 9		95% CI	95% CI	95% CI	95% CI
Q16K. Transplant System Distributes Fairly	I Otal N	% Agree	Lower	Upper	Code	Dif.
Total	10,000	66.6	65.5	67.7	N/A	N/A
Sex						
Female (F)	5,301	67.2	65.7	68.7	F	
Male (M)	4,609	66.5	64.8	68.1	М	
Age						
18-34 (A)	3,019	65.8	63.8	67.8	А	
35-49 (B)	1,908	68.2	65.7	70.7	В	
50-64 (C)	2,411	68.7	66.5	70.9	С	
65+ (D)	1,942	68.2	65.8	70.7	D	
Race						
White (W)	6,718	68.1	66.8	69.3	W	B NA
Black (B)	1,059	61.3	58.1	64.6	В	W
Asian (A)	1,045	67.3	64.2	70.5	А	
Native American (NA)	798	60.9	56.9	64.9	NA	W
Other/Multiple (0)	380	61.9	56.3	67.6	0	
Ethnicity						
Hispanic (H)	1,104	67.2	64.0	70.5	Н	
Non-Hispanic (NH)	8,896	66.5	65.3	67.6	NH	
Education						
High School or Less (HS)	2,104	65.3	63.1	67.5	HS	
Some College/Technical/Vocational (SC)	2,981	67.1	65.3	68.9	SC	
College Graduate (CG)	3,200	68.1	66.4	69.9	CG	
Postgraduate (PG)	1,674	67.8	65.4	70.2	PG	

Table 47. Results for Transplant System Distributes Fairly (Q16K), 2019

0224 Dish or Door House Equal Changes			95% CI	95% CI	95% CI	95% CI
Q22A. Rich of Poor Have Equal Chances	I Otal N	% Agree	Lower	Upper	Code	Dif.
Total	10,000	52.5	51.3	53.6	N/A	N/A
Sex						
Female (F)	5,301	53.4	51.8	54.9	F	
Male (M)	4,609	51.8	50.1	53.5	М	
Age						
18-34 (A)	3,019	53.7	51.7	55.8	А	
35-49 (B)	1,908	53.3	50.5	56.0	В	
50-64 (C)	2,411	51.2	48.9	53.6	С	
65+ (D)	1,942	52.2	49.6	54.7	D	
Race						
White (W)	6,718	53.1	51.7	54.4	W	B NA
Black (B)	1,059	47.3	44.0	50.7	В	W A
Asian (A)	1,045	55.8	52.5	59.1	А	B NA
Native American (NA)	798	41.4	37.5	45.4	NA	WAO
Other/Multiple (O)	380	55.6	49.8	61.4	0	NA
Ethnicity						
Hispanic (H)	1,104	56.6	53.2	60.0	Н	NH
Non-Hispanic (NH)	8,896	51 .6	50.4	52.8	NH	Н
Education						
High School or Less (HS)	2,104	55.8	53.5	58.1	HS	SC CG PG
Some College/Technical/Vocational (SC)	2,981	51 .1	49.1	53.0	SC	HS
College Graduate (CG)	3,200	50.9	49.1	52.8	CG	HS
Postgraduate (PG)	1,674	47.7	45.1	50.2	PG	HS

Table 48. Results for Rich or Poor Have Equal Chances (Q22A), 2019

012C Organs Chauldha Aga Daired	Total N		95% CI	95% CI	95% CI	95% CI
Q12G. Organs Should be Age Paired	I Otal N	% Agree	Lower	Upper	Code	Dif.
Total	10,000	53.7	52.5	54.9	N/A	N/A
Sex						
Female (F)	5,301	51.7	50.1	53.3	F	М
Male (M)	4,609	56.0	54.3	57.7	М	F
Age						
18-34 (A)	3,019	60.5	58.4	62.5	А	C D
35-49 (B)	1,908	56.5	53.8	59.2	В	C D
50-64 (C)	2,411	46.6	44.3	49.0	С	A B
65+ (D)	1,942	48.5	45.9	51.0	D	A B
Race						
White (W)	6,718	53.8	52.4	55.1	W	NA
Black (B)	1,059	51.3	47.9	54.6	В	
Asian (A)	1,045	56.8	53.5	60.1	А	NA
Native American (NA)	798	45.6	41.6	49.7	NA	WAO
Other/Multiple (O)	380	56.8	50.9	62.6	0	NA
Ethnicity						
Hispanic (H)	1,104	56.0	52.6	59.4	Н	
Non-Hispanic (NH)	8,896	53.2	52.0	54.4	NH	
Education						
High School or Less (HS)	2,104	54.5	52.2	56.8	HS	
Some College/Technical/Vocational (SC)	2,981	54.7	52.7	56.6	SC	
College Graduate (CG)	3,200	52.9	51.1	54.8	CG	
Postgraduate (PG)	1,674	50.6	48.0	53.1	PG	

Table 49. Results for Organs Should Be Age Paired (Q12G), 2019

4.9 Organ Allocation Preferences

Q16N. Organs Allocated to Medically Urgent or Local Area

Code	Text
Questio	n
Q16N	Please choose the statement that comes closer to your view:
Respons	se options
1	I would like my organs to go to the more medically urgent patients regardless of where they live in the U.S.
2	I would like my organs to go to patients in my local area even if they are not the more medically urgent patients.
99	Don't know/Refused

Note: All respondents received this question.

Respondents were asked if they would prefer their organs be allocated based on medical urgency regardless of location or by local geographic area even if they are not the more medically urgent patients. Overall, 79.5% of respondents would prefer their organs be allocated based on medical urgency rather than local area. Among those registered as donors, 83.0% preferred medical urgency over local area, while 76.1% of those not registered as donors preferred medical urgency, which was a significant difference (p < .0001; see Figure 18).

Respondents were more likely to favor medical urgency over local area if they were women, age 50 and over, White, Native American, Non-Hispanic, or had a higher level of education. Table 50 shows these results.



Figure 18. Organs Allocated to Medically Urgent or Local Area (Q16N), 2019

016N Organs to Madically Urgant on Local?	Total N	% Medically	95% CI	95% CI	95% CI	95% CI
QION. Organs to medically orgenit or Local?	IOLAIN	Urgent	Lower	Upper	Code	Dif.
Total	10,000	79.5	78.5	80.5	N/A	N/A
Sex						
Female (F)	5,301	81.2	79.9	82.5	F	М
Male (M)	4,609	78.0	76.5	79.5	М	F
Age						
18-34 (A)	3,019	78.7	76.9	80.4	А	C D
35-49 (B)	1,908	76.2	73.8	78.6	В	C D
50-64 (C)	2,411	84.4	82.6	86.1	С	A B
65+ (D)	1,942	84.3	82.4	86.2	D	A B
Race						
White (W)	6,718	82.4	81.3	83.4	W	BAO
Black (B)	1,059	70.5	67.4	73.6	В	W NA
Asian (A)	1,045	76.1	73.1	79.0	А	W
Native American (NA)	798	80.8	77.2	84.4	NA	ΒO
Other/Multiple (0)	380	69.0	63.6	74.4	0	W NA
Ethnicity						
Hispanic (H)	1,104	73.4	70.3	76.5	Н	NH
Non-Hispanic (NH)	8,896	80.8	79.8	81.8	NH	Н
Education						
High School or Less (HS)	2,104	77.2	75.2	79.2	HS	CG PG
Some College/Technical/Vocational (SC)	2,981	79.3	77.7	80.9	SC	PG
College Graduate (CG)	3,200	81.7	80.2	83.2	CG	HS
Postgraduate (PG)	1,674	84.1	82.2	86.0	PG	HS SC

Table 50. Results for Organs to Medically Urgent or Local Area (Q16N), 2019

4.10 Knowledge of Living Donation

Q14F. Statements About Living Donation

Code	Text
Questio	n
Q14F	Do you believe these statements about organ donation are true?
Α	Kidneys can be donated from a living donor.
В	Parts of livers can be donated from a living donor.
С	Parts of lungs can be donated from a living donor.
Respon	se options
1	Yes
2	No
99	Don't know/Refused

Note: All respondents received this question.

Respondents were asked if it was true that kidneys, parts of livers, and parts of lungs could be donated from a living donor. All three types of living donation are possible. Overall, 89.0% of respondents answered correctly that kidneys could be donated from a living donor, 75.4% of respondents answered correctly that parts of livers could be donated from a living donor, and 54.1% of respondents answered correctly that parts of lungs could be donated from a living donor (see Figure 19).

Respondents age 50 and over, White, Native American, or Non-Hispanic were more likely to answer correctly about living kidney donation. Education was not associated with knowledge of living kidney donation. Women, respondents age 50 and over, White, Native American, Non-Hispanic, or those with a higher level of education were more likely to answer correctly about living liver donation. Respondents aged 35 and above or with a postgraduate degree were more likely to answer correctly about living lover donation. Tables 51–53 show these results.





014FA Con Vidnovsha Donatod While Living?	Total N	0/ Voc	95% CI	95% CI	95% CI	95% CI
Q14FA. Can Kidneys be Donated while Living?	I Otal N	% Yes	Lower	Upper	Code	Dif.
Total	10,000	89.0	88.3	89.8	N/A	N/A
Sex						
Female (F)	5,301	90.2	89.2	91.2	F	
Male (M)	4,609	88.5	87.3	89.6	М	
Age						
18-34 (A)	3,019	88.1	86.8	89.5	А	C D
35-49 (B)	1,908	88.5	86.6	90.3	В	C D
50-64 (C)	2,411	93.0	91.8	94.3	С	A B
65+ (D)	1,942	93.3	91.9	94.6	D	A B
Race						
White (W)	6,718	91.1	90.3	91.9	W	BAO
Black (B)	1,059	86.2	83.8	88.6	В	W NA O
Asian (A)	1,045	84.3	81.8	86.7	А	W NA O
Native American (NA)	798	92.3	89.8	94.8	NA	BAO
Other/Multiple (0)	380	76.6	71.8	81.4	0	W B A NA
Ethnicity						
Hispanic (H)	1,104	85.0	82.5	87.5	Н	NH
Non-Hispanic (NH)	8,896	89.9	89.2	90.6	NH	Н
Education						
High School or Less (HS)	2,104	87.5	86.0	89.1	HS	
Some College/Technical/Vocational (SC)	2,981	89.7	88.5	90.9	SC	
College Graduate (CG)	3,200	90.2	89.0	91.3	CG	
Postgraduate (PG)	1,674	90.6	89.1	92.1	PG	

Table 51. Results for Can Kidneys Be Donated While Living (Q14FA), 2019

014FB Can Livershe Denoted While Living?	TotalN	0/ Voc	95% CI	95% CI	95% CI	95% CI
Q14FB. Can Livers be Donated while Living?	I Otal N	% Yes	Lower	Upper	Code	Dif.
Total	10,000	75.4	74.3	76.4	N/A	N/A
Sex						
Female (F)	5,301	78.6	77.2	79.9	F	М
Male (M)	4,609	72.7	71.1	74.2	М	F
Age						
18-34 (A)	3,019	72.1	70.2	74.0	А	C D
35-49 (B)	1,908	72.7	70.2	75.3	В	C D
50-64 (C)	2,411	81.1	79.2	83.0	С	A B
65+ (D)	1,942	83.7	81.8	85.7	D	A B
Race						
White (W)	6,718	78.6	77.4	79.7	W	BAO
Black (B)	1,059	69.1	66.0	72.3	В	W 0
Asian (A)	1,045	69.6	66.5	72.7	А	W 0
Native American (NA)	798	76.0	72.2	79.7	NA	0
Other/Multiple (0)	380	58.9	53.1	64.7	0	W B A NA
Ethnicity						
Hispanic (H)	1,104	68.8	65.5	72.0	Н	NH
Non-Hispanic (NH)	8,896	76.8	75.7	77.8	NH	Н
Education						
High School or Less (HS)	2,104	72.9	70.8	75.0	HS	CG PG
Some College/Technical/Vocational (SC)	2,981	75.2	73.5	77.0	SC	PG
College Graduate (CG)	3,200	77.5	75.9	79.1	CG	HS
Postgraduate (PG)	1,674	80.5	78.5	82.6	PG	HS SC

Table 52. Results for Can Livers Be Donated While Living (Q14FB), 2019

014EC Con Lungs he Denoted While Living?	Total N	0/ Noc	95% CI	95% CI	95% CI	95% CI
Q14FC. Can Lungs be Donated while Living?	I Otal N	% res	Lower	Upper	Code	Dif.
Total	10,000	54.1	52.9	55.3	N/A	N/A
Sex						
Female (F)	5,301	54.2	52.6	55.8	F	
Male (M)	4,609	54.4	52.7	56.1	М	
Age						
18-34 (A)	3,019	50.2	48.1	52.3	А	B C D
35-49 (B)	1,908	56.2	53.4	58.9	В	А
50-64 (C)	2,411	55.2	52.8	57.5	С	А
65+ (D)	1,942	60.1	57.5	62.6	D	А
Race						
White (W)	6,718	55.2	53.9	56.5	W	0
Black (B)	1,059	53.6	50.3	57.0	В	
Asian (A)	1,045	52.7	49.3	56.0	А	
Native American (NA)	798	54.1	50.1	58.1	NA	
Other/Multiple (0)	380	45.0	39.2	50.8	0	W
Ethnicity						
Hispanic (H)	1,104	52.5	49.0	55.9	Н	
Non-Hispanic (NH)	8,896	54.4	53.2	55.6	NH	
Education						
High School or Less (HS)	2,104	51.7	49.3	54.0	HS	PG
Some College/Technical/Vocational (SC)	2,981	55.0	53.1	57.0	SC	
College Graduate (CG)	3,200	54.8	53.0	56.7	CG	
Postgraduate (PG)	1,674	58.9	56.4	61.4	PG	HS

Table 53. Results for Can Lungs Be Donated While Living (Q14FC), 2019

4.11 Age and Organ Donation

Q26A. Age Too Old to Donate Organs

Code	Text
Questio	n
Q26A	Do you believe there is an age when someone is too old to donate an organ upon his or her death?
Respon	se options
1	Yes
2	No
99	Don't know/Refused

Note: All respondents received this question.

Q26B. Age Too Old to Receive Transplanted Organs

Code	Text
Questio	n
Q26B	Do you believe there is an age when someone is too old to receive an organ?
Respons	se options
1	Yes
2	No
99	Don't know/Refused

Note: All respondents received this question.

Respondents were asked if they believed there was an age too old to donate organs or to receive a transplant. Overall, 32.5% of respondents said there was an age too old to donate, and 30.4% said there was an age too old to receive a transplant (see Figure 20).

Respondents were more likely to say there was an age too old for donation or transplantation if they were men, Asian, age 65 and over, or Hispanic (see Tables 54 and 55).





OP(A Is There are Age Tee Old to Denote?	Total N	0/ Noc	95% CI	95% CI	95% CI	95% CI
Q26A. IS There an Age 100 Old to Donate?	I Otal N	% res	Lower	Upper	Code	Dif.
Total	10,000	32.5	31.4	33.6	N/A	N/A
Sex						
Female (F)	5,301	30.3	28.8	31.7	F	М
Male (M)	4,609	35.2	33.5	36.8	М	F
Age						
18-34 (A)	3,019	31.7	29.8	33.7	А	D
35-49 (B)	1,908	29.2	26.7	31.7	В	D
50-64 (C)	2,411	32.3	30.1	34.5	С	D
65+ (D)	1,942	39.4	36.8	41.9	D	A B C
Race						
White (W)	6,718	31.2	30.0	32.5	W	ΒA
Black (B)	1,059	36.0	32.7	39.2	В	W
Asian (A)	1,045	36.6	33.4	39.9	А	W
Native American (NA)	798	31.2	27.5	34.8	NA	
Other/Multiple (0)	380	36.5	30.9	42.1	0	
Ethnicity						
Hispanic (H)	1,104	36.8	33.4	40.1	Н	NH
Non-Hispanic (NH)	8,896	31.6	30.5	32.7	NH	Н
Education						
High School or Less (HS)	2,104	32.9	30.7	35.1	HS	
Some College/Technical/Vocational (SC)	2,981	32.6	30.8	34.4	SC	
College Graduate (CG)	3,200	31.6	29.8	33.3	CG	
Postgraduate (PG)	1,674	33.1	30.7	35.5	PG	

Table 54. Results for Is There an Age Too Old to Donate (Q26A), 2019

026D Is There on Age Tee Old for Transplant? Tet		0/ Voc		95% CI	95% CI	95% CI	95% CI
Q26B. IS There an Age 100 Old for Transplant?	I Otal N	% ies		Lower	Upper	Code	Dif.
Total	10,000		30.4	29.3	31.5	N/A	N/A
Sex							
Female (F)	5,301	2	28.8	27.3	30.2	F	М
Male (M)	4,609		32.4	30.8	34.0	М	F
Age							
18-34 (A)	3,019		27.3	25.5	29.2	А	C D
35-49 (B)	1,908	2	28.3	25.8	30.8	В	D
50-64 (C)	2,411	3	31.4	29.3	33.6	С	A D
65+ (D)	1,942		37.8	35.3	40.3	D	A B C
Race							
White (W)	6,718	2	29.3	28.1	30.5	W	А
Black (B)	1,059	3	31.0	27.9	34.2	В	
Asian (A)	1,045	-	37.4	34.1	40.6	А	W
Native American (NA)	798	3	30.7	27.0	34.3	NA	
Other/Multiple (0)	380		34.9	29.3	40.5	0	
Ethnicity							
Hispanic (H)	1,104	3	35.4	32.1	38.7	Н	NH
Non-Hispanic (NH)	8,896	2	29.3	28.2	30.4	NH	Н
Education							
High School or Less (HS)	2,104	2	28.4	26.2	30.5	HS	PG
Some College/Technical/Vocational (SC)	2,981	3	31.0	29.2	32.8	SC	
College Graduate (CG)	3,200	3	31.3	29.6	33.1	CG	
Postgraduate (PG)	1,674		34.6	32.2	37.1	PG	HS

Table 55. Results for Is There an Age Too Old for Transplant (Q26B), 2019
Q26A2. Age Too Old to Donate

Code	Text		
Questio	n		
Q26A2	What is that age?		
Response options			
Num	Record numeric age		

Note: Respondents who received this question answered "Yes" to "Is There an Age Too Old for Organ Donation?" (Q26A).

Q26B2. Age Too Old for Transplant

Code	Text			
Questio	n			
Q26B2	What is that age?			
Response options				
Num.	Record numeric age			

Note: Respondents who received this question answered "Yes" to "Is There an Age Too Old for Transplant?" (Q26B).

Respondents who said there was an age too old to donate or receive a transplanted organ were asked what age would be too old. The mean age for being too old to donate was 66.6 years old (Lower 95% CI: 66.0, Upper 95% CI: 67.3). The mean age for being too old to receive a transplant was 73.0 years old (Lower 95% CI: 72.4, Upper 95% CI: 73.7).

The response to these questions significantly varied by respondent age, with respondents ages 18-34 on average said that 61 years was too old to donate and 68 years was too old to receive an organ. Respondents age 65 and over said 74 years was too old to donate and 79 was too old to receive a transplant. Figure 21 shows average ages by respondent's age group.





4.12 Presumed Consent

Q17. Supporting Presumed Consent

Code	Text
Questio	n
Q17	Some countries assume that people will be organ donors upon their death, unless there are strong objections from the family. This is sometimes called presumed consent. Would you strongly support, support, oppose, or strongly oppose using this presumed consent approach in the United States?
Respon	se options
1	Strongly Support
2	Support
3	Oppose
4	Strongly Oppose
99	Don't know/Refused
Note: All r	espondents received this question.

Q17C. Opting Out of Presumed Consent

Code	Text
Questio	n
Q17C	If the United States changed to a presumed consent system, where people will be organ donors unless they opted out, would you choose to opt out?
Respons	se options
1	Yes
2	No
99	Don't know/Refused

Note: All respondents received this question.

Respondents were asked if they supported presumed consent being implemented in the United States, and if presumed consent system was implemented, would they opt out. Overall, 56.3% of respondents supported presumed consent in 2019. This represents an increase of 5.2 percentage points from 2012, when 51.1% of respondents supported presumed consent (see Figure 22). This increase was statistically significant (p < .0001),

but was driven by web respondents (58.1% support) rather than telephone respondents (49.4% support). This indicates this change may be driven by survey mode, with telephone surveys underestimating support compared to web surveys, rather than a change in attitudes among the general public. Likewise, more respondents said they would opt out in 2019 (34.4%) compared to 2012 (23.4%), but this was also driven by web respondents more likely to say they would opt out (36.8%) than telephone respondents (25.0%). Again, this difference may not reflect a change in public opinion, but a difference in how respondents answered the question over the telephone as compared to an anonymized web survey. Section 4.18 "Trends in Organ Donation" explores longitudinal comparisons by mode of survey administration in greater detail.

Respondents ages 18-34 were more likely to support presumed consent than those who were 35 and older. Respondents who were Black, Other/multiple races, Hispanic, or with high school or less education were more likely to say they would opt out if the United States changed to a presumed consent system. Tables 56 and 57 show these results.

Figure 22. Percent Supporting Presumed Consent (Q17) and Opting Out of Presumed Consent (Q17C), 2005–2019



Note: "Support" includes "Strongly Support" and "Somewhat Support"

017 Support Drogum ad Concept?		0/ Support	95% CI	95% CI	95% CI	95% CI
Q17. Support Presumed Consent?	I Utal N	% support	Lower	Upper	Code	Dif.
Total	10,000	56. 3	55.2	57.5	N/A	N/A
Sex						
Female (F)	5,301	56.8	55.2	58.4	F	
Male (M)	4,609	56.3	54.6	58.1	М	
Age						
18-34 (A)	3,019	65.1	63.1	67.1	А	B C D
35-49 (B)	1,908	57.8	55.1	60.5	В	A D
50-64 (C)	2,411	52.8	50.4	55.1	С	A D
65+ (D)	1,942	47.6	45.0	50.1	D	A B C
Race						
White (W)	6,718	57.2	55.9	58.6	W	В
Black (B)	1,059	51.7	48.4	55.1	В	W
Asian (A)		56.6	53.3	59.9	А	
Native American (NA)		54.0	50.0	58.0	NA	
Other/Multiple (0)		55.9	50.1	61.8	0	
Ethnicity						
Hispanic (H)	1,104	59.3	55.9	62.7	Н	
Non-Hispanic (NH)	8,896	55.7	54.5	56.9	NH	
Education						
High School or Less (HS)	2,104	54.2	51.9	56.5	HS	CG
Some College/Technical/Vocational (SC)		56.4	54.4	58.3	SC	
College Graduate (CG)	3,200	59.1	57.3	61.0	CG	HS
Postgraduate (PG)	1,674	58.8	56.3	61.4	PG	

Table 56. Results for Support Presumed Consent (Q17), 2019

017C Out Out of Drogum of Concept)		0/ Opt Out	95% CI	95% CI	95% CI	95% CI
Q17C. Opt Out of Presumed Consent?	IULAIN	% Opt Out	Lower	Upper	Code	Dif.
Total	10,000	34.4	33.3	35.6	N/A	N/A
Sex						
Female (F)	5,301	33.5	32.0	35.1	F	
Male (M)	4,609	35.6	34.0	37.3	М	
Age						
18-34 (A)	3,019	35.2	33.2	37.2	А	
35-49 (B)	1,908	34.8	32.2	37.5	В	
50-64 (C)	2,411	32.1	29.9	34.3	С	
65+ (D)	1,942	34.5	32.0	37.0	D	
Race						
White (W)	6,718	31.8	30.5	33.1	W	BAO
Black (B)	1,059	43.6	40.2	46.9	В	W NA
Asian (A)		37.5	34.3	40.7	А	W
Native American (NA)		34.1	30.3	37.9	NA	В
Other/Multiple (0)		42.3	36.5	48.2	0	W
Ethnicity						
Hispanic (H)	1,104	40.6	37.1	44.0	Н	NH
Non-Hispanic (NH)	8,896	33.1	32.0	34.3	NH	Н
Education						
High School or Less (HS)		37.1	34.9	39.4	HS	CG PG
Some College/Technical/Vocational (SC)		34.8	32.9	36.6	SC	PG
College Graduate (CG)	3,200	31.2	29.5	33.0	CG	HS
Postgraduate (PG)	1,674	30.2	27.8	32.6	PG	HS SC

Table 57. Results for Opt Out of Presumed Consent (Q17C), 2019

4.13 Payments and Organ Donation

Q18. Payments Would Increase Likelihood of Organ Donation

Code	Text
Questio	n
Q18	It has been suggested that more organs would be donated if families who donate the organs of a deceased loved one received assistance in paying funeral expenses, a cash award to the donor's estate, or a cash award to a charity of the family's choice. Would payments like these make you more likely or less likely to donate (read and rotate), or would it have no effect?
Α	Your own organs
В	A family member's organs at their time of death
Respon	se options
1	More Likely
2	No Effect
3	Less Likely
99	Don't know/Refused

Note: All respondents received this question.

