

Substance Use Patterns in King County, WA: March – October 2020

BACKGROUND

In response to recent spikes in the number of novel coronavirus disease 2019 (COVID-19) cases, Governor Inslee initiated a one-month period of social gathering and travel restrictions beginning November 16. The virus and community mitigation efforts beginning in March 2020 to reduce its spread resulted in widespread social isolation, grief¹ and economic hardship,² including difficulty meeting basic needs. During this pandemic, a growing number of people have reported depression, anxiety and increased use of substances³ among other behavioral health concerns. For example, a survey of the tri-county area of King, Snohomish and Pierce Counties showed that the percentage of respondents ages 18 and older who felt depressed, worried or anxious for more than half of the week increased between April and July.⁴

Behavioral health refers to connections between behaviors and the health (physical and mental) and well-being of people, including substance use issues. Mental health concerns and problematic substance use are related in that both appear to have a genetic and/or neurobiological component,⁵ and they often co-occur.⁶

Alcohol use can cause depression by reducing serotonin levels,⁷ and people struggling with depression, anxiety and other mental health issues may use substances to self-medicate.

Available sales data show that residents of Washington state increased their use of marijuana, beer and wine since March 2020. Marijuana sales in King County increased since March 2020; average monthly sales between April and August of 2020 were 16.9% higher than the average in January and February and 16.5% higher than the average for the same months in 2019.⁸ Statewide, marijuana sales increased 18% in July and August 2020.⁹ Beer and wine sales also increased in Washington state.⁷ Increased use does not mean that use impaired the ability to function (criteria for problematic substance use).

Past pandemics and natural disasters suggest that adverse behavioral health effects typically occur¹⁰ and usually lag an event by 6-9 months.¹¹ Thus increases in population mental distress and substance use resulting from COVID-19 may be observed this fall and winter. People with current mental health issues and/or substance use disorders are at increased risk of overdose or suicide deaths.¹² Some people anticipate that these mental health and substance use concerns, like the virus itself, will have the greatest impact among Black/African American and Hispanic/Latinx people, older adults, essential workers and lower income people.¹³ We sought to examine the occurrence of problematic substance use and behavioral health concerns during the pandemic and its recovery period to better understand communities' experiences and anticipate the future need for services.

KEY POINTS

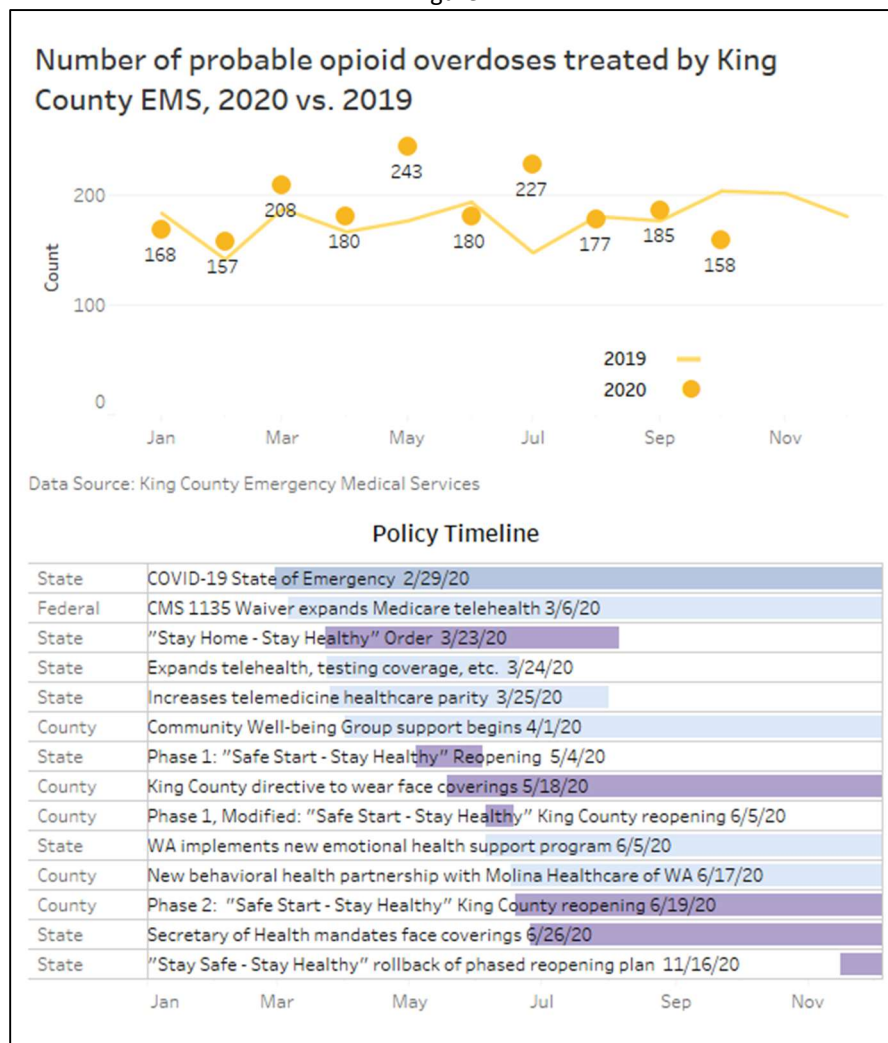
- 1) Despite a decline in requests for King County Emergency Medical Services overall, the number of non-fatal overdose incidents remained similar per month between March and October 2020 compared to 2019 and higher in May and July 2020.
- 2) The number of fentanyl-involved overdose deaths between March and June 2020 was triple the number in the same months of 2019, resulting from the inclusion of fentanyl primarily in counterfeit prescription pills.
- 3) People initially seeking treatment for a substance use disorder first engage in a comprehensive assessment with a provider. Providers affiliated with King County's Behavioral Health and Recovery Division conducted fewer new substance use disorder assessments between March and August 2020 than in the same months of 2019.
- 4) Sales data show increased purchase of marijuana, beer and wine since March 2020.

