

Mental Health Among Youth and Young Adults in King County, WA: January 2019 – October 2021

Report date: November 16, 2021 (revised January 2022)

If you or someone you care about is experiencing suicidal ideation or a crisis, please see the discussion and resources section for ways to connect with supports, and ways to ask questions if someone is thinking about suicide.

BACKGROUND

Community mitigation efforts to limit the spread of novel coronavirus disease 2019 (COVID-19) initially resulted in dramatic increases in the number of King County, Washington residents who were unemployed or furloughed, and/or need assistance affording food, utilities, housing, and accessing health care.¹ These stressors, added to social isolation and grief, are likely to affect the mental health and coping of many in the general population.²

Youth and young adults have experienced many disruptions due to COVID-19 and associated mitigation strategies such as school closures and remote learning, social isolation, family financial hardship or lack of access to food, and some who have experienced either the illness or death of a family member due to COVID-19. This brief examines trends in mental health and suicide among King County, WA youth and young adults from January 2019 – October 2021 to better understand what communities are experiencing and identify areas where targeted resources and interventions would be helpful.

Suicidal ideation is a term used to describe a range of ideas, thoughts, wishes, and/or preoccupations with suicide (death caused by harming oneself with intent to die). Rates for youth suicidal ideation and attempt had been rising prior to the pandemic;³ the system that serves youth and young adults was already overburdened. The pandemic further exacerbated the strains on young people's mental health and well-being, as well as on the youth mental health system. In March 2021, Governor Inslee issued a Youth and Young Adult Mental Health Proclamation, acknowledging the health care system stress across a range of mental and behavioral health conditions.⁴

Key Points:

- The youth mental health system is experiencing a high degree of need
- Suicide attempt and ideation Emergency Department (ED) visits in youth and young adults decreased at the start of the pandemic, as did all ED visits, and have now returned to pre-pandemic levels
- Youth aged 14-17 have the highest rates of ED visits for ideation and suspected attempt
- Youth aged 10-13 experienced an increase in the rate of suspected suicide attempt ED visits from July – September 2021 compared to the same months in 2019 and 2020
- Calls to the Washington Poison Center for a suspected suicide attempt among female youth aged 6-17 was higher between January and October 2021 compared to the same months in 2020 and 2019
- Even with these levels of ideation and attempt, the youth suicide rate is lower thus far in 2021 compared to 2020 and 2019; there were no youth suicides in the month of October 2021

¹ 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-criticalnew-and-existing-resources/>. 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 <https://kingcounty.gov/depts/health/~media/depts/health/data/documents/health-of-children-youth-king-county-2016.ashx>

⁴ https://www.governor.wa.gov/sites/default/files/proclamations/21-05_Children%27s_Mental_Health_Crisis_%28tmp%29.pdf?utm_medium=email&utm_source=govdelivery

