ICF COVID-19 Monitor Survey of U.S. Adults

Wave 2: Mental Health and the Novel Coronavirus Pandemic in the U.S.

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Table of Contents

Background

The COVID Monitor Survey is an internally funded research project of ICF and MFour Mobile Research (MFour) to conduct at least four national surveys of 1,000 adults about their attitudes toward and experiences with the novel coronavirus (COVID-19). The questionnaire examines the impact of the coronavirus on respondents' health, employment, and lifestyles since the onset in late January 2020, and during the seven days prior to the interview, as well as their concerns, attitudes and expectations related to the pandemic. The interview was conducted by web among a national nonprobability sample of adults from a mobile panel, which is Census balanced by age, gender and race/ethnicity. The first survey was conducted between March 28 and April 2, 2020. The second survey was conducted between April 14 and April 22. We expect to complete two more surveys with much the same questionnaire in May and June 2020. This will provide monthly snapshots of American households during the period that health experts anticipate that cases and deaths from the virus will peak in the United States.

The current survey was launched on April 14, 2020 at the end of the twelfth week since the first case of COVID-19 was confirmed on January 21, 2020. On April 14, there had been more than 570,000 positive tests results for COVID-19 in the United States and more than 17,000 deaths. By April 20, near the end of the survey field period, the number of positive results had increased by more than fifty percent to almost 750,000 cases and the number of deaths had doubled to over 35,000. The findings from this survey will be released in a series of daily reports on specific topics. This fifth report will focus on the mental health issues, including smoking, drinking and substance use during COVID-19. Earlier reports have focused on health, employment, lifestyles, and mitigation efforts among other things.

Summary

Natural disasters cause deaths, injuries, illnesses, job and financial losses and other hardships on the affected populations. In addition, for the past several decades the mental health consequences of disasters have been increasingly recognized as well. The threat of death or significant loss can be a traumatic and stressful experience that can produce post-traumatic stress disorder in disaster survivors, as well as depression, generalized anxiety disorder and related psychological conditions. Although a pandemic is a different type of natural disaster than earthquakes, hurricanes, fires and floods, it also carries risks to mental as well as physical health of those exposed to it. Pre-existing mental health conditions, like underlying physical health conditions, can put individual at even greater risk to these outcomes from a disaster.

The current survey conducted at the middle of April 2020 found that a quarter (24%) of this national sample of adults reported they had a medically diagnosed depressive disorder. The rates of diagnosed depressive disorders in the survey are higher among women than men, and higher among whites. The vast majority of these diagnoses undoubtedly occurred prior to the coronavirus outbreak in the United States in late January 2020. Nonetheless, this represents a relative large segment of the US population that is at elevated risk to adverse mental health outcomes as a result of the coronavirus outbreak.

It is also important to note that the distribution of diagnosed depressive disorders may be related as much to treatment seeking behaviors as the underlying distribution of the symptoms or disease. So, it is not surprising that the survey finds a much higher proportion of the sample, 40%-50%, reported

experiencing symptoms of depression and/or anxiety in the two weeks prior to the interview. More importantly, the sample reported a substantially higher rate for each of these four symptoms in the two weeks before the survey in April 2020 than was reported little more than a year earlier in a 15-state sample for the 2018 CDC Behavioral Risk Factor Surveillance System (BRFSS).

The current survey also included measures of the numbers of bad physical health days and bad mental health days in the past seven days before the survey. A year earlier, the national BRFSS sample, using the same questions, found approximately the same average number of bad health days for physical and mental health conditions in the past 30 days. In the current study, however, we found an average of approximately fifty percent more bad mental health days than bad physical health days in the seven days prior to the survey. The apparent higher frequencies of symptoms of anxiety and depression in April 2020 compared to 2018, and the disproportionately more bad mental health days compared to bad physical health days in March 2020 suggests a substantial mental health burden of disease related the coronavirus outbreak.

In order to test the relationship of the coronavirus outbreak on mental health, we examined the average number of reported bad mental health days by different types of exposures and outcomes from the pandemic. Those who have been diagnosed with the coronavirus and those seeking but being unable to be tested for the virus have significantly higher rates of bad mental health days. The average number of bad mental health days in the past week is also associated with worries that you or someone else in the household might contract the disease or the likelihood that you, personally, will get the virus. It is also much higher among those who have lost their job permanently in the aftermath of the coronavirus outbreak. Moreover, the degree of difficulty in paying the rent or mortgage and/or utility bills now is also related to a significantly higher number of bad mental health days in the past week. These findings suggest that the COVID-19 pandemic, like previous natural disasters, increase the risks of poor mental health outcomes for those most exposed to the virus and its aftermath.

Moreover, the number of bad mental health days experienced during the past 7 days during the pandemic is also related to a number of behavioral risk factors for negative health outcomes. Cigarette smoking the past 7 days appears to have increased compared to the most recently available national estimates, and they are related to bad mental health days in the past 7 days. The number of days on which alcohol was consumed in the past 7 days, the average number of drinks consumed on those days, and the number of binge drinking episodes in that period are all related to the number of bad mental health days. The frequency of marijuana use in the past 7 days is also related to the number of bad mental health days.

As public health officials respond to the COVID-19 crisis and its aftermath, it is paramount that they recognize and attend to the mental health and substance use needs of citizens in the short-, medium-, and longer-term. While physical health and safety is a proximal priority, public health officials need to assess and fortify the current infrastructure to attend to Americans' pronounced residual behavioral health needs.

Data that identifies the magnitude and circumstance of those needs provides a metric against which to benchmark behavioral health support and response capacity. For example, in the context of these findings, is the mental health and substance abuse workforce available and prepared to respond? Are crisis support services mobilized and ready across the country? And has the rapid pace of tele(primary)

medicine deployment during this period of social distancing been as easy to adopt and deploy in the behavioral health fields?

Data-informed policies must expand, modify, and/or redeploy the behavioral health support and service infrastructure in our country to better respond to the public's mental health and substance use needs in the face of COVID-19.

Diagnosed Depressive Disorders

As part of the assessment of underlying conditions among the sample, respondents were asked: "Has a doctor, nurse, or other health professional ever told you that you had any of the following ---- a depressive disorder (including depression, major depression, dysthymia, or minor depression)?" Overall, nearly a quarter (24%) of this national sample of adults in April reported that a health professional had ever told them that they had had a depressive disorder. This is a slight increase from 23% in March 2020, but the difference is not statistically significant. Both the March and April survey findings during the coronavirus outbreak are higher than the 18% rate among adults for the same question in the 2018 national BRFSS survey.

Diagnosed Depressive Disorders
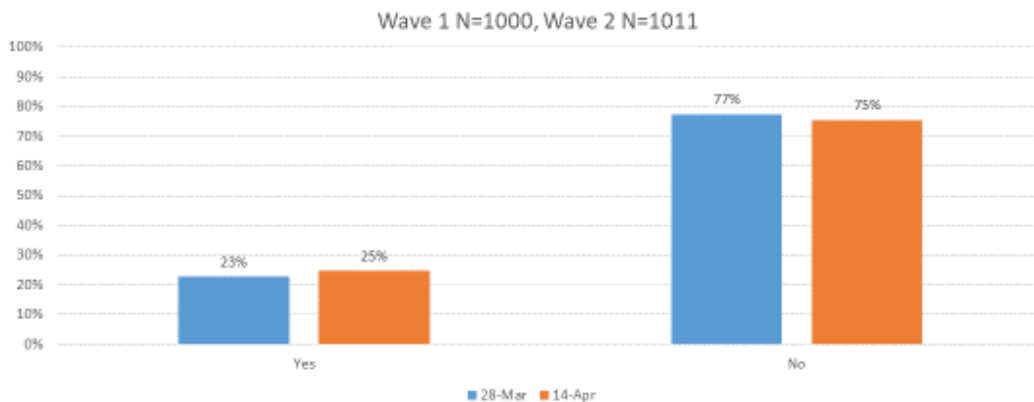
Wave 1 N=1000, Wave 2 N=1011

Has a doctor, nurse, or other health professional ever told you that you had any of the following ... you have a depressive disorder (including depression, major depression, dysthymia or minor depression?   Not Significant at .05

Source: ICF analysis using MFour data collected from a nationwide sample of 1,013 from April 14 – April 22, 2020.

The reported rate of diagnosed depressive disorders in this sample is higher in women (31%) than men (17%), which would be statistically significant. It declines from 27% in the 18-24 year old age cohort to 15% in the 65+ age cohort. It is more common among white Americans (27%) than among Hispanics (17%). The most striking difference is the rate of diagnosed depressive disorders among sexual minorities (47%) which is twice as high compared to others (23%). On the other hand, there is no

statistically significant difference by education or income in the rate of diagnosed depressive disorders in the April survey.

