

## APRIL UPDATE

# Statewide High-Level Analysis of Forecasted Behavioral Health Impacts from COVID-19

## Purpose

This document provides a brief overview of the potential statewide behavioral health impacts from the COVID-19 pandemic. The intent of this document is to communicate potential behavioral health impacts to response planners and organizations or individuals who are responding to or helping to mitigate the behavioral health impacts of the COVID-19 pandemic.

## Bottom Line Up Front

- The COVID-19 pandemic strongly influences behavioral health symptoms and behaviors across the state due to far-reaching medical, economic, social, and political consequences. This forecast is heavily informed by disaster research and response and the latest data and findings specific to this pandemic. Updates will be made monthly to reflect changes in baseline data.
- The transition into the second quarter of 2021 **begins** to move some groups in Washington out of the *disillusionment phase* of the disaster response cycle and into the *reconstruction phase* and recovery. The speed and experience of this process will vary significantly among communities (Figure 1). Those who have experienced significant primary and secondary effects of the pandemic are likely to progress more slowly into reconstruction and recovery than others and experience more severe behavioral health symptoms (Figure 2). This path is represented by the *disaster cascade pathway* (dotted line) in Figure 1.
  - Risk factors that predict a longer recovery cycle (along the disaster cascade pathway) with more severe behavioral health symptoms are also higher for individuals who identify as being part of marginalized social or ethnic groups, families and communities of lower socioeconomic status, and children and youth.<sup>1,2,3,4,5</sup>
- The COVID-19 variants and their effects continue to influence the likelihood of a disaster cascade. These variants may create widespread health and social impacts with the potential for additional infection waves.
- As Washington shifts back and forth through reopening phases, these shifts may increase the likelihood of frustration, anxiety, anger, and depression. Please see [Coping with the Behavioral Health Impacts of Roadmap to Recovery Phase Changes during](#)



DOH 820-166

April 2021

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[COVID-19](#)<sup>a</sup> for information on managing behavioral health challenges associated with reopening phase changes.

- **The risk of suicide, depression, hopelessness, and substance use will continue to remain high through the second quarter of 2021.** The need for professional behavioral health support, as well as community resources, will be occurring at a time when community resources that are already stretched will have even less ability to support the increased need. **Children, youth, and young adults are at significant risk for these behavioral health outcomes.** The effects of isolation combined with shifting educational and social opportunities and experiences have contributed to very difficult behavioral health challenges for many individuals ages 6 – 25.<sup>6</sup>
- Common indicators of behavioral health issues include the number and rate of emergency department (ED) visits for psychological distress, suicidal ideation, suspected suicide attempts, and substance use. Data for these indicators are collected through the [Rapid Health Information Network \(RHINO\) program](#),<sup>b</sup> and definitions for each indicator were created by the Centers for Disease Control and Prevention (CDC).
- We expect behavioral health issues related to isolation, stress, and fear to trend relative to COVID-19 cases, COVID-19 hospitalization rates, and reopening phase changes.<sup>7,8,9,10</sup> In addition, even though vaccine availability has increased and everyone 16 and older is now eligible for a COVID-19 vaccine, situations of varying vaccine access and confidence could escalate medical risks for some people, contributing to subsequent behavioral health impacts. To mitigate these risks, DOH developed and implemented eight [strategies for equitable vaccine distribution](#)<sup>c</sup> based on extensive feedback from the communities, sectors, and partners most impacted by COVID-19.

## Phase-Related Behavioral Health Considerations

**Behavioral health symptoms will continue to present in phases.**<sup>11,12</sup> The unique characteristics of this pandemic trend towards anxiety and depression as a significant behavioral health outcome for many in Washington. These outcomes have been shown throughout the Behavioral Health Impact Situation Reports published by the Washington State Department of Health (DOH), which are available on the [Behavioral Health Resources & Recommendations webpage](#).<sup>d</sup> Behavioral health symptoms of anxiety, impulsivity, decreased frustration tolerance, anger, depression, and post-traumatic stress disorder (PTSD) are likely to increase with any significant increases in infection and hospitalization rates or reopening phase changes.<sup>13,14</sup>

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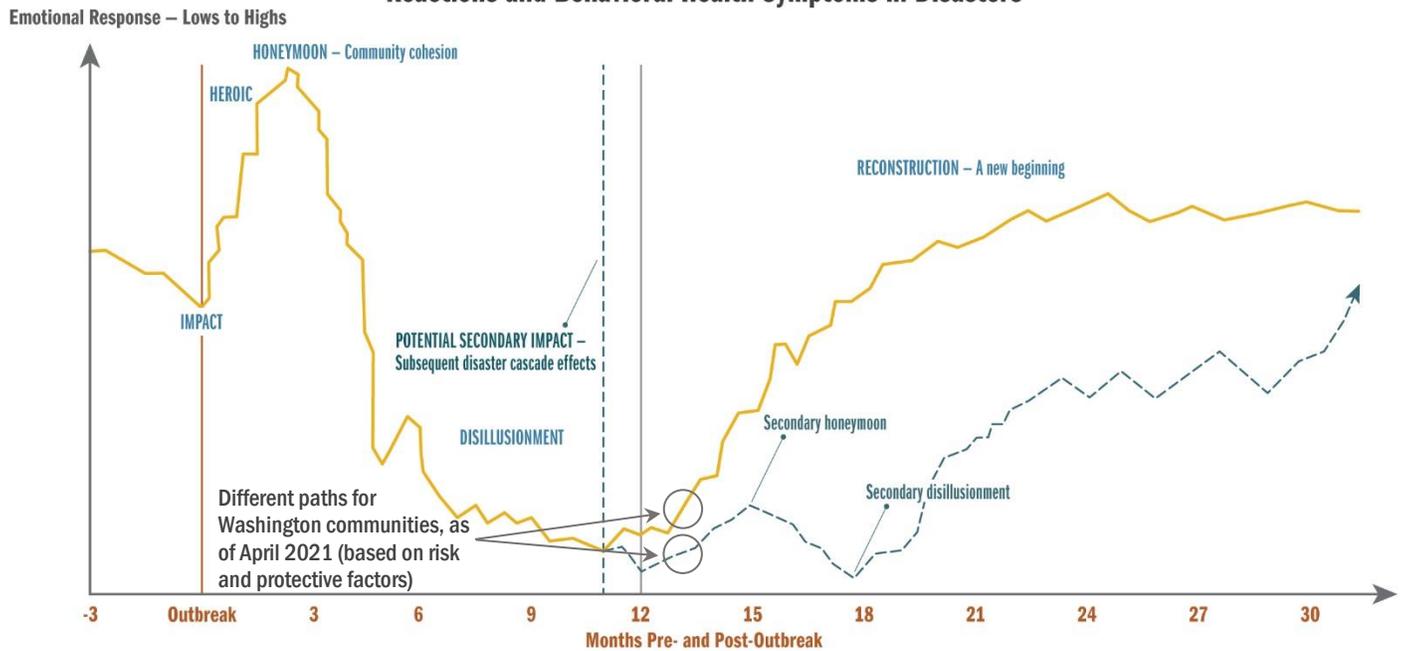
<sup>a</sup> <https://www.doh.wa.gov/Portals/1/Documents/1600/coronavirus/821-138-BHImpactsToPhaseChanges.pdf>

<sup>b</sup> <https://www.doh.wa.gov/ForPublicHealthandHealthcareProviders/HealthcareProfessionsandFacilities/PublicHealthMeaningfulUse/RHINO>

<sup>c</sup> <https://www.doh.wa.gov/Emergencies/COVID19/VaccineInformation/Engagement>

<sup>d</sup> <https://www.doh.wa.gov/Emergencies/COVID19/HealthcareProviders/BehavioralHealthResources>

## Reactions and Behavioral Health Symptoms in Disasters



**Figure 1: Phases of reactions and behavioral health symptoms in disasters.** The dotted graph line represents the response and recovery pattern that may occur if the full force of a disaster cascade is experienced by a majority of the population (i.e., the disaster cascade pathway). *Protective factors* are characteristics, conditions, or behaviors that reduce the effects of stressful life events. They also increase a person’s ability to avoid risks or hazards, recover, and grow stronger. Adapted from the Substance Abuse and Mental Health Services Administration (SAMHSA)<sup>15</sup>

### COVID-19 Variants

The concerns about a **disaster cascade** have been previously discussed in this forecast, and it is possible that the arrival and spread of COVID-19 variants could cause such an event. In addition to the B.1.1.7 variant first found in the United Kingdom, the B.1.351 variant first found in South Africa, and the P.1 variant first found in Brazil, the CDC added two more *variants of concern*<sup>e</sup> in March 2021 – the B.1.427 and B.1.429 variants that originated in California.<sup>16,17</sup> To date, these five [variants of concern have been detected in Washington](#).<sup>f</sup> For the latest information on variants in Washington, see the weekly [SARS-CoV-2 Sequencing and Variants in Washington State report](#).<sup>g</sup>

A *disaster cascade* could occur with any new rise in infections, which may prompt a secondary disaster impact (as represented by the dotted line in Figure 1). The secondary impact may be a result of the pandemic itself (infections and hospitalizations) or an indirect impact of the pandemic (economic hardship, social and political unrest, reopening phase changes, etc.). There remains some concern that the variants, some of which may spread faster, and reduced use of

<sup>e</sup> Variant of concern: A variant for which there is evidence of an increase in transmissibility, more severe disease (increased hospitalizations or deaths), significant reduction in neutralization by antibodies generated during previous infection or vaccination, reduced effectiveness of treatments or vaccines, or diagnostic detection failures. See the CDC *SARS-CoV-2 Variant Classifications and Definitions* (<https://www.cdc.gov/coronavirus/2019-ncov/cases-updates/variant-surveillance/variant-info.html>) and *About Variants of the Virus that Causes COVID-19* (<https://www.cdc.gov/coronavirus/2019ncov/transmission/variant.html>) pages for additional information.