STEADY NUMBER OF EMERGENCY DEPARTMENT VISITS INVOLVING SUICIDIAL IDEATION & ATTEMPTS

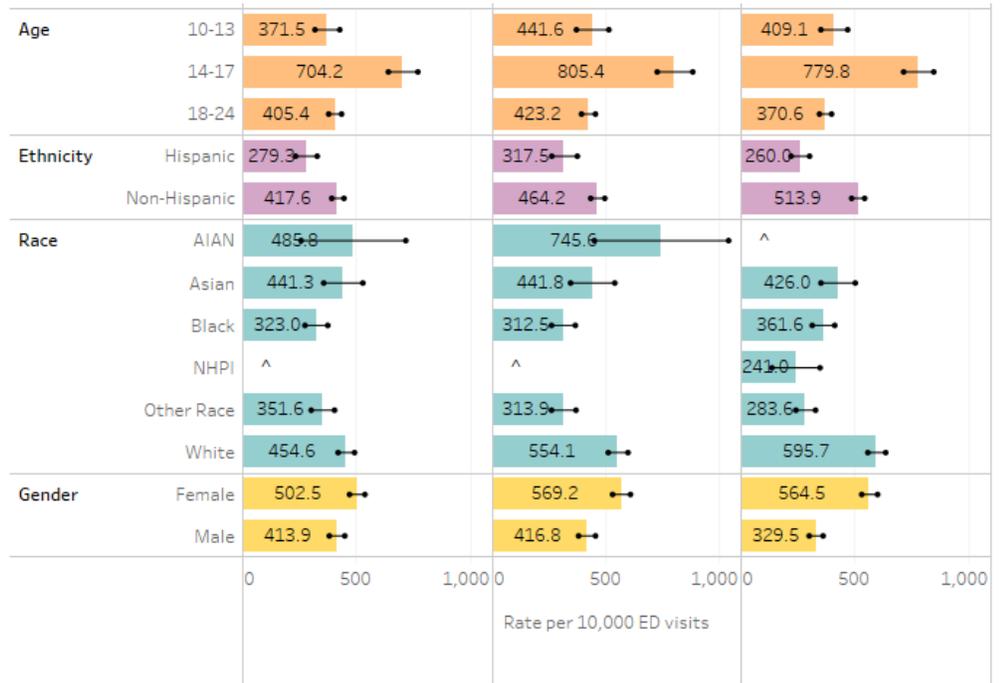
We examined emergency department (ED) visits for suspected suicide attempt or ideation in King County.⁵ ED visits involving suicidal ideation for King County residents ages 10-24 years old initially decreased at the start of the pandemic, as did ED visits for all reasons. As of September 2021, the number of ED visits involving suicidal ideation among King County youth and young adults have remained similar to the number of visits in the year prior to the pandemic (September 2021: 379 visits; September 2019: 375 visits). We note an increasing number of ED visits in late August and September, which corresponds with back-to-school, and is part of an existing seasonal pattern.

ED visits among King County residents ages 10-24 involving suspected suicide attempt are lower than visits for suicidal ideation but have followed a similar trend. In the past few months there has been an increasing trend in visits involving suspected suicide attempt. Counts were significantly higher in September 2021 than September 2019 (September 2021: 122 visits; September 2019: 89 visits).

Suicidal Ideation

To understand what’s happening during the pandemic, we compared the most recent three months in which data are complete, July-September 2021, with the same time periods in 2019 and 2020. In all three years, the rate of ED visits involving suicidal ideation (per 10,000 ED visits for all causes) was significantly higher among youth 14-17 years compared to youth/young adults 10-13 years or 18-24 years (Figure 1). Additionally, in July-September 2020 and 2021 there was an increase in the rate of visits involving suicidal ideation among youth 10-13 years compared to the same months in 2019, although not statistically significant. The rate of visits involving suicidal ideation were also significantly higher among females compared to males in all three years. In July-September 2020, American Indian and Alaskan Native (AIAN) youth and young adults had the highest rates of visits involving suicidal ideation, although not statistically higher than white or Asian youth and young adults. In July-September 2021, there were less than 10 visits involving suicidal ideation among AIAN youth and young adults. Among

Figure 1: Rate of emergency department visits involving suicidal ideation among King County residents ages 10-24, July-September 2019, 2020 & 2021



AIAN = American Indian/Alaskan Native
 NHPI = Native Hawaiian/Pacific Islander
 ^ = data are suppressed if too few cases to protect confidentiality and/or report reliable rates.
 Data source: Washington State Department of Health Rapid Health Information NetwOrk (RHINO)

⁵ 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.

Native Hawaiian/Pacific Islander (NHPI) youth and young adults, there was variability in the number of ED visits for suicidal ideation across the three years, with fewer than 10 visits in 2019 and 2020.

Suspected Suicide Attempt

The rate of ED visits involving suspected suicide attempt followed some similar patterns as suicidal ideation (Figure 2). The rate of visits was similarly highest among youth ages 14-17 years. In July-September 2021, the rate among youth ages 10-13 was significantly higher than in the same months of 2019.

Between 2019-2021, the rate of visits involving suicide attempt was also significantly higher among females compared to males. The rate of visits for suicide attempt in 2019 and 2020 were also higher among Asian youth and young adults compared to other racial/ethnic groups. There were less than 10 visits involving suicide attempt among AIAN as well as NHPI youth and young adults in all three years.

