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**

### **Spectrum News highlights UC researchers and HEALing Communities Study**

The University of Cincinnati's John Winhusen and Caroline Freiermuth discussed the evidence-based practices implemented during the HEALing Communities Study to fight the opioid epidemic with Spectrum News. The national effort to reduce opioid-related overdose deaths has laid the groundwork for more widely available opioid use disorder treatment, safer prescribing practices, and community-based overdose education and naloxone distribution that can save lives, according to researchers who led Ohio's participation in the initiative. Launched in 2019, the HEALing (Helping to End Addiction Long-Term) Communities Study (HCS) is the largest addiction prevention and treatment implementation study... (Dr. T. John Winhusen is the HEALing Communities Study Co-Principal Investigator for Ohio and the CAR Director; Dr. Caroline Freiermuth, CAR Core Co-Leader Population Health and Health Services and CAR member)

### **Com Office of Research Gallery of Awardees**

The CoM Office of Research publicizes faculty who have been awarded external grants of \$100,000/yr. or more and recently featured **CAR Member, Dr. Jayme McReynolds**.

• **Jayme McReynolds, PhD**, assistant professor, Department of Pharmacology and Systems Physiology, National Institute on Drug Abuse R01, "Role of Prelimbic Cortical Endocannabinoid Signaling in Enhanced

Cocaine-seeking Behavior Following Combined Repeated Stress and Cocaine Use in Rats."

## How a Cincinnati mom became a 'light in this dark place' for people with addiction

CINCINNATI (ENQUIRER) - It's early Tuesday morning and Sarah Coyne, 34, approaches an apartment door in Millvale. She has a sheriff's deputy next to her. Inside lives a mom and her three children. All four use fentanyl. Coyne has driven to their home every other week for over two years. She has given the family over 100 cans of Narcan – the opioid overdose antidote. Coyne knocks on the door and calls out "Kayla? It's Sarah." After a moment, the door opens. The Hamilton County Quick Response Team pairs trained peer navigators – people who themselves have experienced substance use conditions in the past or are behavioral health specialists – with law enforcement officers to reach out and help those with...

## More powerful than fentanyl: Rise in synthetic opioids in drug supply prompts health alert

Hamilton County Public Health is alerting the community to a rapid increase in the region's drug supply of a group of dangerous synthetic opioids. The opioids, known as nitazenes, are the latest public health threat flagged by health officials during an opioid epidemic that has taken the country by storm and only recently seen signs of ebbing in the region. Nitazenes range from being 75 to 1,500 times stronger than morphine. Depending on their chemical composition, they can be stronger than fentanyl, which is 100 times stronger than morphine and the primary cause of overdose deaths in the nation, according to federal drug law enforcement officials. Due to their potency, nitazenes are cause a high risk of...

### **Ohio Attorney General Cracks Down on Illegal Vape Sales to Protect Youth**

COLUMBUS, Ohio — Ohio Attorney General Dave Yost has launched a vigorous campaign to combat the proliferation of illegal vaping devices across Ohio, focusing on safeguarding young people from addiction and serious health risks associated with these products. Highlighting the dangers posed by unregulated vape cartridges, Yost emphasized the critical need for consumer protection, especially for Ohio's youth who are vulnerable to the unknown substances contained in these products during critical stages of development. Today, Yost took decisive action by filing complaints against three Ohio businesses under the state Consumer Sales Practices Act. Allegations include the unlawful sale of flavored vapes...

#### How an Ohio school is using job training to fight the opioid epidemic

Salineville, Ohio doesn't have a Chipotle or a Chick-Fil-A. The closest McDonald's is 20 minutes away. People here feel lucky to have a gas station eatery, says local Bill Watson. About 40 miles south of Youngstown, this tiny town is the type of place that people leave. "My wife and I, we often joke that of the people that we graduated with that went to college, we're the only ones that live here," Watson said. The

place was built up by thriving pottery manufacturers and steel producers. But over time, those industries faltered, big businesses shuttered. "When they left, there was nothing else," Watson said. Between 1980 and 2020, thousands of people fled the area. Then came opioids. "I would definitely say that...

