

Survey questionnaire and topline

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

ADDITIONAL QUESTIONS PREVIOUSLY RELEASED OR HELD FOR FUTURE RELEASE

ASK ALL:

MED3 How much, if anything, have you heard or read about gene editing that can be used to change a baby's genetic characteristics?

April 23-
 May 6,
2018

12	A lot
56	A little
32	Nothing at all
1	No answer

ASK ALL:

MED4 Do you think each of the following is an appropriate use of medical technology or is it taking medical technology too far? **[RANDOMIZE ITEMS]**

	<u>An appropriate use of medical technology</u>	<u>Taking medical technology too far</u>	<u>No Answer</u>
a. Changing a baby's genetic characteristics to make the baby more intelligent April 23-May 6, 2018	19	80	1
b. Changing a baby's genetic characteristics to TREAT a serious disease or condition the baby would have at birth April 23-May 6, 2018	72	27	2
c. Changing a baby's genetic characteristics to REDUCE THE RISK of a serious disease or condition that could occur over the course of his or her lifetime April 23-May 6, 2018	60	38	2

TRENDS FOR COMPARISON

Pew Research Center survey conducted by telephone: Would you say that changing a baby's genetic characteristics to make the baby more intelligent is making appropriate use of medical advances OR is it taking medical advances too far?

Aug. 15-25,
2014

15	<i>Appropriate use of medical advances</i>
83	<i>Taking medical advances too far</i>
2	<i>Don't know/Refused (VOL.)</i>

Surveys conducted by telephone: Would you say that changing a baby's genetic characteristics to reduce the risk of serious diseases is making appropriate use of medical advances OR is it taking medical advances too far?

	Pew Research Center Aug. 15-25, <u>2014</u>	VCU Life Sciences Survey Sept. 3-26, <u>2003</u>
Appropriate use of medical advances	46	41
Taking medical advances too far	50	54
Don't know/Refused (VOL.)	4	6

ASK ALL:

MED5 Thinking about what you have heard or read, how well do you think medical researchers understand the health risks and benefits of changing a baby's genetic characteristics?

April 23-
May 6,
2018

7	Very well
29	Fairly well
45	Not too well
17	Not at all well
1	No answer

ASK ALL:

MED6 Thinking about society as a whole ...

How likely, if at all, do you think each of the following would be to occur if gene editing to change a baby's genetic characteristics becomes widely available? [**RANDOMIZE ITEMS**]

	<u>Very likely</u>	<u>Fairly likely</u>	<u>Not too likely</u>	<u>Not at all likely</u>	<u>No Answer</u>
a. Even if gene editing is used appropriately in some cases, others will use these techniques in ways that are morally unacceptable April 23-May 6, 2018	54	32	9	3	1
b. These techniques will help people live longer and better quality lives April 23-May 6, 2018	16	48	27	8	2
c. We will use these techniques before we fully understand how they affect people's health April 23-May 6, 2018	46	38	12	3	1
d. Inequality will increase because this option will be available only for the wealthy April 23-May 6, 2018	58	29	9	4	1

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MED6 continued ...

	<u>Very likely</u>	<u>Fairly likely</u>	<u>Not too likely</u>	<u>Not at all likely</u>	<u>No Answer</u>
e. Development of these techniques will pave the way for new medical advances that benefit society as a whole					
April 23-May 6, 2018	18	42	30	8	1

ASK ALL:

MED7 If gene editing to change a baby's genetic characteristics required testing on human embryos in order to develop these techniques, do you think this would be ...

April 23- May 6, <u>2018</u>	33	An appropriate use of medical technology
	65	Taking medical technology too far
	2	No answer

ADDITIONAL QUESTIONS HELD FOR FURTHER RELEASE**ASK ALL:**

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

April 23- May 6, <u>2018</u>	64	Yes	May 10- June 6 <u>2016</u>	63
	36	No		36
	1	No answer		2

ASK ALL:

G1 Do you, or does anyone in your immediate family, have a gene that predisposes you to a serious disease such as Alzheimer's, cancer, heart disease or sickle cell anemia?

April 23- May 6, <u>2018</u>	26	Yes	May 10- June 6, <u>2016</u>	27
	40	No		43
	34	Not sure		30
	1	No answer		1

ASK ALL:

G2 Have you, or has anyone in your immediate family, ever had a genetic test, or haven't you done this?

April 23- May 6, <u>2018</u>		May 10- June 6 <u>2016</u>
14	Yes	10
65	No	70
20	Not sure	19
1	No answer	1

NOTE: RESULTS SHOWN FOR KNOSCT22-KNOSCT34 INCLUDE 636 RESPONDENTS WHO ANSWERED THESE QUESTIONS APRIL 23-MAY 6, 2018 COMBINED WITH 1,901 RESPONDENTS WHO ANSWERED THESE QUESTIONS IN A PREVIOUS WAVE FIELDLED MAY 10-JUNE 6, 2016.

ASK ALL: Here's a different kind of question. (If you don't know the answer, select "Not sure.") As far as you know ...

KNOSCT22 Here's a different kind of question. (If you don't know the answer, select "Not sure.") As far as you know ...