DRUG OVERDOSE INCIDENTS

The number of non-fatal overdose incidents was higher in May and July 2020 compared to 2019

When King County residents call 9-1-1 for a medical emergency, including drug overdoses, they engage the Medic One/Emergency Medical System (EMS). Nationwide, the overall number of emergency health service incidents declined since March 2020.¹⁴ In King County, overall requests for EMS services declined roughly 25% since March (data not shown). EMS typically responds to between 160 and 240 drug overdose calls per month. The number of monthly non-fatal probable opioid overdoses through October 2020 did not differ from 2019 except in May and July 2020, which saw an increase (Figure 2 and Appendix Table A1).¹⁵

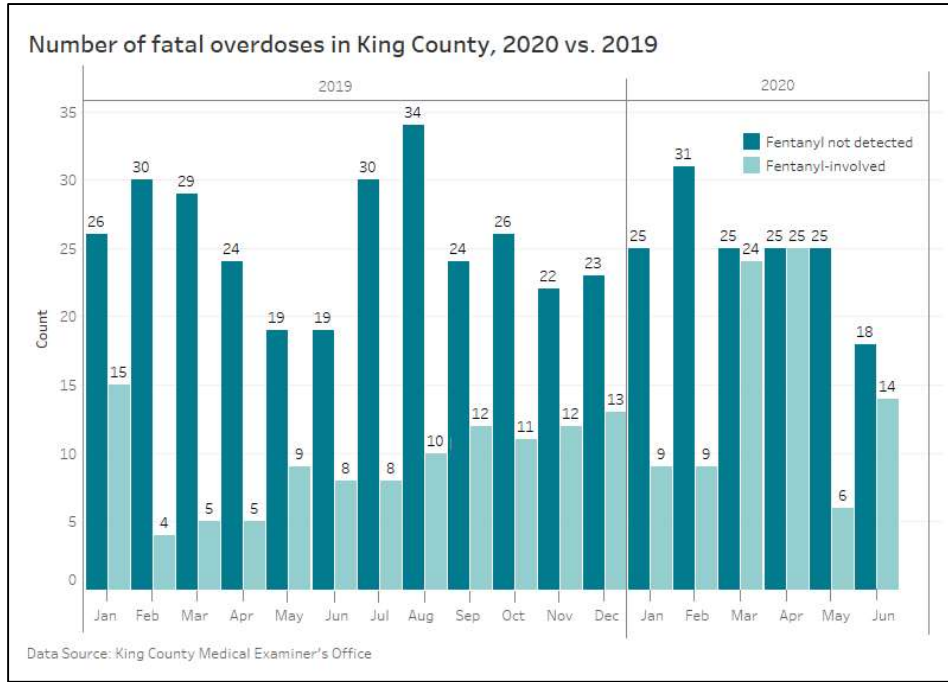
Figure 1



The number of fentanyl-related overdose deaths is higher in 2020 than in 2019

Fatal overdose deaths are certified by the King County Medical Examiner's Office and involve drugs that commonly cause dependency (e.g. illicit drugs, prescription opioids, benzodiazepines, and anti-depressants). Overdose deaths in March 2020 were 44% higher than in March 2019 and 72% higher in April 2020 compared to 2019 (Figure 2). An increase in fentanyl-involved deaths drove this rise in fatal overdoses.¹⁶ Fentanyl-involved deaths have been increasing in King County as in many states.¹⁷ In the first two quarters of 2020, fentanyl-involved deaths doubled compared to the same quarter in 2019.¹⁸ Between March and June 2020, 93 fentanyl deaths occurred compared to 27 in the same months of 2019. Fentanyl-involved overdose deaths are commonly tied to counterfeit pills.¹⁹

Figure 2



Fentanyl-involved overdose deaths also increased among youth. Eleven of the deaths observed in the first six months of 2020 occurred among people 18 years of age or younger (Table 1). In comparison, 8 people age 18 years of age or younger died from a fentanyl-involved overdose during all of 2019.

