

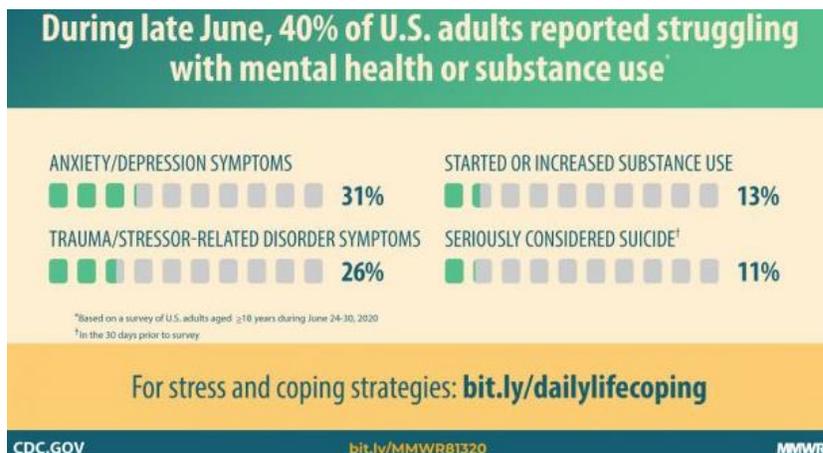


## Reference of the Week

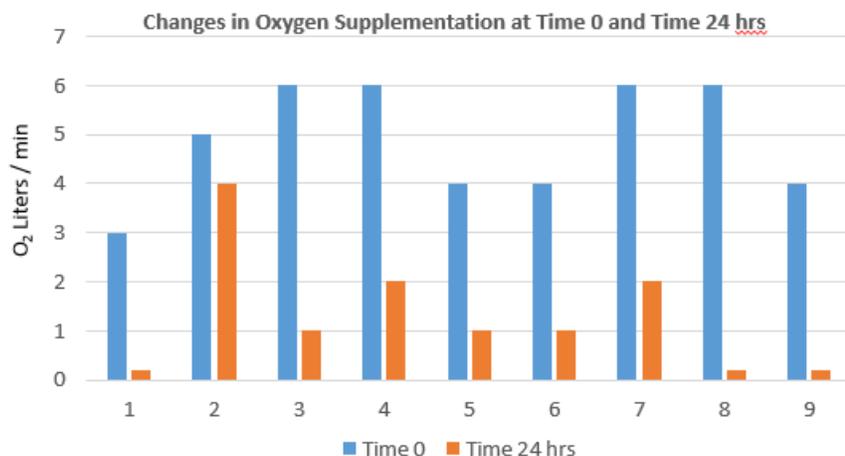
- Gaiha SM. Association Between Youth Smoking, Electronic Cigarette Use, and Coronavirus Disease 2019. *J of Adolescent Health*. 8/11/2020 (pre-publication).  
[https://www.jahonline.org/article/S1054-139X\(20\)30399-2/fulltext](https://www.jahonline.org/article/S1054-139X(20)30399-2/fulltext) pdf  
**Premise:** **1.** The relationship of adolescent e-cigarette, cigarette, and dual use to COVID-19 related outcomes is unknown. **2.** A national on-line survey managed through Qualtrics was used to assess symptoms, testing, and diagnosis of COVID-19 in 13-24 year olds. **3.** A 15-20 minute survey was used and results controlled for demographics, mother's education (as an indicator of socioeconomic status), body mass index, complying with county shelter-in-place orders and state percentage of COVID-19-positive cases.  
**Findings:** **1.** 4,351 individuals completed the online survey from 50 states and the District of Columbia including 1,442 participants ages 13-17 years. **2.** Symptoms of COVID-19 were 2 fold more likely in African-Americans and Latinos, 1.8 times more likely in LGBTQs, and 1.6 times in individuals who did not shelter in place. **3.** Testing was 3.3 times more likely in ever-users of e-cigarettes, 3.6 times in dual users, and 3.9 times of cigarette ever-users. **4.** Diagnosis of COVID-19 was 5 times more likely in ever-users of e-cigarettes, 7 times more likely in dual users, and 6.8 times in dual users within the last 30 days. *Add e-cigarette use and/or dual use smoking to the list of risk factors for COVID-19 mandating that we ask adolescents of their smoking behaviors and step-up our cessation efforts especially during this pandemic.*

## Other References:

- Lee S. Czeisler ME. Mental Health, Substance Use, and Suicidal Ideation during the COVID-19 Pandemic — United States, June 24–30, 2020. *MMWR*. 08/14/2020.  
[https://www.cdc.gov/mmwr/volumes/69/wr/mm6932a1.htm?s\\_cid=mm6932a1\\_w](https://www.cdc.gov/mmwr/volumes/69/wr/mm6932a1.htm?s_cid=mm6932a1_w) pdf  
**Premise:** **1.** COVID-19 and mitigation interventions have impacted the mental health of HCWs and the general population but the extent of mental health challenges and changes in substance use and suicidal ideation in the USA adult population are unclear. **2.** Representative panel surveys were conducted among individuals  $\geq 18$  years of age to ascertain symptoms of anxiety and depression, symptoms of trauma- and stressor-related disorder (TSRD), initiation or augmentation of substance use, serious consideration of suicide, and changes noted within the previous 30 days. **3.** Results were stratified according to gender, age, race/ethnicity, and other demographic consideration such as those who are unpaid caregivers. **4.** The study was managed by Qualtrics and results were compared to similar data/studies performed prior to the pandemic.  
**Findings:** **1.** 5,896 adults completed the study: 40.9% reported an adverse mental/behavioral health condition such as anxiety, depression and TSRD. **2.** 13.3% started or increased substance use and 10.7% experienced suicidal ideation in the 30 days prior to the survey. **3.** Adverse conditions were more common among persons of color, essential versus non-essential workers, and unpaid caregivers of adults. **4.** Among the 1,497 respondents who completed two prior surveys, unpaid caregivers of adults had a 3 fold increase in substance use and suicidal ideation. *Despite limitations, this study exposes major collateral hardship wrought by the pandemic especially for young adult males, persons of color (African-Americans, Hispanics), and unpaid individuals caring for the elderly. No doubt some of these findings can be extended to adolescents.*



