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THE COVID STATES PROJECT:
A 50-STATE COVID-19 SURVEY
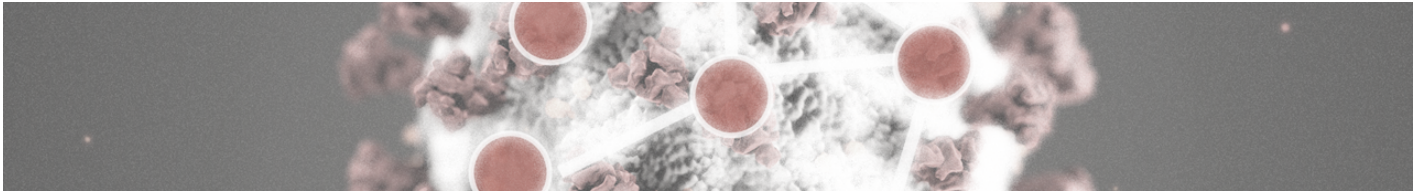# REPORT #37: GUN PURCHASES
DURING THE COVID-19 PANDEMIC

USA, February 2021

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Report of February 5, 2021, v.1

The COVID States Project

From: The COVID-19 Consortium for Understanding the Public's Policy Preferences Across States

A joint project of:
Northeastern University, Harvard University, Rutgers University, and Northwestern University

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COVER MEMO

Summary Memo — February 5, 2020

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and Ata Uslu, Northeastern University

From April 2020 through January 2021, we conducted multiple waves of a large, 50-state survey, some results of which are presented here. You can find previous reports online at covidstates.org.

Note on methods:

Between December 16, 2020 and January 11, 2021, we surveyed 25,640 individuals across all 50 states plus the District of Columbia. The survey was conducted by PureSpectrum via an online, nonprobability sample, with state-level representative quotas for race/ethnicity, age, and gender (for methodological details on the other waves, see covidstates.org). In addition to balancing on these dimensions, we reweighted our data using demographic characteristics to match the U.S. population with respect to race/ethnicity, age, gender, education, and living in urban, suburban, or rural areas. This was the latest in a series of surveys we have been conducting since April 2020, examining attitudes and behaviors regarding COVID-19 in the United States.

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Gun purchases during the COVID-19 pandemic

Gun purchases in the United States have increased dramatically since the start of the COVID-19 pandemic. Based on FBI data, the National Shooting Sports Foundation reported 21 million background checks for firearms sales in 2020, up from 13.2 million the previous year and surpassing the previous record of 15.7 million in 2016. The biggest spikes occurred in March and June, as shown in Figure 1. While March is typically a month of high gun buying, this year saw a much sharper surge. June's spike in gun purchases is even more abnormal compared to previous years when gun purchases are typically close to their low point.
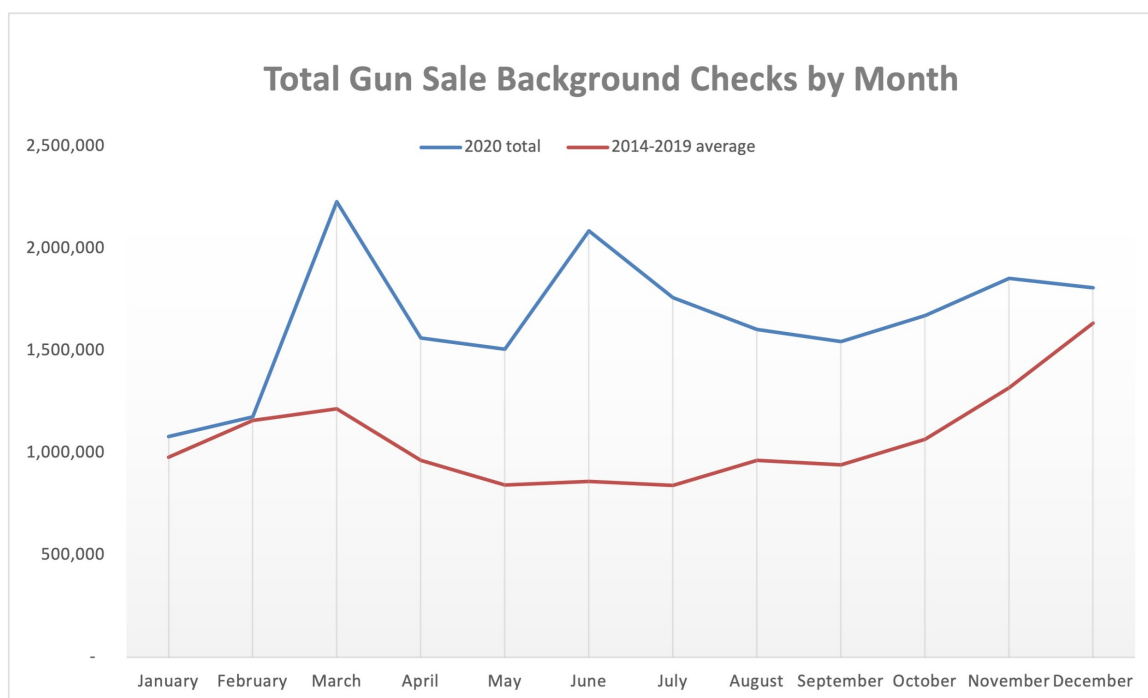

