OCTOBER 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 national and international data and findings specific to this pandemic. Updates will be made monthly to reflect changes in baseline data.
- Ongoing behavioral health impacts in Washington continue to be seen in phases similar to those in Figure 1, with symptoms for most people peaking throughout the remainder of 2020.^{1,2} This will likely coincide with a potential increase in infections in the fall when more people are indoors, which is a pattern consistent with previous pandemics.
- The rest of 2020 and early 2021 will likely be defined by experiencing the disillusionment phase of disaster recovery. The risk of suicide, depression, hopelessness, and substance use are at their highest. This leads to the corresponding need for behavioral health services.
- Experiences of social isolation are associated with increased behavioral health problems, such as depression, anxiety, mood disorders, psychological distress, post-traumatic stress disorder (PTSD), insomnia, fear, stigmatization, low selfesteem, and lack of self-control.³
- Behavioral health outcomes from the COVID-19 pandemic for most people are related to experiences of social isolation, significant changes in lifestyle and employment, fears of the unknowns around further restrictions and economic losses, and stress and pressure related to the balance of child care and work. This may also worsen if COVID-19 cases increase, which could escalate medical risks for greater numbers of people³ and relapses related to addiction.^{4,5,6}



DOH 821-103-07 October 2020

To request this document in another format, call 1-800-525-0127. Deaf or hard of hearing customers, please call 711 (Washington Relay) or email civil.rights@doh.wa.gov.

Reactions and Behavioral Health Symptoms in Disasters

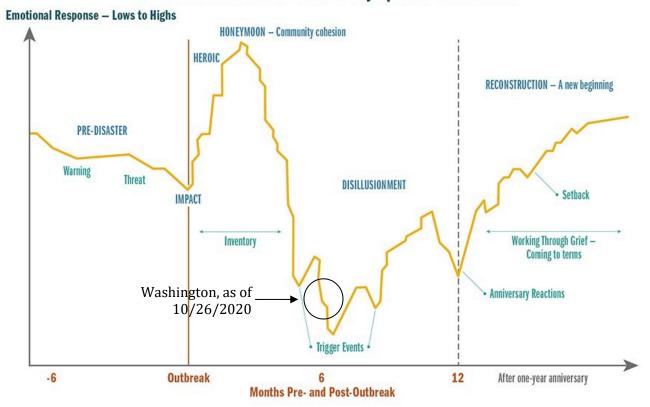


Figure 1: Phases of reactions and behavioral health symptoms in disasters.

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

Phase-Related Behavioral Health Considerations

Behavioral health symptoms will likely present in phases.^{1,2} For each phase in the disaster response and recovery cycle, there are known corresponding behavioral health symptoms and experiences for many people in affected communities. The COVID-19 pandemic is a natural disaster affecting every individual and community in some way. The unique characteristics of this pandemic trend towards depression as a significant behavioral health outcome for many in Washington, which has been shown throughout the Behavioral Health Impact Situation Reports published by the Washington State Department of Health, available on the Behavioral Health Resources & Recommendations webpage.* This may change dramatically if there is a drastic increase in the number of COVID-19 cases toward the end of 2020. In that scenario, increased symptoms of anxiety and PTSD related to fears of illness or death from the virus would likely result.^{8,9}

Some populations, such as ethnic and racial minorities, disadvantaged groups, those of lower socioeconomic status, and essential workers, are experiencing disproportionately more significant behavioral health impacts. 10,11,12,13 Healthcare workers, law enforcement officers, educators, and people recovering from critical care may experience greater behavioral health impacts than those in the general population. The COVID-19 Behavioral Health Group Impact

October Update: Statewide High-Level Analysis of Forecasted Behavioral Health Impacts from COVID-19

^{*} https://www.doh.wa.gov/Emergencies/COVID19/HealthcareProviders/BehavioralHealthResources

Reference Guide, † provides detailed information on how people in specific occupations and social roles are uniquely impacted.

The Disillusionment Phase of Disaster Response & Recovery

Being in the *disillusionment phase* can be uncomfortable and challenging for communities. During this time, individuals, groups (such as non-profits and other organizations), and businesses are managing the limitations of disaster assistance and support. Individuals and communities often feel abandoned as the gap between community needs and available resources widens, especially if financial resources that were more plentiful in earlier phases may be limited or nonexistent.

Depression

Depression is one of the most common emotional responses during the disillusionment phase of disaster response and recovery. In Washington, this phase coincides with seasonal changes, such as reduced daylight hours and fall and winter weather conditions. When weather conditions worsen and people are less likely to spend time outdoors for exercise or as part of a coping mechanism, mental health symptoms are likely to worsen. The combination of these circumstances may result in an increase in symptoms of *seasonal affective disorder* (depression that tends to recur chiefly during the late fall and winter, and is associated with shorter hours of daylight) beyond increases that are typical for this time of year.¹⁴

Washington Listens[‡] (833-681-0211) is a hotline for people experiencing stress due to COVID-19. Resources to help reduce depression and increase resilience are available on the state's coronavirus response wellbeing webpage[§]. Anyone concerned about depression or other behavioral health symptoms should talk with their healthcare provider.