Respondents were asked if payments for deceased organ donation would increase their likelihood of donating either their own organs or a family member's organs. Overall, 34.2% of respondents said payments would make their own donation more likely, and 34.1% said payments would make family donation more likely. This represents an increase of 8.8 percentage points for own donation and 8.3 percentage points for family donation since 2012 (Figure 23). This increase is statistically significant (p < .001) and occurred for both telephone and web respondents. Section 4.18 "Trends in Organ Donation" explores longitudinal comparisons by mode of survey administration in greater detail.

Respondents under age 50 and those with less than a postgraduate degree were more likely to say payments would increase the likelihood of donation (Tables 58 and 59). For family donation, men and Hispanic respondents were also more likely to donate if payments were provided (Table 59).



Figure 23. Percent Responding Payments Would Increase Likelihood of Organ Donation (Q18), 1993–2019

		% More	95% CI	95% CI	95% CI	95% CI
Q18A. Payments for Own Donation?	I Otal N	Likely	Lower	Upper	Code	Dif.
Total	10,000	34.2	33.1	35.3	N/A	N/A
Sex						
Female (F)	5,301	32.7	31.2	34.3	F	
Male (M)	4,609	35.9	34.2	37.6	М	
Age						
18-34 (A)	3,019	45.2	43.1	47.3	А	B C D
35-49 (B)	1,908	36.1	33.4	38.7	В	A D
50-64 (C)	2,411	31.4	29.2	33.6	С	A D
65+ (D)	1,942	21.9	19.7	24.1	D	A B C
Race						
White (W)	6,718	33.6	32.3	34.9	W	
Black (B)	1,059	35.6	32.4	38.9	В	
Asian (A)		36.9	33.6	40.1	А	
Native American (NA)		38.6	34.6	42.5	NA	
Other/Multiple (0)	380	34.5	28.9	40.1	0	
Ethnicity						
Hispanic (H)	1,104	37.8	34.4	41.1	Н	
Non-Hispanic (NH)	8,896	33.4	32.3	34.6	NH	
Education						
High School or Less (HS)		35.2	33.0	37.5	HS	PG
Some College/Technical/Vocational (SC)		34.9	33.1	36.8	SC	PG
College Graduate (CG)	3,200	35.4	33.6	37.2	CG	PG
Postgraduate (PG)	1,674	27.5	25.2	29.8	PG	HS SC CG

Table 58. Results for Payments for Own Donation (Q18A), 2019

010D Deserve extendes Describe Describer 2		% More	95% CI	95% CI	95% CI	95% CI
Q18B. Payments for Family Donation?	TOTALN	Likely	Lower	Upper	Code	Dif.
Total	10,000	34.1	33.0	35.2	N/A	N/A
Sex						
Female (F)	5,301	32.5	31.0	34.0	F	М
Male (M)	4,609	36.1	34.4	37.7	М	F
Age						
18-34 (A)	3,019	43.5	41.5	45.6	А	B C D
35-49 (B)	1,908	35.8	33.2	38.5	В	A D
50-64 (C)	2,411	31.0	28.8	33.2	С	A D
65+ (D)	1,942	24.7	22.5	27.0	D	A B C
Race						
White (W)	6,718	33.6	32.4	34.9	W	
Black (B)	1,059	35.8	32.5	39.0	В	
Asian (A)		34.1	30.9	37.3	А	
Native American (NA)		35.4	31.6	39.2	NA	
Other/Multiple (O)	380	35.8	30.1	41.4	0	
Ethnicity						
Hispanic (H)	1,104	39.2	35.8	42.6	Н	NH
Non-Hispanic (NH)	8,896	33.0	31.9	34.2	NH	Н
Education						
High School or Less (HS)		35.3	33.0	37.5	HS	PG
Some College/Technical/Vocational (SC)		33.5	31.6	35.3	SC	
College Graduate (CG)	3,200	35.6	33.8	37.4	CG	PG
Postgraduate (PG)	1,674	30.0	27.7	32.4	PG	HS CG

Table 59. Results for Payments for Family Donation (Q18B), 2019

4.14 Sources of Information about Organ Donation

Q1. Heard About Organ Donation Past Year

Code	Text
Questio	n
Q1	In the past year, have you heard, read, or seen any information at all about organ donation or transplantation?
Respon	se options
1	Yes
2	No
99	Don't know/Refused

Note: All respondents received this question.

Respondents were asked if they had heard about organ donation in the past year. Overall, 46.6% of respondents had heard about organ donation in the past year, which was 9.4 percentage points decrease (p < .0001) since 2012 (56.0%) (Figure 24). Respondents ages 18-34, Hispanic, or with more than a high school education were more likely to have heard about organ donation than respondents ages 35-64, non-Hispanics, and with some college education or more (Table 60).





01 Heard About Organ Donation in Past Veen?		04 Voc	95% CI	95% CI	95% CI	95% CI
Q1. Heard About Organ Donation in Past Year?	i Donation în Past Fear? Iotai N % Fes		Lower	Upper	Code	Dif.
Total	10,000	46.6	45.4	47.8	N/A	N/A
Sex						
Female (F)	5,301	47.0	45.4	48.6	F	
Male (M)	4,609	46.4	44.7	48.1	М	
Age						
18-34 (A)	3,019	51.2	49.1	53.3	А	ВC
35-49 (B)	1,908	44.4	41.6	47.1	В	А
50-64 (C)	2,411	43.3	41.0	45.6	С	А
65+ (D)	1,942	47.0	44.4	49.6	D	
Race						
White (W)	6,718	46.0	44.6	47.3	W	0
Black (B)	1,059	45.7	42.4	49.1	В	0
Asian (A)		44.4	41.1	47.7	А	0
Native American (NA)		51.0	47.0	55.1	NA	
Other/Multiple (O)	380	55.0	49.2	60.8	0	W B A
Ethnicity						
Hispanic (H)	1,104	52.1	48.6	55.6	Н	NH
Non-Hispanic (NH)	8,896	45.4	44.2	46.6	NH	Н
Education						
High School or Less (HS)		43.2	40.9	45.5	HS	SC CG PG
Some College/Technical/Vocational (SC)		47.7	45.8	49.7	SC	HS
College Graduate (CG)	3,200	48.5	46.7	50.4	CG	HS
Postgraduate (PG)	1,674	52.0	49.5	54.6	PG	HS

Table 60. Results for Heard About Organ Donation Past Year (Q1), 2019

Q2. Learning About Organ Donation from Source

Code	Text
Questio	n
Q2	In the past year, how have you seen or heard about organ donation or transplantation? How about [ROTATE OPTIONS]
Α	A discussion with a family member
В	A discussion with a friend
C	Information provided by a medical professional, clinic, or doctor's office
D	Information provided by a member of the clergy of your religious organization
Ε	Information provided by an attorney
F	Personal experience or involvement with organ, eye or tissue donation
G	A billboard or a poster in a public place
Н	News coverage (TV, radio, newspaper, or internet)
Ι	Your work or school
J	A Motor Vehicles Office (MVA, DMV, or SOS)
К	An advertisement on TV
L	An advertisement on the radio
Μ	A movie and/or a TV show
Ν	A community activity, such as a health fair
0	An organ or tissue donation organization
Р	A senior center or other older adult setting
Q	Social media such as Facebook, Instagram, YouTube, or Twitter
R	Search engines, such as Google, Yahoo, or Bing
S	Other websites
Т	Some other source
Respon	se options
1	Yes
2	No
99	Don't know/Refused

Note: Respondents who received this question answered "Yes" to "Heard About Organ Donation Past Year" (Q1).

Respondents who had seen information about organ donation in the past year (Q1) were asked how they had seen or heard about it, and provided a list of many information sources. The top sources that informed 40% or more of respondents were:

1) News coverage (51.5%)
2) Motor Vehicles Office (46.5%)
3) Discussed with family (43.3%)
4) Discussed with friend (42.0%)
5) Movie or TV show (42.0%)
6) Social Media (40.9%)
7) Advertisement on TV (40.1%)

Figure 25 shows results from all information sources.

Information sources varied widely by respondent demographics, particularly by age. In general, people under the age of 50 were more likely to have heard of organ donation through sources such as discussions with friends or family, through work or school, through a billboard or poster, and especially through online sources, such as social media, search engines and other websites. People 50 and over were more likely to use news coverage as a source of information. Tables 61–79 shows demographic results for each information source.



Figure 25. Percent Learning About Organ Donation from Source (Q2), 2005–2019

024 Courses Discussed with Femily	Total N 0/	N 06 Voc	95% CI	95% CI	95% CI	95% CI
Q2A. Source: Discussed with Family	I Otal N	% res	Lower	Upper	Code	Dif.
Total	4,779	4 3.3	41.7	45.0	N/A	N/A
Sex						
Female (F)	2,586	46.2	43.9	48.5	F	М
Male (M)	2,160	40.2	37.8	42.7	М	F
Age						
18-34 (A)	1,566	47.6	44.7	50.5	А	C D
35-49 (B)	859	45.4	41.3	49.4	В	D
50-64 (C)	1,083	40.6	37.2	44.1	С	А
65+ (D)	968	36.0	32.4	39.5	D	A B
Race						
White (W)	3,187	43.4	41.5	45.3	W	
Black (B)	494	44.6	39.7	49.5	В	
Asian (A)	463	38.1	33.1	43.0	А	
Native American (NA)	435	47.9	42.5	53.4	NA	
Other/Multiple (O)	200	43.2	35.3	51.1	0	
Ethnicity						
Hispanic (H)	576	45.9	41.1	50.7	Н	
Non-Hispanic (NH)	4,203	42.7	41.0	44.5	NH	
Education						
High School or Less (HS)	900	43.6	40.1	47.2	HS	
Some College/Technical/Vocational (SC)	1,433	44.7	41.9	47.5	SC	
College Graduate (CG)	1,557	43.2	40.6	45.9	CG	
Postgraduate (PG)	872	40.0	36.5	43.5	PG	

Table 61. Results for Source: Discussed with Family (Q2A), 2019

02D Courses Discussed with Existed	Total N %		95% CI	95% CI	95% CI	95% CI
Q2B. Source: Discussed with Friend	I Otal N	% res	Lower	Upper	Code	Dif.
Total	4,779	42.0	40.3	43.7	N/A	N/A
Sex						
Female (F)	2,586	43.9	41.6	46.2	F	
Male (M)	2,160	39.9	37.5	42.4	М	
Age						
18-34 (A)	1,566	46.6	43.7	49.5	А	C D
35-49 (B)	859	44.8	40.7	48.9	В	D
50-64 (C)	1,083	37.3	33.9	40.7	С	А
65+ (D)	968	34.9	31.4	38.4	D	A B
Race						
White (W)	3,187	42.0	40.1	43.9	W	
Black (B)	494	42.1	37.2	47.0	В	
Asian (A)	463	40.4	35.5	45.4	А	
Native American (NA)	435	42.1	36.7	47.5	NA	
Other/Multiple (O)	200	42.4	34.5	50.3	0	
Ethnicity						
Hispanic (H)	576	43.5	38.8	48.3	Н	
Non-Hispanic (NH)	4,203	41.6	39.9	43.3	NH	
Education						
High School or Less (HS)	900	42.1	38.5	45.6	HS	
Some College/Technical/Vocational (SC)	1,433	43.2	40.4	46.0	SC	
College Graduate (CG)	1,557	40.6	38.0	43.3	CG	
Postgraduate (PG)	872	41.7	38.1	45.2	PG	

Table 62. Results for Source: Discussed with Friend (Q2B), 2019

020 Courses Info from Modical Drofossional	Total N	0/ Voc		95% CI	95% CI	95% CI	95% CI
Q2C. Source: Into from Medical Professional	I Otal N		% Yes	Lower	Upper	Code	Dif.
Total	4,779		29.5	27.9	31.1	N/A	N/A
Sex							
Female (F)	2,586		27.8	25.7	30.0	F	
Male (M)	2,160		31.2	28.8	33.6	М	
Age							
18-34 (A)	1,566		36.5	33.7	39.4	А	C D
35-49 (B)	859		31.4	27.5	35.2	В	C D
50-64 (C)	1,083		22.8	19.8	25.8	С	A B
65+ (D)	968		21.2	18.0	24.3	D	A B
Race							
White (W)	3,187		27.9	26.1	29.7	W	0
Black (B)	494		33.7	29.0	38.5	В	
Asian (A)	463		28.4	23.7	33.0	А	
Native American (NA)	435		28.3	23.4	33.2	NA	
Other/Multiple (O)	200		37.7	29.9	45.5	0	W
Ethnicity							
Hispanic (H)	576		38.0	33.3	42.7	Н	NH
Non-Hispanic (NH)	4,203		27.4	25.9	29.0	NH	Н
Education							
High School or Less (HS)	900		32.3	28.9	35.6	HS	
Some College/Technical/Vocational (SC)	1,433		27.6	25.0	30.2	SC	
College Graduate (CG)	1,557		28.5	26.1	31.0	CG	
Postgraduate (PG)	872		27.8	24.6	31.0	PG	

Table 63. Results for Source: Info from Medical Professional (Q2C), 2019

ODD Courses Clores	Total N % Va	0/ Noc	95% CI	95% CI	95% CI	95% CI	
Q2D. Source: Clergy	I Otal N		% Yes	Lower	Upper	Code	Dif.
Total	4,779		13.3	12.0	14.5	N/A	N/A
Sex							
Female (F)	2,586		11.3	9.7	13.0	F	М
Male (M)	2,160		15.1	13.2	17.1	М	F
Age							
18-34 (A)	1,566		18.1	15.8	20.5	А	C D
35-49 (B)	859		15.9	12.6	19.2	В	C D
50-64 (C)	1,083		5.1	3.4	6.8	С	A B
65+ (D)	968		5.7	3.8	7.7	D	A B
Race							
White (W)	3,187		10.0	8.8	11.2	W	B A NA O
Black (B)	494		20.6	16.2	25.0	В	W NA
Asian (A)	463		16.9	12.7	21.0	А	W NA O
Native American (NA)	435		4.8	2.3	7.2	NA	WBAO
Other/Multiple (0)	200		29.3	21.9	36.8	0	W A NA
Ethnicity							
Hispanic (H)	576		23.7	19.5	28.0	Н	NH
Non-Hispanic (NH)	4,203		10.7	9.5	11.8	NH	Н
Education							
High School or Less (HS)	900		17.2	14.3	20.0	HS	SC CG PG
Some College/Technical/Vocational (SC)	1,433		11.4	9.5	13.4	SC	HS
College Graduate (CG)	1,557		10.4	8.7	12.1	CG	HS
Postgraduate (PG)	872		10.9	8.6	13.2	PG	HS

Table 64. Results for Source: Clergy (Q2D), 2019

ODE Courses Attorney	Total N 0/ Voc	95% CI	95% CI	95% CI	95% CI	
Q2E. Source: Attorney	I Otal N	% Yes	Lower	Upper	Code	Dif.
Total	4,779	11.1	9.9	12.2	N/A	N/A
Sex						
Female (F)	2,586	9.1	7.7	10.6	F	М
Male (M)	2,160	13.0	11.2	14.8	М	F
Age						
18-34 (A)	1,566	15.7	13.5	17.9	А	C D
35-49 (B)	859	12.9	10.0	15.7	В	C D
50-64 (C)	1,083	3.9	2.5	5.4	С	A B
65+ (D)	968	4.2	2.7	5.7	D	A B
Race						
White (W)	3,187	8.5	7.4	9.5	W	BAO
Black (B)	494	15.8	11.9	19.7	В	W NA
Asian (A)	463	15.7	11.8	19.6	А	W NA
Native American (NA)	435	5.6	3.0	8.1	NA	BAO
Other/Multiple (0)	200	24.1	17.2	31.0	0	W NA
Ethnicity						
Hispanic (H)	576	18.3	14.5	22.1	Н	NH
Non-Hispanic (NH)	4,203	9.3	8.2	10.3	NH	Н
Education						
High School or Less (HS)	900	12.8	10.3	15.3	HS	
Some College/Technical/Vocational (SC)	1,433	9.7	7.9	11.4	SC	
College Graduate (CG)	1,557	10.7	9.0	12.3	CG	
Postgraduate (PG)	872	10.0	7.8	12.2	PG	

Table 65. Results for Source: Attorney (Q2E), 2019

OPE Courses Dersonal Europienes	Total N 0/ Vac 95%	95% CI	95% CI	95% CI	95% CI	
Q2F. Source: Personal Experience	I Otal N	% res	Lower	Upper	Code	Dif.
Total	4,779	19.3	17.9	20.7	N/A	N/A
Sex						
Female (F)	2,586	19.7	17.7	21.7	F	
Male (M)	2,160	18.9	16.8	20.9	М	
Age						
18-34 (A)	1,566	21.2	18.8	23.6	А	C D
35-49 (B)	859	22.1	18.6	25.6	В	C D
50-64 (C)	1,083	12.7	10.4	15.0	С	A B
65+ (D)	968	14.5	11.8	17.2	D	A B
Race						
White (W)	3,187	17.0	15.5	18.4	W	ΒO
Black (B)	494	23.9	19.6	28.3	В	W
Asian (A)	463	19.0	14.9	23.2	А	0
Native American (NA)	435	16.7	12.8	20.6	NA	0
Other/Multiple (O)	200	31.9	24.3	39.4	0	W A NA
Ethnicity						
Hispanic (H)	576	27.9	23.5	32.3	Н	NH
Non-Hispanic (NH)	4,203	17.1	15.8	18.5	NH	Н
Education						
High School or Less (HS)	900	21.3	18.3	24.3	HS	
Some College/Technical/Vocational (SC)	1,433	17.3	15.1	19.5	SC	
College Graduate (CG)	1,557	17.9	15.8	20.0	CG	
Postgraduate (PG)	872	20.1	17.2	23.0	PG	

Table 66. Results for Source: Personal Experience (Q2F), 2019

020 Source, Billboard or Dector	Total N 0/ Vac 95%	95% CI	95% CI	95% CI	95% CI	
Q2G. Source: Billboard of Poster	I Otal N	% Yes	Lower	Upper	Code	Dif.
Total	4,779	27.4	25.8	29.0	N/A	N/A
Sex						
Female (F)	2,586	26.6	24.5	28.7	F	
Male (M)	2,160	28.0	25.7	30.4	М	
Age						
18-34 (A)	1,566	31.4	28.6	34.2	А	C D
35-49 (B)	859	32.9	28.9	36.9	В	C D
50-64 (C)	1,083	21.8	18.9	24.8	С	A B
65+ (D)	968	17.9	15.1	20.8	D	A B
Race						
White (W)	3,187	24.7	23.0	26.4	W	ΒO
Black (B)	494	36.3	31.4	41.2	В	W A NA
Asian (A)	463	23.1	18.7	27.6	А	ΒO
Native American (NA)	435	24.9	20.1	29.7	NA	ΒO
Other/Multiple (O)	200	40.1	32.1	48.0	0	W A NA
Ethnicity						
Hispanic (H)	576	35.3	30.5	40.0	Н	NH
Non-Hispanic (NH)	4,203	25.4	23.9	27.0	NH	Н
Education						
High School or Less (HS)	900	30.7	27.3	34.0	HS	
Some College/Technical/Vocational (SC)	1,433	25.4	22.9	27.9	SC	
College Graduate (CG)	1,557	25.9	23.5	28.3	CG	
Postgraduate (PG)	872	24.7	21.6	27.9	PG	

Table 67. Results for Source: Billboard or Poster (Q2G), 2019

ODIL Courses Norve Courses as	Total N % Voc 95%	95% CI	95% CI	95% CI	95% CI	
Q2H. Source: News Coverage	I Otal N	% Yes	Lower	Upper	Code	Dif.
Total	4,779	51 .5	49.8	53.2	N/A	N/A
Sex						
Female (F)	2,586	51.0	48.7	53.3	F	
Male (M)	2,160	52.2	49.6	54.7	М	
Age						
18-34 (A)	1,566	43.8	40.9	46.7	А	C D
35-49 (B)	859	47.5	43.4	51.6	В	C D
50-64 (C)	1,083	56.6	53.2	60.1	С	A B D
65+ (D)	968	64.3	60.8	67.8	D	A B C
Race						
White (W)	3,187	50 .6	48.7	52.6	W	В
Black (B)	494	57.9	53.1	62.7	В	WA
Asian (A)	463	48.0	43.0	53.0	А	В
Native American (NA)	435	50 .6	45.1	56.1	NA	
Other/Multiple (O)	200	52.3	44.3	60.3	0	
Ethnicity						
Hispanic (H)	576	53.3	48.5	58.1	Н	
Non-Hispanic (NH)	4,203	51 .1	49.3	52.8	NH	
Education						
High School or Less (HS)	900	51.8	48.3	55.4	HS	
Some College/Technical/Vocational (SC)	1,433	48.7	45.8	51.5	SC	PG
College Graduate (CG)	1,557	51.3	48.7	54.0	CG	PG
Postgraduate (PG)	872	57.6	54.1	61.1	PG	SC CG

Table 68. Results for Source: News Coverage (Q2H), 2019

021 Source, Work or School	Total N	0/ Voc	95% CI	95% CI	95% CI	95% CI
Q21. Source: Work of School	IOLAIN	% ies	Lower	Upper	Code	Dif.
Total	4,779	22.5	21.0	24.0	N/A	N/A
Sex						
Female (F)	2,586	20.7	18.7	22.6	F	
Male (M)	2,160	24.4	22.2	26.6	М	
Age						
18-34 (A)	1,566	33.0	30.2	35.7	А	B C D
35-49 (B)	859	26.0	22.4	29.7	В	A C D
50-64 (C)	1,083	14.0	11.5	16.4	С	A B D
65+ (D)	968	5.8	3.8	7.8	D	A B C
Race						
White (W)	3,187	20.2	18.6	21.8	W	B A NA O
Black (B)	494	28.6	23.9	33.4	В	W NA
Asian (A)	463	27.4	22.7	32.0	А	W NA
Native American (NA)	435	13.3	9.8	16.8	NA	WBAO
Other/Multiple (O)	200	32.0	24.6	39.5	0	W NA
Ethnicity						
Hispanic (H)	576	33.3	28.7	37.9	Н	NH
Non-Hispanic (NH)	4,203	19.9	18.5	21.3	NH	Н
Education						
High School or Less (HS)	900	25.9	22.7	29.0	HS	SC
Some College/Technical/Vocational (SC)	1,433	20.0	17.7	22.3	SC	HS
College Graduate (CG)	1,557	21.7	19.5	24.0	CG	
Postgraduate (PG)	872	20.2	17.3	23.1	PG	