Figure 1. *Background checks for gun sales based on the FBI's National Instant Criminal Background Check System (NCIS). Totals are drawn from the "handgun," "long gun," and "other" categories. NCIS figures serve as a useful indicator of gun sale trends, though not an exact count of how many took place (a 2017 academic study found that 22% of gun-owners obtained their most recent gun without a background check).*

Our survey helps in understanding this increase. We find that gun purchases were particularly likely among attendees of protests against racism or police violence. These protests reached massive proportions during the first week of June, the second-highest week ever for background checks at the time. However, it is doubtful that protesters themselves—about 5% of the adult population by our estimates—can fully account for this increase.

Others may have purchased guns in reaction to this widespread unrest, as well as the sweeping government-mandated closures that coincided with the first peak in March. First-time gun purchases were more likely among African Americans, while existing gun owners were significantly more likely to buy guns if they reported not wearing masks or if they had contracted COVID-19. The most common reasons for purchase, by far, were protection against crime (70%) and target shooting or hunting (47%), though over a quarter (32%) said they were reacting to lockdowns, fears of the government, COVID-19, or the 2020 election.

Protesters Bought Guns at a High Rate

People who attended protests or rallies in 2020 were substantially more likely to purchase a gun than those who did not (see Figure 2). Respondents who attended racism or police violence protests were 1.6 times more likely to purchase guns than those who did not. Respondents who attended Trump rallies and protests over lockdowns and the election were 3.9 times more likely to purchase guns than those who did not. Both types of protest/rally attendees remained substantially more likely to purchase guns after accounting for differences in ideology, party, location, and other relevant factors.[1] Notably, attendees at racism or police violence protests were more likely than non-protesters to buy guns only if they owned a gun already; otherwise, rates were statistically indistinguishable after accounting for other differences.

Gun Purchases in 2020 Among Protest and Rally Attendees

Did you or a member of your household buy a gun in 2020?

National Sample, N=8,948. 95% margins of error ±4, ±8, and ±0.7 percentage points respectively. Time period: 12/16/20-1/10/21

Source: The COVID-19 Consortium for Understanding the Public's Policy Preferences Across States (A joint project of: Northeastern University, Harvard University, Rutgers University, and Northwestern University)
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Figure 2.

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[1] Results were confirmed with a logistic regression that accounts for respondents' gender, race, age, income, education, party, support for Trump, protest attendance, COVID-19 infection status, adherence to COVID-19 prevention guidelines, stress, region, county population density, and county COVID-19 death rate. All results in this report are statistically significant in a regression at the p<0.05 level, unless noted.

The Demographics of Gun Buying

The vast majority of gun buyers in 2020 were not first-time buyers: Our survey found that only 24% of gun buyers did not already own a firearm. Yet, when we split this set of gun buyers into those who already owned a gun and those who did not, important differences emerge. In a multivariate regression controlling for demographic, geographic, and political factors, prior gun owners who said they didn't follow mask-wearing guidelines were 1.6 times as likely to buy a gun as those who said they followed mask-wearing guidelines very closely. Among those who did *not* already own a gun, respondents with a household income over $200,000 per year were 2.1 times as likely to buy a gun as those under $15,000. Respondents who reported extreme stress were 2.9 times as likely to become a gun-owner as those who reported no stress and respondents who identified as African American were 1.7 times as likely as those who identified as white (though the majority of gun-buyers overall—66%—identified as white). Younger Americans and Republicans were both more likely to purchase guns than older Americans and Democrats, regardless of prior gun ownership, as shown in Figure 3.

How Likely Were Different Demographic Groups to Buy Guns?