2016-2018	1 per year
2019	8
January-July 2020	11

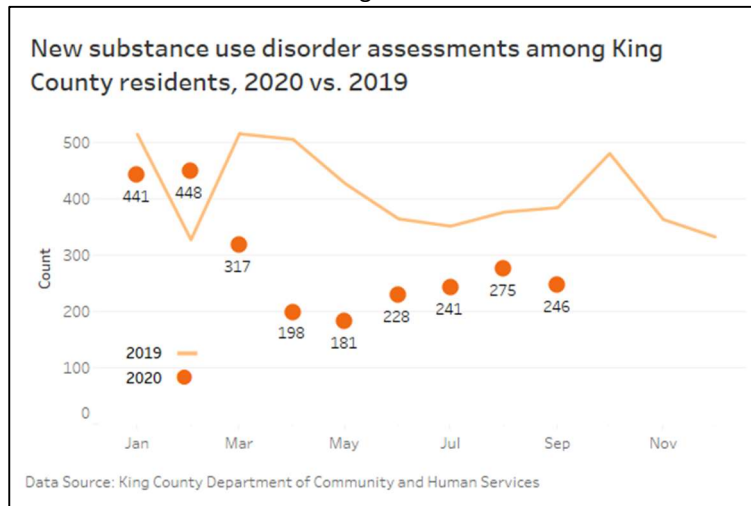
HELP-SEEKING BEHAVIORS

King County offers multiple services to assist people seeking support in managing and/or ceasing their substance use. The number of people requesting these services complements the data about overdoses by reflecting people seeking assistance.

Fewer new substance use disorder assessments conducted between March and August 2020 than in 2019

King County’s Behavioral Health and Recovery Division (BHRD) within the Department of Community and Human Services contracts with a network of providers to offer a range of services for King County residents, including crisis intervention, mental health treatment, substance use disorder treatment, and diversion and reentry services.²⁰ BHRD’s provider network adapted its approaches to continue providing services during the pandemic (details provided below). Prior to receiving substance use disorder services, people engage with a licensed provider in a comprehensive assessment. BHRD recorded fewer new substance use disorder assessments from March through August 2020 compared to the same months of 2019, though the number of assessments increased per month between May and August (Figure 3). September’s count is likely an underestimate given that 15-20% of assessments are accepted into the data system more than 30 days later. Residential substance use disorder admissions remained similar in 2020 compared to 2019 (data not shown). The observed decline in new substance use disorder assessments may be related to the challenges involved with conducting group or other therapy sessions remotely, and/or privacy concerns about telehealth services.

