

Notification: Increase in Emergency Department (ED) and Hospital Visits Related to COVID-19 Symptoms

Updates Provided by: Tri-County Health Department in coordination with Colorado Local Syndromic Surveillance counties (Adams, Arapahoe, Boulder, Broomfield, Denver, Douglas, El Paso, Jefferson, Larimer, La Plata, Mesa, Montezuma, and Pueblo counties)

• Purpose

- ◇ To provide weekly updates to Public Health partners regarding a disease trend of the percentage of all hospital visits (all ED and inpatient) via the Syndromic Surveillance data that meets the Centers for Disease Control and Prevention (CDC) COVID-19 related symptoms and case definition.
- ◇ As the COVID-19 pandemic has secondary impacts for people across the country, mental health indicators, heart attack, stroke, and substance overdoses are critical for Public Health to monitor during the pandemic.

• Definitions used for COVID-19 Syndromic Surveillance (SyS)

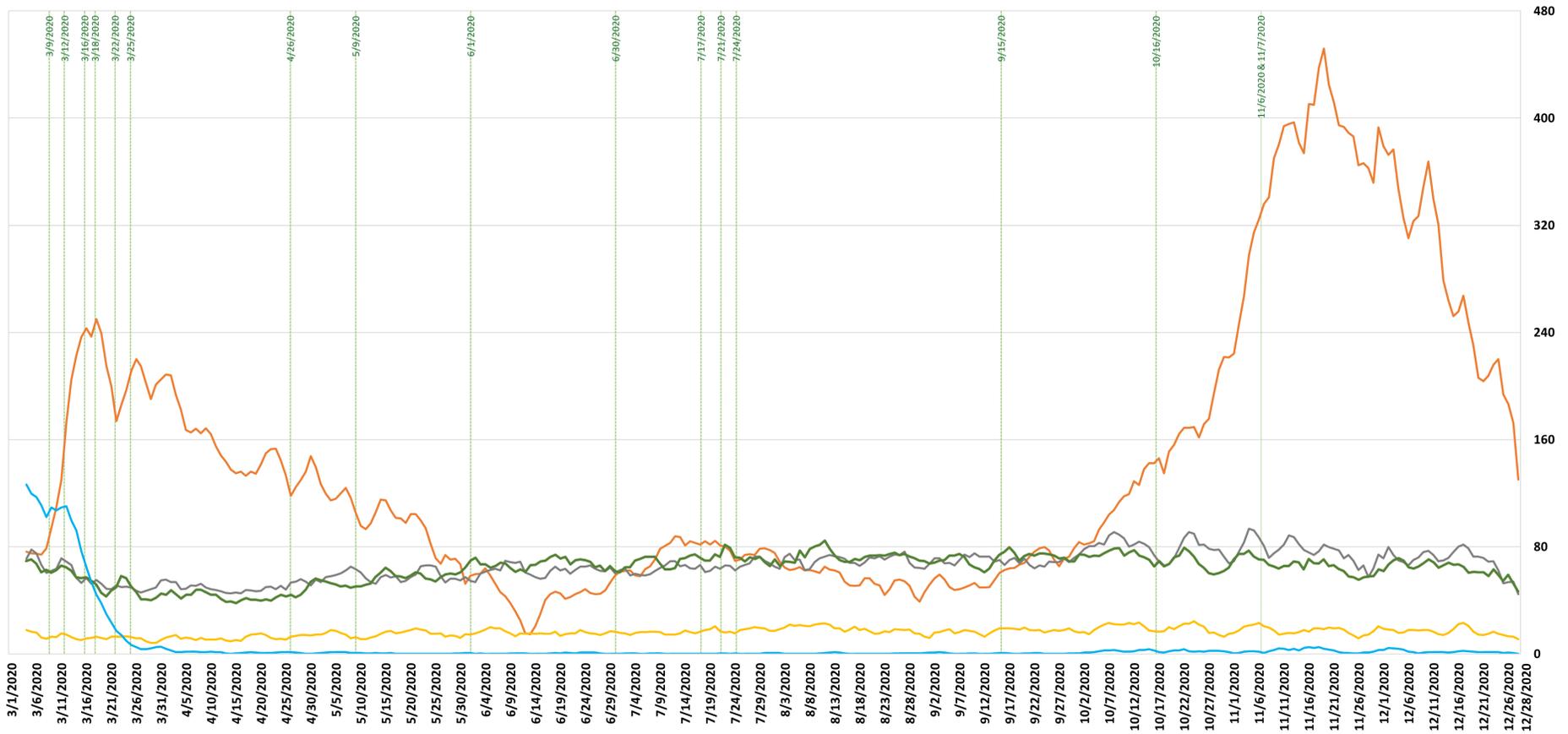
- ◇ COVID-19 related hospital visits were captured if patients meet the *updated CDC's case definition*, by searching 'fever and cough or shortness of breath or difficulty breathing or the presence of coronavirus diagnosis code' with additional negation terms in the SyS data. The case definition was updated by CDC on 09/02/2020. The additional negation terms did not impact historical/current results in Colorado SyS Data.
- ◇ Suicidal ideation related hospital visits were identified if patients met the case definition by searching text terms about suicidal ideas and thoughts or the presence of suicidal ideation diagnosis code (ICD-10 CM: R45.851). Suicide attempt related hospital visits were identified if patients intentionally harmed themselves by searching text terms about injuries due to suicide attempt, intentional self-harm, self-poison, and intentional overdose. Patients were also identified if they were assigned diagnosis codes of suicide attempts (ICD-10 CM: T14.91, X71-70, or T36-50).
- ◇ Mental health related hospital visits during/after disasters were identified if patients met the SyS case definition by searching text terms regarding mental health impacts (e.g. stress, phobic, and anxiety) and diagnosis codes (ICD-10 CM: F41, F43, R45.7) showing an increase after a disaster.
- ◇ Diagnosed influenza related hospital visits were captured if patients meet the CDC's influenza case definition, which is based on searching visits with influenza discharge diagnosis ICD-10 codes (J09, J10, J11).

