FEBRUARY 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.
- Anniversary reactions to the pandemic will likely be widespread and varied on both an individual and community basis.
- During the first several months of 2021, the risk of a *disaster cascade* (more than one disaster impact within a short period of time) remains high. Secondary disaster impacts are often related to, or triggered by, the initial impact and may include additional pandemic waves, economic hardships (unemployment, bankruptcy, eviction, food insecurity, etc.), and social and political disturbances (violence, civil unrest, protests, etc.).
  - The COVID-19 variants and their effects could also result in a disaster cascade. These variants may create widespread health and social impacts because of the potential for additional infection waves and the variety of unknowns.
- Any secondary disaster impacts within the first quarter of 2021 will also be occurring during the *disillusionment phase* of the initial disaster recovery cycle that began in March 2020.
- Ongoing behavioral health impacts in Washington continue to be seen in phases (Figure 1), with symptoms for most people increasing or plateauing in the first half of 2021.[1,2]
- The risk of suicide, depression, hopelessness, and substance use will remain high through the first 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.

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- Behavioral health experiences at this phase of the COVID-19 pandemic typically include symptoms of depression and anxiety, trouble with cognitive functioning, exhaustion, and burnout. **Active resilience development remains an essential intervention for all groups in Washington.**
- We expect behavioral health issues related to isolation, stress, and fears to trend relative to COVID-19 cases and hospitalization rates. In addition, lack of vaccine availability and access could escalate medical risks for more people, contributing to subsequent behavioral health impacts.[3,4,5,6]