Did you or a member of your household buy a gun in 2020?

prior gun ownership

owned a gun before 2020 22%

did not own a gun before 2020 3%

party

Republican 14%

Independent 8%

Democrat 6%

age

18-24 11%

25-44 10%

45-64 8%

65+ 5%

National Sample, N=8,948. Margin of error ±2 percentage points. Time period: 12/16/20-1/10/21

Source: The COVID-19 Consortium for Understanding the Public's Policy Preferences Across States (A joint project of: Northeastern University, Harvard University, Rutgers University, and Northwestern University)
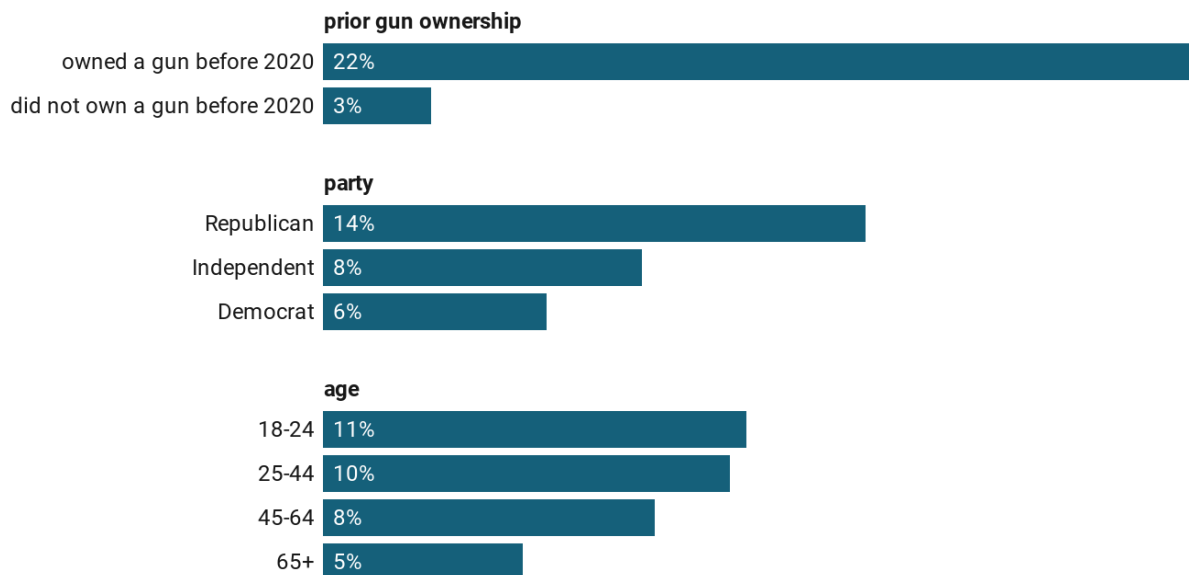• Created with Datawrapper

Figure 3.

Gun Buying Among People with COVID-19

One of our most surprising findings is that respondents who had been ill with COVID-19 at some point last year (determined by a positive test, a diagnosis by a clinician, and report of symptoms)[2] were also more likely to buy a gun (see Figure 4). However, this was only the case for households that already owned a gun. This result holds even when accounting for politics, public health behavior, and geography—including the local death rate from COVID-19. The relationship also appears in both the October and December/January survey waves. Importantly, we cannot tell from our survey data whether respondents became infected before, during, or after their gun purchase; it is possible that some underlying feature we are not measuring is associated with both risk of COVID-19 infection, and with gun buying.

Gun Purchases in 2020 by COVID-19 Status

Did you or a member of your household buy a gun in 2020?

Did not already own a gun

Did not have COVID-19	3%
Had COVID-19	2%

Already owned a gun

Did not have COVID-19	21%
Had COVID-19	36%
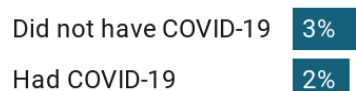
Note: Respondents with COVID-19 may have become infected before or after their gun purchase. National Sample, N= 8,948 (6,022 who did not own a gun already and 2,926 who did). Margins of error are ±0.5, ±2, ±2, and ±9 percentage points respectively. Time period: 12/16/20-1/10/21

Source: The COVID-19 Consortium for Understanding the Public's Policy Preferences Across States (A joint project of: Northeastern University, Harvard University, Rutgers University, and Northwestern University) • Created with Datawrapper

Figure 4.

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[2] To avoid false positives, we required respondents to say "yes" to all three questions in order to be counted as having contracted COVID-19. However, the results remain consistent even when only diagnosis or testing is considered.

Reasons for Gun-Buying

Our survey allowed respondents to choose up to eight reasons for buying a gun, the results of which are presented in Figure 5.

