# THE IMPACT OF EXTREME WEATHER ON VIEWS ABOUT CLIMATE POLICY IN THE UNITED STATES

<u>June 202</u>2







#### **EXECUTIVE SUMMARY**

This national poll provides powerful evidence that public experiences with extreme weather shape views about climate issues and policies for the future. NPR, The Robert Wood Johnson Foundation, and the Harvard T.H. Chan School of Public Health conducted a national survey, *The Impact of Extreme Weather on Views About Climate Policy in the United States*, from March 31 – May 8, 2022. This report examines serious problems facing U.S. households nationally who have recently experienced extreme weather events, as well as broader public experiences and perspectives on climate change and related policies.

Results from this poll show that the vast majority of U.S. adults say they have been personally affected by extreme weather events in the past five years. Many report these events caused serious health problems, serious financial problems, and property damage. On a range of policy measures, public support for government climate action is higher among U.S. adults who have been personally affected by extreme weather events in the past five years than those who have not. These results suggest that as weather disasters continue to worsen and become more prevalent in the future, public views may gradually shift toward greater support for many policies aimed to limit climate change, as wider shares of the public are personally impacted by these severe events. This survey was conducted based on concerns growing from scientific evidence that extreme weather events are strongly linked to adverse health and environmental outcomes.<sup>1</sup>

#### Main findings from this report include:

- Nationally, adults who report they have been personally affected by extreme weather events in the past five years are currently more likely to see climate change in the United States as a crisis or major problem (77%) compared with those who have not been affected by such events (46%). Among adults affected by extreme weather events in the past five years, 37% see climate change in the U.S. as a crisis and 40% see it as a major problem. Among adults not affected by extreme weather events in the past five years, 16% see it as a crisis and 30% see it as a major problem. Overall, 70% of the U.S. public sees climate change as a crisis or a major problem, with 32% seeing it as a crisis and 38% seeing it as a major problem.
- In the current period of high inflation, the public largely favors policies seen as having less of a direct impact on their own financial situation. When faced with two broad policy choices limiting carbon emissions and fortifying infrastructure to protect against weather disasters there is generally higher public support for policies aimed at protecting against future weather disasters (e.g., 57% support increased state spending to prepare for future weather disasters) compared with reducing carbon emissions to limit climate change (e.g., only 39% support a carbon tax if it substantially increases their energy prices).
- Notable examples of high public support for proposals seen as having a limited impact on the financial situation facing households are federal government requirements to reduce carbon emissions from power plants (78% support) and stricter federal fuel efficiency standards for cars and trucks (67% support). However, even though it might hurt U.S. efforts to limit climate change, 62% of the public still thinks the government should allow oil producers to drill for more oil in the U.S. to try to help lower gasoline prices in the future.

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<sup>&</sup>lt;sup>1</sup> E.g., see National Institute of Environmental Health Sciences, <u>"Weather Extremes"</u> and Centers for Disease Control and Prevention, <u>"Climate Effects on Health."</u>

- On a range of policy measures, public support for government climate action is higher among U.S. adults who have been personally affected by extreme weather events in the past five years than those who have not. This includes higher support for stricter federal fuel efficiency standards for cars and trucks (71% to 53%), regulations to make the electricity grid more resistant to extreme weather (64% to 47%), increased state government spending to prepare for future weather disasters (63% to 39%), and lower support for the federal government allowing more oil drilling aimed to lower future gas prices (58% to 74%).
- In the past five years, substantial shares of U.S. adults say they have been personally affected by extreme weather events, including extreme heat (51%), severe cold/severe winter storms (45%), major droughts (25%), hurricanes or severe tropical storms (20%), major flooding (17%), wildfires (17%), tornadoes (14%), and rising sea levels or flooding in coastal communities (9%). Taken together, the vast majority of U.S. adults (78%) say they have been personally affected by one or more extreme weather events in the past five years.
- When it comes to serious health problems after facing extreme weather events, among the 78% of U.S. households experiencing extreme weather events in the past five years, 24% reported facing serious health problems as a result.
- When it comes to serious financial problems, among the 78% of U.S. households experiencing extreme weather events in the past five years, 17% say it resulted in serious financial problems.
- When it comes to evacuation, among the 78% of U.S. households experiencing extreme weather events in the past five years, 14% reported evacuating from their homes as a result.
- When it comes to property damage, among the 78% of U.S. households experiencing extreme weather events in the past five years, 14% reported major home or property damage.
- For most U.S. households who have faced serious financial problems or property damage after extreme weather events, insurance has not adequately protected them from major losses. Among the 18% of all U.S. adults who experienced major home or property damage or serious financial problems as a result of extreme weather events in the last five years, 71% were either uninsured (45%) or underinsured (26%) during these events.
- Nationally, 23% of U.S. adults say that climate change is threatening the health of their families a great deal or quite a lot. Those who report they have been personally affected by extreme weather events in the past five years are more likely to say climate change is threatening the health of their families a great deal or quite a lot (28%) compared with those who have not been affected by such events (9%). In addition, 39% of Native American adults, 32% of Latino adults, 28% of Black adults, 24% of Asian adults, and 19% of White adults say climate change is threatening the health of their families a great deal or quite a lot.
- Among the public, 65% say the climate in North America is changing because of human activity, while 15% say the climate in North America is changing, but not because of human activity, and 19% say the climate in North America is not changing.
- When asked which two groups can have the biggest impact when it comes to limiting climate change, the public identifies the federal government (48%) and businesses and corporations (47%) as the most important groups, followed by state governments (24%), individuals (24%), community organizations (9%), and local governments (9%).

## ABOUT THIS POLL

This national report, *The Impact of Extreme Weather on Views About Climate Policy in the United States*, is based on a survey conducted in the spring of 2022 for NPR, the Robert Wood Johnson Foundation, and the Harvard T.H. Chan School of Public Health. This report examines serious problems facing U.S. households nationally who have recently experienced extreme weather events, as well as broader public experiences and perspectives on climate change and related policies.

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This poll was conducted March 31 – May 8, 2022, among a probability-based, address-based, nationally representative sample of 2,646 U.S. adults ages 18 or older. Interviews were conducted in English and Spanish, according to respondents' preferences. This multi-modal survey offered adults three choices to complete the survey: online, landline, and cell phone. The survey design allowed greater capture of the general population and several hard-to-reach populations beyond standard telephone polling methods. It was also designed to overcome internet connectivity issues by a substantial share of households, as well as web-based preferences among those with internet. Adults were asked to report on serious problems facing both themselves and others living in their households, thus for questions asked about the household, measures are reported as a percentage of households. Race/ethnicity (non-Hispanic white, Hispanic/Latino, African American/Black, Asian, Native American/American Indian/Alaska Native) is reported according to the respondent's racial/ethnic identity. Asian adults were interviewed in English only. The margin of error at the 95% confidence interval is  $\pm$  2.8 percentage points, with subgroup sizes available in the Methodology section.

## I. Extreme Weather and Views on Climate Change

# The vast majority of the public says they have been personally affected by extreme weather in the past five years

In the past five years, substantial shares of U.S. adults say they have been personally affected by extreme weather events, including extreme heat (51%), severe cold/severe winter storms (45%), major droughts (25%), hurricanes or severe tropical storms (20%), major flooding (17%), wildfires (17%), tornadoes (14%), and rising sea levels or flooding in coastal communities (9%). See Table 1 for details. Taken together, the vast majority of U.S. adults (78%) say they have been personally affected by one or more extreme weather events in the past five years.

# Table 1. Extreme Weather Events Experienced by U.S. Adults in the Past Five Years (in Percent)

Q2. Have you been personally affected by any of the following extreme weather events in the last five years, or not?

51
45
25
20
17
17
14
9
13

NPR/Robert Wood Johnson Foundation/Harvard T.H. Chan School of Public Health, *The Impact of Extreme Weather on Views About Climate Policy in the United States*, 3/31/22 – 5/8/22. N=2,646 U.S. adults ages 18+.

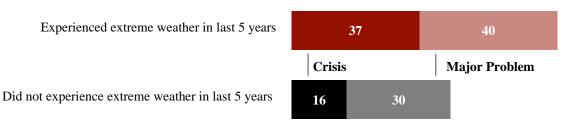
# Those who have recently experienced extreme weather are more likely to see climate change in the United States as a crisis/major problem

Nationally, 70% of the public currently sees climate change in the United States as a crisis or a major problem, with 32% seeing it as a crisis and 38% seeing it as a major problem (but not a crisis). Meanwhile, 18% of the public sees climate change in the U.S. as a minor problem, and 12% does not see it as a problem at all. Those who report they have been personally affected by extreme weather events in the past five years are more likely to see climate change as a crisis or major problem (77%) compared with those who have not been affected by such events (46%) (see Figure 1 below). Among adults who have been affected by extreme weather events in the past five years, 37% see climate change in the U.S. as a crisis and 40% see it as a major problem. Among adults not affected by extreme weather events in the past five years, 16% see it as a crisis and 30% see it as a major problem.

Figure 1. Public Views on Climate Change as a Crisis/Major Problem, by Recent Experiences with Extreme Weather (in Percent)

Q11. In the United States, do you think that climate change is a crisis, a major problem but not a crisis, a minor problem, or not a problem at all?

