

## Week of October 19, 2020

# Behavioral Health Impact Situation Report

This situation report presents the potential behavioral health impacts of the COVID-19 pandemic for Washington to inform planning efforts. The intended audience for this report includes response planners and any organization that is responding to or helping to mitigate the behavioral health impacts of the COVID-19 pandemic.

### Purpose

This report summarizes data analyses conducted by the COVID-19 Behavioral Health Group's Impact & Capacity Assessment Task Force. These analyses assess the likely current and future impacts of the COVID-19 pandemic on mental health and potential for substance use issues among Washingtonians.

### Key Takeaways

- For this reporting period (CDC Week 41: week of October 19), 3 of 5 syndromic indicators (psychological distress, suicidal ideation, and suicide attempts) fell below 2019 levels.
- Despite this decrease, the under 18 age group is showing increased warnings and alerts for Psychological Distress and Suicide Attempts.
- In general surveillance, unusual trends are beginning to appear in terms of the relationship between anxiety and economic status. Previous reporting periods have shown that there was an inverse correlation between anxiety and depression reporting and wealth, while this week, wealth seemed to have a weaker correlation to reports of anxiety and depression.
- For the first time since reporting began, two racial and ethnic groups (Hispanic and multiracial, non-Hispanic) have the highest levels of reported anxiety.
- Those who have some college education were more likely to report anxiety during this period.

### Impact Assessment

This section summarizes data analyses that show the likely current and future impacts of the COVID-19 pandemic on mental health and potential for substance use issues among Washingtonians.

#### Syndromic Surveillance

The Department of Health collects syndromic surveillance data in near real-time from hospitals and clinics across Washington. The data are always subject to updates. Key data elements reported include patient demographic information, chief complaint, and coded diagnoses. [This data collection system<sup>1</sup>](#) is the only source of emergency department (ED) data for Washington. Statistical warnings and alerts are raised when a Centers for Disease Control and Prevention (CDC) algorithm detects a weekly count at least three standard deviations<sup>2</sup> above a 28-day average count, ending three weeks prior to the week with a warning or alert. These warnings or alerts will be mentioned within each respective syndrome section.

As of the Week of October 12 Situation Report (Situation Report 13), *visits of interest per 10,000 ED visits* replaced *visit count* graphs. This new measure can help provide insights into the effect of the “Stay Home, Stay Healthy” order from March 23 (CDC Week 13) onwards, as well as the relative frequency of these indicators for 2019 and 2020. An additional feature of these graphs is the “average weekly difference” in the lower right-hand corner. This feature allows readers to compare both the yearly week-over-week<sup>3</sup> average and the weekly visit fluctuations to better assess demand for care and care-seeking behaviors. In scenarios where a statistical warning or alert is issued, such events will be mentioned within the syndrome description text.

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<sup>1</sup> <https://www.doh.wa.gov/ForPublicHealthandHealthcareProviders/HealthcareProfessionsandFacilities/PublicHealthMeaningfulUse/RHINO>

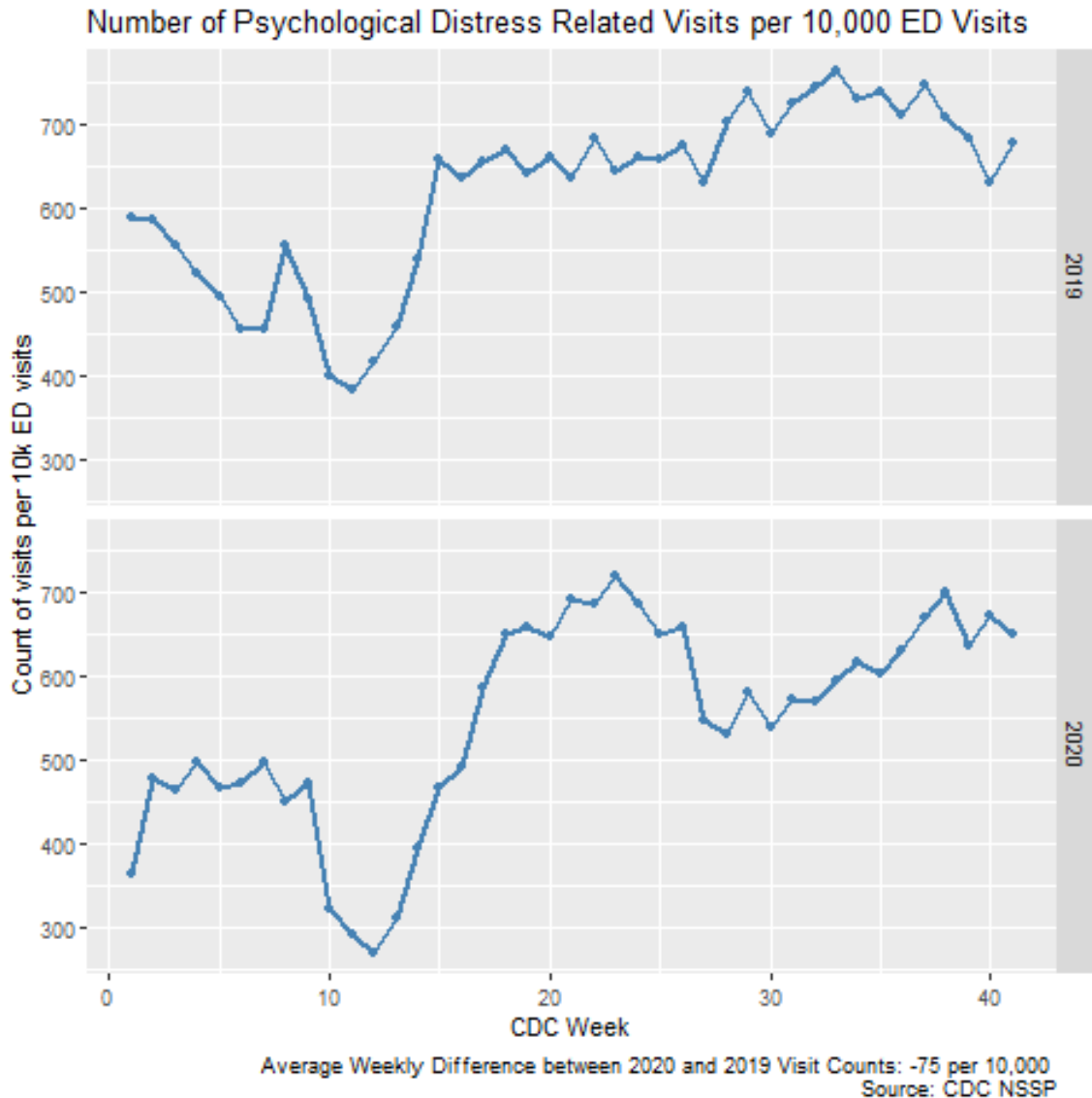
<sup>2</sup> Standard deviation: A measure of the amount of variation or dispersion of a set of values. Standard deviation is often used to measure the distance of a given value from the average value of a data set.

