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**

# 7 dead since Sunday sparks worry that elephant opioid carfentanil may be back

A surge of suspected overdose deaths this week in Cincinnati has health officials worried that the deadly synthetic opioid carfentanil might be back on the streets. The Hamilton County Addiction Response Coalition issued an alert Wednesday. Since Sunday, seven people have died of suspected overdoses in Cincinnati. "Historical trends suggest a potential surge in dangerous substances such as fentanyl, potent fentanyl analogues, carfentanil and nitazenes within the drug supply," the alert said, but it is unclear at this time what specific drugs caused the recent overdose deaths. Carfentanil is far more potent than fentanyl. Originally, it was used legally in the United States as a painkiller to sedate large animals...

### Experts: Sports betting up, but so is problem gambling

The University of Cincinnati and UC Health Lindner Center of HOPE's Chris Tuell spoke with WLWT about the risk and apparent rise in sports gambling addiction. Healthy sports betting is possible, but Tuell said the risk for addiction is high and appears to be rising. "Sports betting can become highly addictive due to the thrill of winning and the urge to chase losses, leading to compulsive gambling behaviors," said Tuell, assistant professor of psychiatry and behavioral neuroscience in the University of Cincinnati College of Medicine and clinical director of addiction services at UC Health's Lindner Center of HOPE. Emotional distress, relationship strain and financial loss are all high risks for problem gamblers. He said if...

### Bill attempts to curb fentanyl

NORWALK — The U.S. House of Representatives took an important step toward curbing the abuse of fentanyl Wednesday. The House voted to pass the Halt All Lethal Trafficking of Fentanyl Act, or HALT Act, with a bipartisan vote of 312-108. Before becoming law, it next goes to the U.S. Senate. Both House members representing the northwest Ohio area, U.S. Rep. Bob Latta, R-Bowling Green, and U.S. Rep. Marcy Kaptur, D-Toledo, voted to pass the bill. Currently, fentanyl-based drugs are temporarily classified in the Schedule I list of the Controlled Substances Act, a law that designates the addictiveness of drugs, their legality and the severity of potential criminal punishments. If passed, the act would make the Schedule...

# Despite decrease in Kentucky's fatal overdoses, Black communities face opposite trend

LOUISVILLE, Ky. (WDRB) -- Numbers show progress is being made in the country's battle against the opioid epidemic, with fatal overdoses declining over the past two years. But despite that progress, Black communities are being left behind, experiencing the opposite trend in silence. There aren't many parts of the nation that haven't been touched by the opioid crisis. Thousands of people have been affected by it in some way, and thousands lose their lives to addiction each year. The approach to bring those numbers down has been all hands on deck. While statistics show it's working, overdose deaths are rising at alarming rates among Black communities, specifically among Black men. It's something Kenneth...

#### **National News**

#### **Ozempic Shows Potential for Alcohol Addiction in Trial**

Weekly treatment with low doses of the GLP-1 receptor agonist semaglutide (Ozempic) reduced alcohol consumption and craving in adults with alcohol use disorder (AUD), a phase II randomized trial showed. At 9 weeks, semaglutide led to fewer grams of alcohol consumed during a laboratory self-administration task ( $\beta$ = -0.48, 95% CI -0.85 to -0.11, P=0.01) and lower peak breath alcohol concentration ( $\beta$ = -0.46, 95% CI -0.87 to -0.06, P=0.03) compared with placebo, according to Christian Hendershot, PhD, of the University of Southern California in Los Angeles, and colleagues. Semaglutide did not affect the average drinks per calendar...

## Research in fruit flies pinpoints brain pathways involved in alcohol-induced insomnia

Alcohol use disorder, which affects over 10% of Americans, can lead to persistent and serious insomnia. Difficulties falling asleep and staying asleep can last even after months of sobriety, increasing the risk of relapse. But treating withdrawal-related insomnia is difficult, partly because what's going on in the brain in this condition remains largely mysterious. Now, research in fruit flies has identified specific brain signals and groups of brain cells that are involved in alcohol-induced insomnia. This work could ultimately lead to targeted treatments for alcohol-related sleep loss, helping people recover from alcohol use disorder. "The...