Table 1: Diagnosed Depressive Disorder by Demographics (April 2020)				
Has a doctor, nurse, or other health professional ever told you that you have a depressive disorder (including depression, major depression, dysthymia, or minor depression)?				
	N	Yes	No	Significance
Total	1012	24.5%	75.5%	
Gender				.000
Male	492	17.3%	82.7%	
Female	511	31.3%	68.7%	
Age				.05
18-24	128	27.3%	72.7%	
25-34	180	25.0%	75.0%	
35-49	283	26.1%	73.9%	
50-64	227	28.6%	71.4%	
65+	193	15.5%	84.5%	
Race/Ethnicity				
White	748	26.7%	73.3%	.004
Black	136	24.3%	75.7%	NS
Hispanic	158	17.1%	82.9%	.05
Sexual Minority				.000
Yes	76	47.4%	52.6%	
No	922	22.8%	77.2%	
NS	10	30.0%	70.0%	
Education				NS
Less than HS	121	24.8%	75.2%	
HS Grad	283	22.6%	77.4%	
Some College	301	28.6%	71.4%	
College Grad	301	22.6%	77.4%	
Income				NS
Less than $25k	226	31.4%	68.6%	
$25k-34,999	149	26.2%	73.8%	
$35k-49,999	132	22.7%	77.3%	
$50k-74,999	177	24.9%	75.1%	
$75k-99,999	117	19.7%	80.3%	
$100,000 or more	158	21.5%	78.5%	

Source: ICF analysis using MFour data collected from a nationwide sample of 1,013 from April 14 – April 22, 2020.

The relatively large proportion of the population with diagnosed mental health conditions represents a subpopulation who are particularly vulnerable to poor mental health outcomes from further trauma or other stressors. At the same time, it must be noted that the size and characteristics of the population

who have already been diagnosed with depressive disorders may not fully represent the underlying distribution of the symptoms or disease. Hence, it is important to look at the distribution of symptoms of mental health conditions associated with traumatic events, such as anxiety and depression, to assess the impact of disasters.

Symptoms of Depression/Anxiety

In order to get around the limitations of medical diagnosis of mental health disorders, this national sample of adults was asked about their experience with symptoms of depression and anxiety in the past two weeks. The questions were drawn from the Behavioral Risk Factor Surveillance Survey for purpose of comparison. Unfortunately, the mental health module of the BRFSS was only used by 15 states in the most recently available data set (BRFSS 2018). Consequently, the comparisons between the results of this national survey conducted at the end of March 2020 and the BRFSS 15-state sample from a year earlier should be useful, but not strictly comparable.

The respondents to our COVID survey were asked: "During the last 2 weeks, how often have you been bothered by having little interest or pleasure in doing things?" In the middle of April, nearly half (49%) of the respondents said they had never been bothered in the past two weeks with that symptom of depression. By contrast, 32% said that they had been bother several days in the past two weeks, 11% said that they had been bothered more than half the days, and 9% said that they had been bothered nearly every day. There was no significant difference in this measure of depression between the first survey in late March and the second survey in mid-April.

How Often Bothered by Having Little Interest or Pleasure in Doing Things

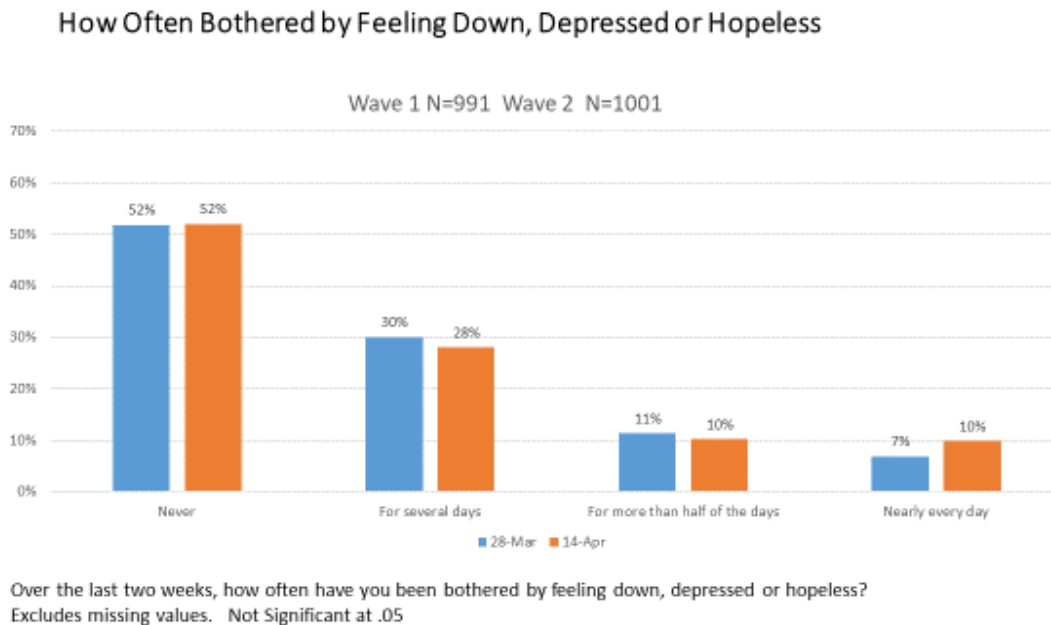Wave 1 N=991 Wave 2 N=1001
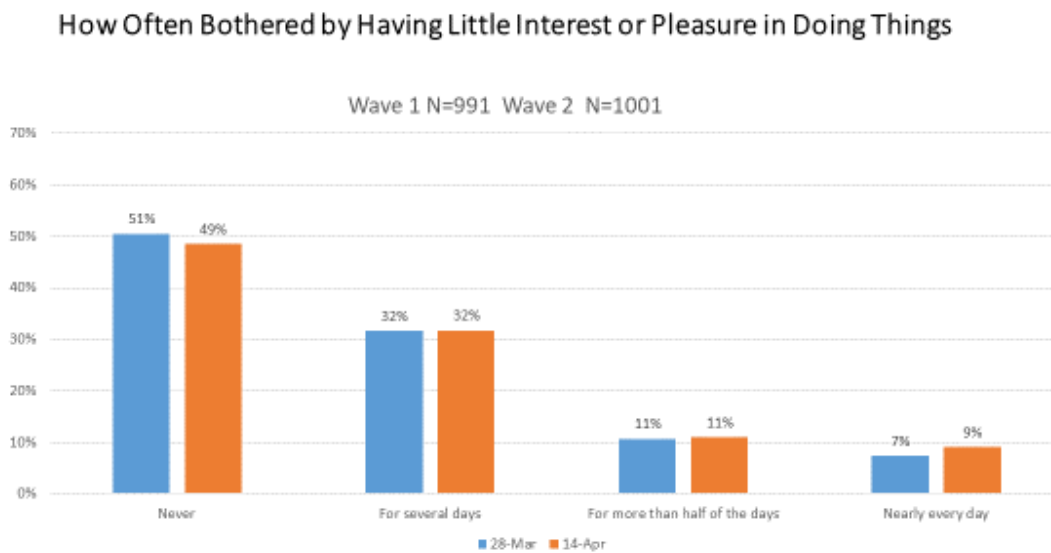
Over the last two weeks, how often have you been bothered by having little interest or pleasure in doing things?
Excludes missing values. Not Significant at .05

Source: ICF analysis using MFour data collected from a nationwide sample of 1,013 from April 14 – April 22, 2020.

By comparison, only 26% of the 15-state BRFSS sample in 2018 reported that they had experienced little interest or pleasure in doing things in a two week period compared to 49% of our sample in March 2020 and 51% in April 2020.

The survey also asked: "During the last 2 weeks, how often have you been bothered by feeling down, depressed or hopeless?" More than half (52%) of the respondents in April said they had never been bothered in the past two weeks with feeling down, depressed or hopeless. By contrast, 28% said that they had been bother several days in the past two weeks, 10% said that they had been bothered more than half the days, and 10% said that they had been bothered nearly every day by feeling down, depressed or hopeless. There was no significant difference in this measure of depression between the first survey in late March and the second survey in mid-April. By comparison, only 27% of the 15-state BRFSS sample in 2018 reported that they had experienced feeling down, depressed or hopeless in the last two weeks compared to 48% of our sample in both March and April 2020.

How Often Bothered by Feeling Down, Depressed or Hopeless

Wave 1 N=991 Wave 2 N=1001

Over the last two weeks, how often have you been bothered by feeling down, depressed or hopeless?
Excludes missing values. Not Significant at .05

Source: ICF analysis using MFour data collected from a nationwide sample of 1,013 from April 14 – April 22, 2020.