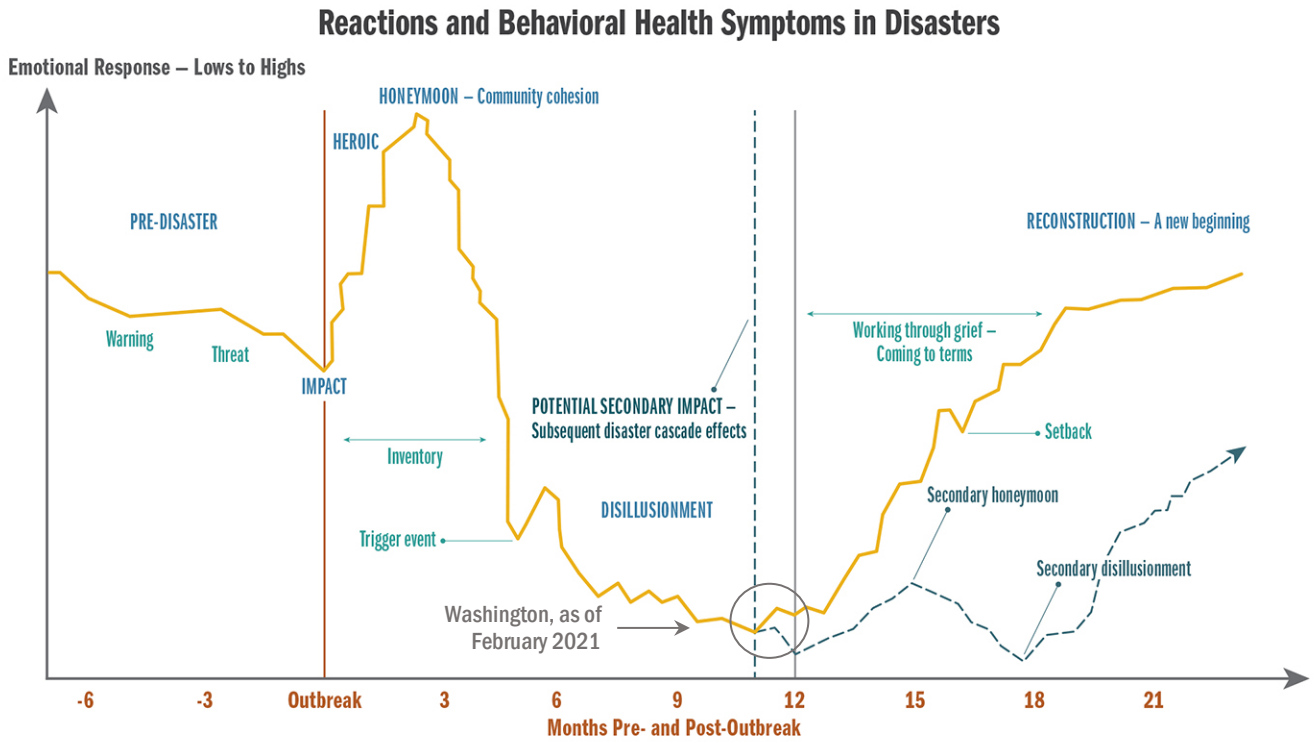

Figure 1: Phases of reactions and behavioral health symptoms in disasters. The dotted graph line represents the response and recovery pattern that may occur if the full force of a disaster cascade is experienced by a majority of the population.

Adapted from the Substance Abuse and Mental Health Services Administration (SAMHSA) [7]

Phase-Related Behavioral Health Considerations

Behavioral health symptoms will continue to present in phases.[1,2] 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.[a] With any significant increases in infection and hospitalization rates, symptoms of anxiety and risk of post-traumatic stress disorder (PTSD) related to fears of illness or death from the virus (or direct experience of illness or death among family and friends) are also likely to increase.[8,9]

[a] https://www.doh.wa.gov/Emergencies/COVID19/HealthcareProviders/BehavioralHealthResources

Areas of Focus for February and March 2021

Anniversary Reactions

Consistent with previous literature on disaster response and recovery cycles, the anniversary after the initial impact of a disaster is typically a significant event for many in the affected population.[10,11] As the one-year anniversary of the initial social and economic impacts from the COVID-19 pandemic approaches for Washington residents in mid-March 2021, behavioral health related responses to this significant period will be widespread and vary significantly.

Particular areas of concern include:

- Despair or hopelessness that the pandemic has continued this long and that we are still in it.
- Apathy or anger about maintaining restrictions and following public health guidelines a year (or more) after the initial outbreak and impact.
- Significant bereavement, grief, and loss reactions about what has been lost or changed (economically, socially, and personally).

Expressions of distress during this time will vary greatly and may range from being very intense to almost nonexistent. Consistent with other types of disasters or critical incidents, the one-year anniversary of the impact of an event can go unnoticed by some and is a main focus of attention or distress for others.[10,11,12]

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 (United Kingdom variant: B.1.1.7, South Africa variant: B.1.351, Brazil variant: P.1)[13] may cause such an event. To date, two of these variants (B.1.1.7 and B.1.351) have been detected in Washington.[b] 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, etc.). Preliminary studies indicate that these variants spread more easily and quickly and may be associated with a higher risk of death. These variants are still being studied to understand whether they cause more severe illness or change the effectiveness of current COVID-19 vaccines.[13]

Vaccine Hope, Hesitancy, and Patience

With vaccine distribution[c] in process throughout the state, hope associated with an end to the pandemic is stronger than it has been in several months in many communities. As an essential element of resilience, hope is a positive and powerful tool to leverage as we move through the 11th and 12th months of the pandemic.[14] While hope is essential, having patience with the vaccine distribution process (including vaccination sites,[d] availability, and accessibility) is also extremely important for behavioral health. Although it may be difficult under the circumstances where emotional regulation skills are challenging for most people, taking a pause before reacting and responding can help increase patience.

Vaccine hesitancy is also a concern in some communities and groups. Efforts by medical and behavioral health providers should be focused on providing scientifically accurate, consistent,

[b] https://www.doh.wa.gov/Emergencies/COVID19/Variants

[c] https://www.doh.wa.gov/Emergencies/COVID19/vaccine

[d] https://www.doh.wa.gov/Emergencies/COVID19/VaccineInformation/MassVaccinationSites

straightforward messaging for clients and patients about potential benefits and risks of the vaccine. Simple and 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. Additional information for providers can be found on DOH's Healthcare Provider Resources & Recommendations webpage.[e]

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.[15,16] 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***.[17]

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.[15] 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.[18] 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.