<sup>3</sup> Week-over-week: The comparison of two weeks, e.g., the same week from 2019 and 2020.

## Psychological Distress

CDC Week 41 (week of October 19) had an ED visit relative count for psychological distress<sup>4</sup> that was less than CDC Week 40, but is among the highest seen since CDC Week 25. In terms of demographics, a statistical alert was issued for the under 18 age group, with previous weeks having both warnings and alerts for the 18-44 age group.

**Graph 1: Relative count of emergency department visits for psychological distress<sup>4</sup> in Washington, by week: 2020 vs. 2019 (Source: CDC ESSENCE)**

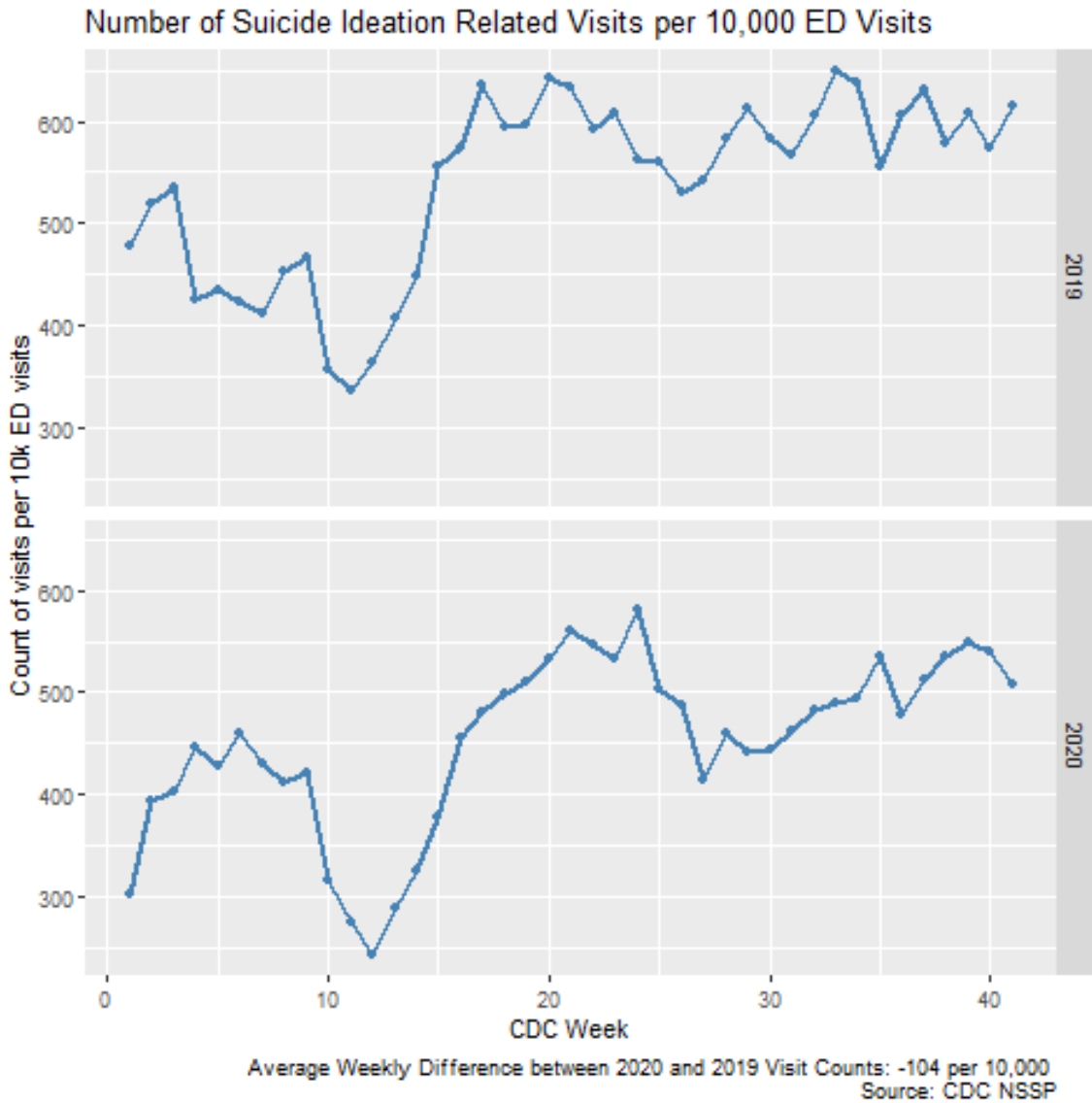


<sup>4</sup> Psychological distress in this context is considered a disaster-related syndrome comprised of panic, stress, and anxiety. It is indexed in the Electronic Surveillance System for the Early Notification of Community-based Epidemics (ESSENCE) platform as Disaster-related