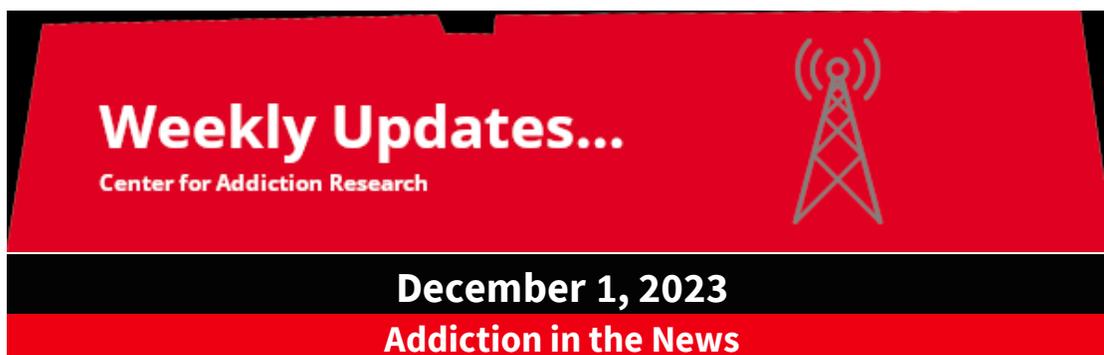


Welcome to the weekly newsletter from the Center for Addiction Research! Each newsletter includes highlights from addiction in the news topics, active funding opportunities offered by NIDA/NIAAA, and information about any new publications from CAR members. Please email Jen Rowe (roweji@ucmail.uc.edu)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

Hamilton County receives millions in settlement dollars from prescription painkiller lawsuit

CINCINNATI — Hamilton County expects to receive millions of dollars from a settlement of a prescription painkiller lawsuit. That money will be dedicated to tackling the addiction crisis here in the Tri-State. "We sued the distributors because of the negative impact that this community has suffered because of the influx of opioids in our community," said Hamilton County Commissioner Denise Driehaus. Over the span of 18 years, the county will receive \$11 million in a settlement from that lawsuit. It received \$1.6 million in 2023. Money from this year's million was distributed to organizations working to respond to the addiction crisis in the Tri-State. "Primarily it's going for prevention and workforce, some..."

KY substance abuse groups focus on recovery equity and expansion

A new statewide program in Kentucky is providing addiction advocacy groups and recovery centers with flexible funding to focus on resource equity and expansion of services. Gary Biggers, program operations manager for the nonprofit Voices for Hope, said the nearly \$50,000 grant will be used to provide staff with training centered on listening, empathy, and nonjudgmental communication when working with diverse populations. The group will also work with communities of color to provide education on overdose, substance use trends, and community resources for recovery. He pointed out large gaps remain in awareness about recovery services and harm reduction in Black and Latino...

Central Ohio man gives back to addiction recovery center where he got sober

COLUMBUS, Ohio (WCMH) — A central Ohio man is giving back this holiday season, helping out a place which he said saved his life. Jeremy Smith has come a long way from where he was about 10 years ago. He was 88 pounds and in the depths of an alcohol addiction. He said he was sick and tired of being sick and tired, so family members took him to the hospital where he spent about a month in a medically induced coma. “I never thought I’d be where I am today,” Smith said. “Because of all the alcohol and everything else that was in my system, they wanted to make sure I wouldn’t die. I had three days left to live. 72 hours they told my parents.” After he was released from the hospital, he went to...

National News

New research shows hard-hitting campaigns can help prevent drinking during pregnancy

New research published Nov. 21 is putting alcohol use during pregnancy in the spotlight, prompting calls from public health experts for ongoing investment in hard-hitting campaigns to support alcohol-free pregnancies. The new study, published in the Australian and New Zealand Journal of Public Health, analyzed adults' views on alcohol and pregnancy to evaluate the impact of a public education campaign that aired in Western Australia from January 2021 to May 2022. The "One Drink" campaign, developed by the WA Mental Health Commission in collaboration with Cancer Council WA, features a...