Mood and anxiety disorders show a weaker relationship with hospitalization and encephalopathy, which means that **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.[19]

Pandemic Apathy

For many people, the length of time this pandemic has been impacting life has resulted in an experience where general exhaustion may be manifesting in the form of apathy about the pandemic. This seems to be characterized in a similar pattern to what is typically seen in disasters in terms of acting "out" and acting "in," but unique in terms of apathy presenting on both ends of the spectrum. (See pages 3–4 of the July forecast update[f] for more information about the concepts of acting "out" and acting "in.")

As the pandemic continues, behavioral choices about compliance and caution may be heavily influenced by impacts individuals have personally experienced, while more cautious behaviors are associated with more significant and negative experiences of the pandemic or the virus itself.[20]

Depression and Suicide Risk

Depression is one of the most common emotional responses during the *disillusionment phase* of disaster response and recovery. Many youth, teens, and young adults are experiencing

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[e] https://www.doh.wa.gov/Emergencies/COVID19/HealthcareProviders

[f] https://www.doh.wa.gov/Portals/1/Documents/1600/coronavirus/BHG-COVID19StatewideSummaryForecastofBHImpacts-July2020Update.pdf

significant symptoms of depression during the pandemic.[21,22] Older adults are also a group of concern due to isolation and lack of social connection.[22] 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[g] 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,[h] and medications, poisons, and firearms should be stored safely. Suicides consistently account for approximately 75% of all firearm-related fatalities in Washington.[23] Storing firearms safely[i] and temporarily removing them from the home[j] 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**[k]: 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[l]
- **National Suicide Prevention Lifeline**:[m] Call 800-273-8255 (English) or 1-888-628-9454 (Español).
- **Crisis Connections**:[n] Call 866-427-4747.
- **Crisis Text Line**:[o] Text HEAL to 741741.
- **Department of Health**: Crisis lines for specific groups[p]
- **TeenLink**:[q] Call or text 866-833-6546.
- **Washington Warm Line**:[r] Call 877-500-9276.
- **Washington State COVID-19 Response**: Mental and emotional well-being webpage[s]

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[g] https://www.doh.wa.gov/YouandYourFamily/InjuryandViolencePrevention/SuicidePrevention/HelpSomeoneElse#common

[h] https://www.seattlechildrens.org/health-safety/keeping-kids-healthy/prevention/home-checklist/

[i] https://www.kingcounty.gov/depts/health/violence-injury-prevention/violence-prevention/gun-violence/LOCK-IT-UP.aspx

[j] https://hiprc.org/firearm/firearm-storage-wa/

[k] https://www.walistens.org/

[l] https://www.hca.wa.gov/health-care-services-supports/behavioral-health-recovery/mental-health-crisis-lines

[m] https://suicidepreventionlifeline.org/

[n] https://www.crisisconnections.org/24-hour-crisis-line/

[o] https://www.crisistextline.org/

[p] https://www.doh.wa.gov/YouandYourFamily/InjuryandViolencePrevention/SuicidePrevention/HotlinesTextandChatResources

[q] https://www.crisisconnections.org/teen-link/

[r] https://www.crisisconnections.org/wa-warm-line/

[s] coronavirus.wa.gov/wellbeing

Unemployment

Suicide and drug overdose death rates are both highly influenced by unemployment.[17,24,25,26] For every 1% increase in the unemployment rate, there is a corresponding 1.6% increase in the suicide rate[25] and an increase of one drug overdose death per 300,000 people.[24] 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."[27]

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 unemployment rate to be 6.3% in January 2020. 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).[28,29] This rate is defined as the percentage of the U.S. labor force that is *functionally* unemployed and more accurately represents the financial well-being of Americans.[30] 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 they conservatively mark at $20,000 annually before taxes). Thus, any individual that wants full-time work but can only find part-time work, and 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 January 2020 was 24.4% 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.[30]

Potential for Violence and Aggression

Increases in FBI background checks for handgun sales[t] in January 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.[31,32] The U.S. Department of Homeland Security (DHS) has maintained their warning of continued violence by domestic extremists.[33,34] Most notably, handgun ownership is associated with a significantly increased and enduring risk of suicide by firearm.[35] 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.[35] 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 Washington, 607,170 firearm background checks were conducted in 2019, compared to 781,471 in 2020, which is a 23% increase. More recently, 73,369 firearms background checks were conducted in Washington in January 2021, which is a 47.6% increase from the 49,714 conducted in January 2020 (Figure 2).[36]

[t] 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.

