SEPTEMBER 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 identified 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 months when more people are indoors, which is a pattern consistent with previous pandemics.
- The fall months (September, October, and November 2020) are likely to be the height of the disillusionment phase of disaster recovery when the risk of suicide, depression, hopelessness, and substance use are at their highest, as is the corresponding need for behavioral health services.
- The behavioral health outcomes from COVID-19 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 childcare and work. However, this may change if COVID-19 cases increase. This could escalate medical risks for greater numbers of people[3] and relapses related to addiction.[4,5,6]
- 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 self-esteem, and lack of self-control.[3]

Washington State Department of Health

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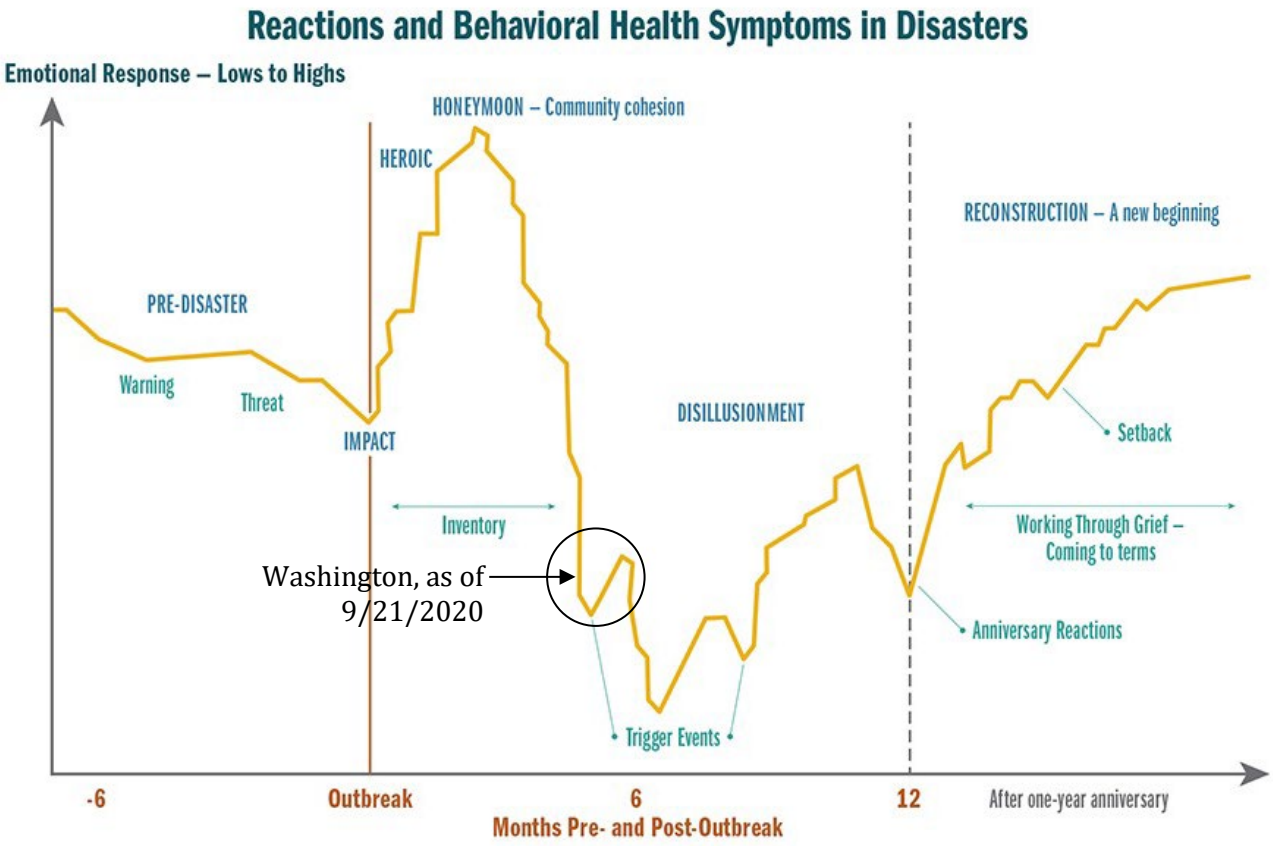

