

Behavioral Health Needs and Services in King County, WA: March – May 2020

BACKGROUND

Community mitigation efforts to limit the spread of novel coronavirus disease 2019 (COVID-19) resulted in dramatic increases in the number of King County, Washington residents who are unemployed or furloughed, and/or need assistance affording food, utilities, housing, and accessing health care. These stressors, added to social isolation and grief, are likely to affect the mental health and coping of many in the general population. The prevalence and duration of psychological stress is affected by additional stressors including the duration of social distancing or quarantine, inadequate basic supplies like food and medical care provisions, financial losses and related socioeconomic stress that occurred because of social distancing.

The COVID-19 pandemic and efforts to limit its spread exacerbate the existing stressors experienced by communities of color. The additional stress introduced by the pandemic may mean increased prevalence and severity of mental distress among Black, Indigenous and people of color who experience violence,⁴ police brutality,⁵ structural racism and other forms of discrimination.⁶ George Floyd's murder by police on May 25 brought national and global attention to systemic racism and its consequences for health. In June, King County identified racism as a public health crisis and committed to dismantling racism and protecting the health and well-being of communities of color.⁷

KEY POINTS

- 1)Washington state survey data show the number of people with symptoms of depression has increased 34% since April 23, 2020. Those who expect to lose employment or lost employment, those with incomes less than \$35,000 per year, and people self-identifying as other or with multiple race categories were more likely to report feeling depressed.
- 2)The number of calls to King County's behavioral health crisis line increased after the start of social distancing, though only calls in April 2020 were significantly higher than those in the same month of 2019 (12% higher).
- 3)Suicide-related Emergency Medical Services incidents and emergency department visits declined since the start of the pandemic, as did the number of overall incidents and visits.
- 4)These measures will continue to be observed given the expected increases in mental health concerns.

¹ For unemployment, see https://www.kingcounty.gov/depts/health/covid-19/data/impacts/unemployment.aspx. For food insecurity, see https://ofm.wa.gov/washington-data-research. For insurance needs, see: https://ofm.wa.gov/washington-data-research.

² Lee S, Chan L, Chau A, Kwok K, Kleinman A. 2005. The experience of SARS-related stigma at Amoy Gardens. *Social Science & Medicine*. 2005; 61, 2038–46. doi: 10.1016/j.socscimed.2005.04.010. Sprang G, Silman M. 2013. Posttraumatic stress disorder in parents and youth after health-related disasters. *Disaster Medicine & Public Health Preparedness*. 2013; 7, 105–10. doi: 10.1017/dmp.2013.22.

³ Pellecchia U, Crestani R, Decroo T, Van den Bergh R, Al-Kourdi Y. Social consequences of Ebola containment measures in Liberia. *PLOS One.* 2015; 10: e0143036. Doi:10.1371/journal.pone.

⁴ Fowler P, Tompsett C, Braciszewski J, Jacques-Tiura AJ, Baltes BB. Community violence: A meta-analysis on the effect of exposure and mental health outcomes of children and adolescents. *Development and Psychopathology*. 2009; 21(1), 227-259. doi:10.1017/S0954579409000145.

⁵ Bor J, Venkataramani A, Williams D, Tsai A. Police killings and their spillover effects on the mental health of black Americans: a population-based, quasi-experimental study. *Lancet*. 2018; 392(10144), 302-310. doi:10.1016/S0140-6736(18)31130-9. Bryant-Davis T, Adams T, Alejandre A, Gray A. The trauma lens of police violence against racial and ethnic minorities. *Journal of Social Issues*. 2017; 73(4), 852-871. doi:10.1111/josi.12251.

⁶ Pieterse AL, Todd NR, Neville HA, Carter RT. Perceived racism and mental health among Black American adults: A meta-analytic review. *Journal of Counseling Psychology*. 2012;59(1), 1–9. doi:10.1037/a0026208. Paradies Y. A systematic review of empirical research on self-reported racism and health. *International journal of epidemiology*. 2006; 35(4), 888-901. doi:10.1093/ije/dyl056.

⁷ See https://publichealthinsider.com/2020/06/11/racism-is-a-public-health-crisis/.

Past pandemics and natural disasters suggest that behavioral health effects resulting from COVID-19 are likely to occur in phases, with increases in population mental distress expected this fall, 6-9 months after the pandemic's start. Behavioral health refers to connections between behaviors and the health (physical and mental) and well-being of people, including substance use issues. We sought to examine what the need for crisis behavioral health services was during the pandemic and going into Washington's recovery period, to better understand what communities are experiencing and anticipate the future need for services.