<sup>f</sup> <https://www.doh.wa.gov/Emergencies/COVID19/Variants>

<sup>g</sup> <https://www.doh.wa.gov/Portals/1/Documents/1600/coronavirus/data-tables/420-316-SequencingAndVariantsReport.pdf>

preventive measures are leading us to a fourth wave (i.e., spike) in COVID-19 cases. Specifically, the B.1.1.7 variant is of particular concern for becoming the dominant strain. Should a fourth wave occur, there is high potential for the *disillusionment phase* to be once again extended.

Preliminary studies indicate that these variants spread more easily and quickly. There is evidence that vaccines are less effective in protecting against some variants. However, **all available vaccines provide protection against (i.e., reduce risk of) hospitalization and death.** These variants continue to be studied to understand whether they cause more severe illness and how they may change the effectiveness of current COVID-19 vaccines.<sup>15,11</sup> While vaccination is helping to control transmission rates, it is not enough to counteract widespread risk-taking behavior (e.g., decreased use of masks, decreased physical distancing, increasing group interactions within close physical proximity).<sup>18</sup> Many people may be experiencing *pandemic apathy* (an experience where general exhaustion manifests in the form of apathy about the pandemic), but it is **essential** that vaccinated and non-vaccinated people do their best to remain vigilant with COVID-19 precautions (masking, distancing, handwashing, and keeping social circles small).

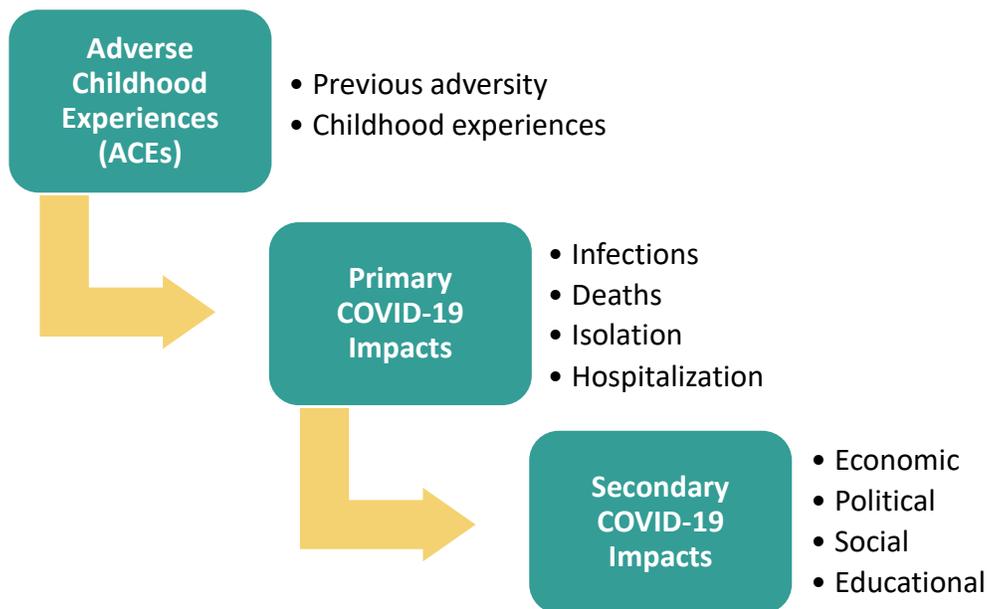
Behavioral health concerns related to the many unknowns associated with the variants include the risks of additional anxiety, issues with excessive use of media to seek information and answers, and additional risks of depression for those already experiencing many negative outcomes related to the pandemic or a *disaster cascade*. For example, media coverage about additional variants, such as coverage on the [COVID-19 variants found in New York and California](#),<sup>h</sup> and the many unknowns associated with them may be an additional source of anxiety for some around the ongoing and constantly changing nature of the pandemic.

### Phase Divergence within Washington

As we progress past the anniversary of the COVID-19 pandemic and into the disaster response and recovery cycle, communities, families, and individuals in Washington will diverge more distinctly from each other in terms of behavioral health experiences. Factors, such as economic security, social marginalization, and race and ethnicity continue to play a role in the experience of both physical and behavioral health risks and symptoms throughout the pandemic.<sup>19,20,21,22</sup> The disparity in experiences throughout the last year will tend to be magnified and exacerbated in the next several months as we move further through the recovery cycle. Those who have been able to experience more economic, social, educational, and occupational opportunities in the first quarter of 2021 will tend to climb more rapidly into the *reconstruction phase* and recovery, while those who have experienced more direct primary and secondary impacts from the pandemic (e.g., illness, hospitalization, job loss, eviction) (Figure 2) will likely endure a prolonged *disillusionment phase*, as is consistent with the disaster cascade pathway (Figure 1).

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<sup>h</sup> <https://www.cidrap.umn.edu/news-perspective/2021/02/new-covid-19-variants-found-new-york-california>



**Figure 2: Disaster and Trauma Cascade Potential.** The figure displays the range of factors (ACEs,<sup>i</sup> primary COVID-19 impacts, secondary COVID-19 impacts) which may alter the *reconstruction phase* and recovery for individuals based on their experiences.

## Typical Disaster Response and Recovery Pathway Considerations

### Workplace Changes

As we move forward in the disaster recovery cycle, some employees who were previously working from home or remotely may begin to transition back to in-person work. This transition may bring with it a variety of emotional and behavioral responses that range from excitement and happiness to anxiety and fear. It may be beneficial for supervisors, managers, and leaders within organizations and businesses to address these transitions and the associated reactions about workplace unknowns and the new normal as directly and transparently as possible. When possible, safety protocol information should be clearly provided, and well-defined expectations about working hours, shifts, and locations should be set at all levels in order to alleviate anxiety and reduce the likelihood of misinterpretation. Within teams, it may be helpful for managers and supervisors to recognize that team members may have very different experiences and reactions about returning to the workplace. *Active listening* is a form of healthy communication that can support team building. It is recommended as an intervention that can help address workplace issues that may arise during these transitions.

### Social and Recreational Factors, Risk Taking

As more and more people in Washington get vaccinated, more opportunities will begin to present themselves for social and recreational activities that were previously off limits due to pandemic associated safety restrictions. The need for patience and diligence remains high as the weather improves and pandemic apathy continues to wear on everyone. One area of attention in the spring and summer months of 2021 is the potential likelihood of a *rebound effect* from the pandemic that may include people acting “out” in ways that are consistent with

<sup>i</sup> Adverse childhood experience (ACE): A traumatic experience in a person’s life occurring before the age of 18 that the person remembers as an adult.

highly expressive behavior (partying, risk taking, aggressive or illegal behavior) as a response to the perception that things are returning to normal.

The likelihood of risk-taking behaviors increases as the lure of social connection with peers and a sense of freedom from pandemic-related restrictions begins to emerge, particularly for youth and young adults.<sup>23,24</sup> In addition to the ways in which the neurological consequences of general pandemic apathy may influence decision making, as the weather changes and temperatures increase, generally risky behavior, as well as the likelihood of aggression and violence also increase.<sup>23,25,26</sup>

### Vaccine Confidence

Vaccine confidence is a concern in some communities and groups. Efforts by medical and behavioral health providers should be focused on providing scientifically accurate, consistent, straightforward messaging for clients and patients about potential benefits and risks of the vaccine. Simple, consistent information about the vaccine development and testing process, as well as the distribution plan in our state, should be made available for patients and clients who are interested. Anxiety about potential side effects can also be alleviated by sharing accurate information on what is known to date for those who have already received the vaccine. See the [Health Care Provider Discussion Guide<sup>j</sup>](#) for tips on building confidence in COVID-19 mRNA vaccines. Additional information for providers can be found on DOH's [Healthcare Provider Resources & Recommendations webpage<sup>k</sup>](#).

