Welcome to the weekly newsletter from the Center for Addiction Research! Each newsletter includes highlights from addiction in the news topics, active funding opportunities offered by NIDA/NIAAA, and information about any new publications from CAR members. Please email Jen Rowe (roweji@ucmail.uc.edu) to change your communication preferences. Thank you.

Thank you for your interest in the Center for Addiction Research - our mission is to accelerate scientific progress in the prevention and treatment of substance use disorders and their consequences by fostering research collaborations across: 1) UC departments, colleges, and centers including Cincinnati Children’s Hospital Medical Center; 2) Local, regional, and state community and governmental partners; and 3) Other academic institutions and industry.

**UC/ Regional News**

**Fentanyl, Coronavirus Pandemic Push Indiana Overdose Deaths To Record Highs**
Indiana experienced record overdose deaths in 2020, according to new federal data. The report, released Wednesday from the Centers for Disease Control and Prevention, estimates 2,268 Hoosiers died of drug overdoses last year, up from an estimated 1,704 overdose deaths in 2019. Available state data, which goes back to 2011, puts the previous record at 1,852 overdose deaths…

**Families of Addicts holds first annual "Rally 4 Recovery"**
An organization in Van Wert is shedding light on the serious drug epidemic happening not only in Ohio but all over the county. According to the Ohio Department of Health, drug overdoses killed more Ohioans in 2020 than in the past 14 years. The Families of Addicts nonprofit organization, or FOA, is working toward not only helping addicts get recovery but spreading awareness…

**After 28-year addiction, a Kentucky woman shares her story of hope**
Sitting in front of a laptop, Alyssa McGuffey looked at images of an expressionless woman, some of them booking photos from jail. "I see a real broken and hopeless and lost person,” she said. The photos showed a woman who was decades into a struggle with drugs. They were photos of McGuffey’s former self. "I got as high as I could every day to deal with it,” McGuffey said. “To just…"
Op-Ed: Who is responsible for the opioid crisis, and who ultimately pays?
In 2013, I was researching a book about the opioid epidemic and found myself with a lawyer touring a neighborhood known as the Bottoms in the town of Lucasville in southern Ohio. The Bottoms is a neighborhood of poor people living in trailers and small, rough houses, and it is flooded every so often by the Scioto River, which runs nearby. Among the things that had mangled the lives…

National News

Confinement Triggers Overdose Deaths; The US Reported More Than 93 Thousand Deaths.
The Central Valley (CA) Business Journal (7/19) reports, “While between 2010 and 2019, 1,192 deaths from drug use and overdose were reported in” Mexico, “in 2020, during confinement due to the covid-19 pandemic, 1,735 deaths were recorded from this cause.” According to the article, “The drugs most consumed in this period were legal ones, such as alcohol, as well as marijuana, cocaine, heroin, tranquilizers, barbiturates, opium / morphine and inhalants, indicate the Units of Medical Specialties Centers for Primary Care in Addictions (UNEME-CAPA ) attached to the National Commission against Addictions.” In the US, “drug overdose deaths last year were more than 93,000.” Drugs on the street became more deadly as “traffickers mixed fentanyl, cocaine and methamphetamine to boost its effects, according to” NIDA Director Dr. Nora Volkow.

The Psychiatry Advisor (7/15, Nye) reports, “Access to marijuana and alcohol among adolescents has declined at historic rates during the COVID-19 pandemic, however, adolescents still reported using these substances at the same rates as before social distancing measures had begun.” The cross-sectional analysis was published in Drug and Alcohol Dependence. Data from the NIH’s Monitoring the Future survey “were analyzed in this study. Students (N=582) in the 12th grade in the US were invited to respond to questions about substance use and availability 1 month prior to social distancing measures and again later in the summer of 2020.” The article adds that the research “indicated that a supply side approach to reducing use of substances among adolescence may not be effective.”

High-Dose Buprenorphine A ‘Game Changer’ For Opioid Addiction.
Medscape (7/16, Brooks, Subscription Publication, 219K) reported research indicates “administering high-dose buprenorphine in the emergency department (ED) to individuals with untreated opioid use disorder (OUD) is safe, well tolerated, and may help get more patients into treatment after discharge.” NIDA Director Nora Volkow, MD, said in a news release, “Emergency departments are at the front lines
of treating people with OUD and helping them overcome barriers to recovery such as withdrawal.” She added that offering buprenorphine in EDs presents “an opportunity to expand access to treatment, especially for underserved populations, by supplementing urgent care with a bridge to outpatient services that may ultimately improve long-term outcomes.” The findings of the 391-patient study, which was received funding from NIDA, were published online July 15 in JAMA Network Open.