Respondents were also asked about two symptoms of anxiety. "During the last 2 weeks, how often have you been bothered by feeling nervous, anxious or on edge?" More than two in five (44%) adults in the sample in April said they had never been bothered in the past two weeks with feeling nervous, anxious or on edge. By contrast, 35% reported that they had been bothered several days in the past two weeks, 11% said that they had been bothered more than half the days, and 11% said that they had been bothered nearly every day by feeling nervous, anxious or on edge. There was no significant difference in this measure of anxiety between the first survey in late March and the second survey in mid-April. By comparison, only 34% of the 15-state BRFSS sample in 2018 reported that they had experienced feeling nervous, anxious or on edge in the last two weeks compared to 56% of our sample in April and 57% in March 2020.
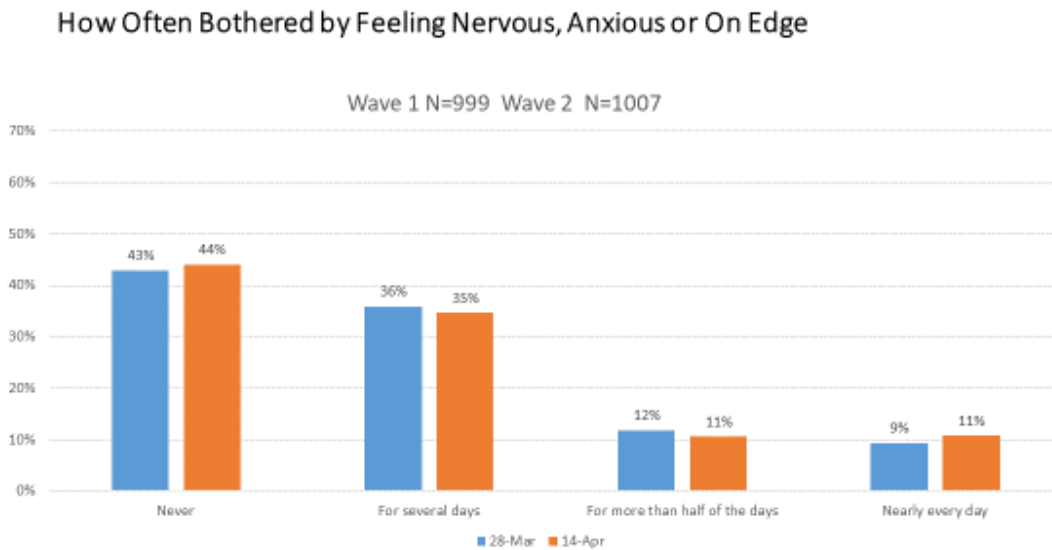
How Often Bothered by Feeling Nervous, Anxious or On Edge

Wave 1 N=999 Wave 2 N=1007

Over the last two weeks, how often have you been bothered by feeling nervous, anxious or on edge?
Excludes missing values.   Not Significant at .05

Source: ICF analysis using MFour data collected from a nationwide sample of 1,013 from April 14 – April 22, 2020.

Finally, respondents were also asked: "During the last 2 weeks, how often have you been bothered by not being able to stop or control worrying?" Half (50%) of our survey sample in April said they had never been bothered in the past two weeks with not being able to stop or control worrying. By contrast, 31% reported that they had been bothered several days in the past two weeks, 9% said that they had been bothered more than half the days, and 11% said that they had been bothered nearly every day by not being able to stop or control worrying. By comparison, only 31% of the 15-state BRFSS sample in 2018 reported that they had experienced not being able to stop or control worrying in the last two weeks

compared to 51% of our sample in March and 50% of our sample in 2020.
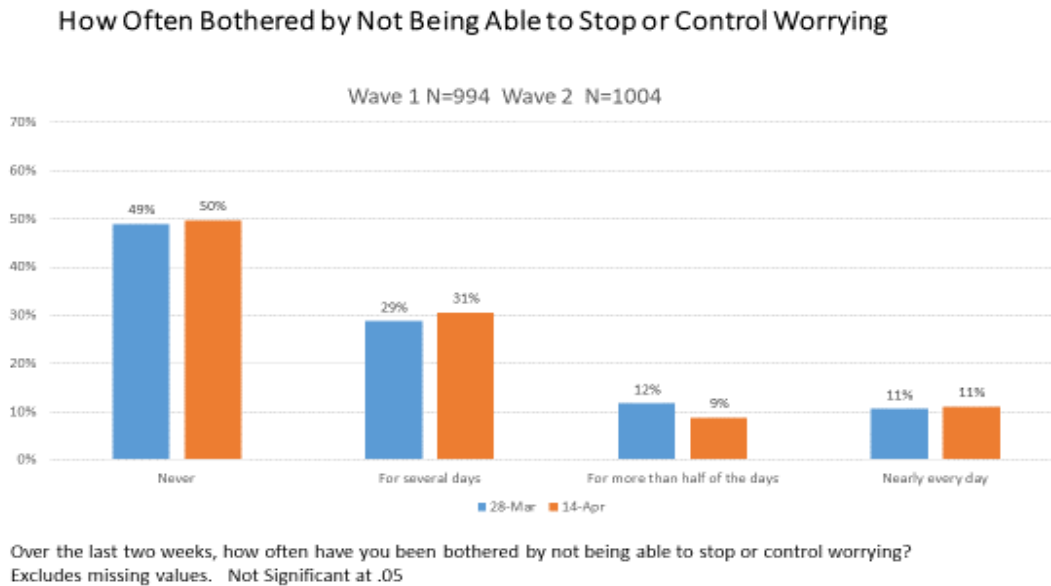
How Often Bothered by Not Being Able to Stop or Control Worrying

Wave 1 N=994 Wave 2 N=1004

Over the last two weeks, how often have you been bothered by not being able to stop or control worrying?
Excludes missing values.   Not Significant at .05

Source: ICF analysis using MFour data collected from a nationwide sample of 1,013 from April 14 – April 22, 2020.

These findings suggest that symptoms related to depression and anxiety were extremely widespread in the US adult population both at the end of March 2020 and mid-April 2020. Indeed, the reported frequency of symptoms of depression and anxiety in this national survey are substantially higher than those reported in the 15-state sample from BRFSS from a little more than a year earlier.

Physical Health and Mental Health in the Past 7 Days

The national sample of adults in our survey was asked about both their physical health and their mental health in the seven days prior to the interview. First, they were asked about physical health. "Now thinking about your physical health, which includes **physical illness and injury**, for how many days during the past 7 days was your physical health not good?" Seven out of ten adults in the sample (72%) report no days in the past seven when their physical health was not good. On the other hand, more than quarter of adults report some days when their physical health was bad in the past weeks, and 5% report that their physical health was bad on all seven days. The mean number of bad physical health days in the past week was .94.

Then, they were asked about their mental health in the same time period. "Now thinking about your **mental health, which includes stress, depression, and problems with emotions**, for how many days during the past 7 days was your mental health not good?" Only a little more than half of the survey respondents (54%) reported no days in the past seven when their mental health was not good. On the other hand, nearly half (46%) reported some bad mental health days in the past week, while 10% report that their physical health was bad on all seven days in the past week. The average (mean) number of bad mental health days in the past week was 1.72.

Table 2: Physical and Mental Health in the Past Seven Days (April)									
	Now thinking about your physical health, which includes physical illness and injury, for how many days **during the past 7 days** was your physical health not good?"								
Days	0	1	2	3	4	5	6	7	Mean
N=943 Excludes missing	72%	7%	6%	4%	2%	3%	0.4%	5%	0.94
BRFSS 30 days	62.5%								
	"Now thinking about your mental health, which includes stress, depression, and problems with emotions, for how many days **during the past 7 days** was your mental health not good?"								
Days	0	1	2	3	4	5	6	7	Mean
N=953 Excludes missing	54%	7%	10%	7%	5%	4%	2%	10%	1.72
BRFSS 30 days	63.1%								

Source: ICF analysis using MFour data collected from a nationwide sample of 1,013 from April 14 – April 22, 2020.

The number of days in which the respondents physical health and mental health was not good in the past seven days is also asked in BRFSS, but for the past 30 days. These two questions are asked of all respondents in all states. In the 2018 BRFSS approximately the nearly the same proportion in the national sample of adults reported no days in which their physical health was not good in the past 30 days (62%) as reported no days when their mental health was not good (63%). In other words, approximately 37% of adults in 2018 reported one or more bad physical or mental health days in the past 30 days. In our survey conducted in April 2020 the proportion of adults who reported one or more bad physical health days in the past 7 days (28%) was much smaller than those with any bad physical health day in the past 30 days in BRFSS (38%), which might be expected with the longer opportunity period in the BRFSS. However, the proportion who reported a bad mental health day in the past 7 days in April 2020 (46%) was substantially higher than the proportion in 30 days in 2018 (37%), despite the shorter opportunity period in the COVID survey. Indeed, the average number of bad mental health days in the past week reported by our national sample at the middle of April 2020 (1.72) was nearly fifty percent higher than the average number of bad physical health days (0.94). This suggests that some factor, most likely related to the novel coronavirus pandemic, has impacted mental health far more than physical health among this national sample of adults.

