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THE COVID STATES PROJECT: A 50-STATE COVID-19 SURVEY REPORT #31: UPDATE ON THE TRAJECTORY OF HEALTH-RELATED BEHAVIORS

USA, January 2021

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Report of January 15, 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 — January 15, 2020

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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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Update on the trajectory of health-related behaviors

Since April 2020, the COVID States Project has been surveying respondents regarding social distancing behaviors and adherence to health recommendations more generally. Our <u>November report</u>, looking at the data from April to November, with a partial exception of mask wearing, found a steady relaxation of these behaviors over time. In this report, we update our November results, finding that this trend has partially reversed, perhaps due to the surge of COVID-19 cases in the last two months. Mask wearing reached its all-time high in our December/January survey, and social distancing behaviors have substantially increased since October (though still far from April levels).

In the last 24 hours, did you or any members of your household do any of the following activities outside of your home?



National Sample: N1 = 19,489 (04/16/20 · 04/30/20), N2 = 20,305 (05/02/20 · 05/15/20), N3 = 18,103 (05/16/20 · 06/01/20), N4 = 22,470 (06/12/20 · 06/28/20), N5 = 19,058 (07/10/20 · 07/27/20), N6 = 21,196 (08/07/20 · 08/26/20), N7 = 20,315 (09/04/20 · 09/28/20), N8 = 18,002 (10/02/20 · 10/23/20), N9 = 12,540 (10/23/20 · 11/04/20), N10 = 24,017 (11/04/20 · 01/12/20), N11 = 25,640 (12/16/20 · 01/11/21)

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) www.covidstates.org • Created with Datawrapper

Figure 1.

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In Figure 1, we examine social distancing behavior trends from April 2020 to January 2021. We find that social distancing behaviors substantially relaxed between April and late June; that is, behaviors that would result in increased proximity with others – such as going to a restaurant or bar, seeing a friend, or going to the gym – increased. Moreover, these behaviors peaked between late August and late October, and have since declined. For example, "visiting a friend" peaked at 18% over the summer and has fallen to 15% as of early January. "Going to work" peaked in late October at 40% and has fallen to 32% as of early January (possibly due in part to holiday vacations). Inter-household indoor proximity in the 24 hours preceding survey response declined from a peak of 45% of respondents in late October, to 40% in early January (which is still far above the lowest point in our survey – 25% in April).

In the last 24 hours, have you been in a room (or another enclosed space) with people who were not members of your household?



National Sample: N1 = 19,489 (04/16/20 - 04/30/20), N2 = 20,305 (05/02/20 - 05/15/20), N3 = 18,103 (05/16/20 - 06/01/20), N4 = 22,470 (06/12/20 - 06/28/20), N5 = 19,058 (07/10/20 - 07/27/20), N6 = 21,196 (08/07/20 - 08/26/20), N7 = 20,315 (09/04/20 - 09/28/20), N8 = 18,002 (10/02/20 - 10/23/20), N9 = 12,540 (10/23/20 - 11/04/20), N10 = 24,017 (11/04/20 - 01/12/20), N11 = 25,640 (12/16/20 - 01/11/21)

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Figure 2.

We further explore reports of indoor proximity to others because this behavior is likely the major driver of transmission events. Group gatherings are particularly powerful drivers of spread because they create conditions for superspreading events, where one contagious individual infects many others. For respondents who indicated they had been in a room with non-household members, we asked a follow up question about how many individuals not from their household were in that room. Focusing on larger groups, we separate into three categories of responses: 5-10, 11-50, and over 50. We note that the epidemiological risk of spread goes up quickly with group size, because the number of potential dyadic pathways for spreading increases with the square of the group size; thus, while we observe groups of size 5-10 much more often in our data, the groups of more than 50 might account for greater risk overall. Indoor proximity between groups of 5 or more people peaked in late October at 45%, just as the fall surge of cases was starting (see Figure 2). All three categories have declined since: from 11.4% to 9.1% for groups of size 5-10, from 4.8% to 3.4% for groups of size 11-50, and from 2% to 1.6% for groups of size 50 or more. Thus, the good news is that, according to this crucial metric of social distancing, there has been substantial improvement since late October. The bad news is that, for all group sizes considered, reports of indoor proximity are still roughly *double* what they were in late April.