Table 69. Results for Source: Work or School (Q2I), 2019

021 Courses Motor Vehicles Office	Total N % Vas 95	95% CI	95% CI	95% CI	95% CI	
Q2J. Source: Motor venicies Office	I Otal N	% res	Lower	Upper	Code	Dif.
Total	4,779	4 6.5	44.8	48.2	N/A	N/A
Sex						
Female (F)	2,586	46.4	44.1	48.8	F	
Male (M)	2,160	46.6	44.1	49.1	М	
Age						
18-34 (A)	1,566	42.1	39.2	44.9	А	С
35-49 (B)	859	48.9	44.8	53.0	В	
50-64 (C)	1,083	51.1	47.6	54.6	С	А
65+ (D)	968	47.0	43.3	50.7	D	
Race						
White (W)	3,187	46.3	44.4	48.3	W	
Black (B)	494	44.6	39.7	49.5	В	
Asian (A)	463	43.4	38.4	48.4	А	
Native American (NA)	435	50 .9	45.5	56.4	NA	
Other/Multiple (O)	200	51.0	43.0	59.0	0	
Ethnicity						
Hispanic (H)	576	46.3	41.5	51.1	Н	
Non-Hispanic (NH)	4,203	4 <mark>6.5</mark>	44.8	48.3	NH	
Education						
High School or Less (HS)	900	43.2	39.7	46.8	HS	
Some College/Technical/Vocational (SC)	1,433	48.5	45.7	51.3	SC	
College Graduate (CG)	1,557	47.6	44.9	50.3	CG	
Postgraduate (PG)	872	49.0	45.4	52.6	PG	

Table 70. Results for Source: Motor Vehicles Office (Q2J), 2019

ONK Courses Advertisement on TW	Total N %	otal N % Ves 95	95% CI	95% CI	95% CI	95% CI
Q2K. Source: Advertisement on TV	I Otal N	% Yes	Lower	Upper	Code	Dif.
Total	4,779	40.1	38.4	41.8	N/A	N/A
Sex						
Female (F)	2,586	38.6	36.3	40.9	F	
Male (M)	2,160	41.7	39.1	44.2	М	
Age						
18-34 (A)	1,566	40.2	37.3	43.1	А	
35-49 (B)	859	39.6	35.4	43.7	В	
50-64 (C)	1,083	37.7	34.2	41.2	С	
65+ (D)	968	39.9	36.2	43.6	D	
Race						
White (W)	3,187	37.6	35.6	39.5	W	B NA O
Black (B)	494	51.8	46.9	56.7	В	W A NA
Asian (A)	463	34.9	29.9	39.8	А	ΒO
Native American (NA)	435	29.3	24.5	34.0	NA	W B O
Other/Multiple (O)	200	49.7	41.7	57.7	0	W A NA
Ethnicity						
Hispanic (H)	576	50.5	45.7	55.3	Н	NH
Non-Hispanic (NH)	4,203	37.5	35.8	39.3	NH	Н
Education						
High School or Less (HS)	900	47.9	44.3	51.4	HS	SC CG PG
Some College/Technical/Vocational (SC)	1,433	36.7	33.9	39.4	SC	HS
College Graduate (CG)	1,557	36.0	33.4	38.6	CG	HS
Postgraduate (PG)	872	33.0	29.6	36.4	PG	HS

Table 71. Results for Source: Advertisement on TV (Q2K), 2019

Old Course Advertises out on Dedie	Total N 0/ Noc 95	95% CI	95% CI	95% CI	95% CI	
Q2L. Source: Advertisement on Radio	Iotai N	% Yes	Lower	Upper	Code	Dif.
Total	4,779	22.6	21.1	24.1	N/A	N/A
Sex						
Female (F)	2,586	20.0	18.0	22.0	F	М
Male (M)	2,160	25.3	23.0	27.6	М	F
Age						
18-34 (A)	1,566	27.5	24.8	30.2	А	C D
35-49 (B)	859	24.9	21.1	28.6	В	C D
50-64 (C)	1,083	17.8	15.0	20.5	С	A B
65+ (D)	968	12.5	10.0	15.1	D	A B
Race						
White (W)	3,187	19.7	18.1	21.3	W	ΒO
Black (B)	494	30.1	25.5	34.8	В	W NA
Asian (A)	463	25.9	21.3	30.5	А	NA
Native American (NA)	435	16.0	11.7	20.3	NA	BAO
Other/Multiple (O)	200	35.5	27.6	43.3	0	W NA
Ethnicity						
Hispanic (H)	576	33.0	28.4	37.7	Н	NH
Non-Hispanic (NH)	4,203	20.1	18.6	21.5	NH	Н
Education						
High School or Less (HS)	900	26.4	23.1	29.6	HS	SC
Some College/Technical/Vocational (SC)	1,433	18.8	16.6	21.1	SC	HS
College Graduate (CG)	1,557	21.8	19.5	24.1	CG	
Postgraduate (PG)	872	22.2	19.2	25.2	PG	

Table 72. Results for Source: Advertisement on Radio (Q2L), 2019

O2M Course, Merrie or TV Cherry		95% CI	95% CI	95% CI	95% CI	
Q2M. Source: Movie or 1 v Snow	I Otal N	% ies	Lower	Upper	Code	Dif.
Total	4,779	42.0	40.3	43.7	N/A	N/A
Sex						
Female (F)	2,586	43.8	41.5	46.1	F	
Male (M)	2,160	40.3	37.8	42.8	М	
Age						
18-34 (A)	1,566	46.3	43.4	49.2	А	B D
35-49 (B)	859	37.6	33.6	41.6	В	А
50-64 (C)	1,083	40.1	36.6	43.6	С	
65+ (D)	968	38.7	35.0	42.3	D	А
Race						
White (W)	3,187	40.8	38.9	42.7	W	В
Black (B)	494	49.3	44.4	54.2	В	W
Asian (A)	463	40.8	35.9	45.8	А	
Native American (NA)	435	39.2	33.9	44.5	NA	
Other/Multiple (0)	200	42.7	34.7	50.6	0	
Ethnicity						
Hispanic (H)	576	47.9	43.1	52.7	Н	NH
Non-Hispanic (NH)	4,203	40.6	38.8	42.3	NH	Н
Education						
High School or Less (HS)	900	44.6	41.0	48.1	HS	PG
Some College/Technical/Vocational (SC)	1,433	42.4	39.6	45.2	SC	
College Graduate (CG)	1,557	41.1	38.5	43.8	CG	
Postgraduate (PG)	872	36.2	32.7	39.6	PG	HS

Table 73. Results for Source: Movie or TV Show (Q2M), 2019

O2N Source, Community Activity /Ilealth Fair	Total N	Total N 0/ Vac		95% CI	95% CI	95% CI	95% CI
Q2N. Source: community Activity/Health Fair	I Otal N	<i>7</i> 0 1 es	Lower	Upper	Code	Dif.	
Total	4,779		20.7	19.2	22.1	N/A	N/A
Sex							
Female (F)	2,586		19.3	17.4	21.3	F	
Male (M)	2,160		22.0	19.9	24.2	М	
Age							
18-34 (A)	1,566		25.8	23.2	28.4	А	C D
35-49 (B)	859		23.2	19.6	26.8	В	C D
50-64 (C)	1,083		14.0	11.4	16.5	С	A B
65+ (D)	968		11.9	9.4	14.5	D	A B
Race							
White (W)	3,187		17.5	16.0	18.9	W	BAO
Black (B)	494		29.8	25.1	34.4	В	W NA
Asian (A)	463		25.4	20.7	30.0	А	W NA
Native American (NA)	435		14.2	10.3	18.1	NA	BAO
Other/Multiple (O)	200		32.6	24.9	40.3	0	W NA
Ethnicity							
Hispanic (H)	576		31.2	26.7	35.8	Н	NH
Non-Hispanic (NH)	4,203		18.1	16.7	19.4	NH	Н
Education							
High School or Less (HS)	900		24.2	21.1	27.4	HS	SC
Some College/Technical/Vocational (SC)	1,433		16.5	14.3	18.6	SC	HS CG
College Graduate (CG)	1,557		21.3	19.1	23.5	CG	SC
Postgraduate (PG)	872		19.0	16.2	21.8	PG	

Table 74. Results for Source: Community Activity/Health Fair (Q2N), 2019

020 Source, Organ Donation Organization	Totol N 0/ V	0/ Voc	95% CI	95% CI	95% CI	95% CI	
Q20. Source: Organ Donation Organization	I Otal N	% ies	Lower	Upper	Code	Dif.	
Total	4,779		25.7	24.2	27.2	N/A	N/A
Sex							
Female (F)	2,586		25.3	23.3	27.4	F	
Male (M)	2,160		26.1	23.8	28.3	М	
Age							
18-34 (A)	1,566		30.5	27.8	33.2	А	C D
35-49 (B)	859		27.5	23.9	31.1	В	C D
50-64 (C)	1,083		20.3	17.4	23.2	С	A B
65+ (D)	968		18.2	15.2	21.1	D	A B
Race							
White (W)	3,187		23.7	22.1	25.4	W	ΒO
Black (B)	494		31.7	27.0	36.4	В	W
Asian (A)	463		25.0	20.5	29.5	А	
Native American (NA)	435		24.1	19.4	28.9	NA	
Other/Multiple (O)	200		34.6	27.0	42.1	0	W
Ethnicity							
Hispanic (H)	576		33.2	28.7	37.7	Н	NH
Non-Hispanic (NH)	4,203		23.9	22.4	25.4	NH	Н
Education							
High School or Less (HS)	900		27.5	24.3	30.7	HS	
Some College/Technical/Vocational (SC)	1,433		22.2	19.8	24.6	SC	CG
College Graduate (CG)	1,557		27.3	24.9	29.7	CG	SC
Postgraduate (PG)	872		26.2	23.0	29.4	PG	

Table 75. Results for Source: Organ Donation Organization (Q20), 2019

02D Source, Senier Conter	Total N	Total N 0/ Vac		95% CI	95% CI	95% CI	95% CI
Q2F. Source: Senior Center	IULAIN	70105	Lower	Upper	Code	Dif.	
Total	4,779		14.7	13.4	16.0	N/A	N/A
Sex							
Female (F)	2,586		13.1	11.3	14.8	F	
Male (M)	2,160		16.3	14.3	18.2	М	
Age							
18-34 (A)	1,566		19.2	16.8	21.6	А	C D
35-49 (B)	859		16.5	13.2	19.8	В	C D
50-64 (C)	1,083		6.8	4.8	8.8	С	A B
65+ (D)	968		8.8	6.5	11.0	D	A B
Race							
White (W)	3,187		12.3	11.0	13.6	W	ΒO
Black (B)	494		21.1	16.7	25.4	В	W NA
Asian (A)	463		15.7	11.7	19.6	А	
Native American (NA)	435		9.7	6.1	13.3	NA	ΒO
Other/Multiple (O)	200		25.6	18.3	32.9	0	W NA
Ethnicity							
Hispanic (H)	576		25.4	21.0	29.7	Н	NH
Non-Hispanic (NH)	4,203		12.1	10.9	13.3	NH	Н
Education							
High School or Less (HS)	900		18.1	15.2	21.0	HS	CG
Some College/Technical/Vocational (SC)	1,433		13.5	11.5	15.5	SC	
College Graduate (CG)	1,557		11.7	9.9	13.4	CG	HS
Postgraduate (PG)	872		12.9	10.4	15.3	PG	

Table 76. Results for Source: Senior Center (Q2P), 2019

020 Course Cosial Madia		95% CI	95% CI	95% CI	95% CI	
Q2Q. Source: Social Media	I Otal N	% ies	Lower	Upper	Code	Dif.
Total	4,779	40.9	39.3	42.6	N/A	N/A
Sex						
Female (F)	2,586	42.3	40.0	44.6	F	
Male (M)	2,160	39.6	37.1	42.1	М	
Age						
18-34 (A)	1,566	58.7	55.8	61.5	А	B C D
35-49 (B)	859	44.1	40.0	48.1	В	A C D
50-64 (C)	1,083	29.9	26.6	33.2	С	A B D
65+ (D)	968	18.7	15.6	21.7	D	A B C
Race						
White (W)	3,187	40.5	38.5	42.4	W	0
Black (B)	494	37.3	32.4	42.2	В	0
Asian (A)	463	40.9	35.9	46.0	А	
Native American (NA)	435	36.7	31.5	41.8	NA	0
Other/Multiple (O)	200	50 .9	42.9	58.9	0	W B NA
Ethnicity						
Hispanic (H)	576	45.4	40.5	50.2	Н	
Non-Hispanic (NH)	4,203	39.9	38.1	41.6	NH	
Education						
High School or Less (HS)	900	47.3	43.8	50.9	HS	SC CG PG
Some College/Technical/Vocational (SC)	1,433	39.5	36.7	42.2	SC	HS PG
College Graduate (CG)	1,557	38.6	36.0	41.3	CG	HS PG
Postgraduate (PG)	872	31.1	27.8	34.5	PG	HS SC CG

Table 77. Results for Source: Social Media (Q2Q), 2019

02D Source, Secret Engines	TotalN	% Yes	95% CI	95% CI	95% CI	95% CI
Q2R. Source: Search Engines	TOTALN		Lower	Upper	Code	Dif.
Total	4,779	30.2	28.6	31.8	N/A	N/A
Sex						
Female (F)	2,586	28.4	26.3	30.6	F	
Male (M)	2,160	32.1	29.7	34.5	М	
Age						
18-34 (A)	1,566	45.1	42.2	48.0	А	B C D
35-49 (B)	859	32.6	28.6	36.6	В	A C D
50-64 (C)	1,083	18.2	15.5	20.9	С	A B D
65+ (D)	968	12.3	9.6	14.9	D	A B C
Race						
White (W)	3,187	27.1	25.3	28.9	W	BAO
Black (B)	494	36.7	31.9	41.6	В	W NA
Asian (A)	463	36.7	31.7	41.7	А	W NA
Native American (NA)	435	26.3	21.3	31.3	NA	BAO
Other/Multiple (O)	200	43.0	35.0	51.0	0	W NA
Ethnicity						
Hispanic (H)	576	40.3	35.5	45.1	Н	NH
Non-Hispanic (NH)	4,203	27.7	26.1	29.3	NH	Н
Education						
High School or Less (HS)	900	35.3	31.9	38.8	HS	SC CG PG
Some College/Technical/Vocational (SC)	1,433	28.3	25.7	30.8	SC	HS
College Graduate (CG)	1,557	28.4	26.0	30.9	CG	HS
Postgraduate (PG)	872	23.7	20.6	26.7	PG	HS

Table 78. Results for Source: Search Engines (Q2R), 2019

026 Source, Other Wahriter	TotalN	N % Yes	95% CI	95% CI	95% CI	95% CI	
Q25. Source: Other websites	TOTALN		Lower	Upper	Code	Dif.	
Total	4,779		16.4	15.1	17.8	N/A	N/A
Sex							
Female (F)	2,586		14.2	12.5	16.0	F	М
Male (M)	2,160		18.7	16.6	20.7	М	F
Age							
18-34 (A)	1,566		23.9	21.3	26.4	А	BCD
35-49 (B)	859		17.7	14.4	21.1	В	A C D
50-64 (C)	1,083		7.6	5.7	9.5	С	A B
65+ (D)	968		6.8	4.9	8.7	D	A B
Race							
White (W)	3,187		14.3	12.9	15.6	W	ΒO
Black (B)	494		20.2	15.9	24.5	В	W
Asian (A)	463		19.2	15.0	23.4	А	
Native American (NA)	435		12.0	8.2	15.9	NA	0
Other/Multiple (O)	200		28.2	20.7	35.6	0	W NA
Ethnicity							
Hispanic (H)	576		25.0	20.7	29.2	Н	NH
Non-Hispanic (NH)	4,203		14.3	13.1	15.6	NH	Н
Education							
High School or Less (HS)	900		19.8	16.9	22.7	HS	CG PG
Some College/Technical/Vocational (SC)	1,433		15.3	13.2	17.4	SC	
College Graduate (CG)	1,557		14.6	12.7	16.5	CG	HS
Postgraduate (PG)	872		13.1	10.6	15.5	PG	HS

Table 79. Results for Source: Other Websites (Q2S), 2019

4.15 Understanding Beliefs about Organ Donation

Responses to individual survey questions may group together in similar ways, representing overall beliefs about organ donation. To better understand overall beliefs about organ donation, the questions addressing organ donation beliefs (Q12x, Q16x, and Q22x) were analyzed using the Principal Components Analysis (PCA).⁸ PCA identifies how responses to multiple individual survey questions may cluster together. Such clustering may indicate a cohesive attitude or belief system represented across that particular group of questions. For this study, these groupings (factors) relate to overarching beliefs about organ donation.

A total of 25 different questions using a Likert-style agree/disagree scale were analyzed with PCA. The PCA identified three overarching belief factors extrapolated from 24 of the 25 survey questions. These three factors are summarized as attitudes and beliefs regarding "Benefits of Organ Donation (Benefits)," "Concerns about Organ Donation (Concerns)," and "Fairness of Organ Donation (Fairness)." The "Benefits" and "Concerns" factors were highly internally reliable, meaning the response to one survey question was consistent with other survey questions within the factor. The "Fairness" factor was moderately internally reliable.

When the questions on the "Benefits" and "Concerns" factors were averaged into composite measures,⁹ the correlation showed a weak relationship between the two factors. *This suggests that having a positive view of organ donation and having concerns about organ donation are primarily independent attitudes*, and many people may feel *both* positively about organ donation and concerned about it, particularly when thinking about a loved one's body after death. These co-existing attitudes may have implications for organ donation outreach campaigns, as organizations try to address both perspectives held by many potential organ donors and their families.

The most representative questions on the "Benefits" factor included Q12E (Organ donation allows something positive to come out of a person's death) and Q12D (Receiving organ transplants improve people's lives). These questions, along with Q12C (Most members of my family would support the idea of organ donation), were the strongest predictors of supporting organ donation and registering as organ donors. The most representative items on the "Concerns" scale were Q16B (You are worried that a loved one's body would be disfigured if his or her organs were donated) and Q16G (If you indicate you intend to be a donor, doctors will be less likely to try to save your life). However, these questions only

⁸ Jolliffe I. (2011) Principal Component Analysis. In: Lovric M. (eds) International Encyclopedia of Statistical Science. Springer, Berlin, Heidelberg

⁹ A composite measure combines questions within the same factor into a single score. In this case, the composite is the mean, or average, of all the items within that factor.

had a weak association with measures of organ donation support. In contrast, question Q12A (It is important for a person's body to have all of its parts when it is buried) was the strongest predictor of a respondent not supporting organ donation. This suggests that the belief that a body should have its parts when buried is *especially* important in determining support for organ donation.¹⁰ In contrast, many concerns about organ donation had *no relationship* with actual measures of organ donation support (Q12F, Q16A, Q16C, Q16D, Q16I, and Q22E).¹¹

Section 4.8 and Appendix C provide the full list of survey questions. Appendix C also details the statistical analysis and includes a color-coded heat map showing the shared variance between survey questions.

4.16 Predictors of Organ Donation

A series of weighted multivariate logistic regressions¹² were modeled to predict different measures of support for organ donation. Predictor variables included respondent demographics (age, sex, race, ethnicity, census region, marriage status, low-income status, insurance status, and if the respondent is a health care professional), a range of attitudes and beliefs (Q12x, Q14F, Q16x, Q16N, Q22x, Q30), and personal experience with organ donation and transplantation (Q23). Attitude and belief variables were coded as "agree" (including "agree" and "strongly agree") or disagree (including "disagree" and "strongly disagree"). All predictor variables were entered into the final model, but only statistically significant predictors are reported in this section. Four weighted multivariate logistic regressions were modeled to understand the predictors for 1) support for organ donation (Q4); 2) registration as an organ donor (Q13); 3) support for organ donation among those who are unregistered (Q4 subset by Q13); and 4) support for donating a family member's organs (Q10). In all four models, the following two predictor variables were among the top three most powerful predictors of support for organ donation: the belief that a body should have all of its parts when buried (Q12A) and the belief that most family members support organ donation (Q12C).

These four models show how strongly predictor variables relate to the outcome variable, but they do not indicate causality. In other words, this type of study design and analysis cannot show that one variable *causes* the results found in another variable. Instead, these relationships are more similar to correlations; they show that the two variables tend to be

¹⁰ The belief that a body should have its parts when buried predicted 12% of variance in registration status and 16% of variance in donating a family member's organs.

¹¹ Many questions in the "Concerns" factor predicted less than 1% variance on the support measures.

¹² A multivariate logistic regression is a statistical technique used to model an association between multiple predictor variables, e.g., age, sex, and attitudes toward organ donation, and an outcome variable, e.g., support for organ donation. A weighted multivariate logistic regression accounts for survey design.
associated. However, unlike a simple correlation, these regression models control for all demographic variables. This means the relationship between attitudes, beliefs, and outcomes can be investigated while controlling for possible other factors, such as the respondents' personal characteristics including age, race, or education level.

The results from the weighted multivariate logistic regressions were interpreted using the adjusted odds ratio (aOR), which describes the strength of the relationship between each predictor variable and the outcome variable, after adjusting for other predictor variables. The larger the aOR, the stronger the association between that predictor and the outcome variable. For consistent comparisons, all aOR are expressed as positives; negative relationships are reverse coded and marked "Disagree." Green bars in the table illustrate the magnitude of the aOR. An aOR of 1.0 would have no green bar visible, because an aOR of 1.0 represents no relationship. The largest aOR in table 80 has the largest green bar (aOR=2.26), and the strongest association with the outcome of support for organ donation. Descriptions of each model with significant aORs are included below. Appendix D provides full regression results.

Predictors of Support for Organ Donation (Q4)

The overall model for predicting support for organ donation was significant (p < .0001). The model successfully predicted support for organ donation for 89.6% of cases, indicating a highly predictive model. A total of 19 predictor variables were significantly associated with support for organ donation (Table 80).

The ten characteristics most strongly associated with supporting organ donation were:

- 1) disagreeing with Q12A "It is important for a person's body to have all of its parts when it is buried." (aOR = 2.26, *p* < .0001);
- 2) being White as compared to being Other/Multiple Race (aOR = 1.85, *p* = .017);
- agreeing with Q12C "Most members of my family would support the idea of organ donation." (aOR = 1.85, *p* < .0001);
- agreeing with Q16J "You would agree to receive an organ transplant if it would save your life." (aOR = 1.84, p < .0001);
- 5) agreeing with Q12D "Receiving organ transplants improve people's lives." (aOR = 1.73, p = .0002);
- 6) agreeing with Q12E "Organ donation allows something positive to come out of a person's death." (aOR = 1.72, p = .0003);
- 7) agreeing with Q16F "Every year, thousands of people die due to a lack of donated organs for transplantation." (aOR = 1.68, p = .0002);
- agreeing with Q12H "All people who need an organ transplant should be able to receive a transplant." (aOR = 1.55, p = .0017);

- 9) being 18-34 years old as compared to being ages 65 and over (aOR = 1.54, *p* = <.0001); and
- 10) disagreeing with Q22D "Organ donation is against my religion." (aOR = 1.52, p = .0006).

Predictor	Text	aOR	р
Disagree with Q12A	"It is important for a person's body to have all of its parts when it is buried."	2.26	<.0001
"White" vs "Other/Multiple" Race	"What best describes your race?"	1.85	0.0169
Agree with Q12C	"Most members of my family would support the idea of organ donation."	1.85	<.0001
Agree with Q16J	"You would agree to receive an organ transplant if it would save your life."	1.84	<.0001
Agree with Q12D	"Receiving organ transplants improve people's lives."	1.73	0.0002
Agree with Q12E	"Organ donation allows something positive to come out of a person's death."	1.72	0.0003
Agree with Q16F	"Every year, thousands of people die due to a lack of donated organs for transplantation."	1.68	0.0002
Agree with Q12H	"All people who need an organ transplant should be able to receive a transplant."	1.55	0.0017
Age 18 - 34 vs 65+	"What is your age?"	1.54	<.0001
Disagree with Q22D	"Organ donation is against my religion."	1.52	0.0006
Agree with Q12B	"It is important for people to tell their families whether or not they would want their organs to be donated upon death."	1.50	0.0055
Disagree with Q16G	"If you indicate you intend to be a donor, doctors will be less likely to try to save your life."	1.48	0.0018
Agree with Q16N	"If I were a donor, I would like my organs to go to the more medically urgent patients regardless of where they live in the U.S."	1.43	0.0010
Agree with Q22B	"Doctors do everything they can to save a person's life before organ donation is even considered."	1.38	0.0134
Sex Male vs Female	"What is your sex?"	1.37	0.0025
Agree with Q22A	"Given equal need, a poor person has as good a chance as a rich person of getting an organ transplant."	1.34	0.0152
Agree with Q16E	"Organ donation helps families cope with their grief."	1.33	0.0245
Disagree with Q16I	"Transplants often go to undeserving people."	1.28	0.0424
Age 65+ vs 35 - 49	"What is your age?"	1.19	0.0101

Table 80. Characteristics Associated with Support for Organ Donation (Q4)

Note: "aOR" is Adjusted Odds Ratio. The green bars represent the magnitude of the aORs.