1. Over two-thirds of gun buyers (70%) said they bought a gun due to concerns about **crime**, which is similar to the rate reported by Gallup in 2013 and Pew in 2017.[3] Crime was a significantly more common motivation for first-time gun buyers (76%) and less common for people living in rural areas (59%).[4]

2. About a third of gun buyers (35%) listed **target shooting** as a motivation, with higher rates reported by Republicans (42%), rural residents (42%), college educated respondents (41%), and people from the Northeast (51%).

3. A quarter of gun buyers (25%) cited **hunting**, with higher rates reported by men (31%), people under the age of 50 (30%), and people who approved of then-President Trump's handling of the pandemic (31%). African Americans were less likely to cite hunting (8%), as were first-time gun buyers (16%), and urban dwellers (19%).

4. A sixth of gun buyers (16%) said they bought guns in response to COVID-19 restrictions—i.e., **lockdowns and quarantine**. People who attended Trump rallies were much more likely to provide this reason (56%), while those diagnosed with COVID-19 were less likely (8%). Urban and suburban residents (9%) were less likely to select lockdowns as a reason than rural residents (17%).

5. 15% of gun buyers included **protection against the government** among their reasons, with greater likelihood for protesters against racism or police violence (27%) and a much greater likelihood for people who reported not adhering to mask-wearing guidelines (60%).
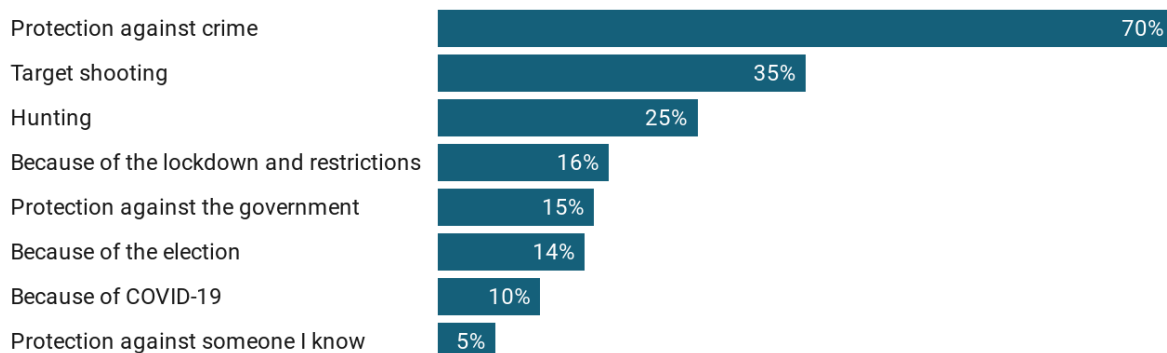
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[3] Gallup and Pew each asked this question differently, which could account for any changes over time.

[4] The percentage of people supplying each reason comes directly from counting our weighted survey responses. For each reason, the breakdown of which groups are more likely to provide that reason comes from a multivariate regression whose variables are listed in the first footnote.

6. About 1 in 7 gun buyers (14%) said they did so because of the **election**. Once again, protesters against racism or police violence were more likely to give this reason (36%), as well as first-time gun buyers (19%). Higher-income households were also more likely to list the election as a reason (21% for earning over $75,000 per year, versus 10% for those earning less).

7. A tenth of gun buyers (10%) listed **COVID-19** as a reason for buying guns, with higher rates reported by first-time buyers (18%) and protest and rally attendees, regardless of protest/rally cause (30%).

8. Finally, while only 5% of gun buyers said they did so to **protect themselves against someone they knew personally**, this reason was slightly more common for those in households earning under $75,000 per year (7%), and for those who reported higher stress levels—i.e., an 8, 9 or 10 on a 10-point scale (8%).

Reasons for Buying a Gun in 2020

What were the reasons you (or a member of your household) decided to get a gun in 2020? (Please select all that apply)

Reason	Percentage
Protection against crime	70%
Target shooting	35%
Hunting	25%
Because of the lockdown and restrictions	16%
Protection against the government	15%
Because of the election	14%
Because of COVID-19	10%
Protection against someone I know	5%

National sample of individuals who reported buying a gun in 2020, N=789. Margin of error at most ±4.6 percentage points (±2.2 for the last bar). Time period: 12/16/20-1/10/21

Source: The COVID-19 Consortium for Understanding the Public's Policy Preferences Across States (A joint project of: Northeastern University, Harvard University, Rutgers University, and Northwestern University)
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Figure 5.