WASHINGTON STATE AND KING COUNTY POPULATION SURVEY RESULTS

The U.S. Census Bureau started conducting a weekly household survey on April 23, 2020 to provide information about the impact of COVID-19 on American households. In Washington state, the number of respondents ages 18 and older who felt depressed for more than half of the week increased over the first five weeks of the survey. During the week of April 23 to May 5, 16% of respondents self-reported feeling down, depressed or hopeless more than half of the previous week, compared to 22% during the week of May 28 to June 2 (Figure 1).

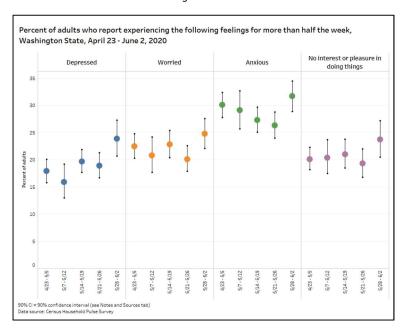
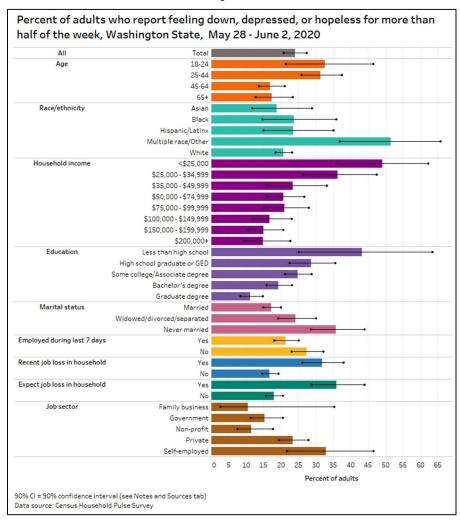


Figure 1

During the week of May 28, the prevalence of feeling depressed more than half the week was similar across race/ethnic groups with one exception: 47% of respondents reporting other or two or more race categories selected reporting feeling down more than half of the week, compared to 22% of Black respondents, 21% of Hispanic, and 19% of white and Asian respondents (Figure 2). Respondents with an annual income less than \$25,000 were more likely to report feeling depressed compared to respondents earning \$50,000 or more per year. Those with less than a high school education were more likely to report feeling depressed than were respondents with a college degree. Respondents expecting a job loss among household members (36%) and experienced a job loss in the household (32%) were more likely to report feeling depressed more than half of the week. Results were similar for respondents from the Seattle metropolitan statistical area, which includes respondents from King, Pierce and Snohomish counties (data not shown).

⁸ Washington State Department of Health (May 15, 2020). *Statewide High-Level Analysis of Forecasted Behavioral Health Impacts from COVID-19*.

Figure 2



Available King County population survey data do not show the same increases in depression and serious mental distress, but samples are relatively small and may not well represent all groups in the general population. The Behavioral Risk Factor Surveillance System is an annual telephone survey of U.S. adults to collect health-related behavior information. Although the sample is selected to reflect a year of information, monthly results are available and should be interpreted with caution. The sample per month for King County ranges between 200-300 participants and excludes people without phone access or who speak a language other than English or Spanish. During April and May 2020, the percentage of King County respondents reporting serious mental distress (14 or more days in last month with mental health "not good") was similar to the percentage observed in the months prior to the pandemic (9% in April, 11% in May, compared to 11% in January/February 2020). Researchers with the UW Seattle Center for the Science of Social Connection surveyed 500 King County residents daily during March through May to understand their response to the pandemic. The UW survey sample is more likely to be white and employed than is the general population. They tested a linear trend for each participant and found no significant change for 65% of the sample, improvement (negative linear slopes) for 24% of the sample, and worsening (positive linear slopes) for 11% of the sample. Respondents reporting higher levels of loneliness, interpersonal conflict, and lower annual salaries were more likely to report higher levels of depression.

⁹ For details please see https://uwcovid19.shinyapps.io/dashboard/. For information about the Center see https://depts.washington.edu/uwcssc/content/homepage.

BEHAVIORAL HEALTH CRISIS CALLS AND SUICIDE-RELATED SERVICE REQUESTS

We examined use of behavioral health crisis services that represent people's needs for crisis intervention in response to behavioral health needs. These measures include calls to King County's 24-hour behavioral health crisis line, Emergency Medical Services (EMS) suicide-related or self-harm incidents, and emergency department (ED) visits for suicide ideation or attempt. The 24-hour crisis line exists to assist King County residents facing behavioral health stressors and link them to appropriate emergency health services. The number of these calls increased in March after the start of social distancing, though only calls in April 2020 were significantly higher than those in the same month of 2019 (12% higher; Figure 3).