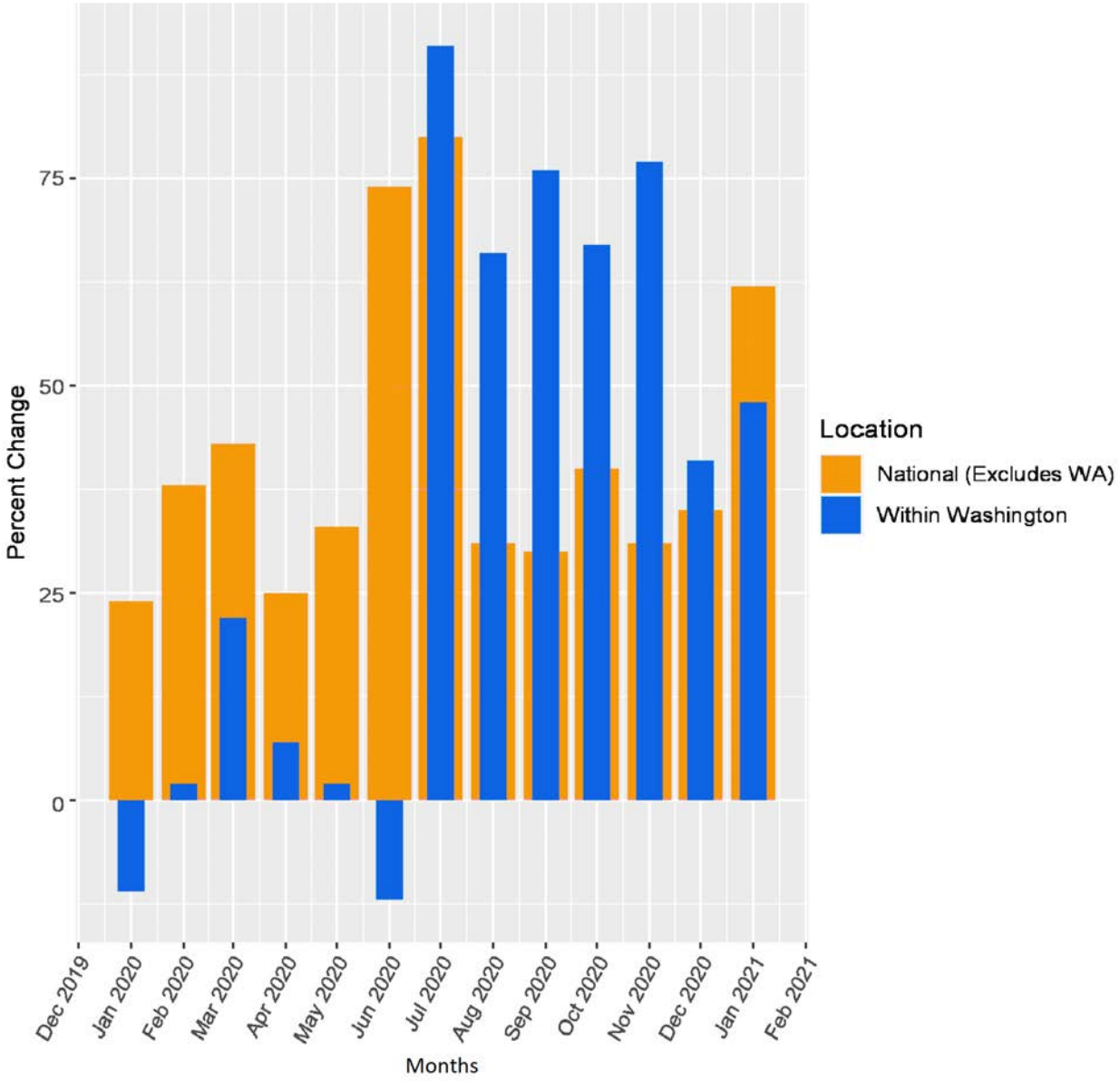

Figure 2: Percent change of NICS firearm background checks from December 2019 through January 2021. The graph compares Washington background checks with the rest of the nation.