### Disaster Cascade Pathway Considerations

#### Social Marginalization

There are a number of groups and communities that have experienced significant social marginalization throughout the pandemic. Several studies have found that across the United States, members of ethnic minority groups have been disproportionately negatively affected by COVID-19, sometimes at rates two or three times higher than their representation in the larger population.<sup>27,28,29</sup> There is also a corresponding increase in behavioral health concerns related to historical negative medical experiences, direct medical impacts of the pandemic, and grief and isolation.<sup>30</sup> In terms of behavioral health outcomes, 61% of Black adults and 60% of Hispanic adults reported that the COVID-19 pandemic has impacted their mental health, in comparison with 55% of White adults.<sup>31</sup>

Risks related to underlying social or systemic factors are exacerbated by historical trauma and anxiety related to discrimination and prejudice.<sup>32</sup> These risks can result in higher levels of PTSD, as well as a variety of other mental health concerns, including substance use issues. There has been a significant increase in crimes against members of Asian communities, related to COVID-19, as a result of misconceptions and misinformation about the source of the virus that causes COVID-19, and the tendency to seek a source of blame for the pandemic.<sup>33,34,35</sup> There have been reports of hate crimes, such as harassment and discrimination, with Asian Americans being shunned, verbally abused, coughed and spat on, and physically assaulted. These experiences have significant negative impacts to behavioral health, as social isolation and perceived separation from the community escalates.<sup>36</sup>

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<sup>j</sup> <https://www.doh.wa.gov/Portals/1/Documents/1600/coronavirus/820-130-ProviderMRNAVaccinesDiscussionGuide.pdf>

<sup>k</sup> <https://www.doh.wa.gov/Emergencies/COVID19/HealthcareProviders>

Violence against women increases both during and after every type of large-scale emergency or disaster, and increases during the COVID-19 pandemic have already been documented across multiple countries, including the United States.<sup>37,38</sup> Violence against women can result in serious physical, psychological, and sexual and reproductive health problems, including sexually transmitted infections, HIV, and unplanned pregnancies.<sup>37</sup> Increased stress due to COVID-19, reduced peer support, increased substance use issues, and decreased access to services may all contribute to a significant increase of gender-based violence.<sup>39</sup> Business closures and the need to stay home to control the spread of COVID-19 contributed to an environment where some victims of intimate partner violence had to shelter in place with their abusers. There has also been a significant increase in housing-related sexual harassment from landlords demanding “sex-for-rent” from both female and male renters who are falling behind in rent payments.<sup>40</sup>

The uneven division of labor in the household also significantly burdens women. Women are doing more unpaid labor in the home than men, such as educating children at home due to school closures, caring for ill family members, and daily household chores.<sup>37,41,42,43</sup> Additionally, closures of schools and daycare centers significantly increased child care needs, which has a particularly large impact on working mothers.<sup>42</sup> In the United States, among all married couples with children, husbands provide 7.4 hours of child care per week on average, versus the 13.3 hours for wives. Single mothers make up the majority of single-parent households, accounting for just under 70 percent of all single-parent households.<sup>41</sup> In the United States, that amounts to 15 million single mothers. Combined with the economic disadvantages of being female as outlined above, women who are single parents experience even larger financial impacts related to the COVID-19 pandemic.

Individuals in the LGBTQ+ community are also at increased risk of behavioral health, medical, and economic impacts due to COVID-19.<sup>37,44</sup> LGBTQ+ youth are particularly vulnerable to negative mental health impacts due to COVID-19.<sup>45</sup> Prior to COVID-19, LGBTQ+ youth were disproportionately impacted by housing instability – a trend that is likely to significantly worsen with the pandemic.<sup>45</sup> LGBTQ+ youth were at significantly increased risk for depression, anxiety, substance use, and suicidality before COVID-19.<sup>42</sup> These risks are highest among youth who identify as transgender, non-binary, or both.<sup>41</sup> Safe, supportive social connections are essential protective factors against depression and suicide among LGBTQ+ youth.<sup>45,46</sup>

With school closures and the need to stay home to control the spread of COVID-19, many youth in the LGBTQ+ community lost access to trusted allies and safe adults, such as coaches, teachers, and school counselors, as well as LGBTQ+ community groups, including Gender and Sexualities Alliances (GSAs).<sup>45</sup> Physical distancing measures may have an additional negative impact on LGBTQ+ youth as only 30% report living in a home where they are accepted by their parents.<sup>1</sup> LGB young adults who experience high levels of parental rejection are eight times more likely to die by suicide and are six times more likely to experience severe depression.<sup>2</sup> LGBTQ+ youth are at extremely high risk for sexual, physical, and psychological abuse.<sup>42,45</sup> Intimate partner violence is also prevalent in the LGBTQ+ community, even in youth.<sup>47</sup> Social isolation is a difficult aspect of the COVID-19 pandemic among older adults, and is particularly challenging for members of the aging LGBTQ+ population who also deal with various forms of systemic discrimination, including those in employment, medical care, and housing.<sup>42</sup>

### Socioeconomic Status

Disasters may affect all people, but those of lower socioeconomic status are usually much more negatively impacted than other groups.<sup>30</sup> For example, individuals and families in lower socioeconomic groups are 52% more likely to lose their job or experience a significant reduction in their income than individuals in middle or upper socioeconomic groups.<sup>48</sup> Only 23% of

individuals in lower socioeconomic groups have enough money saved to cover expenses for three months in case of a sudden loss of income, compared to their middle (48%) and upper (75%) socioeconomic counterparts. Additionally, 53% of individuals with lower socioeconomic status will struggle to pay all their bills in any given month, compared to 25% of individuals with middle socioeconomic status and 11% of individuals with upper socioeconomic status.<sup>48</sup>

In general, women tend to have less stable employment than their male counterparts.<sup>37</sup> This means there may be an increased economic impact of COVID-19 for women who are earning less, saving less, and have less secure employment than men.<sup>37,41</sup> Unemployment rates related to physical distancing measures have had a large impact on sectors with high female employment, such as restaurants and hospitality.<sup>49</sup> Additionally, though women make up a majority of the healthcare workforce (67%),<sup>36,50</sup> the overall pay gap between men and women in the field is 28%.<sup>42</sup>

Individuals in the LGBTQ+ community are more likely to work jobs with high rates of exposure to illness (essential jobs), as well as higher risk of economic impact (i.e., sudden loss of income and/or layoffs).<sup>51</sup> Approximately 30% of individuals in the LGBTQ+ community, compared to 22% of the general population, have experienced a sudden loss of income.<sup>2</sup> Individuals in the LGBTQ+ community are more likely to live in poverty than their cisgender counterparts.<sup>42</sup> Already, 20% of LGBTQ+ individuals describe their personal finances as “much worse off” than they were a year ago, compared to 11% of the general population. LGBTQ+ individuals are less likely to have access to health insurance.<sup>42</sup> Prior to the pandemic, 17% of LGBTQ+ adults had no access to health insurance, compared to 12% of non-LGBTQ+ adults.<sup>42</sup> When broken down more specifically, 23% of LGBTQ+ adults of color, 22% of transgender adults, and 32% of transgender adults of color have no form of health insurance coverage.

The following concerns related to socioeconomic status are things that directly and indirectly influence behavioral health symptoms for members of this group throughout the COVID-19 pandemic:

- Those without a four-year college degree (46%) are more likely than their counterparts with a bachelor’s degree (37%) to lose their job or experience a reduction in income.<sup>48</sup>
- When looking at the impact of ethnicity on loss of income, 61% of Hispanic adults report that someone in their household lost a job or experienced a pay cut due to the COVID-19 pandemic, compared with 44% of Black adults and 38% of White adults.<sup>48</sup>
- Overall, more than 26% of individuals have lost their job due to the COVID-19 pandemic. Also, 21% have had their hours reduced, 13% have experienced a pay cut, and 7% have been furloughed.<sup>31</sup> Approximately 65% of these individuals are from low-income households earning less than \$40,000 annually.
- Almost 30% of adults are struggling to pay monthly bills or afford household expenses, such as food or health insurance, due to COVID-19.<sup>31</sup> This increases to 40% among 18 – 29 year-olds, those with annual household incomes of \$40,000 or less, and Hispanic adults. Additionally, Black adults are disproportionately struggling to pay monthly bills or afford household expenses, with 56% of Black adults reporting these impacts.
- Individuals in lower socioeconomic groups are at higher risk for having their mental health negatively impacted due to COVID-19.<sup>52</sup> For example, 26% of individuals with an annual income of less than \$40,000 report experiencing a significant negative mental health impact, compared to 17% of those with an income between \$40,000 and \$89,000 and 14% of those with an income of \$90,000 or more.

- Individuals in lower socioeconomic groups are also at a higher risk for developing PTSD after a disaster.<sup>53,54</sup>

## Unemployment

Suicide and drug overdose death rates are both highly influenced by unemployment.<sup>55,56,57,78</sup> For every 1% increase in the unemployment rate, there is a corresponding 1.6% increase in the suicide rate<sup>56</sup> and an increase of one drug overdose death per 300,000 people.<sup>55</sup> Additionally, a recent study from the National Bureau of Economic Research reported, “the size of the COVID-19-related unemployment to be between 2 and 5 times larger than the typical unemployment shock, depending on race [and] gender, resulting in a 3.0% increase in mortality rate and a 0.5% drop in life expectancy over the next 15 years for the overall American population. We also predict that the shock will disproportionately affect African Americans and women [in the short term] while white men might suffer large consequences [in the long term]. These figures translate in a staggering 0.89 million additional deaths [nationally] over the next 15 years.”<sup>58</sup>

The U.S. Bureau of Labor Statistics (BLS) regularly reports unemployment data, which is based on labor market activity, working conditions, and price changes in the U.S. economy. BLS measured the national unemployment rate to be 6.2% in February 2021. In reviewing another source, the Ludwig Institute for Shared Economic Prosperity (LISEP) began using a new measure to calculate what is called the True Rate of Unemployment (TRU).<sup>59,60</sup> This rate is defined as the percentage of the U.S. labor force that is *functionally unemployed*.<sup>61</sup> TRU uses data from BLS and also tracks the percentage of the U.S. labor force that does not have a full-time job (35+ hours a week) but wants one, has no job, or does not earn a living wage (which is marked at \$20,000 annually before taxes). Thus, any individual who wants full-time work but can only find part-time work, as well as those working full-time but earning too little to climb above the poverty line, are considered *functionally unemployed*. Based on the inclusion of these additional factors related to unemployment, the TRU in February 2021 was 25.1% nationally. Further analysis of the data shows the disparity between Black and White Americans, with 30.2% of Black Americans functionally unemployed compared to 22.7% of White Americans.<sup>61</sup>

Individuals in Washington who are experiencing true functional unemployment, as previously described, are at higher risk of continuing to experience the behavioral health impacts of the *disillusionment phase*, even as we move into late spring and early summer. In Washington, approximately 1,231 people die from suicide annually, and 1,173 people die from drug overdose annually.<sup>62</sup> The unemployment rate in Washington was 6.0% in January 2021, 2.1 percentage points higher than January 2020.<sup>63</sup> Given the increase in unemployment, it is possible that the suicide rate will increase by 3.36%.

