

## AUGUST 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 continues to strongly influence behavioral health symptoms and behaviors across the state due to its 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 will likely be seen in phases (see Figure 1 and Figure 2), peaking around 6–9 months after the initial outbreak.<sup>1,2</sup> 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.
- Washington is currently experiencing a slow extension of the first wave of the pandemic as represented by a continuous and steady increase in COVID-19 cases following the phased reopening that began in June 2020.
- Heading into the fall months of 2020, the behavioral health outcomes from COVID-19 for most people are related to experiences of social isolation, 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 as COVID-19 cases continue to increase, increasing medical risks for greater numbers of people<sup>3</sup> and relapses related to addiction.<sup>4,5,6</sup>
- 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.<sup>3</sup>



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## Reactions and Behavioral Health Symptoms in Disasters

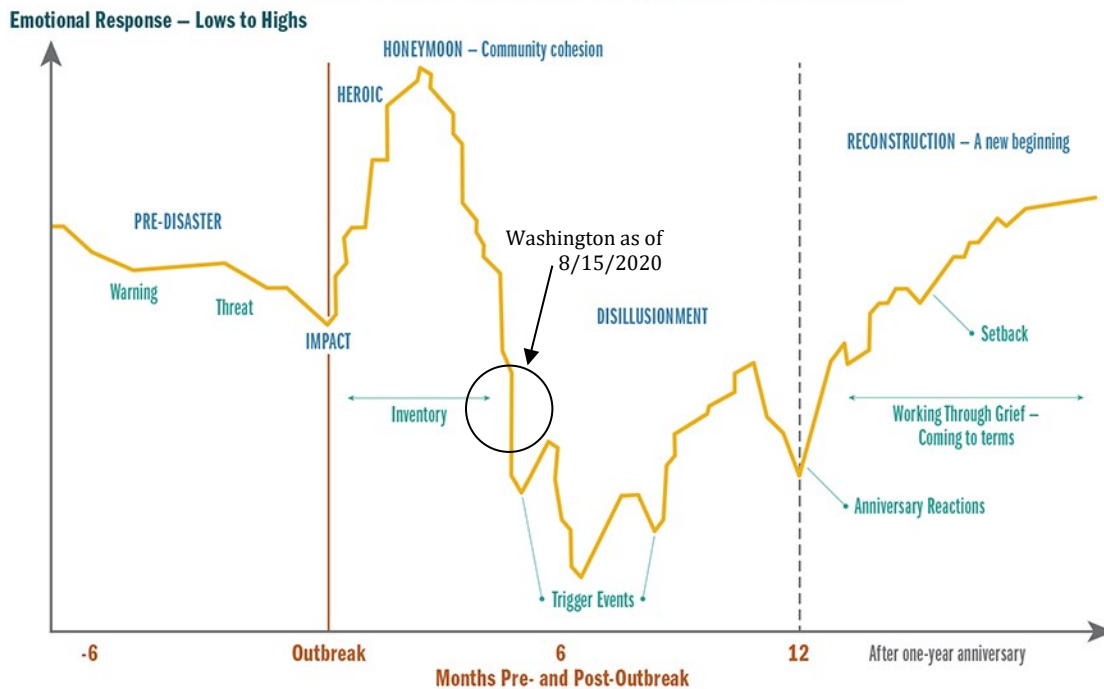


Figure 1: Phases of reactions and behavioral health symptoms in disasters. Adapted from the Substance Abuse and Mental Health Services Administration (SAMHSA) <sup>7</sup>

### Phase-Related Behavioral Health Considerations

**Behavioral health symptoms will likely present in phases.**<sup>1,2</sup> 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 in Washington. This may change dramatically if there is a drastic increase in the number of COVID-19 cases in September and October. In that case, increased symptoms of anxiety and post-traumatic stress disorder (PTSD) related to fears of illness or death from the virus will likely result.<sup>8,9</sup>

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.<sup>10,11,12,13,14</sup> Healthcare workers, law enforcement officers, educators, and people recovering from critical care may experience greater behavioral health impacts than the general population. The [COVID-19 Behavioral Health Group Impact Reference Guide](#) (DOH publication number 821-104) provides detailed information on how people in specific occupations and social roles are uniquely impacted.