# Revolutionary Kentucky-based opioid use disorder treatment device receives FDA approval

LEXINGTON, Ky. (WKYT) - It's a revolutionary device in the world of addiction recovery. "This can have a profound impact in our state. No question about it," said Isaiah House's Mike Cox. The video above shows the NET Device. It's an opioid use disorder treatment found exclusively at Isaiah House facilities. The neurostimulation therapy reduces opioid withdrawal symptoms within 24 hours. "Adhesive electrodes are placed behind the ears. Through a carefully programmed series of tiny electrical pulses, it restimulates the production of the body's own natural production of endorphins in the brain." For people in addiction, these naturally produced chemicals become depleted or replaced by their...

### **National News**

## Innovative program may reduce substance use among formerly incarcerated men

A study led by Liliane Cambraia Windsor at the University of Illinois Urbana-Champaign School of Social Work has shown significant reductions in alcohol and substance use among formerly incarcerated men through a unique combination of critical dialogue and capacity-building projects. This innovative approach, tested in a randomized clinical trial, offers new hope for communities struggling with high rates of substance use and its devastating consequences. The study, conducted with 602 men with histories of substance use disorders (SUD) and incarceration, aimed to identify effective intervention components that...

# As restrictions on cannabis and psychedelics ease, Americans dabble with 'microdosing'

Loosening local, state and federal regulations on cannabis and psychedelics has increased Americans' interest in microdosing, according to a study from researchers at the University of California San Diego. Published in JAMA Health Forum, the study found that the rate of microdosing-related Google searches grew by 1,250% from 2015 to 2023, with over three million searches in 2023 alone. This surge in interest correlates with recent legislative changes decriminalizing or authorizing the use of psychedelic substances in therapy and permitting recreational cannabis use. The research fills a gap in understanding how...

## WHO releases first-ever clinical treatment guideline for tobacco cessation in adults

The World Health Organization (WHO) recommends a comprehensive set of tobacco cessation interventions, including behavioral support delivered by health-

care providers, digital cessation interventions and pharmacological treatments in a first guideline on tobacco cessation. The guideline focuses on helping the more than 750 million tobacco users who want to quit all forms of tobacco. The recommendations are relevant for all adults seeking to quit various tobacco products, including cigarettes, waterpipes, smokeless tobacco products, cigars, roll-your-own tobacco, and heated tobacco products (HTPs). "This guideline...

# Pregnant women might not be receiving nicotine replacement therapy long enough to quit smoking

Maternal use of quit smoking medicine aligns with current clinical advice, but low completion rates of nicotine replacement therapy (NRT) may mean that pregnant women need more support to successfully quit smoking, a review of prescription medicine data has revealed. The UNSW-led population-wide study—published in JAMA Network Open June 28—aimed to find out how many pregnant women were using quit smoking medicines. Researchers looked at data for everyone giving birth over a five-year period in four countries: 1.7 million pregnancies in Australia (NSW only), New Zealand, Norway and Sweden. "Smoking...

### Few US adults use nicotine pouches, nationally representative study finds

A new study found that the prevalence of nicotine pouch use was low in U.S. adults despite a 641% increase in sales of the products between 2019 and 2022. Researchers say the findings raise questions about who is using the millions of nicotine pouches sold in the U.S. and why. Nicotine pouches, a new commercial tobacco product, contain a crystalline powder with nicotine, flavorings (including fruit, mint or candy) and other additives. They do not cause respiratory harm and are perceived by some as an alternative to help adults who smoke tobacco quit. Nicotine pouches have recently gained attention over concerns that...