Workplace Burnout, Compassion Fatigue, and Moral Injury

Workplace burnout and similar phenomena for healthcare and human services workers have been increasing steadily in the last several months and will likely continue to do so for the remainder of 2020. ^{15,16} Compounding this issue is the concern that some workers feel they may experience discrimination in the workplace for voicing concerns about mental health.

Burnout is defined as exhaustion of body and mind when there is an unequal balance between the demands of the job and the coping resources available to an employee. Compassion fatigue is the emotional and physical tiredness leading to a decreased ability to empathize or feel compassion for others. It is also described as secondary traumatic stress. Moral injury is defined as strong feelings of guilt, shame, and anger about the frustration that comes from not being able to give the kind of care or service that an employee wants and expects to provide. During disasters such as the COVID-19 pandemic, healthcare workers are frequently in situations where standards of care are altered due to patient surge and scarce resources, shifting from conventional care to contingency care or crisis standards of care. Having to practice outside of conventional care is an added psychological risk for healthcare workers.

[†] https://www.doh.wa.gov/Portals/1/Documents/1600/coronavirus/BHG-COVID19BehavioralHealthGroupImpactReferenceGuide.pdf

[‡] https://www.walistens.org/

[§] coronavirus.wa.gov/wellbeing

We are likely to continue to see an increase in the experiences of burnout, compassion fatigue, and moral injury (for healthcare workers) due to the length and pervasiveness of the pandemic. Additionally, there will likely be workplace stressors related to economic pressures and divisiveness among people and groups. For information on mitigating these impacts, please see the COVID-19 Guidance for Building Resilience in the Workplace.**

Cognitive and Emotional Disruptions

Cognitive concerns and the tendency to react emotionally are hallmarks of long-term stress and trauma, and are significant in the context of disaster response and recovery. ^{17,18} Many people are experiencing problems with memory (such as tracking details, attention, planning, and organizational thinking) that impact the ability to function at home and at work. In addition to these cognitive issues—in part as a function of them—many people are reacting in a more emotional way than they otherwise might to neutral events and interactions. ¹⁷

Recognizing the way that the human brain functions in the context of a disaster and providing that information publicly may help reduce the stigma around these cognitive issues and provide opportunities for many people to learn how to manage them more effectively. Normalizing the experiences of stress and trauma affecting the brain, body, and functioning helps increase resilience.

Substance Use

Many individuals and communities are experiencing a significant lack of control over their personal and environmental circumstances in the current stage (approximately 7 months postimpact) of the pandemic. As we move further into the *disillusionment phase*, the need to manage distressing or difficult feelings related to stress and frustration may become problematic. When individuals feel loss of control combined with associated stress, worry, and fear or anger, these feelings are frequently managed with substance use.

Additionally, mixed messaging at the federal level, messaging from states, and varying degrees of media coverage related to COVID-19 risks and potential outcomes have created a high baseline level of uncertainty within many communities. Given the extended period of unknowns, restrictions associated with the pandemic, and additional stressors associated with the potential for multiple waves (i.e., an increase in COVID-19 cases) and subsequent disruptions, substance use will likely surpass typical post-disaster levels. ^{19,20,21}

According to the Washington Poison Center (WAPC), there are recent and concerning trends for adolescents and teens (age 13-17). Intentional self-harm and suicidal intent has increased by 5% compared with 2019 through over-the-counter medications and the misuse of prescribed medications (i.e. atypical antipsychotics). ²² Substance use (i.e., wanting to get high) related to over-the-counter substances (e.g., antihistamines, cough medicine) and illegal substances (for their age group) of alcohol and cannabis has increased by 34%.

There are similar concerns regarding adults over 60 related to medication errors and the misuse of household cleaning substances and disinfectants.²³ There is also data to suggest a higher call volume to the WAPC about the intentional use of substances for self-harm or abuse. It is important to help older community members with medication management to avoid errors, and to encourage regular preventative care appointments in order to foster support and

^{**} https://www.doh.wa.gov/Portals/1/Documents/1600/coronavirus/COVID-19-BuildingWorkplaceResilience.pdf

prevention related to self-harm or suicidal ideation. Recent research has also identified a concerning trend around alcohol use increasing for women. This may be a reflection of the multitude of responsibilities that many working women have been faced with, such as managing home-schooling and trying to maintain employment throughout the pandemic.²⁴

Substance use will likely continue to be a problematic coping choice for many, with the potential for further increases moving into the late months of 2020 as the holidays approach and familial issues (such as discord or the lack of opportunity for support) due to isolation increase.²⁵

Individuals concerned about substance use should talk with their healthcare provider. Visit the state's coronavirus response wellbeing webpage[§] for resources to help with substance use.

Resilience Building in the Disillusionment Phase

Personal and Community Resilience

The continued development of *psychological resilience* (adaptability and flexibility, connection, purpose, and hope) should be strongly encouraged throughout the next several months. Please see the <u>Born resilient article</u>, ^{††} <u>The Ingredients of Resilience infographic</u>, ^{‡‡} and the <u>COVID-19</u> <u>Guidance for Building Resilience in the Workplace</u> ^{**} for more information on resilience. Encouraging people to engage in healthy outdoor activities as a way of active coping is highly recommended when group size is limited appropriately, safe social distancing can be maintained, and masks or face coverings are worn.