Figure 1: Phases of reactions and behavioral health symptoms in disasters.
Adapted from the Substance Abuse and Mental Health Services Administration (SAMHSA) [7]

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 the affected community. As the COVID-19 pandemic is a natural disaster impacting us on a national level, **every individual and community is affected in some way.** The unique characteristics of this pandemic are trending towards depression as a significant behavioral health outcome for many in Washington, which is shown in the series of Behavioral Health Impact Situation Reports published by the Washington State Department of Health (available on DOH's Behavioral Health Resources & Recommendations webpage*). This may change dramatically if there is a drastic increase in the number of COVID-19 cases in October and November. In that case, increased symptoms of anxiety PTSD related to fears of illness or death from the virus would likely result.[8,9]

Certain 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.[10,11,12,13,14] 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

* 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. As we move into the fourth quarter of 2020, financial resources that were more plentiful in earlier phases may be limited or nonexistent.

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. The current conditions this month related to unhealthy air quality due to wildfire smoke and the resulting consequence of not being able to spend as much time outdoors safely is likely to contribute to worsening mental health symptoms for those in impacted areas. The combination of these circumstances is likely to 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.[15,16]

In September, we are likely to continue to see socially disruptive behaviors on a larger community scale as one expression of *emotional burnout* (exhaustion of physical or emotional strength or motivation usually as a result of prolonged stress or frustration) due to the length and pervasiveness of the pandemic, in addition to stressors related to economic pressures and divisiveness among people and groups. 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.[17]

Law enforcement is likely to continue seeing a disproportionate increase in violent crimes compared to this period in 2019.[18] 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.[19,20,21] Anger, irritability, and aggression are also common symptoms of depression and despair, and will likely result in continuing trends of increased interpersonal violence.[22,23]

The COVID-19 pandemic and its associated impacts on daily life can also increase behavioral health risks for wildland firefighters. Under normal circumstances, wildland firefighters are disproportionately impacted and susceptible to severe behavioral health symptoms.[16,24] Wildland firefighters can experience high levels of depression, PTSD, and death by suicide.[16,25,26] Please see

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

COVID-19 Behavioral Health Considerations for Wildland Firefighters[‡] and COVID-19 Behavioral Health Handout for Wildland Firefighters[§] for more information.

If COVID-19 cases dramatically increase in the fall months, along with resulting significant social and economic disruption, one of the large-scale outcomes will likely include a *trauma cascade*. This is a situation in which parts of the disaster recovery cycle can be repeated or prolonged, during which people may have a reduced ability to emotionally recover from the disaster due to additional or ongoing impacts on their lives.[1]

For members of communities in Washington who have been directly affected or displaced by wildfires, the experiences of a trauma cascade are likely to be co-occurring with behavioral health conditions associated with the COVID-19 pandemic. This could likely result in an extremely difficult progression of symptoms in the next several months for these community members, characterized by moderate to severe symptoms of acute stress which have the potential to result in PTSD and *major depressive disorder. Major depressive disorder* (i.e., clinical depression) is a common but serious mood disorder. It causes severe symptoms that affect how you feel, think, and handle daily activities, such as sleeping, eating, or working.[22,23]

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 Born resilient article,[**] The Ingredients of Resilience infographic,[††] and the COVID-19 Guidance for Building Resilience in the Workplace[‡‡] for more information on resilience.

Refer to local health departments which may also have guidelines for gatherings and upcoming holidays. Encouraging people to engage in **healthy outdoor activities as a way of active coping is highly recommended when group size is limited appropriately, safe physical distancing can be maintained, and 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 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.[27] Resilience can be actively developed both on individual and community levels. Creative social connection, as part of resilience, can also be encouraged and developed. It can be amplified to increase social

[‡] https://www.doh.wa.gov/Portals/1/Documents/1600/coronavirus/BHG-COVID-19-BehavioralHealthWildlandFirefighters.pdf

[§] https://www.doh.wa.gov/Portals/1/Documents/1600/coronavirus/BHG-WLFFpamphlet-821-107EN-8x11.pdf

[**] https://medium.com/wadepthealth/born-resilient-5a20945356df

[††] https://coronavirus.wa.gov/sites/default/files/2020-09/COVID-19%20Ingredients%20of%20Resilience.pdf

[‡‡] https://www.doh.wa.gov/Portals/1/Documents/1600/coronavirus/COVID-19-BuildingWorkplaceResilience.pdf

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.[1,28] Resilience is something that can be intentionally taught, practiced, and developed for people across all age groups. Resilience can be increased by:[29]

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

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 taking into account 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.[30,31]

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

Specific Areas of Focus for Transition into October 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.