### The Disillusionment Phase of Disaster Response & Recovery

Moving into the *disillusionment phase* can be uncomfortable and challenging for communities. During this time, individuals, groups (non-profits and other organizations), and businesses are often confronted with the limitations of disaster assistance and support. Individuals and communities may feel abandoned as the gap between community needs and available

resources widens. As we move towards 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 heading into the disillusionment phase. In Washington, the beginning of this phase coincides with changes in seasonal conditions, as daylight hours become shorter and the weather worsens. The combination of these circumstances is likely to result in an increase in symptoms of seasonal affective disorder.<sup>15</sup>

In September, it is likely that socially disruptive behaviors will continue to be seen on a larger community scale as one expression of *emotional burnout* due to the length and pervasiveness of the pandemic, stressors related to economic pressures, and divisiveness among people and groups. Substance use will continue to be a problematic coping choice for many, with the potential for further increases moving into the late months of 2020.

Law enforcement is likely to continue seeing a disproportionate increase in violent crimes compared to this time period in 2019.<sup>16</sup> 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.

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.<sup>1,17,18</sup>

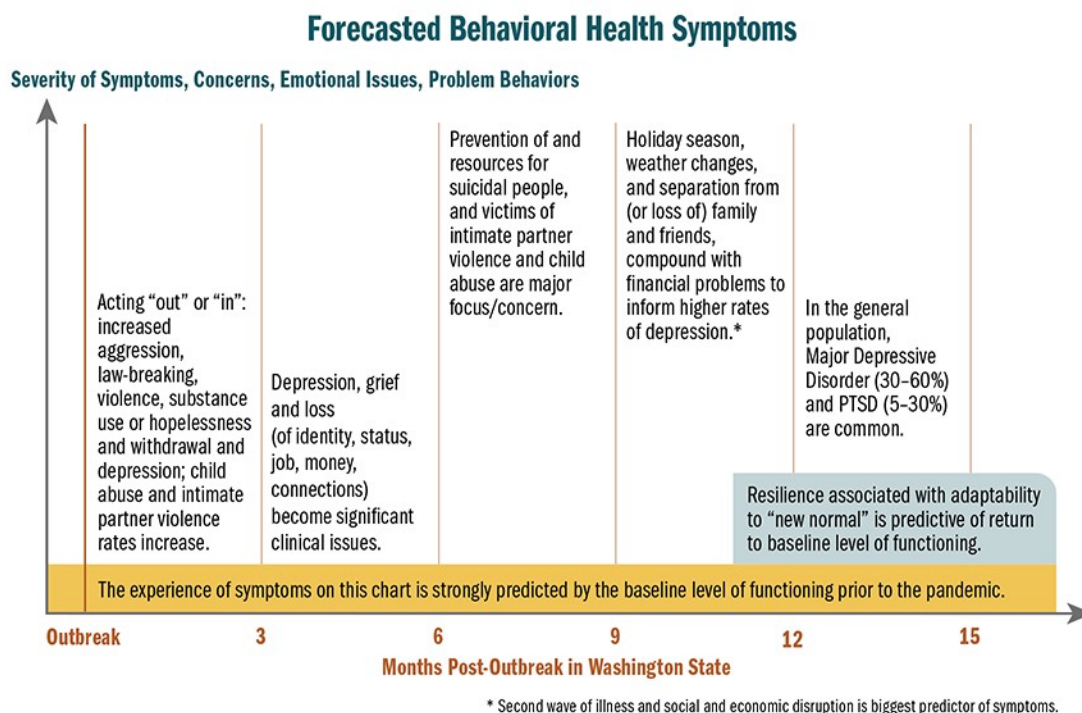


Figure 2: Forecasted behavioral health symptoms.

## Specific Areas of Focus for August and September 2020

### Children and Families

#### Resuming 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 the following:<sup>19,20,21</sup>

- 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. When weighing the merits of each learning option for students, 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.<sup>22,23</sup> Traumatic brain injuries (TBIs) are the most common form of injury due to child abuse after a disaster. In a virtual learning setting, an abuser may be present during all interactions between the child and educator. This may change and limit opportunities to ask directly about abuse and neglect and to make inquiries into whether or not a child feels safe in the home. Typical cues that teachers may use to spot signs of abuse or neglect are often unavailable in a virtual environment.

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

- Abnormal levels of participation in online classes (e.g., being unusually vocal and disruptive, having difficulty paying attention, or being very withdrawn)
- Extremely flat or blunted emotional expression (e.g., not laughing or interacting appropriately to social cues with peers)
- Unusual degree of physical disarray (e.g., clothing is noticeably dirty, not properly fitted, or inappropriate for weather or age; hair or skin is noticeably dirty or unwashed)
- Observable bruising on face, head, neck, hands, wrists, shoulders, or arms

- Excessive sleepiness or lethargy (e.g., putting their head down, excessive yawning, difficulty concentrating, falling asleep during instruction)

## Masks and Face Coverings

The spread of COVID-19 is causing many changes and disruptions to daily life. Children and families are navigating complex issues with school, childcare, emotion regulation, and behavior. Another significant change is the statewide mask mandate, requiring everyone age 2 years and older wear a mask or face covering when in a public space.<sup>24</sup> While some children won't have any trouble with it, other children may struggle with wearing a face covering. It's a new sensation, it can slip around, and it impacts their natural tendency to put things in their mouth.

