# Methodology

## The American Trends Panel survey methodology

The American Trends Panel (ATP), created by Pew Research Center, is a nationally representative panel of randomly selected U.S. adults. Panelists participate via self-administered web surveys. Panelists who do not have internet access at home are provided with a tablet and wireless internet connection. Interviews are conducted in both English and Spanish. The panel is being managed by Ipsos.

Data in this report is drawn from the panel wave conducted July 27 to Aug. 2, 2020. A total of 11,001 panelists responded out of 14,407 who were sampled, for a response rate of 76%. This does not include 10 panelists who were removed from the data due to extremely high rates of refusal or straightlining. The cumulative response rate accounting for nonresponse to the recruitment surveys and attrition is 4.2%. The break-off rate among panelists who logged on to the survey and completed at least one item is 1.3%. The margin of sampling error for the full sample of 11,001 respondents is plus or minus 1.5 percentage points.

### American Trends Panel recruitment surveys

| Recruitment dates | Mode | Invited | Joined | Active panelists remaining |
|---|---|---|---|---|
| Jan. 23 to March 16, 2014 | Landline/cell RDD | 9,809 | 5,338 | 2,303 |
| Aug. 27 to Oct. 4, 2015 | Landline/cell RDD | 6,004 | 2,976 | 1,335 |
| April 25 to June 4, 2017 | Landline/cell RDD | 3,905 | 1,628 | 684 |
| Aug. 8 to Oct. 31, 2018 | ABS/web | 9,396 | 8,778 | 6.403 |
| Aug. 19 to Nov. 30, 2019 | ABS/web | 5,900 | 4,720 | 4.681 |
| **Total** | | **35,014** | **23,440** | **15,406** |

Note: Approximately once per year, panelists who have not participated in multiple consecutive waves or who did not complete an annual profiling survey are removed from the panel. Panelists also become inactive if they ask to be removed from the panel.

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The ATP was created in 2014, with the first cohort of panelists invited to join the panel at the end of a large, national, landline and cellphone random-digit-dial survey that was conducted in both English and Spanish. Two additional recruitments were conducted using the same method in 2015 and 2017, respectively. Across these three surveys, a total of 19,718 adults were invited to join the ATP, of which 9,942 agreed to participate.

In August 2018, the ATP switched from telephone to address-based recruitment. Invitations were sent to a random, address-based sample of households selected from the U.S. Postal Service's Delivery Sequence File. In each household, the adult with the next birthday was asked to go online

to complete a survey, at the end of which they were invited to join the panel. For a random half-sample of invitations, households without internet access were instructed to return a postcard. These households were contacted by telephone and sent a tablet if they agreed to participate. A total of 9,396 were invited to join the panel, and 8,778 agreed to join the panel and completed an initial profile survey. The same recruitment procedure was carried out on August 19, 2019, from which a total of 5,900 were invited to join the panel and 4,720 agreed to join the panel and completed an initial profile survey. Of the 23,440 individuals who have ever joined the ATP, 15,406 remained active panelists and continued to receive survey invitations at the time this survey was conducted.

The U.S. Postal Service's Delivery Sequence File has been estimated to cover as much as 98% of the population, although some studies suggest that the coverage could be in the low 90% range.[1] The American Trends Panel never uses breakout routers or chains that direct respondents to additional surveys.

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[1] AAPOR Task Force on Address-based Sampling. 2016. "AAPOR Report: Address-based Sampling."

## Weighting

The ATP data was weighted in a multistep process that begins with a base weight incorporating the respondents' original selection probability. The next step in the weighting uses an iterative technique that aligns the sample to population benchmarks on the dimensions listed in the accompanying table.

Sampling errors and test of statistical significance take into account the effect of weighting.