Mental Health v1. Full details are available at <https://knowledgerepository.syndromicsurveillance.org/disaster-related-mental-health-v1-syndrome-definitioncommittee>.

## Suicidal Ideation and Suicide Attempts

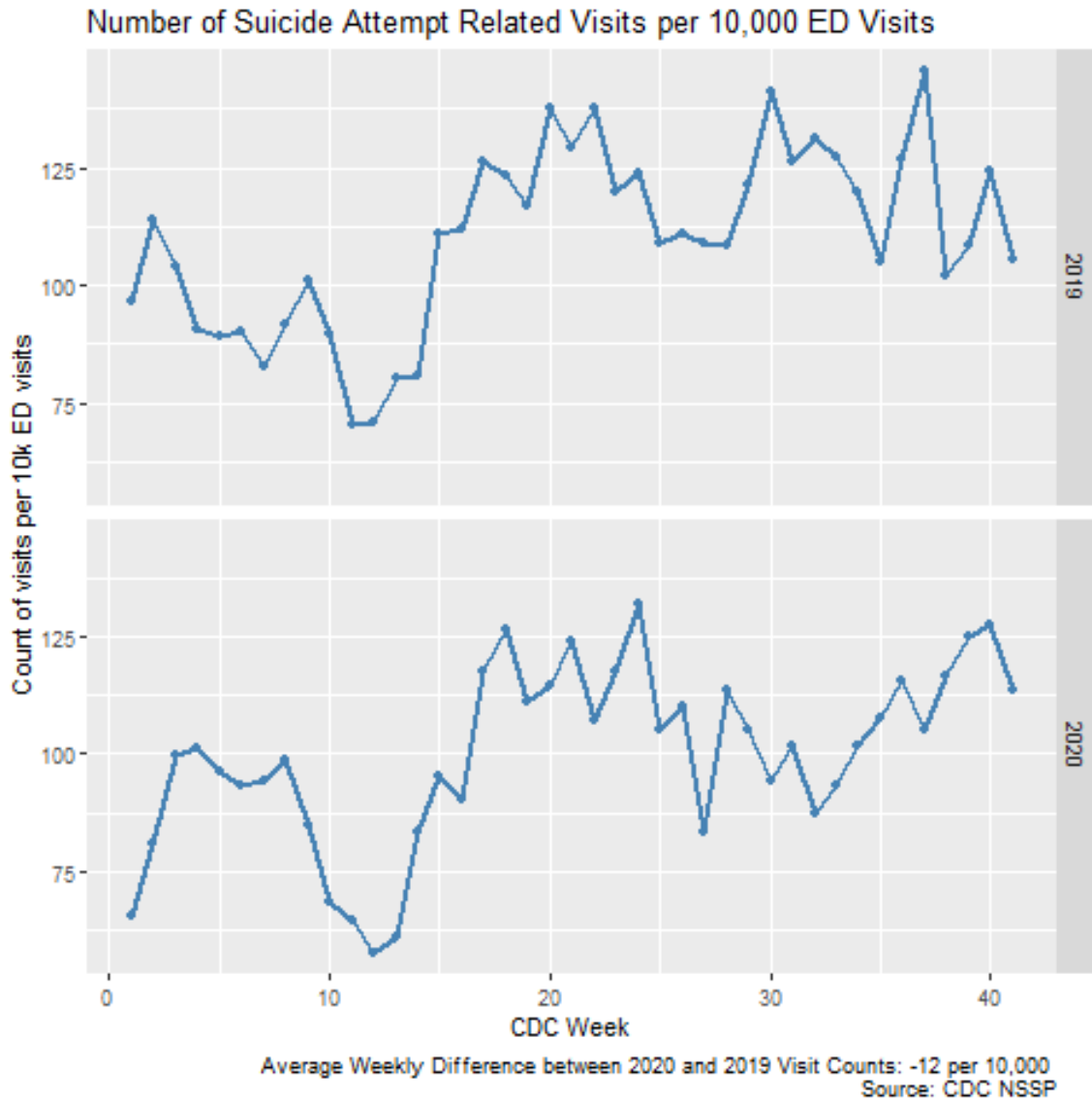
For CDC Week 41, there has been a decrease in relative reported ED visits for suicidal ideation (Graph 2). While there are no alerts or warnings for this week, this decline is from a grouping of statistical alerts over the past 3 weeks, primarily from the under 18 age group.

**Graph 2: Relative count of emergency department visits for suicidal ideation in Washington, by week: 2020 vs. 2019 (Source: CDC ESSENCE)**



For emergency department visits for suicide attempts, the pattern of fluctuations has continued, slightly decreasing in CDC Week 41. Additionally, **the trend continues of a statistical warning for the under 18 age group**, with 4 of the past 5 weeks receiving a warning or alert.

