Methodology

This report is drawn from a survey conducted as part of the American Trends Panel (ATP), a nationally representative panel of randomly selected U.S. adults living in households recruited from landline and cellphone random-digit-dial (RDD) surveys. Panelists participate via monthly self-administered web surveys. Panelists who do not have internet access are provided with a tablet and wireless internet connection. The panel, which was created by Pew Research Center, is being managed by GfK.

Data in this report are drawn from the panel wave conducted April 23-May 6, 2018, among 2,537 respondents. The margin of sampling error for the full sample of 2,537 respondents is plus or minus 2.8 percentage points.

Members of the ATP were recruited from several large, national landline and cellphone RDD surveys conducted in English and Spanish. At the end of each survey, respondents were invited to join the panel. The first group of panelists was recruited from the 2014 Political Polarization and Typology Survey, conducted January 23-March 16, 2014. Of the 10,013 adults interviewed, 9,809 were invited to take part in the panel and a total of 5,338 agreed to participate.[1]

Margins of error

	Sample size	Margin of error in percentage points
U.S. adults	2,537	+/- 2.8
Men	1,272	+/- 4.0
Women	1,265	+/- 3.8
Race/ethnicity		
White	1,519	+/- 3.3
Black	412	+/- 7.8
Hispanic	421	+/-7.6
18-29	367	+/- 7.3
30-49	759	+/-4.9
50+	1,409	+/-3.6
Some college or less	1,453	+/- 3.5
College graduate +	1,080	+/- 4.1
Family income		
<$30,000	686	+/- 5.2
$30,00-74,999	898	+/- 4.7
$75,000-99,999	306	+/- 7.6
$100,000+	552	+/- 5.6
Party, including leaners		
Republican	976	+/-4.3
Democrat	1,486	+/- 3.6

Note: The margins of error are reported at the 95% level of confidence and are calculated by taking into account the average design effect for each subgroup. Republicans and Democrats include independents and others who "lean" toward the parties.
Source: Survey conducted April 23-May 6, 2018.

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The second group of panelists was recruited from the 2015 Pew Research Center Survey on Government, conducted August 27-October 4, 2015. Of the 6,004 adults interviewed, all were

[1] When data collection for the 2014 Political Polarization and Typology Survey began, non-internet users were subsampled at a rate of 25%, but a decision was made shortly thereafter to invite all non-internet users to join. In total, 83% of non-internet users were invited to join the panel.

invited to join the panel, and 2,976 agreed to participate.[2] The third group of panelists was recruited from a survey conducted April 25 to June 4, 2017. Of the 5,012 adults interviewed in the survey or pretest, 3,905 were invited to take part in the panel and a total of 1,628 agreed to participate.[3]

The overall target population for Wave 34 was non-institutionalized persons age 18 and over, living in the United States, including Alaska and Hawaii. The sample for Wave 34 consisted of 3,099 ATP members that were invited to Wave 33 and were still active. This subsample was selected using the following approach:

1. Panelists were grouped into three strata based on how underrepresented they are demographically. Then we analyzed response rates to the last five panel survey waves (W28-32) to project the number of panelists in each stratum who would respond to the W33 survey.

2. We then determined how many panelists we wanted to sample from each stratum in W33 in order to finish with around 2,500 completed interviews and have a responding sample that is as representative as possible.

    - Stratum A consists of panelists who are non-internet users, are black non-Hispanic, are Hispanic, or have high school or less education. There were 1,819 total panelists in this stratum and they are sampled at a rate of 100% for W33. 1,806 were active panelists.

    - Stratum B consists of panelists who are ages 18 to 34 or are non-volunteers. The 1,684 total panelists in this stratum are subsampled at a rate of 63%, yielding 1,061 sampled for W33 (1,057 were active).

    - Stratum C consists of the remaining 2,009 panelists not in stratum A or B. This group is subsampled at a rate of 12%, yielding 241 panelists sampled for W33 (239 were active).

The ATP data were weighted in a multi-step process that begins with a base weight incorporating the respondents' original survey selection probability and the fact that in 2014 some panelists were

[2] Respondents to the 2014 Political Polarization and Typology Survey who indicated that they are internet users but refused to provide an email address were initially permitted to participate in the American Trends Panel by mail, but were no longer permitted to join the panel after Feb. 6, 2014. Internet users from the 2015 Pew Research Center Survey on Government who refused to provide an email address were not permitted to join the panel.

[3] White, non-Hispanic college graduates were subsampled at a rate of 50%.

subsampled for invitation to the panel. Next, an adjustment was made for the fact that the propensity to join the panel and remain an active panelist varied across different groups in the sample. The final step in the weighting uses an iterative technique that aligns the sample to population benchmarks on a number of dimensions. Gender, age, education, race, Hispanic origin and region parameters come from the U.S. Census Bureau's 2016 American Community Survey. The county-level population density parameter (deciles) comes from the 2010 U.S. decennial census. The telephone service benchmark comes from the July-December 2016 National Health Interview Survey and is projected to 2017. The volunteerism benchmark comes from the 2015 Current Population Survey Volunteer Supplement. The party affiliation benchmark is the average of the three most recent Pew Research Center general public telephone surveys. The internet access benchmark comes from the 2017 ATP Panel Refresh Survey. Respondents who did not previously have internet access are treated as not having internet access for weighting purposes. Sampling errors and statistical tests of significance take into account the effect of weighting. Interviews are conducted in both English and Spanish, but the Hispanic sample in the ATP is predominantly U.S. born and English speaking.

Margins of error tables shown here provide the unweighted sample sizes and the error attributable to sampling that would be expected at the 95% level of confidence for different groups in the survey taking into account the average design effect for each subgroup. Sample sizes and sampling errors for other subgroups are available upon request.