#### Brain waves used to measure effect of anti-alcohol campaigns

Health campaigns, such as those against drug abuse or those promoting infection prevention measures during the coronavirus pandemic, are key public health tools and help protect the population. A recent campaign of the World Health Organization (WHO), for example, was launched in October 2024 under the motto "Redefine Alcohol." This call to action encourages people in Europe to reflect on the health effects of alcohol consumption, which, according to the WHO is currently directly responsible for one in eleven deaths in the European region. However, not all health campaigns achieve the desired effect. Having an objective measure...

#### Study links heavy cannabis use to higher death risk, psychosis

Heavy weed use may be far more dangerous than people realize, according to a pair of studies published in JAMA Network Open. People diagnosed with cannabis use disorder (CUD) may face nearly triple the risk of death over five years compared to those without the disorder, according to a large study published Feb. 6. The study, conducted in Ontario, Canada, found that people treated for CUD in hospitals or emergency rooms were 10 times more likely to die by suicide than those in the general population. They were also significantly more likely to die from trauma, drug poisoning and lung cancer, researchers found. A...

# Frequent cannabis use can lead to cavities, severe tooth loss, according to study

It's long been known that smoking cannabis can lead to problems in the lungs, heart and brain. Ellyce Clonan, DDS, a researcher at the University at Buffalo School of Dental Medicine, has identified another health problem linked to frequent recreational cannabis (FRC) use—tooth decay and severe tooth loss. An article detailing her findings is featured on the cover of the January 2025 issue of the Journal of the American Dental Association (ADA). Clonan, who joined the faculty in spring 2024 as a clinical assistant professor in the Department of Pediatric and Community Dentistry, spotted the association between cannabis and tooth...

# Menthol flavored cigarette smoking increases mortality risk vs. non-menthol cigarettes, study finds

In a large, nationwide study led by the American Cancer Society (ACS), researchers found mortality risks for smoking menthol cigarettes were higher than nonmenthol cigarettes for death from any cause and cardiovascular diseases, especially heart diseases. Higher risks were evident in individuals who had quit smoking and at high smoking intensities. Black participants currently smoking menthol brands had high increases for some heart diseases with an 88% elevated mortality risk compared to non-menthol cigarettes. The report also showed quitting smoking substantially reduced health risks from both cigarette...

## Overcoming nicotine withdrawal: Clues found in neural mechanisms of the brain

According to the World Health Organization (WHO), over 22% of the global population smokes, with more than 9 million smoking-related deaths reported annually. Effective treatments to alleviate nicotine withdrawal symptoms caused by smoking cessation are essential for successful smoking cessation. Currently, approved treatments for nicotine withdrawal include Bupropion and Varenicline, but there is a pressing need for new therapeutic options to improve smoking cessation success rates. A research team led by Dr. Heh-In Im at the Center for Brain Disorders of the Korea Institute of Science and...

### Tobacco age restrictions may not be working, new research shows

Based on survey data, young adults covered by Tobacco 21 (T21) laws say they are smoking less. Biomarkers paint a smokier picture. Despite recent reports of tobacco bans' success, new research shows 18- to 20-year-olds are finding ways to get cigarettes and vapes. Traces of nicotine and tobacco in their bodies prove it. First-of-its-kind research developed by Wake Forest University economist Erik Nesson and published in the peer-reviewed Journal of Health Economics shows that since the enactment of state T21 laws between 2016 and 2019, young adults aged 18–20 are more likely to report that they don't smoke—although a...

# Android app targets Hispanic smokers and uses anxiety exercises to increase quitting success

University of Houston researchers have created a first-of-its-kind, Spanish-language Android app called Impacto, designed specifically to help Hispanic smokers quit with guidance designed to reflect their cultural experiences. Results of the pilot test, published in the Journal of Substance Abuse & Addiction Treatment, indicate the app works – decreasing daily smoking rates and improving smoking cessation. "Hispanic individuals who smoke face greater challenges in quitting and a higher risk of smoking-related health problems than the general population," reports Michael Zvolensky, Hugh Roy and Lillie Cranz Cullen...