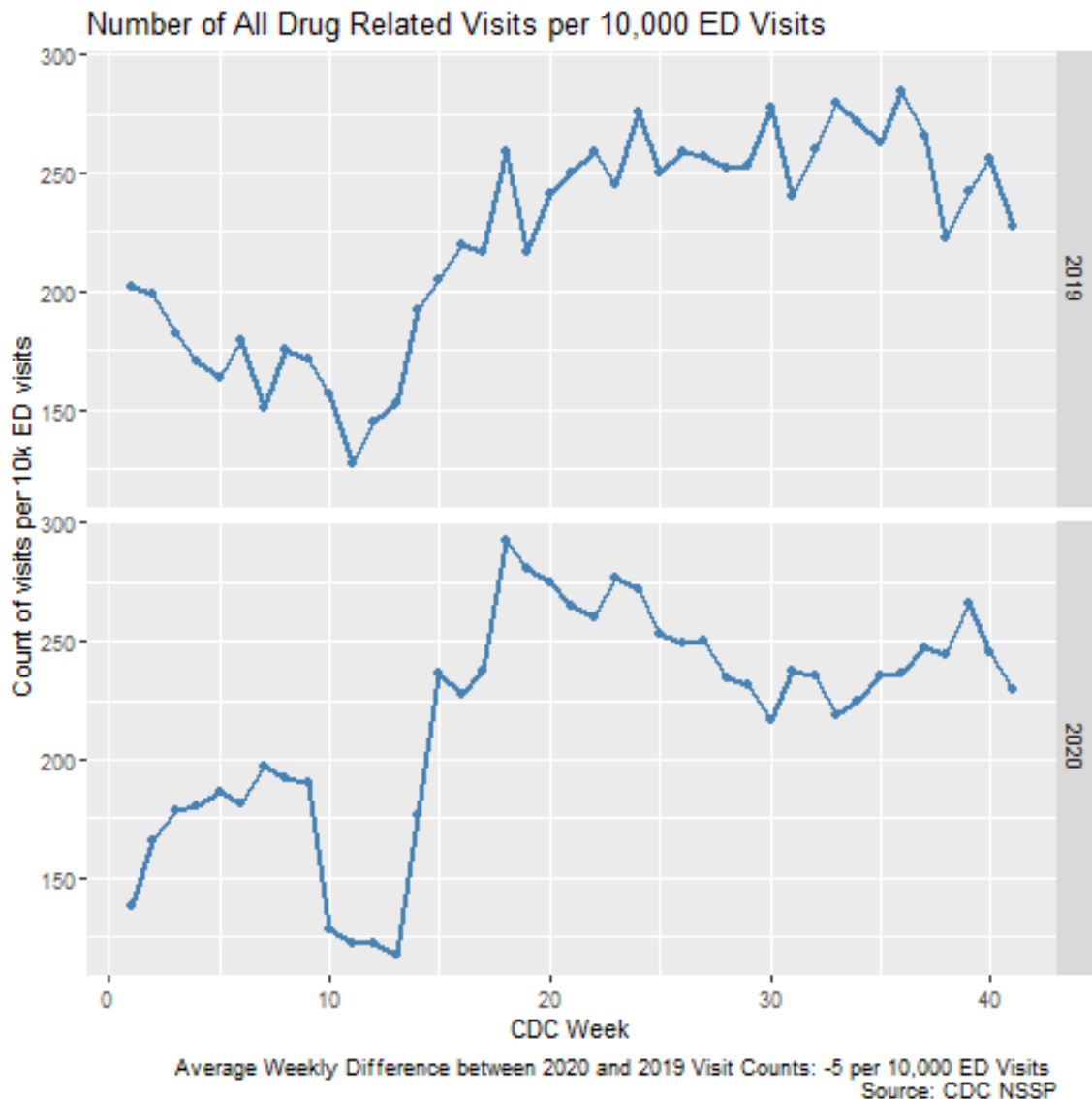
**Graph 3: Relative count of emergency department visits for suicide attempts in Washington, by week: 2020 vs. 2019 (Source: CDC ESSENCE)**



## Substance Use – Drug Overdose and Alcohol-Related Emergency Visits

For CDC Week 41, there has been a very slight decrease in relative visits for all drug<sup>5</sup>-related visits as compared to CDC Week 40, and a very slight increase compared to this period last year (Graph 4). All age groups are trending down in opioid-related ED visits over the past four weeks, **but the under 18 age group is experiencing a general upward trend in all drug-related visits**. No race or ethnicity category experienced a warning or alert regarding all drug visits for this period.