• COVID-19 Related Symptoms and Diagnosis in Colorado Local Syndromic Surveillance Counties

- ◇ In Syndromic Surveillance (SyS) data, overall hospital visits decreased from 12/21/2020-12/28/2020 compared to the previous week. The case count with COVID-19 related symptoms decreased for the past week (Figure). Please note, the last data point may not be complete.
- ◇ From 12/21/2020-12/28/2020, a decreased number of patients were assigned COVID-19 diagnosis codes (ICD-10 CM: U07.1) compared to the previous week in SyS data.
- ◇ For COVID-19 lab orders submitted in SyS the week of 12/21/2020, zero COVID-19 lab orders were detected for persons experiencing homelessness, three COVID-19 lab orders were detected for persons living in a nursing home, and two COVID-19 lab orders were detected for correctional facilities.
- ◇ From 12/21/2020-12/28/2020, the case count with influenza diagnosis codes decreased compared to the previous week in SyS data.
- ◇ Compared to the previous week, hospital visits related to suicidal ideation and suicide attempt decreased from 12/21/2020-12/28/2020 (Figure). Hospital visits related to mental health impacts during/after a disaster also decreased from 12/21/2020-12/28/2020 compared to the previous week.
- ◇ Please find more COVID-19 related information on the following county specific web pages:

[CDPHE COVID-19 Case Data](#), [TCHD COVID-19 Case Updates](#), [Boulder County COVID-19 Illness and Recovery](#), [Denver County COVID-19 Case Reporting](#), [El Paso Coronavirus Disease 2019](#), [Jefferson County COVID-19 Case Summary](#), [Larimer County Community COVID-19 Monitoring](#), [San Juan Basin Public Health COVID-19 Data Dashboard](#).

Figure. COVID-19 Related Symptoms, Suicidal Ideation, Suicide Attempts, Disaster Mental Health Impacts, and Diagnosed Influenza in Colorado Local Syndromic Surveillance Counties*



— 4-Day Trend: COVID-19 Related Symptoms (R. Axis) — 4-Day Trend: Suicide Ideation (R. Axis)
— 4-Day Trend: Suicide Attempt (R. Axis) — 4-Day Trend: Disaster Mental Health Impacts (R. Axis)
— 4-Day Trend: Diagnosed Influenza (R. Axis)

- Public Health Guidelines and Orders**
- 3/09/2020 - Released the COVID-19 Test Guideline
 - 3/12/2020 - Updated the COVID-19 Testing Guideline
 - 3/16/2020 - Closure of Bars, Restaurants, Theaters, Gyms and Casinos
 - 3/18/2020 - Social Distancing
 - 3/18/2020 - Suspension of Normal In-Person Instruction
 - 3/22/2020 - Reduce In-Person Workforce
 - 3/25/2020 - Stay-at-Home Order
 - 4/26/2020 - Safer-at-Home Order
 - 5/09/2020 - Denver Metro Area Safer-at-Home Order went into effect
 - 6/01/2020 - Safer at Home in the Vast, Great Outdoors
 - 6/30/2020 - Bars and nightclubs will close for in-person service
 - 7/17/2020 - Statewide Mask Mandate for Colorado
 - 7/21/2020 - Colorado Prohibits serving alcohol after 10 pm
 - 7/24/2020 - TCHD Face Covering Order
 - 9/15/2020 - Public Health Order for the Safer at Home DIAL went into effect
 - 10/16/2020 - Public health order masks in/outdoors, limits gatherings in Denver
 - 10/16/2020 - Public health order limiting gatherings and alcohol sales in Adams & Arapahoes counties
 - 11/6/2020 - Home by 10 Order in Denver county
 - 11/7/2020 - Public Health order implementing curfew in Adams county

* Colorado Local Syndromic Surveillance Counties: Adams, Arapahoe, Boulder, Broomfield, Denver, Douglas, El Paso, Jefferson, Larimer, La Plata, Mesa, Montezuma, Pueblo Counties.
 * The Children's Hospital of Colorado data is included as of 10/15/2020.
 * Facilities temporarily closed as of 10/12/20 include: SCL Health St. Joseph ED in Aurora and Littleton
 * The following counties' information was added on 05/24/2020: Broomfield, La Plata, Mesa, Montezuma, Pueblo Counties.