When King County residents call 9-1-1 for a medical emergency, they engage the Medic One/EMS system. Incidents examined to help understand population mental health include EMS-suspected suicidal ideation, suicide attempts, and incidents of self-harm. Suicidal ideation refers to thoughts of suicide, either a desire to commit or planning for suicide, with no behavioral follow-up. Suicide attempts are self-directed behaviors with the intention of death, whether the behaviors result in injury or not. Self-harm behaviors refer to self-inflicted harm without the intention to cause death.

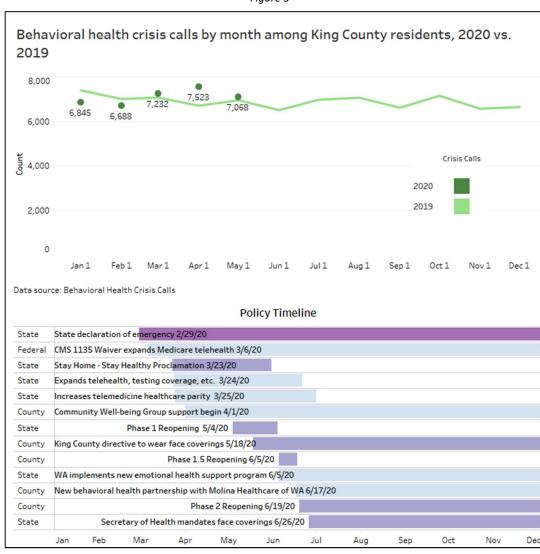


Figure 3

¹⁰ See for example https://www.ncbi.nlm.nih.gov/books/NBK137739/table/ch1.t1/.

Nationwide, the overall number of emergency health service incidents declined since March 2020.¹¹ In King County, overall requests for EMS services declined roughly 25% since March (data not shown). EMS incidents for suspected suicidal thoughts and behaviors and self-harm behaviors similarly declined during the early months of the pandemic (figure 4). EMS incidents related to suspected self-harm or suicidal thoughts or behaviors in April 2020 were 17% lower than the number in April 2019, and 39% lower in May 2020 compared to May 2019.

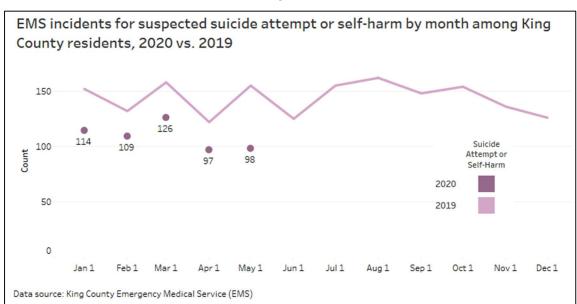


Figure 4

During April and May 2020, keeping in mind some people may be counted more than once, 46% of the people involved were female, 43% were male, 10% did not report a gender identity, and 0.5% had gender reported as unknown (data not shown). In the same months of 2019, slightly more females were assessed for suicide attempt or self-harm by EMS (50%). Most in-person EMS incidents for self-harm and suicidal thoughts and behaviors in April and May 2020 occurred among people between 20 and 39 years of age (52%, data not shown). Roughly one-fifth occurred among people between 10 and 19 years of age (19%) and those age 40-59 years of age (22%). Roughly 6% of incidents occurred among people age 60 years or older. In comparison, people assessed by EMS for the same reasons during April and May 2019 were slightly older; 36% of incidents occurred among people 20-39 years of age, 25% among those 40-59, and 12% among people 60 years of age or older. Race/ethnicity was missing for 40% of people assessed by EMS for self-harm and suicidal thoughts and behaviors. Comparisons over time by race/ethnicity are unreliable given the large amount of missing data, thus are not included.

We also examined ED visits for self-directed violence (suicide attempts) and ideation using Centers for Disease Control and Prevention-developed definitions based on patients' chief complaint and discharge diagnosis¹². Mirroring national declines in ED visits during the early COVID-19 pandemic (March 20 – April 27)¹³, the overall number of ED visits declined since March 2020 in King County, as did visits associated with suicide ideation and attempts (Figure 5). While ED visits for suicide ideation increased in

¹¹ Lerner EB, Newgard CD, Mann, NC. Effect of the Coronavirus Disease 2019 (COVID-19) Pandemic on the U.S. Emergency Medical Services System: A Preliminary Report. *Academic Emergency Medicine*. doi:10.1111/acem.14051.