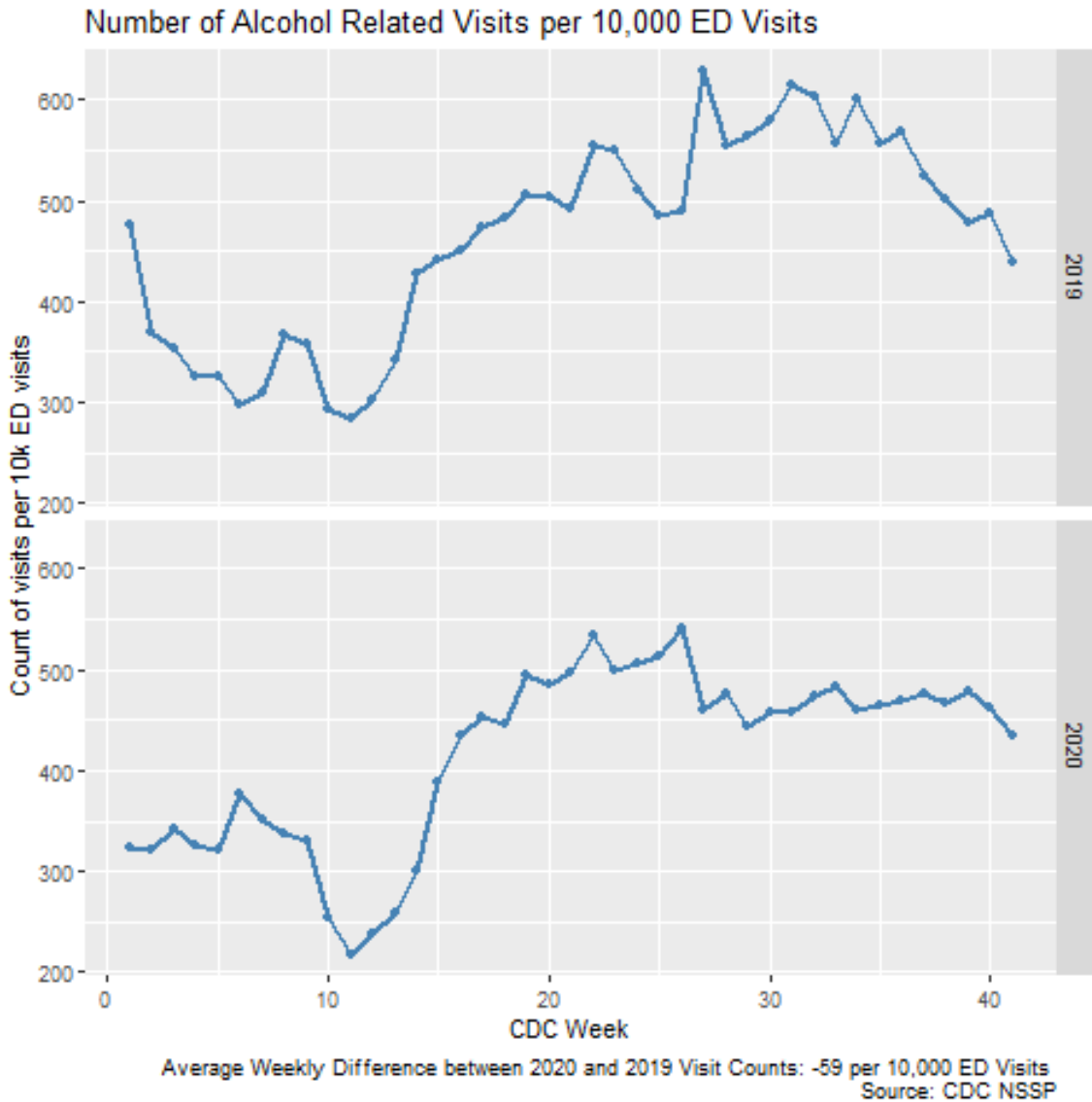
**Graph 4: Relative count of emergency department visits for all drug<sup>5</sup>-related visits in Washington, by week: 2020 vs. 2019 (Source: CDC ESSENCE)**



<sup>5</sup> All drug: This definition specifies overdoses for any drug, including heroin, opioid, and stimulants. It is indexed in the Electronic Surveillance System for the Early Notification of Community-Based Epidemics (ESSENCE) platform as CDC All Drug v1. Full details available at <https://knowledgerepository.syndromicsurveillance.org/cdc-all-drug-v1>.

Similar to previous weeks, **alcohol-related relative visits for CDC Week 41 show a slight decrease** as compared to earlier weeks, and a significant drop from peak visit rates in Weeks 23-28 of this year (Graph 5). No group warranted a warning, though it should be noted that visits per 10,000 for alcohol have remained somewhat stable for 2020, while there was a several week period of sustained decreases in visits in 2019. This has resulted in a slight convergence in visit counts between 2019 and 2020 data.