- Joyner MJ. Effect of Convalescent Plasma [CP] on Mortality among Hospitalized Patients with COVID-19: Initial Three-Month Experience. <https://www.medrxiv.org/content/10.1101/2020.08.12.20169359v1> pdf  
**Premise/methods:** 1. CP has been used extensively to treat a variety of infectious disease including those that cause respiratory disease. 2. CP is being used to treat COVID-19 in the absence of a vaccine and limited anti-viral therapies. 3. Mayo managed the US Expanded Access Program (EAP) for the use of CP in COVID-19. 4. Outcomes for this multicenter prospective open-label adult study included: 1. Does the timing of treatment impact on the course of disease. 2. Do higher AB levels in transfused CP result in reduced mortality?  
**Findings:** 1. Data was included for 35,322 transfused patients from 1,959 registered sites: 52.3% required ICU; 27.5% were receiving mechanical ventilation. 2. The 7 day mortality rate was 8.7% in patients transfused within 3 days of diagnosis and 11.9% transfused  $\geq$  4 days of diagnosis. The 30 day mortality rate also demonstrated the same statistically significant difference in mortality between “early” and “late” CP transfusion. 3. For patients with high, medium, and low AB titers in CP the 7 day mortality was 8.9%, 11.6%, and 13.7% respectfully. The 30 day mortality also demonstrated the same relationship between IgG AB titer and mortality. *This study adds to at least 10 other reports suggesting that CP is a beneficial therapy, particularly when administered early, and the safety profile is acceptable. It appears the CP is harvested 14 days after resolution of symptoms and ideally is screened for containing high neutralizing AB titers.*
- van de Veerdonk FL. Outcomes Associated With Use of a Kinin B2 Receptor Antagonist Among Patients With COVID-19. JAMA-infectious diseases. 08/13/2020.  
<https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2769237> pdf  
**Premise/Methods:** 1. The kallikrein-kinin system and the production of bradykinin contributes to pulmonary vascular permeability and is degraded by ACE2 receptor that may be rendered dysfunctional by SARS-CoV-2 theoretically increasing bradykinin levels. 2. Actibant is an FDA approved drug (Firazyr) released for the treatment of hereditary angioedema (HAE) that blocks bradykinin receptor binding. 3. This was a single center case control study of adults PCR + for SARS-CoV-2 who required oxygen therapy ( $\geq$  3 L/min) and had an abnormal chest CT. 4. The primary outcome was change in oxygen requirement; secondary outcomes were changes in D-dimer level, fever, and safety.  
**Findings:** 1. Nine patients received actibant by SC injection and were acceptably matched with 18 control patients. 2. The agent was “well-tolerated” with no significant adverse events reported. 3. All 9 members of the intervention group demonstrated a reduction in oxygen within 24 hours whereas only 8 of the control group had a reduction or no change. 4. No association to changes in D-dimer levels or fever curve was found.



*This very preliminary study of the repurposed drug actibant (Firazyr) for COVID-19 provides another pathway for potential treatment of non-cardiogenic pulmonary edema in patients suffering from ARDS in this disease.*

## SEE THE ARTICLE CABINET ON THE S: DRIVE, “COVID-19 ARTICLE RESOURCE CABINET” FOR CHILDREN’S FULL COLLECTION

- Kroshus E. Plans of US parents regarding school attendance for their Children in the fall of 2020: A National Survey. JAMA. 8/14/2020.

<https://jamanetwork.com/journals/jamapediatrics/fullarticle/2769634> pdf

**Premise/Methods:** **1.** Parental plans for schooling and drivers for this decision are largely unknown. **2.** Qualtrics managed an English only anonymous on-line (computer or phone) survey of demographically diverse parents across the US with an over-representation of Blacks and Latinos. **3.** The primary outcome was parent-reported plans for their child’s school attendance. **4.** Parents beliefs were assessed: (1) confidence in the school; (2) difficulty keeping their child at home; (3) fear of COVID-19; and (4) fear of multisystem inflammatory syndrome (MIS-C).

**Results:** **1.** 727 parents completed the survey: 28% Black, 27% Hispanic; 53% female; 37% lower income; 34% with 1 or more medically vulnerable household occupant; 57% could work from home; and 44% had flexible work hours. **2.** 49% would probably or definitely send their children to school and 30% probably or definitely keep their child at home. **3.** Only 29% were confident that schools could prevent the spread of COVID-19; 45% felt schools could meet their children’s academic needs. **4.** Characteristics of parents who would keep their children at home: lower socioeconomic status; flexible jobs or unemployment; household with a vulnerable individual; but NOT race or ethnicity; and concern for COVID-19 and/or MIS-C. *This study is concerning in that almost 1/3 of parents are not likely to send their children to school regardless of what school districts decide. Local decision-making must take into account parental concerns, and resources for distant learning. We must provide parents with realistic risks of COVID-19 and MIS-C as well as the requirements for successful homeschooling.*

## SEE THE ARTICLE CABINET ON THE S: DRIVE, “COVID-19 ARTICLE RESOURCE CABINET” FOR CHILDREN’S FULL COLLECTION