Continuing to reconnect and engage with loved ones and family members from whom many people have been separated should also be encouraged when these encounters can be done outdoors, at a safe physical distance, and with appropriate safety measures in place (e.g., hand washing/sanitizing and face coverings).

Community resilience is the capacity of individuals and households within a community to absorb, endure, and recover from the impacts of a disaster. Approximately 50% of Washington residents have one or two risk factors that can threaten resilience, including unemployment, single parenting, economic inequality, or pre-existing medical conditions. Resilience can be actively developed both on individual and community levels. Creative social connection as a part of resilience building can also be encouraged and developed. It can be amplified to increase social connection. This helps reduce behavioral health symptoms and encourages development of active coping skills for the population at large.

The typical long-term response to disaster is **resilience**, rather than disorder.^{1,27} Resilience is something that can be intentionally taught, practiced, and developed for people across all groups. Resilience can be increased by:²⁸

- Becoming adaptive and psychologically flexible.
- Focusing on developing social connections, big or small.
- Reorienting and developing a sense of purpose.
- Focusing on hope.

†† https://medium.com/wadepthealth/born-resilient-5a20945356df

^{‡‡} https://coronavirus.wa.gov/sites/default/files/2020-09/COVID-19%20Ingredients%20of%20Resilience.pdf

Community support groups, lay volunteers, and social organizations and clubs are resources that can be developed to help reduce behavioral health symptoms for the general population. These should be leveraged to reduce demand on depleted or unavailable professional medical and therapeutic resources throughout 2020.

Organizational Resilience

Organizational resilience can be developed by focusing on the main elements of resilience and identifying some specific ways in which organizations can be successful in this phase of the COVID-19 pandemic. Recommendations include:

- Developing shared trust and interdependence among employers and employees.
- Enhancing the organization's ability to learn and adapt to lessons learned.
- Human Resources flexibility for work schedules and boundaries, time off, and job roles.
- Open, two-way communication among leadership and staff at all levels about expectations and goals.^{29,30}

For more detailed information on how to support and build workplace resilience, please see the COVID-19 Guidance for Building Resilience in the Workplace.**

Forecasted Behavioral Health Symptoms

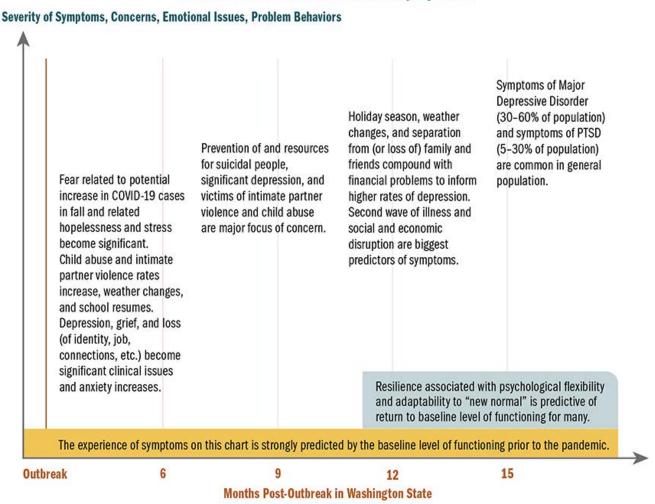


Figure 2: Forecasted behavioral health symptoms.

Specific Areas of Focus for November and December 2020

Political Concerns and the Election

Experts across the nation agree that the likelihood of politically motivated violence after an election has never been higher in modern American history. The highest risk is likely to occur specifically in the time between Election Day and Inauguration Day.^{31,32} The disillusionment phase of disaster recovery and response often leads to the magnification and intensification of individuals' emotions. The growing levels of anger seen across many communities both nationally and in the Pacific Northwest, as well as the rising threat of far-right and far-left extremist groups, creates a high-risk setting for acts of political violence within the disaster context.³¹ Individuals are encouraged to practice self-care more than ever in the months of October, November, and December.

Self-care related to political concern can include restricting reading and watching of politically-related news content to less than two hours per day, avoiding high-intensity discussions about politics, and focusing on small things in everyday life that are meaningful and fulfilling (e.g., completing domestic projects, such as gardening, decorating for a holiday, cooking a special meal, or finishing a good book). Becoming more involved with your community and neighborhood also offers opportunity for social connection and engagement in meaningful activities. Someone might consider things such as volunteering with community organizations, or supporting neighbors and community members (e.g., those who are medically vulnerable) by being a supportive listener, bringing their garbage cans in, mowing their lawn, or running an errand for them.

Violence and Aggression

As individuals move further into the *disillusionment phase*, they often experience several extreme stressors and significant negative events, such as fear of getting sick or loss of loved ones, ^{43,51} unemployment, ^{43,51} or property loss. ^{33,43,51} Individuals often feel powerlessness and a loss of control as a result of these acute experiences. ^{33,51} This leads individuals to direct their feelings (e.g., anger, frustration, sadness, fear, and anxiety) either towards themselves by acting "in" or towards others by acting "out." ^{33,51} Both self-harm and interpersonal violence increase significantly after disasters. ⁵¹ This refers to how people are expressing themselves and their emotions in the context of a disaster response timeline, *not* expressions due to underlying causes or larger-scale social issues. Although, these could also be drivers of behavior.