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.[33] 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[u] 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.[h,i,j] Some firearms dealers will take firearms and store them safely for families during a crisis.

[u] https://saferhomescoalition.org/what-is-a-safer-home/

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. Families experiencing hardship are also reporting navigating their child's disruptive or uncooperative behavior and anxiety.[37] 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 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 (EDs) for children ages 5–17 between April and October 2020 increased by 24%–31%, compared with the same time period in 2019.[38] It is normal for children to be experiencing difficulty 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.[v] 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.

Suicidal Ideation and Attempts in Youth

We are continuing to monitor rates of ED visits for psychological distress, suicidal ideation, and suicide attempts for adolescents, youth, and young adults. 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**. There are a number of factors, including the current *disillusionment phase* of disaster and the unique challenges faced by young people this year, that may contribute to an increase in distress.

We are strongly recommending 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.

Child Abuse

Child abuse and domestic violence often increase significantly in post-disaster settings, such as the COVID-19 pandemic.[39,40,41] Traumatic brain injuries (TBIs) among very young children are the most commonly studied and among the most concerning form of injury due to child abuse after a disaster.[42] The national rate of ED visits related to child abuse and neglect resulting in hospitalization has increased among children across all ages, compared to 2019.[43] While we don't have clear evidence of increasing numbers of child abuse-related ED visits in Washington yet, we are very concerned and want to make sure families have the support they need during these challenging times.[44]

Due to school closures and social distancing measures, more children and youth are online and unsupervised than usual. Predators that are sexually interested in children are using this opportunity to entice children to produce sexually explicit material (i.e., online enticement).[45]

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[v] https://www.doh.wa.gov/Portals/1/Documents/1600/coronavirus/BHG-COVID19-FamilyToolbox.pdf

National rates of online enticement of children have increased 98.66% – from 15,220 reports in 2019 to 30,236 in 2020 – during the January–September time period.

Additionally, as child traffickers have adjusted to the reluctance of buyers to meet in person to engage in commercial sex, some traffickers are now offering virtual subscription-based services in which buyers pay to access online images and videos of the child being sexually abused. Accordingly, compared to the January–September time period of 2019, there has been a 63.3% increase in National CyberTipline reports (i.e., reports of distribution of child pornography and child sexual abuse material) for the same time period in 2020 (11,286,674 reports in 2019 versus 18,423,495 in 2020).[41] According to Seattle Police Department's Internet Crimes Against Children (ICAC) Unit, which processes all statewide data of this nature, Washington CyberTips and online enticement reports are following the same trends as national-level data.

In an online setting, most educators and healthcare providers are asking for a parent or caregiver to be present during all the interactions between the child and educator or provider. This may change or limit the opportunities for an educator/provider to ask the child directly or inquire about the way things are going at home. Typical cues that educators/providers use to spot signs of abuse or neglect may not be applicable in an online environment.

Potential signs of child abuse or neglect that may be visible in an online setting:

- Changes in levels of participation in online classes (unusually vocal, disruptive, very withdrawn, frequently absent or late to class, leaving early without explanation or notice, not wanting to leave).
- Extremely blunted or heightened emotional expressions.
- Appearing frightened or shrinking at the approach of an adult in the home.
- Age-inappropriate or sexualized knowledge, language, drawings, or behavior.
- Observable bruising on face, head, neck, hands, or arms (that is atypical for an active child of that developmental age). Recognize that children can have bruises for many reasons (e.g., rough playing, climbing).
- A change in the child's general physical appearance or hygiene (e.g., a child that normally presents in weather-appropriate clothing is no longer doing so, or a child that normally appears clean begins to appear with consistently greasy hair).
- Indications that a young child may be home alone.
- Observable signs in the background of health or safety hazards, harsh discipline, violence, substance abuse, or accessible weapons.
- Parent or caregiver giving conflicting, unconvincing, or no explanation for a child's injury.
- Parent or caregiver describing the child as bad, worthless, or burdensome.