#### % reporting they see climate change as a crisis/major problem



NPR/Robert Wood Johnson Foundation/Harvard T.H. Chan School of Public Health, *The Impact of Extreme Weather on Views About Climate Policy in the United States*, 3/31/22 – 5/8/22. N=2,646 U.S. adults ages 18+.

## Public support for government climate action is higher among those who have experienced extreme weather events

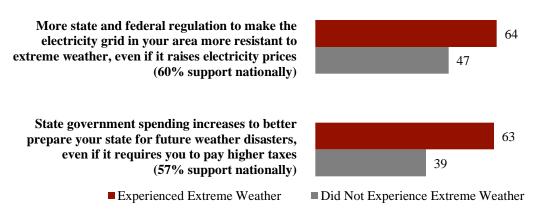
As a general principle, the public broadly (65%) believes the government should be doing more to limit climate change, with only 35% of adults saying the government is trying to do too much to limit climate change that should be left to individuals and businesses. However, in the current period of high inflation, the public largely favors policies seen as having less of a direct impact on their own financial situation. When faced with two broad policy choices – limiting carbon emissions and fortifying infrastructure to protect against weather disasters – there is generally higher public support for policies aimed at protecting against future weather disasters (e.g., 57% support increased state spending to prepare for future weather disasters) compared with reducing carbon emissions to limit climate change (e.g., only 39% support a carbon tax if it substantially increases their energy prices).

Notable examples of high public support for proposals seen as having a limited impact on the financial situation facing households are federal government requirements to reduce carbon emissions from power plants (78% support) and stricter federal fuel efficiency standards for cars and trucks (67% support). However, even though it might hurt U.S. efforts to limit climate change, 62% of the public still thinks the government should allow oil producers to drill for more oil in the U.S. to try to help lower gasoline prices in the future.

Despite this, those who have recently experienced extreme weather are more likely to support activities aimed to limit climate change compared to those who have not. See Figure 2 below for support on specific policies related to protecting against future weather disasters, and Figure 3 below for support on policies related to climate change.

Figure 2. Public Support for Specific Policies Related to Protecting Against Weather Disasters (in Percent)

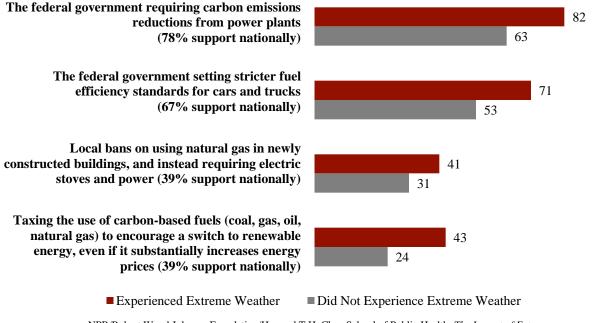
% support, by experiences of extreme weather in the past five years



NPR/Robert Wood Johnson Foundation/Harvard T.H. Chan School of Public Health, *The Impact of Extreme Weather on Views About Climate Policy in the United States*, 3/31/22 – 5/8/22. N=2,646 U.S. adults ages 18+.

Figure 3. Public Support for Policies Related to Climate Change (in Percent)

% support, by experiences of extreme weather in the past five years



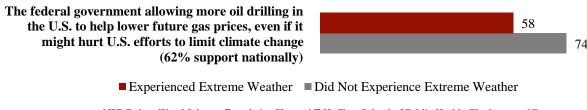
NPR/Robert Wood Johnson Foundation/Harvard T.H. Chan School of Public Health, *The Impact of Extreme Weather on Views About Climate Policy in the United States*, 3/31/22 – 5/8/22. N=2,646 U.S. adults ages 18+.

# 58% of the public says rising gasoline prices have been a serious problem for their households

When asked about recent rises in gasoline prices in the United States, 58% of the public says these rising gasoline prices have been a serious problem for their households. And even though it might hurt U.S. efforts to limit climate change, 62% of the public still thinks the government should allow oil producers to drill for more oil in the U.S. to try to help lower gasoline prices in the future (see Figure 4).

Figure 4. Public Support for U.S. Allowing More Oil Drilling to Help Lower Future Gas Prices (in Percent)

% support, by experiences of extreme weather in the past five years



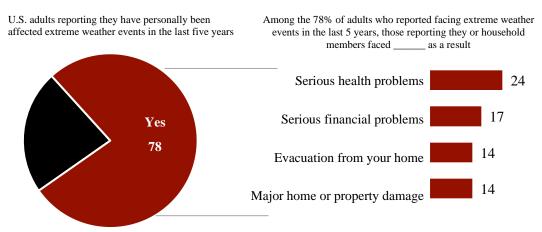
NPR/Robert Wood Johnson Foundation/Harvard T.H. Chan School of Public Health, *The Impact of Extreme Weather on Views About Climate Policy in the United States*, 3/31/22 - 5/8/22. N=2,646 U.S. adults ages 18+.

## II. Serious Damage, Health, Financial Problems Resulting from Extreme Weather

# Substantial shares of U.S. households facing extreme weather reported evacuating or facing serious damage, health, or financial problems as a result

Among households experiencing extreme weather events in the past five years, 24% reported facing serious health problems as a result, 17% reported serious financial problems, 14% reported evacuating from their home, and 14% reported major home or property damage. See Figure 5 for details.

Figure 5. Serious Damage, Health, Financial Problems for U.S. Households Facing Extreme Weather Events in the Past Five Years (in Percent)



NPR/Robert Wood Johnson Foundation/Harvard T.H. Chan School of Public Health, *The Impact of Extreme Weather on Views About Climate Policy in the United States*, 3/31/22 – 5/8/22. N=2,646 U.S. adults ages 18+. Q2a-i and Q4a-i.

Several problems were notably worse in specific types of disasters. For households affected by wildfires in the past five years, 38% say they have faced serious health problems as a result of extreme weather, including 19% of households affected by wildfires specifically citing serious health problems resulting from smoke or lack of clean air. When it comes to serious financial problems, 33% of households who have experienced rising sea levels or flooding in coastal communities and 29% of households who have experienced any type of major flooding in the past five years say they have had serious financial problems as a result of extreme weather.

Many also experienced major property damage: 28% of households who have experienced rising sea levels or flooding in coastal communities, 26% who have experienced hurricanes or severe tropical storms, and 26% who have experienced any major flooding in the past five years say they have experienced major home or property damage as a result of extreme weather. In addition, 27% of households who have experienced rising sea levels or flooding in coastal communities, 25% who have experienced hurricanes or severe tropical storms, and 24% who have experienced major flooding in the past five years reported evacuating their homes as a result of extreme weather.

## III. Inadequate Insurance Coverage After Facing Extreme Weather

# 71% of those who experienced major property damage or serious financial problems from extreme weather were uninsured or underinsured at the time

For most U.S. households who have faced serious financial problems or property damage after extreme weather events, insurance has not adequately protected them from major losses (see Figure 6). Among the 18% of all U.S. adults who experienced major home or property damage or serious financial problems as a result of extreme weather events in the last five years, 71% were either uninsured (45%) or underinsured (26%) during these events.

# Figure 6. Inadequate Insurance Coverage Reported by U.S. Adults With Damage or Financial Problems from Extreme Weather (in Percent)

Insurance experiences reported among the 18% of U.S. adults with major home or property damage or serious financial problems as a result extreme weather events in the last 5 years



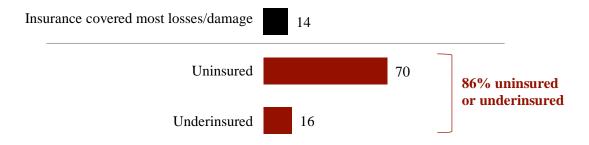
NPR/Robert Wood Johnson Foundation/Harvard T.H. Chan School of Public Health, *The Impact of Extreme Weather on Views About Climate Policy in the United States*, 3/31/22 – 5/8/22. N=581 U.S. adults ages 18+ who experienced major damage to their home or property or serious financial problems as a result of extreme weather events in the last five years. Q2, Q4h-i. Q5. At the time you experienced extreme weather, did you have any type of homeowners' or renters' insurance, or not? Q5a. And did your homeowners' or renters' insurance cover most of the losses or repairs from the extreme weather event(s), or not?

#### Renters less likely to be financially protected during weather disasters than homeowners

Among renters who experienced major home or property damage or serious financial problems as a result of extreme weather events in the last five years (24% of all U.S. renters), only 30% say they had renters' insurance at the time (vs. 70% of homeowners with insurance at the time). Thus, 70% of renters who have experienced major home or property damage or serious financial problems as a result of extreme weather in the last five years say they did not have any type of renters' insurance at the time, and an additional 16% say their insurance did not cover most of the losses or repairs from their extreme weather event, leaving only 14% who say they had adequate insurance coverage at the time. See Figure 7 below.

Figure 7. Inadequate Insurance Coverage Reported by U.S. Renters With Damage or Financial Problems from Extreme Weather (in Percent)

Insurance experiences reported among the 24% of U.S. renters with major home or property damage or serious financial problems as a result extreme weather events in the last 5 years



NPR/Robert Wood Johnson Foundation/Harvard T.H. Chan School of Public Health, *The Impact of Extreme Weather on Views About Climate Policy in the United States*, 3/31/22 – 5/8/22. N=266 U.S. renters ages 18+ who experienced major damage to their home or property or serious financial problems as a result of extreme weather events in the last five years. Q2, Q4h-i. Q5. At the time you experienced extreme weather, did you have any type of homeowners' or renters' insurance, or not? Q5a. And did your homeowners' or renters' insurance cover most of the losses or repairs from the extreme weather event(s), or not?