Increases in handgun sales present more risk for gun violence.^{34,35} Most notably, handgun ownership is associated with a significantly increased and enduring risk of suicide by firearm.³⁶ The FBI has conducted 28,826,499 background checks nationwide for gun purchases and other related services from January–September 2020, 2,892,115 of which occurred in August alone. In comparison, the FBI conducted a total of 28,369,750 background checks for gun purchases in the year 2000.³⁶

Law enforcement is likely to continue seeing a disproportionate increase in violent crimes compared to this period in 2019.³⁷ Violence against women increases after every type of disaster or emergency.³⁸ Rates of intimate partner violence and child abuse during the pandemic have increased significantly in Washington and elsewhere compared with data from previous years.⁵² According to weekly surveys of Washington law enforcement agencies, there has been a 14.4% increase in reported domestic violence offenses and a 32% increase in other violent offenses, including murder and animal cruelty, in September 2020 compared to

September 2019.³⁹ However, the data only represent 25–30% of law enforcement agencies reporting any given week. Based on data from previous disasters, it is likely that even among reporting agencies the true number of domestic violence, child abuse, sexual assault, and animal cruelty cases is significantly higher. As sadness and grief or loss are the most common experiences for many individuals in the *disillusionment phase*, law enforcement officers may see a higher number of calls related to suicide during this time.^{40,41,42} Anger, irritability, and aggression are also common symptoms of depression and despair, and will likely result in continuing trends of increased interpersonal violence.^{43,44} Help and resources for domestic violence are available on the state's coronavirus response wellbeing webpage.[§]

Holidays and Family Gatherings

The upcoming holiday season presents a series of challenges for many people in the context of COVID-19 and family dynamics. ⁴⁵ Members of the same extended family may have different ideas about health precautions, mask-wearing, and norms and safety around interactions (e.g., social distancing, time spent indoors, etc.). There may also be challenges around social and political ideology and conversation. The holidays tend to exacerbate anxiety and stress for many people generally, but under the conditions of the pandemic and the current social climate, that experience may be magnified. There also may be a sense of pressure or expectation on the part of many people to celebrate, party, or have a great time during this season as a means of 'blowing off steam' and trying to relax.

The combination of more stress and the expectation that the holidays should be more fun than the day-to-day may also contribute to problematic substance use for many. It is recommended that each person try to acknowledge and respect their own personal values, as well as physical and emotional boundaries with family gatherings in order to mitigate behavioral health challenges that may develop (specifically anxiety, stress, and substance use). Managing appropriate expectations for events and gatherings at this time of year in the context of COVID-19 will be helpful in reducing symptoms.

Visit the state's coronavirus response gatherings webpage^{§§} for guidelines on alternatives and risk reduction strategies for gatherings, as well as tips for navigating difficult conversations about gatherings. Refer to local health departments which may also have guidelines for gatherings and upcoming holidays.

Children and Families

Academic Instruction—In-Person and Distance Learning

Many parents and caregivers have very strong feelings about in-person versus distance learning, or are feeling overwhelmed and confused about making a decision about how to educate their children amid the multiple options for learning at this time (e.g., full-time distance learning, full-time in person learning, a variation of both in a hybrid learning model, etc.). Despite differing considerations regarding which method of learning is best, almost everyone is worried for their children's health, safety, and development during this time. One of the most important things for parents and caregivers to focus on regardless of which educational model they select, is to establish and return to a routine. Routines help children

October Update: Statewide High-Level Analysis of Forecasted Behavioral Health Impacts from COVID-19

^{§§} https://coronavirus.wa.gov/gatherings

feel safe and stable, which are important components when preparing children to participate in their education.⁴⁶ Simple ways to establish or reinforce routine include:

- Reunite children with family, friends, and community if they have experienced a separation, if this can be accomplished safely.
- Try to have a consistent time for playing outside or unwinding, bedtime, and meals.
- Support regular attendance at school and being on time. If homeschooling, provide a regular schooling time.
- Provide a quiet place where children can escape from the visual chaos. This can even be a separate area/room or quiet corner of a room.

The decision around in-person or distance learning is difficult for parents and school districts alike. Both options present unique benefits and risks. Regardless of how instruction is delivered, children often struggle with their behavior, mood, and learning when they are in the middle of a disaster.

Common, short-term responses you might see in children include: 47,48,49

- Difficulty paying attention, having a hard time focusing on schoolwork
- Trouble remembering what they learned, trouble remembering to complete tasks
- Too much energy, acting too silly
- Feeling really tired all the time, having a hard time sleeping
- Stomachaches or headaches
- Being irritable, cranky, crying often, or having tantrums
- Blurting, having a hard time thinking before they act

It is important for parents, caregivers, and schools to consider the ways in which the behavioral health of their children is being affected by the pandemic and the impacts to their students' ability to learn, retain new information, and advance academically. Refer to the COVID-19
Behavioral Health Toolbox for Families
*** for tips on how to navigate some of the emotional responses that families may experience during the COVID-19 pandemic. The toolbox provides general information about common emotional reactions of children, teens, and families during disasters. Families, parents, caregivers, and educators can use this information to help children, teens, and families recover from disasters and grow stronger.