Predictors of Signing up as Organ Donor (Q13)

The overall model for predicting whether a respondent would sign up as organ donor was significant (p < .0001). The model successfully predicted signing up as organ donor for 77.7% of cases, indicating a moderately to highly predictive model. A total of 19 predictor variables were significantly associated with signing up as organ donor (Table 81).

The ten characteristics most strongly associated with signing up as organ donor were:

- 1) disagreeing with Q12A "It is important for a person's body to have all of its parts when it is buried." (aOR = 3.00, *p* < .0001);
- agreeing with Q12C "Most members of my family would support the idea of organ donation." (aOR = 2.59, *p* < .0001);
- having a personal experience with organ donation (Q23), such as being/knowing an organ donor, being/knowing someone who received a transplant, or being/knowing someone waiting for an organ (aOR = 2.32, *p* < .0001);
- 4) working in the healthcare profession (D7) (aOR = 2.22, *p* < .0001);
- 5) agreeing with Q16E "Organ donation helps families cope with their grief." (aOR = 1.71, *p* = .0002);
- 6) being ages 65 and over as compared to 18-34 years old (aOR = 1.69, *p* <.0001);
- 7) disagreeing with Q16B "You are worried that a loved one's body would be disfigured if his or her organs were donated." (aOR = 1.57, p < .0001);
- 8) being White as compared to being Asian (aOR = 1.50, *p* = .0003);
- 9) having a postgraduate degree as compared to a high school degree or less (aOR = 1.48, p = .0069); and
- 10) being ages 65 and over as compared to 35-49 years old (aOR = 1.47, p = .026).

Predictor	Text	aOR	р
Disagree with Q12A	"It is important for a person's body to have all of its parts when it is buried."	3.00	<.0001
Agree with Q12C	"Most members of my family would support the idea of organ donation."	2.59	<.0001
Yes to Q23A/Q23B/Q23C	Experience with Organ Donation (Yes to Q23A, Q23B, or Q23C)	2.32	<.0001
Yes to D7	"Do you work in the healthcare profession?"	2.22	<.0001
Agree with Q16E	"Organ donation helps families cope with their grief."	1.71	<.0001
Age 65+ vs 18 - 34	"What is your age?"	1.69	<.0001
Disagree with Q16B	"You are worried that a loved one's body would be disfigured if his or her organs were donated."	1.57	<.0001
"White" vs "Asian" Race	"What best describes your race?"	1.50	0.0003
"Postgraduage" vs "High School" Educ.	"What is the highest level of education you have completed?"	1.48	0.0069
Age 65+ vs 35 - 49	"What is your age?"	1.47	0.0260
Agree with Q16J	"You would agree to receive an organ transplant if it would save your life."	1.46	0.0035
"White" vs "Black" Race	"What best describes your race?"	1.44	0.0054
Agree with Q16A	"Minority patients are less likely to receive organ transplants."	1.32	<.0001
Agree with Q22B	"Doctors do everything they can to save a person's life before organ donation is even considered."	1.32	0.0114
Agree with Q22A	"Given equal need, a poor person has as good a chance as a rich person of getting an organ transplant."	1.29	0.0002
Disagree with Q16G	"If you indicate you intend to be a donor, doctors will be less likely to try to save your life."	1.24	0.0122
Agree with Q12F	"A deceased person's next of kin should be able to override the deceased person's wish to donate his or her organs."	1.21	0.0223
Income Above \$40k D9	"What is your total annual household income, before taxes?"	1.16	0.0363
"Native American" vs "White" Race	"What best describes your race?"	1.14	0.0081

Table 81. Characteristics Associated with Signing up as Organ Donor (Q13)

Note: "aOR" is Adjusted Odds Ratio. The green bars represent the magnitude of the aORs.

Predictors of Signing up Among Supporters (Q4 subset by Q13)

The overall model for predicting signing up as organ donor among supporters was significant (p < .0001). The model successfully predicted signing up as organ donor among supporters for 76.0% of cases, indicating a moderately to highly predictive model. A total of 16 predictor variables were significantly associated with signing up as organ donor among supporters (Table 82).

The ten characteristics most strongly associated with signing up as organ donor among supporters were:

- 1) disagreeing with Q12A "It is important for a person's body to have all of its parts when it is buried." (aOR = 3.17, *p* < .0001);
- agreeing with Q12C "Most members of my family would support the idea of organ donation." (aOR = 2.64, *p* < .0001);
- having a personal experience with organ donation (Q23), such as being/knowing an organ donor, being/knowing someone who received a transplant, or being/knowing someone waiting for an organ (aOR = 2.24, *p* < .0001);
- 4) working in the field of healthcare (aOR = 2.10, *p* < .0001);
- 5) agreeing with Q16E "Organ donation helps families cope with their grief." (aOR = 1.69, *p* < .0001);
- 6) being ages 65 and over as compared to 18-34 years old (aOR = 1.66, *p* <.0001);
- 7) having a postgraduate degree as compared to a high school degree or less (aOR = 1.56, p = .0024);
- 8) disagreeing with Q16B "You are worried that a loved one's body would be disfigured if his or her organs were donated." (aOR = 1.52, *p* < .0001);
- 9) being White as compared to being Asian (aOR = 1.52, p = .0002); and
- 10) being ages 65 and over as compared to 35-49 years old (aOR = 1.44, p = .0262).

Table 82.	Characteristics	Associated	with	Signing up	Among S	Supporters ((Q4
by Q13)							

Predictor	Text	aOR	р
Disagree with Q12A	"It is important for a person's body to have all of its parts when it is buried."	3.16	<.0001
Agree with Q12C	"Most members of my family would support the idea of organ donation."	2.64	<.0001
Yes to Q23A/Q23B/Q23C	Experience with Organ Donation (Yes to Q23A, Q23B, or Q23C)	2.24	<.0001
Yes to D7	"Do you work in the healthcare profession?"	2.10	<.0001
Agree with Q16E	"Organ donation helps families cope with their grief."	1.69	<.0001
Age 65+ vs 18 - 34	"What is your age?"	1.66	<.0001
"Postgraduage" vs "High School" Educ.	"What is the highest level of education you have completed?"	1.56	0.0024
Disagree with Q16B	"You are worried that a loved one's body would be disfigured if his or her organs were donated."	1.52	<.0001
"White" vs "Asian" Race	"What best describes your race?"	1.52	0.0002
Age 65+ vs 35 - 49	"What is your age?"	1.44	0.0262
"White" vs "Black" Race	"What best describes your race?"	1.43	0.0071
Agree with Q22D	Organ donation is against my religion.	1.35	0.0079
Agree with Q16A	"Minority patients are less likely to receive organ transplants."	1.34	<.0001
Agree with Q22A	"Given equal need, a poor person has as good a chance as a rich person of getting an organ transplant."	1.29	0.0003
Disagree with Q16G	"If you indicate you intend to be a donor, doctors will be less likely to try to save your life."	1.28	0.0052
"Native American" vs "White" Race	"What best describes your race?"	1.15	0.0097

Note: "aOR" is Adjusted Odds Ratio. The green bars represent the magnitude of the aORs.

Predictors of Support for Donating a Family Member's Organs (Q10)

The overall model for predicting support for donating a family member's organs was significant (p < .0001). The model successfully predicted support for donating a family member's organs for 82.9% of cases, indicating a moderately to highly predictive model. A total of 17 predictor variables were significantly associated with support for donating a family member's organs (Table 83).

The ten characteristics most strongly associated with supporting donating a family member's organs were:

- agreeing with Q12C "Most members of my family would support the idea of organ donation." (aOR = 3.69, *p* < .0001);
- 2) disagreeing with Q12A "It is important for a person's body to have all of its parts when it is buried." (aOR = 3.53, p < .0001);
- agreeing with Q16E "Organ donation helps families cope with their grief." (aOR = 2.31, *p* < .0001);
- having a personal experience with organ donation (Q23), such as being/knowing an organ donor, being/knowing someone who received a transplant, or being/knowing someone waiting for an organ (aOR = 2.22, *p* < .0001);
- 5) agreeing with Q12F "A deceased person's next of kin should be able to override the deceased person's wish to donate his or her organs." (aOR = 2.07, *p* < .0001);
- 6) disagreeing with Q16B "You are worried that a loved one's body would be disfigured if his or her organs were donated." (aOR = 1.89, *p* = .0003);
- 7) agreeing with Q22A "Given equal need, a poor person has as good a chance as a rich person of getting an organ transplant." (aOR = 1.85, p = .005);
- 8) being ages 65 and over as compared to 18-34 years old (aOR = 1.83, *p* <.0001);
- 9) being White as compared to being Asian (aOR = 1.80, p = .004); and
- 10) disagreeing with Q14FB that parts of livers can be donated from a living donor (aOR = 1.75, p = .0069).

Predictor	Text	aOR	р
Agree with Q12C	"Most members of my family would support the idea of organ donation."	3.69	<.0001
Disgree with Q12A	"It is important for a person's body to have all of its parts when it is buried."	3.53	<.0001
Agree with Q16E	"Organ donation helps families cope with their grief."	2.31	<.0001
Yes to Q23A/Q23B/Q23C	Experience with Organ Donation (Yes to Q23A, Q23B, or Q23C)	2.22	<.0001
Agree with Q12F	"A deceased person's next of kin should be able to override the deceased person's wish to donate his or her organs."	2.07	<.0001
Diagree with Q16B	"You are worried that a loved one's body would be disfigured if his or her organs were donated."	1.89	0.0003
Agree with Q22A	"Given equal need, a poor person has as good a chance as a rich person of getting an organ transplant."	1.85	0.0054
Age 65+ vs 18 - 34	"What is your age?"	1.83	<.0001
"White" vs "Asian" Race	"You would agree to receive an organ transplant if it would save your life."	1.80	0.0035
Disagree with Q14FB	"Parts of livers can be donated from a living donor."	1.75	0.0069
Yes to D7	"Do you work in the healthcare profession?"	1.54	0.0260
Age 65+ vs 35 - 49	"What is your age?"	1.50	<.0001
Agree with Q14FC	"Parts of lungs can be donated from a living donor."	1.30	0.0114
"College Grad" vs "High School" Educ.	"What is the highest level of education you have completed?"	1.28	0.0122
Agree with Q16A	"Minority patients are less likely to receive organ transplants."	1.26	0.0363
Married (D4)	"What is your current marital status?"	1.24	0.0002
Agree with Q16K	"The U.S. transplant system uses a fair approach to distribute organs to patients."	1.24	0.0223

Table 83. Characteristics Associated with Willingness to Donate a Family Member's Organs (Q10)

Note: "aOR" is Adjusted Odds Ratio. The green bars represent the magnitude of the aORs.

4.17 Demographic Profiles of Support for Organ Donation

This section examines the level of support for organ donation by specific demographic combinations, providing more detail than previous sections. General support for organ donation (Q4) was assessed across demographic categories of race and ethnicity, age group, and educational level. These particular demographic factors were chosen because they showed significantly different support for organ donation in section 4.1, equivalent to p < .005.

For the purpose of this analysis, the respondents were categorized into one of the five race/ethnicity groups: Non-Hispanic White, Non-Hispanic Black, Non-Hispanic Asian, Non-Hispanic Native American, and Hispanic. Non-Hispanic Other/Multiple race was not included as a separate racial category because of low prevalence and statistical power (n = 166). Age groups were condensed into two groups: 1) Under the age of 50 and 2) 50 and over, as minimal differences were found between the 18–34 and 35–49 age groups and between the 50–64 and 65 and over age groups in their support for organ donation. These adjustments resulted in eight combinations of age and education within each of the five race/ethnicity groups, leading to 40 total demographic groups.

Overall Support for Organ Donation (Q4)

Of these 40 demographic groups, four were less likely to support organ donation than the overall population (90.4% support).¹³ These groups were:

- 1) Black respondents under 50 with a high school degree or less (76.7% support);
- 2) Black respondents under 50 with some college, trade school, or a vocational degree
- (83.3% support);

3) Black respondents 50 and over with a high school degree or less (81.0% support); and

4) Hispanic respondents under 50 with a high school degree or less (84.0% support).

Taken together, these results suggest the demographic groups least likely to support organ donation are Blacks or Hispanics under the age of 50 and without a college degree.

 $^{^{13}}$ These four groups were identified by looking at whether their 95% Confidence Interval (CI) fell below the population estimate for organ donation support in Table 84 (90.4%; 95% CI = 89.7%, 91.2%).

Race and Ethnicity	Age	Education	Total N	%	95%	95%
Race and Dennierey	Group	Buucution	Iotain	Support	Lower CI	Upper CI
All	All	All	10,000	90.4%	89.7%	91.2%
White (Non-Hispanic)	Under 50	High School	718	92.6%	90.6%	94.6%
White (Non-Hispanic)	Under 50	Some College	886	92.3%	90.5%	94.1%
White (Non-Hispanic)	Under 50	College Graduate	985	93.9%	92.4%	95.5%
White (Non-Hispanic)	Under 50	Postgraduate	350	94.1%	91.6%	96.6%
White (Non-Hispanic)	50 +	High School	518	93.6%	91.4%	95.7%
White (Non-Hispanic)	50 +	Some College	778	95.7%	94.3%	97.2%
White (Non-Hispanic)	50 +	College Graduate	848	95.9%	94.6%	97.2%
White (Non-Hispanic)	50 +	Postgraduate	560	96.9%	95.5%	98.4%
Black (Non-Hispanic)	Under 50	High School	95	76.7%	67.9%	85.5%
Black (Non-Hispanic)	Under 50	Some College	161	83.3%	77.3%	89.3%
Black (Non-Hispanic)	Under 50	College Graduate	139	89.1%	84.0%	94.3%
Black (Non-Hispanic)	Under 50	Postgraduate	49	84.6%	74.5%	94.7%
Black (Non-Hispanic)	50 +	High School	101	81.0%	73.3%	88.8%
Black (Non-Hispanic)	50 +	Some College	164	91.3%	86.9%	95.7%
Black (Non-Hispanic)	50 +	College Graduate	114	92.0%	87.0%	97.0%
Black (Non-Hispanic)	50 +	Postgraduate	82	93.9%	88.8%	99.1%
Asian (Non-Hispanic)	Under 50	High School	46	86.5%	76.3%	96.7%
Asian (Non-Hispanic)	Under 50	Some College	89	91.8%	85.7%	97.8%
Asian (Non-Hispanic)	Under 50	College Graduate	244	90.8%	87.2%	94.4%
Asian (Non-Hispanic)	Under 50	Postgraduate	126	91.7%	86.8%	96.7%
Asian (Non-Hispanic)	50 +	High School	25	96.2%	88.9%	100.0%
Asian (Non-Hispanic)	50 +	Some College	60	93.6%	87.6%	99.7%
Asian (Non-Hispanic)	50 +	College Graduate	163	90.4%	85.9%	94.9%
Asian (Non-Hispanic)	50 +	Postgraduate	137	90.2%	84.7%	95.7%
Nat. Am. (Non-Hispanic)	Under 50	High School	103	88.3%	81.9%	94.7%
Nat. Am. (Non-Hispanic)	Under 50	Some College	131	93.9%	89.6%	98.1%
Nat. Am. (Non-Hispanic)	Under 50	College Graduate	87	96.2%	91.8%	100.0%
Nat. Am. (Non-Hispanic)	Under 50	Postgraduate	27	92.7%	82.5%	100.0%
Nat. Am. (Non-Hispanic)	50 +	High School	52	88.3%	79.5%	97.1%
Nat. Am. (Non-Hispanic)	50 +	Some College	127	90.4%	85.2%	95.6%
Nat. Am. (Non-Hispanic)	50 +	College Graduate	100	95.2%	91.0%	99.3%
Nat. Am. (Non-Hispanic)	50 +	Postgraduate	74	96.3%	92.3%	100.0%
Hispanic (Any Race)	Under 50	High School	162	84.0%	77.6%	90.4%
Hispanic (Any Race)	Under 50	Some College	189	89.8%	85.1%	94.5%
Hispanic (Any Race)	Under 50	College Graduate	153	91.6%	87.3%	95.9%
Hispanic (Any Race)	Under 50	Postgraduate	64	91.7%	84.2%	99.3%
Hispanic (Any Race)	50 +	High School	86	89.4%	82.8%	96.1%
Hispanic (Any Race)	50 +	Some College	114	93.5%	88.8%	98.2%
Hispanic (Any Race)	50 +	College Graduate	112	95.9%	92.3%	99.5%
Hispanic (Any Race)	50 +	Postgraduate	82	96.2%	91.9%	100.0%

Table 84. Support for Organ Donation (Q4) by Demographic Category

Note: "Support" includes "Strongly support" and "Support." "Total N" is the unweighted number of individuals in this group. Percentages are weighted to national population characteristics. "CI" is the confidence interval. "Nat. Am." is "Native American."

Unregistered (Q13) Supporters of Organ Donation (Q4)

Almost half (46.2%) of those who support organ donation in Q4 said they have not signed up as donors in Q13. This analysis examines the proportion of unregistered supporters by demographic group. Because of the smaller number of organ donation supporters (n=9,080) compared to the total number of survey respondents, this analysis condensed college graduates and postgraduates into a single group, leading to 30 demographic combinations of race/ethnicity, age, and education level. Also, with fewer respondents in this analysis, the 95% Confidence Interval for several groups was wide, indicating less certainty in the estimated percent for these groups.

Despite fewer respondents in this analysis, several groups had a higher proportion of unregistered supporters when compared to the subpopulation of unregistered supporters (46.2%).¹⁴ These groups are:

- 1) Black respondents 50 and over with some college (65.4%);
- 2) Black respondents 50 and over with a high school degree or less (65.1%);
- 3) Hispanic respondents 50 and over with a high school degree or less (61.8%);
- 4) Asian respondents under 50 with some college (59.2%);
- 5) Asian respondents under 50 who are at least college graduates (55.8%);
- 6) White respondents 50 and over with a high school degree or less (55.6%);
- 7) Black respondents 50 and over with at least a college degree (54.2%); and
- 8) Asian respondents 50 and over with at least a college degree (52.4%).

Asian respondents under 50 with a high school degree or less had the highest degree of unregistered supporters (80.7%), but because this demographic category included only 40 respondents, the confidence interval is large (67.8% to 93.6%).

The group least likely to include unregistered supporters were White respondents under 50 with at least a college degree (30.8%).

¹⁴These groups were identified by looking at whether their 95% Confidence Interval (CI) fell above the subpopulation estimate for unregistered supporters in Table 85 (46.2%; 95% CI = 45.0%, 47.5%).

Race and Ethnicity	Age Group	Education	Total N	% Unreg.	95% Lower CI	95% Upper CI
All	All	All	9080	46 .2%	45.0%	47.5%
White (Non-Hispanic)	Under 50	High School	667	47.3%	43.5%	51.2%
White (Non-Hispanic)	Under 50	Some College	815	36 .7%	33.3%	40.1%
White (Non-Hispanic)	Under 50	College Grad +	1248	30.8%	28.2%	33.5%
White (Non-Hispanic)	50 +	High School	477	55.6%	51.1%	60.1%
White (Non-Hispanic)	50 +	Some College	737	43.8%	40.2%	47.4%
White (Non-Hispanic)	50 +	College Grad +	1349	37.6%	35.0%	40.2%
Black (Non-Hispanic)	Under 50	High School	73	58.5 %	46.8%	70.2%
Black (Non-Hispanic)	Under 50	Some College	135	50. <mark>5%</mark>	41.8%	59.2%
Black (Non-Hispanic)	Under 50	College Grad +	162	53.6%	45.7%	61.5%
Black (Non-Hispanic)	50 +	High School	81	65.1%	54.7%	75.6%
Black (Non-Hispanic)	50 +	Some College	150	65.4%	57.8%	73.1%
Black (Non-Hispanic)	50 +	College Grad +	182	54.2%	47.0%	61.5%
Asian (Non-Hispanic)	Under 50	High School	40	80.7%	67.8%	93.6%
Asian (Non-Hispanic)	Under 50	Some College	81	59.2%	48.2%	70.2%
Asian (Non-Hispanic)	Under 50	College Grad +	334	55.8%	50.3%	61.3%
Asian (Non-Hispanic)	50 +	High School	24	61.6 <mark>%</mark>	42.0%	81.3%
Asian (Non-Hispanic)	50 +	Some College	56	48.0%	34.8%	61.1%
Asian (Non-Hispanic)	50 +	College Grad +	272	52.4%	46.3%	58.5%
Nat. Am. (Non-Hispanic)	Under 50	High School	91	39 .1%	29.0%	49.3%
Nat. Am. (Non-Hispanic)	Under 50	Some College	122	3 4.3%	25.6%	42.9%
Nat. Am. (Non-Hispanic)	Under 50	College Grad +	109	35.3%	26.1%	44.5%
Nat. Am. (Non-Hispanic)	50 +	High School	46	47.0%	32.5%	61.4%
Nat. Am. (Non-Hispanic)	50 +	Some College	114	42.3%	33.1%	51.4%
Nat. Am. (Non-Hispanic)	50 +	College Grad +	165	3 4.6%	27.3%	41.9%
Hispanic (Any Race)	Under 50	High School	137	54.1%	45.1%	63.0%
Hispanic (Any Race)	Under 50	Some College	166	43 .4%	35.3%	51.6%
Hispanic (Any Race)	Under 50	College Grad +	196	39 .0%	31.7%	46.2%
Hispanic (Any Race)	50 +	High School	73	61.8 <mark>%</mark>	50.0%	73.6%
Hispanic (Any Race)	50 +	Some College	107	43.6%	33.8%	53.3%
Hispanic (Any Race)	50 +	College Grad +	184	39.4%	32.1%	46.8%

Table 85. Unregistered (Q13) Supporters of Organ Donation (Q4)

Note: "Unregistered Supporters" are those who selected "Strongly support" or "Support" for Organ Donation (Q4) but are not signed up as organ donors (Q13). The denominator for the percentages is all supporters of organ donation regardless of registration status. "Total N" is the unweighted number of individuals in this group. Percentages are weighted to national population characteristics. "CI" is the confidence interval. "Nat. Am." is "Native American."

4.18 Trends in Organ Donation

Previous national surveys of the public's donation attitudes and practices were fielded in 1993, 2005, and 2012, with the 1993 survey funded by the Partnership for Organ Donation, and the 2005 and 2012 surveys funded by HRSA. Many of the survey questions remained the same to enable tracking over time. In this section, trends are examined in the following areas: (1) support for organ donation, (2) likelihood of donating organs while living, (3) willingness to donate hands or face after death, (4) attitudes towards presumed consent, (5) attitudes towards payments associated with deceased organ donation, (6) beliefs in benefits of organ donation, and (5) beliefs in concerns about organ donation.

Trends over time and survey administration mode

The previous national surveys have been fielded by telephone using a Computer-Assisted Telephone Interviewing (CATI) technique. However, declining response rates for telephone surveys (from 36% in 1997 to 6% in 2018¹⁵) have made CATI surveys increasingly expensive and potentially less representative. Therefore, the 2019 NSODAP survey included both a telephone survey of a representative sample of 2,000 respondents and a web survey panel consisting of a representative sample of 8,000 respondents. The telephone survey allows direct comparisons with prior surveys, while the web survey allows collection of a much larger sample size to provide more detailed statistical comparisons.