Research finds semaglutide treatment is associated with remarkable reductions in alcohol use disorder symptoms

The first published evidence from humans that semaglutide specifically reduces the symptoms of alcohol use disorder (AUD) has been published in The Journal of Clinical Psychiatry and details a recent collaboration between clinicians and scientists at the University of Oklahoma School of Community Medicine and Oklahoma State University Center for Health Sciences. The paper outlines the outcomes of six patients who received semaglutide during treatment for weight loss, demonstrating a significant and noteworthy decrease in their Alcohol Use Disorders Identification Test (AUDIT)...

20-year study finds no evidence that cannabis reduces long-term opioid use

A 20-year Australian study has found no evidence to suggest cannabis reduces illicit opioid use, and it may not be an effective long-term method of reducing harm for those with an opioid use disorder or problematic use of opioids. Published in the American Journal of Psychiatry, the University of Sydney-led study is one of the longest of its kind. Between 2001 to 2022, the study involved a group of 615 people with heroin dependence, many of whom also used cannabis. Additional analysis found no consistent evidence between cannabis and other opioid use, including opioids that were prescribed. Opioid use...

Study: Cannabis use disorder increasing among veterans with psychiatric disorders

Research published in The American Journal of Psychiatry finds that during a period of increasing cannabis use in the U.S., the prevalence of cannabis use disorder is disproportionately increasing among veterans with psychiatric disorders, especially those with more severe psychiatric disorders. The research team, led by Ofir Livne, M.D., M.P.H., assistant professor of clinical psychiatry, Columbia University / New York State Psychiatric Institute, used Veterans Health Administration (VHA) electronic health records over two periods (2005-2014 and 2016-2019) to identify trends in cannabis...

Cannabis use in pregnancy may raise infant health risks

A large study of more than 360,000 mothers and infants found increased risk of low birth weight and admission to the neonatal intensive care unit (NICU) for babies whose mothers used cannabis during pregnancy. The findings align with previous research suggesting a connection between prenatal cannabis use and low birthweight babies, and advice from the American College of Obstetricians and Gynecologists that pregnant patients avoid cannabis in pregnancy. The researchers also found a "dose-response" relationship, meaning increasing risk of infant health risks with more frequent reported use of...

Are Edibles Actually Good for Sleep?

About 14% of U.S. adults said they used marijuana edibles as of 2022, and research suggests many of them do so in search of better sleep. One small 2021 study of cannabis users found that more than three-quarters of them thought they slept better thanks to the drug. But despite the popularity of using edibles for sleep, the data on how well they help people drift off are surprisingly mixed. Using edibles is "very helpful for some people," says Deirdre Conroy, clinical director of the Behavioral Sleep Medicine Program at Michigan Medicine. But "for some people, it doesn't help at all, and for others it works..."

Decline in excess mortality seen in first decade after quitting smoking

Former smokers avoid more than half of the excess cardiovascular, cancer, and respiratory mortality associated with current smoking within the first decade after quitting, according to a research letter published online Nov. 27 in JAMA Internal Medicine. Blake Thomson, D.Phil., and Farhad Islami, M.D., Ph.D., from the American Cancer Society in Atlanta, examined the association between years since quitting smoking and mortality. Self-reported current and never smokers were compared to former smokers who had quit one to nine, 10 to 19, 20 to 29, and 30 or more years before recruitment for cardiovascular, cancer...

Social media posts that promote tobacco are increasing, AI detection technology finds

When teenagers and young adults see pro-tobacco content on social media, they face higher risks. They are more likely to report using tobacco products such as e-cigarettes (also called vapes), more likely to start using those products for the first time and less likely to view them as harmful. Algorithms programmed to automatically remove tobacco ads are designed to protect youth—but they don't always work or are not implemented well enough by social media platforms, according to Julia Vassey, MPH, a health behavior researcher in the department of population and public health sciences at the Keck...