The pattern of bad physical and mental health days in March was repeated in April. The proportion of the sample that was not sure of the number of bad physical (8%-7%) and bad mental health (6%-6%) was approximately the same. The proportion of the sample with no bad physical health days in the past seven days (not excluding not sure) was 66% in late March and 67% in mid-April. The proportion with one or more bad physical health days was identical in March (26%) and April (26%). Overall, there was no statistically significant differences in the number of bad physical health days reported in the COVID survey between late March and mid-April 2020.

Table 3: Physical and Mental Health in the Past Seven Days: March-April									
	Now thinking about your physical health, which includes physical illness and injury, for how many days **during the past 7 days** was your physical health not good?" NS at .05								
Days	0	1	2	3	4	5	6	7	Not sure
March N=993	66%	6%	6%	4%	2%	2%	1%	6%	8%
April N=1012	67%	7%	6%	4%	2%	3%	.4%	5%	7%
	"Now thinking about your mental health, which includes stress, depression, and problems with emotions, for how many days **during the past 7 days** was your mental health not good?" NS at .05								
Days	0	1	2	3	4	5	6	7	Not Sure
March N=991	53%	6%	9%	7%	4%	4%	2%	8%	6%
April N=1010	51%	7%	9%	7%	5%	4%	2%	10%	6%

Source: ICF analysis using MFour data collected from a nationwide sample of 1,013 from April 14 – April 22, 2020.

The proportion of the sample with no bad mental health days in the past seven days was 53% in late March and 51% in mid-April. The proportion with one or more bad mental health days was 41% in March and 43% in April. The differences in the number of bad mental health days reported between the surveys in late March and mid-April was not significant.

Mental Health and COVID

Is there evidence from the survey that ties poorer mental health outcomes to the pandemic and its impact on the American public? We have attempted to answer this question by comparing the average number of bad mental health days in the past 7 days to effects of the coronavirus in our sample. These effects include worry about the coronavirus, employment and financial hardship, and other effects on respondents living conditions and lifestyles.

Health concerns and worries related to the coronavirus outbreak appear to have a significant effect on respondents' mental health as evidenced by the average number of bad mental health days in the past week. For example, the average number of mental health days in the March survey increased from .51 for those are not at all worried that someone in their household might catch the coronavirus, to 1.55 for those who not too worried and 1.29 for those who are somewhat worried, to 2.14 for those who are very worried. In April, the average number of mental health days was a larger 1.59 for those are not at all worried that someone in their household might catch the coronavirus, a similar 1.55 for those who not too worried and 1.47, but increased to for those who are somewhat worried, to 2.04 for those who are very worried. Although the differences in April were smaller than March, they were still statistically significant.

When the perceived health risk of the coronavirus is more personal, the relationship between the health concern and bad mental health days is stronger. In March, the average number of mental health days in the past week increases steadily from 1.02 among those who think it is not at all likely that they will personally get sick with the coronavirus, to 1.48 for those who think it is not too likely, to 1.99 for those who think it is somewhat likely, to 2.30 among those who think it is very likely that they, personally, will catch the coronavirus. Similarly in April, the average number of mental health days in the past week increases steadily from 1.34 among those who think it is not at all likely that they will personally get sick with the coronavirus, to 1.49 for those who think it is not too likely, to 2.04 for those who think it is somewhat likely, to 3.23 among those who think it is very likely that they, personally, will catch the coronavirus.

The ability to obtain testing for the coronavirus for those who sought it also impacted on the number of bad mental health days in the past week. In March, those who were not able to get COVID-19 testing had an average of 3.11 bad mental health days, compared to 1.56 for those who were able to get testing. In April, the average number of bad mental health days was 2.45 for those who were unable to get testing, compared to 1.68 for those did not. Both differences were statistically significant.

Concerns about the ability of the local hospital(s) to have the necessary resources to treat the coronavirus, if the respondent got sick, was also related to the number of bad mental health days in the past week. In March, the number of bad mental health days increased from .38 for those who were not at all worried about their hospital's resources, to 1.34 for those who were not too worried, to 1.47 for those who were somewhat worried, to 2.00 for those who were very worried about it. In April, the number of bad mental health days was higher (1.59) for those who were not at all worried about their hospital's resources than in March, it nonetheless increased from 1.18 for those who were not too worried, to 1.68 for those who were somewhat worried, to 2.04 for those who were very worried about their hospitals ability to treat patients in April. These differences were statistically significant.

In one case, a health concern that was related to bad mental health days in March ceased to do so in the April survey. In March the average number of mental health days increased from 1.22 for those are not very concerned about the spread of coronavirus in their community, to 1.52 for those who are somewhat concerned, to 1.87 for those who are very concerned. This difference was statistically significant. By contrast, in April the average number of mental health days was 1.68 for those are not very concerned about the spread of coronavirus in their community, 1.62 for those who are somewhat concerned, and 1.82 for those who are very concerned. These differences were not statistically significant.

Overall, the surveys continued to find a relationship between health concerns related to the coronavirus and mental health symptoms, such as the number of bad mental health days in the past week in April. However, the relationship seemed to be somewhat weaker for some health concerns in April compared to March. The more serious and personal threats, however, continued to have a statistically significant relationship with mental health symptoms.

Table 4: Average Days of Bad Mental Health by COVID Health Concerns and Experiences in March and April 2020				
	March 2020		**April 2020**	
Have you or anyone else in the household tried to be tested for coronavirus and not been able to get tested?	**N**	**Mean**	**N**	**Mean**
Yes	49	3.11	59	2.45
No	881	1.56	893	1.68
	Sign. at .000		Sign. at .017	
How worried are you that your local hospital(s) will not have the resources to treat all patients infected with the coronavirus?				
Very worried	425	2.00	350	2.04
Somewhat worried	337	1.47	347	1.68
Not too worried	126	1.34	179	1.18
Not at all worried	41	0.38	74	1.59
	Sign. at .000		Sign. at .001	
Are you very concerned, concerned, or not very concerned about the spread of coronavirus within your community?				
Very concerned	452	1.87	459	1.82
Concerned	342	1.52	341	1.62
Not very concerned	133	1.22	153	1.68
	Sign at .009		NS	
How worried are you that someone in your immediate family might catch the coronavirus (COVID-19)?				
Very worried	366	2.14	356	2.04
Somewhat worried	326	1.29	324	1.47
Not too worried	150	1.55	180	1.55
Not at all worried	67	.51	60	1.59
	Sign. at .000		Sign. at .012	
How likely do you think it is that you, personally, will get sick with coronavirus?				
Very Likely	72	2.30	57	3.23
Somewhat Likely	288	1.99	252	2.04
Not too Likely	406	1.48	460	1.49
Not at all likely	144	1.02	156	1.34
	Sign. at .000		Sign. at .000	

*Source: ICF analysis using MFour data collected from a nationwide sample of 1,013 from April 14 – April 22, 2020.

By contrast, the relationship between employment and financial outcomes related to COVID-19 seemed to strengthen somewhat between March and April. The permanent loss of a job since the beginning of the coronavirus was associated with a higher average of mental health days (2.54) than among those without such a loss (1.57) in March. However, this was the only employment outcome that was associated with a statistically significant increase in number of bad mental health days. In March, the

average number of bad mental health days was also higher (1.83) among those who have suffered a reduction in work hours than among those who have not (1.56) but the difference is not large enough to be significant. By contrast, the average number of mental health days was actually smaller among those who have been temporarily laid off or furloughed (1.41) than those who have not (1.67) in March although the difference was not large enough to be significant.

In April, like March, the permanent loss of a job since the beginning of the coronavirus was associated with a higher average of mental health days (2.28) than among those without such a loss (1.56). But in April, those who had been temporarily laid off or furloughed had a significantly higher average number of mental health days (2.20) than those who have not (1.50). And, in April, the average number of bad mental health days was also higher (1.94) among those who have suffered a reduction in work hours than among those who have not (1.51). All of these differences as a result of being fired, furloughed or had work hours reduced as a result of the COVID-19 outbreak were statistically significant.

On the other hand, in both March and April, there was no significant difference in mental health days between those who have been told to work from home, those permitted to work from home, those told to work a different shift, those whose worksite has closed, and those who have not.