Different modes of survey administration can lead to different patterns of response. For example, telephone interviews can be subject to social desirability bias, in which respondents may self-censor their responses to please the interviewer or to avoid embarrassment. The risk of social desirability increases for questions that are more sensitive or socially stigmatized. However, anonymized web surveys are much more robust against social desirability bias and tend to result in more direct responses to questions, especially for sensitive questions. This means the 2019 NSODAP telephone results can be compared to prior surveys, but the web results may not be directly comparable.

To preserve comparability to prior surveys, and to examine possible mode differences, the trends over time are reported separately by telephone and web surveys. To examine trends over time, 2019 NSODAP telephone results are compared to prior surveys. To

¹⁵ Response rates in telephone surveys have resumed their decline, Pew Research Center <u>https://www.pewresearch.org/fact-tank/2019/02/27/response-rates-in-telephone-surveys-have-resumed-their-decline/</u>

examine mode differences, the 2019 NSODAP telephone and web results are compared.¹⁶ A table of trends for all longitudinal questions is shown in Table 86. In this table, asterisks indicate a significant difference (p < .05) when compared to the 2019 phone results. A significant difference for a prior year indicates a meaningful change over time. A significant difference between web and phone for 2019 indicates a difference by survey administration mode.

¹⁶ All significance tests in this section are z-tests of two population proportions.

Question	1993 (Phone)	2005 (Phone)	2012 (Phone)	2019 (Web)	2019 (Phone)
Q4. Support for Organ Donation	93.5%*	92.9%*	94.9%*	90.5%	89.7%
Q15A. Living Donation, Close Friend	-	74.3%*	85.4%*	74.2%*	81.3%
Q15B. Living Donation, Family Member	-	90.1%	93.5%*	85.2%*	88.7%
Q15C. Living Donation, Acquaintance	-	-	67.6%	51.7%*	65.0%
Q15D. Living Donation, Stranger	-	37.5%*	54.7%*	44.2%*	50.4%
Q15EA. Donate Your Hands	-	-	80.3%*	63.5%*	66.2%
Q15EB. Donate Your Face	-	-	58.2%*	46.8%	46.6%
Q16N. Medically Urgent vs Local Area	-	-	81.7%	78.7%*	83.2%
Q17. Support Presumed Consent	-	41.9%*	51.1%	58.1%*	49.4%
Q17C. Opt Out of Presumed Consent	-	70.3%*	71.9%*	62.4%*	65.2%
Q18A. Payments Own Organs	12.0%*	16.7%*	25.4%*	37.2%*	21.2%
Q18B. Payments Family's Organs	12.0%*	18.3%*	25.8%*	37.0%*	22.8%
Q12, Q16, Q22. Benefits of Organ Donation	-	88.2%	88.6%*	84.8%	86.4%
Q12, Q16, Q22. Concerns about Donation	-	77.3%*	74.6%*	64.9%	66.7%

Table 86. Trends in Organ Donation for Longitudinal Questions, 1993–2019

Note: An asterisk (*) indicates a significant difference at the p < .05 level when compared to the 2019 telephone survey. An asterisk for a prior year (1993–2012) indicates a significant change between that year and 2019. Asterisks for the 2019 web survey indicate a significant difference in survey administration mode (web and telephone). A dash indicates the question was not included in that survey, and no comparison is possible. Percentages indicate support or affirmative responses, except for Concerns, which is expressed as disagreement with Concerns. Definitions of how responses are categorized as percentages are described in the sections for each question throughout this report.

Support for organ donation (Q4)

Respondents were asked about their support for organ donation. Telephone surveys showed a decline in support for organ donation of 5.2% points, from 94.9% in 2012 to 89.7% in 2019 (p < .0001). Support from web respondents was equivalent to telephone respondents (telephone 89.7%, web 90.5%, p = .28), but telephone respondents were more likely to decline to answer this question (telephone 4.8%, web 0.9%, p < .0001), while web respondents were more likely to say they opposed organ donation (telephone 5.5%, web 8.6%, p < .0001). Figure 25 shows these trends from 1993 to 2019.



Figure 25. Trends in Support for Organ Donation (Q4), 1993-2019

Support/Strongly Support 20 Don't Know/Refused Oppose/Strongly Oppose

Likelihood of living donation (Q15A-Q15D)

Respondents were asked how likely they would be to donate an organ while living to a close friend (Q15A), a family member (Q15B), an acquaintance (Q15C), or someone they did not know (Q15D). Telephone respondents from 2019 were significantly less likely than respondents from 2012 to say they would donate to a close friend (85.4% in 2012 to 81.3% in 2019, p < .0001), family member (93.5% in 2012 to 88.7% in 2019, p < .0001), and a stranger (54.7% in 2012 to 50.4% in 2019, p = .002). Although there was a decline in likely donations to an acquaintance from 2012 to 2019, this difference was not statistically significant (67.6% in 2012 to 65.0% in 2019, p = .051). This indicates respondents in 2019 were slightly less likely to be willing to donate an organ while living to a close friend, family member, or a stranger compared to respondents in 2012.

Web respondents were far more likely to say they were *unlikely* to donate an organ while living compared to telephone respondents. This result was consistent for a close friend (telephone 14.9%, web 25.5%, p < .0001), a family member (telephone 8.8%, web 14.6%, p < .0001), an acquaintance (phone 30.5%, web 47.8%, p < .0001), and a stranger (telephone 44.9%, web 55.5%, p < .0001). This indicates a strong mode difference, and possible social desirability bias, in which telephone respondents are much more likely to say they would donate an organ while living than web respondents.

Figures 26 through 29 shows these trends from 2005 to 2019. Likelihood of living donation to an acquaintance was introduced in 2012.



Figure 26. Likely Living Donation to a Close Friend (Q15A), 2005-2019

Somewhat Likely/Very Likely 🕫 Don't know/Refused 💷 Not Very Likely/Not at All Likely



Figure 27. Likely Living Donation to a Family Member (Q15B), 2005-2019

Somewhat Likely/Very Likely 🖉 Don't know/Refused 🗉 Not Very Likely/Not at All Likely

Figure 28. Likely Living Donation to an Acquaintance (Q15C), 2012-2019



Somewhat Likely/Very Likely 🖉 Don't know/Refused 🗉 Not Very Likely/Not at All Likely



Figure 29. Likely Living Donation to a Stranger (Q15D), 2005-2019

Somewhat Likely/Very Likely 🕫 Don't know/Refused 💷 Not Very Likely/Not at All Likely

Willingness to Donate Hands (Q15EA) and Face (Q15EB)

Respondents were asked how willing they would be to donate their hands (Q15EA) or face (Q15EB) after death. Approximately 14% fewer respondents indicated they are likely to donate hands in 2019 than in 2012 and 11.6% fewer for face donation (hands were 80.3% in 2012 to 66.2% in 2019, p < .0001 and face was 58.2% in 2012 to 46.6% in 2019, p < .0001). This indicates respondents in 2019 are much less willing to donate their hands or face than respondents in 2012.

Web respondents were slightly less likely to be willing to donate their hands than telephone respondents (telephone 66.2%, web 63.5%, p = .024), indicating a modest mode difference for willingness to donate hands. However, telephone respondents were also more likely to decline to answer (telephone 5.5%, web 0.4%, p < .0001). There was no mode difference for willingness to donate face (telephone 46.6%, web 46.8%, p = .87). However, telephone respondents were again more likely to decline to answer (telephone 5.9%, web 0.3%, p < .0001).

Figures 30 and 31 show these results.



Figure 30. Willingness to Donate Hands (Q15EA), 2012-2019

Figure 31. Willingness to Donate Face (Q15EB), 2012-2019



Prefer Organs go to Medically Urgent vs Local Area (Q16N)

Respondents were asked if they would prefer their organs go to those with the most urgent medical need regardless of geographical area, or to the local area, even if those patients were not the most medically urgent (Q16N). Telephone surveys showed the same level of support for organs going to medically urgent instead of local patients in 2019 as in 2012 (81.7% in 2012 to 83.2% in 2019, p = .16). Web respondents were slightly less likely to support organs going to medically urgent instead of local patients (telephone 83.2%, web 78.7%, p < .0001).

Figure 32 shows these results.



Figure 32. Prefer Organs go to Medically Urgent or Local Area (Q16N), 2012-2019

Somewhat Likely/Very Likely 🖉 Don't know/Refused 🔳 Not Very Likely/Not at All Likely

Presumed consent (Q17 and Q17C)

Respondents were asked if they supported presumed consent for organ donation (Q17), and if presumed consent were to be implemented in the United States, whether they would opt out (Q17C). Telephone surveys showed the same level of support for presumed consent in 2019 as in 2012 (51.1% in 2012 to 49.4% in 2019, p = .22). The percentage of respondents who said they would opt out of presumed consent if implemented remained the same (23.4% in 2012 to 25.0% in 2019, p = .18), but the percentage of respondents who declined to answer this question increased in 2019 (4.7% in 2012 to 9.8% in 2019, p < .0001). This indicates while support for presumed consent has remained consistent over time, more respondents in 2019 declined to answer the question on whether they would opt out of presumed consent if implemented remained to opt out of presumed consent has remained consistent over time, more respondents in 2019 declined to answer the question on whether they would opt out of presumed consent if implemented.

Web respondents were much more likely to support presumed consent than telephone respondents (telephone 49.4%, web 58.1%, p < .0001). However, web respondents were also much more likely to say they would opt out of presumed consent (telephone 25.0%, web 36.8%, p < .0001). Telephone respondents were much more likely to decline to answer whether they would opt out of presumed consent than web respondents (telephone 9.8%, web 0.8%, p < .0001).

Figures 33 and 34 show these results.



Figure 33. Support for Presumed Consent (Q17), 2005-2019

Support/Strongly Support Ø Don't Know/Refused Oppose/Strongly Oppose



Figure 34. Opt Out of Presumed Consent (Q17C), 2005-2019

Payments Associated with Organ Donation (Q18A and Q18B)

Respondents were asked if payments such as assistance with funeral expenses, would increase the likelihood of donating their own organs (Q18A) or family members' organs at their time of death (Q18B). Slightly fewer telephone respondents in 2019 than in 2012 said payments would make them more likely to donate their own organs (25.4% in 2012 to 21.2% in 2019, p = .0005). The 2019 telephone respondents were also less likely to say payments would increase the likelihood of donating family members' organs (25.8% in 2012 to 22.8% in 2019, p = .014). This indicates a slight decline over time in those who say payments would increase the likelihood of donations.

Web respondents were far more likely than telephone respondents to say payments would increase the likelihood of donations. For one's own organs, 37.2% of web respondents said it would increase likelihood of donation, compared to 21.2% of telephone respondents (p < .0001). Likewise, 37% of web respondents said payments would increase the likelihood of donating family members' organs, compared to 22.8% of telephone respondents (p < .0001). This indicates a strong mode difference, in which telephone respondents were much less likely to say that payments would influence their willingness to donate their own organs or family members' organs compared to web respondents.

Figures 35 and 36 show these results.



Figure 35. Payments for Own Donation (Q18A), 1993-2019

Figure 36. Payments for Family Donation (Q18B), 1993-2019



Belief in Benefits of Organ Donation (Q12x, Q16x, Q22x)

Respondents were asked several questions related to beliefs and attitudes about organ donation (Q12x, Q16x, Q22x). Principal Components Analysis (PCA) determined that many of these questions group together into two broad belief factors, one representing the benefits of organ donation ("Benefits") and another representing concerns about organ donation ("Concerns"); see section 4.15 "Understanding Belief Structures About Organ Donation" for more information. Questions that were used since 2005 from these belief factors were averaged together into a single composite average for both the Benefits and Concerns belief factors. The single composite score of "Benefits" beliefs included questions Q12B, Q12C, Q12D, Q12E, Q16E, Q16F, Q16H, and Q22B.

Telephone surveys showed a slight significant decrease in those agreeing with the benefits of organ donation from the 2012 results (88.6% in 2012 to 86.4% in 2019, p = .017).

Web respondents were similar in their agreement with the benefits of organ donation as telephone respondents (telephone 86.4%, web 84.8%, p = .07), indicating no significant mode difference.

Figure 37 shows these results.



Figure 37. Beliefs in Benefits of Organ Donation, 2005-2019

Belief in Concerns About Organ Donation (Q12, Q16, Q22)

Several of the belief and attitude questions represented concerns about organ donation, such as doctors are less likely to save the life of a registered organ donor, and a body should have its parts at burial. The questions that represented concerns about organ donation ("Concern") that were used since 2005 were averaged into a single composite. The score included questions Q12A, Q12F, Q16A, Q16B, Q16C, Q16G, Q16I, Q22C, Q22D, and Q22E.

Fewer telephone respondents in 2019 disagreed with concerns of organ donation since 2012 (74.6% in 2012 to 66.7% in 2019, p < .0001). More respondents in 2019 slightly agreed with concerns of organ donation than in 2012 (21.7% in 2012 to 24.5% in 2019, p = .018), and the percentage of respondents who declined to answer the "Concerns" questions increased greatly in 2019 (3.7% in 2012 to 8.8% in 2019, p < .0001).

Web respondents were similarly likely as telephone respondents to say they disagreed with concerns of organ donation (phone 66.7%, web 64.9%, p = .13), but were far more likely to say they agreed with concerns of organ donation (phone 24.5%, web 34.8%, p < .0001). This indicates a strong mode difference, in which telephone respondents were less likely to agree with concerns of organ donation than web respondents.

Figure 38 shows these results.



Figure 38. Belief in Concerns about Organ Donation, 2005-2019

Technical Appendix A: Methodology

A1. Sample

The NSODAP used a multi-mode split-sample design with 10,000 participants. This included 2,000 respondents collected through computer-assisted telephone interviewing (CATI), and 8,000 respondents collected through a demographically-balanced web panel.

Telephone Sample

A probability telephone sample of n=2,000 was collected using address-based sampling (ABS). In this method, residential households were sampled, and the associated telephone number was dialed. In contrast to random digit dialing (RDD), this approach allowed the methodology to incorporate known residential characteristics, such as census region and racial prevalence. Half of the telephone sample (N=1,000) was collected using an equal-probability selection method (EPSEM), and the other half (N=1,000) sampled zip codes with a high prevalence of racial and/or ethnic minorities. This oversample helped ensure adequate statistical representation for racial and ethnic minorities. Up to 10 calls were placed to each respondent, and both cell phones and landlines were attempted where available. In cases where multiple eligible respondents were available at an address, the "most recent birthday" method was used to select the participant. All telephone cases were collected between November 2018 and March 2019. The telephone survey had a raw response rate of 7.4% (American Association for Public Opinion Research Response Rate 2; AAPOR RR 2) and an adjusted response rate of 11.4% (AAPOR RR 4).

Web Sample

A non-probability web sample of n=8,000 was collected after CATI interviewing was complete. The web panel was balanced by sex, age, race, and ethnicity, so the final combined sample closely resembles the demographic distribution of U.S. adults. The panel included oversamples of Asian and Native American respondents to ensure adequate statistical power. All web cases were collected in March and April 2019.

Consistent with the 2012 report, those who included Native American when selecting multiple races were grouped with Native Americans rather than in the Other/Multiple group. Table A1 shows the full sample characteristics.

Sample Characteristics	Total N	Total %	Weight N	Weight %	Phone N	Phone %	Web N	Web %
Total	10,000	100.0	10,000	100.0	2,000	100.0	8,000	100.0
Sex								
Female	5,301	53.0	5,099	51.0	1,065	53.3	4,236	53.0
Male	4,609	46.1	4,811	48.1	925	46.3	3,684	46.1
Other/Unspecified	90	0.9	90	0.9	10	0.5	80	1.0
Age								
18-34	3,019	30.2	2,853	28.5	359	18.0	2,660	33.3
35-49	1,908	19.1	2,355	23.6	418	20.9	1,490	18.6
50-64	2,411	24.1	2,352	23.5	520	26.0	1,891	23.6
65+	1,942	19.4	1,811	18.1	552	27.6	1,390	17.4
Unspecified	720	7.2	629	6.3	151	7.6	569	5.1
Race								
White	6,718	67.2	7,267	72.7	1,462	73.1	5,256	65.7
Black	1,059	10.6	1,263	12.6	317	15.9	742	9.3
Asian	1,045	10.5	547	5.5	103	5.2	942	11.8
Native American	798	8.0	178	1.8	46	2.3	752	9.4
Other/Multiple	380	3.8	748	7.5	72	3.6	308	3.9
Ethnicity								
Hispanic	1,104	11.0	1,768	17.7	217	10.9	887	11.1
Non-Hispanic	8,896	89.0	8,232	82.3	1,783	89.2	7,113	88.9
Education								
High School or Less	2,104	21.0	3,913	39.1	452	22.6	1,652	20.7
Some College/Technical/Vocational	2,981	29.8	2,817	28.2	581	29.1	2,400	30.0
College Graduate	3,200	32.0	2,062	20.6	621	31.1	2579	32.2
Postgraduate	1,674	16.7	1,167	11.7	310	15.5	1364	17.1
Unspecified	41	0.4	41	0.4	36	1.8	5	0.1

Table A1. Sample Characteristics by Survey Administration Mode

Note: "N" is the number of cases. "Weight N" and "Weight %" are the total sample weighted to U.S. Census characteristics. All other results are unweighted. "Phone" is the number of cases collected by telephone interview. "Web" is the number of cases collected online. For "unspecified" demographics, the Census characteristic weights are applied to the proportion of the sample for which demographics are known.

A2. Weighting

The sampled data were weighted to maximize the sample's representativeness compared to the population of U.S. adults as a whole. National characteristics were collected for sex, age group, race, ethnicity, education status, and census region, using the 2017 American Community Survey. Post-stratification weights based on national demographic characteristics were applied to the sample using SAS-callable SUDAAN's PROC WTADJUST procedure. This step ensured each demographic group was represented proportionally to its national distribution. Weight trimming was not necessary, as no extreme weights were observed. The mean weight value was 1.0, with a median weight of 0.8. All survey results in this report were calculated using these weights.

This weighting procedure was applied separately to the telephone sample and web sample to create nationally representative weights for each. These weights were used only to conduct the mode analysis in section A4.

A3. Analysis

Most analyses in this report were conducted using SAS' survey-specific procedures. PROC SURVEYFREQ was used to calculate frequencies, weighted proportions and confidence intervals; PROC SURVEYMEANS to calculate means; and PROC LOGISTIC to conduct logistic regressions. These survey procedures take into account survey design effects and survey weights. Analytical scripts were run using SAS v9.4.

Survey results were weighted to reflect U.S. adult population estimates. Each estimate value is reported with a 95% confidence interval. When two confidence intervals do not overlap, this indicates a meaningful difference equivalent to statistical significance with a critical p of .005. This measure is stricter than traditional significance testing (p of .05). This stricter requirement reduces the rate of Type I errors, or "false positives" from 1 in 20 to 1 in 200. The sample size of N=10,000 provides strong statistical power for this stricter requirement.

The psychometric analysis, including principal components analysis (PCA), Cronbach's alpha values, and Pearson correlations for the heat-map of organ donation beliefs, was conducted using SPSS v24. Survey weights were not applied for psychometric analysis.

A4. Data Considerations and Mode Differences

This section describes the multi-mode design of this study and examines possible mode differences.

Mode refers to whether the survey was completed by telephone or online. This study included an online mode because the progressive decline in telephone survey response rates presents a challenge to ongoing telephone survey viability. Overall, telephone survey response rates have declined steadily, from over 37% in 1997 to 6% in 2018.¹⁷ This decline in telephone response rates is thought to be driven by a proliferation of unwanted telephone calls, as well as improved caller identification, call silencing, and call blocking technology in smartphones. Declining response rates present a serious challenge to survey researchers as they seek to conduct surveys that are both representative of the general population and cost-effective. This has led the American Association of Public Opinion Researchers (AAPOR) to conclude in a 2013 task force report¹⁸ that high-quality, non-probability samples can be used in place of or alongside probability samples to generalize to wider populations.

To account for low telephone survey response rates and to ensure adequate representation of demographic minorities, the 2019 NSODAP used a split-mode design, using both a probability-based telephone survey and a non-probability, census-balanced web panel survey. This allowed NSODAP to achieve a sufficient sample size and statistical power for demographic minorities, as well as compare possible differences across modes. However, using multiple modes can introduce mode differences. An examination of possible mode differences in this study found telephone respondents were more likely to be older and White. For this section only, survey questions are weighted to U.S. national characteristics within each mode separately. This weighting controls for differences in demographics across mode. General support for organ donation is nearly identical across modes, but for many sensitive questions, telephone respondents were much less likely to answer the question than web respondents. These mode differences should be taken into consideration when interpreting results. Table A1 shows key organ donation questions split by mode.

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¹⁷ Response rates in telephone surveys have resumed their decline, Pew Research Center <u>https://www.pewresearch.org/fact-tank/2019/02/27/response-rates-in-telephone-surveys-have-resumed-their-decline/</u>

¹⁸ Report of the AAPOR Task Force on Non-Probability Sampling, AAPOR <u>https://www.aapor.org/AAPOR_Main/media/MainSiteFiles/NPS_TF_Report_Final_7_revised_FNL_6_22_13.p</u> <u>df</u>

Telephone Respondents Older, More Likely to Be White Than Web Respondents

Demographic proportions between web and telephone were similar for sex, ethnicity (Hispanic), and education, but telephone respondents were more likely to be older than web respondents, and more likely to be White. For age, only 18.0% of telephone respondents were ages 18-34, while 33.3% of web respondents were 18-34 (p < .001). Additionally, 27.6% of telephone respondents were 65 and over, while only 17.4% of web respondents were 65 and over. For race, 73.1% of telephone respondents identified as White, while only 65.7% of web respondents identified as White (p < .001). For question results throughout this section, each mode was weighted to national demographic characteristics independently, preventing these demographic differences by mode from influencing question results. Table A1 shows the full demographic comparisons across mode.

Support for Organ Donation the Same Across Telephone and Web Survey

General support for organ donation (Q4) was nearly identical between telephone and web modes. Nearly 90% of telephone survey participants and 90.5% of web participants supporting organ donation (p = .58), indicating no mode differences for general support of organ donation. However, telephone respondents were more likely to decline to answer the question (4.8% vs. 0.9%, p < .001), while web respondents were more likely to say they opposed organ donation (8.6% vs. 5.5%, p < .001).

Telephone Respondents Less Likely to Respond to All Survey Questions

For questions asking about support for organ donation or willingness to donate, telephone survey respondents were relatively more likely to respond with "Don't know" or to refuse to answer, while web survey respondents were more likely to select a response option. This may be because of social desirability bias, where survey participants hesitate to respond in ways they believe may be met with interviewer disapproval. Social desirability bias is stronger in telephone surveys with human interaction than with anonymous internet surveys. These differences are seen in Tables A1 and A2.

Telephone Respondents Less Likely to Have Seen Information About Organ

Donation; More Likely to Have Signed Up as Organ Donor

Two key organ donation questions showed differences in responses not accounted for by telephone respondents being less likely to respond. Telephone respondents were less likely to have heard about organ donation in the past year (Q1, 35.9% vs. 48.8%, p < .001) but were more likely to have signed up to be organ donors (Q13, 55.6% vs. 48.5%, p < .001). These differences may indicate systematic differences between telephone and web populations not accounted for in recorded demographics.

Survey Questions	Phone %	Web %	Difference							
Q1. Heard about organ donation										
Yes	35.9	48.8	-12.9							
No	63.2	50.5	12.6							
Don't Know/Refused	0.9	0.7	0.3							
Q4. General support for dor	nation									
Support	89.7	90.5	-0.8							
Oppose	5.5	8.6	-3.1							
Don't Know/Refused	4.8	0.9	3.9							
Q13. Signed up as organ dor	ıor									
Yes	55.6	48.5	7.1							
No	42.0	51.2	-9.2							
Don't Know/Refused	2.4	0.3	2.1							
Q5. Want organs donated										
Yes	40.1	48.6	-8.4							
No	46.7	51.1	-4.4							
Don't Know/Refused	13.2	0.3	12.9							
Q14B. Willing to sign up as	donor									
Yes	56.1	71.7	-15.7							
No	30.1	28.0	2.2							
Don't Know/Refused	13.8	0.3	13.5							
Q15EA. Willing to donate ha	ands									
Willing	66.2	63.5	2.6							
Not willing	28.3	36.1	-7.7							
Don't Know/Refused	5.5	0.4	5.1							
Q15EB. Willing to donate fa	ce									
Willing	46.6	46.8	-0.2							
Not willing	47.5	52 .9	-5.4							
Don't Know/Refused	5.9	0.4	5.6							

Table A2. Mode Analysis for Key Questions

Note: The "Difference" column indicates the difference between telephone and web respondents. The dashed vertical line in this column is the axis indicating no difference between telephone and web respondents. Positive numbers with blue bars indicate telephone respondents were more likely to select this item. Negative numbers with red bars indicate web respondents were more likely to select this item. Each mode is independently weighted to national demographic characteristics to control for possible demographic effects by mode.