Child Abuse

Child abuse and domestic violence increase significantly in post-disaster settings, such as the COVID-19 pandemic. ^{50,51,52} Traumatic brain injuries (TBIs) are the most common form of injury due to child abuse after a disaster. ⁵⁰ In an online environment, 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 may use to spot signs of abuse or neglect are often unavailable in a virtual environment.

^{***} https://www.doh.wa.gov/Portals/1/Documents/1600/coronavirus/BHG-COVID19-FamilyToolbox.pdf

Signs of child abuse that may be visible in a virtual setting may include the following:

- Changes in levels of participation in online classes (being unusually vocal, disruptive, or very withdrawn, frequently absent or coming 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.
- 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 <u>COVID-19 Guidance for Educators: Recognizing and Reporting Child Abuse and Neglect</u> in Online Education Settings^{†††} for more information.

Parenting and Working from Home

Managing the variety of responsibilities and demands of working from home while also balancing child care and self-care can be overwhelming and have significant negative effects on behavioral health for children, adolescents, and adults. Families with parents and caregivers working from home should try to create structure in their daily schedule. Establishing a plan or daily schedule for everyone in the household can help create a sense of stability and comfort during a time when there are many unknowns. To the extent that is possible, try to separate work areas from family or home areas with physical boundaries (e.g., doors, room dividers, or a separate table) in order to help the brain mentally separate work from home.

Key Things to Know

There are a number of additional factors and considerations that impact behavioral health to take into account in the remaining months of 2020:

Medical and specialty providers, organizations, and facilities should attempt to develop resources and staffing to address behavioral health impacts of the pandemic that are likely to increase significantly in the fall months. Support strategies need to be tailored based on the current phase of the incident and the target population.

^{***} https://www.doh.wa.gov/Portals/1/Documents/1600/coronavirus/821-113-COVID19RecognizingReportingChildAbuse.pdf

- Ending of federal support programs (e.g. Payroll Protection Act, supply distribution) may cause communities to realize that there are substantial gaps between their needs and available resources.
- With the onset of cold and flu season, many individuals will have difficulty determining whether their symptoms of illness are COVID-19 related or due to another virus. As such, employees will be required to quarantine themselves. In the case that specific companies, businesses, or roles face mass quarantines, delays or disruptions in supply chains and services disruptions could occur.
- In Washington, the highest risk of suicide will likely occur between October and December 2020. This is consistent with known cycles of disaster response patterns. Seasonal affective disorder worsens mental health challenges at this time of year due to increased hours of darkness and inclement weather. Winter holidays can also worsen mental health challenges for many people, as they are often an emotionally and financially difficult time of year. Data suggest that young adults (18-29), as well as older adults (60+), are particularly vulnerable. ^{20,21,39}
- Given the current sociopolitical climate, election season could likely have a strong impact on the behavioral health of Washingtonians.^{53,73}
- There are significant nationwide trends towards a steady increase in behavioral health symptoms across the population, including anxiety, depression, and suicidal ideation (which has almost doubled compared to 2019 in some places). Within Washington, this is shown both through the general trends within U.S. Census data as examined below (Figure 3), as well as a trend of increasing emergency department visits for symptoms associated with behavioral health issues. This trend has not been uniform, but rather unstable, and may indicate a general feeling of uncertainty about future events.
- Based on population data for Washington and known cycles of common psychological responses to disasters, as well as the latest outcome data specific to COVID-19, we can reasonably expect that approximately <u>three million</u> Washingtonians will experience clinically significant behavioral health symptoms over the next two to five months.
 - Symptoms of depression will likely be the most common, followed by anxiety and acute stress. These symptoms will likely be strong enough to cause significant distress or impairment for most people in this group.
 - Weekly survey data suggest that over 1.7 million Washington adults are experiencing symptoms of anxiety on at least most days and over 1.1 million are experiencing symptoms of depression on at least most days (Figure 3).55
- While only 4–6% of people typically develop symptoms of PTSD after a disaster (equivalent to 380,000 individuals in Washington), this number can vary quite a bit depending on the type of disaster. It is often higher among first responders and medical personnel if the disaster is more chronic and widespread, children are hurt or injured, and burnout is likely. 40,41

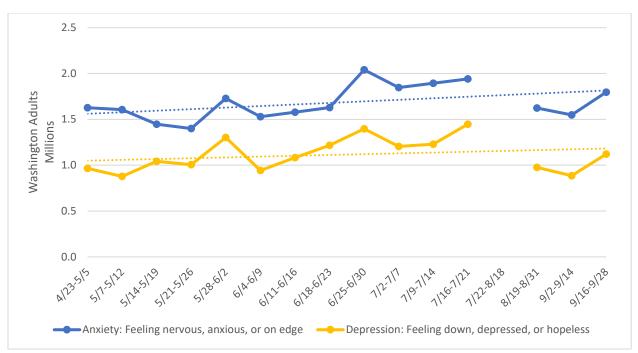


Figure 3: Estimated Washington adults experiencing symptoms of anxiety and depression at least most days, by week: April 23–Sept 28 (Source: U.S. Census Bureau).