Table 5: Average Days of Bad Mental Health by Work Experiences Related to COVID among those employed at the beginning of 2020				
Since the beginning of the coronavirus crisis, has (any of) your employer(s) done any of the following:	March 2020		April 2020	
	N	Mean	N	Mean
Laid you off permanently or involuntarily terminated you				
Yes	39	2.54*	65	2.28*
Not Selected	533	1.57	575	1.56
Furloughed or temporarily laid you off				
Yes	81	1.41	116	2.20*
Not selected	490	1.67	524	1.50
Reduced your work hours				
Yes	164	1.83	176	1.94*
Not selected	408	1.56	464	1.51
Required you to work a different shift				
Yes	54	1.88	51	1.90
Not selected	517	1.61	589	1.60
Told you that you must work from home				
Yes	108	1.41	146	1.47
Not selected	464	1.69	494	1.67
Told you that you could work from home if you wanted				
Yes	60	1.50	54	1.15
Not selected	512	1.65	586	1.67
Closed your worksite				
Yes	121	1.89	108	1.98
Not selected	450	1.57	532	1.56
None of these				

	155	1.52	158	1.23*
Yes				
Not selected	417	1.68	482	1.77

*Differences are statistically significant <.05
Source: ICF analysis using MFour data collected from a nationwide sample of 1,013 from April 14 – April 22, 2020.

The loss of a job or a reduction in working hours usually has a dramatic impact on pay and as a result consumer purchasing power. This in turn may make it difficult for those suffering these losses to be able to pay for discretionary purchases, or even essentials. In April for the first time, we explored whether or not respondents were having difficulties in paying their current rent or mortgage, and/or utility bills. This allowed us to examine the relationship between financial hardship and mental health outcomes from the coronavirus outbreak.

Respondents were asked in April: "How much difficulty are you having now in paying the full amount of the rent or mortgage?" The average number of bad mental health days in the past 7 days increased from 1.17 for those having no difficulty in paying the rent or mortgage, to 1.70 for those having little difficulty, to 2.40 for those having some difficulty, to 2.47 for those have a lot of difficulty in paying those bills.

Table 6: Average Days of Bad Mental Health by Current Economic Concerns: April			
How much difficulty are you having now in paying the full amount of the rent or mortgage?	**Mean**	**N**	**Standard Deviation**
No difficulty	**1.17***	414	**2.060**
Little difficulty	1.70	140	2.301
Some difficulty	2.40	179	2.585
A lot of difficulty	2.47	125	2.571
No rent or mortgage	1.84	87	2.462
Total *Significant at .000	1.72	945	2.370
How much difficulty are you having now in paying the full amount of the utility bill(s)?			
No difficulty	**1.14***	455	**2.016**
Little difficulty	1.76	152	2.391
Some difficulty	2.15	159	2.529
A lot of difficulty	2.72	146	2.598
No utility bills	3.15	37	2.801
Total *Significant at .000	1.73	950	2.383

*Source: ICF analysis using MFour data collected from a nationwide sample of 1,013 from April 14 – April 22, 2020.

Similarly, respondents were asked in April: "How much difficulty are you having now in paying the full amount of the utility bill(s)?" The average number of bad mental health days in the past 7 days increased from 1.14 for those having no difficulty in paying the utility bills, to 1.76 for those having little

difficulty, to 2.15 for those having some difficulty, to 2.72 for those have a lot of difficulty in paying those bills. This is a strong and statistically significant relationship with current financial difficulties and poor mental health outcomes, such as ability to pay bills, related to the coronavirus outbreak.

We also explored in April, as we did in March, the impact of the virus on changed household finances on mental health outcomes is seen in fears about paying bills in the next three months. The average number of mental health days increases steadily from 1.22 for those who think it is extremely unlikely they will not be able to pay the full amount of the utility bills in the next 3 months, to 1.64 who consider it unlikely, to 1.68 for those who choose a neutral position, to 1.86 for those who consider it likely, to 2.41 who consider it extremely likely. The same pattern is found in relationship between mental health days and likelihood of being able to pay the full amount of the rent or the mortgage in the next three months. Indeed, the concerns about future financial hardship appears to be almost identical with current financial difficulties even though many respondents are concerned about future job losses or work hour reductions.

Table 7: Average Days of Bad Mental Health by Future Economic Concerns: March - April				
	March 2020		April 2020	
In the next 3 months, how likely is it that you/your household will not be able to pay the full amount of the rent or mortgage?	N	Mean	N	Mean
Extremely unlikely	246	1.27	297	1.16*
Unlikely	238	1.48	231	1.62
Neutral	193	1.85	221	1.94
Likely	137	2.04	141	2.36
Extremely Likely	101	2.01	104	2.30
Significant at .004				
In the next 3 months, how likely is it that you/your household will not be able to pay the full amount of the utility bill(s)?				
Extremely unlikely	245	1.22	289	1.16*
Unlikely	248	1.64	248	1.49
Neutral	180	1.68	214	1.91
Likely	161	1.86	149	2.40
Extremely Likely	87	2.41	103	2.69
Significant at .001				

Source: ICF analysis using MFour data collected from a nationwide sample of 1,013 from April 14 – April 22, 2020.

Smoking, Alcohol Use and Mental Health

Alcohol and tobacco use have long been associated with mental health. Not only can substance abuse be a mental health condition, individuals may use alcohol, tobacco and other substance to self-medicate for other mental health conditions. Consequently, we have included smoking and alcohol use in this fifth report for our national survey on the coronavirus.

Approximately 20% of our national sample of adults reported that smoked cigarettes in the past seven days at the end of April 2020. This finding contrasts with the most recent (2018) of current adult smoking from the National Health Interview Survey (NHIS). The NHIS reported 13.7% of US adults currently smoked cigarettes in 2018. This suggests a significant increase in the proportion of adults who now smoke, which may be related to the coronavirus outbreak.

The proportion of adults who reported any cigarette smoking in the past 7 days was unchanged in mid-April from the previous survey at the end of March. The average number of cigarettes smoked a day, on average was 6.75 for all adults in April. The difference from 5.97 cigarettes a day in March was not statistically significant.

Average Cigarettes Smoked A Day in the Past Seven Days

Wave 1 N=994 Wave 2 N=1003

How many cigarettes a day, on average, did you smoke in the past 7 days?
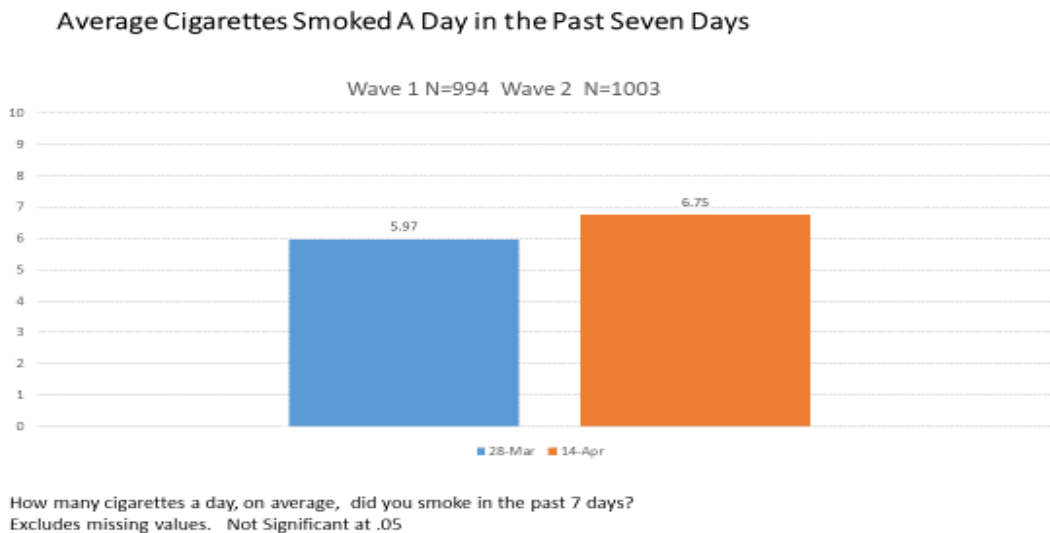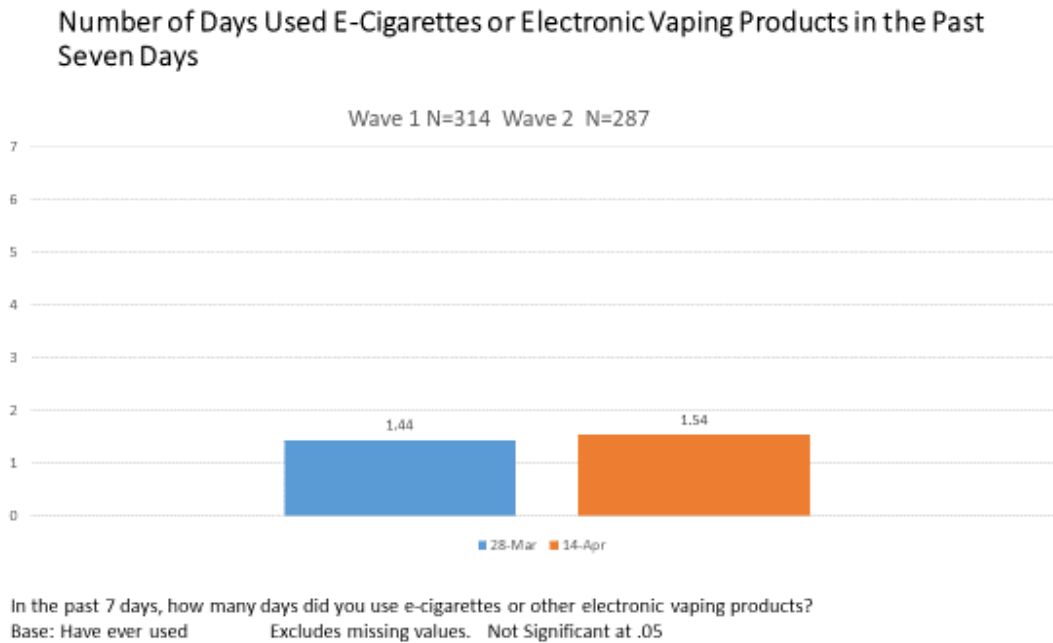Excludes missing values.   Not Significant at .05

Source: ICF analysis using MFour data collected from a nationwide sample of 1,013 from April 14 – April 22, 2020.