Refer to DOH's COVID-19 Guidance for Educators: Recognizing and Reporting Child Abuse and Neglect in Online Education Settings[w] for more information.

It is important to recognize the challenges parents and caregivers are experiencing during this unprecedented time. Many parents and caregivers have the responsibility of balancing their work schedule with their child's distance learning and limited childcare options, or they may be experiencing job loss and financial instability. The Washington State Resource Guide for Parents

[w] https://www.doh.wa.gov/Portals/1/Documents/1600/coronavirus/821-113-COVID19RecognizingReportingChildAbuse.pdf

and Caregivers: Caring for Your Family During COVID-19[x] (available in multiple languages) is another resource to help strengthen the resilience of parents and families. Refer families in need of assistance to community supports, which can be found through state resources, such as Help Me Grow Washington,[y] Washington 2-1-1, and Washington Listens.[k]

Key Things to Know

- Medical and specialty providers,[z] 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 a disaster cascade may occur. Support strategies need to be tailored based on the current phase of the incident and the target population.
- The risk of suicide will likely continue to be high throughout the first two quarters of 2021. Data suggest that young adults (ages 18–29) and older adults (60+) are particularly vulnerable.[46] We encourage healthcare providers to routinely screen and ask their patients about suicidal thoughts or plans. The National Institute of Mental Health's Ask Suicide-Screening Questions (ASQ) Screening Tool[aa] can be used for patients ages 10–24.
- It is anticipated that rates of depression and anxiety 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[42]) due to the chronic and ongoing social and economic disruption in people's lives as a result of the COVID-19 pandemic.
    - Weekly survey data suggest that over 2 million Washington adults are experiencing symptoms of anxiety on at least most days, and over 1.3 million are experiencing symptoms of depression on at least most days (Figure 4).[47] This is the equivalent of 45% of the population in Washington.
- 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.[a] 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.

[x] https://dcyf.wa.gov/publications-library?combine_1=fs_0039&combine=&field_program_topic_value=All&field_languages_available_value=All

[y] https://helpmegrowwa.org/

[z] https://www.doh.wa.gov/Portals/1/Documents/1600/coronavirus/BHG-COVID19BehavioralHealthGroupImpactReferenceGuide.pdf#page=8

[aa] https://www.nimh.nih.gov/research/research-conducted-at-nimh/asq-toolkit-materials/asq-tool/screening_tool_asq_nimh_toolkit_155867.pdf