#### Study fails to show that youth vaping causes future smoking

A team of public health researchers has found "very low-certainty evidence" to support a commonly held belief that nicotine vaping is a gateway to cigarette smoking for young people. "One of the substantial concerns from some members of the public health community about vaping is that it might cause more young people to smoke," says Jamie Hartmann-Boyce, assistant professor of health policy and management at the University of Massachusetts Amherst and senior author of a new review paper published in the journal Addiction "Some—but not all—evidence from our study possibly suggests the opposite...

# Moderate-to-vigorous exercise in childhood may significantly postpone the initiation of tobacco smoking

Teenagers may be less likely to initiate tobacco smoking if they engage in moderate-to-vigorous physical activity (MVPA) from childhood, a new study conducted in collaboration between the Universities of Bristol and Exeter in the U.K., and the University of Eastern Finland shows. The results were published in Behaviour Research and Therapy. Childhood and teenage tobacco smoking is a strong preventable risk factor for premature structural and functional cardiac damage already in the mid-20s. Physical activity intervention studies have reported reduced smoking rates among adults; however, physical activity studies in...

#### Hong Kong to ban vaping in public by mid-2026

Hong Kong will ban the possession and use of e-cigarette cartridges in public by mid-2026, the city's top health official said on Sunday as the government pushed ahead with its anti-tobacco agenda. Vaping remains common in Hong Kong even though the Chinese finance hub banned the import, manufacture and sale of e-cigarettes and heated tobacco products in April 2022. "To protect our young people, we believe it is time to ban the use of e-cigarette cartridges," Secretary for Health Lo Chung-mau said on a television program. "We will start by legislating against outdoor possession and use," Lo said. "Once the public is accustomed...

### High levels of BTMPS detected in fentanyl, raising health concerns

A UCLA research team has found that drugs being sold as fentanyl contain high amounts of the industrial chemical bis(2,2,6,6-tetramethyl-4-piperidyl) sebacate, or BTMPS. This new substance of concern emerged in the illicit drug supply nearly simultaneously in multiple U.S. locations from coast-to-coast. From June through October 2024, the team quantitatively tested samples of drugs sold as fentanyl that had high levels of the chemical, which belongs to a class of compounds called hindered amine light stabilizers and has a variety of applications including as a sealant, adhesive, and additive to plastics. The paper is...

# Study shows initial success but long-term challenges of 2019 Medicare opioid safety policy

A new study led by researchers at the Harvard Pilgrim Health Care Institute has found that a 2019 Medicare opioid safety policy showed initial reductions in opioid prescribing to high-risk populations. However, the policy's effectiveness diminished over time. The study is published in JAMA Internal Medicine. Medicare provides coverage for 9 million U.S. adults with disabilities under the age of 65. Despite representing only 3% of the U.S. population, these beneficiaries account for 25% of opioid-related overdose deaths and hospitalizations. On January 1, 2019, the Centers for Medicare & Medicaid Services (CMS) required all...

# Poor sleep and addiction go hand in hand—understanding how could lead to new treatments for opioid use disorder

A good night's sleep often sets the stage for a positive day. But for the nearly quarter of American adults struggling with mental illness, a good night's rest is often elusive. For patients with psychiatric conditions from addiction to mood disorders such as depression, disrupted sleep can often exacerbate symptoms and make it harder to stay on treatment. Despite the important role circadian rhythms and sleep play in addiction, neuroscientists like me are only now beginning to understand the molecular mechanisms behind these effects. Sleep and addictive drugs have an entangled relationship. Most addictive drugs can alter...