## Depression and Suicide

Depression is one of the most common emotional responses during the *disillusionment phase* of disaster response and recovery. Many children, teens, and young adults are experiencing significant symptoms of depression during the pandemic.<sup>6,64</sup> Older adults are also a group of concern due to isolation and lack of social connection.<sup>77</sup> First responders, healthcare professionals, and behavioral health providers are also feeling emotional impacts of the pandemic as more patients and clients need treatment, support, and preventive care.

As the risk of depression increases, so does the risk of suicide. Active suicide prevention should be promoted through sharing information on recognizing [warning signs](#)<sup>l</sup> and other related resources, and checking in with colleagues, friends, family members, and neighbors. When someone is expressing thoughts of self-harm, [access to dangerous means of harm should be removed](#),<sup>m</sup> and medications, poisons, and firearms should be stored safely. Suicides consistently account for approximately 75% of all firearm-related fatalities in Washington.<sup>65</sup> [Storing firearms safely](#)<sup>n</sup> and [temporarily removing them from the home](#)<sup>o</sup> of an at-risk person during a crisis can save lives.

#### **Additional Resources:**

- Anyone concerned about depression or other behavioral health symptoms should talk with their **healthcare provider**.
- [Washington Listens](#)<sup>p</sup>: Call 833-681-0211 to talk to a support specialist who will listen and help you cope with the stress of COVID-19.
- **Health Care Authority:** [Mental health crisis lines](#)<sup>q</sup>
- [National Suicide Prevention Lifeline](#):<sup>r</sup> Call 800-273-8255 (English) or 1-888-628-9454 (Español).
- [Crisis Connections](#):<sup>s</sup> Call 866-427-4747.
- [Crisis Text Line](#):<sup>t</sup> Text HEAL to 741741.
- **Department of Health:** [Crisis lines for specific groups](#)<sup>u</sup>
- [TeenLink](#):<sup>v</sup> Call or text 866-833-6546.
- [Washington Warm Line](#):<sup>w</sup> Call 877-500-9276.
- **Washington State COVID-19 Response:** [Mental and emotional well-being webpage](#)<sup>x</sup>

#### Children and Families

Almost 30% of parents are experiencing negative mood and poor sleep quality, with a 122% increase in reported work disruption and 86% of families experiencing hardships, such as loss of income, job loss, increased caregiving burden, and household illness.<sup>66</sup> Families experiencing hardship are also reporting navigating their child's disruptive or uncooperative behavior and anxiety. When children go through a hard time, such as living through a disaster, they will need extra attention and comfort from their parents. It's important to try to be patient with children

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<sup>l</sup> <https://www.doh.wa.gov/YouandYourFamily/InjuryandViolencePrevention/SuicidePrevention/HelpSomeoneElse#common>

<sup>m</sup> <https://www.seattlechildrens.org/health-safety/keeping-kids-healthy/prevention/home-checklist/>

<sup>n</sup> <https://www.kingcounty.gov/depts/health/violence-injury-prevention/violence-prevention/gun-violence/LOCK-IT-UP.aspx>

<sup>o</sup> <https://hiprc.org/firearm/firearm-storage-wa/>

<sup>p</sup> <https://www.walistens.org/>

<sup>q</sup> <https://www.hca.wa.gov/health-care-services-supports/behavioral-health-recovery/mental-health-crisis-lines>

<sup>r</sup> <https://suicidepreventionlifeline.org/>

<sup>s</sup> <https://www.crisisconnections.org/24-hour-crisis-line/>

<sup>t</sup> <https://www.crisistextline.org/>

<sup>u</sup> <https://www.doh.wa.gov/YouandYourFamily/InjuryandViolencePrevention/SuicidePrevention/HotlinesTextandChatResources>

<sup>v</sup> <https://www.crisisconnections.org/teen-link/>

<sup>w</sup> <https://www.crisisconnections.org/wa-warm-line/>

<sup>x</sup> [coronavirus.wa.gov/wellbeing](https://coronavirus.wa.gov/wellbeing)

who are upset and may be having tantrums or becoming withdrawn. It's also important to try to keep the family rules about behavior the same, if possible. When children don't have help with boundaries and limits on their behavior, it can make them feel less safe and more anxious.

Mental health-related visits to emergency departments for children ages 5 – 17 between April and October 2020 increased by 24% – 31%, compared with the same time period in 2019.<sup>67</sup> It is normal for children to be having trouble during this time. However, if there are concerns about safety, seek professional support and assistance. For more detailed information on this topic, see the [Behavioral Health Toolbox for Families: Supporting Children and Teens During the COVID-19 Pandemic](#).<sup>y</sup> This resource provides general information about common emotional reactions of children, teens, and families during disasters. It also has suggestions on how to help children, teens, and families recover from disasters and grow stronger. Parents and caregivers can also use the [National Parent Helpline](#)<sup>z</sup> to access telephone support (1-855-427-2736) and additional resources.

### Suicidal Ideation and Suicide Attempts in Youth

We are continuing to monitor rates of ED visits for psychological distress, suicidal ideation, and suspected suicide attempts for children, teens, and young adults.<sup>aa,bb</sup> The convergence of factors that may be uniquely affecting the psychological health of these groups in the later months of 2020 into the early months of 2021 is **very concerning**. Several factors, including the current *disillusionment phase* of disaster, the extreme difficulty with access to behavioral healthcare and resources, and the unique challenges faced by young people this year, will likely contribute to an increase in distress.

A recent [emergency proclamation](#)<sup>cc</sup> by Governor Inslee states that “hospitals and health professionals who specialize in the treatment of children indicate that many of Washington’s children and youth are experiencing a significant mental and behavioral health crisis as a result of the ongoing pandemic,” and “the children and adolescents presenting in mental health crises to hospitals or emergency rooms are the most severe cases and represent just a small portion of the entire population of youth in Washington who are suffering from increased mental and behavioral health needs, educational setbacks, and developmental concerns.”

We strongly recommend continual monitoring and supporting of adolescents and youth. For parents and caregivers, this can include checking in and asking youth and teens about thoughts of self-harm or suicide. Asking about suicide does **not** increase risk and, in fact, increases safety and often helps lead to timely intervention. For medical and behavioral health providers, this includes screening for suicidal ideation and behaviors, and regularly checking in about access to means, such as substances or firearms, for inflicting self-harm of any kind.

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<sup>y</sup> <https://www.doh.wa.gov/Portals/1/Documents/1600/coronavirus/BHG-COVID19-FamilyToolbox.pdf>

<sup>z</sup> <https://www.nationalparenthelpline.org/>

<sup>aa</sup> Data regarding suspected suicide attempt among people of all ages should be interpreted with caution. The current CDC definition for suspected suicide attempt, due to its broad inclusion of intentional self-harm behaviors that may or may not be interpreted as a suicidal act, could artificially inflate both the count and rate of such visits.

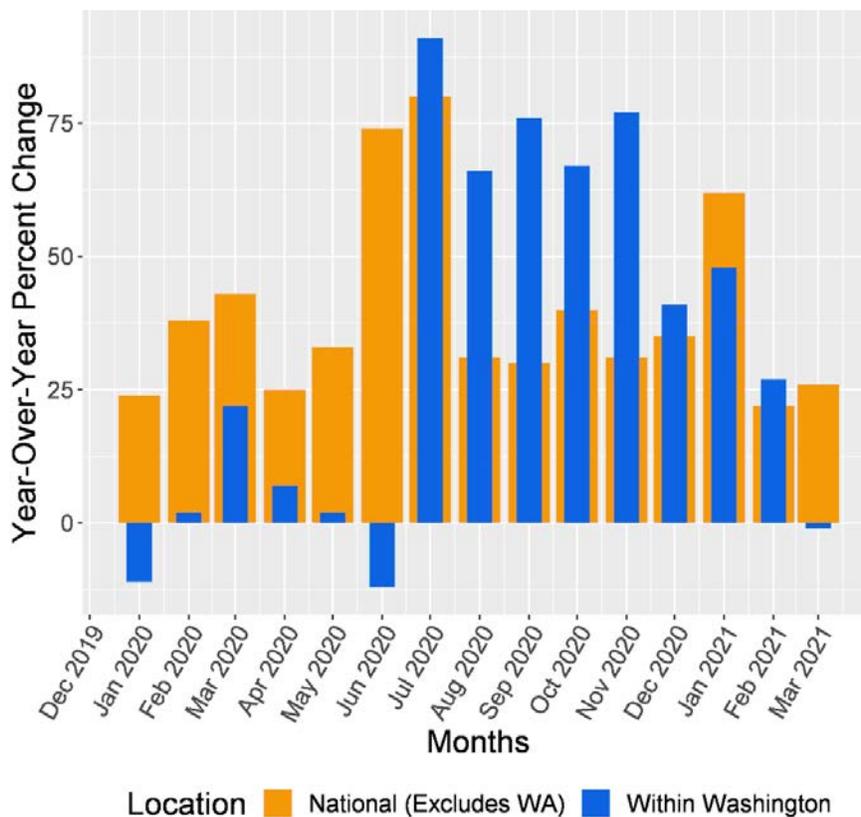
<sup>bb</sup> <https://knowledgerepository.syndromicsurveillance.org/disaster-related-mental-health-v1-syndrome-definition-subcommittee>