There are a number of additional factors and considerations that impact behavioral health to take into account for the fall:

- Ending of some local (county and city) eviction moratoriums, unless deferred, may result in unstable housing and housing crises for people who have experienced unexpected decreases in income or unemployment.
- 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.
- Given the current sociopolitical climate, election season could likely have a strong impact on the behavioral health of Washingtonians.[32]
- An eventual return to baseline levels of functioning for many people should occur around 14 months after the initial outbreak. **This is assuming that the rates of infection do not continue to significantly increase and that a sense of the new normal is underway.**

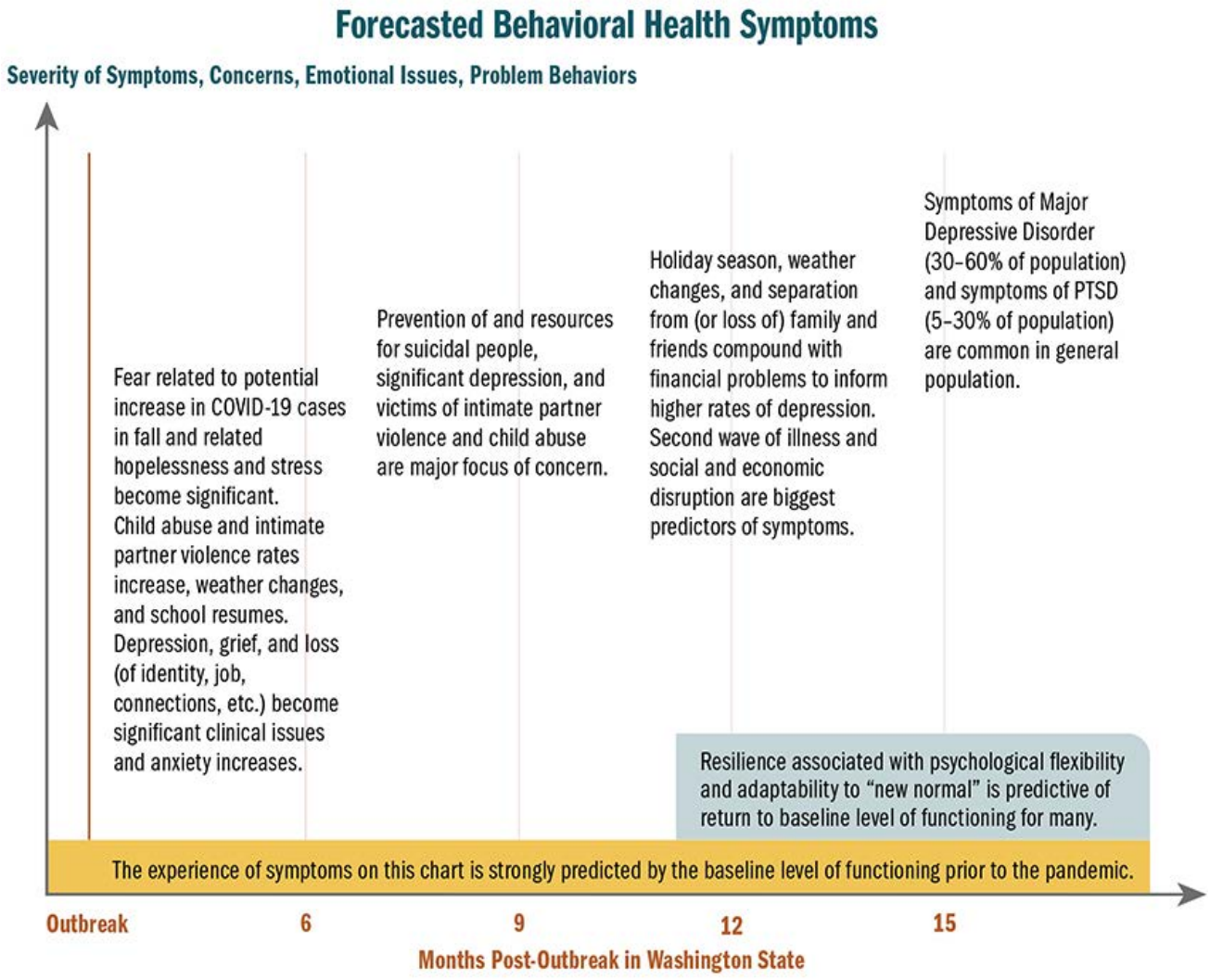

Figure 2: Forecasted behavioral health symptoms.