Figure 3

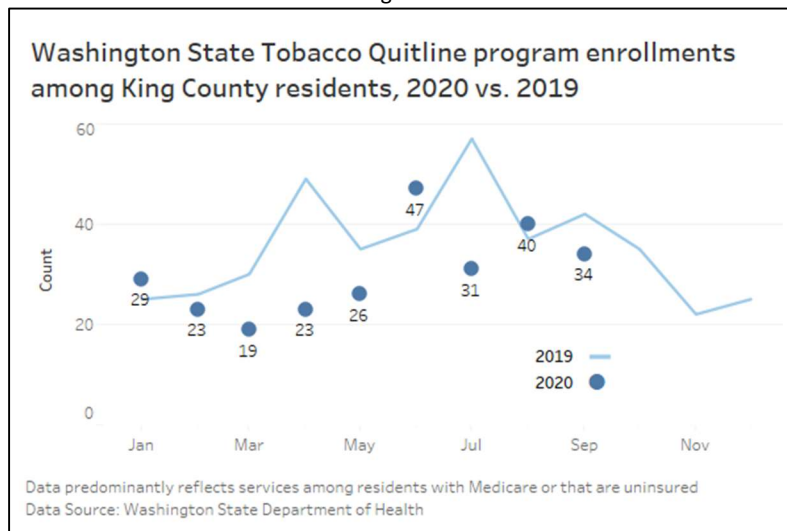


King County Quitline registrations per month were lower only in April and July 2020 compared to 2019

People may also increase tobacco use and postpone quit attempts in response to increased stress, anxiety, and depression. The Washington State Quitline provides 24-hour phone counseling and cessation medications to help people quit smoking or vaping.²¹ These data reflect information the state receives about tobacco cessation counseling services provided to residents on Medicare and who are uninsured; most residents who have Medicaid or private insurance are not represented in these data.

Quitline registrations among King County residents decreased in March 2020 but were significantly lower only in April and July 2020 compared to the same month of 2019 (Figure 4).²² The Centers for Disease Control and Prevention’s (CDC) *Tips from Former Smokers*[®] campaign began advertising the Quitline number at the end of April which likely contributed to the increase in registrations observed in subsequent months.