<sup>cc</sup> [https://www.governor.wa.gov/sites/default/files/proclamations/21-05\\_Children%27s\\_Mental\\_Health\\_Crisis\\_%28tmp%29.pdf](https://www.governor.wa.gov/sites/default/files/proclamations/21-05_Children%27s_Mental_Health_Crisis_%28tmp%29.pdf)

## Potential for Violence and Aggression

Increases in FBI background checks for handgun sales<sup>dd</sup> in January 2021 could indicate significantly more risk for gun violence, particularly with where we are in the disaster response and recovery cycle, as well as the current sociopolitical climate.<sup>68,69</sup> The U.S. Department of Homeland Security (DHS) has maintained their warning of continued violence by domestic extremists.<sup>70,71</sup> Most notably, handgun ownership is associated with a significantly increased and enduring risk of suicide by firearm.<sup>72</sup> The FBI conducted 39,695,315 background checks nationwide for gun purchases and other related services in 2020. In comparison, the FBI conducted a total of 28,369,750 background checks for gun purchases in the year 2000.<sup>73</sup> Firearm background checks in January 2021 were the third highest one-month total on record, with 4,317,804 checks, compared to 2,702,702 in January 2020, which is a 60% increase.

In March 2021, 4,645,609 background checks were conducted nationally, continuing the trend of significantly increased background checks when compared to years prior to 2020, with Washington showing a greater increase than the United States as a whole. In Washington, 607,170 firearm background checks were conducted in 2019, compared to 781,471 in 2020, which is a 23% increase. More recently, 74,860 firearms background checks were conducted in Washington in March 2021, which is a less than 1% decrease from the 75,529 conducted in March 2020 (Figure 3).<sup>74</sup>



**Figure 3: Percent change of NICS firearm background checks from December 2019 through March 2021.** The graph compares Washington background checks with the rest of the nation.

<sup>dd</sup> It is important to note that the number of firearm background checks initiated through the NICS (National Instant Criminal Background Check System) does not represent the number of firearms sold. Based on varying state laws and purchase scenarios, a one-to-one correlation cannot be made between a firearm background check and a firearm sale.

The combination of the COVID-19 pandemic and the election season has caused a significant increase in sociopolitical discord, extremist views, and extremist behaviors, according to a DHS threat assessment.<sup>75</sup> With heightened emotions due to the pandemic, increased extremist behavior, and increased gun sales, it is more important than ever for people and communities to promote resilience, increase connection, be mindful of what others may be experiencing, and be intentional about practicing patience. Some [ways to decrease risk](#)<sup>ee</sup> are to **keep all firearms securely locked up**, prevent unauthorized access by children, and ask a friend or relative to take firearms in an emergency transfer until the crisis is addressed.<sup>m,n,o</sup> Some firearms dealers will take firearms and store them safely for families during a crisis.

## Behavioral Health Outcomes for Survivors of COVID-19

As the number of people infected with the virus continues to increase nationally, so does the number of survivors. Recently, concerning research, provider bulletins, and anecdotal accounts have documented specific behavioral health symptoms and diagnoses which seem to occur in those who have survived COVID-19.<sup>76,77</sup> Treatment providers and behavioral health systems should be aware of these findings, which include new instances of anxiety disorders and PTSD, as well as a new diagnosis identified as **post-COVID-19 psychosis**.<sup>78</sup>

For adults over 65 years, there also seems to be a slight increase in diagnoses of dementia in the first 14 – 90 days after a COVID-19 diagnosis.<sup>76</sup> Research indicates that individuals who have been hospitalized for COVID-19 or developed encephalopathy (any brain disease that impacts brain function) due to their illness are more likely to experience neurological complications, a psychotic disorder, mood disorder, anxiety disorder, substance use disorder, and insomnia.<sup>79</sup> Although the estimated incidence is modest in the whole COVID-19 cohort (0.67%), 1.46% of hospitalized cases and 4.72% of those who had neurological symptoms related to their COVID-19 infection received a first diagnosis of dementia within six months.

### **Individuals with even mild cases of COVID-19 are at higher risk for depression and anxiety.**

This research is congruent with earlier research on COVID-19 which demonstrated evidence that survivors are at increased risk of mood and anxiety disorders and dementia in the three months following infection.<sup>76</sup>

## Key Things to Know

- [Medical and specialty providers](#),<sup>ff</sup> organizations, and facilities should continue developing resources and staffing to address behavioral health impacts of the pandemic that are likely to increase significantly, particularly under circumstances where individuals, families, and communities are affected by a disaster cascade. Support strategies need to be tailored based on the current phase of the incident and the target population, group, or individual.
- The risk of suicide will likely continue to be high throughout the first half of 2021. Data suggest that young adults (ages 18 – 29) and older adults (60+) are particularly vulnerable.<sup>19</sup> We encourage healthcare providers to routinely screen and ask their patients about suicidal

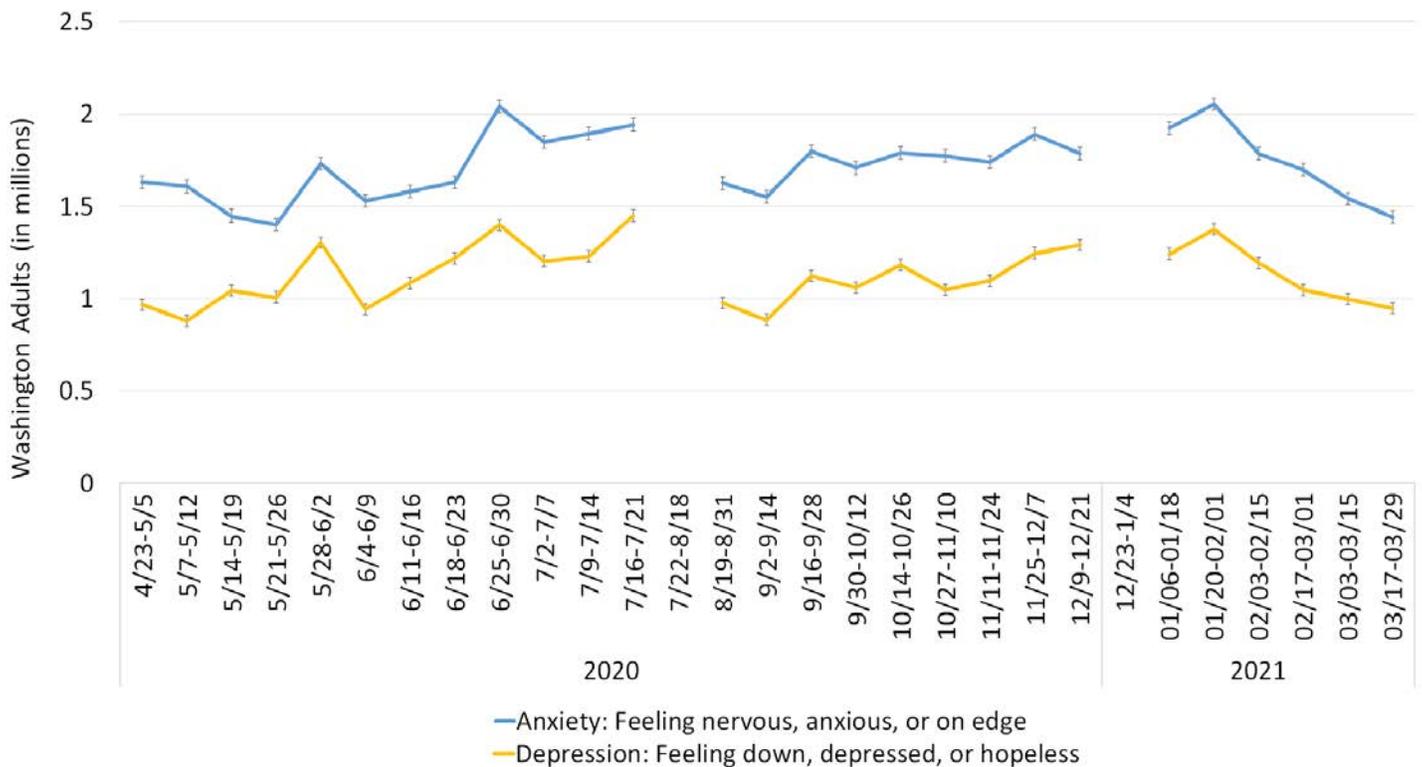
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<sup>ee</sup> <https://saferhomescoalition.org/what-is-a-safer-home/>

<sup>ff</sup> <https://www.doh.wa.gov/Portals/1/Documents/1600/coronavirus/BHG-COVID19BehavioralHealthGroupImpactReferenceGuide.pdf#page=8>

thoughts or plans. The National Institute of Mental Health’s [Ask Suicide-Screening Questions \(ASQ\) Screening Tool](#)<sup>88</sup> can be used for patients ages 10 – 24.