Note: Census data unavailable for the dates of 7/22/20 to 8/18/20.

- Rates of PTSD have been much higher (10–35%) in some places more directly impacted by a critical incident.⁴² Although rates of PTSD may not reach such critical levels in Washington, it is anticipated that rates of depression are likely to be much higher (potentially 30–60% of the general population, which is equivalent to 2.25 million–4.5 million people in Washington⁴⁰) due to the chronic and ongoing social and economic disruption in people's lives as a result of the COVID-19 pandemic. This is a much higher rate than typical after a natural disaster where there is a single impact point in time.
- If we experience an additional fall peak of illness as a function of this pandemic, significant behavioral health reactions or functional impairments may be experienced by approximately 45% of the population.^{56,57}
- The most common symptoms of trauma in children and teens in the context of disaster recovery include eating too much or too little, difficulty sleeping, having bad dreams or nightmares, sleeping too much or too little, changes in behavior, and difficulty learning and remembering new things. It is also very common for children and youth of all ages to experience some regression, such as acting like they did as a younger child.⁵⁸
- Suicide and drug overdose rates are both highly influenced by unemployment. ^{10,20,59,60} For every 1% increase in the unemployment rate, there is a corresponding 1.6% increase in the suicide rate ¹⁹ and an increase of one drug overdose death per 300,000 people. ²⁰
 - In Washington, approximately 1,231 people die from suicide annually and 1,173 people die from drug overdose annually.
 - The unemployment rate in Washington was 8.5% in August 2020,⁶¹ 4.3 percentage points higher than August 2019. 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 within the next decade.

- In the context of post-disaster recovery, individuals often utilize substances as a way to relieve psychological suffering. As such, disasters are linked to increased use of tobacco, cannabis, and alcohol. 62
 - Prior to COVID-19, approximately 24% of individuals with mood disorders reported using alcohol or drugs to relieve symptoms, 10% of individuals with an anxiety disorder reported self-medicating with alcohol, 3% of individuals with an anxiety disorder reported self-medicating with alcohol and drugs, and 21% of individuals with PTSD reported using alcohol and other drugs to relieve their psychological symptoms. ⁶² Due to the extended nature of this pandemic, it is likely that self-medication and use of substances of all types will continue to increase throughout the remaining 2020 months into 2021.
 - Compared to August 2019, cannabis tax collections for August 2020 were up 41%.⁶³
 There has also been a stable, but higher than expected, number of alcohol-related emergency department visits.⁶⁴
 - Given these increases, healthcare providers should suggest healthy alternatives for coping and sources of support. For additional resources, visit DOH's Behavioral Health Resources & Recommendations webpage* for providers. It is important to note that these numbers likely do not reflect the total number of individuals that will be able to seek and access services. Capacity building 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 by April or May 2021 is anticipated for many people. However, this is dependent on the level of disruption caused by a potentially dramatic increase in infection rates in the fall of 2020 or winter of 2021.^{1,2}

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.

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. Retrieved from 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
- 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. Retrieved from https://www.samhsa.gov/dtac/recovering-disasters/phases-disaster.
- 8. Anesi, G. L. & Manaker, S. (2020) Coronavirus disease 2019 (COVID-19): Critical care issues. Retrieved from 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. Parker, K., Horowitz Menasce, J., & Brown, A. (2020). Pew Research Center. About Half of Lower-Income Americans Report Household Job or Wage Loss Due to COVID-19. Retrieved from https://www.pewsocialtrends.org/2020/04/21/about-half-of-lower-income-americans-report-household-job-or-wage-loss-due-to-covid-19/
- 11. Panchal, N., Kamal, R., Orgera, K., Cox, C., Garfield, R., Hamel, L., Muñana, C., & Chidambaram, P. (2020). The Implications of COVID-19 for Mental Health and Substance Use. Kaiser Family Foundation. Retrieved from https://www.kff.org/health-reform/issue-brief/the-implications-of-covid-19-for-mental-health-and-substance-use
- 12. 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.
- 13. Garg, S., Kim, L., Whitaker, M., et al. 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 2020;69:458–464. DOI: http://dx.doi.org/10.15585/mmwr.mm6915e3
- 14. Targum, S. D., & Rosenthal, N. (2008). Seasonal affective disorder. *Psychiatry (Edgmont (Pa. : Township))*, *5*(5), 31–33.
- 15. American Psychiatric Association. (2020). *Moral Injury During the COVID-19 Pandemic.* https://www.psychiatry.org/File%20Library/Psychiatrists/APA-Guidance-COVID-19-Moral-Injury.pdf