¹² Zwald ML, Holland KM, Annor FB, et al. Syndromic Surveillance of Suicidal Ideation and Self-Directed Violence — United States, January 2017–December 2018. *Morbidity and Mortality Weekly Report*. 2020; 69, 103–108. doi:10.15585/mmwr.mm6904a3.

¹³ Hartnett KP, Kite-Powell A, DeVies J, et al. Impact of the COVID-19 Pandemic on Emergency Department Visits — United States, January1, 2019–May 30, 2020. *Morbidity and Mortality Weekly Report*. 2020; 69, 699–704. doi:10.15585/mmwr.mm6923e1.

May, the number is well below the number that occurred in the same months of 2019.

Emergency department (ED) visits for suicide attempt and suicide ideation by month among King County residents, 2020 vs. 2019 1.278 1 154 1,000 1,044 994 874 Suicide Suicide Count Attempt Ideation 2020 500 2019 176 163 144 0 May 1 Jan 1 Feb 1 Mar 1 Apr 1 Jun 1 Jul 1 Aug 1 Oct 1 Nov 1 Dec 1 Data source: Washington State Department of Health Rapid Health Information NetwOrk (RHINO)

Figure 5

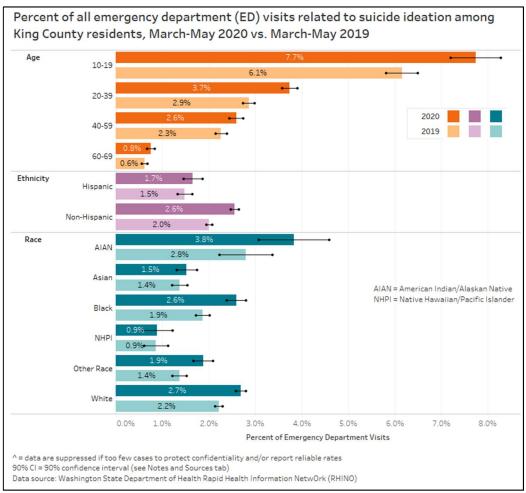
When comparing ED visits involving suicidal ideation as a percent of all ED visits in a group for the period March-May 2020 to the same time period in 2019, the percentage of suicidal ideation ED visits decreased with age. The percentage of visits involving suicidal ideation among younger age groups (10-19 and 20-39 years) was higher for the 3-month period in 2020, compared to the same time period in 2019 (Figure 6). Compared to the same months of 2019, the percentage of ED visits involving suicidal ideation in March through May 2020 was higher among people with non-Hispanic ethnicity. When examining results by race, ¹⁴ the percentage of ED visits that involved suicidal ideation was higher among Black, white, and other race groups during Mar-May 2020 compared to the same months in 2019. These results should be interpreted with caution given the larger context of dramatic decreases in overall ED visits, including for critical conditions such as heart attacks, during the early months of the pandemic. ¹³ As with suicide-related EMS incidents and ED visits, suicide deaths in King County investigated by the Medical Examiner's Office did not increase during March through May 2020 relative to the 2019 annual average (data not shown).

LIMITATIONS

The measures reported reflect people's requests for crisis intervention and do not represent all community needs for behavioral health services. Some people may be engaging behavioral healthcare providers through insurance providers, if they have healthcare insurance. Others may be struggling with anxiety or depression and have not yet sought assistance. Census Pulse Survey data cover Washington State rather than King County, although King County comprises 30% of the state's population. It is not possible to differentiate whether changes in crisis service requests result from changes in care-seeking behaviors or community needs, thus monitoring will continue during the recovery period.

¹⁴ Visits can have more than once race indicated in the clinical record and counts of visits by race group might not sum to total number of visits.

Figure 6



STATE AND COUNTY STRATEGIES IN RESPONSE TO ANTICIPATED BEHAVIORAL HEALTH SERVICE NEEDS

On March 6, 2020, the Centers for Medicare and Medicaid Services broadened access to Medicare telehealth services so that beneficiaries could receive a wider range of behavioral health services from their providers without having to travel to a healthcare facility. On March 24, 2020, Washington State's Insurance Commissioner ordered health insurers in the state to expand telehealth services expanding mental health service providers ability to reach their clients remotely. These actions enabled an expansion of telehealth services via video or phone conferencing, including intake assessments conducted via telehealth.