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

## Weighting dimensions

| Variable | Benchmark source |
|---|---|
| Gender | 2018 American Community Survey |
| Age | |
| Education | |
| Race/Hispanic origin | |
| Born inside vs. outside the U.S. among Asians | |
| Country of birth among Hispanics | |
| Years lived in the United States | |
| Home internet access | |
| Region x Metropolitan status | 2019 CPS March Supplement |
| Volunteerism | 2017 CPS Volunteering & Civic Life Supplement |
| Voter registration | 2018 CPS Voting and Registration Supplement |
| Party affiliation | Average of the three most recent Pew Research Center telephone surveys. |

Note: Estimates from the ACS are based on non-institutionalized adults. Voter registration is calculated using procedures from Hur, Achen (2013) and rescaled to include the total U.S. adult population.

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The following table shows the unweighted sample sizes and the error attributable to sampling that would be expected at the 95% level of confidence for different groups in the survey:

| Group | Unweighted sample size | Plus or minus … |
|---|---|---|
| Total sample | 11,001 | 1.5 percentage points |

Sample sizes and sampling errors for other subgroups are available upon request.

### A note about the Asian American sample

This survey includes a total sample size of 301 Asian Americans. The sample includes English-speaking Asian Americans only and, therefore, may not be representative of the overall Asian American population (74% of our weighted Asian American sample was born in another country, compared with 77% of the Asian American adult population overall). Despite this limitation, it is important to report the views of Asian Americans on the topics in this study. As always, Asian Americans' responses are incorporated into the general population figures throughout this report. Because of the relatively small sample size and a reduction in precision due to weighting, we are not able to analyze Asian American respondents by demographic categories, such as gender, age or education.

## Defining income tiers

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

Based on these adjustments, among respondents who provided their income and household size, 31% are lower income, 43% are middle income and 20% fall into the upper-income tier.

For more information about how the income tiers were determined, please see here.

# Categorization of COVID-19 county health impact

This report uses the number and timing of deaths attributed to COVID-19 in each respondent's county as a measure of the scale of the health impact of the outbreak for each individual in the survey. These numbers are then adjusted for differences in county population (per 100,000 residents). Counties are categorized as having a higher or lower rate of COVID-19 deaths. In addition to the number of deaths in the county, counties were classified according to when the majority of deaths occurred (either in the past eight weeks or prior to the past eight weeks).

Counties are classified as "higher" if they had more than 25 deaths per 100,000 people as of July 26, 2020. "Lower" counties had 25 or fewer deaths per 100,000 people. Counties that have recorded fewer than five deaths overall since the beginning of the pandemic are classified as "Lower/prior to the past 8 weeks."

Data for deaths attributed to COVID-19 by county are taken from the 2019 Novel Coronavirus COVID-19 (2019-nCoV) Data Repository maintained at John Hopkins University (downloaded on Aug. 3, 2020). These data are supplemented with data from the New York City Health Department (also downloaded on Aug. 3) to break out the individual boroughs within New York City, which are not reported separately in the Johns Hopkins data. Similarly, data from New York Times coronavirus reporting (also downloaded Aug. 3) is used to separate out Rhode Island counties that are not separately reported by Johns Hopkins.
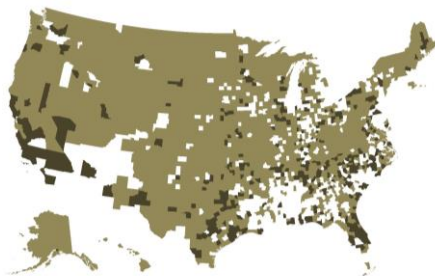
## Categorization of COVID-19 death rate by county

*Counties where COVID-19 has had a _____ impact on county health (as of July 26)*

**Counties with 25 or fewer deaths per 100,000 residents**

Most 8+ weeks ago    Most within the last 8 weeks

**Counties with more than 25 deaths per 100,000 residents**

Most 8+ weeks ago    Most within the last 8 weeks



Note: COVID-19 county health impact based on number of deaths per 100,000 people reported in each county as of July 26, 2020. Counties with fewer than five deaths total are included in the "25 or fewer deaths per 100,000/Most 8+ weeks ago" category.
Source: John Hopkins University 2019 Novel Coronavirus COVID-19 (2019-nCoV) Data Repository.

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