Technical Appendix B: Non-Response Bias Analysis

A non-response analysis was conducted to understand possible differences associated with survey respondents and non-respondents. This helps ensure the survey data are representative of the broader national population of U.S. adults. The non-response analysis involved two components: a non-response analysis of household demographics by participation status, and an analysis of organ donation attitudes by "early" and "late" respondents, similar to the approach conducted in the 2012 National Survey of Organ Donation Attitudes and Behaviors study.

B1. Non-Response Bias Analysis of Demographic Participation

The ABS methodology uses residential addresses as the basis of sampling. This allows known properties of the address or zip code to be analyzed for possible non-response within demographic categories. This analysis compared household income and racial/ethnic composition by zip code between respondents and non-respondents. Median household income by zip code was compared between respondents (Median = \$60,075) and non-respondents (Median = \$61,611), which was significantly different using an Independent Samples Median Test (p = .035). This suggests the median household income for respondents was \$1,536 or 2.5% lower than for non-respondents, but this effect was relatively weak even with the large sampling frame (N=27,930).

This analysis also examined response rates within each sampling group. This includes an equal-probability selection method (EPSEM) general population sample, and four racial/ethnic samples (non-Hispanic Black, Hispanic, non-Hispanic Asian, and non-Hispanic Native American) that were selected from zip codes with higher proportions of those groups. Table B1 shows the proportion of each racial/ethnic group in each sample and response rates. Response rate was compared between each oversample group with the general population sample using z-tests of proportions. The general population sample response rate was 7.9%. There was no statistical difference with the Black (7.7%) or Native American (9.4%) groups, but the Hispanic (5.8%) and Asian (4.8%) groups were less likely to respond (both p < .0001) when compared to the general population sample. This demographic difference in likelihood of response is corrected through the weighting procedures detailed in Appendix A.

Sample Group	N	Zip % White	Zip % Black	Zip % Hispanic	Zip % Asian	Zip % Nat. Amer.	Response Rate	р
Total	27,930	66.7%	15.6%	14.5%	8.9%	1.1%	7.2%	-
Gen. Pop.	14,711	78.5%	11.4%	10.6%	4.0%	0.5%	7.9%	Ref.
Black Sample	3,899	43.3%	48.0%	8.9%	2.4%	0.4%	7.7%	0.77
Hispanic Sample	4,040	66.6%	11.6%	35.5%	5.6%	0.8%	5.8%	<.0001
Asian Sample	4,105	45 .3%	6.1%	14.7%	38.2%	0.3%	4.8%	<.0001
Nat. Amer. Sample	1,165	71.2%	7.3%	7.8%	2.1%	14.2%	9.4%	0.07

Table B1. Response Rates by Sampling Group

Note: "Nat. Amer." indicates Native American. All race groups are non-Hispanic in this table.

B2. Non-Response Bias Analysis of "Early" and "Late" Responders

Because non-respondents do not contribute survey data, this study used late responders as a proxy for non-response to address possible attitudinal differences between responders and non-responders. This approach is based on the assumption that non-respondents are more similar to late responders than early responders. Respondents were categorized as "early responders" if they were reached with 3 telephone calls or fewer and "late responders" were reached after 4 to 10 phone calls. This categorized 1,168 respondents in the "early responders" group (58.4%) and 832 respondents in the "late responders" group (41.6%). This same approach and categorization was used for the 2012 National Survey of Organ Donation Attitudes and Behaviors study. Notably, there were significantly more "late responders" in the 2019 study (41.6%) than the 2012 study (29.7%), p < .0001, which is associated with declining response rates in telephone surveying over time.

"Early" and "late" responders were compared on several key questions regarding support for organ donation and willingness to donate. These included Q1 (Heard about organ donation), Q4 (Support for organ donation), Q13 (Signed up as organ donor), Q5 (Want organs donated), Q14B (Willing to sign up as donor), Q15EA (Willing to donate hands), and Q15EB (Willing to donate face). "Early" and "late" responders did not significantly differ in their responses to all of these questions. This suggests that "early" and "late" responders are very similar in their support for organ donation and willingness to donate, and nonresponse bias does not affect survey measurement for these questions. Table B2 shows the question responses and differences between "Early" and "Late" responders.

Question	% Early Responders	% Late Responders	Difference					
Q1. Heard about organ donation								
Yes	37.3	36.8	0.5					
No	61.8	62.2	-0.5					
Don't Know/Refused	1.0	1.0	0.0					
Q4. Support for donation								
Strongly Support/Support	90.5	88.0	2.5					
Strongly Oppose/Oppose	4.6	7.4	-2.8					
Don't Know/Refused	4.9	4.6	0.3					
Q13. Signed up as organ do	ıor		, ,					
Yes	54.9	52 .3	2.7					
No	42.7	45.4	-2.7					
Don't Know/Refused	2.4	2.4	0.0					
Q5. Want organs donated								
Definitely/Probably Yes	46.4	42.1	4.3					
Definitely/Probably No	40.1	43.0	-2.9					
Don't Know/Refused	13.4	14.9	-1.4					
Q14B. Willing to sign up as	donor							
Yes	54.7	56.7	-2.0					
No	33.4	27.3	6.1					
Don't Know/Refused	11.9	16.0	-4.1					
Q15EA. Willing to donate ha	ands							
Very willing/Willing	65.4	64.2	1.2					
Not very/at all willing	28.7	30.0	-1.2					
Don't Know/Refused	5.9	5.9	0.0					
Q15EB. Willing to donate fa	ce							
Very willing/Willing	44.6	48.6	-4.0					
Not very/at all willing	48.8	45.2	3.6					
Don't Know/Refused	6.6	6.2	0.4					

Table B2. Non-Response Analysis for Key Questions

Note: The "Difference" column indicates the difference between "early" and "late" responders. The dashed vertical line in this column is the axis indicating no difference between "early" and "late" responders. Positive numbers with blue bars indicate "early" responders were more likely to select this item. Negative numbers with red bars indicate "late" responders were more likely to select this item. The differences were not statistically significant for all key questions.
Technical Appendix C: Results for Principal Components Analysis

A total of 25 items using a Likert-style agree/disagree scale were analyzed with Principle Components Analysis (PCA), using a Direct Oblimin rotation method. The PCA identified 3 factors with Eigenvalues greater than 1, loading 24 of the 25 items on these 3 factors, and accounting for 49.4% of variance. Rotation converged in six iterations. These three factors are broadly summarized as attitudes and beliefs regarding "Benefits of Organ Donation", "Concerns about Organ Donation", and "Fairness of Organ Donation." Cronbach α results suggest the "Positive" (α =. 89) and "Concerns" (α =. 86) domains are highly reliable and consistent across items. The "Fairness" domain was moderately reliable (α =. 54, *r*=. 38, *p* < . 001). Key results for the PCA, including Eigenvalues, Cronbach α , and Pattern Matrix loadings are shown in Table C1.

The Benefits and Concerns scales were averaged into two mean composite scores. The Pearson correlation between the "Benefits" and "Concerns" composites was r = -.22, p < . 001, indicating a weak relationship between these two factors. This suggests an individual's beliefs about the benefits of organ donation is only weakly influenced by their concerns about organ donation; in other words, people may simultaneously view organ donation positively and have concerns about it.

Full question text is available in section 4.8, and the interpretation of these results is explained in greater depth in section 4.15.

Factor	"Benefits"	"Concerns"	"Fairness"
Eigenvalue	6.35	4.57	1.42
Cronbach α	0.89	0.86	0.54
Items loading on "Benefits" Factor			
Q12E. Organ Donation Allows Positive in Death	0.81	-	-
Q12D. Organ Donation Improves Lives	0.80	-	-
Q16F. Thousands Die from Organ Shortage	0.74	-	-
Q16J. Would Receive Organ to Save Life	0.73	-	-
Q16H. Honor Wishes about Organ Donation	0.70	-	-
Q22F. Many Die Without Needed Organs	0.69	-	-
Q12H. All Should Receive Needed Organ	0.65	-	-
Q12B. Tell Family Wishes about Donation	0.65	-	-
Q16E. Organ Donation Helps Cope with Grief	0.62	-	-
Q12C. Most Family Supports Organ Donation	0.62	-	-
Q22B. Doctors Save Lives with Organ Donation	0.58	-	-
Items loading on "Concerns" Factor			
Q16B. Loved One Disfigured after Donation	-	0.74	-
Q16G. Less Likely to Save Donor	-	0.74	-
Q16D. Donation Causes Extra Medical Bills	-	0.70	-
Q22C. Organ Donation is Experimental	-	0.70	-
Q22D. Organ Donation Against my Religion	-	0.68	-
Q12A. Body Should Have Its Parts at Burial	-	0.67	-
Q16I. Transplants go to Undeserving	-	0.65	-
Q12F. Family Should Override Donation Wishes	-	0.58	-
Q16C. Brain-dead Recovery Possible	-	0.57	-
Q22E. Funeral Impossible after Donation	-	0.56	-
Q16A. Minority Less Likely to Receive	-	0.53	-
Items loading on "Fairness" Factor			
Q22A. Equal Chances to Receive Organ	-	-	0.74
Q16K. Organ Donation System Fair	-	-	0.58
Items not loading on any factor			
Q12G. Age Pairing of Donors and Recipients	-	-	-

Table C1. Principal Components Analysis Items Loading on Three Factors

Note: Eigenvalues describe how much of the variance about the underlying construct is accounted for/explained by the factor. The higher the eigenvalue, the more the factor reflects the underlying construct of interest. Cronbach α (alpha) values describe the inter-item reliability of the items on the scale, with values above 0.7 indicating high inter-item reliability, and values above 0.5 indicating moderate inter-item reliability. Pattern loading values for each item indicate how well the item fits onto the factor. Loading values less than 0.5 are not shown.

Figure C1 shows a color-coded heat-map of shared variance between survey questions. Questions include key measures of support for organ donation and the questions loading onto the "Benefits" attitude scale, the "Concerns" scale, and the "Fairness" scale. The saturation of color is a direct representation of the shared variance between each pair of survey questions in the heat-map. A deeper color indicates a stronger association between questions. Green indicates a positive relationship, and blue indicates a negative relationship. Similar survey questions are grouped together in dashed-line rectangles. Key measures of support for organ donation (support for organ donation, signing up for organ donation, willingness to donate family members organs) are in the top left dashed-line rectangle. Items representing the "Benefits" factor are in the dashed-line rectangle to the right and below this. The questions representing the "Concerns" factor are in a dashed-line rectangle to the right and below the "Benefits" factor. The "Fairness" factor is in a dashedline rectangle in the bottom right of the heat-map.

Percent Shared Variance	Q4	Q13	Q10	Q12E	Q12D	Q16F	Q16J	Q16H	Q22F	Q12H	Q12B	Q16E	Q12C	Q22B	Q16B	Q16G	Q16D	Q22C	Q22D	Q12A	Q16I	Q12F	Q16C	Q22E	Q16A	Q22A	Q16K
	SU	JPPOI	RT	<u> </u>																							
Q4. Support Organ Donation		19%	24%	26%	24%	15%	17%	14%	12%	12%	10%	13%	21%	13%	-5%	-4%	-1%	-3%	-6%	-11%	-1%	-1%	0%	-1%	0%	1%	6%
Q13. Signed Up	19%		36%	12%	10%	5%	8%	5%	3%	3%	2%	6%	18%	6%	-6%	-4%	-1%	-3%	-5%	-12%	-1%	0%	-1%	-1%	0%	1%	2%
Q10. Donate Family	24%	36%	[-]	16%	13%	8%	11%	8%	5%	5%	2%	14%	30%	8%	-7%	-3%	-1%	-3%	-5%	-16%	0%	0%	0%	0%	0%	2%	5%
	_						BENI	EFITS	OF F	ONA	TION																
Q12E. Positive in Death	26%	12%	16%		54%	25%	30%	24%	22%	23%	24%	19%	25%	20%	-5%	-4%	-1%	-4%	-9%	-8%	-2%	-1%	0%	-2%	0%	1%	9%
Q12D. Improve Lives	24%	10%	13%	54%	'	24%	30%	24%	21%	24%	23%	16%	23%	19%	-4%	-3%	-1%	-4%	-8%	-7%	-1%	-1%	0%	-2%	0%	1%	9%
Q16F. Thousands Die	15%	5%	8%	25%	24%		21%	21%	29%	13%	16%	18%	12%	16%	-1%	-1%	0%	-2%	-3%	-4%	0%	-1%	0%	-1%	2%	1%	7%
Q16J. Receive Organ	17%	8%	11%	30%	30%	21%		21%	18%	18%	14%	16%	16%	17%	-2%	-1%	0%	-2%	-5%	-4%	-1%	0%	0%	-1%	0%	2%	10%
Q16H. Honor wishes	14%	5%	8%	24%	24%	21%	21%		17%	13%	14%	14%	13%	16%	-2%	-2%	0%	-2%	-4%	-4%	0%	-4%	0%	-1%	0%	1%	8%
Q22F. Many Die	12%	3%	5%	22%	21%	29%	18%	17%		13%	15%	14%	11%	19%	-1%	-1%	0%	-1%	-2%	-2%	0%	-1%	0%	0%	1%	1%	5%
Q12H. All Should Receive	12%	3%	5%	23%	24%	13%	18%	13%	13%		12%	10%	11%	11%	-1%	-1%	0%	-1%	-2%	-1%	-2%	0%	0%	0%	1%	1%	5%
Q12B. Tell Family Wishes	10%	2%	2%	24%	23%	16%	14%	14%	15%	12%		9%	11%	10%	-1%	-1%	0%	-1%	-2%	-1%	0%	-1%	0%	-1%	0%	1%	5%
Q16E. Cope with Grief	13%	6%	14%	19%	16%	18%	16%	14%	14%	10%	9%		16%	15%	0%	0%	0%	0%	-1%	-2%	0%	0%	0%	0%	2%	3%	13%
Q12C. Most Family Supports	21%	18%	30%	25%	23%	12%	16%	13%	11%	11%	11%	16%	'	14%	-4%	-2%	-1%	-2%	-5%	-8%	0%	0%	0%	0%	0%	2%	8%
Q22B. Doctors Save Lives	13%	6%	8%	20%	19%	16%	17%	16%	19%	11%	10%	15%	14%	<u> </u>	-3%	-10%	-1%	-2%	-3%	-3%	-1%	0%	0%	0%	0%	5%	12%
																	CO	NCEF	RNS A	BOU	T DO	NATI	ON				
Q16B. Loved One Disfigured	-5%	-6%	-7%	-5%	-4%	-1%	-2%	-2%	-1%	-1%	-1%	0%	-4%	-3%		25%	20%	22%	24%	31%	17%	13%	11%	14%	6%	1%	0%
Q16G. Less Likely to Save	-4%	-4%	-3%	-4%	-3%	-1%	-1%	-2%	-1%	-1%	-1%	0%	-2%	-10%	25%		23%	21%	19%	18%	20%	10%	13%	10%	9%	1%	0%
Q16D. Extra Medical Bills	-1%	-1%	-1%	-1%	-1%	0%	0%	0%	0%	0%	0%	0%	-1%	-1%	20%	23%		17%	15%	15%	17%	10%	10%	9%	9%	1%	0%
Q22C. Experimental Procedure	-3%	-3%	-3%	-4%	-4%	-2%	-2%	-2%	-1%	-1%	-1%	0%	-2%	-2%	22%	21%	17%		24%	20%	14%	13%	11%	15%	5%	2%	0%
Q22D. Against my Religion	-6%	-5%	-5%	-9%	-8%	-3%	-5%	-4%	-2%	-2%	-2%	-1%	-5%	-3%	24%	19%	15%	24%		28%	13%	12%	9%	17%	5%	2%	0%
Q12A. Body Have Its Parts	-11%	-12%	-16%	-8%	-7%	-4%	-4%	-4%	-2%	-1%	-1%	-2%	-8%	-3%	31%	18%	15%	20%	28%		9%	13%	9%	12%	3%	1%	0%
Q16I. Transplants Undeserving	-1%	-1%	0%	-2%	-1%	0%	-1%	0%	0%	-2%	0%	0%	0%	-1%	17%	20%	17%	14%	13%	9%		9%	8%	7%	9%	0%	0%
Q12F. Override Wishes	-1%	0%	0%	-1%	-1%	-1%	0%	-4%	-1%	0%	-1%	0%	0%	0%	13%	10%	10%	13%	12%	13%	9%		7%	9%	3%	3%	2%
Q16C. Brain-dead Recovery	0%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	11%	13%	10%	11%	9%	9%	8%	7%		7%	4%	2%	1%
Q22E. Funeral Impossible	-1%	-1%	0%	-2%	-2%	-1%	-1%	-1%	0%	0%	-1%	0%	0%	0%	14%	10%	9%	15%	17%	12%	7%	9%	7%		3%	3%	1%
Q16A. Minority Less Likely	0%	0%	0%	0%	0%	2%	0%	0%	1%	1%	0%	2%	0%	0%	6%	9%	9%	5%	5%	3%	9%	3%	4%	3%		-2%	0%
																										FAIR	NESS
Q22A. Equal Chances	1%	1%	2%	1%	1%	1%	2%	1%	1%	1%	1%	3%	2%	5%	1%	1%	1%	2%	2%	1%	0%	3%	2%	3%	-2%	['	14%
Q16K. Fair System	6%	2%	5%	9%	9%	7%	10%	8%	5%	5%	5%	13%	8%	12%	0%	0%	0%	0%	0%	0%	0%	2%	1%	1%	0%	14%	j

Figure C1. Heatmap of Shared Variance for Organ Donation Support and Organ Donation Attitudes

Note: Maximum color saturation reached at 30% shared variance. Negative values in blue indicate a negative relationship.

Technical Appendix D: Regression Analysis Results

A series of weighted logistic regressions were conducted in SAS using PROC SURVEYLOGISTIC to investigate how both respondent characteristics and attitudes and beliefs about organ donation are associated with support for organ donation. The statistical output for these regressions is included in this section.

These models were inspected for possible multi-collinearity, which occurs when strong relationships between predictor variables reduces model accuracy. Inspection of correlation values found no evidence of multi-collinearity; no Pearson correlations above r=0.6 were found between any of the attitude and belief questions, and only one correlation value out of 465 variables exceeded r=0.5. Additionally, the standard errors of regression coefficients were low across all attitude and belief questions.

For all four models, the top three predictors included Q12A "It is important for a person's body to have all of its parts when it is buried" and Q12C "Most members of my family support the idea of organ donation." These two variables had an especially strong association with the four measures of support for organ donation that were modeled. Having a personal experience with organ donation (Q23) was strongly associated with signing up as a donor. Section 4.16 "Predictors of organ donation" includes the interpretations of these results.

D1. Logistic Regression for Overall Support for Organ Donation (Q4)

The overall model for predicting support for organ donation was significant (Wald $\chi^2(52) =$ 937.3, p < .0001), with a concordance rate successfully predicting overall support for organ donation for 89.3% of cases, indicating a highly predictive model. The Nagelkerke $R^2 =$.378, which also indicates a strongly predictive model. A total of 7,962 completed cases were included in the model. Table D1 includes all predictor effects, including odds ratios and significance values, sorted in order of Wald χ^2 magnitude.

Effect	DF	Max LLE	Std Error	Wald Chi- Square	р	Adj. Odds Ratio	95% CI Lower	95% CI Upper
Intercept	1	0.362	0.410	0.782	0.3766	-	-	-
Q12A - Body Have Its Parts when Buried	1	-0.818	0.122	45.100	<.0001	0.442	0.348	0.561
Q12C - Most Family Support Organ Donation	1	0.615	0.118	27.132	<.0001	1.850	1.468	2.332
Q16J - Would Agree to Receive Transplant	1	0.610	0.135	20.486	<.0001	1.841	1.414	2.398
Age 18-34 vs 65+	1	0.368	0.093	15.702	<.0001	1.537	1.040	2.273
Q12D - Organ Transplants Improve Lives	1	0.548	0.149	13.557	0.0002	1.730	1.292	2.316
Q16F - Thousands Die from Lack of Organs	1	0.520	0.142	13.508	0.0002	1.682	1.275	2.220
Q12E - Donation Allows Positive in Death	1	0.541	0.148	13.371	0.0003	1.718	1.285	2.295
Q22D - Organ Donation Against My Religion	1	-0.422	0.124	11.666	0.0006	0.656	0.515	0.835
Q16N - Local Donations vs Medically Urgent	1	-0.355	0.108	10.765	0.0010	0.701	0.567	0.867
Q12H - All Who Need Should Get Transplant	1	0.437	0.139	9.840	0.0017	1.548	1.178	2.033
Q16G - Doctors Less Likely to Save Donor	1	-0.392	0.126	9.744	0.0018	0.676	0.528	0.864
Female vs Male	1	-0.157	0.052	9.125	0.0025	1.163	0.597	0.896
Q12B - Important to Tell Family Wishes	1	0.404	0.146	7.695	0.0055	1.497	1.126	1.992
Age 35-49 vs 65+	1	-0.238	0.093	6.617	0.0101	0.839	0.572	1.230
Q22B - Doctors do Everything to Save	1	0.318	0.129	6.114	0.0134	1.375	1.068	1.769
Q22A - Equal Chance for Poor and Rich	1	0.289	0.119	5.891	0.0152	1.335	1.057	1.685
Race - Other/Multiple vs White	1	-0.361	0.151	5.704	0.0169	0.540	0.390	0.747
Q16E - Donation Helps Cope with Grief	1	0.283	0.126	5.057	0.0245	1.328	1.037	1.700
Q16I - Transplants go to Undeserving	1	-0.243	0.120	4.118	0.0424	0.784	0.620	0.992
D4 - Married vs Not Married	1	0.218	0.112	3.816	0.0508	1.244	0.999	1.549
Q22C - Organ Donation is Experimental	1	-0.229	0.121	3.601	0.0578	0.795	0.628	1.008
Q30 - Religious Beliefs Important	1	0.222	0.117	3.600	0.0578	1.249	0.993	1.571
Q16D - Donation Causes Extra Medical Bills	1	-0.225	0.122	3.430	0.0640	0.798	0.629	1.013
D9 - Low Income vs not Low Income	1	-0.196	0.112	3.070	0.0798	0.822	0.661	1.023
Q16B - Worried Loved One Disfigured	1	-0.193	0.127	2.320	0.1277	0.824	0.643	1.057
D7 - Work in Healthcare vs Not In Healthcare	1	0.239	0.168	2.019	0.1553	1.270	0.913	1.764
Q23 - Personal Experience with Organ Donation	1	0.173	0.124	1.965	0.1610	1.189	0.933	1.515

Table D1. Logistic Regression Results for Predictors of Overall Support for Organ Donation (Q4)

2019 National Survey of Organ Donation Attitudes and Practices: Report of Findings

Effect	DF	Max LLE	Std Error	Wald Chi- Square	р	Adj. Odds Ratio	95% CI Lower	95% CI Upper
Q14FC - Literacy, Lungs Living Donor	1	-0.158	0.116	1.861	0.1725	0.854	0.681	1.071
Race - Black vs White	1	-0.179	0.132	1.840	0.1749	0.648	0.495	0.848
Q22F - Many Die on Waiting List	1	0.183	0.143	1.634	0.2012	1.200	0.907	1.588
Race - Asian vs White	1	0.179	0.176	1.035	0.3089	0.926	0.624	1.374
Education - Some College vs High School	1	-0.085	0.092	0.849	0.3567	0.971	0.763	1.235
Region - Unknown vs West	1	-0.368	0.404	0.829	0.3625	0.551	0.201	1.514
D14 - Insured vs Not Insured	1	-0.098	0.122	0.652	0.4195	0.906	0.714	1.151
Age - Unknown vs 65+	1	-0.109	0.136	0.639	0.4241	0.954	0.596	1.527
Region - South vs West	1	0.099	0.126	0.616	0.4324	0.880	0.664	1.165
Q16K - Transplant System Fair	1	0.092	0.121	0.578	0.4471	1.097	0.865	1.391
Q16A - Minority Patients Less Likely to Receive	1	0.091	0.120	0.568	0.4511	1.095	0.865	1.386
Education - Postgraduate vs High School	1	0.096	0.141	0.465	0.4955	1.163	0.784	1.727
Q22E - Funeral Impossible after Donation	1	0.076	0.123	0.376	0.5397	1.078	0.847	1.373
Region - Midwest vs West	1	0.066	0.141	0.219	0.6402	0.851	0.616	1.176
Q16C - Brain-Dead Recovery Possible	1	-0.048	0.118	0.168	0.6822	0.953	0.756	1.201
Education - College vs High School	1	0.043	0.107	0.161	0.6882	1.103	0.818	1.487
Age 50-64 vs 65+	1	0.042	0.113	0.135	0.7130	1.109	0.742	1.659
Q14FA - Literacy, Kidneys Living Donor	1	-0.053	0.148	0.129	0.7197	0.948	0.709	1.268
Race - Nat. Amer. vs White	1	0.107	0.307	0.121	0.7284	0.862	0.407	1.824
Q14FB - Literacy, Livers Living Donor	1	0.044	0.126	0.120	0.7289	1.045	0.816	1.336
Hispanic vs Not Hispanic	1	0.019	0.067	0.083	0.7738	1.039	0.801	1.348
Q12G - Organ Donations Should be Age Paired	1	-0.025	0.117	0.045	0.8324	0.975	0.775	1.228
Region - Northeast vs West	1	-0.024	0.139	0.030	0.8621	0.778	0.568	1.066
Q16H - Wish to Donate Honored over Family	1	-0.011	0.142	0.006	0.9411	0.990	0.749	1.307
Q12F - Family Should Override Wishes	1	0.004	0.125	0.001	0.9740	1.004	0.787	1.282

D2. Logistic Regression for Signing up as Organ Donor (Q13)

The overall model for predicting signing up as organ donor was significant (Wald $\chi^2(52) =$ 999.6, *p* < .0001), with a concordance rate successfully predicting overall support for organ donation for 77.7% of cases, indicating a highly predictive model. The Nagelkerke *R*² = .294, which also indicates a strongly predictive model. A total of 8,006 completed cases were included in the model. Table D2 includes all predictor effects, including odds ratios and significance values, sorted in order of Wald χ^2 magnitude.