Men in our surveys were somewhat more likely to smoke any cigarettes in the past seven days (22%) compared to women (18%). Cigarette smoking also varies with age. Less than one in ten adults aged 18-24 reported smoking any cigarettes in the past seven days (9%), compared to 26% of those aged 25-34, and 28% for those aged 35-49. The proportion who smoked any cigarettes in the past seven days drops to 21% for those aged 50-64, and 8% for those aged 65 and older. White adults (20%) are about as likely as non-white adults (19%) to have smoked cigarettes in the past seven days. Hispanic adults (12%) are less likely than non-Hispanics (21%) to have smoked cigarettes in the past seven days.

In addition to cigarette smoking, we also asked this national sample of adults about their use of e-cigarettes or other electronic vaping products. Three out of ten adults of the sample (30%) reported in April that they had ever used an electronic vaping product, even just one time, in their life. This is effectively unchanged from 32% at the end of March.

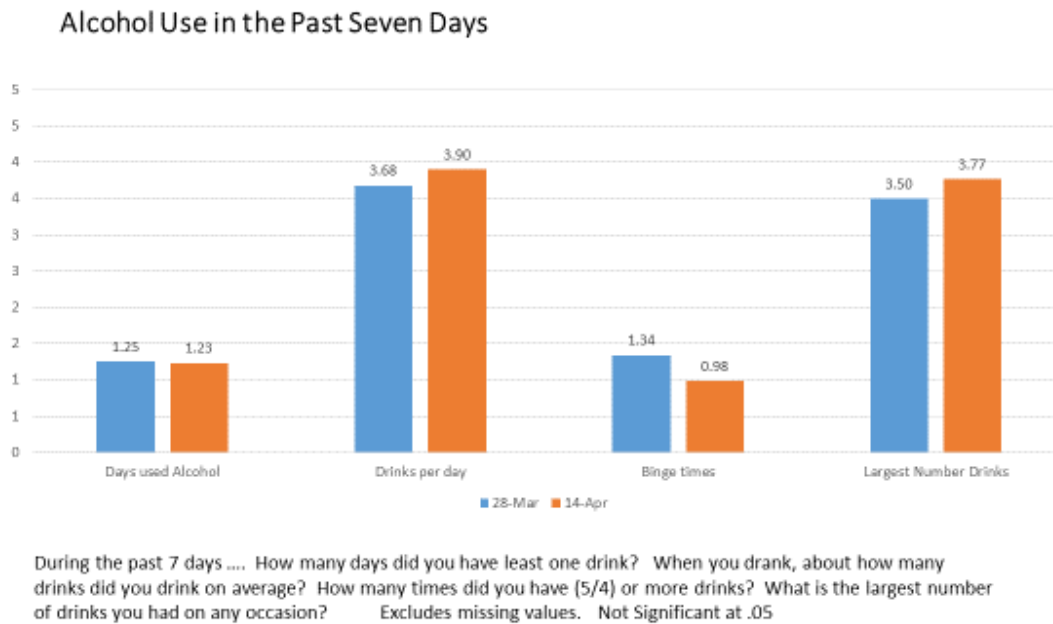Those who have ever used electronic vaping products were asked how many days in the past 7 days they had used an e-cigarette or other electronic vaping products. About one in ten adults (10%) report vaping at least one day in the past seven in April. Four percent of all adults report vaping every day in the past seven. On average, past users reported using an electronic vaping product on an average of

1.54 days in the past seven days in April. This is statistically unchanged from the average of 1.44 days using a vaping product in March.

Number of Days Used E-Cigarettes or Electronic Vaping Products in the Past Seven Days

Wave 1 N=314 Wave 2 N=287

In the past 7 days, how many days did you use e-cigarettes or other electronic vaping products?
Base: Have ever used   Excludes missing values.   Not Significant at .05

Source: ICF analysis using MFour data collected from a nationwide sample of 1,013 from April 14 – April 22, 2020.

Approximately 40% of our national sample of adults reported that they have had at least one drink in the past seven days in April. This is statistically unchanged since the March survey. In contrast to smoking, the rate of current alcohol use in the COVID survey is lower than the most recent estimate of current drinking by US adults (55.3%) from the National Survey of Drug Use and Health (NSDUH). However, the NSDUH estimate is based on past month, compared to past seven days in the COVID survey, so a lower rate would be expected of the current survey.

Alcohol Use in the Past Seven Days

During the past 7 days …. How many days did you have least one drink? When you drank, about how many drinks did you drink on average? How many times did you have (5/4) or more drinks? What is the largest number of drinks you had on any occasion? Excludes missing values. Not Significant at .05

Source: ICF analysis using MFour data collected from a nationwide sample of 1,013 from April 14 – April 22, 2020.

Men (41%) and women (39%) were about equally likely to have at least one drink in the past seven days. Alcohol use also varies with age. Three in ten adults aged 18-24 reported smoking any alcohol use in the past seven days (31%), compared to 47% of those aged 25-34, 44% for those aged 35-49, and 41% of those aged 50-64. The proportion who had any alcoholic drinks in the past seven days drops to 32% for those aged 65 and older. White adults (41%) are somewhat more likely than non-white adults (36%) to have had an alcoholic drink in the past seven days. Hispanic adults (40%) are about as likely as non-Hispanics (40%) to have had any alcoholic drinks in the past seven days.

Those who reported drinking alcoholic beverages in the past seven days were asked how many times in the past seven days they had 5 or more drinks, if they were men, or 4 or more drinks if they were women. This is the standard definition of binge drinking. We find that more than four out of ten adults who drank in the past seven days (42%) reported at least one occasion of binge drinking in the past seven days. This would translate into 15% of all adults in the sample. By contrast, NSDUH in 2018 estimated that 26% of adults engaged in binge drinking at least once in the past month. However, the lower estimate in the current survey is also consistent with a much shorter opportunity.

Men (50%) were more likely than women (41%), who drank to report at least one occasion of binge drinking in the past week. Binge drinking among those who use alcohol in the past seven days also varies with age. Nearly half of adults aged 18-24 who drank, reported at least one occasion of binge drinking in the past seven days (48%), compared to 47% of those aged 25-34, 57% for those aged 35-49, and 44% of those aged 50-64. The proportion of drinker who had at least one occasion of binge drinking in the past seven days drops to 33% for those aged 65 and older. White adults who drank in the past week were somewhat less likely to binge drink (44%) than non-white adults (50%). Hispanic adults (53%)

were more likely to binge drink than non-Hispanics (44%) who had any alcoholic drinks in the past seven days.

None of the measures of alcohol use in the past 7 days have changed sufficiently between the March survey and the April survey for the differences to be statistically significant.

The current use of tobacco and alcohol in this sample appears to be related to current symptoms of anxiety, depression and frequency of bad mental health days. The average number of cigarettes consumed per day during the past 7 days increases from 2.3 who never were **bothered by having little interest in doing things in the past 2 weeks**, to 8.5 among those who had those feelings for several days, to 8.9 among those who had the feelings for more than half of the days, to 16.9 cigarettes per day for those who were bothered by having little interest in doing things nearly every day in the past two weeks. Among those who had any drinks in the past seven days, the average number of drinks increases from 2.41 for those who never were bothered by having little interest in doing things in the past two weeks, to 4.26 drinks for who those who felt that way for several days, to 5.16 drinks for those who felt that way more than half of the days, to 7.11 drinks for those who felt that way nearly every day. Among those who drink, the number of occasions when they had 5 or more (4 or more for women) drinks in the past seven days, increased from .73 for those who never bothered by the feeling, to 1.50 for those who were bother for several days, to 1.91 for those who were bothered nearly every day, to 2.23 occasions for those who were bothered nearly every day.