Which is the better way to determine whether a new drug is effective in treating a disease? If a scientist has a group of 1,000 volunteers with the disease to study, should she ... **[RANDOMIZE OPTIONS 1 AND 2]**

Apr 23- May 6 <u>2018</u>	
68	Give the drug to half of them but not to the other half, and compare how many in each group get better (<i>Correct</i>)
32	NET Incorrect/Not sure/No answer
14	Give the drug to all of them and see how many get better
18	Not sure
<1	No answer

[RANDOMIZE ITEMS KNOSCT23 TO KNOSCT34; KNOSCT22 ALWAYS FIRST]

ASK ALL:

KNOSCT23

Which gas is made as a consequence of burning fossil fuels? Is it ... **[RANDOMIZE OPTIONS 1-4]**¹¹

Apr 23-

May 6

2018

72	Carbon dioxide (<i>Correct</i>)
28	NET Incorrect/Not sure/No answer
4	Hydrogen
1	Helium
3	Radon
20	Not sure
<1	No answer

NO QUESTION KNOSCT24, KNOSCT25 AND KNOSCT26**ASK ALL:**

KNOSCT27

If the chances that an old bridge will collapse starts at 1% in week 1 and doubles each week (as shown below), what is the chance that the old bridge will collapse during week 7?

Chances the bridge will collapse is...

1%	at Week 1
2%	at Week 2
4%	at Week 3
8%	at Week 4

Enter the % chance that the bridge will collapse at Week 7 (if the bridge is still standing after Week 6)¹²

April 23-

May 6,

2018

62	64% (<i>Correct</i>)
38	NET Incorrect/Not sure/No answer
20	All other numeric responses
17	Not sure
1	No answer

¹¹ In the Wave 17 May 2016 survey, the question had a minor wording difference: "What gas is made as a consequence of burning fossil fuels? Is it ..."

¹² The phrase "(if the bridge is still standing after Week 6)" was added for clarity in the April 23-May 6, 2018, wave.

ASK ALL:

KNOSCT28 Which of the following conditions can be treated effectively by antibiotic medications?

[Check all that apply] **[RANDOMIZE ITEMS WITH ITEMS e AND f ALWAYS LAST]**April 23-
May 6,
201846 Bacterial infection only (*Correct*)
54 NET Incorrect/Not sure/No answer**KNOSCT28 INDIVIDUAL ITEM RESPONSES**

	<u>Selected</u>	<u>Not selected</u> <u>/No answer</u>
a. Viral infections (such as a cold)	23	77
b. Fungal infections (such as athlete's foot)	28	72
c. Bacterial infections (such as strep throat infections)	83	17
d. Allergic reactions to insect bites	17	83
e. None of these [EXCLUSIVE PUNCH]	2	98
f. Not sure [EXCLUSIVE PUNCH]	9	91

ASK ALL:KNOSCT29 If a scientist wants to determine if a new drug is effective at treating high blood pressure by giving half of a group of 1,000 volunteers a new medication and the other half a "sugar pill" she wants to rule out ... **[RANDOMIZE OPTIONS 1-3]**April 23-
May 6,
201859 A placebo effect (*Correct*)
41 NET Incorrect/Not sure/No answer
4 A third person effect
16 A false consensus effect
20 Not sure
1 No answer**NO QUESTION KNOSCT30****ASK ALL:**KNOSCT31 Which of these terms refers to health benefits occurring when most people in a population get a vaccine? **[RANDOMIZE OPTIONS 1-3]**April 23-
May 6,
201834 Herd immunity (*Correct*)
66 NET Incorrect/Not sure/No answer
8 Population control
35 Vaccination rate
23 Not sure
1 No answer

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ASK ALL:

KNOSCT32 Which of the following can be genetically modified?

[Check all that apply] **[RANDOMIZE ITEMS WITH ITEMS e AND f ALWAYS LAST]**

April 23-
 May 6,
2018
 39
 61

Selected all (*Correct*)
 NET Incorrect/Not sure/No answer

KNOSCT32 INDIVIDUAL ITEM RESPONSES

	<u>Selected</u>	<u>Not selected</u> <u>/No answer</u>
a. An apple	61	39
b. Salmon	53	47
c. A mosquito	46	54
d. Corn	70	30
e. None of these [EXCLUSIVE PUNCH]	2	98
f. Not sure [EXCLUSIVE PUNCH]	20	80

ASK ALL:KNOSCT33 Humans and mice share the same genetic makeup by... **[RANDOMIZE ORDER LOW TO HIGH; HIGH TO LOW with NOT SURE ALWAYS LAST]**

April 23-
 May 6,
2018
 34
 66

About 50% or more (*Correct*)
 NET Incorrect/Not sure/No answer
 8 Less than 10%
 14 Between 11% and 49%
 44 Not sure
 1 No answer

ASK ALL:KNOSCT34 Which gas makes up most of the Earth's atmosphere? **[RANDOMIZE OPTIONS 1-4]**

April 23-
 May 6,
2018
 31
 69

Nitrogen (*Correct*)
 NET Incorrect/Not sure/No answer
 9 Hydrogen
 9 Carbon dioxide
 35 Oxygen
 15 Not sure
 1 No answer

TOTAL NUMBER CORRECT KNOSCT22 THROUGH KNOSCT34:

April 23-
May 6,
2018

4	9 out of 9
10	8 out of 9
10	7 out of 9
13	6 out of 9
12	5 out of 9
13	4 out of 9
11	3 out of 9
12	2 out of 9
9	1 out of 9
6	0 out of 9

24	High science knowledge (7-9 correct)
49	Medium science knowledge (3-6 correct)
26	Low science knowledge (0-2 correct)