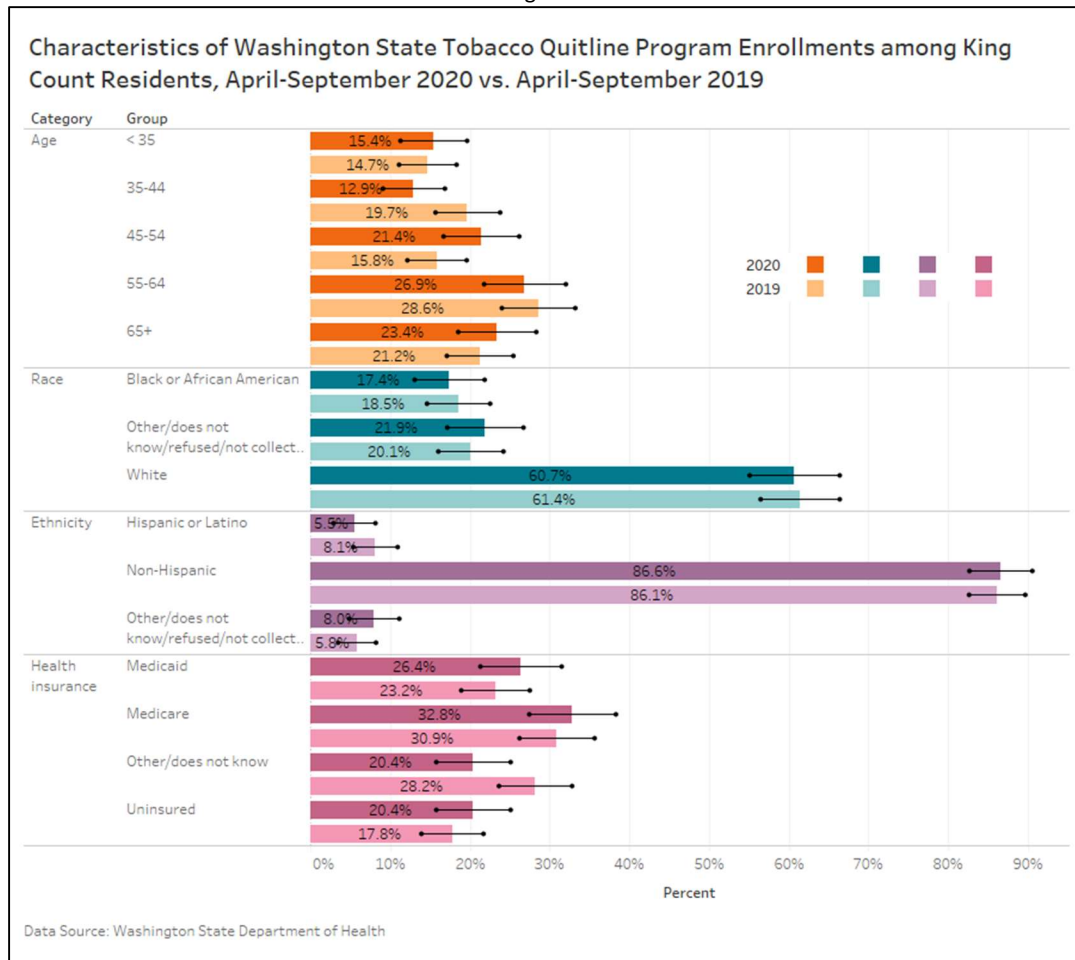
Figure 4



The characteristics of King County residents that registered with the Quitline during April-September 2020 were similar compared to the same months in 2019 (Figure 5). In both years, all age groups had a similar, non-statistically different, percentage of registrations. By health insurance status, there was a similar percentage of people that had Medicaid, Medicare or that were uninsured. There were significantly more white and non-Hispanic residents registered compared to people in other race or

Hispanic ethnicity groups.

Figure 5



LIMITATIONS

The measures reported do not reflect a complete picture of King County residents’ problematic substance use that adversely affects healthy functioning. Overdose, new substance use disorder assessments, and Quitline data represent an unknown portion of all people with problematic substance use and do not indicate all community needs for behavioral health services. New substance use disorder assessment and Quitline data presented reflect participants in publicly funded programs. Some people may be receiving behavioral health services through private insurance providers. Others may be struggling with problematic substance use, anxiety and/or depression and have not yet sought assistance.

DISCUSSION

The information reviewed in this brief suggests that problematic substance use was similar and in some months was higher during the pandemic than the same period in 2019. Though the data are incomplete, available information for new assessments for substance use disorder treatment shows a lower number of assessments than in 2019. Given prior evidence that behavioral health concerns often increase 6–9 months after an event, continued monitoring of community experiences is needed. King County services remain available and some resources were expanded, as described below, which may help prevent further increases in problematic substance use.

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

In King County, providers adapted during early months of the pandemic to ensure services were available, and services continue to be available through a variety of approaches. 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. Washington State’s Insurance Commissioner ordered health insurers in the state to expand telehealth services for mental health service providers on March 24, 2020. This expansion of telehealth services via video or phone included intake assessments.²³ In addition to providing assessment and treatment services via telehealth, federal regulators and Washington state providers made substances used in the treatment of opioid addiction easier to obtain. Methadone can be distributed in up to 14-day supplies and buprenorphine in one-week supplies rather than picked up in-person daily.²⁴

Washington state received 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 largest purchaser of healthcare in the state, Washington State’s Health Care Authority (HCA), provides healthcare services through Apple Health and other programs²⁵ and received over \$4 million in federal funds to respond to increases in behavioral health needs in the community that result from the COVID-19 pandemic.²⁶ 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. 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.²⁷

Many of the direct impacts of COVID-19 and efforts to reduce its spread increase the likelihood of mental health and substance use issues. Prior to the COVID-19 pandemic, we faced an opioid epidemic. The increase in fentanyl-involved deaths during 2020 confirm that this epidemic continues. These concurrent epidemics underscore the need for community-based behavioral health services and continued monitoring of available data to inform planning efforts.