Some ways to help a child adjust to mask wearing are to:

- Model the behavior yourself
- Engage children with making or decorating their own masks
- Have them wear the mask for brief periods of time to get used to them (i.e., while dancing to a favorite song)

Refer to the [Helping kids to wear cloth face coverings article](#) and [infographic](#) for more detailed information and ways to support younger children in wearing face coverings.

## 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. As we move into the fall months and educational instruction resumes, 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 that 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 by manifesting in substance use for some. 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. For many people in Washington, it is likely that the summer months of 2020 will include a significant sense of frustration and higher rates of substance use than might otherwise typically be present. **Most, but not all, substance use issues will be an exacerbation of pre-existing problematic behavior.**<sup>25</sup> Given the extended period of unknowns, restrictions associated with the pandemic, and additional stressors

associated with the potential for multiple waves and subsequent disruption, substance use will likely surpass typical post-disaster levels.

## Violence and Aggression

Hot weather is often correlated with an increase in physical violence and aggression.<sup>26</sup> Coupled with the potential for problematic substance use which tends to reduce impulse control, an increase in the number of physical assaults and property crimes is expected in the summer months as the weather gets warmer, including arson associated with 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,<sup>18,27</sup> unemployment,<sup>17,27</sup> or property loss.<sup>17,27,28</sup> Individuals often feel powerlessness and a loss of control as a result of these acute experiences.<sup>27,28</sup> This leads individuals to direct their feelings (like anger, frustration, sadness, fear, and anxiety) either towards themselves by acting “in” or towards others by acting “out.”<sup>27,28,29</sup> Both self-harm and interpersonal violence increase significantly after disasters.<sup>27</sup> 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, which 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. There have been significant increases in handgun sales. In Washington, the number of federal background checks for handgun sales was 61% higher in March–July 2020 than the number for the corresponding period in 2019.<sup>30</sup> This may present more risk for gun violence, including suicide.<sup>31</sup> **The most acting “out” behavior related to the COVID-19 pandemic is likely to continue until there is a significant decrease in the number of hot days and an increase in rainy or cooler days.**

Violence against women increases after every type of disaster or emergency.<sup>32</sup> Rates of intimate partner violence and child abuse have increased significantly in Washington. Weekly surveys of Washington law enforcement agencies indicate that domestic violence offenses remain elevated at levels 14% higher than those in 2019.<sup>33</sup> 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.

## Social Connection, Travel, and Resilience Building

The continued development of *psychological resilience* (adaptability and flexibility, connection, purpose, and hope) in the summer months should be strongly encouraged. New opportunities to spend time outdoors with an increase in warm and pleasant weather should be leveraged when conditions allow. [State health guidelines outline considerations for safe travel](#), and local health departments may also have guidelines. 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, being a single parent, lower socioeconomic brackets, or pre-existing medical conditions.<sup>34</sup> 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 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.<sup>1,35</sup> Resilience is something that can be intentionally taught, practiced, and developed for people across all age groups. Resilience can be increased by:<sup>36</sup>

- 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, law enforcement, first responders, 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 take pressure off of depleted or unavailable professional medical and therapeutic resources throughout 2020.

### Specific Areas of Focus for Transition into September 2020

Medical and specialty providers, organizations, and facilities should attempt to develop resources and staffing to address behavioral health impacts of the pandemic. 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 as fall approaches:

- 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.
- 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.**
- 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 will also likely have a strong impact on the behavioral health of Washingtonians.<sup>37</sup>