**Lessons Learned – And Lost – From A Vietnam-Era Study Of Addiction.**

In an opinion for STAT (7/19, 262K), author Lauren Aguirre writes that opioids have “been given special attention in the news, funding bills, and the 2017 President’s Commission on Combatting Drug Addiction and the Opioid Crisis,” but Aguirre questions if the evidence justifies that view. She points to the “unexpected results” from a study funded by the NIH, Defense Departments, and the Veterans Administration that took place 50 years ago that “shed light on the nature of addiction and the position of opioids in an array of other widely misused legal and illegal drugs.” She added, “Sociologist Lee N. Robins, who was hired to lead the research project, selected and interviewed a random sample of 470 soldiers from the nearly 14,000 headed home” from Vietnam “in September 1971, as well as a sample of 495 who had tested positive for opioids” and learned “that heroin use was uncommon, even among those who had become addicted in Vietnam” about 8 to 12 months after returning to the US.

**Opinion: Opioid Fight Must Widen Its Focus To People Moving Down The Pipeline From Initiation To Overdose.**

In an opinion for Newsweek (7/20, 2.67M), Society of Addiction Psychology President-Elect Aaron Weiner writes that the CDC “just released its provisional overdose numbers for 2020, and the news is dire.” Weiner says, “I’m going to be blunt; we’re losing this war against opioid addiction, and it’s not just because of COVID-related disruptions.” He adds that by “narrowing our focus” on “the very beginning of opioid addiction (prescription) or end-stage disease (overdose),” that “hundreds of thousands of people moving down the pipeline from initiation to overdose” are being missed.

**Op-Ed: American Healthcare Consumers Also Play Role In Opioid Crisis.**

In an op-ed for the Los Angeles Times (7/18, 3.37M), contributor Sam Quinones writes that he heard “the recent resolution to lawsuits brought by 15 state attorneys general. Purdue, as we know it, would cease to exist.” Quinones explains, “OxyContin (oxycodone) helped ignite the new heroin market that expanded as prescription pain pills spread coast to coast.” Quinones adds that the opioid “epidemic was too complex for one group to have created,” and “none of this would have been possible without us – American healthcare consumers.”
Coronavirus-Related Stress Likely A Factor In Record Overdose Deaths, Experts Say.

Fox News (7/15, Rivas, 23.99M) reports, “Overdose deaths hit a record 93,000 amid coronavirus last year due to pandemic-driven instabilities and loss of support systems, inaccess to medical care and the increasing presence of deadly synthetic opioids, top experts in addiction suspect.” National Institute on Drug Abuse Director Dr. Nora Volkow told Fox News, “It’s a horrifically tragic loss of life, particularly considering where we have been going as a country, as a world, with so many people dying. ... We have all been affected by COVID in so many ways.” Furthermore, according “to Volkow, deaths tied to fentanyl increased by over 55% in the 12-month period ending December 2020, and deaths tied to methamphetamine climbed by 46%.”

Analysis: Pandemic Complicated Pregnant Women’s Access To Drug Rehab.

The AP (7/15, Fassett) reports, “With the rise of the opioid epidemic, there has been a growing movement among health care professionals and state social workers to help mothers get sober rather than punish their drug use. ... But such programs are a rarity in the world of rehab, and experts fear that even more limitations during the pandemic will stifle what little progress has been made.” The AP says that “amid a fourfold increase in opioid use disorders among pregnant women in the past two decades,” the federal government “responded by requiring states in 2016 to track and address drug-exposed infants and by allowing states in 2018 to repurpose some foster care money to help families stay together.” However, the AP says, “much of that work...has been disrupted by the pandemic.”

How Can We Improve COVID Vaccine Access For People Who Use Drugs?