### US urges dismissal of lawsuit demanding menthol cigarette ban

June 28 (Reuters) - The Biden administration asked a federal judge to dismiss a lawsuit by anti-smoking groups demanding that it end nearly a year of delay and ban menthol cigarettes, which are used disproportionately by Blacks and younger people. In a Thursday night court filing, the Food and Drug Administration said the delay was not unreasonable because it had yet to determine that a ban was "appropriate for the protection of the public health." The FDA also said the plaintiffs had no direct stake in a ban, having alleged at most "a setback to their abstract social interests," and therefore had no standing to sue. It...

### Unsafe neighborhoods could drive up smoking rates

It may sound far-fetched, but new research suggests that living in dangerous neighborhoods could trigger an unintended health harm: higher smoking rates among residents. "High levels of neighborhood threat shape perceptions of powerlessness among residents, amplifying a general sense of mistrust, that can promote maladaptive coping behavior like smoking," said researcher Michael

Zvolensky, a professor of psychology at the University of Houston. According to the U.S. Centers for Disease Control and Prevention, the neighborhoods people live in can determine their health and well-being. While such factors are now...

## Only 1 in 4 Adults Needing Opioid Use Disorder Treatment Received Medications

Only about a quarter of adults who needed treatment for opioid use disorder (OUD) received recommended medications, survey data showed. In 2022, the National Survey on Drug Use and Health (NSDUH) found that 3.7% of U.S. adults -- approximately 9.4 million people -- needed OUD treatment. Of those, 55.2% received any treatment, and 25.1% of adults received medications for opioid use disorder (MOUD), reported Deborah Dowell, MD, of the CDC's National Center for Injury Prevention and Control in Rockville, Maryland, and co-authors in Morbidity and Mortality Weekly Report (MMWR). Many adults who needed OUD...

### 7-Day Buprenorphine Promising for Mild Opioid Withdrawal

Extended-release 7-day injectable buprenorphine was safe and tolerable for most patients who had minimal-to-mild opioid withdrawal, a nonrandomized trial found. Among 100 adult patients with minimal-to-mild opioid withdrawal scores who were given a 24-mg dose of extended-release buprenorphine, only 10 people (10%, 95% CI 4.9%-17.6%) saw a 5-point or greater jump in withdrawal symptoms within 4 hours of injection, reported Gail D'Onofrio, MD, of the Yale School of Medicine in New Haven, Connecticut, and colleagues. Scores were determined using the Clinical Opiate Withdrawal Scale (COWS), an 11-item questionnaire...

## Most Americans don't know that primary care physicians can prescribe addiction treatment

Results from a national survey indicate that many Americans, 61%, are unaware that primary care physicians can prescribe medications for opioid use disorder, and 13% incorrectly believed that they could not. The survey, funded by the National Institutes of Health (NIH), also found that 82% of the people who reported ever misusing prescription or illicit opioids expressed comfort in going to their primary care physicians for medications for opioid use disorder. Among those who had not misused opioids, a majority, 74%, reported they would be comfortable referring their loved ones to primary care for these medications...

### Brain neurotransmitter receptor antagonist found to prevent opioid addiction in mice

New research led by UCLA Health has found a drug that treats insomnia works to prevent the addictive effects of the morphine opioids in mice while still providing effective pain relief. The study, published in the journal Nature Mental Health, concluded that suvorexant, which blocks brain receptors for a neurotransmitter called hypocretin, prevents opioid addiction. At high doses in humans, suvorexant induces sleep and is used to treat insomnia. But sleep was not induced, and

behavioral alertness was maintained, at the much lower doses effective in preventing opioid addiction in mice. Hypocretin, also called orexin, is a peptide...

# Trained peers are as effective as clinical social workers in reducing opioid overdose, new trial finds

In Rhode Island, over one in four emergency department (ED) patients at high risk of overdose has a non-fatal opioid overdose in the 18 months after discharge. A parallel, two-arm, randomized controlled trial conducted of over 600 ED patients at high risk of opioid overdose in Rhode Island has found that support from a peer recovery support specialist (a trained support worker with lived experience of addiction) is as effective in reducing opioid overdose as support from a licensed clinical social worker. In other words, interviewing and intervention techniques informed by lived experience are as effective as those informed...