# Few of those with property damage or serious financial problems from extreme weather events applied for state or federal aid; even fewer received that aid

Among the 18% of all U.S. adults who experienced major home or property damage or serious financial problems as a result of extreme weather events in the last five years, 22% say they applied for federal or state financial assistance as a result. And among those who applied, only 53% were able to get this assistance, leaving the vast majority (88%) of those who experienced major home or property damage or serious financial problems as a result of extreme weather events in the last five years without federal or state aid.

## IV. Views on Climate Change and Health

#### 23% of the U.S. public sees climate change as threatening the health of their families

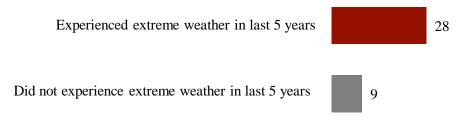
Nationally, 23% of U.S. adults say that climate change is threatening the health of their families a great deal or quite a lot, while 29% say it somewhat threatens the health of their families, 19% say it threatens the health of their families not very much, and 9% say climate change doesn't threaten the health of their families at all (19% of U.S. adults who do not think the climate is changing were not asked this question).

Those who report they have been personally affected by extreme weather events in the past five years are more likely to say climate change is threatening the health of their families a great deal or quite a lot (28%) compared with those who have not been affected by such events (9%) (see Figure 8 below).

Figure 8. Public Views on Climate Change as a Threat to Their Family's Health, by Recent Experiences with Extreme Weather (in Percent)

Q12. How much, if at all, do you think climate change is threatening the health of your family?

% reporting "a great deal" or "quite a lot"



NPR/Robert Wood Johnson Foundation/Harvard T.H. Chan School of Public Health, *The Impact of Extreme Weather on Views About Climate Policy in the United States*, 3/31/22 – 5/8/22. N=2,646 U.S. adults ages 18+.

# 7% of the public recently moved or is seriously considering moving because of climate change or extreme weather in their area

Nationally, 7% of U.S. adults say they have moved within the past five years or are now seriously considering moving, specifically due to climate change or extreme weather events in their areas, including 17% of those who have faced rising sea levels or flooding in coastal communities. In addition, 14% of households who have evacuated their homes or faced serious property damage, financial, or health problems as a result of extreme weather in the past five years report that they have moved or are seriously considering moving due to climate change or extreme weather in their area.

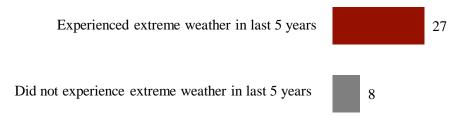
## V. Public Involvement in Activities to Limit Climate Change

# Public involvement in civic, social, or political efforts to limit climate change is higher among those who have experienced extreme weather

In the past year, 23% of U.S. adults say they have personally been actively involved in efforts to limit climate change, including signing petitions, giving money, doing volunteer work, writing letters to the news media, or using social media to express their views. Notably, public involvement in efforts to limit climate change is higher among those who have experienced extreme weather (see Figure 9). Among people who have experienced extreme weather events in the past five years, 27% say they have been active in these efforts, compared with 8% of those who did not experienced extreme weather.

Figure 9. Public Involvement in Activities to Limit Climate Change, by Recent Experiences with Extreme Weather (in Percent)

Q16. In the past year, have you personally been actively involved in efforts to limit climate change, including signing petitions, giving money, doing volunteer work, writing letters to the news media, or using social media to express your views, or have you not done this?



NPR/Robert Wood Johnson Foundation/Harvard T.H. Chan School of Public Health, *The Impact of Extreme Weather on Views About Climate Policy in the United States*, 3/31/22 – 5/8/22. N=2,646 U.S. adults ages 18+.

# 30% of registered voters say they are likely to vote for a candidate in the next election who favors major government action to limit climate change

When it comes to the upcoming 2022 Congressional election, 30% of registered voters say they are very likely to vote for a candidate because they favor major government action to limit climate change. Meanwhile, 33% of registered voters say they are somewhat likely, 15% say they are somewhat unlikely, and 22% say they are very unlikely to vote for such a candidate.

## VI. Views on Climate Change Preparedness

# The federal government and businesses/corporations widely seen as having the potential to make the biggest impact to limit climate change

When asked which two groups can have the biggest impact when it comes to limiting climate change, the public identifies the federal government (48%) and businesses and corporations (47%) as the most important groups, followed by state governments (24%), individuals (24%), community organizations (9%), and local governments (9%). See Table 2 for details below.

# Table 2. Public Views on Which Two Groups Can Have the Biggest National Impact to Limit Climate Change (in Percent)

Q18. In your view, which of the following groups can have the biggest impact when it comes to limiting climate change? The federal government, state governments, local governments, community organizations, businesses and corporations, or individuals (Respondents allowed to pick up to 2 groups)

Federal government	48
Businesses and corporations	47
Individuals	24
State governments	24
Community organizations	9
Local governments	9
Not asked – do not think North American	19
climate is changing	19

NPR/Robert Wood Johnson Foundation/Harvard T.H. Chan School of Public Health, *The Impact of Extreme Weather on Views About Climate Policy in the United States*, 3/31/22 – 5/8/22. N=2,646 U.S. adults ages 18+. Estimates add up to more than 100% because respondents were asked to provide two groups.

#### Few believe the United States is very prepared to deal with weather disasters

Nationally, only 10% of U.S. adults believe the United States is very prepared to deal with weather disasters and extreme weather events, while 42% say the U.S. is somewhat prepared, 34% believe the U.S. is not too prepared, and 14% say the U.S. is not at all prepared.

#### Similarly, few believe their own state is very prepared to deal with weather disasters

Similarly, only 13% of U.S. adults believe their own state is very prepared to deal with weather disasters and extreme weather events that may occur in their local communities, while 48% believe their state is somewhat prepared, 27% say their state is not too prepared, and 12% say their state is not at all prepared.

#### A majority of the public gives negative ratings to U.S. leaders on climate change

When asked to rate the job U.S. leaders have done to address climate change, a majority of the U.S. public gives negative ratings to every group mentioned (see Table 3). Among the public, 79% say business leaders have done an only fair or poor job addressing climate change, and the same share (79%) say Republican lawmakers have done an only fair or poor job. Meanwhile, 71% say their mayors or local political leaders have done an only fair or poor job addressing climate change, 68% say Democratic lawmakers have done an only fair or poor job, 67% say their state governor has an only fair or poor job, and 66% say President Biden has done an only fair or poor job.

Table 3. Rating the Job U.S. Leaders Have Done to Address Climate Change (in Percent)

Q21. How would you rate the job \_\_\_\_\_ (has/have) done to address climate change? Excellent, good, only fair, or poor?

	Excellent	Good	Only Fair	Poor
President Biden	8	25	31	35
Your state's governor	7	25	37	30
Democratic lawmakers	6	25	38	30
Your mayor or local political leader	5	22	42	29
Republican lawmakers	4	15	31	49
Business leaders	2	17	45	34

NPR/Robert Wood Johnson Foundation/Harvard T.H. Chan School of Public Health, *The Impact of Extreme Weather on Views About Climate Policy in the United States*, 3/31/22 - 5/8/22. N=2,646 U.S. adults ages 18+.

## VII. Additional Views on Climate Change and Extreme Weather

# 58% of the public sees climate change as playing a major role in recent North American extreme weather events

Nationally, 58% of the public believes climate change has played a major role in recent extreme weather events in North America, including significant heat waves, flooding, wild fires, droughts, and hurricanes. Meanwhile, 25% believes climate change has played a minor role in these extreme weather events, and 16% believes climate change has played no role in these extreme weather events.

# 57% of the public thinks extreme weather events have become more frequent where they live in the past five years

Compared to five years ago, 57% of the public thinks extreme weather events like wildfires, extreme heat, hurricanes, or tornadoes have become more frequently where they live, while 37% say there has been no change, and 6% say extreme weather events have been less frequent.

#### 65% of the U.S. public believes the climate is changing because of human activity

Among the U.S. public, 65% say the climate in North America is changing because of human activity, while 15% say the climate in North America is changing, but not because of human activity, and 19% say the climate in North America is not changing.

# 64% of the public believes extreme weather events more severely impact low-income communities in their state, while only 45% believe it more severely impacts racial minority communities

When it comes to views on extreme weather events, 64% of the U.S. public thinks extreme weather events like wildfires, extreme heat, hurricanes, or tornadoes have a more severe impact on low-income communities in their state. However, only 45% of the public thinks extreme weather events have a more severe impact on racial minority communities in their state.

# 43% of public believes it is likely that technological or scientific advances will limit most negative effects of climate change in the future

Notably, when asked about the future role of technology, 43% of the public believes it is likely that technological or scientific advances will be able to limit most of the negative effects of climate change in the future, without major changes in American life (10% believe it is very likely and 33% believe it is somewhat likely). Meanwhile, 39% of the public believes it is unlikely likely these advances will be able to limit most negative effects of climate change (24% believe it is somewhat unlikely and 15% believe it is very unlikely). Nineteen percent (19%) of U.S. adults were not asked this question because they previously reported they do not think the climate in North America is changing.