Table 8. Loss of interest in things in past 2 weeks by substance use (mean) in past 7 days (April)					
	Over the last two weeks, how often have you been bothered by having little interest or pleasure in doing things? Would you say …				
In the past 7 days	Never	Several Days	More than half of the days	Nearly every day	Significance
Cigarettes a day on average	6.62	5.51	7.90	11.04	NS
Days drank alcohol	1.08	1.36	1.27	1.48	NS
Drinks on days drank	2.85	3.28	9.07	5.33	.000
Times binge drinking	0.68	1.17	1.52	1.18	.015
Largest number of drinks	2.78	3.98	6.91	4.02	.000
Days used marijuana	0.55	0.82	1.01	1.61	.000

Source: ICF analysis using MFour data collected from a nationwide sample of 1,013 from April 14 – April 22, 2020.

The use of tobacco and alcohol in the past seven days is also related to the frequency of **feeling down, depressed or hopeless in the past two weeks.** The average number of cigarettes consumed per day during the past 7 days increases from 3.1 who never were bothered in the past 2 weeks, to 7.3 among those who had those feelings for several days, to 8.5 among those who had the feelings for more than half of the days, to 17.8 cigarettes per day for those who were bothered nearly every day in the past two weeks. Among those who had any drinks in the past seven days, the average number of drinks increases from 2.66 for those who never were bothered in the past two weeks, to 4.29 drinks for who those who felt that way for several days, to 4.90 drinks for those who felt that way more than half of the days, to 5.74 drinks for those who felt that way nearly every day. Among those who drink, the number of occasions when they had 5 or more (4 or more for women) drinks in the past seven days, increased from .67 for those who never bothered by the feeling, to 1.56 for those who were bother for several days, to

1.95 for those who were bothered nearly every day, to 2.27 occasions for those who were bothered nearly every day.

Table 9. Feeling depressed or hopeless in past 2 weeks by substance use (mean) in past 7 days (April)					
	Over the last two weeks, how often have you been bothered by having little interest or pleasure in doing things? Would you say …				
In the past 7 days	Never	Several Days	More than half of the days	Nearly every day	Significance
Cigarettes a day on average	4.44	6.66	7.44	16.10	.000
Days drank alcohol	1.00	1.53	1.53	1.33	.000
Drinks on days drank	2.69	4.55	4.98	5.13	.000
Times binge drinking	0.61	1.57	1.87	1.34	.000
Largest number of drinks	2.76	4.30	4.45	4.38	.000
Days used marijuana	0.48	0.85	1.51	1.38	.000

Source: ICF analysis using MFour data collected from a nationwide sample of 1,013 from April 14 – April 22, 2020.

The use of tobacco and alcohol in the past seven days is also related to the frequency of being **bothered by feeling nervous, anxious or on edge in the past two weeks.** The average number of cigarettes consumed per day during the past 7 days increases from 2.36 who never were bothered in the past 2 weeks, to 7.77 among those who had those feelings for several days, to 9.66 among those who had the feelings for more than half of the days, to 11.09 cigarettes per day for those who were bothered nearly every day in the past two weeks. Among those who had any drinks in the past seven days, the average number of drinks increases from 2.56 for those who never were bothered in the past two weeks, to 3.44 drinks for who those who felt that way for several days, to 6.29 drinks for those who felt that way more than half of the days, to 5.88 drinks for those who felt that way nearly every day. Among those who drink, the number of occasions when they had 5 or more (4 or more for women) drinks in the past seven days, increased from .71 for those who never bothered by the feeling, to 1.22 for those who were bother for several days, to 1.56 for those who were bothered nearly every day, to 3.37 occasions for those who were bothered nearly every day.

Table 10. Nervous, anxious or on edge in past 2 weeks by substance use (mean) in past 7 days (April)					
	Over the last two weeks, how often have you been bothered by having little interest or pleasure in doing things? Would you say …				
In the past 7 days	Never	Several Days	More than half of the days	Nearly every day	Significance
Cigarettes a day on average	4.28	6.17	10.00	12.10	.000
Days drank alcohol	0.99	1.46	1.40	1.33	.000
Drinks on days drank	2.73	3.77	5.78	5.48	.000
Times binge drinking	0.71	1.16	1.84	1.99	.000
Largest number of drinks	2.82	3.96	4.35	4.49	.001
Days used marijuana	0.48	0.71	1.47	1.58	.000

Source: ICF analysis using MFour data collected from a nationwide sample of 1,013 from April 14 – April 22, 2020.

The use of tobacco and alcohol in the past seven days is also related to the frequency of being **bothered by not being able to stop or control worrying in the past two weeks.** The average number of cigarettes consumed per day during the past 7 days increases from 3.44 who never were bothered in the past 2 weeks, to 6.83 among those who had those feelings for several days, to 11.92 among those who had the feelings for more than half of the days, before dropping to 8.96 cigarettes per day for those who were bothered nearly every day in the past two weeks. Among those who had any drinks in the past seven days, the average number of drinks increases from 3.11 drinks for those who never were bothered in the past two weeks, to 3.84 drinks for who those who felt that way for several days, to 3.98 drinks for those who felt that way more than half of the days, to 5.44 drinks for those who felt that way nearly every day. Among those who drink, the number of occasions when they had 5 or more (4 or more for women) drinks in the past seven days, increased from .71 for those who never bothered by the feeling, to 1.48 for those who were bother for several days, to 1.76 for those who were bothered nearly every day, to 2.10 occasions for those who were bothered nearly every day.

Table 11. Not able to stop or control worrying in past 2 weeks by substance use (mean) in past 7 days (April)					
	Over the last two weeks, how often have you been bothered by having little interest or pleasure in doing things? Would you say …				
In the past 7 days	Never	Several Days	More than half of the days	Nearly every day	Significance
Cigarettes a day on average	4.48	7.11	9.37	10.38	.001
Days drank alcohol	1.04	1.38	1.60	1.41	.000
Drinks on days drank	2.91	4.15	4.51	5.68	.001
Times binge drinking	0.68	1.29	2.05	1.79	.000
Largest number of drinks	2.90	4.00	4.90	4.09	.000
Days used marijuana	0.51	0.75	1.58	1.54	.000

Source: ICF analysis using MFour data collected from a nationwide sample of 1,013 from April 14 – April 22, 2020.

The average number of cigarettes and the average number of alcoholic drinks does not appear as closely related to the **number of days when the respondent's mental health was not good** in the same period. The average number of cigarettes smoked in the past seven days increases from 3.27 for those who had no bad mental health days in the past week, to 13.15 cigarettes for those who had seven bad mental health days. However, the average number of bad mental health days does not increase as consistently for number of days drinking alcohol, number of drinks on days when alcohol was consumed, and number of occasions of binge drinking in that period.

Table 12. Number of bad mental health days in past 7 days by substance use (mean) in past 7 days									
	Over the last two weeks, how often have you been bothered by having little interest or pleasure in doing things? Would you say …								
In the past 7 days	0	1	2	3	4	5	6	7	Sign.
Cigarettes a day on average	4.22	5.74	8.47	8.35	6.39	11.21	5.82	12.43	.000
Days drank alcohol	1.02	1.40	1.59	1.66	1.83	1.83	1.49	1.05	.000
Drinks on days drank	2.96	3.10	5.28	5.03	5.25	3.82	3.29	4.25	.014
Times binge drinking	0.79	1.12	1.99	0.94	1.84	1.70	1.72	1.07	.000
Largest number of drinks	2.82	3.81	4.59	5.34	4.73	3.77	3.76	3.43	.000

| Days used marijuana | 0.51 | 0.64 | 0.93 | 1.14 | 1.68 | 1.66 | 0.79 | 1.06 | .000 |

Source: ICF analysis using MFour data collected from a nationwide sample of 1,013 from April 14 – April 22, 2020.

Nonetheless, in general there appears to be a strong relationship between symptoms of depression and anxiety in the past two weeks and cigarette and alcohol consumption in the past seven days.

Research Methods

The target population for this study consisted of all U.S. adults ages 18 and over. Respondents for the survey were drawn from the MFour mobile panel comprised of approximately 2 million persons. People in the full panel had to be ages 13 and over, living in any of the 50 states or District of Columbia, own a smartphone with Android or iOS, and have registered to receive and respond to survey opportunities using MFour's Surveys On The Go® app. Individuals qualified for panel inclusion through a series of profiling questions and fraud detection measures. The panel does not provide a comprehensive population frame, or support probability samples for the general population, due to the selective nature of panel enrollment. Nonetheless, the overall panel is designed to provide national non-probability samples of adults that are comparable to the geographically and demographically distribution of the US adult population.