- It is anticipated that rates of depression and anxiety for certain at-risk groups (e.g., those identifying as multiracial or LGBTQ+) in the general population during this pandemic are likely to be much higher than is typical after a natural disaster where there is a single impact point in time. Clinically significant symptoms of anxiety or depression are likely to occur in 30% – 60% of the general population (equivalent to 2.25 million – 4.5 million people in Washington, including children and youth) due to the chronic and ongoing social and economic disruption in people’s lives as a result of the COVID-19 pandemic.<sup>79</sup>
- Weekly survey data suggest that approximately 1.8 million Washington adults are experiencing symptoms of anxiety on at least most days, and just over 1.1 million are experiencing symptoms of depression on at least most days (Figure 4).<sup>20</sup>



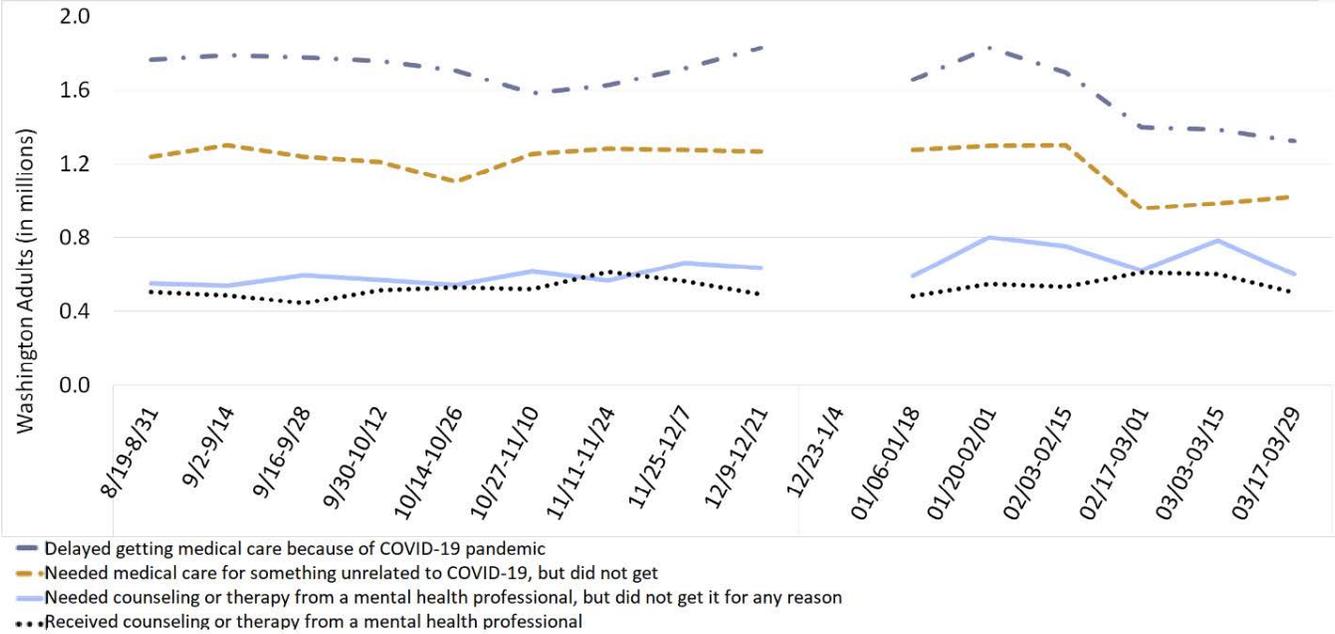
**Figure 4: Estimated Washington adults experiencing symptoms of anxiety and depression at least most days, by week: April 23, 2020 – March 29, 2021 (Source: U.S. Census Bureau).**

Note: Census data is unavailable for the periods of July 22, 2020 – August 18, 2020 and December 21, 2020 – January 6, 2021.

- [Survey data](#) collected by the U.S. Census Bureau for August 19, 2020 – March 29, 2021 show the number of adults in Washington who received medical care and counseling, as well as the number who delayed or did not receive care (Figure 5).<sup>20</sup> Among those who reported needing counseling or therapy and not receiving it, approximately 52% were ages 18 – 39. Note that survey respondents were not asked why they were unable to receive behavioral healthcare.

<sup>88</sup> [https://www.nimh.nih.gov/research/research-conducted-at-nimh/asq-toolkit-materials/asq-tool/screening\\_tool\\_asq\\_nimh\\_toolkit\\_155867.pdf](https://www.nimh.nih.gov/research/research-conducted-at-nimh/asq-toolkit-materials/asq-tool/screening_tool_asq_nimh_toolkit_155867.pdf)

- Healthcare providers and organizations should continue to suggest healthy alternatives for coping and sources of support for staff, as well as patients and clients. For additional resources, visit [DOH's Behavioral Health Resources & Recommendations webpage](#).<sup>d</sup> Planning should include creative and flexible behavioral health service provision, particularly within rural communities and underserved populations, with specific mindfulness around cost of services, access to technology (e.g., for telehealth), availability of services, and stigma related to behavioral health.
- An eventual return to pre-pandemic baseline levels of functioning in 2021 is anticipated for many people.



**Figure 5: Estimated Washington adults who received or delayed medical care or counseling, by week: August 19, 2020 – March 29, 2021 (Source: U.S. Census Bureau).**  
 Note: The U.S. Census Bureau began this data collection in August 2020 and paused briefly for the period of December 23, 2020 – January 3, 2021.

### Acknowledgements

This document was developed by the Washington State Department of Health’s Behavioral Health Strike Team for the COVID-19 response. The strike team is a group of clinical psychologists, psychiatrists, and therapists who are professionals in disaster relief and behavioral health. Lead authors from the Behavioral Health Strike Team are Kira Mauseth, Ph.D. and Stacy Cecchet, Ph.D., ABPP. Research support for this report was provided by undergraduate psychology students at Seattle University.

## References

1. Katz-Wise, S. L., Rosario, M., & Tsappis, M. (2016). Lesbian, gay, bisexual, and transgender youth and family acceptance. *Pediatric Clinics of North America*, 63(6), 1011-1025.
2. Ryan, C., Huebner, D., Diaz, R. M., & Sanchez, J. (2009). Family rejection as a predictor of negative health outcomes in white and Latino lesbian, gay, and bisexual young adults. *Pediatrics*, 123(1), 346-352.
3. Chowkwanyun, M., Reed, A. L. (2020). Racial Health Disparities and Covid-19 — Caution and Context. *New England Journal of Medicine*, 383, 201-203. 10.1056/NEJMp2012910
4. Lopez, M. H., Rainie, L., & Budiman, A. (2020). *Financial and health impacts of COVID-19 vary widely by race and ethnicity*. Pew Research Fact Tank. <https://www.pewresearch.org/fact-tank/2020/05/05/financial-and-health-impacts-of-covid-19-vary-widely-by-race-and-ethnicity/>
5. Parker, K., Horowitz, J., Brown, A. (April 21, 2020). *About Half of Lower-Income Americans Report Household Job or Wage Loss Due to COVID-19*. Pew Research Center Social and Demographic Trends. <https://www.pewsocialtrends.org/2020/04/21/about-half-of-lower-income-americans-report-household-job-or-wage-loss-due-to-covid-19/>
6. Beam, C., Kim, A. (2020). Psychological Sequelae of Social Isolation and Loneliness Might Be a Larger Problem in Young Adults Than Older Adults. University of Southern California Psychological Trauma: Theory, Research, Practice, and Policy. American Psychological Association 2020, Vol. 12, No. S1, S58–S60. ISSN: 1942-9681. <http://dx.doi.org/10.1037/tra0000774>
7. Hossain, M. M., Sultana, A., & Purohit, N. (2020). *Mental health outcomes of quarantine and isolation for infection prevention: A systematic umbrella review of the global evidence*. <https://ssrn.com/abstract=3561265>
8. Johnson, B. R., Pagano, M. E., Lee, M. T., & Post, S. G. (2018). Alone on the Inside: The Impact of Social Isolation and Helping Others on AOD Use and Criminal Activity. *Youth & society*, 50(4), 529–550. <https://doi.org/10.1177/0044118X15617400>
9. Havassy, B. E., Hall, S. M., & Wasserman, D. A. (1991). Social support and relapse: Commonalities among alcoholics, opiate users, and cigarette smokers. *Addictive Behaviors*, 16(5), 235–246. [https://doi.org/10.1016/0306-4603\(91\)90016-B](https://doi.org/10.1016/0306-4603(91)90016-B)
10. Da, B. L., Im, G. Y., & Schiano, T. D. (2020). COVID-19 Hangover: A Rising Tide of Alcohol Use Disorder and Alcohol-Associated Liver Disease. *Hepatology*. Accepted Author Manuscript. <https://doi.org/10.1002/hep.31307>
11. Substance Abuse and Mental Health Services Administration. (2015). Supplemental research bulletin - Issue 5: Traumatic stress and suicide after disasters. SAMHSA. [https://www.samhsa.gov/sites/default/files/dtac/srb\\_sept2015.pdf](https://www.samhsa.gov/sites/default/files/dtac/srb_sept2015.pdf)
12. Centers for Disease Control and Prevention. (2018). The continuum of pandemic phases. CDC. <https://www.cdc.gov/flu/pandemic-resources/planning-preparedness/global-planning-508.html>
13. Anesi, G. L. & Manaker, S. (2020). *Coronavirus disease 2019 (COVID-19): Critical care issues*. <https://www.uptodate.com/contents/coronavirus-disease-2019-covid-19-critical-care-issues>
14. Bhatraju, P. K., Ghassemieh, B. J., Nichols, M., Kim, R., Jerome, K. R., Nalla, A. K., Greninger, A. L., Pipavath, S., Wurfel, M. M., Evans, L., Kritek, P. A., West, R. E., et al. (2020). Covid-19 in Critically Ill Patients in the Seattle Region. *New England Journal of Medicine*. 10.1056/NEJMoa2004500
15. SAMHSA. (2020). *Phases of Disaster*. <https://www.samhsa.gov/dtac/recovering-disasters/phases-disaster>
16. Centers for Disease Control and Prevention. (2021). *New Variants of the Virus that Causes COVID-19*. <https://www.cdc.gov/coronavirus/2019-ncov/transmission/variant.html>
17. Washington, N., Gangavarapu, K., et al. (2021). *Genomic epidemiology identifies emergence and rapid transmission of SARS-CoV-2 B.1.1.7 in the United States*. <https://www.medrxiv.org/content/10.1101/2021.02.06.21251159v1.full>
18. Washington State Department of Health. (April 2021). *COVID-19 immunity increasing, but not enough to slow transmission*. News Release. <https://www.doh.wa.gov/Newsroom/Articles/ID/2754/COVID-19-immunity-increasing-but-not-enough-to-slow-transmission>