## VIII. Experiences in California

As part of this national survey, the sample also includes a representative sample of adult California residents (through 290 interviews). California residents' experiences with extreme weather and climate change are detailed below.

- 71% of California residents say they have been personally affected by extremely hot weather or extreme heat waves in the last five years.
- 65% of California residents say they have been personally affected by major droughts or water shortages in the last five years.
- 51% of California residents say they have been personally affected by wildfires in the last five years.

## Table 4. Extreme Weather Events Experienced By California Residents in the Past Five Years (in Percent)

Q2. Have you been personally affected by any of the following extreme weather events in the last five years, or not?

71
65
51
15
6
4
3
2
11

NPR/Robert Wood Johnson Foundation/Harvard T.H. Chan School of Public Health, *The Impact of Extreme Weather on Views About Climate Policy in the United States*, 3/31/22 – 5/8/22. N=290 California adults ages 18+.

- When it comes to serious health problems, among the 87% of California households experiencing extreme weather events in the past five years, 27% reported facing serious health problems as a result.
- Among California households who have experienced wildfires in the past five years, 36% reported facing serious health problems as a result of extreme weather, and 21% reported evacuating their homes due to extreme weather.
- 33% of California residents say that climate change is threatening the health of their families a great deal or quite a lot (nationally: 23%).
- Among California residents, there is generally higher public support for policies aimed at protecting against future weather disasters (e.g., 52% support increased state spending to prepare for future weather disasters) compared with reducing carbon emissions to limit climate change (e.g., only 41% support a carbon tax if it substantially increases their energy prices).

## IX. Experiences in Texas

As part of this national survey, the sample also includes a representative sample of adult Texas residents (through 462 interviews). Texas residents' experiences with extreme weather and climate change are detailed below.

• In the last five years, 84% of Texas residents say they have been personally affected by severe cold weather or severe winter storms in the last five years, while 61% say they have been personally affected by extremely hot weather or heat waves, and 35% say they have been personally affected by hurricanes or severe tropical storms. See Table 5 for details.

## Table 5. Extreme Weather Events Experienced By Texas Residents in the Past Five Years (in Percent)

Q2. Have you been personally affected by any of the following extreme weather events in the last five years, or not?

Severe cold weather or severe winter storms	84
Extremely hot weather or extreme heat waves	61
Hurricanes or severe tropical storms	35
Major flooding	31
Major droughts or water shortages	31
Tornadoes	21
Wildfires	17
Rising sea levels or flooding in coastal communities	11
Other severe weather events or weather disasters	20

NPR/Robert Wood Johnson Foundation/Harvard T.H. Chan School of Public Health, *The Impact of Extreme Weather on Views About Climate Policy in the United States*, 3/31/22 – 5/8/22. N=462 Texas adults ages 18+.

- When it comes to serious health problems, among the 93% of Texas households experiencing extreme weather events in the past five years, 24% reported facing serious health problems as a result. Among the 35% of Texas households who have experienced hurricanes or severe tropical storms in the past five years, 34% reported facing serious health problems as a result of extreme weather.
- When it comes to serious financial problems after facing extreme weather events, among the 93% of Texas households experiencing extreme weather events in the past five years, 23% reported serious financial problems as a result.
- When it comes to evacuation and damage, among the 93% of Texas households experiencing extreme weather events in the past five years, 25% reported evacuating from their homes as a result, while 27% reported major home or property damage.
- 70% of Texas residents support more state and federal regulation to make the electricity grid in their area more resistant to extreme weather, even if it raises their electricity prices (nationally 60% support).
- Among Texas residents, there is generally higher public support for policies aimed at protecting against future weather disasters (e.g., 65% support increased state spending to prepare for future weather disasters) compared with reducing carbon emissions to limit climate change (e.g., only 34% support a carbon tax if it substantially increases their energy prices).

## X. Experiences in Florida

As part of this national survey, the sample also includes a representative sample of adult Florida residents (through 196 interviews). Florida residents' experiences with extreme weather and climate change are detailed below.

- 68% of Florida residents say they have been personally affected by hurricanes or severe tropical storms in the last five years.
- 57% of Florida residents say they have been personally affected by extremely hot weather or heat waves in the last five years.

## Table 6. Extreme Weather Events Experienced By Florida Residents in the Past Five Years (in Percent)

Q2. Have you been personally affected by any of the following extreme weather events in the last five years, or not?

received evering in the teast five years, or not	
Hurricanes or severe tropical storms	68
Extremely hot weather or extreme heat waves	57
Severe cold weather or severe winter storms	20
Tornadoes	15
Major flooding	10
Major droughts or water shortages	10
Rising sea levels or flooding in coastal communities	19
Wildfires	9
Other severe weather events or weather disasters	8

NPR/Robert Wood Johnson Foundation/Harvard T.H. Chan School of Public Health, *The Impact of Extreme Weather on Views About Climate Policy in the United States*, 3/31/22 – 5/8/22. N=196 Florida adults ages 18+.

- When it comes to serious financial problems after facing extreme weather events, among the 83% of Florida households experiencing extreme weather events in the past five years, 22% reported serious financial problems as a result.
- When it comes to evacuation and damage, among the 83% of Florida households experiencing extreme weather events in the past five years, 26% reported evacuating from their homes as a result, while 21% reported major home or property damage.
- Among Florida residents, there is generally higher public support for policies aimed at
  protecting against future weather disasters (e.g., 54% support increased state spending to
  prepare for future weather disasters) compared with reducing carbon emissions to limit
  climate change (e.g., only 41% support a carbon tax if it substantially increases their energy
  prices).

## XI. Experiences of Those Affected by Extreme Heat/Heat Waves

Nationally, 51% of U.S. adults report they have been personally affected by extremely hot weather or extreme heat waves in the last five years. Their experiences are reported below.

- When it comes to serious health problems faced by households as a result of extreme weather, 30% of those who have experienced extreme heat events in the past five years report their household members have faced serious health problems as a result of extreme weather.
- 11% of those who were personally affected by extreme heat in the past five years say their households have faced serious health problems resulting from lack of adequate air conditioning in their home.
- 25% of Native American adults who were personally affected by extreme heat in the past five years say their households have faced serious health problems resulting from lack of adequate air conditioning in their home, while 18% of Latino adults, 14% of Black adults, and 14% of Asian adults say this (vs. 7% of Whites).
- 34% of those who have experienced extreme heat in the past five years say that climate change is threatening the health of their families a great deal or quite a lot.
- When it comes to serious financial problems faced by households as a result of extreme weather, 20% of those who have experienced extreme heat in the past five years report their household members have faced serious financial problems as a result of extreme weather.
- Among those who have been personally affected by extremely hot weather or extreme heat waves in the past five years, most believe that climate change was either a major (71%) or minor (21%) factor contributing to the extreme heat they experienced. Only 8% say climate change was not a factor.

## XII. Experiences of Those Affected by Severe Cold/Severe Storms

Nationally, 45% of adults report they have been personally affected by severe cold or severe winter storms in the last five years. Their experiences are reported below.

- When it comes to serious health problems faced by households as a result of extreme weather, 27% of those who have experienced severe cold events in the past five years report their household members have faced serious health problems as a result of extreme weather.
- 7% of those who have experienced extreme cold in the past five years say it resulted in serious health problems for their households from lack of adequate heating in their home.
- 31% of those who have experienced extreme cold in the past five years say that climate change is threatening the health of their families a great deal or quite a lot.
- When it comes to serious financial problems faced by households as a result of extreme weather, 20% of those who have experienced severe cold or severe winter storms in the past five years report their household members have faced serious financial problems as a result of extreme weather.
- Among those who have been personally affected by severe cold or severe winter storms in the past five years, most believe that climate change was either a major (58%) or minor (30%) factor contributing to the severe cold or severe winter storms they experienced. Only 12% say climate change was not a factor.

# XIII. Experiences of Those Affected by Major Droughts/Water Shortages

Nationally, 25% of adults report they have been personally affected by major droughts or water shortages in the last five years. Their experiences are reported below.

- When it comes to serious health problems faced by households as a result of extreme
  weather, 30% of those who have experienced major droughts or water shortages in the past
  five years report their household members have faced serious health problems as a result of
  extreme weather.
- 31% of those who have experienced major droughts or water shortages in the past five years say that climate change is threatening the health of their families a great deal or quite a lot.
- When it comes to serious financial problems faced by households as a result of extreme weather, 19% of those who have experienced major droughts or water shortages in the past five years report their household members have faced serious financial problems as a result of extreme weather.
- Among those who have been personally affected by major droughts or water shortages in the past five years, most believe that climate change was either a major (65%) or minor (23%) factor contributing to the major droughts or water shortages they experienced. Only 12% say climate change was not a factor.

# XIV. Experiences of Those Affected by Hurricanes/Severe Tropical Storms

Nationally, 20% of adults report they have been personally affected by hurricanes or severe tropical storms in the last five years. Their experiences are reported below.