In the last week, how closely did you personally follow the health recommendations listed below?



Percentage of respondents answering "very closely" across 11 survey waves.

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) www.covidstates.org
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Figure 3.

National Sample: N1 = 19,489 (04/16/20 - 04/30/20), N2 = 20,305 (05/02/20 - 05/15/20), N3 = 18,103 (05/16/20 - 06/01/20), N4 = 22,470 (06/12/20 - 06/28/20), N5 = 19,058 (07/10/20 - 07/27/20), N6 = 21,196 (08/07/20 - 08/26/20), N7 = 20,315 (09/04/20 - 09/28/20), N8 = 18,002 (10/02/20 - 10/23/20), N9 = 12,540 (10/23/20 - 11/04/20), N10 = 24,017 (11/04/20 - 01/12/20), N11 = 25,640 (12/16/20 - 01/11/21)

In Figure 3, we examine adherence to recommended guidelines across 4 sets of behaviors: avoiding contact with other people, avoiding public or crowded places, frequently washing hands, and wearing a face mask when outside of the household. In our November report, for the first three items, we found a general decline in adherence between April and October. Face mask wearing, on the other hand, steadily increased from April to late August, and essentially plateaued between August and late October. Since November, there has been substantial and steady improvement in avoiding contact with other people, avoiding public or crowded places, and face mask wearing (although for the first two, adherence is still well below April's levels). All three of these items have also improved by 4-5 percentage points since October. In contrast, reports of handwashing have not increased, which likely reflects the recent communication to the public (e.g., by the CDC) that the virus predominantly spreads through respiratory droplets, and less commonly through touching surfaces.

The overall decline in proximity noted here raises the question of how much Christmas and New Year's celebrations will drive a surge of cases in January. The general trends of improvement suggest that this pattern might not be as bad as feared. However, it is also likely that the survey does not capture the patterns of proximity during the holidays that are most epidemiologically worrisome: large volumes of incidental proximity of travelers, and extended, intimate proximity with friends and family. In our survey that concluded in January, we did ask respondents whether they had attended celebrations in December (or were planning to, for earlier respondents). Thirty percent responded affirmatively. Unfortunately, we do not have a pre-COVID baseline to compare to, although we suspect that it would be substantially higher.

Improvements seem fairly uniform across states, e.g., it is not clear that there have been bigger improvements in states that have been harder hit in the last several months. For more details, state data can be found in Tables 1 and 2 of Appendix A.

Appendix A: State Tables

Table 1. In the last 24 hours, did you or any member of your household do any ofthe following activities outside of your home? December/January Wave

Margins of error in parentheses

	Go to work	Go to the gym	Go visit a friend	Go to a cafe, bar, or restaurant	Go to a doctor or visit a hospital	Go to church or another place of worship	Take mass transit (e.g. subway, bus, or train)
National	32 (1)	6 (0)	15 (1)	12 (1)	10 (0)	5 (0)	3 (0)
AK	37 (6)	7 (3)	17 (5)	7 (3)	8 (3)	4 (2)	1 (1)
AL	28 (5)	4 (2)	14 (4)	14 (4)	9 (3)	7 (3)	1 (1)
AR	36 (6)	5 (3)	22 (5)	13 (4)	11 (4)	9 (3)	0 (0)
AZ	31 (5)	7 (3)	17 (4)	16 (4)	13 (4)	5 (2)	5 (2)
CA	32 (5)	3 (2)	12 (3)	8 (3)	8 (3)	4 (2)	4 (2)
СО	26 (5)	8 (3)	16 (4)	11 (3)	10 (3)	5 (2)	1 (1)
СТ	31 (5)	5 (2)	13 (3)	10 (3)	8 (3)	4 (2)	3 (2)
DC	25 (5)	6 (3)	9 (3)	9 (3)	11 (3)	5 (2)	8 (3)
DE	32 (5)	4 (2)	9 (3)	7 (3)	10 (3)	4 (2)	3 (2)
FL	28 (4)	7 (2)	14 (3)	15 (3)	9 (3)	5 (2)	1 (1)
GA	34 (5)	6 (3)	15 (4)	15 (4)	8 (3)	9 (3)	4 (2)
н	41 (5)	6 (2)	14 (4)	13 (4)	12 (3)	4 (2)	4 (2)