- 16. Alharbi, J., Jackson, D., & Usher, K. (2020). The potential for COVID-19 to contribute to compassion fatigue in critical care nurses. *PubMed Central*. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7267232/
- 17. Hayes, J. P., Vanelzakker, M. B., & Shin, L. M. (2012). Emotion and cognition interactions in PTSD: a review of neurocognitive and neuroimaging studies. Frontiers in integrative neuroscience, 6, 89. https://doi.org/10.3389/fnint.2012.00089
- 18. Centers for Disease Control and Prevention, "Traumatic Incident Stress," The National Institute for for Occupational Safety and Health (NIOSH). 2013, December 30. Retrieved from https://www.cdc.gov/niosh/topics/traumaticincident/default.html
- 19. 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*.
- 20. Brown, E., & Wehby, G. L. (2019). Economic conditions and drug and opioid overdose deaths. *Medical Care Research and Review, 76*(4), 462–477. https://doi.org/10.1177/1077558717722592 20
- 21. Meadows Mental Health Policy Institute (2020). COVID-19 Response Briefing: Mental Health and Substance Use Disorder Impacts of a COVID-19 Economic Recession. Retrieved from https://www.texasstateofmind.org/uploads/whitepapers/COVID-MHSUDImpacts.pdf
- 22. Washington Poison Center (2020). Exposure Trends During the COVID-19 Pandemic. Special Focus: Adolescent Intentional Self-Poisoning. Retrieved from https://www.wapc.org/wp-content/uploads/FINAL-COVID-Snapshot-3 Adolescents.pdf
- 23. Washington Poison Center (2020). Exposure Trends During the COVID-19 Pandemic. Special Focus: Adults 60 Years and Older. Retrieved from https://www.wapc.org/wp-content/uploads/FINAL-COVID-Snapshot-4 Older-Adults.pdf
- 24. Pollard, M., Tucker, J., & Green, H. (2020). Changes in Adult Alcohol Use and Consequences During the COVID-19 Pandemic in the US. Author Affiliations Article Information *JAMA Network Open*, 3(9),e2022942. doi:10.1001/jamanetworkopen.2020.22942
- 25. Lebow, J. L. (2020). The Challenges of COVID-19 for Divorcing and Post-divorce Families. *Fam. Proc.*, 59, 967-973. 10.1111/famp.12574
- 26. U.S. Census Bureau. (2020). Community Resilience Estimate June 17, 2020. Retrieved from https://www2.census.gov/data/experimental-data-products/community-resilience-estimates/2020/technical-document.pdf
- 27. Bonanno, G. A. (2004). Loss, Trauma, and Human Resilience: Have We Underestimated the Human Capacity to Thrive After Extremely Aversive Events? *American Psychologist*, *59*(1), 20–28. https://doi.org/10.1037/0003-066X.59.1.20
- 28. Hobfoll, S. E., Watson, P. J., Bell, C. C., Bryant, R., Brymer, M. J., Friedman, M. J., & Ursano, R. J. (2007). Five essential elements of immediate and mid-term mass trauma intervention: Empirical evidence. *Psychiatry Interpersonal & Biological Processes*, 70(4), 283-315.
- 29. Gittell, J. H., Cameron, K., Lim, S., & Rivas, V. (2006). Relationships, Layoffs, and Organizational Resilience Airline Industry Responses to September 11. *The Journal of Applied Behavioral Science*, 42(3), 300-324.
- 30. Lengnick-Hall, C. A., Beck, T. E., & Lengnick-Hall, M. L. (2011). Developing a capacity for organizational resilience through strategic human resource management. *Human Resource Management Review*, *21*, 243-255.
- 31. Wray, C. (2020, September 24). *Worldwide Threats to the Homeland*. Federal Bureau of Investigation. https://www.fbi.gov/news/testimony/worldwide-threats-to-the-homeland-092420

- 32. Jones, S. G., Doxsee, C., Harrington, N., Hwang, G., & Suber, J. (2020, October 22). *The War Comes Home: The Evolution of Domestic Terrorism in the United States*. Center for Strategic & International Studies. https://www.csis.org/analysis/war-comes-home-evolution-domestic-terrorism-united-states
- 33. World Health Organization. (2005). Violence and Disasters. Department of Injuries and Violence Prevention. Geneva, Switzerland. Retrieved from https://www.who.int/violence_injury_prevention/publications/violence/violence_disasters.pdf
- 34. 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
- 35. 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
- 36. Federal Bureau of Investigation, "National Instant Criminal Background Check System (NICS)," Services: NICS. 2019, Retrieved from https://www.fbi.gov/services/cjis/nics
- 37. King County Prosecuting Attorney's Office Crime Strategies Unit. (2020, July). 2020 King County Firearm Violence Q1-Q2. https://kingcounty.gov/~/media/depts/prosecutor/documents/2020/Jan,-d-,-June_2020_King_County_gun_report.ashx?la=en
- 38. World Health Organization. (2020). COVID-19 and violence against women: what the health sector/system can do. World Health Organization. Retrieved from https://www.who.int/reproductivehealth/publications/vaw-covid-19/en/
- 39. Behavioral Health Impact Situation Report, Week of October 5, 2020. Washington State Department of Health, 821-102-12.
- 40. 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
- 41. Makwana, N. (2019). Disaster and its impact on mental health: A narrative review. *Journal of family medicine and primary care, 8*(10), 3090–3095. https://doi.org/10.4103/jfmpc.jfmpc_893_19
- 42. Bonanno, G. A., Galea, S., Bucciarielli, A., & Vlahov, D. (2006). Psychological Resilience after disaster: New York City in the aftermath of the September 11th terrorist attack. *Psychological Science*, *17*(3): 181-6.
- 43. Miller, J. L. & Pescaroli, G. (2018). Psychosocial Capacity Building in Response to Cascading Disasters: A Culturally Informed Approach. *International Journal of Disaster Risk Reduction*. Retrieved from https://doi.org/10.1016/j.ijdrr.2018.04.018
- 44. Pescaroli, G. & Alexander, D. (2015). A definition of cascading disasters and cascading effects: going beyond the "toppling dominos" metaphor. Global Risk Forum, *Planet@Risk 3*(1), 58–67.
- 45. Centers for Disease Control and Prevention, "Holiday Celebrations," Coronavirus Disease 2019 (COVID-19)," Your Health. October 19, 2020, Retrieved from https://www.cdc.gov/coronavirus/2019-ncov/daily-life-coping/holidays.html
- 46. Zhang et al. (2020). Assessment of mental health of Chinese primary school students before and after school closing and opening during the COVID-19 pandemic. *JAMA Network, 3*(9), e2021482. 10.1001/jamanetworkopen.2020.21482
- 47. Cooper, N. S., Feder, A., Southwick, A. M., & Charney, D. S. (2007). Resiliency and vulnerability to trauma: Psychobiological mechanisms. In D. Romer & E. F. Walker (Eds.), Adolescent