### Telehealth builds autonomy and trust in treating addiction, study finds

Even as the nation's opioid epidemic continues to ravage families and communities nationwide—with more than 100,000 Americans dying of drug overdoses each year—stigma remains a barrier for many people accessing treatment for addiction. A new study from Oregon Health & Science University suggests that telehealth may be an important antidote to overcoming stigma and reducing barriers for people seeking out the treatment they need. The study, published recently in the Harm Reduction Journal, compiled in-depth interviews with 30 people treated for substance use disorder at OHSU from March of 2020 to...

### Brain region involved in oxycodone relapse identified

Even years after they have recovered, a person who once struggled with alcohol or opioid addiction can relapse—and that relapse is more likely to occur during particularly stressful times. Now, Scripps Research scientists have identified an area of the brain that plays a key role in stress-induced oxycodone relapse. Their findings explain why the drug suvorexant, which they previously found to reduce alcohol and oxycodone relapse when administered orally, works so well. "Having a better understanding of the region(s) in the brain responsible for this kind of relapse is incredibly important as we develop treatments for...

# **Q&A:** Researcher discusses how machine learning helps identify patients at risk levels for opioid use disorder

Ronen Rozenblum, Ph.D., MPH, director of the Unit for Innovative Healthcare Practice & Technology and director of Business Development of the Center for Patient Safety Research and Practice at Brigham and Women's Hospital, and an assistant professor at Harvard Medical School, is the principal investigator and senior author of a new study published in JMIR Medical Informatics, "A Machine Learning Application to Classify Patients at Differing Levels of Risk of Opioid Use Disorder: Clinician Based Validation Study." In this article, Dr. Rozenblum discusses

this research. How would you summarize your study for a lay audience? Our study focused on using advanced machine learning (ML) to help clinicians...

# Report: 12.7 percent of adults using fentanyl or heroin also report using xylazine

A considerable proportion of adults reporting illegally manufactured fentanyl (IMF) or heroin use also use xylazine, according to research published in the July 4 issue of the U.S. Centers for Disease Control and Prevention Morbidity and Mortality Weekly Report. Xinyi Jiang, Ph.D., from the CDC in Atlanta, and colleagues identified a convenience sample of U.S. adults aged 18 years and older from those evaluated for substance use treatment during July 2022 to September 2023. Data were obtained from the Addiction Severity Index-Multimedia Version clinical assessment tool. The researchers found that 14.6% of the 43,947 adults...

### Stimulant users caught up in fatal 'fourth wave' of opioid epidemic

In Pawtucket, R.I., near a storefront advertising "free" cell phones, J.R. sat in an empty back stairwell and showed a reporter how he tries to avoid overdosing when he smokes crack cocaine. It had been several hours since his last hit, and the chatty, middle-aged man's hands moved quickly. In one hand, he held a glass pipe. In the other, a lentil-sized crumb of cocaine. Or at least J.R. hoped it was cocaine, pure cocaine — uncontaminated by any fentanyl, a potent opioid that was linked to nearly 80% of all overdose deaths in Rhode Island in 2022. He flicked his lighter to "test" his supply. If it has a "cigar like sweet smell," he said, it...

### Researchers unveils a critical role of the lateral septum in drug addiction

A research team led by Dr. Zhu Yingjie from the Shenzhen Institute of Advanced Technology, Chinese Academy of Sciences has published a study in Neuron that presents a comprehensive transcriptional profile of the lateral septum (LS) at the single-cell level, elucidating the spatial distribution of its major neuronal types. The study shows that neurons expressing estrogen receptor 1 (LSEsr1), predominantly located in the ventral subregion of LS, play a crucial role in reward-seeking and methamphetamine (METH) addiction. In 1954, psychologists Olds and Milner discovered the brain's reward system through intracranial self-stimulation...