- When it comes to serious health problems faced by households as a result of extreme weather, 28% of those who have experienced hurricanes or severe tropical storms in the past five years report their household members have faced serious health problems as a result of extreme weather.
- 26% of those who have experienced hurricanes or severe tropical storms in the past five years say that climate change is threatening the health of their families a great deal or quite a lot.
- When it comes to serious financial problems faced by households as a result of extreme weather, 26% of those who have experienced hurricanes or severe tropical storms in the past five years report their household members have faced serious financial problems as a result of extreme weather.
- When it comes to evacuation faced by households as a result of extreme weather, 25% of those who have experienced hurricanes or severe tropical storms in the past five years report their household members have evacuated their homes as a result of extreme weather.
- When it comes to damage faced by households as a result of extreme weather, 26% of those
  who have experienced hurricanes or severe tropical storms in the past five years report their
  household members have faced major home or property damage as a result of extreme
  weather.
- Among those who have been personally affected by hurricanes or severe tropical storms in the past five years, most believe that climate change was either a major (58%) or minor (27%) factor contributing to the hurricanes or severe tropical storms they experienced. Only 15% say climate change was not a factor.

## XV. Experiences of Those Affected by Major Flooding

Nationally, 17% of adults report they have been personally affected by major flooding in the last five years. Their experiences are reported below.

- When it comes to serious health problems faced by households as a result of extreme weather, 33% of those who have experienced major flooding in the past five years report their household members have faced serious health problems as a result of extreme weather.
- 33% of those who have experienced major flooding in the past five years say that climate change is threatening the health of their families a great deal or quite a lot.
- When it comes to serious financial problems faced by households as a result of extreme
  weather, 29% of those who have experienced major flooding in the past five years report
  their household members have faced serious financial problems as a result of extreme
  weather.
- When it comes to evacuation faced by households as a result of extreme weather, 25% of those who have experienced major flooding in the past five years report their household members have evacuated their homes as a result of extreme weather.
- When it comes to damage faced by households as a result of extreme weather, 26% of those who have experienced major flooding in the past five years report their household members have faced major home or property damage as a result of extreme weather.
- Among those who have been personally affected by major flooding in the past five years, most believe that climate change was either a major (65%) or minor (22%) factor contributing to the major flooding they experienced. Only 14% say climate change was not a factor.

## XVI. Experiences of Those Affected by Wildfires

Nationally, 17% of adults report they have been personally affected by wildfires in the last five years. Their experiences are reported below.

- When it comes to serious health problems faced by households as a result of extreme weather, 38% of those who have experienced wildfires in the past five years report their household members have faced serious health problems as a result of extreme weather.
- 35% of those who have experienced wildfires in the past five years say that climate change is threatening the health of their families a great deal or quite a lot.
- When it comes to serious financial problems faced by households as a result of extreme weather, 18% of those who have experienced wildfires in the past five years report their household members have faced serious financial problems as a result of extreme weather.
- When it comes to evacuation faced by households as a result of extreme weather, 20% of those who have experienced wildfires in the past five years report their household members have evacuated their homes as a result of extreme weather.
- Among those who have been personally affected by wildfires in the past five years, most believe that climate change was either a major (68%) or minor (20%) factor contributing to the wildfires they experienced. Only 12% say climate change was not a factor.

## XVII. Experiences of Those Affected by Tornadoes

Nationally, 14% of adults report they have been personally affected by tornadoes in the last five years. Their experiences are reported below.

- When it comes to serious health problems faced by households as a result of extreme weather, 31% of those who have experienced tornadoes in the past five years report their household members have faced serious health problems as a result of extreme weather.
- 31% of those who have experienced tornadoes in the past five years say that climate change is threatening the health of their families a great deal or quite a lot.
- When it comes to serious financial problems faced by households as a result of extreme weather, 23% of those who have experienced tornadoes in the past five years report their household members have faced serious financial problems as a result of extreme weather.
- When it comes to damage faced by households as a result of extreme weather, 22% of those who have experienced tornadoes in the past five years report their household members have faced major home or property damage as a result of extreme weather.
- Among those who have been personally affected by tornadoes in the past five years, most believe that climate change was either a major (49%) or minor (32%) factor contributing to the tornadoes they experienced. Only 19% say climate change was not a factor.

# XVIII. Experiences of Those Affected by Rising Sea Levels in Coastal Communities

Nationally, 9% of adults report they have been personally affected by rising sea levels or floods in coastal communities in the last five years. Their experiences are reported below.

- When it comes to serious health problems faced by households as a result of extreme weather, 33% of those who have experienced rising sea levels or floods in coastal communities in the past five years report their household members have faced serious health problems as a result of extreme weather.
- 40% of those who have experienced rising sea levels or floods in coastal communities in the past five years say that climate change is threatening the health of their families a great deal or quite a lot.
- When it comes to serious financial problems faced by households as a result of extreme weather, 33% of those who have experienced rising sea levels or floods in coastal communities in the past five years report their household members have faced serious financial problems as a result of extreme weather.
- When it comes to evacuation faced by households as a result of extreme weather, 27% of
  those who have experienced rising sea levels or floods in coastal communities in the past five
  years report their household members have evacuated their homes as a result of extreme
  weather.
- When it comes to damage faced by households as a result of extreme weather, 28% of those
  who have experienced rising sea levels or floods in coastal communities in the past five years
  report their household members have faced major home or property damage as a result of
  extreme weather.
- Among those who have been personally affected by rising sea levels or flooding in coastal communities in the past five years, most believe that climate change was either a major (69%) or minor (23%) factor contributing to the rising sea levels or flooding they experienced. Only 7% say climate change was not a factor.

## XIX. Experiences of Racial and Ethnic Minorities

As part of this national survey, the sample also includes representative samples of Black adults, Latino adults, Native American adults, Asian adults, and non-Hispanic White adults. Experiences with extreme weather and climate change by racial/ethnic identity are detailed below.

- On climate change and health, 39% of Native American adults, 32% of Latino adults, 28% of Black adults, 24% of Asian adults, and 19% of White adults say climate change is threatening the health of their families a great deal or quite a lot.
- When it comes to serious financial problems faced by households as a result of extreme weather, 43% of Native Americans who have experienced extreme weather in the past five years say their households have faced serious financial problems as a result, compared with 33% of Black adults, 25% of Latino adults, 15% of Asian adults, and 10% of White adults.
- When it comes to serious health problems faced by households as a result of extreme weather, 51% of Native Americans who have experienced extreme weather in the past five years say their households have faced serious health problems as a result, while 31% of Latino adults, 30% of Asian adults, 29% of Black adults, and 18% of White adults say this.
- 27% of Native American adults who were personally affected by extreme weather events in the past five years say their households have faced serious problems related to mental health as a result of these weather events; 17% of Black adults, 14% of Asian adults, 13% of Latino adults, and 10% of White adults say this.
- 23% of Native American adults who were personally affected by extreme weather events in the past five years say their households have faced serious health problems resulting from poor water quality or a lack of water; only 9% of Latino adults, 9% of Black adults, 7% of Asian adults, and 2% of White adults say this.
- 25% of Native American adults who were personally affected by extreme heat in the past five years say their households have faced serious health problems resulting from lack of adequate air conditioning in their home, while 18% of Latino adults, 14% of Black adults, and 14% of Asian adults say this (vs. 7% of Whites).

## XX. Methodology

The poll in this study is part of an on-going series of surveys developed by researchers at the Harvard Opinion Research Program (HORP) at Harvard T.H. Chan School of Public Health in partnership with the Robert Wood Johnson Foundation and NPR. The research team consists of the following members at each institution.

**Harvard T.H. Chan School of Public Health**: Robert J. Blendon, Emeritus Professor of Health Policy and Political Analysis and Executive Director of HORP; John M. Benson, Senior Research Scientist and Managing Director of HORP; Mary G. Findling, Assistant Director of HORP; Chelsea Whitton Pearsall, Research Coordinator.

**Robert Wood Johnson Foundation**: Carolyn Miller, Senior Program Officer, Research-Evaluation-Learning; Jordan Reese, Director of Media Relations.

**NPR**: Andrea Kissack, Senior Supervising Editor, Science Desk; Neela Banerjee, Supervising Climate Editor, Science Desk; Jeff Brady, interim Energy and Environment Editor, National Desk; Rebecca Hersher, Reporter, Science Desk.

Interviews were conducted online and via telephone (cellphone and landline), **March 31 – May 8, 2022,** among a nationally representative, probability-based sample of 2,646 adults age 18 or older in the U.S. Data collection was conducted in English and Spanish by SSRS (Glen Mills, PA), an independent research company. The margin of sampling error, including the design effect, was  $\pm 2.8$  percentage points at the 95% confidence level for national data.

The core of the sample was address-based, with respondents sampled from the United States Postal Service's Computerized Delivery Sequence (CDS) file. Sampled households were sent an invitation letter including a link to complete the survey online and a toll-free number, which respondents could call to complete the survey with a telephone interviewer. All respondents were sent a reminder postcard, which also included a QR code they could scan to be linked to the survey via a smart device. Households that could be matched to telephone numbers and that had not yet completed the survey were called to attempt to complete an interview. In order to represent the hardest-to-reach populations, the address-based sample (ABS) was supplemented by telephone interviews with respondents who had previously completed interviews on the weekly random-digit dialing (RDD) SSRS Omnibus poll and online using the SSRS Opinion Panel, a probability-based panel.

A total of 2,285 respondents completed the questionnaire online, 165 by calling in to complete, and 196 were completed as outbound telephone interviews.

