[**Symptoms of Anxiety or Depressive Disorder and Use of Mental Health Care Among Adults During the COVID-19 Pandemic — United States, August 2020–February 2021**](link) **(MMWR)**

Bottom Line: The percentage of adults with recent anxiety or depressive disorder symptoms, and those reporting an unmet mental health care need, increased from August 2020 to February 2021, with the largest increases among 18-29 year-olds and those with less than a high school education.

Details: This report shares findings from the Household Pulse Survey, which was conducted to rapidly monitor changes in access to mental health care and status among US adults during the COVID-19 pandemic. From 8/19/20-2/1/21, the percentage of adults with recent (past 7 days) anxiety or depressive disorder symptoms increased from 36.4% to 41.5%; increases were observed for all groups of adults except those ≥80 years of age and non-Hispanic adults reporting races other than Black, Asian, or White. The percent of those reporting that they had an unmet need for mental health counseling or therapy in the past month also increased, from 9.2% to 11.7%. Reported mental health care treatment also increased during this time period, from 22.4% to 24.8%. 18-29 year-olds and adults with less than a high school education saw the largest increases in symptoms and unmet mental health care need. During the survey period 1/20/21-2/1/21, 23.8% of respondents with anxiety or depressive disorder symptoms reported an unmet mental health need.

Key Takeaways:
- During 1/20/21-2/1/21, 1 in 4 adults reporting anxiety or depressive disorder symptoms had an unmet mental health need.
- Findings regarding an increase in mental health problems and needs among adults during the COVID-19 pandemic can be used to evaluate the effect of strategies/policies and support the development of interventions for groups that are disproportionately affected.

[**Persistent Neurologic Symptoms and Cognitive Dysfunction in Non-Hospitalized Covid-19 "Long Haulers"**](link) **(Annals of Clinical and Translational Neurology)***

Bottom Line: In this study, the most common and persistent neurological symptom experienced by non-hospitalized COVID-19 "long haulers" was "brain fog," and there were few significant differences between participants with and without lab-confirmed SARS-CoV-2 infection.

Details: This study looked at the range of neurological symptoms and sequelae experienced by non-hospitalized COVID-19 "long haulers" (also known as Post-Acute Sequelae of SARS-CoV-2 infection, or PASC). The first 100 consecutive patients who were treated (virtually or in person) at a COVID-19 clinic focused on neurological symptoms in Chicago from May-November 2020 were included. Due to limited SARS-CoV-2 testing early in the pandemic, only 50 patients had lab-confirmed SARS-CoV-2 infection (PCR or antibody), but all participants experienced the initial physical symptoms (Infectious Diseases Society of America definition) of COVID-19. Other inclusion criteria were not being hospitalized for pneumonia or hypoxemia and experiencing neurological symptoms

*Denotes a study that has garnered some media attention

for over 6 weeks. The average age of the sample was 43.2, and the majority were female (70%) and White (88%). Patients resided in 21 states, and almost half (48%) were evaluated via telemedicine. Participants' comorbidities were most frequently depression/anxiety (42%) and autoimmune disease, insomnia, and lung disease (16% each). The most common neurological issues among the sample were: "brain fog" (81%), headache (68%), numbness/tingling (60%), altered sense of taste (59%), loss of smell (55%), and myalgia (55%); only loss of smell was more frequent in the lab-confirmed SARS-CoV-2 group. Symptoms fluctuated, and most had not completely resolved by their initial visit. Common non-neurological symptoms were fatigue (85%), depression/anxiety (47%), shortness of breath (46%), and chest pain (37%). There was no association between time symptoms started and participants' subjective sense of recovery. Both participants with positive and negative lab-confirmed SARS-CoV-2 infection had cognition and fatigue scores that indicated impaired quality of life, and those with lab-confirmed infection did worse than a demographically matched US population in working memory cognitive tasks and attention. While the study was not intended to identify underlying mechanisms of PASC, authors point to a possible autoimmune contribution, neuropsychiatric vulnerability, and/or inflammation of brain vessel endothelial cells.

Key Takeaways:
- The neurological manifestations of COVID-19 reported in this study among non-hospitalized individuals are numerous and point to the need for a multidisciplinary approach to building the evidence base and providing care.
- In addition to a small sample size, study limitations include: a racially homogenous sample that was able to access clinical care; individuals within the SARS-CoV-2 negative group that had post-viral syndromes caused by other viruses, rather than SARS-CoV-2; lack of pre-COVID-19 cognitive and quality of life assessments which precluded comparing patient-level changes; and participants not having the same lab, imaging, and neurophysiologic testing.