# 'There has never been a more dangerous time to take drugs': The rising global threat of nitazenes and synthetic opioids

In the early hours of September 14, 2021, three men parked in a quiet car park in the southern English market town of Abingdon-on-Thames. The men, returning from a night out, had pulled over to smoke heroin. Unknown to them, the drug had been fortified with a nitazene compound called isotonitazene, a highly potent new synthetic opioid. Two of the men, Peter Haslam and Adrian Davies, overdosed and went into cardiac arrest. The third, Michael Parsons, tried to save them and himself by injecting naloxone, an opioid overdose antidote. Despite paramedics also trying to resuscitate Haslam and Davies, both died at the...

## How opioid deaths tripled in Philly over a decade, and what may be behind a recent downturn

After nearly a decade of almost year-over-year increases in overdose deaths, the tide may finally be turning in Philadelphia. The Centers for Disease Control and Prevention announced in May 2024 an estimated 3% decrease in overdose deaths in the U.S. in 2023 compared with 2022. Shortly after, data from the Philadelphia Department of Public Health showed a similar trend: Fatal overdoses across the city decreased 7% in 2023, from 1,207 to 1,122. The city is expected to release its 2024 data in the spring of 2025. While these declines are notable, the city's 2023 fatal overdose numbers are three times higher than they were in 2013. Still, if...

# Telehealth may be closing the care gap for people with substance use disorder in rural areas

Recognition of telehealth as an effective strategy for delivering treatment for substance use disorder (SUD) has raised hopes for improving access to this treatment in settings with limited transportation or when time constraints compromise regular use of consistent access to in-person substance use treatment. But the findings from a team of researchers from the Virginia Center for Health Innovation, UCLA, RAND, and MedInsight, Milliman Inc., suggest that the promise of telehealth may vary by insurance and geography. The findings are described in a research letter published Feb. 12 in JAMA Network Open. New research...

## Researchers decry 'disastrously bad idea' as NIH slashes payments for research infrastructure

The US National Institutes of Health is lowering the maximum "indirect cost rate" that research institutions can charge the government, the agency said late Friday – a move that scientists said could be devastating for the nation's position as a research leader. The average NIH grant to an institution has typically had about 30% earmarked for infrastructure costs such as facilities, maintenance and security; some institutions charged up to 60% or more. The new NIH policy will cap that indirect cost rate at 15%, effective immediately. "NIH spent more than \$35 Billion in Fiscal Year 2023 on almost 50,000 competitive grants to more than...

## **Funding Opportunities**



Due to a pause in communications, there are no new NIH Grants Funding Opportunities to post this week.

#### **Other Funding Opportunity:**

**2025–2026 Center for Dissemination and Implementation At Stanford (C-DIAS) Fellowship in Addiction Dissemination & Implementation (D&I) Science**Deadline: April 1, 2025

The C-DIAS Fellowship in Addiction Dissemination & Implementation (D&I) Science is for early or mid-career individuals with goals to improve public access to and quality of addiction treatment by leveraging advanced implementation science methods. This year-long mentored learning experience: Is a one-year (Sept 2025– Sept 2026), primarily virtual fellowship, with the possibility of extending to two years. Includes three days in Half Moon Bay California (Sept 10-12, 2025) for the C-DIAS annual meeting to connect with C-DIAS Faculty, Advisory Board Members, C-DIAS Research Project PI and teams, as well as past and current C-DIAS Fellows. Features a Research Track with a goal of preparation for an NIH-funded addiction implementation science research career; and a Learning Health Systems Track to apply implementation methods for substance use as an embedded researcher or quality improvement specialist. Combines didactics, experiential peer group-based learning, individual mentoring, and guidance in professional development. Enables individuals to maintain their full-time employment at their home institution. Activities include monthly, virtual, hour-long lectures; participation in the C-DIAS Research Core sections activities; C-DIAS Virtual Grand Rounds; individualized mentoring; lead authorship opportunities; and support developing an NIH grant

application or proposal to solve a health systems problem. The C-DIAS Fellowship is eligible for CME/CE credits. C-DIAS Fellows join an expanding network of individuals engaged in addiction treatment health services and implementation research, all committed to real-world impact.

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