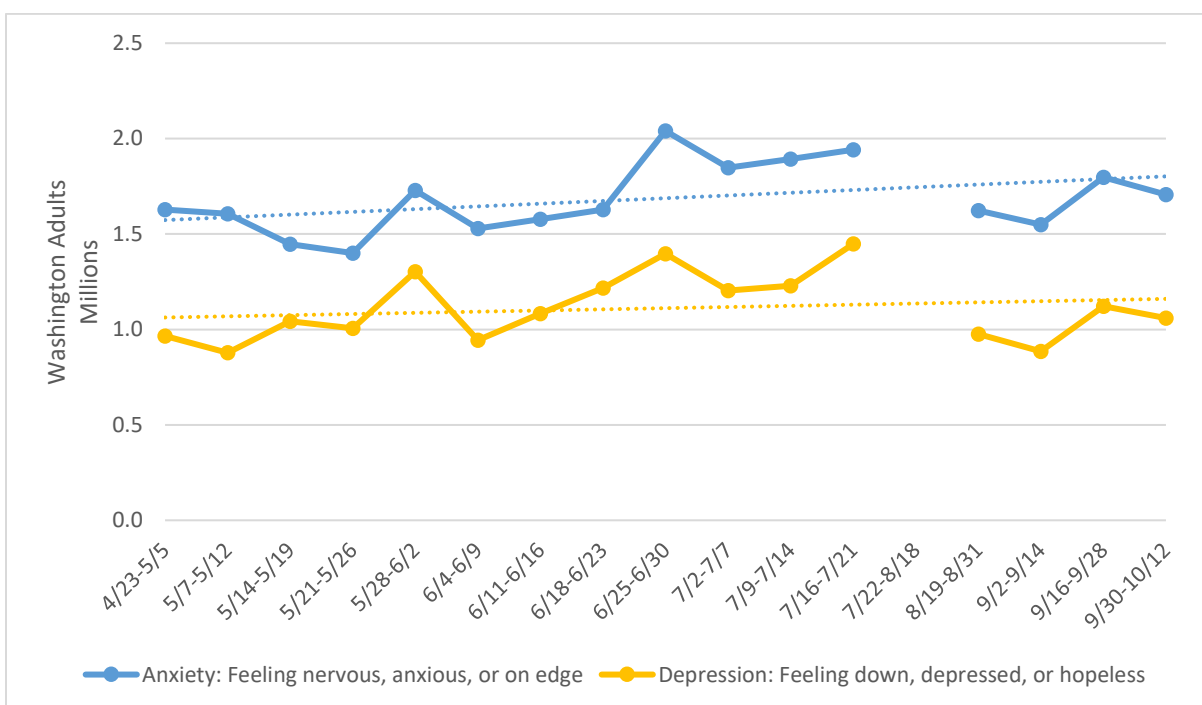
**Graph 5: Relative count of emergency department visits for alcohol-related visits in Washington, by week: 2020 vs. 2019 (Source: CDC ESSENCE)**



## General Surveillance – Symptoms of Anxiety and Depression

Survey data collected by the U.S. Census Bureau<sup>6</sup> for September 30–October 12 suggest **decreases of 5% in feelings of anxiety and 6% in feelings of depression** among Washington adults (Graph 6). **Just over 1.7 million reported experiencing symptoms of anxiety on at least most days and just under 1.1 million reported experiencing symptoms of depression on at least most days.** For these measures, the estimated standard error indicates that both upper and lower bound estimates limit how inaccurate this estimate may be by around 9.2% above or below the numbers previously mentioned. This survey data is not in any way related to the data presented in a previous section.

**Graph 6: Estimated Washington adults with feelings of anxiety and depression at least most days, by week: April 23–Oct 12 (Source: U.S. Census Bureau)**



Note: For the period of 7/21–8/19, census data was not available and thus, any trends during this point are an artifact of analysis.

Further analysis of the depression measure for September 30–October 12 survey data indicates marked disparities among demographic groups. As with the anxiety measure, there is an inverse relationship between age and frequency of depression symptoms. In other words, as age increases, frequency of depression symptoms decreases. One notable observation is that,

<sup>6</sup> In May, the U.S. Census Bureau began measuring the social and economic impacts during the COVID-19 pandemic with a weekly Household Pulse survey of adults across the country. The survey asks four questions related to how often survey respondents have experienced specific symptoms associated with anxiety and depression over the past week. Additional details about the survey can be found at <https://www.cdc.gov/nchs/covid19/pulse/mental-health.htm>.



unlike previous months, household income and anxiety have a broader relationship. Individuals earning \$25,000–\$35,000 appear to be displaying equal amounts of anxiety as those earning under \$25,000. Both groups are showing at least a 10% increase in symptom reporting than the second most anxious economic group (earning \$50,000–\$74,999).

**Hispanic and multiracial (non-Hispanic) have the highest symptom reporting for both depression and anxiety.** Those with some college education have the highest symptom reporting rate for this week. Lastly, those who identified as female have an increased symptom reporting rate for anxiety of roughly 13% (40% for females, compared to 27% for males).

### Crime – Domestic Violence

While the October 5–October 11 reporting period has kept the trend of the previous period in terms of decreased domestic violence offenses being reported, **year-over-year<sup>7</sup> reports continue to increase (13.4%)** according to survey data from the Washington Association of Sheriffs and Police Chiefs (WASPC).<sup>8</sup>

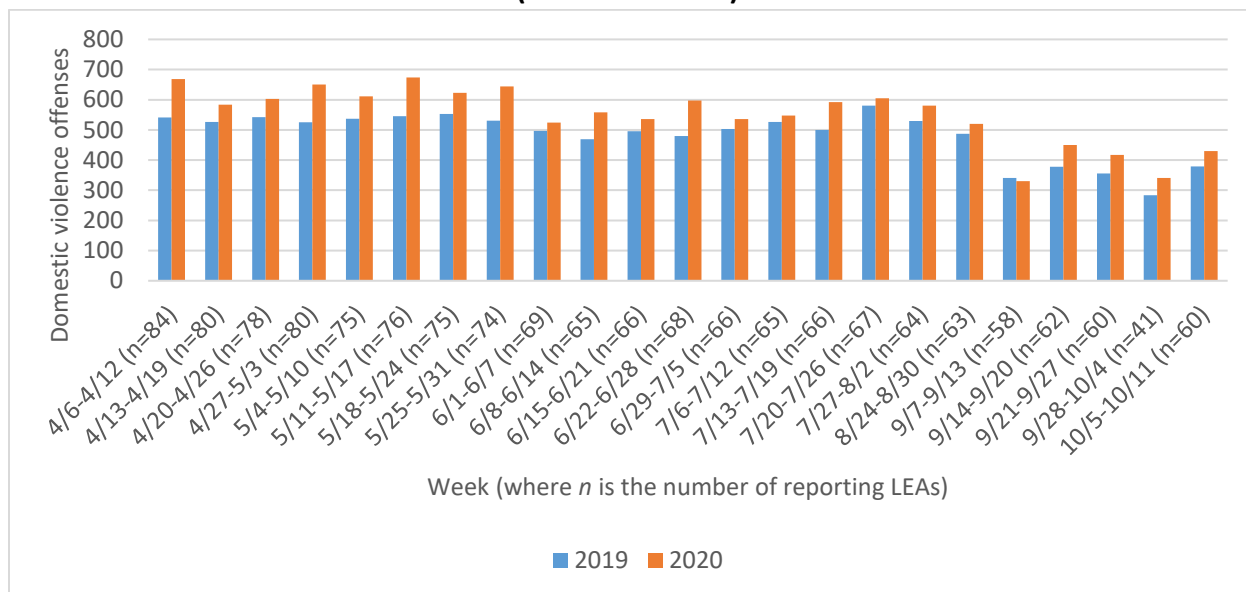
This survey has also detected a **double-digit decrease (24%) in other offenses during the September 28–October 4 period, which in the previous measured week were down by 50% from last year.** The only exceptions to this trend was a slight increase in animal cruelty offenses (from 0 in 2019 to 6 in 2020) and murder (from 0 in 2019 to 1 in 2020) for the agencies who reported during this period (n=60).