[**Interim Estimates of Vaccine Effectiveness of BNT162b2 and mRNA-1273 COVID-19 Vaccines in Preventing SARS-CoV-2 Infection Among Health Care Personnel, First Responders, and Other Essential and Frontline Workers — Eight U.S. Locations, December 2020–March**] (MMWR)*

Bottom Line: In this prospective study of almost 4,000 healthcare, first responder, and other frontline workers undergoing SARS-CoV-2 testing for 13 successive weeks, mRNA vaccines were 90% and 80% effective in preventing SARS-CoV-2 infections ≥14 days after the second dose and ≥14 days after the first dose but before the second dose, respectively, regardless of symptom status.

Details: This study sought to better understand the real-world effectiveness of mRNA vaccines against symptomatic and asymptomatic SARS-CoV-2 among a cohort of health care workers, first responders, and other essential/frontline workers who underwent weekly SARS-CoV-2 testing, regardless of symptom status, for 13 weeks. The study period ran from 12/14/20-3/13/21, during which participants performed a nasal swab each week, regardless of COVID-19 symptom status, and additional swab and saliva collection if symptoms presented. Of 3,950 participants with no history of lab-confirmed SARS-CoV-2 infection, 63% (n=2,479) received both mRNA vaccine doses and 12% (n=477) received

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only 1 dose. A majority (63%) received the Pfizer-BioNTech vaccine. 161 SARS-CoV-2 infections (1.38 SARS-CoV-2 infections per 1,000 person-days) were identified by reverse transcription-polymerase chain reaction (RT-PCR) among unvaccinated participants, compared to 3 (0.04 infections per 1,000 person-days) among fully immunized participants ≥14 days after the second dose and 8 (0.19 infections per 1,000 person-days) among partially immunized participants ≥14 days after the first dose and before the second dose. 58% of infections were found through weekly testing and 42% through testing after symptom onset. mRNA vaccine effectiveness against SARS-CoV-2 infection, regardless of symptom status, was estimated to be 90% and 80% for fully and partially immunized participants, respectively.

Key Takeaways:
- This study contributes to a small but growing body of evidence supporting the effectiveness of Moderna and Pfizer's mRNA vaccines against SARS-CoV-2 infections in real world settings, which is consistent with findings from the vaccines' Phase III trials.
- It was not possible to estimate effectiveness measures by vaccine type nor how effective vaccines were against circulating variants.
- Study limitations include: fairly wide confidence intervals for effectiveness estimates at least in part due to the small numbers of post-immunization SARS-CoV-2 infections observed; and self-collection of specimens/shipping delays which could reduce sensitivity of virus detection.

[Association of Race/Ethnicity With Likeliness of COVID-19 Vaccine Uptake Among Health Workers and the General Population in the San Francisco Bay Area](#) (JAMA Internal Medicine)

Bottom Line: In this survey administered to community-residing adults and medical center employees in the San Francisco Bay Area, differences in COVID-19 vaccine intentions by race/ethnicity were similar in both groups.

Details: This cross-sectional survey explored COVID-19 vaccine intentions among a racially and ethnically diverse cohort of medical center employees and community-residing adults in the San Francisco Bay Area from 11/27/20-1/15/21. 3935 adults randomly selected from households and 2501 employees from 3 medical centers who volunteered for routine COVID-19 testing were included. Survey questions assessed likeliness to get a COVID-19 vaccine, how early they would like to receive a vaccine, and reasons to get or not get vaccinated. Response rates were high (80% and 72% of the general population and medical center cohorts, respectively). While a higher proportion of medical center employees intended to get a COVID-19 vaccine (84% vs 66%), differences in vaccine intentions by race/ethnicity were similar in both cohorts. In the medical center and general population cohorts, respectively, the adjusted odds ratio (95% Confidence Interval) of vaccine intentions relative to White respondents was 0.24 and 0.29 for Black respondents, 0.50 and 0.55 for Latinx respondents, 0.37 and 0.57 for Asian respondents, 0.28 and 0.62 for respondents of other races, and 0.49 and 0.65 for respondents of multiple races. Black, Latinx, and Asian respondents were more likely than White respondents to endorse reasons to not get vaccinated - specifically: less confidence that vaccines prevent COVID-

19; less trust in pharmaceutical companies making vaccines; and more concerns that the vaccine approval process was rushed.

Key Takeaways:
- In this study, working in a medical setting did not counterbalance differences in COVID-19 vaccine intentions by race/ethnicity.
- Vaccine intentions are dynamic, and a focus on them should not preclude the need to ensure equitable access to vaccines.
- Vaccine rollout efforts must acknowledge and address the role of structural racism in diminishing trust in medical/scientific institutions among historically marginalized populations, perpetuating unequal access to health care, and undermining COVID-19 vaccine confidence.

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