IA	35 (5)	6 (3)	15 (4)	11 (3)	9 (3)	4 (2)	1 (1)
ID	36 (5)	5 (2)	16 (4)	14 (3)	8 (3)	7 (2)	1 (1)
IL	31 (5)	7 (3)	14 (4)	9 (3)	8 (3)	3 (2)	4 (2)
IN	36 (5)	5 (2)	17 (4)	19 (4)	12 (3)	5 (2)	1 (1)
KS	33 (5)	6 (2)	12 (3)	15 (4)	8 (3)	8 (3)	0 (1)
KY	31 (5)	3 (2)	15 (4)	10 (3)	10 (3)	6 (2)	2 (1)
LA	29 (5)	7 (3)	17 (4)	10 (3)	11 (3)	7 (3)	1 (1)
MA	30 (4)	7 (3)	16 (4)	11 (3)	10 (3)	4 (2)	4 (2)
MD	32 (5)	8 (3)	12 (3)	11 (3)	7 (3)	4 (2)	4 (2)
ME	32 (5)	5 (2)	13 (3)	7 (2)	11 (3)	2 (1)	2 (1)
MI	28 (4)	5 (2)	13 (3)	9 (3)	8 (3)	3 (2)	1 (1)
MN	27 (4)	5 (2)	17 (4)	8 (3)	6 (2)	3 (2)	2 (1)
МО	32 (5)	6 (2)	18 (4)	16 (4)	10 (3)	5 (2)	2 (1)
MS	31 (6)	4 (2)	15 (4)	18 (5)	12 (4)	9 (3)	1 (1)
MT	40 (5)	6 (2)	17 (4)	17 (4)	10 (3)	7 (3)	0 (1)
NC	30 (4)	6 (2)	14 (3)	14 (3)	9 (3)	6 (2)	2 (1)
ND	42 (5)	8 (3)	15 (4)	19 (4)	12 (3)	5 (2)	0 (1)
NE	37 (5)	6 (2)	17 (4)	18 (4)	8 (3)	5 (2)	2 (1)
NH	31 (4)	7 (2)	11 (3)	9 (3)	8 (3)	3 (1)	1 (1)
NJ	31 (5)	7 (3)	13 (3)	9 (3)	8 (3)	5 (2)	4 (2)
NM	33 (6)	6 (3)	16 (5)	6 (3)	9 (4)	3 (2)	2 (2)
NV	31 (5)	8 (3)	14 (4)	12 (3)	9 (3)	2 (2)	4 (2)

NY	27 (4)	7 (2)	13 (3)	9 (3)	11 (3)	4 (2)	8 (3)
ОН	33 (5)	6 (2)	16 (4)	12 (3)	9 (3)	5 (2)	3 (2)
ОК	31 (5)	4 (2)	16 (4)	17 (4)	8 (3)	5 (2)	1 (1)
OR	30 (4)	2 (1)	16 (3)	8 (3)	7 (2)	4 (2)	4 (2)
PA	30 (4)	5 (2)	11 (3)	8 (3)	9 (3)	2 (1)	4 (2)
RI	33 (5)	5 (2)	11 (3)	10 (3)	10 (3)	4 (2)	3 (2)
SC	35 (5)	7 (3)	17 (4)	17 (4)	12 (4)	11 (3)	2 (1)
SD	39 (5)	8 (3)	19 (4)	16 (4)	13 (3)	9 (3)	1 (1)
TN	29 (5)	4 (2)	16 (4)	13 (3)	12 (3)	7 (2)	2 (1)
ТХ	32 (4)	7 (2)	18 (4)	17 (4)	12 (3)	8 (3)	3 (2)
UT	36 (5)	9 (3)	21 (4)	16 (3)	10 (3)	5 (2)	4 (2)
VA	29 (5)	6 (2)	13 (4)	12 (3)	9 (3)	5 (2)	2 (2)
VT	35 (6)	4 (2)	10 (4)	7 (3)	8 (3)	4 (2)	2 (2)
WA	27 (4)	2 (1)	15 (3)	6 (2)	11 (3)	5 (2)	4 (2)
WI	30 (5)	6 (2)	14 (3)	12 (3)	7 (3)	6 (2)	1 (1)
WV	30 (5)	4 (2)	15 (4)	9 (3)	10 (3)	4 (2)	1 (1)
WY	42 (6)	6 (3)	17 (5)	18 (5)	12 (4)	8 (3)	3 (2)