Filter (NY) (7/15, Kleykamp) reports, “As the highly contagious Delta variant continues to spread across the US, cases and hospitalizations are on the rise in most states, especially those with low vaccination coverage,” which “leaves many people and communities at risk – disproportionately the most marginalized communities, including people who use drugs.” A study released in September “confirmed...people who use drugs, especially opioids, are more likely than the general population to be hospitalized and die from COVID-19.” According to the article, “The CDC only recently acknowledged substance use as an underlying health condition that should be prioritized for vaccination.” National Institute on Drug Abuse Director Dr. Nora Volkow “agrees with the prioritization and is frank about the risks at hand.” Volkow told Filter, “Getting the COVID-19 vaccine is crucial for substance use populations because they have a much greater likelihood of having severe outcomes from the virus, including death.”
Advisory Group Offers Criteria For How Massachusetts May Use Millions From Opioid Settlements.
WBUR-FM Boston (7/20, Bebinger, 71K) reports an advisory group in Massachusetts “has started hashing out criteria for how the state will use millions of dollars that has already started flowing from multiple lawsuits stemming from the opioid crisis.” A few of the “ways the group suggests Massachusetts might spend the money expected from pending opioid settlements” include: “Counseling for children who’ve lost a parent to overdose”; “Mobile vans distributing clean needles and treatment to rural areas”; “More job training for former drug users coming out of jail”; and “Recovery programs with black, brown and multilingual staff.”

Communities In Philadelphia Are Promoting Overdose Prevention Tools. 
The Verywell Health1 (7/20, Wolters) says, “Philadelphia reported 1,214 unintentional overdose fatalities in 2020, the city’s second highest on record,” and 81% of recorded cases involved fentanyl. According to the article, “To combat the overdose epidemic, experts and harm reduction advocates say people should carry Naloxone (narcan) even if they don’t use drugs.” Many clinics use medication-assisted treatment (MAT) which combines behavioral therapy and medications. NIDA Director Dr. Nora Volkow “says that MAT programs can be life-saving.” Volkow told Verywell, “When you have been repeatedly exposed to opioids, you become tolerant to them, and as a result, you need higher doses to get that same high.”

DIA:
CMS To Require Most Insurance Plans To Cover PrEP At No Cost
NBC Out (7/20, Ryan) reports, “In a move that is expected to prove transformative to the national HIV-prevention effort,” CMS, the Department of Labor, and the Department of the Treasury issued guidance on Tuesday requiring “almost all health insurers” to cover “the HIV prevention pill, known as PrEP, or pre-exposure prophylaxis, with no cost sharing – including for the drug itself and, crucially, for clinic visits and lab tests.” The shift “means the entire experience of maintaining a prescription to Truvada or Descovy, the two approved forms of PrEP, should now be totally free for almost all insured individuals.” However, a prescribing physician “must persuade an insurer that Descovy in particular is medically necessary for any specific patient to qualify for zero cost sharing for that drug’s use as HIV prevention.”

The Washington Post (7/17, Diamond, Bernstein, 10.52M) said, “A stunning report this week that an estimated 93,000 people died of drug overdose deaths in 2020 has renewed attention on the nation’s other epidemic: the drug crisis that the government, health-care workers and street-level activists have been battling
unsuccessfully for more than two decades.” The article added that the worsening crisis “may demand more innovative approaches” from President Biden “that advocates have been proposing for years and other countries have adopted.” National Institute on Drug Abuse Director Dr. Nora Volkow said, “The data speak for themselves, and they are shouting. ... We need to address the social determinants of health that put some people at a higher risk of drug use and addiction. ... We need to educate people that addiction can be treated. We need to provide access to these treatments for everyone who needs them.”

Review Shows Many Who Have Been Incarcerated In US Were Drug Offenders. The AP (7/21, Morrison) reports its own “review of federal and state incarceration data” shows that approximately 20 percent of people who spent time behind bars in the US between 1975 and 2019 had a “drug offense listed as their most serious crime.” According to the article, “The racial disparities reveal the uneven toll of the war on drugs.”

FDA Warns Against Nitrite “Poppers”. AllNurses (7/15) reports, “The FDA recently noticed an increase in hospitalizations and deaths linked to using nitrite ‘poppers.’” The agency issued a June 24 “statement warning consumers not to buy or use poppers that are typically sold online and in adult novelty shops.” The National Institute on Drug Abuse is mentioned.