Possible sources of non-sampling error include non-response bias, as well as question wording and ordering effects. Non-response produces some known biases in survey-derived estimates because participation tends to vary for different subgroups of the population. To compensate for these known biases and for variations in probability of selection within and across households, the samples were weighted to match the distribution of the population based on data from the U.S. Census Bureau's 2020 Current Population Survey (CPS). Weighting parameters included: gender, age, education level, race/ethnicity, region, and party identification.

## **Characteristics of Population Subgroups**

	Number of interviews (unweighted)
Total national adults	2646
Personally affected by extreme weather event in past five years (NET)	
Affected	2128
Not affected	509
Personally affected by the following in the past five years:	
Extremely hot weather or extreme heat wave	1420
Severe cold weather or severe winter storms	1233
Major droughts or water shortages	718
Hurricanes or severe tropical storms	657
Major flooding	486
Wildfires	483
Tornadoes	445
Rising sea levels or flooding in coastal communities	277
Experienced major home/property damage or serious financial problems as a result of extreme weather events in past five years	581
Home is owned/experienced these problems	315
Home is rented/experienced these problems	266
By race/ethnicity	
White	1237
Black	489
Latino	450
Asian	241
Native American	152
By race/ethnicity and affected by extreme weather event in past five years	_
White/affected	975
Black/affected	385
Latino/affected	387
Asian/affected	183
Native American/affected	137
By state	
California	290
Texas	462
Florida	196
By state affected by extreme weather event in past five years (NET)	
California/affected	253
Texas/affected	430
Florida/affected	163
By state affected by specific types of extreme weather event in past five years	
California/affected by wildfires in past five years	159
Texas/affected by hurricanes or severe tropical storms	170
Florida/affected by extremely hot weather or heat waves in past five years	109
Registered voters	2257

#### NPR

# ROBERT WOOD JOHNSON FOUNDATION HARVARD T.H. CHAN SCHOOL OF PUBLIC HEALTH

# THE IMPACT OF EXTREME WEATHER ON VIEWS ABOUT CLIMATE POLICY IN THE UNITED STATES

The survey was conducted for National Public Radio, the Robert Wood Johnson Foundation, and Harvard T.H. Chan School of Public Health, online and via telephone (cellphone and landline) by SSRS, an independent research company. Interviews were conducted in English and Spanish, **March 31 – May 8, 2022,** among a nationally representative, probability-based sample of 2,646 adults age 18 or older in the U.S. The margin of sampling error for the total national sample is ±2.8 percentage points at the 95% confidence level.

The main part of the sample was address-based, with respondents sampled from the United States Postal Service's Computerized Delivery Sequence (CDS) file. Sampled households were sent an invitation letter including a link to complete the survey online and a toll-free number that respondents could call to complete the survey with a telephone interviewer. In order to represent the hardest-to-reach populations, the address-based sample (ABS) was supplemented by telephone interviews with respondents who had previously completed interviews on the weekly random-digit dialing (RDD) SSRS Omnibus poll and online using the probability-based SSRS Opinion Panel. A total of 2,285 respondents completed the questionnaire online, 165 by calling in by telephone, and 196 were completed by outbound telephone interviews.

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#### I. EXPERIENCES WITH SEVERE WEATHER EVENTS

Q1. Compared to five years ago, do you think extreme weather events like wildfires, extreme heat, hurricanes, or tornadoes have become more or less frequent where you live, or has there been no change?

	%
More frequent	57
Less frequent	6
No change	37
Don't know/Refused/Web Blank	*

Q2. Have you been personally affected by any of the following extreme weather events in the last five years?

#### a. Any tornadoes

	%
Yes	14
No	84
Don't know/Refused/Web Blank	2

#### b. Any hurricanes or severe tropical storms

	%
Yes	20
No	78
Don't know/Refused/Web Blank	2

#### c. Extremely hot weather or extreme heat waves

	%
Yes	51
No	48
Don't know/Refused/Web Blank	1

## d. Any wildfires

	%
Yes	17
No	81
Don't know/Refused/Web Blank	2

## e. Any major flooding

	%
Yes	17
No	81
Don't know/Refused/Web Blank	2

## f. Any major droughts or water shortages

	%
Yes	25
No	73
Don't know/Refused/Web Blank	2

## g. Rising sea levels or flooding in a coastal community

	%
Yes	9
No	88
Don't know/Refused/Web Blank	3

## h. Any severe cold weather or severe winter storms

	%
Yes	45
No	54
Don't know/Refused/Web Blank	1

## i. Any other extreme weather events or weather disasters

	%
Yes	13
No	84
Don't know/Refused/Web Blank	3

Q2 Yes Summary Base: Total respondents

	%
Extremely hot weather or extreme heat waves	51
Any severe cold weather or severe winter storms	45
Any major droughts or water shortages	25
Any hurricanes or severe tropical storms	20
Any wildfires	17
Any major flooding	17
Any tornadoes	14
Rising sea levels or flooding in a coastal community	9
Any other extreme weather events or weather disasters	13

# Q2a-i Summary Table Base: Total respondents

	%
Have been personally affected by any extreme weather events in the last five years	78
Have not been personally affected by any extreme weather events in the last five years	22
Don't know/Refused/Web Blank	*

Q3. Do you think climate change was a major factor, a minor factor, or not a factor contributing to each of the following you have experienced in the last five years?

## (Asked of those personally affected by any tornadoes in the last five years; n=445)

a. Any tornadoes

	%
Major factor	49
Minor factor	32
Not a factor	19
Don't know/Refused/Web Blank	*

# (Asked of those personally affected by any hurricanes or severe tropical storms in the last five years; n=657)

b. Any hurricanes or severe tropical storms

	%
Major factor	58
Minor factor	27
Not a factor	15
Don't know/Refused/Web Blank	*

# (Asked of those personally affected by extremely hot weather or extreme heat waves in the last five years; n=1420)

c. Extremely hot weather or extreme heat waves

	%
Major factor	71
Minor factor	21
Not a factor	8
Don't know/Refused/Web Blank	*

#### (Asked of those personally affected by any wildfires in the last five years; n=483)

d. Any wildfires

	%
Major factor	68
Minor factor	20
Not a factor	12
Don't know/Refused/Web Blank	-

#### (Asked of those personally affected by any major flooding in the last five years; n=486)

e. Any major flooding

	%
Major factor	65
Minor factor	21
Not a factor	14
Don't know/Refused/Web Blank	*

# (Asked of those personally affected by any major droughts or water shortages in the last five years; n=718)

f. Any major droughts or water shortages

	%
Major factor	65
Minor factor	23
Not a factor	12
Don't know/Refused/Web Blank	*

# (Asked of those personally affected by rising sea levels or flooding in a coastal community in the last five years; n=277)

g. Rising sea levels or flooding in a coastal community

	%
Major factor	69
Minor factor	23
Not a factor	7
Don't know/Refused/Web Blank	1

# (Asked of those personally affected by any severe cold weather or severe winter storms in the last five years; n=1233)

h. Any severe cold weather or severe winter storms

	%
Major factor	58
Minor factor	30
Not a factor	12
Don't know/Refused/Web Blank	*

# (Asked of those personally affected by any other extreme weather events or weather disasters in the last five years; n=392)

i. Any other extreme weather events or weather disasters

	%
Major factor	65
Minor factor	28
Not a factor	7
Don't know/Refused/Web Blank	*

#### II. SERIOUS PROBLEMS AS A RESULT OF EXTREME WEATHER

Q4. After experiencing any extreme weather events in the last five years, did you or anyone else living in your household ever face any of the following problems as a result?

## (Asked of those personally affected by extremely hot weather or extreme heat waves in the last five years; n=1420)

a. Serious health problems resulting from lack of adequate air conditioning in your home

	%
Yes	11
No	89
Don't know/Refused/Web Blank	*

#### (Asked of those personally affected by any wildfires in the last five years; n=483)

b. Serious health problems resulting from smoke or a lack of clean air

	%
Yes	19
No	81
Don't know/Refused/Web Blank	*

## (Asked of those personally affected by any severe cold weather or severe winter storms in the last five years; n=1233)

c. Serious health problems resulting from lack of adequate heating in your home

	%
Yes	6
No	94
Don't know/Refused/Web Blank	*

## (Asked of those personally affected by any extreme weather events in the last five years; n=2128)

d. Serious health problems resulting from poor water quality or a lack of water

	%
Yes	5
No	94
Don't know/Refused/Web Blank	1

## (Asked of those personally affected by any extreme weather events in the last five years; n=2128)

e. Any serious problems related to mental health

	%
Yes	12
No	87
Don't know/Refused/Web Blank	1

## (Asked of those personally affected by any extreme weather events in the last five years; n=2128)

f. Any other serious health problems or injuries

	%
Yes	8
No	92
Don't know/Refused/Web Blank	*

## (Asked of those personally affected by any extreme weather events in the last five years; n=2128)

g. Displacement from your home, even for a short time

	%
Yes	14
No	86
Don't know/Refused/Web Blank	*

## (Asked of those personally affected by any extreme weather events in the last five years; n=2128)

h. Major damage to your home or property

	%
Yes	14
No	86
Don't know/Refused/Web Blank	*

## (Asked of those personally affected by any extreme weather events in the last five years; n=2128)

i. Serious financial problems

	%
Yes	17
No	82
Don't know/Refused/Web Blank	1

#### Q4a-f Summary - Serious health problems of any kind

Base: Respondents personally affected by any extreme weather events in the last five years; n=2128)

	%
You or anyone living in your household ever faced a serious health problem	
after experiencing any extreme weather events in the last five years	24
No/Dk/Ref	76

## **Q2/Q4 Summary Table Base: Total respondents**

	%
Have been personally affected by any extreme weather events in the last five years	78
Any serious problems from an extreme weather event	32
No serious problems from any extreme weather event	46
Have not been personally affected by any extreme weather events in the last five years	22
Don't know/Ref/Web blank	*

## (Asked of respondents in the households that experienced serious financial problems as a result of any extreme weather events in the last five years; n=397)

Q4j. Did this include problems paying repair bills?