Specific Areas of Focus for October and November 2020

Children and Families

Academic Instruction—In-Person and Distance Learning

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:[33,34,35]

- 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 of 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

Many parents and caregivers have very strong feelings about in-person versus distance learning. Despite disagreement about which method of learning is best, almost everyone is worried for their children's health, safety, and development during this time. 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.[36,37,38] Traumatic brain injuries (TBIs) are the most common form of injury due to child abuse after a disaster.

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 care provider. This may change or limit the opportunities for an educator or care provider to ask the child directly or inquire about the way things are going at home. If someone is abusing or neglecting a child, they may be able to hear the interactions the educator or provider has with the child. Typical cues that educators and providers may use to spot signs of abuse or neglect are often unavailable in an online environment.

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

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

- 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.

Parenting and Working from Home

Managing the variety of responsibilities and demands of working from home while also balancing childcare 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 a helpful 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, recognizing it may not be an option for many people, work areas should be separated from family or home areas with physical boundaries (e.g., doors, room dividers, a separate table) in order to help the brain mentally separate work from home.

Substance Use

Many individuals and communities are experiencing a significant lack of control over their personal and environmental circumstances in the current stage (6-7 months post-impact) of the pandemic. As we move further into the disillusionment stage, the need to manage distressing or difficult feelings related to stress and frustration may become problematic. When individuals feel loss of control along with associated stress, worry, and fear, it is very common for those feelings to be expressed outwardly in the form of frustration and 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., increases in COVID-19 cases) and subsequent disruption, substance use will likely surpass typical post-disaster levels.[39,40,41]

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).[42] 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.[43] 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 prevention related to self-harm or suicidal ideation.

Violence and Aggression

As individuals move 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,[23,44] unemployment,[22,44] or property loss.[22,44,45] Individuals often feel powerlessness and a loss of control as a result of these acute experiences.[44,45] 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."[44,45] Both self-harm and interpersonal violence increase significantly after disasters.[44] 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.

There is evidence that nationally, people's behaviors and emotions are intensified by the experience of COVID-19. They are acting in ways they normally wouldn't in circumstances without the stressors and impacts of the pandemic, which can intensify and magnify existing feelings of distress, anger, fear, and aggression.

Increases in handgun sales can present more risk for gun violence, including suicide.[46] In Washington, the number of federal background checks for handgun sales was 6% lower in March–August 2020 than the number for the corresponding period in 2019.[47]

Where changes in weather or air quality keep people indoors more of the time, acting "out" (the external expression of negative emotions) is likely to slowly be replaced by acting "in." This results in a substantial increase in symptoms of hopelessness and depression and behaviors related to intentional isolation and withdrawal.

Violence against women increases after every type of disaster or emergency.[48] Rates of intimate partner violence and child abuse during the pandemic have increased significantly in Washington and elsewhere compared with data from previous years.[38] Weekly surveys of Washington law enforcement agencies indicate that domestic violence offenses remain elevated at levels 8% higher than those in 2019.[49] However, these data only represent 25–30% of law enforcement agencies any given week. Based on data from previous disasters, it is likely that, even among reporting agencies, the true number of domestic violence cases is significantly higher.