More addictive and harder to quit: Health groups want Black menthol smokers to know support groups can help

As the Biden administration moves closer to banning menthol cigarettes and flavored cigars, major health organizations are pushing to get the word out to Black smokers that help is available for those who want to quit. The vast majority of Black smokers in the U.S., 85%, use menthols, according to the Campaign for Tobacco-Free Kids. In 2020, nearly 81% of Black smokers used menthols, compared to 34% of white smokers, data from the Centers for Disease Control and Prevention found. The disparity is the result of decades-long advertising practices from the tobacco industry, which specifically targeted...

Incoming New Zealand govt to abandon anti-smoking laws

New Zealand's incoming conservative government will jettison world-leading measures to stub out smoking, new Prime Minister Christopher Luxon confirmed Monday, in a move described by health campaigners as a "huge win for the tobacco industry". Unveiled under former prime minister Jacinda Ardern, the so-called "generational smoking ban" aimed to prohibit the sale of cigarettes to anyone born after 2008. Praised by public health experts and anti-smoking advocates, a suite of near-identical measures were recently announced in the United Kingdom. But after being sworn in on Monday, Luxon...

France to ban smoking on beaches as it seeks to avoid 75,000 tobacco-related deaths per year

PARIS (AP) — France will ban smoking on all beaches, in public parks, forests and some other public areas as part of a national anti-tobacco plan presented by the health minister on Tuesday. Tobacco products cause 75,000 avoidable deaths a year in France, Minister of Health and Prevention Aurélien Rousseau said on BFM television. The government will introduce legislation at the start of next year to enlarge the scope of places where fines can be levied for smoking, he said. "Beaches, parks, around schools -- lots of places had started these experiments and now, it's true, we're heading to a general rule..."

Australia to ban vape imports over child addiction concerns

Australia will ban imports of disposable vapes from January 1, the government said Tuesday, slamming the devices as recreational products addicting children. The block on single-use vapes is aimed at reversing a "disturbing" increase in vaping among young people, Health Minister Mark Butler said. Australia first revealed the import ban in May but had not given a start date until now. Vaping had been sold to governments as a tool to help long-term smokers quit, Butler said. "It was not sold as a recreational product, especially not one targeted to our kids, but that is what it has become," the minister...

Evolving Overdose Crisis Shakes Previously Effective Treatments

BURLINGTON, Vt. -- "You can't inject a horse tranquilizer and think nothing bad is gonna happen" to you, said Ty Sears, 33, a longtime drug user now in recovery. Sears was referring to xylazine, a sedative used for animal surgeries that has infiltrated the illicit drug supply across the country, contributing to a steady climb in overdose deaths. Sears divides his time between Burlington and Morrisville, a village an hour to the east. In Burlington, he visits clusters of drug users, offering water, food, and encouragement. He has been there, been down, done time, struggled to adhere to treatment regimens. But...

Dozens of US adolescents die from drug overdoses every month. An expert unpacks the grim numbers

Drug overdose deaths in the United States continue to rise. Overdoses claimed more than 112,000 American lives from May 2022 to May 2023, according to the Centers for Disease Control and Prevention, a 37% increase compared with the 12-month period ending in May 2020. The vast majority of those who died were adults. But drug overdoses are killing young Americans in unprecedented numbers: The monthly total rose from 31 in July 2019 to 87 in May 2021, the period with the most recent data. As a scholar of substance use who focuses on patterns that vary between age groups, I'm struck by how adolescents'...

How the death of a young mom led to the unraveling of a national fentanyl trafficking network

It began with the death of a 20-year-old mom, just a month after her baby boy's first birthday. She was one of 70,000 Americans lost to the scourge of fentanyl in 2021. Police officers couldn't save Diamond Lynch, who overdosed in her Washington, D.C., apartment after taking a pill laced with the powerful and dangerous chemical opiate. But they quickly began investigating how she died, with the help of federal prosecutors and the Drug Enforcement Administration. Starting with some text messages and a handful of pills, authorities unraveled a massive fentanyl distribution network that extended...