Table 2. In the last week, how closely did you personally follow the healthrecommendations listed below? Percentage answering "Very closely" in ourDecember/January wave

	Avoiding contact with other people	Avoiding public or crowded places	Frequently washing hands	Wearing a face mask when outside of your home
National	52 (1)	59 (1)	72 (1)	80 (1)
AK	44 (6)	49 (6)	65 (6)	71 (5)
AL	50 (6)	54 (6)	75 (5)	81 (4)
AR	46 (6)	52 (6)	69 (5)	73 (5)
AZ	50 (5)	57 (5)	72 (5)	78 (4)
CA	58 (5)	67 (5)	75 (4)	86 (3)
со	51 (5)	59 (5)	73 (5)	83 (4)
СТ	56 (5)	63 (5)	76 (4)	85 (4)
DC	68 (5)	74 (5)	80 (4)	92 (3)
DE	52 (5)	62 (5)	71 (5)	88 (3)
FL	51 (5)	58 (5)	71 (4)	80 (4)
GA	51 (5)	56 (5)	74 (5)	72 (5)
ні	51 (5)	57 (5)	75 (5)	86 (4)
IA	44 (5)	53 (5)	68 (5)	77 (4)
ID	36 (5)	48 (5)	60 (5)	67 (5)
IL	55 (5)	63 (5)	72 (5)	82 (4)

Margins of error in parentheses

IN	46 (5)	55 (5)	71 (5)	76 (4)
KS	45 (5)	54 (5)	68 (5)	73 (4)
KY	54 (5)	61 (5)	72 (5)	82 (4)
LA	49 (5)	57 (5)	72 (5)	73 (5)
MA	58 (5)	66 (5)	72 (4)	85 (3)
MD	58 (5)	66 (5)	76 (4)	86 (3)
ME	53 (5)	59 (5)	69 (4)	81 (4)
MI	53 (5)	57 (5)	67 (5)	76 (4)
MN	48 (5)	62 (5)	68 (4)	79 (4)
МО	49 (5)	57 (5)	74 (4)	75 (4)
MS	44 (6)	52 (6)	76 (5)	77 (5)
MT	34 (5)	46 (5)	63 (5)	72 (5)
NC	51 (5)	56 (5)	72 (4)	76 (4)
ND	35 (5)	45 (5)	61 (5)	71 (5)
NE	43 (5)	51 (5)	69 (5)	76 (4)
NH	53 (5)	65 (4)	71 (4)	84 (3)
NJ	58 (5)	66 (5)	71 (5)	84 (4)
NM	57 (6)	62 (6)	75 (5)	81 (5)
NV	54 (5)	63 (5)	75 (5)	84 (4)
NY	58 (5)	66 (5)	75 (4)	86 (3)
ОН	51 (5)	56 (5)	68 (5)	77 (4)
ОК	47 (5)	52 (5)	70 (5)	70 (5)

OR	52 (5)	60 (5)	66 (4)	81 (4)
PA	56 (5)	62 (5)	72 (4)	79 (4)
RI	57 (5)	65 (5)	76 (4)	89 (3)
SC	49 (5)	57 (5)	69 (5)	77 (5)
SD	36 (5)	43 (5)	60 (5)	61 (5)
TN	50 (5)	61 (5)	72 (4)	76 (4)
ТХ	53 (5)	58 (5)	75 (4)	81 (4)
UT	43 (5)	51 (5)	68 (4)	77 (4)
VA	56 (5)	59 (5)	74 (5)	79 (4)
VT	52 (6)	61 (6)	58 (6)	81 (5)
WA	54 (5)	56 (5)	69 (4)	79 (4)
WI	50 (5)	55 (5)	66 (5)	73 (4)
WV	52 (6)	59 (5)	73 (5)	81 (4)
WY	37 (6)	43 (6)	60 (6)	64 (6)

Table 3. In the last 24 hours, have you been in a room (or another enclosed space) with people who were not members of your household? December/January Wave