In addition to sampling error, one should bear in mind that question wording and practical difficulties in conducting surveys can introduce error or bias into the findings of opinion polls.

The April 2018 wave had a response rate of 82% (2,537 responses among 3,099 individuals in the panel). Taking account of the combined, weighted response rate for the recruitment surveys (10.1%) and attrition from panel members who were removed at their request or for inactivity, the cumulative response rate for the wave is 2.3%.[4]

[4] Approximately once per year, panelists who have not participated in multiple consecutive waves are removed from the panel. These cases are counted in the denominator of cumulative response rates. Note that for the March 2018 survey, we calculated the response rates by computing the mean rates for the subsampled respondents (based on the rates from the recruitment survey they joined the panel on).

Survey questionnaire and topline

2018 PEW RESEARCH CENTER'S AMERICAN TRENDS PANEL
APRIL 23-MAY 6, 2018
TOTAL N=2,537

ASK ALL:
SCI1 Overall, do you think science has made life easier or more difficult for most people?

Apr 23-May 6 2018	
90	Easier
10	More difficult
1	No answer

TREND FOR COMPARISON
Pew Research Center surveys conducted by telephone: Overall, has science made life easier or more difficult for most people?

	Aug 15-25 2014	*Apr 28-May 12 2009*
Easier	*79*	*83*
More difficulty	*15*	*10*
Not had much of an effect (VOL.)	*1*	*1*
Don't know/Refused (VOL.)	*4*	*6*

ASK ALL:
SCI2 Do you think science has had a mostly positive or mostly negative effect on the quality of the following in the U.S.? **[RANDOMIZE ITEMS]**

	Mostly positive	Mostly negative	No Answer
a. Food			
Apr 23-May 6, 2018	70	29	1
b. Health care			
Apr 23-May 6, 2018	90	9	1
c. The environment			
Apr 23-May 6, 2018	76	23	1

TREND FOR COMPARISON
*Pew Research Center surveys conducted by telephone: Has science had a mostly positive or mostly negative effect on the quality of **[INSERT ITEM; RANDOMIZE]** in the U.S.? What about **[NEXT ITEM]**? **[IF NECESSARY**: Has science had a mostly positive or mostly negative effect on the quality of **[ITEM]** in the U.S.?**]***

		Mostly positive	Mostly negative	Not had much of an effect **(VOL.)**	DK/Ref **(VOL.)**
a.	*Food*				
	Aug 15-25, 2014	*62*	*34*	*1*	*3*
	Apr 28-May 12, 2009[5]	*66*	*24*	*2*	*8*
b.	*Health care*				
	Aug 15-25, 2014	*79*	*18*	*1*	*3*
	Apr 28-May 12, 2009	*85*	*10*	*1*	*4*
c.	*The environment*				
	Aug 15-25, 2014	*62*	*31*	*2*	*5*
	Apr 28-May 12, 2009	*66*	*23*	*2*	*8*

SCI3 AND SCI4 PREVIOUSLY RELEASED

ADDITIONAL QUESTIONS HELD FOR FUTURE RELEASE

ASK ALL:
MED1 Thinking now about medicine…

Which of these statements comes closer to your point of view, even if neither is exactly right?

Apr 23-May 6 2018	
48	Medical treatments these days are worth the costs because they allow people to live longer and better quality lives
51	Medical treatments these days often create as many problems as they solve
1	No answer

[5] In 2009, the question stem did not explicitly mention "in the U.S.". The question wording was: "Has science had a mostly positive or mostly negative effect on the quality of [INSERT ITEM; RANDOMIZE]? What about [NEXT ITEM]? [IF NECESSARY: Has science had a mostly positive or mostly negative effect on the quality of [ITEM]?

TREND FOR COMPARISON
Pew Research Center survey conducted by telephone: Thinking about medical science. Which of these statements comes closest to your point of view, even if neither is exactly right? ***[READ IN ORDER]***

Mar 21-Apr 8 2013	
54	*(one) Medical treatments these days are worth the costs because they allow people to live longer and better quality lives [OR]*
41	*(two) Medical treatments these days often create as many problems as they solve.*
3	*Neither/Both equally* ***(VOL.)***
3	*Don't know/Refused* ***(VOL.)***

ASK ALL:
MED2 Thinking about medical treatments these days, how much of a problem, if at all, are each of the following? **[RANDOMIZE ITEMS]**

		A big problem	A small problem	Not a problem	No answer
a.	Healthcare providers are too quick to order tests and procedures that may not be necessary				
	Apr 23-May 6, 2018	46	42	12	1
b.	People rely too much on prescription medicines that may not be necessary				
	Apr 23-May 6, 2018	68	28	3	1
c.	New treatments are made available before we fully understand how they affect people's health				
	Apr 23-May 6, 2018	44	46	9	1
d.	The cost of treatments makes quality medical care unaffordable				
	Apr 23-May 6, 2018	83	14	3	<1
e.	New treatments are so complex that patients cannot make informed decisions				
	Apr 23-May 6, 2018	42	48	9	1
f.	Side effects from prescription medicines create as many problems as the medicines solve				
	Apr 23-May 6, 2018	59	36	5	<1
g.	The process for evaluating the safety and effectiveness of new medical treatments is too slow				
	Apr 23-May 6, 2018	49	40	10	1

ADDITIONAL QUESTIONS HELD FOR FUTURE RELEASE

ASK ALL:

BIO15 Have you seen a health care provider FOR AN ILLNESS OR MEDICAL CONDITION in the past 12 months, or not?

Apr 23-May 6 2018		May 10-June 6 2016
64	Yes	63
36	No	36
1	No answer	2

ADDITIONAL QUESTIONS HELD FOR FUTURE RELEASE