Effect	DF	Max LLE	Std Error	Wald Chi- Square	р	Adj. Odds Ratio	95% CI Lower	95% CI Upper
Intercept	1	-1.567	0.363	18.649	<.0001	-	-	-
Q12A - Body Have Its Parts when Buried	1	-1.099	0.087	161.597	<.0001	0.333	0.281	0.395
Q23 - Personal Experience with Organ Donation	1	0.840	0.072	137.434	<.0001	2.316	2.012	2.665
Q12C - Most Family Support Organ Donation	1	0.950	0.091	110.162	<.0001	2.586	2.165	3.087
D7 - Work in Healthcare vs Not In Healthcare	1	0.798	0.113	49.908	<.0001	2.222	1.781	2.773
Q16E - Donation Helps Cope with Grief	1	0.539	0.090	36.018	<.0001	1.714	1.438	2.044
Q16B - Worried Loved One Disfigured	1	-0.452	0.086	27.502	<.0001	0.636	0.537	0.753
Age 18-34 vs 65+	1	0.295	0.060	24.490	<.0001	1.694	1.400	2.051
Q16A - Minority Patients Less Likely to Receive	1	0.280	0.070	16.258	<.0001	1.323	1.155	1.516
Q22A - Equal Chance for Poor and Rich	1	0.258	0.069	13.966	0.0002	1.294	1.130	1.481
Race - Asian vs White	1	-0.299	0.083	13.073	0.0003	0.665	0.552	0.800
Age 50-64 vs 65+	1	-0.211	0.062	11.695	0.0006	1.022	0.853	1.223
Q16J - Would Agree to Receive Transplant	1	0.379	0.130	8.540	0.0035	1.461	1.133	1.884
Race - Black vs White	1	-0.255	0.092	7.739	0.0054	0.695	0.563	0.857
Education - Postgraduate vs High School	1	0.156	0.058	7.293	0.0069	1.475	1.218	1.785
Race - Nat. Amer. vs White	1	0.239	0.090	7.007	0.0081	1.139	0.929	1.395
Q22B - Doctors do Everything to Save	1	0.276	0.109	6.402	0.0114	1.318	1.064	1.633
Q16G - Doctors Less Likely to Save Donor	1	-0.217	0.087	6.283	0.0122	0.805	0.679	0.954
Q12F - Family Should Override Wishes	1	0.190	0.083	5.225	0.0223	1.209	1.027	1.422
Age 35-49 vs 65+	1	0.154	0.069	4.956	0.0260	1.472	1.198	1.807
D9 - Low Income vs not Low Income	1	-0.151	0.072	4.385	0.0363	0.860	0.746	0.990
Region - Midwest vs West	1	0.196	0.102	3.652	0.0560	1.065	0.889	1.277
Q22D - Organ Donation Against My Religion	1	0.198	0.107	3.439	0.0637	1.218	0.989	1.501
Q14FA - Literacy, Kidneys Living Donor	1	-0.249	0.136	3.329	0.0681	0.780	0.597	1.019
Q14FB - Literacy, Livers Living Donor	1	-0.159	0.089	3.190	0.0741	0.853	0.717	1.016
Q16H - Wish to Donate Honored over Family	1	0.186	0.117	2.542	0.1109	1.205	0.958	1.515
Race - Other/Multiple vs White	1	0.206	0.143	2.082	0.1490	1.102	0.779	1.560
Q16C - Brain-Dead Recovery Possible	1	-0.102	0.071	2.024	0.1548	0.904	0.786	1.039

Table D2. Logistic Regression Results for Predictors of Signing up as Organ Donor (Q13)

2019 National Survey of Organ Donation Attitudes and Practices: Report of Findings

Effect	DF	Max LLE	Std Error	Wald Chi- Square	р	Adj. Odds Ratio	95% CI Lower	95% CI Upper
Q22E - Funeral Impossible after Donation	1	0.111	0.079	1.993	0.1580	1.118	0.958	1.305
Q22F - Many Die on Waiting List	1	-0.179	0.133	1.812	0.1783	0.836	0.645	1.085
Q16K - Transplant System Fair	1	0.099	0.076	1.695	0.1930	1.104	0.951	1.283
Female vs Male	1	0.040	0.032	1.560	0.2116	1.083	0.956	1.226
Q12B - Important to Tell Family Wishes	1	-0.172	0.139	1.530	0.2162	0.842	0.640	1.106
Hispanic vs Not Hispanic	1	-0.057	0.049	1.372	0.2415	0.892	0.737	1.080
Q16N - Medically Urgent vs Local Donations	1	0.101	0.089	1.268	0.2602	1.106	0.928	1.318
Q16I - Transplants go to Undeserving	1	0.088	0.078	1.262	0.2613	1.092	0.937	1.272
Married vs Not Married	1	0.072	0.068	1.141	0.2855	1.075	0.941	1.228
Q16F - Thousands Die from Lack of Organs	1	-0.136	0.129	1.112	0.2916	0.873	0.677	1.124
Education - Some College vs High School	1	0.046	0.047	0.940	0.3323	1.320	1.127	1.547
Region - Unknown vs West	1	-0.325	0.338	0.922	0.3369	0.633	0.275	1.457
D14 - Insured vs Not Insured	1	-0.084	0.096	0.763	0.3825	0.919	0.761	1.110
Q12H - All Who Need Should Get Transplant	1	0.098	0.113	0.747	0.3873	1.103	0.884	1.376
Q12G - Organ Donations Should be Age Paired	1	-0.056	0.067	0.694	0.4047	0.946	0.830	1.078
Education - College vs High School	1	0.030	0.045	0.459	0.4981	1.300	1.108	1.526
Q22C - Organ Donation is Experimental	1	-0.055	0.083	0.433	0.5105	0.947	0.805	1.114
Region - South vs West	1	0.055	0.098	0.316	0.5738	0.926	0.787	1.089
Region - Northeast vs West	1	-0.058	0.104	0.310	0.5774	0.827	0.685	0.997
Q12D - Organ Transplants Improve Lives	1	0.096	0.174	0.303	0.5819	1.101	0.782	1.549
Q12E - Donation Allows Positive in Death	1	0.077	0.177	0.191	0.6617	1.080	0.764	1.527
Q14FC - Literacy, Lungs Living Donor	1	-0.021	0.070	0.092	0.7612	0.979	0.853	1.123
Q16D - Donation Causes Extra Medical Bills	1	-0.020	0.079	0.063	0.8026	0.981	0.840	1.144
Q30 - Religious Beliefs Important	1	-0.009	0.069	0.017	0.8975	0.991	0.865	1.135
Age - Unknown vs 65+	1	-0.005	0.115	0.002	0.9646	1.255	0.918	1.717

D3. Logistic Regression for Signing up (Q13) Among Supporters (Q4)

The overall model for predicting signing up (Q13) among supporters of organ donation (Q4) was significant (Wald $\chi^2(52) = 855.5$, p < .0001), with a concordance rate successfully predicting overall support for organ donation for 76.0% of cases, indicating a highly predictive model. The Nagelkerke $R^2 = .263$, which also indicates a strongly predictive model. A total of 7,398 completed cases were included in the model. Table D3 includes all predictor effects, including odds ratios and significance values, sorted in order of Wald χ^2 magnitude.

Effect	DF	Max LLE	Std Error	Wald Chi- Square	р	Adj. Odds Ratio	95% CI Lower	95% CI Upper
Intercept	1	-1.334	0.391	11.617	0.0007	-	-	-
Q12A - Body Have Its Parts when Buried	1	-1.152	0.089	167.722	<.0001	0.316	0.265	0.376
Q23 - Personal Experience with Organ Donation	1	0.808	0.073	122.702	<.0001	2.242	1.944	2.587
Q12C - Most Family Support Organ Donation	1	0.970	0.094	106.809	<.0001	2.638	2.194	3.170
D7 - Work in Healthcare vs Not In Healthcare	1	0.744	0.115	42.189	<.0001	2.103	1.681	2.632
Q16E - Donation Helps Cope with Grief	1	0.526	0.092	32.904	<.0001	1.693	1.414	2.026
Age 18-34 vs 65+	1	0.301	0.062	23.540	<.0001	1.664	1.369	2.023
Q16B - Worried Loved One Disfigured	1	-0.420	0.089	22.559	<.0001	0.657	0.552	0.781
Q16A - Minority Patients Less Likely to Receive	1	0.290	0.071	16.870	<.0001	1.337	1.164	1.536
Race - Asian vs White	1	-0.313	0.085	13.462	0.0002	0.660	0.546	0.798
Q22A - Equal Chance for Poor and Rich	1	0.252	0.070	12.892	0.0003	1.286	1.121	1.475
Age 50-64 vs 65+	1	-0.197	0.063	9.740	0.0018	1.012	0.842	1.215
Education - Postgraduate vs High School	1	0.180	0.059	9.206	0.0024	1.557	1.279	1.895
Q16G - Doctors Less Likely to Save Donor	1	-0.248	0.089	7.822	0.0052	0.780	0.656	0.929
Race - Black vs White	1	-0.257	0.096	7.245	0.0071	0.698	0.561	0.869
Q22D - Organ Donation Against My Religion	1	0.299	0.113	7.061	0.0079	1.349	1.082	1.681
Race - Nat. Amer. vs White	1	0.241	0.093	6.691	0.0097	1.149	0.932	1.415
Age 35-49 vs 65+	1	0.158	0.071	4.945	0.0262	1.443	1.169	1.781
Region - Midwest vs West	1	0.223	0.106	4.422	0.0355	1.019	0.847	1.226
Q16H - Wish to Donate Honored over Family	1	0.234	0.121	3.746	0.0529	1.264	0.997	1.602
Q12F - Family Should Override Wishes	1	0.152	0.086	3.158	0.0755	1.164	0.984	1.376
Q22B - Doctors do Everything to Save	1	0.199	0.112	3.158	0.0756	1.220	0.980	1.520
Q14FB - Literacy, Livers Living Donor	1	-0.161	0.092	3.091	0.0787	0.851	0.712	1.019
Q16J - Would Agree to Receive Transplant	1	0.221	0.132	2.795	0.0946	1.247	0.963	1.615
Q16N - Medically Urgent vs Local Donations	1	0.151	0.092	2.688	0.1011	1.162	0.971	1.391
Q16C - Brain-Dead Recovery Possible	1	-0.117	0.072	2.597	0.1071	0.890	0.772	1.026
Q14FA - Literacy, Kidneys Living Donor	1	-0.231	0.145	2.549	0.1103	0.793	0.597	1.054
D9 - Low Income vs not Low Income	1	-0.116	0.074	2.449	0.1176	0.891	0.770	1.030

Table D3. Logistic Regression Results for Predictors of Signing up Among Supporters (Q4 by Q13)

2019 National Survey of Organ Donation Attitudes and Practices: Report of Findings

Effect	DF	Max LLE	Std Error	Wald Chi- Square	р	Adj. Odds Ratio	95% CI Lower	95% CI Upper
Region - Unknown vs West	1	-0.550	0.353	2.424	0.1195	0.471	0.197	1.124
Race - Other/Multiple vs White	1	0.227	0.150	2.292	0.1300	1.133	0.787	1.633
Q12B - Important to Tell Family Wishes	1	-0.220	0.149	2.186	0.1392	0.802	0.599	1.074
Q22E - Funeral Impossible after Donation	1	0.116	0.081	2.059	0.1514	1.123	0.958	1.316
Female vs Male	1	0.044	0.033	1.831	0.1760	1.092	0.961	1.241
Q22F - Many Die on Waiting List	1	-0.188	0.141	1.767	0.1838	0.829	0.628	1.093
Q16I - Transplants go to Undeserving	1	0.103	0.081	1.602	0.2056	1.108	0.945	1.299
Region - South vs West	1	0.128	0.101	1.594	0.2068	0.927	0.784	1.095
Married vs Not Married	1	0.084	0.069	1.461	0.2268	1.087	0.949	1.246
Q12G - Organ Donations Should be Age Paired	1	-0.081	0.067	1.426	0.2324	0.923	0.808	1.053
Education - College vs High School	1	0.049	0.046	1.135	0.2868	1.365	1.157	1.611
Q22C - Organ Donation is Experimental	1	-0.089	0.087	1.049	0.3059	0.915	0.772	1.085
Q16K - Transplant System Fair	1	0.074	0.079	0.880	0.3482	1.076	0.923	1.255
Hispanic vs Not Hispanic	1	-0.047	0.050	0.867	0.3517	0.911	0.748	1.109
Education - Some College vs High School	1	0.033	0.048	0.452	0.5015	1.343	1.140	1.580
D14 - Insured vs Not Insured	1	-0.067	0.101	0.442	0.5064	0.935	0.767	1.140
Q16F - Thousands Die from Lack of Organs	1	-0.072	0.135	0.281	0.5959	0.931	0.714	1.213
Q12D - Organ Transplants Improve Lives	1	0.097	0.186	0.273	0.6012	1.102	0.765	1.587
Age - Unknown vs 65+	1	-0.054	0.122	0.200	0.6549	1.166	0.839	1.621
Q12E - Donation Allows Positive in Death	1	-0.047	0.193	0.058	0.8090	0.954	0.654	1.393
Q12H - All Who Need Should Get Transplant	1	0.020	0.119	0.029	0.8651	1.020	0.809	1.287
Q14FC - Literacy, Lungs Living Donor	1	0.008	0.071	0.014	0.9060	1.008	0.877	1.160
Q30 - Religious Beliefs Important	1	-0.005	0.071	0.006	0.9394	0.995	0.866	1.143
Region - Northeast vs West	1	-0.005	0.108	0.002	0.9639	0.811	0.669	0.985
Q16D - Donation Causes Extra Medical Bills	1	-0.003	0.081	0.001	0.9739	0.997	0.852	1.168

D4. Logistic Regression for Likely Donation of Family Member's Organs (Q10)

The overall model for predicting likely donation of a deceased family member's organs (Q10) was significant (Wald $\chi^2(52) = 798.8$, p < .0001), with a concordance rate successfully predicting overall support for organ donation for 82.9% of cases, indicating a highly predictive model. The Nagelkerke $R^2 = .387$, which also indicates a strongly predictive model. A total of 5,512 completed cases were included in the model. Table D4 includes all predictor effects, including odds ratios and significance values, sorted in order of Wald χ^2 magnitude.

Effect	DF	Max LLE	Std Error	Wald Chi- Square	р	Adj. Odds Ratio	95% CI Lower	95% CI Upper
Intercept	1	-1.311	0.469	7.826	0.0051	-	-	-
Q12C - Most Family Support Organ Donation	1	1.304	0.114	130.777	<.0001	3.685	2.947	4.607
Q12A - Body Have Its Parts when Buried	1	-1.262	0.117	116.088	<.0001	0.283	0.225	0.356
Q16E - Donation Helps Cope with Grief	1	0.837	0.113	55.045	<.0001	2.309	1.851	2.880
Q23 - Personal Experience with Organ Donation	1	0.727	0.102	51.258	<.0001	2.068	1.695	2.524
Q12F - Family Should Override Wishes	1	0.796	0.128	38.724	<.0001	2.217	1.725	2.849
Q16B - Worried Loved One Disfigured	1	-0.604	0.119	25.994	<.0001	0.546	0.433	0.689
Q22A - Equal Chance for Poor and Rich	1	0.407	0.097	17.690	<.0001	1.502	1.243	1.816
Age 18-34 vs 65+	1	0.354	0.087	16.397	<.0001	1.888	1.447	2.462
Race - Asian vs White	1	-0.456	0.117	15.321	<.0001	0.572	0.440	0.744
Q14FB - Literacy, Livers Living Donor	1	-0.432	0.118	13.498	0.0002	0.649	0.516	0.817
D7 - Work in Healthcare vs Not In Healthcare	1	0.587	0.160	13.446	0.0002	1.798	1.314	2.460
Age 35-49 vs 65+	1	0.336	0.097	12.093	0.0005	1.853	1.401	2.452
Age 50-64 vs 65+	1	-0.289	0.088	10.928	0.0009	0.992	0.776	1.268
Q14FC - Literacy, Lungs Living Donor	1	-0.264	0.097	7.462	0.0063	0.768	0.636	0.928
Education - College vs High School	1	0.163	0.061	7.058	0.0079	1.244	0.990	1.563
Q16A - Minority Patients Less Likely to Receive	1	0.243	0.097	6.259	0.0124	1.276	1.054	1.543
Married vs Not Married	1	0.217	0.093	5.494	0.0191	1.243	1.036	1.490
Q16K - Transplant System Fair	1	0.233	0.106	4.854	0.0276	1.262	1.026	1.553
Female vs Male	1	0.074	0.045	2.689	0.1010	1.159	0.972	1.383
D9 - Low Income vs not Low Income	1	-0.143	0.099	2.069	0.1503	0.867	0.714	1.053
Q16G - Doctors Less Likely to Save Donor	1	-0.168	0.128	1.714	0.1905	0.845	0.657	1.087
Race - Nat. Amer. vs White	1	0.159	0.125	1.621	0.2030	1.059	0.793	1.413
Race - Other/Multiple vs White	1	0.210	0.187	1.263	0.2611	1.114	0.710	1.747
Q22E - Funeral Impossible after Donation	1	0.122	0.111	1.212	0.2709	1.130	0.909	1.404
Q12B - Important to Tell Family Wishes	1	0.182	0.176	1.068	0.3014	1.200	0.849	1.695
Q22B - Doctors do Everything to Save	1	0.145	0.150	0.934	0.3339	1.156	0.862	1.551
Region - South vs West	1	0.143	0.154	0.871	0.3506	0.939	0.750	1.176

Table D4. Logistic Regression Results for Predictors of Willingness to Donate Family Member's Organs (Q10)

2019 National Survey of Organ Donation Attitudes and Practices: Report of Findings

Effect	DF	Max LLE	Std Error	Wald Chi- Square	р	Adj. Odds Ratio	95% CI Lower	95% CI Upper
Q16I - Transplants go to Undeserving	1	0.104	0.113	0.846	0.3576	1.109	0.889	1.383
D14 - Insured vs Not Insured	1	0.124	0.137	0.823	0.3643	1.132	0.866	1.480
Q16F - Thousands Die from Lack of Organs	1	0.150	0.170	0.782	0.3766	1.162	0.833	1.622
Region - Midwest vs West	1	0.132	0.159	0.689	0.4066	0.928	0.724	1.191
Region - Unknown vs West	1	-0.428	0.550	0.604	0.4370	0.531	0.137	2.055
Education - Some College vs High School	1	-0.048	0.064	0.563	0.4531	1.008	0.803	1.264
Education - Postgraduate vs High School	1	-0.060	0.080	0.561	0.4539	0.996	0.758	1.308
Q12D - Organ Transplants Improve Lives	1	-0.153	0.225	0.463	0.4963	0.858	0.552	1.334
Age - Unknown vs 65+	1	-0.119	0.174	0.462	0.4967	1.177	0.738	1.878
Q22D - Organ Donation Against My Religion	1	0.091	0.145	0.398	0.5280	1.095	0.825	1.454
Q16H - Wish to Donate Honored over Family	1	0.086	0.156	0.302	0.5825	1.089	0.803	1.477
Q22C - Organ Donation is Experimental	1	0.061	0.121	0.254	0.6144	1.063	0.838	1.348
Q16C - Brain-Dead Recovery Possible	1	-0.046	0.097	0.223	0.6371	0.955	0.790	1.155
Q30 - Religious Beliefs Important	1	0.046	0.100	0.209	0.6477	1.047	0.860	1.273
Q12E - Donation Allows Positive in Death	1	0.101	0.221	0.208	0.6482	1.106	0.717	1.706
Region - Northeast vs West	1	-0.053	0.163	0.106	0.7446	0.772	0.593	1.004
Q12H - All Who Need Should Get Transplant	1	0.045	0.155	0.084	0.7721	1.046	0.771	1.418
Q16J - Would Agree to Receive Transplant	1	0.042	0.170	0.061	0.8045	1.043	0.747	1.455
Q14FA - Literacy, Kidneys Living Donor	1	0.035	0.183	0.036	0.8487	1.035	0.724	1.481
Q16D - Donation Causes Extra Medical Bills	1	0.019	0.112	0.028	0.8675	1.019	0.818	1.269
Race - Black vs White	1	-0.015	0.128	0.013	0.9097	0.890	0.662	1.197
Q22F - Many Die on Waiting List	1	-0.015	0.185	0.006	0.9364	0.985	0.685	1.417
Q12G - Organ Donations Should be Age Paired	1	0.003	0.093	0.001	0.9755	1.003	0.836	1.202
Q16N - Medically Urgent vs Local Donations	1	-0.002	0.126	0.000	0.9842	0.998	0.779	1.278
Hispanic vs Not Hispanic	1	-0.001	0.071	0.000	0.9906	0.998	0.756	1.318

Technical Appendix E: Full Questionnaire

OMB control number 0915-0290 Expiration 09/30/2021

NATIONAL SURVEY OF ORGAN DONATION ATTITUDES AND PRACTICES Computer-Assisted-Telephone-Interviewing (CATI) Script (English Version)

Public Burden Statement: An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. The OMB control number for this project is 0915-0290. Public reporting burden for this collection of information is estimated to average 0.29 hours per response, including the time for reviewing instructions, searching existing data sources, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to HRSA Reports Clearance Officer, 5600 Fishers Lane, Room 14N-39, Rockville, Maryland, 20857.