Figure 2: Rate of emergency department visits involving suicide attempts among King County residents ages 10-24, July-September 2019, 2020 & 2021



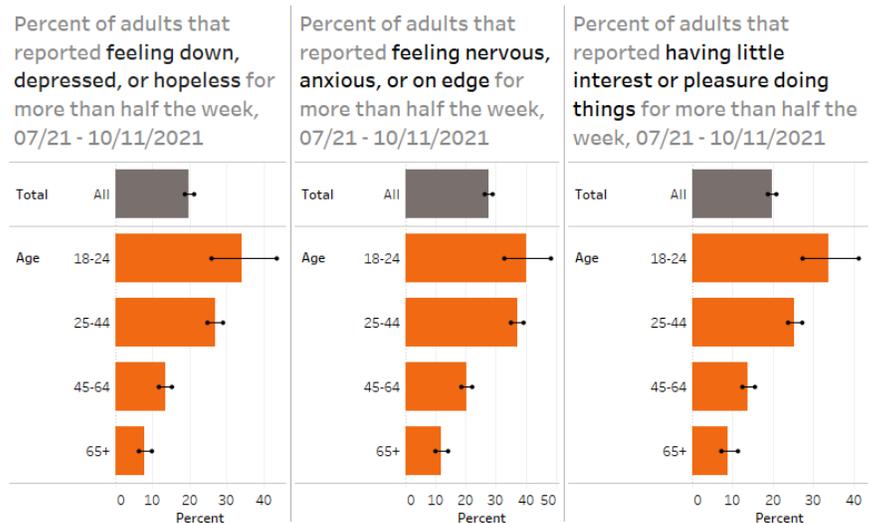
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YOUNG ADULTS REPORTING HIGHEST RATES OF DEPRESSION, ANXIETY

As of April 23, 2020, the U.S. Census Bureau started conducting a weekly survey of households to provide information about the impact of COVID-19 on American households. The survey includes several questions related to mental health symptoms and mental health care use.

In the King-Snohomish-Pierce area from July 21, 2021 to October 11, 2021 34.1% of respondents ages 18-24 felt depressed for more than half of the week, 40.2% felt anxious for more than half of the week, and 33.8% had little interest or pleasure in doing things more than half of the week. These percentages have remained similar since the survey started in April 2020, but respondents 18-24 years reported the highest percentages compared to all other age groups (Figure 3). In

Figure 2: Percent of adults that reported symptoms of depression or anxiety by age group from July 21, 2021 – October 11, 2021; Census Household Pulse Survey, King-Snohomish-Pierce Counties



addition, 23.4% (90% Confidence Interval: 17.8% – 30.3%) of respondents ages 18-24 reported that they did not get needed counseling or therapy from a mental health professional in the last 4 weeks, compared to 13.4% (90% Confidence Interval: 12.4% – 14.5%) of adults overall in the tri-county area. This survey did not include questions about children’s mental health.

YOUTH DEATHS BY SUICIDE REMAINED SIMILAR IN KING COUNTY FROM 2019-2020

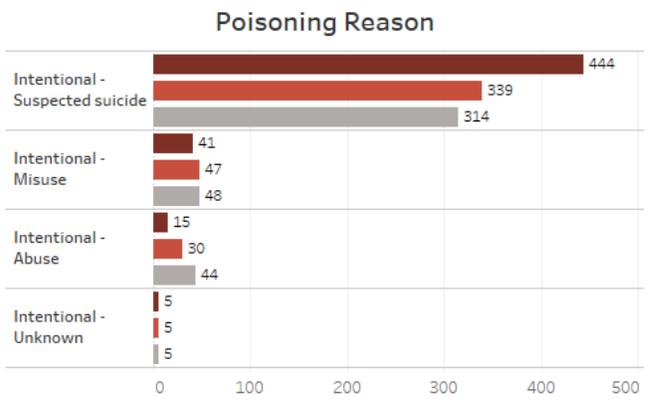
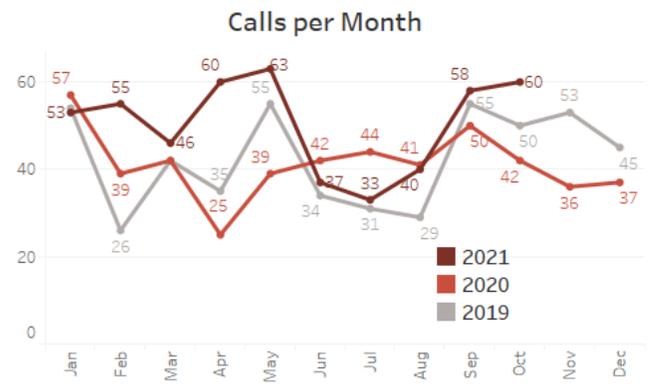
Public Health convenes Child Death Review (CDR) to systematically review unexpected but preventable deaths of King County children ages 0-17 and make recommendations to improve programs, systems, environments, and policies that impact risk factors for child death, with the aim of ultimately preventing future child deaths. From CDR data, the overall number of deaths by suicide among youth under age 18 in King County stayed roughly the same between 2019 and 2020 (14 deaths each year), however the average age dropped from 16.5 years in 2019 to 14.6 years in 2020, with a geographic shift away from predominantly East King County residents (33% in 2016-2019 to 5% in 2020-2021) to the city of Seattle (30% in 2016-2019 to 42% in 2020-2021) and South King County residents (28% in 2016-2018 to 37% in 2020-2021).