	No	Yes, with 1-4 people	Yes, with 5- 10 people	Yes, with 11-50 people	Yes, with over 50 people
National	60 (1)	26 (1)	9 (0)	3 (0)	2 (0)
AK	54 (6)	33 (6)	7 (3)	5 (3)	1 (1)
AL	63 (5)	23 (5)	9 (3)	3 (2)	2 (2)
AR	59 (6)	28 (5)	9 (3)	2 (2)	2 (2)
AZ	62 (5)	22 (4)	10 (3)	4 (2)	2 (1)
CA	69 (5)	21 (4)	7 (3)	2 (2)	1 (1)
СО	58 (5)	26 (5)	11 (3)	4 (2)	1 (1)
СТ	61 (5)	25 (4)	7 (3)	4 (2)	2 (2)
DC	64 (5)	26 (5)	7 (3)	2 (2)	2 (1)
DE	64 (5)	24 (4)	9 (3)	3 (2)	1 (1)
FL	62 (5)	22 (4)	10 (3)	4 (2)	2 (1)
GA	63 (5)	22 (4)	11 (3)	2 (2)	2 (1)
HI	58 (5)	24 (5)	11 (3)	5 (2)	2 (2)
IA	56 (5)	30 (5)	9 (3)	4 (2)	2 (1)
ID	53 (5)	26 (4)	13 (3)	6 (2)	3 (2)
IL	59 (5)	28 (5)	10 (3)	2 (1)	2 (1)

Margins of error in parentheses

IN	56 (5)	27 (4)	10 (3)	5 (2)	3 (2)
KS	61 (5)	23 (4)	10 (3)	4 (2)	2 (1)
KY	64 (5)	22 (4)	10 (3)	3 (2)	1 (1)
LA	58 (5)	25 (5)	10 (3)	5 (2)	2 (2)
MA	60 (5)	29 (4)	8 (3)	2 (1)	1 (1)
MD	65 (5)	25 (4)	6 (2)	3 (2)	0 (1)
ME	55 (5)	29 (4)	9 (3)	5 (2)	2 (1)
MI	64 (5)	24 (4)	9 (3)	1 (1)	2 (1)
MN	58 (5)	29 (4)	8 (3)	4 (2)	2 (1)
МО	56 (5)	28 (4)	11 (3)	5 (2)	1 (1)
MS	56 (6)	24 (5)	12 (4)	6 (3)	1 (1)
MT	52 (5)	28 (5)	13 (3)	5 (2)	2 (1)
NC	63 (5)	26 (4)	7 (2)	3 (2)	1 (1)
ND	47 (5)	27 (5)	15 (4)	8 (3)	3 (2)
NE	52 (5)	31 (5)	11 (3)	5 (2)	1 (1)
NH	63 (4)	26 (4)	7 (2)	3 (2)	1 (1)
NJ	64 (5)	25 (4)	8 (3)	1 (1)	1 (1)
NM	63 (6)	27 (6)	7 (3)	1 (1)	2 (2)
NV	63 (5)	23 (4)	7 (3)	4 (2)	3 (2)
NY	61 (5)	27 (4)	9 (3)	2 (1)	1 (1)
ОН	61 (5)	24 (4)	9 (3)	4 (2)	2 (1)

ОК	61 (5)	27 (5)	8 (3)	3 (2)	1 (1)
OR	60 (5)	26 (4)	9 (3)	4 (2)	1 (1)
PA	59 (5)	27 (4)	9 (3)	3 (2)	2 (1)
RI	62 (5)	27 (5)	8 (3)	1 (1)	2 (1)
SC	54 (5)	27 (5)	13 (4)	4 (2)	2 (2)
SD	49 (5)	27 (5)	14 (4)	6 (2)	4 (2)
TN	63 (5)	23 (4)	9 (3)	4 (2)	2 (1)
ТХ	60 (5)	25 (4)	11 (3)	3 (2)	2 (1)
UT	53 (5)	32 (4)	10 (3)	3 (2)	1 (1)
VA	58 (5)	27 (5)	11 (3)	2 (2)	1 (1)
VT	58 (6)	30 (5)	9 (3)	3 (2)	1 (1)
WA	61 (4)	26 (4)	8 (2)	3 (2)	1 (1)
WI	55 (5)	28 (4)	10 (3)	5 (2)	2 (1)
WV	63 (5)	26 (5)	7 (3)	3 (2)	1 (1)
WY	45 (6)	26 (6)	20 (5)	7 (3)	2 (2)