PROJECT – HRS R658

INTRO1

Hello, my name is _____, and I am calling from American Directions Research Group. I am calling on behalf of the U.S. Department of Health and Human Services. We're conducting a national survey about organ donation. Am I speaking to someone 18 or older? (*Skip:* If "Yes", continue; if "No", ask to speak to someone who is 18 or older)

- 1. Respondent available -(Continue)
- 2. No one 18 or older in household (Thank and Terminate)
- 3. Respondent not available/Not a good time -(Set time to call back)
- 4. (Soft Refusal)
- 5. (Hard Refusal) -(Thank and Terminate)

(Skip this question if cell/landline data present in sample file)

S1B Have I reached you on a cellphone or landline phone?

- 1. Landline
- 2. Cell
- 3. (Don't Know)
- 4. (Refused)

(If S1B = Landline)

S1 First, I would like to identify the adult living in your household, 18 or older, who had the most recent birthday. Who would that be?

- 1. Respondent -(Skip to S1B)
- 2. Someone else in household -(Ask to speak to that person, then reset to Introduction)
- 3. No adults 18 or over in household (Thank, Terminate, and Tally)
- 4. Respondent not available (Record First name and set time to call back)
- 5. (Refusal) (Thank and Terminate)

(If S1B = Cell)

S1C For your safety, are you currently driving?

- 1. Yes [SET CALLBACK IF DRIVING, ELSE CONTINUE]
- 2. No
- 3. (Don't Know)
- 4. (Refused)

INTRO 2

This is an important study of people's opinions about organ donation. Your assistance in this study is voluntary, but your opinions are needed to provide an accurate understanding of the public's views. If there is any question you do not wish to answer, just tell me. Your answers are confidential and will be combined with those of others. You, as an individual, will never be identified. The questions will require about 20 minutes of your time.

Q1 In the past year, have you heard, read, or seen any information at all about organ donation or transplantation?

- 1. Yes
- 2. No
- 3. Don't Know
- 4. (Refused)

[IF NECESSARY READ] By <u>ORGAN DONATION</u>, I mean the donation of organs, such as hearts or kidneys from a person who has died, or the donation of organs, such as kidneys or parts of a liver or lung, from a person who is alive. Transplantation is the surgical transfer of an organ from one person to another. Organ donation does not include donation of bone marrow or tissue, such as skin or corneas.

Q2 (If Q1 = Yes) In the past year, how have you seen or heard about organ donation or transplantation?

[RESPONSE CODES]

- 1. Yes
- 2. No
- 3. (Don't know)
- 4. (Refused)

How about [READ AND ROTATE]:

- A. A discussion with a family member
- **B.** A discussion with a friend
- C. Information provided by a medical professional, clinic, or doctor's office
- **D.** Information provided by a member of the clergy of your religious organization
- **E.** Information provided by an attorney
- F. Personal experience or involvement with organ, eye or tissue donation
- **G.** A billboard or a poster in a public place
- H. News coverage (TV, radio, newspaper, or internet)
- I. Your work or school
- **J.** A Motor Vehicles Office (MVA, DMV, or SOS)

- **K.** An advertisement on TV
- L. An advertisement on the radio
- M. A movie and/or a TV show
- N. A community activity, such as a health fair
- **O.** An organ or tissue donation organization
- P. A senior center or other older adult setting
- Q. Social media such as Facebook, Instagram, YouTube, or Twitter
- R. Search engines, such as Google, Yahoo, or Bing
- **S.** Other websites
- T. Some other source

Q2A (If Q2T = Yes)

What is that other source? [open-ended response RECORD VERBATIM]

Q2B (If Q2Q = Yes)

Which social media websites? [open-ended response RECORD VERBATIM]

Q2C (If Q2R = Yes)

Which search engine websites? [open-ended response RECORD VERBATIM]

Q2D (If Q2S = Yes)

Which other websites? [open-ended response RECORD VERBATIM]

Q2E (If Q2Q or Q2R or Q2S = Yes)

When you are online, do you typically use a computer, a hand-held mobile device, such as a smart phone or tablet, or do you use both?

- 1. Computer
- 2. Mobile device
- 3. Both
- 4. (Don't Know)
- 5. (Refused)

Q3 Which sources of information would be most likely to influence how you think or act about organ donation and transplantation? [open-ended response RECORD VERBATIM]

Q4 In general, do you strongly support, support, oppose, or strongly oppose the donation of organs for transplantation?

- 1. Strongly support
- 2. Support
- 3. Oppose
- 4. Strongly oppose
- 5. (Don't Know)
- 6. (Refused)

Q13 Have you signed up to be an organ donor?

- 1. Yes
- 2. No
- 3. (Don't Know)
- 4. (Refused)

Q13A (If Q13 = Yes) (rotate Q13A A-D) How did you sign up?

- 1. Yes
- 2. No
- 3. (Don't Know)
- 4. (Refused)
- A. Your State's Department of Motor Vehicles, Motor Vehicle Department, or Secretary of State Office
- **B.** At a donor registration drive or event
- **C.** Through a mobile phone app
- **D.** Through a website
- **E.** Some other way

Q13B (If Q13A=E 'Some other way') What other way did you sign up to be an organ donor? [open-ended response RECORD VERBATIM]

Q13C (If Q13A = D (website))

Did you sign up using a hand-held mobile device such as a smart phone or tablet?

- 1. Yes
- 2. No
- 3. (Don't Know)
- 4. (Refused)

Q5 (If Q13 $\underline{NOT} = Yes$)

Would you want your organs to be donated after your death? Would you say definitely yes, probably yes, probably no, or definitely no?

- 1. Definitely Yes
- 2. Probably Yes
- 3. Probably No
- 4. Definitely No
- 5. (Don't Know)
- 6. (Refused)

Q14B (If Q5 = definitely yes or probably yes)

Would you be willing to sign up to be an organ donor?

- 1. Yes [SKIP TO Q14D]
- 2. No [SKIP TO Q14C]

- 3. (Don't Know)
- 4. (Refused)

Q14C (If Q14B = NO)

Is there a particular reason why you do not want to sign up to be an organ donor? [open-ended response RECORD VERBATIM]

Q14C1 (If Q14C = "don't know" or "no reason")

Would you say it is for one of these reasons?

- 1. Yes
- 2. No
- 3. (Don't Know)
- 4. (Refused)
- **A.** Haven't thought about it
- **B.** I would need more information
- C. Because of medical reasons
- **D.** I feel I am too old to donate
- E. I don't believe I will receive the best medical treatment if I'm a donor

Q14D (If Q14B = YES)

Is there a particular reason why you have not signed up to be an organ donor? [open-ended response RECORD VERBATIM]

Q14E (If Q5 = definitely yes or probably yes)

Would you be willing to sign up to be an organ donor through a hand-held mobile device such as a smart phone or tablet?

- 1. Yes
- 2. No
- 3. (Don't Know)
- 4. (Refused)

Q6A (If Q5 \underline{NOT} = definitely yes or probably yes)

Is there a particular reason why you do not want your organs donated upon your death? If Yes, what might that reason be?

- 1. [open-ended response RECORD VERBATIM]
- 2. (Don't Know)
- 3. Some Other Reason

Q6A1 (If Q6A = "don't know" or "no reason")

Would you say it is for one of these reasons?

- 1. Yes
- 2. No
- 3. (Don't Know)

- 4. (Refused)
- **A.** It's against my religion
- **B.** For medical reasons
- **C.** I don't want my body cut up or disfigured
- **D.** Donation costs might be passed to my family
- **E.** They might take my organs before death
- F. I don't believe I will receive the best medical treatment if I'm a donor
- G. I feel I am too old to donate

Q6B (If Q5 \underline{NOT} = definitely yes or probably yes)

Have you discussed with a member of your family your wish not to donate your organs after your death?

- 1. Yes
- 2. No
- 3. (Don't Know)
- 4. (Refused)
- 5. N/A or No Family Members

Q6BB (If Q5 \underline{NOT} = definitely yes or probably yes)

Is there one thing that could change your mind to want to be a donor?

- 1. Yes [SPECIFY AND RECORD VERBATIM]
- 2. No
- 3. (Don't Know)
- 4. (Refused)

Q6BC (If Q13 = Yes)

If you had to identify the biggest reason or reasons why you want to be an organ donor, what would those be? [Open-ended response RECORD VERBATIM]

Q6BD (If Q6BC= "don't know" or "no reason")

Would you say it is for one of these reasons?

- 1. Yes
- 2. No
- 3. (Don't Know)
- 4. (Refused)
- **A.** To save a life
- **B.** I won't need them any longer
- **C.** It's the right thing to do

Q6C (If Q13 = Yes)

Have you discussed your wish to be an organ donor with a member of your family?

- 1. Yes
- 2. No
- 3. (Don't Know)
- 4. (Refused)
- 5. N/A or No Family Members

Q7 (If Q6C <u>NOT</u> Yes)

How willing are you to discuss your wishes about organ donation with your family? Would you say very willing, somewhat willing, not very willing, or not at all willing?

- 1. Very willing
- 2. Somewhat willing
- 3. Not very willing
- 4. Not at all willing
- 5. (Don't Know)
- 6. (Refused)

Q8 (If Q6C = not very willing or not at all willing or (Don't Know))

Is there a particular reason why you are unwilling to discuss donation with your family?

- 1. Yes
- 2. No
- 3. (Don't Know)
- 4. (Refused)

Q8A (If Q8 = Yes)

What is that reason?

- 1. [SPECIFY AND RECORD VERBATIM]
- 2. (Don't Know)
- 3. No Reason

Q8B (If Q8A = "don't know" or "no reason")

Would you say it is for one of these reasons? [MULTIPUNCH SELECT ALL THAT APPLY]

- **A.** I don't want to discuss death with my family
- **B.** My family wouldn't understand
- C. My family believes the body should be buried whole
- **D.** My family is too young to discuss this
- **E.** I am not in good health
- **F.** My donor registration is not my family's business
- G. Whether or not I become a donor is my family's decision to make
- H. Talking about death may increase the chance of dying
- I. Someone in my family may need my organs

Q9 (If Q6B <u>NOT</u> N/A or No Family Members or Q6C <u>NOT</u> N/A or No Family Members) Has any member of your family told you about his or her wish to donate or not to donate his or her organs after death?

- 1. Yes
- 2. No
- 3. (Don't Know)
- 4. (Refused)

Q10 (If Q6B <u>NOT</u> N/A or No Family Members or Q6C <u>NOT</u> N/A or No Family Members) If you didn't know your family member's wishes, how likely would you be to donate his or her organs upon his or her death, if it were up to you? Would you be very likely, somewhat likely, not very likely, or not at all likely?

- 1. Very likely
- 2. Somewhat likely
- 3. Not very likely
- 4. Not at all likely
- 5. (Don't Know)
- 6. (Refused)

Q11 (If Q6B <u>NOT</u> N/A or No Family Members or Q6C <u>NOT</u> N/A or No Family Members) If a family member had requested that his or her organs be donated upon death how likely would you be to donate his or her organs, if it were up to you? Would you be very likely, somewhat likely, not very likely, or not at all likely?

- 1. Very likely
- 2. Somewhat likely
- 3. Not very likely
- 4. Not at all likely
- 5. (Don't Know)
- 6. (Refused)

Q12 Now, I am going to read you a number of statements. For each one, please tell me if you strongly agree, somewhat agree, somewhat disagree, or strongly disagree.

- 1. Strongly Agree
- 2. Somewhat Agree
- 3. Somewhat Disagree
- 4. Strongly Disagree
- 5. (Don't Know)
- 6. (Refused)
- A. It is important for a person's body to have all of its parts when it is buried.
- **B.** It is important for people to tell their families whether or not they would want their organs to be donated upon death.
- C. Most members of my family would support the idea of organ donation.

- **D.** Receiving organ transplants improve people's lives.
- **E.** Organ donation allows something positive to come out of a person's death.
- **F.** A deceased person's next of kin should be able to override the deceased person's wish to donate his or her organs.
- **G.** Organs should be distributed so that the expected life of the organ is similar to the expected life of the recipient. For example, older people should generally get older organs and younger people should get younger organs.
- H. All people who need an organ transplant should be able to receive a transplant.

Q14F Do you believe these statements about organ donation are true?

- 1. Yes
- 2. No
- 3. (Don't Know)
- 4. (Refused)

A. Kidneys can be donated from a living donor.

- **B.** Parts of livers can be donated from a living donor.
- **C.** Parts of lungs can be donated from a living donor.

Q14G Have you ever donated an organ or a part of an organ?

- 1. Yes
- 2. No
- 3. (Don't Know)
- 4. (Refused)

Q15 Assuming you are medically able, how likely would you be to agree to donate an organ while you are living to [INSERT ROTATED CHOICES]? Would you say very likely, somewhat likely, not very likely, or not at all likely?

- 1. Very likely
- 2. Somewhat likely
- 3. Not very likely
- 4. Not at all likely
- 5. (Don't Know)
- 6. (Refused)
- A. A close friend
- **B.** A family member
- C. An acquaintance
- **D.** Someone you don't know

Q15A (If Q15 = not very likely or not at all likely)

What are your reasons for not agreeing to donate an organ while you are living? [Open-ended response RECORD VERBATIM]

Q16 Now I am going to read you several statements. For each one, please tell me whether you strongly agree, somewhat agree, somewhat disagree, or strongly disagree. [ROTATE STATEMENTS]

- 1. Strongly Agree
- 2. Somewhat Agree
- 3. Somewhat Disagree
- 4. Strongly Disagree
- 5. (Don't Know)
- 6. (Refused)

A. Minority patients are less likely to receive organ transplants.

- **B.** You are worried that a loved one's body would be disfigured if his or her organs were donated.
- C. It is possible for a brain-dead person to recover from his or her injuries.
- **D.** People who choose to donate a family member's organs end up paying extra medical bills.
- E. Organ donation helps families cope with their grief.
- F. Every year, thousands of people die due to a lack of donated organs for transplantation.
- G. If you indicate you intend to be a donor, doctors will be less likely to try to save your life.
- **H.** A person's wish to donate his or her organs should be honored under all circumstances, even over the objections of surviving family members.
- I. Transplants often go to undeserving people.
- J. You would agree to receive an organ transplant if it would save your life.
- K. The U.S. transplant system uses a fair approach to distribute organs to patients.

[IF Q16A= "Strongly Agree" or "Somewhat Agree" ASK Q16AA, ALL OTHERS GOTO Q16N] Why do you think minority patients are less likely to receive organ transplants? [open-ended response RECORD VERBATIM]

Q16N Please choose the statement that comes closest to your view (Rotate)

- 1. If I were a donor, I would like my organs to go to the more medically urgent patients regardless of where they live in the U.S., OR
- 2. If I were a donor, I would like my organs to go to patients in my local area even if they are not the more medically urgent patients waiting for an organ.
- 3. (Don't Know)
- 4. (Refused)

Q17 Some countries assume that people will be organ donors upon their death, unless there are strong objections from the family. This is sometimes called presumed consent. Would you strongly support, support, oppose, or strongly oppose using this presumed consent approach in the United States?

- 1. Strongly Support
- 2. Support
- 3. Oppose

- 4. Strongly Oppose
- 5. (Don't Know)
- 6. (Refused)

Q17A (If Q17 = "Oppose" or "Strongly oppose")

Is there a particular reason why you oppose presumed consent? [Open-ended response RECORD VERBATIM]

Q17C If the United States changed to a presumed consent system, where people will be organ donors unless they opted out, would you choose to opt out?

- 1. Yes
- 2. No
- 3. (Don't Know)
- 4. (Refused)

Q18 It has been suggested that more organs would be donated if families who donate the organs of a deceased loved one received assistance in paying funeral expenses, a cash award to the donor's estate, or a cash award to a charity of the family's choice. Would payments like these make you more likely or less likely to donate (read and rotate), or would it have no effect.

- 1. More Likely
- 2. Less Likely
- 3. No Effect
- 4. (Don't Know)
- 5. (Refused)
- A. Your own organs
- **B.** A family member's organs at their time of death

Q19 (If Q18A or Q18B = more likely)

Is there a particular reason why a payment would make you more likely to donate your organs or a family member's organs?

- 1. Yes
- 2. No
- 3. (Don't Know)
- 4. (Refused)

Q19A (If Q19= Yes) What reason? [Open-ended response RECORD VERBATIM]

Q20 (If Q18A or Q18B = less likely)

Is there a particular reason why a payment would make you less likely to donate your organs or a family member's organs?

1. Yes

- 2. No
- 3. (Don't Know)
- 4. (Refused)

Q20A (If Q20= Yes) What reason? [Open-ended response RECORD VERBATIM]

Q22 Now I am going to read you several statements. For each one, please tell me whether you strongly agree, somewhat agree, somewhat disagree, or strongly disagree.

- 1. Strongly Agree
- 2. Somewhat Agree
- 3. Somewhat Disagree
- 4. Strongly Disagree
- 5. (Don't Know)
- 6. (Refused)

[ROTATE FOLLOWING CHOICES]

- **A.** Given equal need, a poor person has as good a chance as a rich person of getting an organ transplant.
- **B.** Doctors do everything they can to save a person's life before organ donation is even considered.
- C. Organ transplantation is an experimental medical procedure.
- **D.** Organ donation is against my religion.
- E. It is impossible to have a regular funeral service following organ donation.
- **F.** Many people on the national transplant waiting list die because the organ they need isn't donated in time.

Q15E Recent medical breakthroughs have resulted in successful face and hand transplants for people who have suffered the loss of limbs or facial disfigurement from traumatic injuries, such as accidents and war. How willing would you be [INSERT ROTATED CHOICES]? Would you say you are very willing, somewhat willing, not very willing, or not at all willing?

- 1. Very Willing
- 2. Somewhat Willing
- 3. Not Very Willing
- 4. Not at all Willing
- 5. (Don't Know)
- 6. (Refused)
- **A.** Upon your death to donate your hands
- **B.** Upon your death to donate your face

Q15E1 If your family member signed up to be an organ donor, upon his or her death will you also be willing to [INSERT ROTATED CHOICES]? Would you be very willing, somewhat willing, not very willing, or not at all willing?

- 1. Very Willing
- 2. Somewhat Willing
- 3. Not Very Willing
- 4. Not at all Willing
- 5. (Don't Know)
- 6. (Refused)
- A. Donate your family member's hands
- **B.** Donate your family member's face

Q23A Have you, or has anyone close to you, ever been an organ donor?

- 5. Yes
- 6. No
- 7. (Don't Know)
- 8. (Refused)

Q23B Have you, or has anyone close to you, ever received an organ transplant?

- 1. Yes
- 2. No
- 3. (Don't Know)
- 4. (Refused)

Q23C Are you, or is anyone close to you, currently waiting for an organ?

- 9. Yes
- 10. No
- 11. (Don't Know)
- 12. (Refused)

Q26A Do you believe there is an age when someone is too old to donate an organ upon his or her death?

- 1. Yes
- 2. No
- 3. (Don't Know)
- 4. (Refused)

Q26A2 (If Q26A = Yes) What is that age? [RECORD NUMERIC] Q26B Do you believe there is an age when someone is too old to receive an organ?

- 1. Yes
- 2. No
- 3. (Don't Know)
- 4. (Refused)

Q26B2 (If Q26B = Yes) What is that age? [RECORD NUMERIC]

Q28 In general, how would you rate your overall health? Would you say excellent, very good, good, fair, poor?

- 1. Excellent
- 2. Very Good
- 3. Good
- 4. Fair
- 5. Poor
- 6. (Don't Know)
- 7. (Refused)

Q29 What best describes your religion, if any? Would you say Protestant, Evangelical, Roman Catholic, Orthodox, Mormon, Jewish, Muslim, Buddhist, atheist, agnostic, or something else?

- 1. Protestant
- 2. Evangelical
- 3. Roman Catholic
- 4. Orthodox
- 5. Mormon
- 6. Jewish
- 7. Muslim
- 8. Buddhist
- 9. atheist
- 10. agnostic
- 11. something else
- 12. (Don't Know)
- 13. (Refused)
- Q30 How important are your religious beliefs?
 - 1. Very Important
 - 2. Somewhat Important
 - 3. Not Very Important
 - 4. Not at all important
 - 5. (Don't Know)
 - 6. (Refused)

- D1 What is your sex?
 - 1. Male
 - 2. Female
 - 3. Other
 - 4. (Don't Know)
 - 5. (Refused)

D1 What is your age? [RECORD NUMERIC]

- D3 What is the highest level of education you have completed? [READ CHOICES]
 - 1. less than high school graduate
 - 2. high school graduate
 - 3. some college
 - 4. trade/technical/vocational training
 - 5. college graduate
 - 6. post-graduate work/degree
 - 7. (Don't Know)
 - 8. (Refused)
- D4A What is your current marital status?
 - 1. single/never been married
 - 2. married
 - 3. separated
 - 4. divorced
 - 5. widowed
 - 6. domestic partnership/living with partner (not legally married)
 - 7. (Don't Know)
 - 8. (Refused)
- D7 Do you work in the healthcare profession?
 - 1. Yes
 - 2. No
 - 3. (Don't Know)
 - 4. (Refused)
- D8 What is your zip code?
 - 1. [RECORD 5 DIGIT NUMERIC]
 - 2. (Don't Know)
 - 3. (Refused)
- D12 Would you describe yourself as Hispanic or Latino Origin?
 - 1. No, not of Hispanic, Latino, or Spanish origin
 - 2. Yes, Mexican, Mexican American, Chicano

- 3. Yes, Puerto Rican
- 4. Yes, Cuban
- 5. Yes, another Hispanic, Latino, or Spanish origin, please specify_____

D11 What best describes your race (can select more than one option)? Would you say [READ CHOICES]

- 1. White
- 2. Black or African American
- 3. American Indian or Alaska Native, please specify_____
- 4. Asian Indian
- 5. Chinese
- 6. Filipino
- 7. Japanese
- 8. Korean
- 9. Vietnamese
- 10. Other Asian, please specify _____
- 11. Native Hawaiian
- 12. Guamanian or Chamorro
- 13. Samoan
- 14. Other Pacific Islander, please specify_____
- D13 What best describes your current employment status? [READ CHOICES]
 - 1. Employed full-time
 - 2. Employed part-time
 - 3. Taking care of home or family but not working for pay
 - 4. Not employed but looking for work
 - 5. Student
 - 6. Retired
 - 7. Unable to work
 - 8. Other
 - 9. (Don't Know)
 - 10. (Refused)

D14 Do you currently have any type of health insurance plan or health coverage?

- 1. Yes
- 2. No
- 3. (Don't Know)
- 4. (Refused)

$D15 \quad (If D14 = Yes)$

What best describes the source of your health plan. If you have more than one, please select your primary plan. [READ CHOICES]

- 1. Private plan, such as through an employer
- 2. The federal insurance exchange at healthcare.gov, or a state insurance plan
- 3. Medicaid
- 4. Medicare
- 5. Veterans' Affairs
- 6. TRICARE/Military Health System
- 7. Other government or state plan
- 8. Other
- 9. (Don't Know)
- 10. (Refused)

D9 What is your total ANNUAL household income, before taxes? Please include income from wages and salaries, remittances from family members living elsewhere, farming, and all other sources. Please say "yes" when we reach your annual household income.

[READ CHOICES]

- 1. Less than \$20,000,
- 2. \$20,000 or more, but less than \$30,000
- 3. \$30,000 or more, but less than \$40,000
- 4. \$50,000 or more but less than \$60,000
- 5. \$60,000 or more, but less than \$75,000
- 6. \$75,000 or more but less than \$100,000
- 7. \$100,000 or more, but less than \$150,000
- 8. \$150,000 or more
- 9. (Don't Know)
- 10. (Refused)

Thank you for your participation. Results of the survey will be available in about six months on a government web site at www.organdonor.gov.