#### Q4i/Q4j Combo Table

Base: Respondents who were personally affected by any extreme weather events in the last five years; n=2128)

	%
Had serious financial problems	17
Included problems paying repair bills	11
Did not include problems paying repair bills	6
Did not have serious financial problems	82
Don't know/Refused/Web blank	1

## (Asked of respondents in the households that experienced serious financial problems as a result of any extreme weather events in the last five years; n=397)

Q4k. Did this include problems paying credit cards, loans, or other debt?

#### Q4i/Q4k Combo Table

Base: Respondents who were personally affected by any extreme weather events in the last five years; n=2128)

	%
Had serious financial problems	17
Included problems paying credit cards, loans, or other debt	11
Did not include problems paying credit cards, loans, or other debt	6
No, did not have serious financial problems	82
Don't know/Refused/Web blank	1

## (Asked of those who experienced major damage to their home or property or serious financial problems as a result of extreme weather events in the last five years; n=581)

Q5. At the time you experienced extreme weather, did you have any type of homeowners' or renters' insurance, or not?

	%
Yes	55
No	45
Don't know/Refused/Web Blank	-

## (Asked of those who had any type of homeowners' or renters' insurance at the time they experienced extreme weather in the last 5 years; n=329)

Q5a. And did your homeowners' or renters' insurance cover most of the losses or repairs from the extreme weather event(s), or not?

	%
Yes	53
No	47
Don't know/Refused/Web Blank	*

#### Q5/Q5a. Combo Table

Based on those who experienced major damage to their home or property or serious financial problems as a result of extreme weather events in the last 5 years; n = 581

	%
Had any type of homeowners' or renters' insurance at the time they experienced	
extreme weather	55
Homeowners' or renters' insurance covered <b>most</b> of the losses or repairs from the	
extreme weather event (s)	29
Homeowners' or renters' insurance did not cover <b>most</b> of the losses or repairs from	
the extreme weather event (s)	26
Did not have any type of homeowners' or renters' insurance at the time they	
experienced extreme weather	45
Don't know/Refused/Web blank	-

#### (Asked of those personally affected by extreme weather events in the last 5 years; n = 2128)

Q6. As a result of the extreme weather you experienced in the last 5 years, have you applied for any type of federal or state financial assistance that you thought you were eligible for?

	%
Yes	9
No	91
Don't know/Refused/Web Blank	*

# (Asked of those who applied for any type of federal or state financial assistance that they thought they were eligible for as a result of the extreme weather they experienced in the last 5 years; n = 240)

Q6a. And were you able to get this assistance, or not?

	%
Yes	60
No	40
Don't know/Refused/Web Blank	-

Q7a. Do you think extreme weather events like wildfires, extreme heat, hurricanes, or tornadoes have a more severe impact on **low-income communities** in your state, or do you think extreme weather events don't have a more severe impact on these communities in your state?

	%
Yes	64
No	36
Don't know/Refused/Web Blank	*

Q7b. Do you think extreme weather events like wildfires, extreme heat, hurricanes, or tornadoes have a more severe impact on **racial minority communities** in your state, or do you think extreme weather events don't have a more severe impact on these communities in your state?

	%
Yes	45
No	55
Don't know/Refused/Web Blank	*

Q8. Have you moved within the last 5 years, or are you now seriously considering moving, or is this something you have not done and are not seriously considering?

	%
Have moved in the last 5 years or are now seriously considering moving	40
Have moved within the last 5 years	28
Are now seriously considering moving	16
Have not moved within the last 5 years and are not seriously considering moving	60
Don't know/Refused/Web blank	*

## (Asked of those who have moved in the last 5 years or are now seriously considering moving; n=1132)

Q8a. And is this **at least partially** because of climate change or extreme weather events in your area, or not?

	%
Yes	17
No	83
Don't know/Refused/Web Blank	-

#### Q8/Q8a. Combo Table Based on total respondents

	%
Have moved in the last 5 years or are now seriously considering moving	40
This is at least partially because of climate change or extreme weather events in	
your area	7
This is not at least partially because of climate change or extreme weather events	
in your area	33
Have not moved within the last 5 years and are not seriously considering moving	60
Don't know/Refused/Web blank	*

## III. SERIOUS CONCERNS ABOUT CLIMATE CHANGE, CONNECTION BETWEEN CLIMATE CHANGE AND HEALTH

Q9. As you may have heard, parts of North America have recently experienced significant heat waves, flooding, wildfires, droughts, and hurricanes. What role, if any, would you say climate change has played in these extreme weather events? Would you say climate change has played:

	%
A major role	58
A minor role	25
No role in these extreme weather events	16
Don't know/Refused/Web blank	1

#### Q10. Do you think the climate in North America is changing, or is it **not** changing?

	%
Yes	81
No	19
Don't know/Refused/Web Blank	*

## Q10. Do you think the climate in North America is changing, or is it **not** changing? **(Asked of those who think the climate in North America is changing; n=2266)**

Q10a. Do you think the climate in North America is changing because of human activity such as burning fossil fuels , or is it changing but **not** because of human activity?

## Q10/Q10a. Combo Table Based on total respondents

	%
Think the climate in North America is changing	81
Changing because of human activity	65
Changing but <b>not</b> because of human activity	15
Don't know/Refused/Web blank if it is changing because of human activity	1
Don't think the climate in North America is changing	19
Don't know/Refused/Web blank	*

#### Q11. Now thinking about the United States. In the United States, do you think that climate change is:

	%
A crisis	32
A major problem but not a crisis	38
A minor problem	18
Not a problem at all	12
Don't know/Refused/Web Blank	*

#### (Asked of those who think the climate in North America is changing; n=2266)

Q12. How much, if at all, do you think climate change is threatening the health of your family?

	%
A great deal	12
Quite a lot	17
Somewhat	36
Not very much	24
Not at all	11
Don't know/Refused/Web Blank	*

## Q10/Q12. Combo Table Based on total respondents

	%
Think climate change is threatening the health of their family a great deal	10
Think climate change is threatening the health of their family quite a lot	13
Think climate change is threatening the health of their family somewhat	29
Think climate change is threatening the health of their family not very much	19
Think climate change is threatening the health of their family not at all	9
Not asked – Do not think the climate in North America is changing	19

#### (Asked of those who think the climate in North America is changing; n=2266)

Q13. How likely do you think it is that technological or scientific advances will be able to limit **most** of the negative effects of climate change in the future, without **major** changes in American life?

	%
Very likely	12
Somewhat likely	40
Somewhat unlikely	30
Very unlikely	18
Don't know/Refused/Web Blank	*

## Q10/Q13. Combo Table Based on total respondents

	%
Very likely	10
Somewhat likely	33
Somewhat unlikely	24
Very unlikely	15
Not asked – Do not think the climate in North America is changing	19

#### IV. INVOLVEMENT IN ACTIVITIES TO LIMIT CLIMATE CHANGE

Q16. In the past year, have you personally been actively involved in efforts to limit climate change, including signing petitions, giving money, doing volunteer work, writing letters to the news media, or using social media to express your views, or have you not done this?

	%
Yes	23
No	77
Don't know/Refused/Web Blank	-

Q17. In the upcoming 2022 Congressional election, how likely are you to vote for a candidate because they favor major government action to limit climate change?

	%
Very likely	30
Somewhat likely	33
Somewhat unlikely	14
Very unlikely	22
Don't know/Refused/Web Blank	1

#### V. VIEWS ON CLIMATE CHANGE PREPAREDNESS AND POLICIES

#### (Asked of those who think climate change in North America is changing; n=2266)

Q18. In your view, which of the following groups can have the **biggest** impact when it comes to limiting climate change?

	%
The federal government	35
State governments	7
Local governments	3
Community organizations	4
Business and corporations	34
Individuals	17
Don't know/Refused/Web blank	*

## Q10/Q18. Biggest Impact Combo Table Based on total respondents

	%
The federal government	28
State governments	6
Local governments	3
Community organizations	3
Business and corporations	27
Individuals	14
Don't know/Refused/Web blank	*
Not asked – Do not think the climate in North America is changing	19

#### (Asked of those who think climate change in North America is changing; n=2266)

Q18. In your view, which of the following groups can have the **biggest** impact when it comes to limiting climate change?

## (Asked of those who think the climate in North America is changing and answered Q18; n=2255)

Q18a. And which group can have the **second** biggest impact when it comes to limiting climate change?

## Q18/Q18a. Two Biggest Impacts Combo Table Base on those who believe the climate in North America is changing; n=2266

Combined first and second choices	%
The federal government	60
State governments	30
Local governments	11
Community organizations	11
Business and corporations	58
Individuals	29
Don't know/Refused/Web blank	*

## Q10/Q18/Q18a. Two Biggest Impact Combo Table Based on total respondents

Combined first and second choices	%
The federal government	48
State governments	24
Local governments	9
Community organizations	9
Business and corporations	47
Individuals	24
Don't know/Refused/Web blank	*
Not asked – Do not think the climate in North America is changing	19

#### (Half sample A; n=1341)

Q19. Now thinking about weather disasters and extreme weather events. How prepared do you think the United States is to deal with weather disasters and extreme weather events?