Youth suicide remained constant between 2019 and 2020 by race/ethnicity (majority white, non-Hispanic) and gender (majority male). In the past 5 years (2016-2021), CDR determined that 14% of youth who died by suicide were known to identify as LGBTQ. However, this is likely an underestimate as there may be additional youth that were not included if their gender identity or sexual orientation was not known to family or friends. From January through October 2021, there have been 5 youth suicide deaths, and the average age has been higher than that seen in 2020.

WASHINGTON POISON CENTER CALLS FOR SUSPECTED SUICIDE ATTEMPT INCREASED AMONG FEMALE YOUTH

The Washington Poison Center (WAPC) is a hotline that provides assistance for people that have been exposed to toxic substances. In January-October 2021 there were 532 calls to the WAPC for an intentional exposure that was a suspected suicide attempt among youth ages 6-17. Of these, 444 (83%) were among females (Figure 4). The volume of calls among females ages 6-17 increased in 2021 compared to the same months in 2020 (January-October 2020: 339 calls) and 2019 (January-October 2019: 314). There was no increase in other intentional exposure calls (misuse, abuse, unknown) or among males in this age group. However, there has also been a slight increase in calls for suspected suicide attempt among males ages 18-24 (see the [data dashboard](#)⁶ for additional details about WAPC call data and use the drop down menu at the top to choose a selection for: age, gender, and poisoning reason).

Figure 3: King County Calls to the Washington Poison Center among female youth ages 6-17, January-October 2019-2021



Data Source: Washington Poison Center <https://www.wapc.org/>



⁶ https://tableaupub.kingcounty.gov/t/Public/views/EconomicSocialandOverallHealthImpactsofCOVID-19inKingCountyWA/WAPoisonCenterCalls?embed=y&:display_spinner=no&:showAppBanner=false&:embed_code_version=3&:loadOrderID=0&:display_count=n&:showVizHome=n&:origin=viz_share_link

DATA LIMITATIONS

The data reported will not reflect the full burden of behavioral health care needs among youth and young adults in King County. Many youth may not visit the ED but instead engage with healthcare providers or others may be experiencing mental health concerns and not yet sought assistance or have declined assistance. Additionally, we have limited demographic data for ED visits and from the WAPC. Only binary gender data (female/male) are collected with no data provided on transgender or gender diverse youth and young adults nor any data on sexual orientation. We know that transgender and gender diverse youth and young adults as well as youth and young adults that identify as lesbian, gay, or bisexual experience some of the highest rates of suicidal ideation/attempt.^{7,8} Although our current countywide data sources have limited information by gender identity and sexual orientation, among high school students attending Seattle Public Schools in Fall 2018, the percentage reporting prolonged feelings of sadness/hopelessness was 2.5 times higher among students identifying as lesbian, gay or bisexual compared to straight students; and 3 times higher for suicidal thoughts.⁹

Race/ethnicity for ED visit data may be based on providers' observation rather than self-report. Some racial/ethnic groups have small populations, making it difficult to reliably describe their health data and compare them with larger populations. For ED visits, changes in the completeness of reported data by hospitals over time may also impact the number of visits detected. Our data cover the volume of visits, but not necessarily the severity or length of stay of the visits. Census Household Pulse Survey data covers the tri-county region (King, Pierce, and Snohomish) and we are unable to look at data for just King County residents. Additionally, the survey does not ask respondents reasons for not receiving needed behavioral health care.