- psychopathology and the developing brain: Integrating brain and prevention science. (pp. 347-372). Oxford, UK: Oxford University Press.
- 48. Kira Mauseth, Ph.D., Tona McGuire, Ph.D., & Kathryn Adams, EdD. Health Support Team. Personal communication, October 16, 2020.
- 49. Stacy Cecchet, Ph.D., Kira Mauseth, Ph.D. PsychMed International. Personal communication, October 16, 2020.
- 50. World Health Organization. (2005). Violence and Disasters. Department of Injuries and Violence Prevention. Geneva, Switzerland. Retrieved from https://www.who.int/violence_injury_prevention/publications/violence/violence_disasters.pdf
- 51. 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.
- 52. 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*. Retrieved from https://www.apa.org/topics/covid-19/domestic-violence-child-abuse
- 53. Smith, K. B., Hibbing, M. V., Hibbing, J. R. (2019). Friends, relatives, sanity, and health: The costs of politics. *PLOS ONE 14*(9), e0221870. https://doi.org/10.1371/journal.pone.0221870
- 54 Czeisler, M. É., Lane, R. I., Petrosky E., et al. Mental Health, Substance Use, and Suicidal Ideation During the COVID-19 Pandemic United States, June 24–30, 2020. MMWR Morb Mortal Wkly Rep 2020, 69, 1049–1057. http://dx.doi.org/10.15585/mmwr.mm6932a1
- 55. U.S. Census Bureau. Household Pulse Survey Data Tables. Retrieved from https://www.census.gov/programs-surveys/household-pulse-survey/data.html
- 56. Bonanno, G. A., Brewin, C. R. Kaniasty, K. & LaGreca, A. M. (2010). Weighing the Costs of Disaster: Consequences, Risks, and Resilience in Individuals, Families, and Communities. *Psychological Science in the Public Interest*, 11(1), 1–49. https://doi.org/10.1177/1529100610387086
- 57. Cerdá, M., Bordelois, P. M., Galea, S., Norris, F., Tracy, M., & Koenen, K. C. (2013). The course of posttraumatic stress symptoms and functional impairment following a disaster: what is the lasting influence of acute versus ongoing traumatic events and stressors? *Social psychiatry and psychiatric epidemiology*, 48(3), 385–395. https://doi.org/10.1007/s00127-012-0560-3
- 58. Shaw, J. A., Espinel, Z., & Shultz, J. M. (2012). Care of children exposed to the traumatic effects of disaster. Arlington, VA: American Psychiatric Publishing.
- 59. 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.
- 60. Meadows Mental Health Policy Institute (2020). COVID-19 Response Briefing: Mental Health and Substance Use Disorder Impacts of a COVID-19 Economic Recession. Retrieved from https://www.texasstateofmind.org/uploads/whitepapers/COVID-MHSUDImpacts.pdf
- 61. Facts and Figures Report June 2020. Washington State Employment Security Department. Retrieved from https://esd.wa.gov/labormarketinfo/facts-and-figures-report
- 62. Alexander, A. C., & Ward, K. D. (2018). Understanding post-disaster substance use and psychological distress using concepts from the self-medication hypothesis and social cognitive theory. *Journal of psychoactive drugs*, *50*(2), 177-186.
- 63. FY2020 and FY2019 Revenue Collected. Washington State Liquor and Cannabis Board. Obtained directly via email correspondence.
- 64. Centers for Disease Control and Prevention. National Syndromic Surveillance Program. Indexed 'CDC Alcohol v1' query for counts of weekly alcohol-related emergency department visits in Washington State. Retrieved from ESSENCE platform on July 15, 2020.