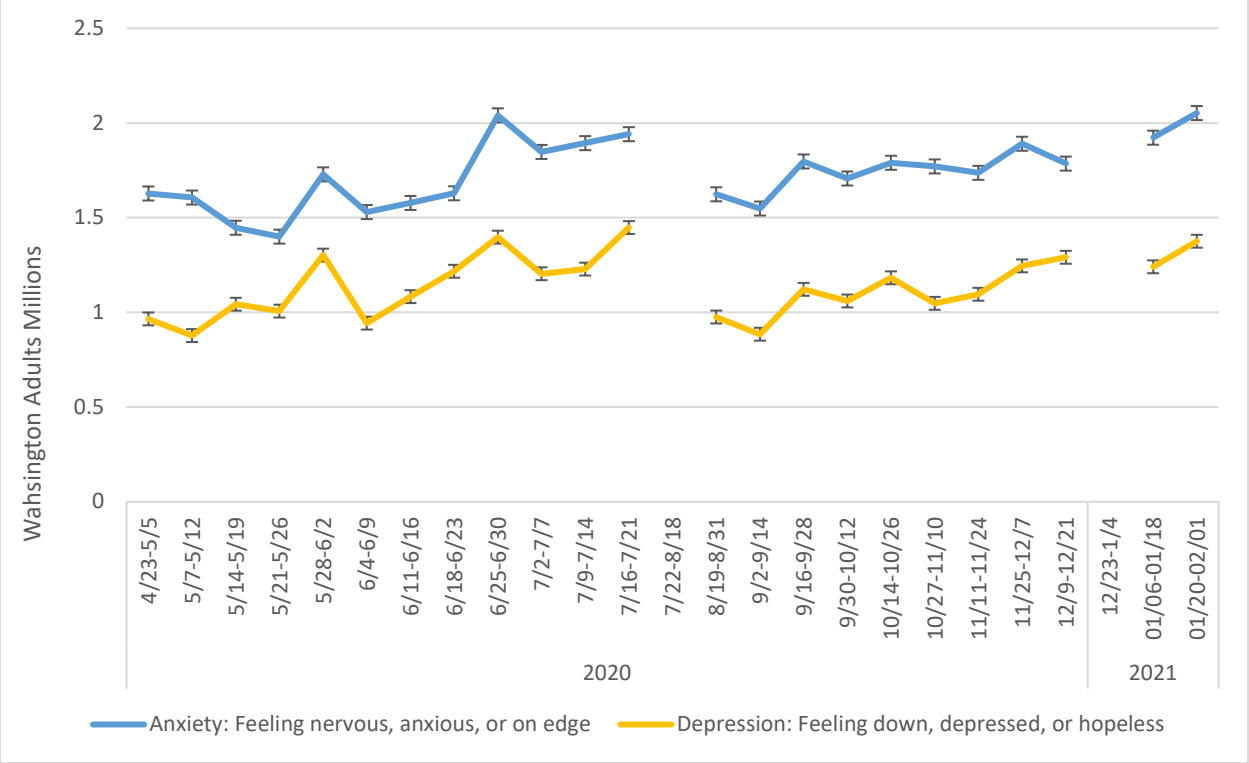

Figure 4: Estimated Washington adults experiencing symptoms of anxiety and depression at least most days, by week: April 23, 2020–Feb 1, 2021 (Source: U.S. Census Bureau).

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

- Unemployment influences suicide and drug overdose death rates.
  - In Washington, approximately 1,231 people die from suicide annually, and 1,173 people die from drug overdose annually.[48]
  - The seasonally adjusted unemployment rate in Washington was 7.1% in December 2020, 2.8 percentage points higher than December 2019.[49] If economic impacts of the pandemic are sustained over a longer term, this could result in an additional 4,978 deaths annually by suicide, and drug overdose deaths may also increase proportionally.
- An eventual return to pre-pandemic baseline levels of functioning in 2021 is anticipated for many people.

Acknowledgements

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References

1. 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
2. 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
3. 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
4. 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
5. 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
6. 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
7. SAMHSA. (2020). *Phases of Disaster.* https://www.samhsa.gov/dtac/recovering-disasters/phases-disaster
8. 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
9. 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
10. SAMHSA. (2020). *Disaster Anniversaries*. https://www.samhsa.gov/sites/default/files/dtac/webcast_disaster_anniversaries.pdf
11. Nemeth, D. G., Kurianski, J., Reeder, K. P., Lewis, A., Marceaux, K., & Whittington, T. (2012). Addressing Anniversary Reactions of Trauma Through Group Process: The Hurricane Katrina Anniversary Wellness Workshops. International Journal of Group Psychotherapy, 62(1). p. 129-142 https://doi.org/10.1521/ijgp.2012.62.1.129
12. Daly, E.S., Gulliver, S.B., Zimering, R.T., Kamholtz, B. W., & Morrissette, S.B. (2008) Disaster mental health workers responding to ground zero: One year later. Journal of Traumatic Stress, 21(2), p. 227-239. https://doi.org/10.1002/jts.20311
13. 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
14. Kwon, P., Birrueta, M., Faust, E., & Brown, E. R. (2015). The role of hope in preventive interventions. Social and Personality Psychology Compass, 9(12), 696-704. Doi: 10.1111/spc3.12227
15. Taquet, Maxime et al. Bidirectional associations between COVID-19 and psychiatric disorder: retrospective cohort studies of 62,354 COVID-19 cases in the USA. The Lancet Psychiatry, Volume 0, Issue 0
16. 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
17. 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
18. Taquet, M., Geddes, J. R., Husain, M., Luciano, S., Harrison, P. J. (2021). Six-month Neurological and Psychiatric Outcomes in 236,379 Survivors of COVID-19. *MedRxIV* 2021.01.16.21249950. doi:10.1101/2021.01.16.21249950
19. 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