### Possible Pandemic Wave Scenarios for COVID-19 and Forecasted Behavioral Health Symptoms

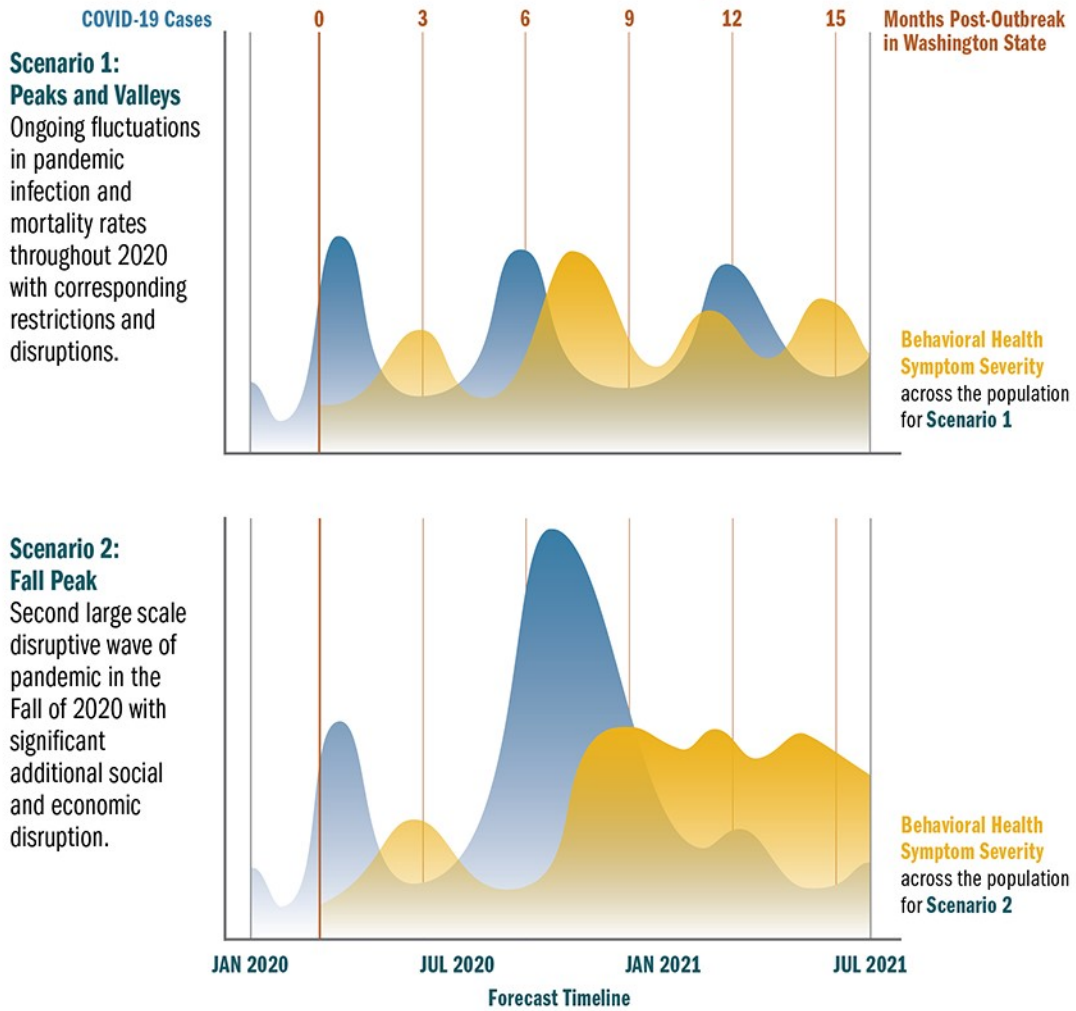


Figure 3: Possible pandemic wave scenarios for COVID-19 and forecasted behavioral health symptoms.



## Key Things to Know

- Approximately 650,000 Washingtonians were receiving treatment for behavioral health needs prior to the COVID-19 outbreak.<sup>38</sup>
- Approximately 700,000 Washingtonians have mental health concerns, but were **not** receiving services prior to the outbreak.<sup>38</sup>
- 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.**<sup>39,40</sup>
- Rates of PTSD have been much higher (10–35%) in some places more directly impacted by a critical incident.<sup>41</sup> 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<sup>41</sup>) 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.<sup>42,43</sup>
- 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.<sup>44</sup>
- Suicide and drug overdose rates are both highly influenced by unemployment.<sup>10,45,46,47</sup> For every 1% increase in the unemployment rate, there is a corresponding 1.6% increase in the suicide rate<sup>45</sup> and an increase of one drug overdose death per 300,000 people.<sup>46</sup> 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 9.8% in June 2020,<sup>48</sup> 5.5 percentage points higher than June 2019. If sustained, this could result in an additional 108 deaths annually by suicide and an additional 140 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.<sup>49</sup>
  - 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.<sup>49</sup> **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.**
    - As compared to June 2019, cannabis tax collections for June 2020 were up 31%.<sup>50</sup> There has also been a corresponding rise in alcohol-related emergency department visits in 2020.<sup>51</sup>