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<sup>7</sup> Year-over-year: The comparison of two years, specifically 2020 to 2019.

<sup>8</sup> WASPC began conducting a weekly survey to all Washington law enforcement agencies (LEAs) in April to understand the likely impact of the COVID-19 pandemic on common crimes. Between 24–31% of the 275 LEAs respond each week. It should be noted that despite varying numbers of law enforcement agencies reporting offenses week-over-week, all values for each week are tied strictly to that week's reporting number for both 2019 and 2020. A smaller or larger number of reporting agencies does not affect year-over-year comparisons.

**Graph 7: Domestic violence offenses reported, by week for April 6–October 11: 2020 vs. 2019**  
 (Source: WASPC)<sup>9</sup>



### Product Sales – Alcohol and Cannabis Taxes & Handgun Background Checks

The Liquor and Cannabis Board (LCB) summarizes monthly beer, wine, and cannabis tax collections, which may be used as a representation of sales of legal recreational substances and by extension, potential for substance use issues. Additionally, federal background checks for handgun sales<sup>10</sup> may represent access to firearms,<sup>11</sup> which is a risk factor for suicide and other gun violence.<sup>12</sup>

Monthly cannabis tax collections in the first half of 2020 were consistently higher than in 2019. They have continued to rise in July and August with an approximate 18% increase in purchases, as indicated by revenue. While changes in year-over-year<sup>7</sup> monthly beer and wine tax collections (combined) have fluctuated, they are generally increasing.

Additionally, federal background checks, while fluctuating over the last several months, have seen a 6% decrease for the month of July, with a two-month trend that has led to an 11% decrease as compared to the same period last year.

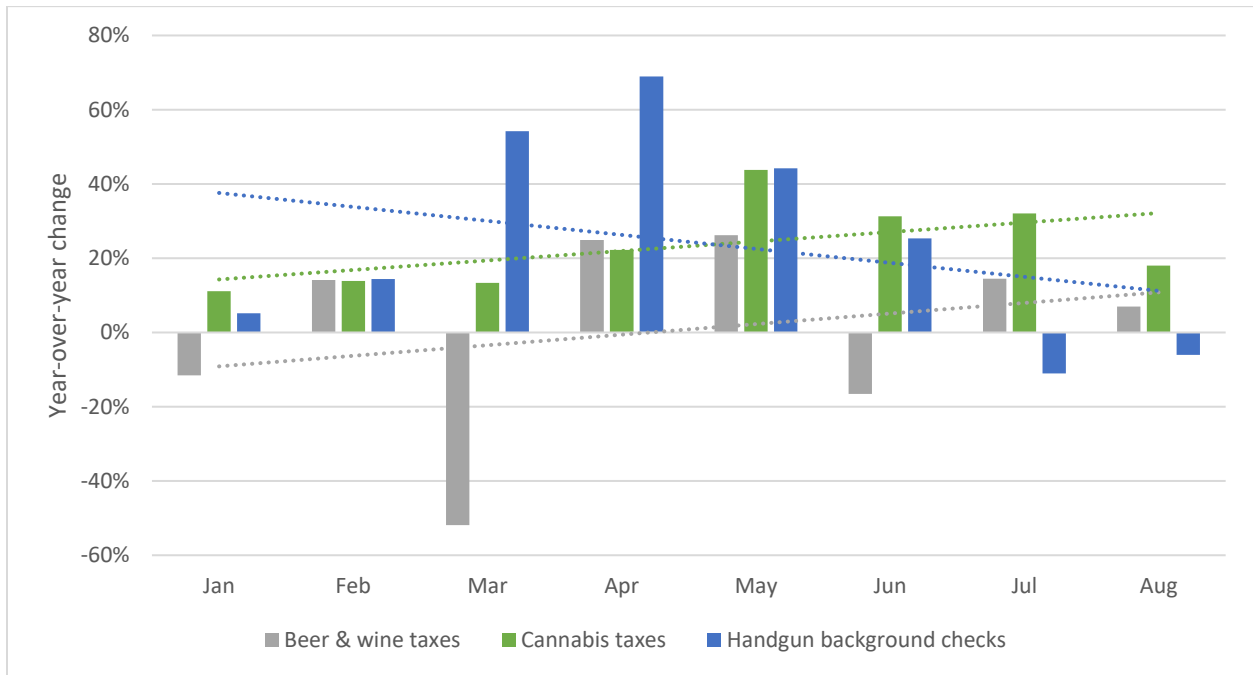
<sup>9</sup> N is for both 2019 and 2020, specifying only those agencies reporting in both 2020 to 2019.