Appendix of Tables

Table A1		
Number of probable opioid overdoses treated by King County EMS, 2020 vs. 2019		
Month	Count (90% Confidence Interval)	
	2019	2020
January	183 (161-205)	168 (147-189)
February	141 (122-160)	157 (136-178)
March	187 (165-209)	208 (184-232)
April	166 (145-187)	180 (158-202)
May	176 (154-198)	243 (217-269)
June	193 (170-216)	180 (158-202)
July	147 (127-167)	227 (202-252)
August	180 (158-202)	177 (155-199)
September	176 (154-198)	185 (163-207)
October	203 (180-226)	158 (137-179)
November	201 (178-224)	
December	180 (158-202)	

Data Source: King County Emergency Medical Services

Table A2		
Number of fatal overdoses in King County, 2020 vs. 2019		
Month	Count (90% Confidence Interval)	
	2019	2020
January	41 (26-56)	34 (21-47)
February	34 (22-46)	40 (26-54)
March	34 (22-46)	49 (33-65)
April	29 (17-41)	50 (34-66)
May	28 (16-40)	31 (19-43)
June	27 (15-39)	32 (19-45)
July	38 (24-52)	
August	44 (29-59)	
September	36 (22-50)	
October	37 (23-51)	
November	34 (21-47)	
December	36 (22-50)	

Data Source: King County Medical Examiner's Office

Table A3		
Number of new substance use disorder assessments among King County residents, 2020 vs. 2019		
Month	Count (90% Confidence Interval)	
	2019	2020
January	514 (447-551)	441 (407-475)
February	327 (297-357)	448 (413-483)
March	515 (478-552)	317 (288-346)
April	505 (468-542)	198 (175-221)
May	427 (393-461)	181 (159-203)
June	364 (333-395)	228 (203-253)
July	351 (320-382)	241 (216-266)
August	376 (344-408)	275 (248-302)
September	384 (352-416)	246 (220-272)
October	480 (444-516)	
November	363 (332-394)	
December	332 (302-362)	

Data Source: King County Department of Community and Human Services

Technical Notes

Non-fatal overdose data came from King County Emergency Medical Services (EMS). The EMS system is managed by the King County EMS Division, and relies on 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. When EMS staff respond to calls, they enter information into an electronic medical record which is queried after de-duplicating, based on several criteria in order to classify probable overdoses. More information on non-fatal overdoses and how they are determined can be found online (<https://www.kingcounty.gov/depts/health/overdose-prevention/non-fatal.aspx>). EMS may also respond to fatal overdoses and these cases are typically documented as a cardiac arrest or obvious death, thus are not reported here.

Fatal overdose data were from the King County Medical Examiner's Office (MEO). Fatal overdose deaths reflect certified deaths involving drug(s) that commonly cause drug dependency and exclude alcohol poisonings, pending toxicology cases, and deaths from insulin and acetaminophen. More information on fatal overdoses and how they are determined can be found online (<https://www.kingcounty.gov/depts/health/examiner/services/reports-data/overdose.aspx>).

Substance use disorder assessments data were provided by the King County Department of Community and Human Services. These represent first assessments that are conducted for anybody that seeks care in an outpatient substance use disorder program. These data do not include people who had been cared for by the same agencies in the past month and do not include people seeking assessments using private insurance.

Washington State Quitline data were provided by the Washington State Department of Health. These counts represent program registrations per month; however, they only represent services paid for by the Department of Health.

Poisson confidence limits were calculated as a measure of variability for all count data to conservatively rule out random variation as an explanation for the observed change and are available upon request. A binomial normal approximation formula was used to compute corresponding confidence intervals for variation in percent tobacco Quitline demographic data. Data by disability and LGBTQ+ status were not available and will be added to future briefs when possible.

Resources

- Overdose Prevention and Response: <https://www.kingcounty.gov/depts/health/overdose-prevention.aspx>
- Washington State Quitline: 1-800-QUIT-NOW or <https://www.doh.wa.gov/YouandYourFamily/Tobacco/HowtoQuit>
- Community support and well-being: <https://www.kingcounty.gov/depts/health/covid-19/support.aspx>
- More information about the data: www.kingcounty.gov/covid/impacts or contact data.request@kingcounty.gov

Suggested citation

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² For unemployment, see <https://www.kingcounty.gov/depts/health/covid-19/data/impacts/unemployment.aspx>. For food insecurity, see <https://publichealthinsider.com/2020/06/17/with-food-insecurity-on-the-rise-public-health-highlights-critical-new-and-existing-resources/>. For insurance needs, see <https://kingcounty.gov/depts/health/covid-19/data/impacts/insurance.aspx> and <https://ofm.wa.gov/washington-data-research>.

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- ²³ See <https://www.hca.wa.gov/health-care-services-and-supports/hca-supports-increased-telehealth-options-medicaid-clients-public> for more information.
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