Washington State's Health Care Authority (HCA) provides healthcare services through Apple Health and other programs and is the largest purchaser of healthcare in the state. The HCA is receiving over \$4 million in federal funds to respond to increases in behavioral health needs in the community that result from the COVID-19 pandemic. Just over half (\$2.2 million) funds "Washington Listens", a statewide support line and program designed to support people affected by the stress of the outbreak which launched June 5, 2020. The remaining funds support increased access to behavioral healthcare in other ways, such as providing 5,000 laptops to behavioral health agencies to support expanded telehealth.

¹⁵ See https://www.hca.wa.gov/about-hca for more information.

¹⁶ Drew, J. May 8, 2020. COVID-19 could impact the mental health of millions in Washington state, experts say. The News Tribune. Retrieved on June 9 2020 from https://www.thenewstribune.com/news/coronavirus/article242582871.html

 $^{^{17}\} https://www.hca.wa.gov/health-care-services-and-supports/hca-supports-increased-telehealth-options-medicaid-clients-public$

Washington State will also receive a \$2 million grant to increase substance use disorder and mental health treatment for individuals with no or insufficient health care coverage to support their treatment needs.

The Public Health - Seattle & King County COVID-19 emergency response team created a Community Well-Being Group in early April 2020. The group is focusing on promoting community emotional health and resilience during the intersecting public health crises of COVID-19 and racism and is thus centering on the emotional health and well-being of Black, Indigenous and communities of color. For example, the group: a) disseminated a behavioral health resource guide during the County sponsored testing events, b) wrote blogs about how to support emotional health during COVID, c) placed Public Health Reserve Corps behavioral health volunteers to support the regional crisis call line and host de-briefing groups for COVID-19 first responders, d) supported the expansion of virtual Mental Health First Aid training, and e) provided COVID-19 related guidance to behavioral health providers. The Community Well-Being Group is coordinating with state and regional partners to support the emotional health of communities throughout the recovery period which includes continual monitoring of community needs.

Technical Notes

Crisis call line data is provided from monthly call volume reports from the crisis center to the King County Department of Community and Human Services Behavioral Health and Recovery Division. Demographic information is collected at time of call for too few callers to provide reliable measure of demographic distribution.

The EMS system is managed by the King County Emergency Medical Services (EMS) Division, and relies on complex partnerships with fire departments, paramedic agencies, EMS dispatch centers, and hospitals. EMS data reflect a 9-1-1 incident rather than a unique individual. A single 9-1-1 call may generate multiple service provider responses for one or more patient(s); and when this occurs, multiple EMS unit records can be generated for the same incident. Race/ethnicity and gender data may be based on responders' observation rather than self-report, and individuals may have more than one race/ethnicity documented. Suspected suicides, suicide attempts and suicidal ideations were identified using EMS provider's recorded primary impressions, primary symptoms, and using a key word search of 'suicide' or 'suicidal' in the narrative of the patient care report form. Disability status data are being examined and may be available for future analyses.

Emergency Department data for this report represent visits by King County residents to healthcare facilities rather than unique individuals and are not restricted to King County facilities. Race/ethnicity data may be based on providers' observation rather than self-report. Data were obtained and analyzed through the National Syndromic Surveillance Program BioSense ESSENCE platform. Definitions for ED visits due to suicide ideation and self-directed violence (suicide attempt) combines clinical presentation descriptions (e.g., hanging, laceration, or overdose attempt) and diagnosis codes noted in chief complaint history, discharge diagnosis, and admission reason code and description fields. See "more information about data" link for more details. Data are preliminary and subject to change as data are added, updated and validated over time.

Poisson confidence limits were calculated as a measure of variability in Crisis call line, EMS incidents, and Emergency Department visits count data to conservatively rule out random variation as an explanation for the observed decline and are available from the "more information about data" link below. A binomial normal approximation formula was used to compute corresponding confidence intervals for variation in percent of emergency department visits. Data by disability and LGBQ status were not available and will be added to future briefs when possible.

Resources

- Guidance related to COVID-19: https://www.kingcounty.gov/depts/health/covid-19.aspx
- More information about data: https://www.kingcounty.gov/depts/health/covid-19/data/impacts.aspx or contact data.request@kingcounty.gov
- Community support and well-being: https://www.kingcounty.gov/depts/health/covid-19/support.aspx

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¹⁸ For more information see https://www.kingcounty.gov/depts/health/covid-19/support.aspx.