Key Things to Know

- 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).[50]
- 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 three million 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 1.6 million Washington adults are experiencing symptoms of anxiety on at least most days, and over 900,000 are experiencing symptoms of depression on at least most days (Figure 3).[51]

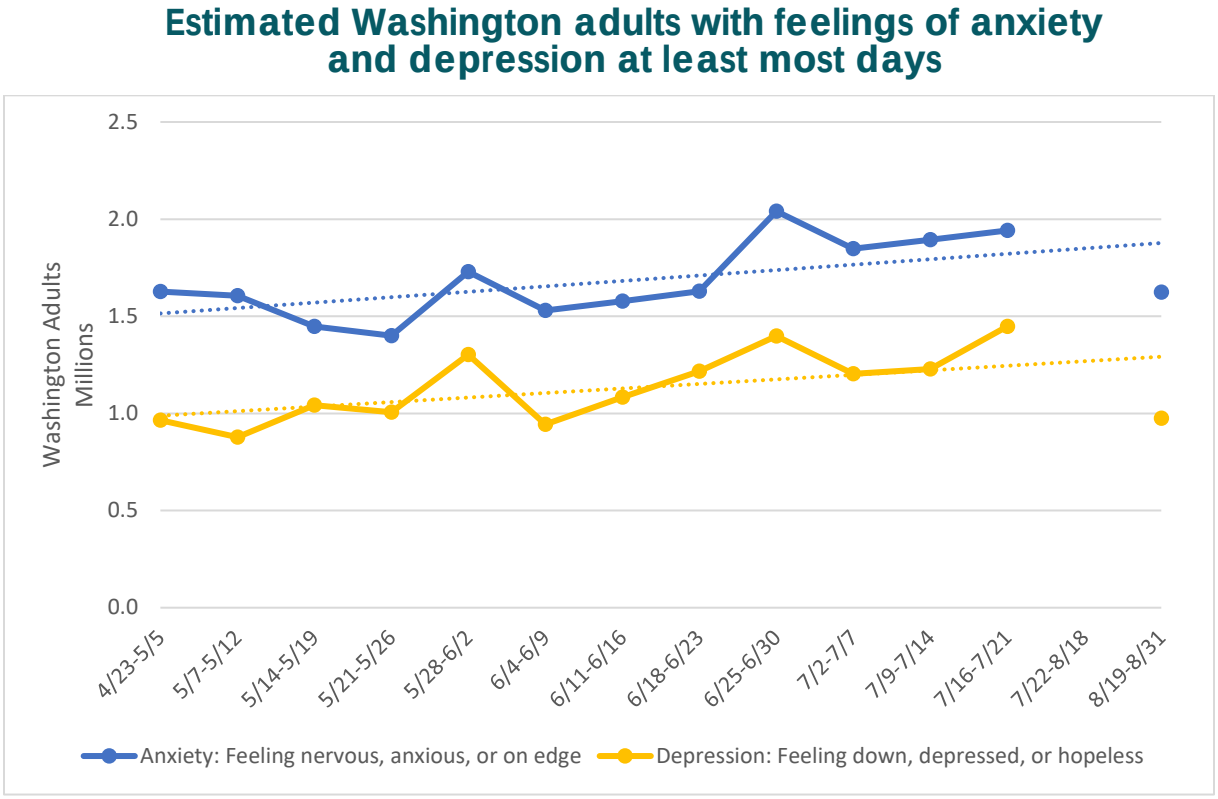

Figure 3: Estimated Washington adults experiencing symptoms of anxiety and depression at least most days, by week: April 23–July 21 (Source: U.S. Census Bureau)

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

- 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, widespread, children are hurt or injured, and burnout is likely**.[19,20]
- Rates of PTSD have been much higher (10–35%) in some places more directly impacted by a critical incident.[21] 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 to 4.5 million people in Washington[19]) 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 are to 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.[52,53]
- 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.[54]
- Suicide and drug overdose rates are both highly influenced by unemployment.[10,55,40,56] For every 1% increase in the unemployment rate, there is a corresponding 1.6% increase in the suicide rate[55] and an increase of one drug overdose death per 300,000 people.[40]
  - 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 10.3% in July 2020,[57] 5.7 percentage points higher than in June 2019. If sustained, this could result in an additional 112 deaths annually by suicide and an additional 145 deaths annually by drug overdose.
- 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.[58]
  - 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.[58] **Due to the extended nature of a pandemic, it is likely that self-medication and use of substances of all types will increase significantly over the next 6–9 months.**
    - Compared to August 2019, cannabis tax collections for August 2020 were up 41%.[59] There has also been a corresponding rise in alcohol-related emergency department visits in 2020.[60]
  - 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

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