### FDA OKs First Point-of-Care Test for Detecting Hep C in At-Risk Adults

The FDA on Thursday granted marketing authorization to the first point-of-care test for hepatitis C virus (HCV), enabling at-risk adults to be rapidly diagnosed and immediately linked to care if needed. The test -- the Xpert HCV test and GeneXpert Xpress System -- detects HCV RNA and is indicated for those with signs or symptoms of hepatitis C. Unlike before, when samples had to be sent to a central lab, the test can be used at doctors' offices, urgent care centers, substance use disorder treatment facilities, emergency rooms, and any other setting with a Clinical Laboratory Improvement Amendments (CLIA) Certificate of...

### **Funding Opportunities**



#### RFA-DA-25-057

<u>Combined Neuromodulation and Behavioral Treatment Algorithm Development for Stimulant Use Disorder (StUD) Enriched for Vulnerable Phenotype (U01 Clinical Trial Required)</u>

### PAR-24-220

NIH HEAL Initiative PainCare Clinician Training Program (PCTP): Mentored Patient-Oriented Research Career Development award (K23 - Clinical Trial Required)

### PAR-24-219

NIH HEAL Initiative PainCare Clinician Training Program (PCTP): Mentored Clinical Scientist Development Awards (K08 - Clinical Trials Not Allowed)

### NOT-NS-24-111

Notice of Correction to PAR-24-219: NIH HEAL Initiative PainCare Clinician Training Program (PCTP): Mentored Clinical Scientist Development Awards (K08 - Clinical Trials Not Allowed)

### PAR-24-218

NIH HEAL Initiative PainCare Clinician Training Program (PCTP): Mentored Clinical Scientist Development Awards (K08 - Basic Experimental Studies with Humans (BESH) Required)

#### PAR-24-217

NIH HEAL Initiative PainCare Clinician Training Program (PCTP): Mentored Clinical Scientist Development Awards (K08 - Clinical Trials Required)

#### PAS-24-242

<u>D-START: Data Science Track Award for Research Transition (D/START) (R03-Clinical Trial Optional)</u>

### RFA-DA-25-085

<u>Translational Resource Centers to Build Bridges Between Substance Use</u>
<u>Epidemiology/Etiology and Prevention Intervention Research (U24 Clinical Trials Not Allowed)</u>

#### NOT-DA-26-001

Notice of Special Interest (NOSI): Advancing Research on SUD with brain-based computational models

### **UC Foundation Funding Opportunities**

Please contact Carol Russell at (513) 556-6169 or <u>carol.russell@uc.edu</u> at least 5 business days before the deadline, prior to applying to the below opportunity, to ensure coordination and to facilitate assistance with approaches.

# Foundation Issues Challenge to Support People with Opioid Use Disorder Deadline: August 8, 2024 (Concept note)

The Foundation for Opioid Response Efforts (FORE) aims to convene and support partners advancing patient-centered, innovative, evidence-based solutions impacting people experiencing opioid use disorder (OUD), their families, and their communities. FORE has released a request for proposals for its Opioid Crisis Innovation Challenge. This opportunity focuses on projects in the following three areas: innovative payment models, workforce development, and transitioning from treatment to recovery.

Applicants may apply for a grant of up to \$600,000 – \$300,000 a year for up to two years. The organization will provide grants for specific projects that bring an innovative approach to long-standing and complex issues related to all aspects of stemming the tide of the nation's opioid crisis. The RFP targets projects that can explore and/or evaluate new "outside- the-box" ideas, bring together approaches from several diverse fields, and engage multi- disciplinary, cross-sector teams to solve some of the crisis' most intractable problems. FORE prioritizes work that incorporates a focus on patient-centered solutions and on health equity, and that reaches diverse high-risk populations, including adolescents and older populations, pregnant, parenting and postpartum people, and those with justice involvement. FORE also assesses projects within a framework of meeting one or more of its overarching objectives of supporting: policy initiatives, professional education, payer and provider strategies, and public awareness. Proposed projects should be able to contribute to long-lasting improvements in patient care and/or other aspects of the national opioid and overdose crisis. Competitive applications will demonstrate clear, immediate needs, as well as the potential to inform short-term improvements as well as longer-term, broader impact, sustainability, and scalability. Applicants must also demonstrate a commitment to and support for the proposed project from their organizational leadership.