19. Washington State Department of Health. *Behavioral Health Impact Situation Report: Week of March 15, 2021*. 821-102-32.
20. U.S. Census Bureau. *Household Pulse Survey Data Tables*. <https://www.census.gov/programs-surveys/household-pulse-survey/data.html>
21. Centers for Disease Control and Prevention. (2021). *Health Equity Considerations and Racial and Ethnic Minority Groups*. <https://www.cdc.gov/coronavirus/2019-ncov/community/health-equity/race-ethnicity.html>
22. Tai, D., Shah, A., Doubeni, C. A., Sia, I. G., & Wieland, M. L. (2021). The Disproportionate Impact of COVID-19 on Racial and Ethnic Minorities in the United States. *Clinical infectious diseases: an official publication of the Infectious Diseases Society of America*, 72(4), 703–706. <https://doi.org/10.1093/cid/ciaa815>
23. Reyna, V. (Ed) & Zayas, V. (Ed). (2014). *The Neuroscience of risky decision making*. Bronfenbrenner series on the ecology of human decision making. Washington, DC, US: American Psychological Association; xviii, 222 pp.
24. Silva, K., Patrianakos, J., Chein, J., Steinberg, L. (2017). Joint Effects of Peer Presence and Fatigue on Risk and Reward Processing in Late Adolescence. *Journal of Youth Adolescence*, 46, 1878–1890.
25. Syndicus, M., Weise, B. S., & vanTreeck, C. (2018). In the heat and noise of the moment: effects on risky decision making. *Environment and Behavior*, 50(1), pp 3-27.
26. Cohn, E. G., & Rotton, J. (2005). The curve is still out there: A reply to Bushman, Wang, and Anderson's (2005) "Is the curve relating temperature to aggression linear or curvilinear?" *Journal of Personality and Social Psychology*, 89(1), 67–70. <https://doi.org/10.1037/0022-3514.89.1.67>
27. Garg, S., Kim, L., Whitaker, M., et al. (2020). Hospitalization Rates and Characteristics of Patients Hospitalized with Laboratory-Confirmed Coronavirus Disease 2019 — COVID-NET, 14 States, March 1–30, 2020. *MMWR Morb Mortal Wkly Rep*, 69, 458–464. <http://dx.doi.org/10.15585/mmwr.mm6915e3>
28. Behavioral Risk Factor Surveillance System (BRFSS). (2018). Washington State Department of Health, Center for Health Statistics. Community Health Assessment Tool (CHAT), December 2019.
29. Liem, A., Wang, C., Wariyanti, Y., Latkin, C. A., & Hall, B. J. (2020). The neglected health of international migrant workers in the COVID-19 epidemic. *The Lancet Psychiatry*, 7(4), e20.
30. SAMHSA. (2017, July). *Greater Impact: How Disasters Affect People of Low Socioeconomic Status*. Disaster Technical Assistance Center Supplemental Research Bulletin. [https://www.samhsa.gov/sites/default/files/dtac/srb-low-ses\\_2.pdf](https://www.samhsa.gov/sites/default/files/dtac/srb-low-ses_2.pdf)
31. Kaiser Family Foundation. (2020, April). *Coronavirus, Social Distancing, and Contact Tracing*. KFF Health Tracking Poll. <https://www.kff.org/report-section/kff-health-tracking-poll-late-april-2020-economic-and-mental-health-impacts-of-coronavirus/>
32. Rodriguez-Seijas, C., Stohl, M., Hasin, D. S., Eaton, N. R. (2015). Transdiagnostic Factors and Mediation of the Relationship Between Perceived Racial Discrimination and Mental Disorders. *JAMA Psychiatry*, 72(7), 706–713. doi:10.1001/jamapsychiatry.2015.0148
33. Wen, J., Aston, J., Liu, X. & Ying, T. (2020) Effects of misleading media coverage on public health crisis: a case of the 2019 novel coronavirus outbreak in China. *Anatolia*, 31(2), 331-336. <https://doi.org/10.1080/13032917.2020.1730621>
34. Gover, Angela R., Harper, Shannon B., Langton, Lynn. (July 2020). *Anti-Asian Hate Crime During the COVID-19 Pandemic: Exploring the Reproduction of Inequality*. National Center for Biotechnology Information, U.S. National Library of Medicine. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7364747/>
35. Choi, Cynthia, Kulkarni, Manjusha P. (March 2020). *Asian American Pacific Islander (AAPI) Civil Rights Organizations Establishes STOP AAPI HATE Reporting Center*. Asian Pacific Planning and Policy Council (A3PCON). <http://www.asianpacificpolicyandplanningcouncil.org/asian-american-pacific-islander-aapi-civil-rights-organizations-establishes-stop-aapi-hate-reporting-center/>
36. Boniol, M., Mclsaac, M., Xu, L., Wuliji, T., Diallo, K., & Campbell, J. (2019, March). *Gender equity in the health workforce: Analysis of 104 countries*. World Health Organization. <https://apps.who.int/iris/bitstream/handle/10665/311314/WHO-HIS-HWF-Gender-WP1-2019.1-eng.pdf?sequen>

37. Human Rights Campaign Foundation. (2020). *The economic impact of COVID-19 on the LGBTQ community*. [https://assets2.hrc.org/files/assets/resources/COVID19-EconomicImpact-IssueBrief-042220.pdf?\\_ga=2.99080222.1078006411.1590034610-1493237670.1590034610](https://assets2.hrc.org/files/assets/resources/COVID19-EconomicImpact-IssueBrief-042220.pdf?_ga=2.99080222.1078006411.1590034610-1493237670.1590034610)
38. Women's Aid UK. (2020, April). *The impact of Covid-19 on survivors: findings from Women's Aid's initial Survivor Survey*. <https://1q7dqy2unor827bqjls0c4rn-wpengine.netdna-ssl.com/wp-content/uploads/2020/05/The-impact-of-Covid-19-on-survivors-findings-from-Women%E2%80%99s-Aid%E2%80%99s-initial-Survivor-Survey.pdf>
39. UN Women. (2020, April 9). *Policy Brief: The Impact of COVID-19 on Women*. United Nations Entity for Gender Equality and the Empowerment of Women, United Nations Secretariat. <https://www.unwomen.org/-/media/headquarters/attachments/sections/library/publications/2020/policy-brief-the-impact-of-covid-19-on-women-en.pdf?la=en&vs=1406>
40. Office of the Attorney General. (April 23, 2020). *Stopping Predatory Practices Related to COVID-19 and Housing*. <https://www.justice.gov/coronavirus/page/file/1270951/download>
41. Price-Feeney, M., Green, A. E., & Dorison, S. (in press). Understanding the mental health of transgender and nonbinary youth. *Journal of Adolescent Health*. <https://doi.org/10.1016/j.jadohealth.2019.11.314>
42. Friedman, M. S., Marshal, M. P., Guadamuz, T. E., Wei, C., Wong, C. F., Saewyc, E. M., & Stall, R. (2011). A meta-analysis of disparities in childhood sexual abuse, parental physical abuse, and peer victimization among sexual minority and sexual nonminority individuals. *American Journal of Public Health, 101*(8), 1481-1494.
43. Becasen, J. S., Denard, C. L., Mullins, M. M., Higa, D. H., & Sipe, T. A. (2019). Estimating the Prevalence of HIV and Sexual Behaviors Among the US Transgender Population: A Systematic Review and Meta-Analysis, 2006-2017. *American journal of public health, 109*(1), e1–e8. <https://doi.org/10.2105/AJPH.2018.304727>
44. The Trevor Project. (2020). *Implications of COVID-19 for LGBTQ youth mental health and suicide prevention*. <https://www.thetrevorproject.org/2020/04/03/implications-of-covid-19-for-lgbtq-youth-mental-health-and-suicide-prevention/>
45. Baams, L. (2018). Disparities for LGBTQ and gender nonconforming adolescents. *Pediatrics, 141*(5), e20173004.
46. Kaniuka, A., Pugh, K. C., Jordan, M., Brooks, B., Dodd, J., Mann, A. K., & Hirsch, J. K. (2019). Stigma and suicide risk among the LGBTQ population: Are anxiety and depression to blame and can connectedness to the LGBTQ community help? *Journal of Gay & Lesbian Mental Health, 23*(2), 205-220.
47. Calton, J. M., Cattaneo, L. B., & Gebhard, K. T. (2016). Barriers to help seeking for lesbian, gay, bisexual, transgender, and queer survivors of intimate partner violence. *Trauma, Violence, & Abuse, 17*(5), 585-600.
48. Parker, K., Horowitz, J., Brown, A. (2020, April 21). *About Half of Lower-Income Americans Report Household Job or Wage Loss Due to COVID-19*. Pew Research Center Social and Demographic Trends. <https://www.pewsocialtrends.org/2020/04/21/about-half-of-lower-income-americans-report-household-job-or-wage-loss-due-to-covid-19/>
49. Alon, T. M., Doepke, M., Olmstead-Rumsey, J., & Tertilt, M. (2020, April). *The impact of COVID-19 on gender equality*. National Bureau of Economic Research. <https://www.nber.org/papers/w26947>
50. Wenham, C., Smith, J., & Morgan, R. (2020). COVID-19: the gendered impacts of the outbreak. *The Lancet, 395*(10227), 846-848.
51. Russell, S. T., & Fish, J. N. (2016). Mental health in lesbian, gay, bisexual, and transgender (LGBT) youth. *Annual Review of Clinical Psychology, 12*, 465-487.
52. Chidambaram, P. (2020, August 21). *The Implications of COVID-19 for Mental Health and Substance Use*. Kaiser Family Foundation. <https://www.kff.org/health-reform/issue-brief/the-implications-of-covid-19-for-mental-health-and-substance-use/>
53. North, C. S., Oliver, J., & Pandya, A. (2012). Examining a comprehensive model of disaster-related posttraumatic stress disorder in systematically studied survivors of 10 disasters. *American Journal of Public Health, 102*(10), e40–e48. 10.2105/AJPH.2012.300689
54. Kessler, R. C., Galea, S., Gruber, M. J., Sampson, N. A., Ursano, R. J., & Wessely, S. (2008). Trends in mental illness and suicidality after Hurricane Katrina. *Molecular Psychiatry, 13*, 374–384.