20. Chen, F., Griffith, A., Cottrell, A., & Wong, Y. L. (2013). Behavioral responses to epidemics in an online experiment: using virtual diseases to study human behavior. *PloS one, 8*(1), e52814. https://doi.org/10.1371/journal.pone.0052814

21. 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

22. 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

23. 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

24. Brown, E., & Wehby, G. L. (2019). Economic conditions and drug and opioid overdose deaths. *Medical Care Research and Review, 76*(4), 462–477.

25. 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.

26. 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-MHSUDImpacts.pdf

27. 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

28. 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

29. 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

30. Ludwig Institute for Shared Economic Prosperity (2021).The True Rate of Unemployment. https://www.lisep.org

31. 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

32. 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. 10.1056/NEJMsa1916744

33. 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

34. 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

35. Federal Bureau of Investigation. (2019). National Instant Criminal Background Check System (NICS), Services: NICS. https://www.fbi.gov/services/cjis/nics

36. 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

37. 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

38. 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

39. World Health Organization. (2005). *Violence and Disasters.* Department of Injuries and Violence Prevention. Geneva, Switzerland. https://www.who.int/violence_injury_prevention/publications/violence/violence_disasters.pdf

40. 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.

41. Abramson, A. (2020). *How COVID-19 may increase domestic violence and child abuse. National crises ramp up stress among couples and families. Psychologists identify the risks and point to resources that can help.* American Psychological Association. https://www.apa.org/topics/covid-19/domestic-violence-child-abuse

42. Fran H., Norris, Matthew J., Friedman & Patricia J., Watson. (2002). 60,000 Disaster Victims Speak: Part II. Summary and Implications of the Disaster Mental Health Research. *Psychiatry, 65*(3), 240-260. 10.1521/psyc.65.3.240.20169

43. Swedo, E., Idaikkadar, N., Leemis, R., et al. (2020). Trends in U.S. Emergency Department Visits Related to Suspected or Confirmed Child Abuse and Neglect Among Children and Adolescents Aged <18 Years Before and During the COVID-19 Pandemic — United States, January 2019–September 2020. *MMWR Morb Mortal Wkly Rep,* 69, 1841–1847. http://dx.doi.org/10.15585/mmwr.mm6949a1

44. Washington State Department of Social and Health Services. (2020, December 18). *Child Welfare and Health Service Trends in Washington State – Monitoring Child Protective Services Intakes and Medical Visits During the COVID-19 Pandemic.* https://www.dshs.wa.gov/sites/default/files/rda/reports/DCYFcovid.pdf

45. O'Donnell, B. (2020, July 16). COVID-19 and Missing & Exploited Children. *National Center for Missing & Exploited Children.* https://www.missingkids.org/blog/2020/covid-19-and-missing-and-exploited-children

46. Washington State Department of Health. *Behavioral Health Impact Situation Report, Week of October 26, 2020.* 821-102-15.

47. U.S. Census Bureau. *Household Pulse Survey Data Tables.* https://www.census.gov/programs-surveys/household-pulse-survey/data.html

48. Washington State Department of Health, Center for Health Statistics, Death Certificate Data, 1990–2018, Community Health Assessment Tool (CHAT), October 2019.

49. Washington State Employment Security Department. *Facts and Figures Report – June 2020.* https://esd.wa.gov/labormarketinfo/facts-and-figures-report