	%
Very prepared	10
Somewhat prepared	42
Not too prepared	34
Not at all prepared	14
Don't know/Refused/Web Blank	*

#### (Half sample A; n=1341)

Q20. How prepared do you think your state is to deal with weather disasters and extreme weather events that may occur in your local community?

	%
Very prepared	13
Somewhat prepared	48
Not too prepared	27
Not at all prepared	12
Don't know/Refused/Web Blank	*

(Half sample B; n=1305)
Q21. How would you rate the job (INSERT ITEM) (has/have) done to address climate change?

#### Your mayor or local political leader a.

	%
Excellent	5
Good	22
Only fair	42
Poor	29
Don't know/Refused/Web Blank	2

#### **Business leaders** b.

	%
Excellent	2
Good	17
Only fair	45
Poor	34
Don't know/Refused/Web Blank	2

#### President Biden c.

	%
Excellent	8
Good	25
Only fair	31
Poor	35
Don't know/Refused/Web Blank	1

#### d. Democratic lawmakers

	%
Excellent	6
Good	25
Only fair	38
Poor	30
Don't know/Refused/Web Blank	1

### e. Republican lawmakers

	%
Excellent	4
Good	15
Only fair	30
Poor	49
Don't know/Refused/Web Blank	2

### f. Your state's governor

	%
Excellent	7
Good	25
Only fair	37
Poor	30
Don't know/Refused/Web Blank	1

Q22. Some people think (the government is trying to do too much that should be left to individuals and businesses when it comes to limiting climate change). Others think that (the government should do more to limit climate change). Which comes closer to your own view?

	%
The government is trying to do too much that should be left to individuals and	
businesses when it comes to limiting climate change	35
The government should do more to limit climate change	65
Don't know/Refused/Web Blank	*

#### (Half sample A; n=1341)

Q23. Do you support or oppose spending increases by your state government to better prepare your state for future weather disasters or extreme weather events, even if it requires you to pay higher taxes?

	%
Support	57
Oppose	42
Don't know/Refused/Web Blank	1

Q24. Do you support or oppose more state and federal regulation to make the electricity grid in your area more resistant to extreme weather, even if it raises your electricity prices?

	%
Support	60
Oppose	39
Don't know/Refused/Web Blank	1

Q25a. Recently, gasoline prices in the United States have been rising. Have these rising gasoline prices been a serious problem for your household, or not?

	%
Yes	58
No	42
Don't know/Refused/Web Blank	-

Q25b. Even though it might hurt U.S. efforts to limit climate change, do you think the federal government should allow oil producers to drill for more oil in the U.S. to try to help lower gasoline prices in the future , or not?

	%
Yes	62
No	37
Don't know/Refused/Web Blank	1

Q26. Several proposals have been made to try to limit climate change in the future. Please tell me if you support or oppose each of the following proposals, keeping in mind that they may result in higher taxes or prices for you. Do you support or oppose (INSERT ITEM)?

b. Local bans on using natural gas, which often powers gas stoves and heat pumps, in newly constructed buildings and instead requiring electric stoves and power

	%
Support	39
Oppose	61
Don't know/Refused/Web Blank	*

c. The federal government setting stricter fuel efficiency standards for cars and trucks

	%
Support	67
Oppose	32
Don't know/Refused/Web Blank	1

d. The federal government requiring the reduction of carbon emissions from power plants

	%
Support	78
Oppose	21
Don't know/Refused/Web Blank	1

e. Taxing the use of carbon-based fuels such as coal, gasoline and oil, and natural gas to encourage a switch to renewable, cleaner energy

	%
Support	51
Oppose	48
Don't know/Refused/Web Blank	1

Q26e. Taxing the use of carbon-based fuels such as coal, gasoline and oil, and natural gas to encourage a switch to renewable, cleaner energy

(Asked of those who support taxing the use of carbon based fuels such as coal, gasoline and oil, and natural gas to encourage a switch to renewable energy; n=1497)

Q26f. Would you still support this if it substantially increased the prices you would have to pay for energy like gasoline, heating, or cooling, or would you now oppose this proposal?

## **Q26e/Q26f. Summary Table** Based on total respondents

	%
Still support this even if it substantially increased the prices you would have to pay	39
Oppose in general or if it substantially increased the prices you would have to pay	61
Oppose in general	48
Now oppose if it substantially increased the prices you would have to pay	13
Don't know/Refused/Web Blank	1

#### VI. DEMOGRAPHICS

#### AGE OF RESPONDENT Based on total respondents

Age (Generation)	%
18-25 (Gen Z)	10
26-41 (Millennial)	30
42-57 (Gen X)	24
58-76 (Baby Boomer)	29
77+ (Silent Generation)	7

## RACE/ETHNICITY OF RESPONDENT Based on total respondents

Are you, yourself, of Latino or Hispanic origin or descent, such as Mexican, Puerto Rican, Cuban, or some other Latin American background?

What is your race? Are you white, black or African American, Asian, American Indian or Alaska Native, or Native Hawaiian or other Pacific Islander?

## (Ask those who identify as both Hispanic and American Indian/Alaskan Native) With which do you identify more?

	%
Hispanic	17
Non-Hispanic White	63
Non-Hispanic Black	12
Non-Hispanic Asian	4
American Indian/Alaska Native	3
Non-Hispanic Native Hawaiian/Pacific	*
Islander	
Non-Hispanic else	1

#### D2. What is the last grade or class that you completed in school?

	%
Less than high school grad	9
Less than high school (Grades 1-8 or no formal schooling)	2
High school incomplete (Grades 9-11 or Grade 12 with no diploma)	7
High school graduate or equivalent	28
High school graduate (Grade 12 with diploma or GED certificate)	20
Vocational, business, technical, or training courses after high school that did	
not count toward an associate degree from a college, community college or	
university (e.g., training for a certificate or an apprenticeship)	8
Some college but no degree	27
Some college, no degree (includes some community college)	17
Two-year associate degree from a college or university	10
College graduate	20
Four-year college or university degree/Bachelor's degree (e.g., BS, BA, AB)	16
Some postgraduate or professional school, no postgraduate degree	4
Post-graduate or professional degree, including master's, doctorate, medical, or	
law degree (e.g., MA, MS, PhD, MD, JD)	15
Don't know/Refused/Web blank	-

## Q27. Do you have any disability that keeps you from participating fully in work, school, housework, or other activities?

	%
Yes	16
No	84
Don't Know/Refused/Web Blank	-

#### D5. Is the home where you are currently living owned or rented?

	%
Owned	71
Rented	29
Don't Know/Refused/Web Blank	*

## Q28. Do you **currently** have any type of homeowners' or renters' insurance that would cover losses from weather disasters or extreme weather events like wildfires or floods, or not?

	%
Yes	62
No	38
Don't Know/Refused/Web Blank	*

D6. Are you registered to vote at your present address, or not?"

	%
Yes	85
No	15
Don't Know/Refused/Web Blank	*

PARTY. In politics today, do you consider yourself a Republican, Democrat, an independent, or what?

	%
Republican	29
Democrat	29
Independent	24
Other	6
None	12
Don't Know/Refused/Web Blank	*

PARTY. In politics today, do you consider yourself a Republican, Democrat, an independent, or what?

(Asked of those who consider themselves independent, other party, none, don't know or refused to say; n=1194)

PARTYLEAN. Do you lean more towards the Republican Party or the Democratic Party?

## Party/Partylean Combo Table Based on total respondents

	%
Republican/Republican leaners	36
Democrat/Democratic leaners	42
Independent/Do not lean	22
Other party (Vol.)	*
Don't know/Refused/Web blank	*

### D10/D10a/D10b Combo Table Based on total respondents

	%
Less than \$30,000 (NET)	30
Under \$15,000	13
\$15,000 to under \$20,000	6
\$20,000 to under \$25,000	5
\$25,000 to under \$30,000	6
Less than \$30,000 unspecified	*
\$30,000 but less than \$100,000 (NET)	45
\$30,000 to under \$35,000	6
\$35,000 to under \$50,000	11
\$50,000 to under \$75,000	16
\$75,000 to under \$100,000	12
\$30,000 but less than \$100,000 unspecified	*
\$100,000 or over (NET)	25
\$100,000 to under \$150,000	12
\$150,000 to under \$200,000	6
\$200,000 to under \$250,000	2
\$250,000 or more	3
\$100,000 or over unspecified	*
Don't know/Refused/Web blank	*

### RSEX. Are you male or female?

	%
Male	47
Female	51
Other	2
Don't Know/Refused/Web Blank	*

## D11. Which of the following do you consider yourself to be? You can select as many as apply.

	%
Heterosexual or Straight	89
Gay or Lesbian	3
Bisexual	4
Transgender	1
Queer	2
Gender non-conforming	1
Non-binary	1
Or a different identity	1
Don't know/Refused/	
Web blank	2

### LGBTQ Identity Based on total respondents

	%
LGBTQ	10
Cis and Straight	88
Don't know/Refused/Web blank	2