- Given these increases, healthcare providers should suggest both healthy alternatives for coping and sources of support. For additional resources, visit [DOH's Behavioral Health Resources & Recommendations webpage](#) for providers.
- 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 1.9 million Washington adults are experiencing symptoms of anxiety on at least most days, and over 1.4 million are experiencing symptoms of depression on at least most days (Figure 4).<sup>52</sup>

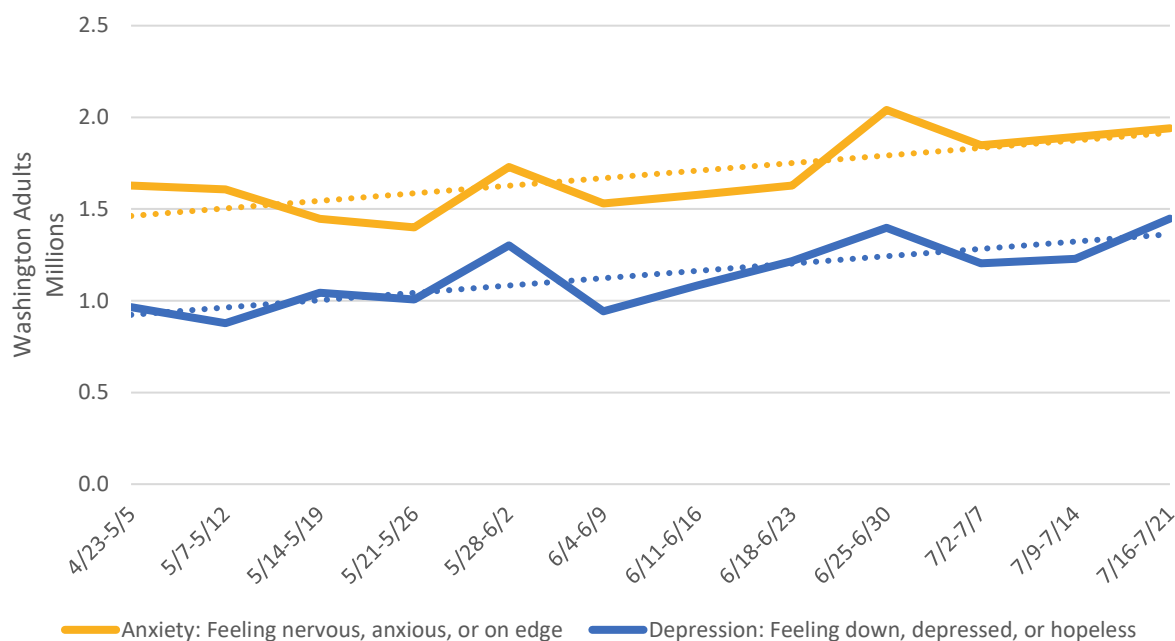


Figure 4: Estimated Washington adults experiencing symptoms of anxiety and depression at least most days, by week: April 23–July 21 (Source: U.S. Census Bureau)

- 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 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 COVID-19 cases in the fall of 2020 or winter of 2021.<sup>1,2</sup>

## Background Data and Analysis

### National Prevalence Rates

Mental illness, behavioral health diagnoses, and demographics<sup>53,54</sup>

- Generalized anxiety disorder = approximately 1.0% of adolescents, 2.7% adults
- Panic attacks = 11.2% of adults
- Panic disorder = approximately 2–3% of adolescents and adults
- Mood disorders = approximately 9.7% of adults
- Depression = 10–20% of adults<sup>55</sup>
- Post-traumatic stress disorder (PTSD): 3.6% of adults<sup>53</sup>

National prevalence rates for substance-related disorders<sup>53,54,56</sup>

- Nicotine dependence = 11.0% of adults
- Alcohol use disorder = approximately 4.6% of adolescents, 8.5% of adults
- Cannabis use disorder = approximately 2.3% of adolescents, 5% of young adults, and 0.8% of adults
- Opioid use disorder = approximately 0.6% of adolescents, 1.1% of young adults, and 0.8% of adults

### Washington Data

- Population: Approximately 7.6 million
- Percentages with baseline serious mental illness
  - Adults 18 and over = 5.3%<sup>38</sup> (or 400,044 people)
  - Young adults from 18–25 = 6.2%<sup>38</sup> (or 29,014 people)
- Percentage of adults 18 and over with any mental illness who received treatment: 45.6% (approximately 650,000 people or 8% of the total population of Washington)<sup>38</sup>
- Depression = 12.7% in Washington, 41.1% of whom received mental health services<sup>38</sup>
- Death rates<sup>57</sup>
  - Annual suicide rate = approximately 16.2 per 100,000
  - Annual drug overdose death rate = approximately 15.4 per 100,000

## Acknowledgements

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