55. Brown, E., & Wehby, G. L. (2019). Economic conditions and drug and opioid overdose deaths. *Medical Care Research and Review*, 76(4), 462–477.
56. Phillips, J. A. (2014). Suicide and the Great Recession of 2007–2009: The Role of Economic Factors in the 50 U.S. States. *Social Science & Medicine*, 116, 22-31.
57. Meadows Mental Health Policy Institute (2020). *COVID-19 Response Briefing: Mental Health and Substance Use Disorder Impacts of a COVID-19 Economic Recession*. <https://www.texasstateofmind.org/uploads/whitepapers/COVID-MHSUDIImpacts.pdf>
58. Bianchi, F., Bianchi, G., & Song, D. (2020). *The long-term impact of the covid-19 unemployment shock on life expectancy and mortality rates*. National Bureau of Economic Research Working Paper Series, Working Paper 28304. [https://www.nber.org/papers/w28304?Utm\\_campaign=ntwh&utm\\_medium=email&utm\\_source=ntwg6](https://www.nber.org/papers/w28304?Utm_campaign=ntwh&utm_medium=email&utm_source=ntwg6)
59. Ludwig Institute for Shared Economic Prosperity (2020). *Measuring Better: Development of 'True Rate of Unemployment' Data as the Basis for Social and Economic Policy*. White Paper. [https://assets.website-files.com/5f67c16a6ca3251ecc11eca7/5fd77b946b8ccc555b8cc6e5\\_November%20White%20Paper%201220.pdf](https://assets.website-files.com/5f67c16a6ca3251ecc11eca7/5fd77b946b8ccc555b8cc6e5_November%20White%20Paper%201220.pdf)
60. Ludwig, E. (2021). *Unemployment Is Much Worse Than You Think — Here's Why*. Politico. <https://www.politico.com/news/agenda/2021/01/25/unemployment-worse-than-you-think-462218>
61. Ludwig Institute for Shared Economic Prosperity (2021). *The True Rate of Unemployment*. <https://www.lisep.org>
62. Washington State Department of Health, Center for Health Statistics, Death Certificate Data, 1990–2018, Community Health Assessment Tool (CHAT), October 2019.
63. Washington State Employment Security Department. *Facts and Figures Report – June 2020*. <https://esd.wa.gov/labormarketinfo/facts-and-figures-report>
64. Czeisler, M. É., Lane, R. I., Petrosky, E., et al. (2020). Mental Health, Substance Use, and Suicidal Ideation During the COVID-19 Pandemic — United States, June 24–30, 2020. *MMWR Morb Mortal Wkly Rep*, 69, 1049–1057. <http://dx.doi.org/10.15585/mmwr.mm6932a1>
65. Washington State Department of Health. (2019). *Annual Report: Firearm Fatality and Suicide Prevention – A Public Health Approach*. <https://www.doh.wa.gov/Portals/1/Documents/8390/346-087-SuicideFirearmPrevention.pdf>
66. Gassman-Pines, A., Oltmans Ananat, E., & Fitz-Henley, J. (2020). COVID-19 and Parent-Child Psychological Well-being. *Pediatrics*, 146(4), e2020007294. doi: 10.1542/peds.2020-007294
67. Leeb, R. T., Bitsko, R. H., Radhakrishnan, L., Martinez, P., Njai, R., Holland, K. M. (2020). Mental Health–Related Emergency Department Visits Among Children Aged <18 Years During the COVID-19 Pandemic — United States, January 1–October 17, 2020. *MMWR Morb Mortal Wkly Rep*, 69, 1675–1680. [http://dx.doi.org/10.15585/mmwr.mm6945a3external icon](http://dx.doi.org/10.15585/mmwr.mm6945a3external%20icon)
68. Anglemyer, A., Horvath, T., Rutherford, G. (2014). The accessibility of firearms and risk for suicide and homicide victimization among household members: a systematic review and meta-analysis [published correction appears in *Ann Intern Med*, 160(9), 658-9]. *Ann Intern Med*, 160(2), 101-110. doi:10.7326/M13-1301
69. Studdert, D. M., Zhang, Y., Swanson, S. A, Prince, P., Rodden, J. A., Holsinger, E. E., Spittal, M. J., Wintemute, G. J., & Miller, M. M. (2020). Handgun Ownership and Suicide in California. *N Engl J Med*, 382, 2220-2229. doi:10.1056/NEJMsa1916744
70. U.S. Department of Homeland Security. (2020). *Homeland Threat Assessment*. [https://www.dhs.gov/sites/default/files/publications/2020\\_10\\_06\\_homeland-threat-assessment.pdf](https://www.dhs.gov/sites/default/files/publications/2020_10_06_homeland-threat-assessment.pdf)
71. U.S. Department of Homeland Security. (2021). *National Terrorism Advisory System Bulletin*. <https://www.dhs.gov/ntas/advisory/national-terrorism-advisory-system-bulletin-january-27-2021>
72. Federal Bureau of Investigation. (2019). National Instant Criminal Background Check System (NICS), Services: NICS. <https://www.fbi.gov/services/cjis/nics>

73. Norris, F. H., Friedman, M. J., & Watson, P. J. (2002). 60,000 disaster victims speak: Part II. Summary and implications of the disaster mental health research. *Psychiatry*, *65*(3), 240–260. <https://doi.org/10.1521/psyc.65.3.240.20169>
74. Federal Bureau of Investigation. (2020). National Instant Criminal Background Check System (NICS), Firearm Checks: Month/Year by State. [https://www.fbi.gov/file-repository/nics\\_firearm\\_checks\\_-\\_month\\_year\\_by\\_state.pdf/view](https://www.fbi.gov/file-repository/nics_firearm_checks_-_month_year_by_state.pdf/view)
75. Rezaeian, M. (2013). The association between natural disasters and violence: A systematic review of the literature and a call for more epidemiological studies. *Journal of Research in Medical Sciences*, *18*(12), 1103–1107.
76. Taquet, M., Luciano, S., Geddes, J. R., & Harrison, P. J. (2021). Bidirectional associations between COVID-19 and psychiatric disorder: retrospective cohort studies of 62,354 COVID-19 cases in the USA. *The Lancet. Psychiatry*, *8*(2), 130–140. [https://doi.org/10.1016/S2215-0366\(20\)30462-4](https://doi.org/10.1016/S2215-0366(20)30462-4)
77. Moreno, C., Wykes, T., et al. (2020). *How mental health care should change as a consequence of the COVID-19 pandemic*. <https://www.thelancet.com/action/showPdf?pii=S2215-0366%2820%2930307-2>
78. Chacko, M., Job, A., Caston, F., 3rd, George, P., Yacoub, A., & Cáceda, R. (2020). COVID-19-Induced Psychosis and Suicidal Behavior: Case Report. *SN comprehensive clinical medicine*, 1–5. Advance online publication. <https://doi.org/10.1007/s42399-020-00530-7>
79. Taquet, M., Geddes, J. R., Husain, M., Luciano, S., & Harrison, P. J. (2021). 6-month neurological and psychiatric outcomes in 236 379 survivors of COVID-19: a retrospective cohort study using electronic health records. *The lancet. Psychiatry*, *8*(5), 416–427. [https://doi.org/10.1016/S2215-0366\(21\)00084-5](https://doi.org/10.1016/S2215-0366(21)00084-5)