The MFour panel profile includes panel members' zip code, age, gender, race/ethnicity, and education so it can be geographically and demographically balanced to Census estimates. Consequently, the panel methodology allows efficient targeting of a geographically and demographically representative sample from the total panel for the survey invitation. An invitation to participate in the study was sent to 3,500 adult members of a Census balanced (by age, gender and race) national sample of the mobile panel.

The initial survey invitation was sent via push notification to sampled panel members on their cell phone. Reminders were sent to non-respondents over a four-day period. Panel members were remunerated based on completed surveys in the form of a modest cash incentive which was three dollars (four dollars on the last few days) for this survey. A total of 1,013 interviews were completed between April 14 and April 22, 2020. On average, it took participants just under 19 minutes to complete the survey. Respondents from 47 states[1] and the District of Columbia were represented in the final sample. The survey's participation rate is calculated as the number of completed interviews divided by the number of invitations (AAPOR RR 1 of 28.9%).

All analyses were conducted with SPSS Statistics 22 and SAS version 9.4. All analyses were conducted with SPSS Statistics 22 and SAS version 9.4. We have used χ^2 tests to indicate the association between samples or subsamples and specific variables. in these surveys would be large enough to be statistically significant in a probability sample. This is not a probability sample so the underlying distribution of the population may or may not satisfy the assumptions of the statistical model, however χ^2 tests of association are commonly used with nonprobability samples. We provide the test as a decision tool for readers in evaluating which differences are likely to be important. This study and processes within the

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[1] Three of the 4 smallest states in population, Alaska, Vermont and Wyoming are not represented in the completed sample as a result of random sampling.

study for protection of human subjects were reviewed and approved by the ICF Institutional Review Board.

Appendices – Select Items by Key Demographics

Over the last 2 weeks, how often have you been bothered by having little interest or pleasure in doing things. Would you say this happens				
	Never	for several days	for more than half the days or	nearly every day
Age				
18-24	30.1%	37.9%	20.5%	11.5%
25-34	40.1%	33.2%	14.2%	12.6%
35-49	51.7%	30.7%	10.1%	7.5%
50-64	51.0%	30.4%	8.3%	10.3%
65+	61.0%	28.7%	5.7%	4.6%
Gender				
Male	51.7%	29.7%	10.7%	7.8%
Female	45.5%	33.5%	11.1%	9.8%
Race / Ethnicity				
Non-Hispanic White/Caucasian	49.3%	32.6%	8.7%	9.4%
Non-Hispanic Black/African American	55.7%	28.3%	10.6%	5.4%
Non-Hispanic Asian	33.9%	34.2%	23.9%	8.1%
Hispanic	47.6%	30.8%	14.8%	6.7%
Other	35.5%	26.4%	17.0%	21.2%

*Source: ICF analysis using MFour data collected from a nationwide sample of 1,013 from April 14 – April 22, 2020.

Over the last 2 weeks, how often have you been bothered by feeling nervous, anxious or on edge? Would you say this happens				
	Never	for several days	for more than half the days or	nearly every day
Age				
18-24	33.3%	38.9%	14.7%	13.1%
25-34	34.4%	36.1%	15.4%	14.1%
35-49	41.9%	36.0%	11.0%	11.1%
50-64	44.8%	36.4%	8.4%	10.4%
65+	62.0%	26.1%	5.8%	6.1%
Gender				
Male	51.4%	31.1%	9.9%	7.7%
Female	37.1%	38.0%	11.4%	13.5%
Race / Ethnicity				
Non-Hispanic White/Caucasian	44.5%	35.4%	9.8%	10.4%
Non-Hispanic Black/African American	52.9%	32.6%	8.8%	5.6%
Non-Hispanic Asian	37.4%	42.3%	7.0%	13.3%
Hispanic	39.6%	33.0%	13.2%	14.1%
Other	35.4%	25.8%	23.1%	15.7%

*Source: ICF analysis using MFour data collected from a nationwide sample of 1,013 from April 14 – April 22, 2020.

Over the last 2 weeks, how often have you been bothered by not being able to stop or control worrying?				
	Never	for several days	for more than half the days or	nearly every day
Age				
18-24	37.2%	30.2%	15.9%	16.6%
25-34	41.7%	31.4%	10.9%	15.9%
35-49	48.0%	33.6%	8.3%	10.1%
50-64	52.0%	32.3%	6.2%	9.5%
65+	65.3%	23.8%	5.5%	5.3%
Gender				
Male	56.8%	28.7%	6.7%	7.7%
Female	43.1%	32.5%	10.7%	13.7%
Race / Ethnicity				
Non-Hispanic White/Caucasian	51.1%	31.0%	7.9%	10.0%
Non-Hispanic Black/African American	54.7%	26.2%	4.2%	14.8%
Non-Hispanic Asian	43.2%	42.8%	8.4%	5.7%
Hispanic	44.3%	30.9%	14.0%	10.8%
Other	41.7%	24.0%	14.8%	19.5%

*Source: ICF analysis using MFour data collected from a nationwide sample of 1,013 from April 14 – April 22, 2020.

In the next 3 months, how likely is it that you/your household will not be able to pay the full amount of the rent or mortgage?					
	Extremely unlikely	Unlikely	Neutral	Likely	Extremely Likely
Age					
18-24	24.0%	26.2%	27.9%	12.3%	9.6%
25-34	27.1%	22.2%	20.9%	19.1%	10.7%
35-49	28.2%	18.3%	26.7%	13.9%	12.9%
50-64	29.2%	21.0%	24.0%	15.5%	10.3%
65+	42.1%	31.4%	12.2%	9.3%	5.1%
Gender					
Male	32.9%	21.6%	22.6%	14.8%	8.1%
Female	28.0%	24.7%	22.3%	13.5%	11.5%
Race / Ethnicity					
Non-Hispanic White/Caucasian	35.3%	23.5%	20.3%	13.0%	8.0%
Non-Hispanic Black/African American	21.7%	20.9%	26.6%	13.7%	17.1%
Non-Hispanic Asian	28.5%	19.8%	16.0%	26.5%	9.2%
Hispanic	19.6%	24.2%	30.0%	14.9%	11.3%
Other	22.4%	22.6%	21.6%	16.8%	16.7%

*Source: ICF analysis using MFour data collected from a nationwide sample of 1,013 from April 14 – April 22, 2020.

In the next 3 months, how likely is it that you/your household will not be able to pay the full amount of the rent or mortgage?					
	Extremely unlikely	Unlikely	Neutral	Likely	Extremely Likely
Age					
18-24	24.0%	26.2%	27.9%	12.3%	9.6%
25-34	27.1%	22.2%	20.9%	19.1%	10.7%
35-49	28.2%	18.3%	26.7%	13.9%	12.9%
50-64	29.2%	21.0%	24.0%	15.5%	10.3%
65+	42.1%	31.4%	12.2%	9.3%	5.1%
Gender					
Male	32.9%	21.6%	22.6%	14.8%	8.1%
Female	28.0%	24.7%	22.3%	13.5%	11.5%
Race / Ethnicity					
Non-Hispanic White/Caucasian	35.3%	23.5%	20.3%	13.0%	8.0%
Non-Hispanic Black/African American	21.7%	20.9%	26.6%	13.7%	17.1%
Non-Hispanic Asian	28.5%	19.8%	16.0%	26.5%	9.2%
Hispanic	19.6%	24.2%	30.0%	14.9%	11.3%
Other	22.4%	22.6%	21.6%	16.8%	16.7%

*Source: ICF analysis using MFour data collected from a nationwide sample of 1,013 from April 14 – April 22, 2020.

In the next 3 months, how likely is it that you/your household will not be able to pay the full amount of the utility bill(s)?					
	Extremely unlikely	Unlikely	Neutral	Likely	Extremely Likely
Age					
18-24	23.2%	24.6%	30.2%	16.1%	5.9%
25-34	22.2%	20.4%	25.4%	19.3%	12.6%
35-49	25.8%	21.7%	24.6%	15.6%	12.3%
50-64	27.9%	24.6%	19.9%	16.3%	11.3%
65+	44.1%	32.0%	11.9%	5.2%	6.8%
Gender					
Male	29.1%	24.0%	23.3%	15.9%	7.7%
Female	28.5%	25.0%	20.8%	13.2%	12.4%
Race / Ethnicity					
Non-Hispanic White/Caucasian	34.2%	24.9%	18.8%	13.4%	8.6%
Non-Hispanic Black/African American	16.9%	20.1%	32.8%	12.5%	17.7%
Non-Hispanic Asian	19.2%	34.1%	23.7%	20.0%	3.1%
Hispanic	20.5%	23.6%	29.3%	16.9%	9.8%
Other	19.7%	22.4%	12.9%	21.4%	23.6%

*Source: ICF analysis using MFour data collected from a nationwide sample of 1,013 from April 14 – April 22, 2020.

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