<sup>10</sup> From the Federal Bureau of Investigation: “It is important to note that the statistics within this chart represent the number of firearm background checks initiated through the NICS [National Instant Criminal Background Check System]. They do not represent the number of firearms sold. Based on varying state laws and purchase scenarios, a one-to-one correlation cannot be made between a firearm background check and a firearm sale.”

<sup>11</sup> Nemerov, Howard Ross. Estimating Guns Sold by State (January 11, 2018). Available at SSRN: <http://dx.doi.org/10.2139/ssrn.3100289>

<sup>12</sup> Anglemeyer, A., Horvath, T., Rutherford, G. The accessibility of firearms and risk for suicide and homicide victimization among household members: a systematic review and meta-analysis [published correction appears in *Ann Intern Med.* 2014 May 6;160(9):658-9]. *Ann Intern Med.* 2014;160(2):101-110. doi:10.7326/M13-1301

**Graph 8: Year-over-year change in select product sales indicators, by month: 2020 vs. 2019**  
 (Sources: LCB, Federal Bureau of Investigation)



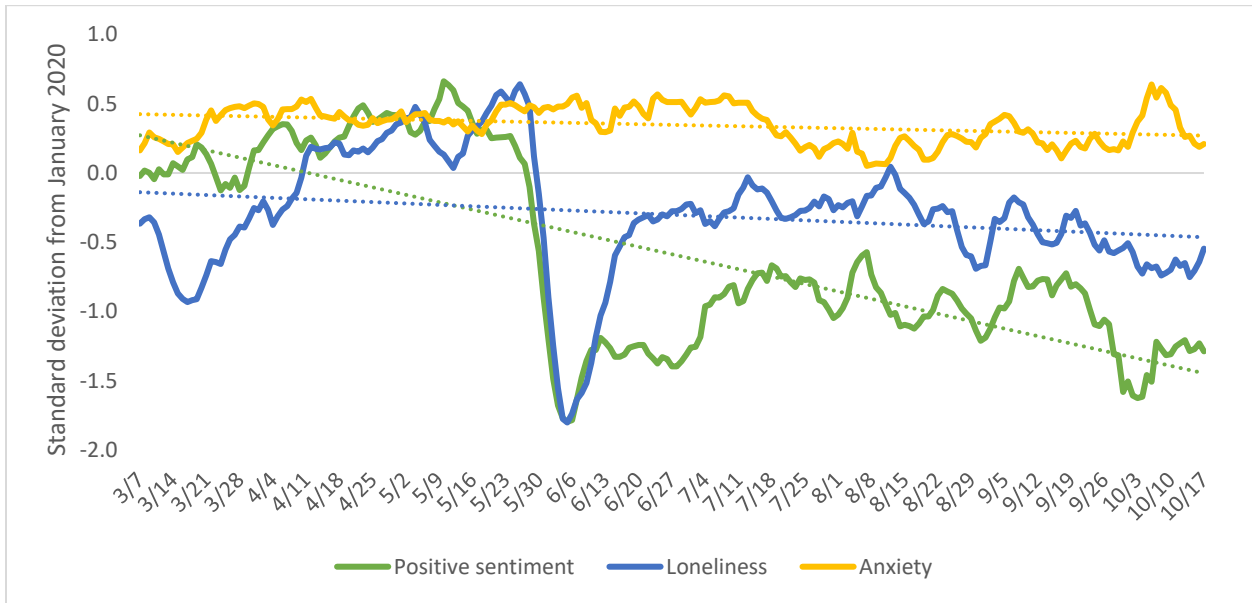
### Social Media – Expressions of Positive Sentiment, Loneliness, and Anxiety

Social media data continue to plateau after stabilizing from events around July 6. Tweets related to COVID-19 and geotagged to Washington<sup>13,14</sup> suggest that since late June, all three measures have fluctuated around new averages, with positive sentiment remaining the most variable measure. As to be expected given the pattern in previous months, positive sentiment dropped, and anxiety rose near the start of October (as has been the case for the start of each month within the observation period). There was a slight climb in positive sentiment and decline in anxiety from around October 10 through October 17.

<sup>13</sup> Since January 2020, researchers at the Penn Center for Digital Health have been tracking “tweets” about the COVID-19 pandemic, analyzing language used by Twitter users to quantify the extent to which they reflect expressions of positive sentiment, loneliness, and anxiety. Although these measures have been made publicly available, the researchers included a disclaimer, stating that “the data are still being validated and are not ready for public policy decision making.”

<sup>14</sup> Guntuku, S.C., Sherman, G., Stokes, D.C., et al. Tracking Mental Health and Symptom Mentions on Twitter During COVID-19. *J GEN INTERN MED* (2020). <https://doi.org/10.1007/s11606-020-05988-8>

**Graph 9: 7-day moving averages of deviations in select expression measures<sup>13,14</sup> relative to January 2020 baseline: March 7, 2020–Oct 17, 2020**  
 (Source: Penn Center for Digital Health)



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