Research Indicates Boredom May Be Tied To Mental Illnesses, Brain Injuries And Dysfunctional Behaviors. The Washington Post (7/16, 10.52M) reported, “Psychologists...are on a mission to unravel the mysteries of boredom, a little-studied yet universal human experience distinct from apathy or depression.” Early research “often dismissed boredom as temporary and inconsequential, but recent work has established its links to mental illness, traumatic brain injury and dysfunctional behaviors such as reckless driving and substance abuse.” Some experts “believe the feeling is a modern phenomenon, driven by technology and a constant overload of meaningless stimulation. But historical literature proves that even our counterparts in ancient times had the burden of tedium to bear.”

Becerra Visits New Hampshire To Celebrate Child Care Tax Payments, Address Rising Number Of Drug Overdoses. The New Hampshire Union Leader (7/15, Landrigan, 100K) reports, “Celebrating an expanded child care tax credit and vowing a more vigorous campaign to reduce the record drug overdoses linked to the pandemic, Health and Human Services Secretary Xavier Becerra came to New Hampshire Thursday.” A rally held in Manchester marked “the first day when 130,000 New Hampshire families began to receive monthly checks of up to $300 to support childcare for 216,000 children in
the state.” Becerra said to applause, “Check your bank account, check your mail, you may have a $300 check or deposit. ... We want to give back [to] parents a tax cut for their kids.” Following “the rally, Becerra was the guest star at a childcare roundtable at Southern New Hampshire Services in Manchester.” Subsequently, “Becerra attended a substance abuse disorder roundtable at Harbor Health Care, and then took a tour of the Revive Recovery Center, both in Nashua.”

Funding Opportunities

PAR-21-287
Effectiveness of School-Based Health Centers to Advance Health Equity (R01 Clinical Trial Optional)

NOT-NS-21-062
Notice of Intent to Publish a Funding Opportunity Announcement for BRAIN Initiative: Team-Research BRAIN Circuit Programs - TeamBCP (U19 Clinical Trial Required)

NOT-NS-21-063
Notice of Intent to Publish a Funding Opportunity Announcement for BRAIN Initiative: Team-Research BRAIN Circuit Programs - TeamBCP (U19 Clinical Trial Not Allowed)

NOT-DA-21-047
Notice of Change to Application Types Allowed for PA-20-173, PA-20-174, PA-20-171, "Independent Scientist Award (Parent K02)"

CAR Member New Publications

Heroin use is associated with liver fibrosis in the Miami Adult Studies on HIV (MASH) cohort Marianna K Baum, Javier A Tamargo, Richard L Ehman, Kenneth E Sherman, Jun Chen, Qingyun Liu, Raul N Mandler, Colby Teeman, Sabrina S Martinez, Adriana Campa

Journal Drug and Alcohol Dependence,
DOI: https://doi.org/10.1016/j.drugalcdep.2021.108531

ABSTRACT

Background: People who use opioids and people living with HIV (PLWH) are at increased risk for liver-related morbidity and mortality. Although animal models suggest that chronic
opioid use may cause liver damage, research in humans is limited. We aimed to determine whether opioid use, particularly heroin, was associated with liver fibrosis.

**Methods:** Cross-sectional analysis of 679 participants (295 HIV/HCV uninfected, 218 HIV mono-infected, 87 HCV mono-infected, 79 HIV/HCV coinfected) from the Miami Adult Studies on HIV (MASH) cohort. Liver fibrosis was assessed via magnetic resonance elastography (MRE) on a 3 T Siemens MAGNETOM Prisma scanner.

**Results:** A total of 120 (17.7 %) participants used opioids. Liver fibrosis was present in 99 (14.6 %) participants and advanced liver fibrosis in 31 (4.6 %). Heroin use (N = 46, 6.8 %) was associated with HCV-seropositivity, smoking, misuse of prescription opioids, and polysubstance use. The use of heroin, but not misuse of prescription opioids, was significantly associated with liver fibrosis (OR = 2.77, 95 % CI: 1.18-6.50) compared to heroin non-users, after adjustment for confounders including excessive alcohol consumption, polysubstance use and HIV and HCV infections. Both HIV and HCV infections were associated with liver fibrosis, whether virally suppressed/undetectable or viremic.

**Conclusions:** Heroin use was independently associated with increased risk for liver fibrosis irrespective of the use of other substances and HIV or HCV infections. Both HIV and HCV were associated with higher risk for liver fibrosis, even among those with suppressed or undetectable viral loads. The exact mechanisms for opioid-induced liver fibrosis remain to be fully elucidated.

**Keywords:** HIV; Hepatitis C; Liver diseases; Opioids; Substance abuse.