DISCUSSION, RESOURCES, AND STATE AND COUNTY STRATEGIES

While we may be seeing high rates of ED visits for suicidal ideation and attempts, one positive note is that there were no youth deaths by suicide in the month of October and we are currently on track to have fewer youth suicides in 2021 than in 2019 and 2020. Suicidal ideation and attempt ED visits often trend higher during the school year,^{10,11} and these data follow a similar pattern. The Washington State Department of Health (DOH) is also monitoring similar data across the state, as well as looking for signals in other data sets (see their [Behavioral Health Resources and Recommendations](#)¹² for further details). DOH has also produced a toolbox that provides behavioral health tips and resources for addressing emotional response with returning to in-person school.¹³ Since 2012, DOH has maintained a statewide registry for health care, public health, and support professionals to volunteer during disasters and public health emergencies. If you are a behavioral health provider willing and able to help, consider registering at WAserv (WAserv.org).

While the mental health system for youth needs additional support to have culturally competent and representative counselors, and more providers to be able to safely discharge kids from the ED,¹⁴ there are a variety of resources: School based health centers are available now that school is in session; University of

⁷ Kann L, Olsen EO, McManus T, et al. Sexual Identity, Sex of Sexual Contacts, and Health-Related Behaviors Among Students in Grades 9–12 — United States and Selected Sites, 2015. *MMWR Surveill Summ* 2016;65(No. SS-9):1-202. DOI: <http://dx.doi.org/10.15585/mmwr.ss6509a1>

⁸ Johns, M, Lowry, R, Andrzejewski, J, et al. Transgender Identity and Experiences of violence Victimization, Substance Use, Suicide Risk, and Sexual Risk Behaviors among High School Students – 19 states and Large Urban School Districts, 2018. *MMWR* 2017;68(3):67-71. DOI: <http://dx.doi.org/10.15585/mmwr.mm6803a3>

⁹ Center for Disease Control (CDC) Youth Risk Behavior Survey for High School Students. 2018 Seattle Public Schools Youth Risk Behavior Survey data report. <https://www.seattleschools.org/wp-content/uploads/2021/09/CDCdataYRBSforSPS.pdf>

¹⁰ Hansen, B., Lang, M. Back to school blues: Seasonality of youth suicide and the academic calendar. *Economcis of Education Review* 2011;30(5):850-861. DOI: <https://doi.org/10.1016/j.econedurev.2011.04.012>

¹¹ Plemmons, G., Hall, M., Douponik, S. et al. Hospitalization for Suicide Ideation or Attempt: 2008-2015. *Pediatrics* 2018; 141(6) DOI: <https://doi.org/10.1542/peds.2017-2426>

¹² <https://www.doh.wa.gov/Emergencies/COVID19/HealthcareProviders/BehavioralHealthResources>

¹³ Washington State Department of Health COVID-19 Back to Classroom THINK Toolbox. <https://www.doh.wa.gov/Portals/1/Documents/1600/coronavirus/821-148-BackToClassroomToolbox.pdf>

¹⁴ <https://pulse.seattlechildrens.org/responding-to-our-states-youth-mental-health-emergency/>

Washington's Forefront Suicide Prevention offers a [LEARN Saves Lives training](#)¹⁵ that is open to community. Seattle Children's offers a [Youth Mental Health First Aid](#) training for adults in partnership with King County and Chad's Legacy Project, has shared [tips for success with in-person education](#)¹⁶, made resources available online in a [Mental Health Resource Hub](#)¹⁷, and operates the state-funded [Washington Mental Health Referral Service](#)¹⁸ line to connect families to outpatient treatment in their community. Crisis lines including the [Trevor Project](#)¹⁹ (1-866-488-7386) for LGBTQ youth and [Crisis Connections](#)²⁰ (1-866-427-4747) are available to assist those currently experiencing a crisis or to connect people with other resources including basic needs, substance use services, and other support services.

Providers stress the importance of engaging with youth and young adults. If you are concerned your child or a young person in your life may be thinking about suicide or harming themselves:

1. Ask them directly with care: "Are you thinking about killing yourself?"²¹ Asking does not plant the idea in their head but gives them the opportunity to tell you if they're feeling suicidal.
 - a. If you are concerned about their immediate safety, go to the ED.
 - b. If you need help but do not need to go to the ED, immediate help is available by calling the National Suicide Prevention Hotline (1-800-273-8255), texting HOME to 741741 for the Crisis Text Line; or [Washington Listens](#)²² by calling or texting 1-833-681-0211.
2. Get connected to resources, such as outpatient mental health treatment. The child's pediatrician and school-based health care providers can be helpful resources in this process. You may encounter long wait times but don't give up. If you need support in finding outpatient care for your child/teen, call the [Washington Mental Health Referral Service](#)²³ at 1-833-303-5437 for help finding appropriate treatment in your community.
3. Make your home environment as safe as possible for a child/teen struggling with self-harm or suicidal thoughts: remove items that could be used for self-injury (lock up medicines, even over-the-counter; store firearms using the triple-safe method: locked, unloaded, ammunition locked in a separate location).^{24,25} For locations of temporary storage of firearms outside the home see [Washington's Firearm Safe Storage Map](#).²⁶
4. Keep having conversations about emotions with the young people in your life.

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We would like to acknowledge and thank the members of the Youth & Families Thrive Now Task Force as well as Kashi Arora, Sarah Wilhelm, Karyn Brownson, Janae Mareletto, and Sara Jaye Sanford for their contributions and subject matter input to this brief.

¹⁵ <https://inthe forefront.org/news/events/forefront-suicide-prevention-learn-saves-lives-webinar-for-seattle-childrens-hospital/>

¹⁶ <https://pulse.seattlechildrens.org/tips-for-in-person-school-success-from-educator-dad/>

¹⁷ https://www.seattlechildrens.org/health-safety/keeping-kids-healthy/development/mental-health-resources/?utm_campaign=redir-chx&utm_content=mental-health-hub

¹⁸ <https://www.seattlechildrens.org/clinics/washington-mental-health-referral-service/>

¹⁹ <https://www.thetrevorproject.org/>

²⁰ <https://www.crisisconnections.org/>

²¹ Teen Suicide Prevention Resource Guide: https://www.youtheastsideservices.org/wp-content/uploads/2021/09/TeenSuicidePrevention_ResourceGuide_0821.pdf

²² <https://waportal.org/partners/home/WaListens>

²³ <https://www.seattlechildrens.org/healthcare-professionals/access-services/partnership-access-line/washingtons-mental-health-referral-service-children-teens/>

²⁴ <https://kingcounty.gov/depts/health/violence-injury-prevention/violence-prevention/gun-violence/LOCK-IT-UP.aspx>

²⁵ <https://www.seattlechildrens.org/globalassets/documents/for-patients-and-families/pfe/pe1687.pdf>

²⁶ <https://hiprc.org/firearm/firearm-storage-wa/>

TECHNICAL NOTES :

ED 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 using CDC developed definitions. Definitions for suicidal ideation and suspected suicide attempt combined clinical presentation with indicators for key text terms (e.g. hanging, laceration, or overdose attempt) and diagnosis codes. Data are preliminary and subject to change as the system groups chief complaint and diagnoses into syndromes which are modified based on continuous validation. The current CDC definition for suspected suicide attempt, due to its broad inclusion of intentional self-harm behaviors that may or may not be interpreted as a suicidal act, could artificially inflate both the count and rate of such visits.

Census Household Pulse Survey data presented here includes questions related to mental health among adults age 18 and older in the Seattle-Tacoma-Bellevue metropolitan statistical area (MSA) encompassing the tri-county area of Snohomish, King and Pierce. Questions on anxiety and depression symptoms were based on the modified four item Patient Health Questionnaire (PHQ-4) which asks how often during the past 7 days, respondents had been bothered by 1) feeling nervous, anxious, or on edge; 2) not being able to stop or control worrying; 3) feeling down, depressed, or hopeless; and 4) having little interest or pleasure in doing things. The four questions can be used to construct composite scores on symptoms of an anxiety disorder, symptoms of a depressive disorder, or symptoms of anxiety and/or depression disorders combined. For the combined composite, the score can be used to further define the severity of the symptoms. For further details see MMWR article: <https://www.cdc.gov/mmwr/volumes/70/wr/mm7013e2.htm>

Confidence Interval (90% CI) is the probability that after accounting for random variation for counts or sampling error for survey data, the reported count or estimated rate (percent) will be within the interval 90% of the time. For count data, the confidence interval is calculated using the Poisson formula for counts, for rates the confidence interval is calculated using the Poisson normal approximation formula. A Poisson means statistical test was used to compare differences in ED visits between years.

For more information visit: <https://kingcounty.gov/covid/data/impacts> and www.publichealthinsider.com. For questions please contact: COVIDevaluation@kingcounty.gov

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