To be eligible, applicants must be U.S.-based public charities that are tax-exempt under section 501(c)(3) of the Internal Revenue Code, or nonprofit, tax-exempt universities. The foundation will also consider grant requests from state, local, and Native American tribal government units or agencies for specific charitable projects. Upon review selected applicants will be invited to submit a full proposal. For

complete program guidelines and application instructions, see the Foundation for Opioid Response Efforts website.

### **CAR Member New Publications**

Effect of the Communities that HEAL intervention on receipt of behavioral therapies for opioid use disorder: A cluster randomized wait-list controlled trial

LaShawn Glasgow, Christian Douglas, Joel G. Sprunger, Aimee N.C. Campbell, Redonna Chandler, Anindita Dasgupta, JaNae Holloway, Katherine R. Marks, Sara M. Roberts, Linda Sprague Martinez, Katherine Thompson, Roger D. Weiss, Arnie Aldridge, Kat Asman, Carolina Barbosa, Derek Blevins, Deborah Chassler, Lindsay Cogan, Laura Fanucchi, Megan E. Hall...Nabila El-Bassel

Drug and Alcohol Dependence

DOI: <a href="https://doi.org/10.1016/j.drugalcdep.2024.111286">https://doi.org/10.1016/j.drugalcdep.2024.111286</a>

#### **ABSTRACT**

**Background:** The U.S. opioid overdose crisis persists. Outpatient behavioral health services (BHS) are essential components of a comprehensive response to opioid use disorder and overdose fatalities. The Helping to End Addiction Long-Term® (HEALing) Communities Study developed the Communities That HEAL (CTH) intervention to reduce opioid overdose deaths in 67 communities in Kentucky, Ohio, New York, and Massachusetts through the implementation of evidence-based practices (EBPs), including BHS. This paper compares the rate of individuals receiving outpatient BHS in Wave 1 intervention communities (n = 34) to waitlisted Wave 2 communities (n = 33).

**Methods:** Medicaid data included individuals ≥18 years of age receiving any of five BHS categories: intensive outpatient, outpatient, case management, peer support, and case management or peer support. Negative binomial regression models estimated the rate of receiving each BHS for Wave 1 and Wave 2. Effect modification analyses evaluated changes in the effect of the CTH intervention between Wave 1 and Wave 2 by research site, rurality, age, sex, and race/ethnicity.

**Results:** No significant differences were detected between intervention and waitlisted communities in the rate of individuals receiving any of the five BHS categories. None of the interaction effects used to test the effect modification were significant.

**Conclusions:** Several factors should be considered when interpreting results—no significant intervention effects were observed through Medicaid claims data, the best available data source but limited in terms of capturing individuals reached by the intervention. Also, the 12-month evaluation window may have been too brief to see improved outcomes considering the time required to stand-up BHS.

**Trial Registration:** Clinical Trials.gov http://www.clinicaltrials.gov: Identifier: NCT04111939

# Vertical Transmission of Hepatitis C Virus Among Women With a History of Injection Opioid Use

John M Cafardi, Hong T Lin, Lana Lange, Lacey Kelley, Kelly Lemon, Elizabeth A Odegard, Heidi L Meeds, Jason T Blackard, Judith Feinberg

Clinical Infectious Diseases

DOI: <a href="https://doi.org/10.1093/cid/ciae177">https://doi.org/10.1093/cid/ciae177</a>

#### **ABSTRACT**

We evaluated vertical transmission and linkage to care in women with hepatitis C virus (HCV) and history of injection drug use employing co-localized testing and treatment. Transmission occurred in 1 of 23 infants, with mother-infant genetic distance of 1.26%. Rates for infant testing, maternal linkage, and cure were 77%, 52%, and 100%, respectively.

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