Substance abuse treatment helps reduce reported methamphetamine use among men who have sex with men

A nearly decade-long study by UCLA researchers found that substance abuse treatment of any kind may help to reduce methamphetamine usage among men who have sex with other men—a population that has been disproportionately impacted by the U.S. methamphetamine crisis in recent years. The findings come from the mSTUDY and are published in the *Journal of Substance Use and Addiction Treatment*. The study analyzed responses from a group of nearly 300 men in Los Angeles who self-reported how frequently they used methamphetamine in the previous six months and...

Researchers uncover molecular mechanism of methamphetamine binding to trace amine receptor

Methamphetamine (meth) abuse is a major health concern. Understanding how meth interacts with its target proteins is crucial for the development of novel medications to address drug addiction. Previous research into the mechanism of meth's effects has mainly focused on the dopamine system, but recent studies suggest it may also directly bind to the trace amine receptor 1 (TAAR1), which plays a key role in psychostimulant abuse-related behaviors. TAAR1 is a receptor in the brain that recognizes various biogenic amines, including the natural compound β -phenethylamine (β -PEA). TAAR1 agonists have...

Overdose deaths increased in pregnant and postpartum women from early 2018 to late 2021

Drug overdose deaths rose markedly between January to June 2018 and July to December 2021 among 10- to 44-year-old girls and women who were pregnant or pregnant within the previous 12 months, according to a new study by researchers at National Institute on Drug Abuse (NIDA) at the National Institutes of Health. Overdose mortality more than tripled among those aged 35 to 44 during the study period, from 4.9 deaths per 100,000 mothers aged 35 to 44 with a live birth in the 2018 period to 15.8 in the 2021 period. Over 60% of these pregnancy-associated overdose deaths occurred outside healthcare...

Philadelphia doula program could promote recovery and prevent drug overdose deaths, study finds

Research shows broadly that people who have doulas involved in their pregnancy care can have better maternal and infant health outcomes. Now, a new study looking at a Philadelphia doula program for people living with addiction shows that these non-clinical support professionals may help reduce fatal drug overdoses in the postpartum period and strengthen long-term engagement with addiction recovery services. Researchers noted early successes and challenges of the city's Community Doula Support Program, established in March 2020, in a paper published this month in *Maternal and Child Health*...

Funding Opportunities



GRANTS & FUNDING

NIH Central Resource for Grants and Funding Information

[PAR-24-067](#)

[Prevention and Intervention Approaches for Fetal Alcohol Spectrum Disorders \(R34 Clinical Trial Optional\)](#)

[PAR-24-068](#)

[Prevention and Intervention Approaches for Fetal Alcohol Spectrum Disorders \(R61/R33 Clinical Trial Optional\)](#)

[PAR-24-048](#)

[Providing Research Education Experiences to Enhance Inclusivity for a Diverse Substance Use and Addiction Scientific Workforce \(R25 Clinical Trials Not Allowed\)](#)

[PAR-24-070](#)

[Career Enhancement Award to Advance Research on Firearm Injury and Mortality Prevention \(K18 Independent Clinical Trial Not Allowed\)](#)

[PAR-24-073](#)

[Career Enhancement Award to Advance Research on Firearm Injury and Mortality Prevention \(K18 Independent Clinical Trial Required\)](#)

[RFA-DA-24-042](#)

[BRAIN Initiative: Brain-Behavior Quantification and Synchronization Transformative and Integrative Models of Behavior at the Organismal Level \(R34 Clinical Trial Optional\)](#)

[NOT-DA-23-046](#)

[Notice of Change to the budget limits in RFA-DA-24-038, RFA-DA-23-021, "Developing Regulated Therapeutic and Diagnostic Solutions for Patients Affected by Opioid and/or Stimulants use Disorders \(OUD/StUD\) \(R41/R42 and R43/R44 Clinical Trials Optional\)](#)

[NOT-DA-25-027](#)

[Notice of Special Interest \(NOSI\): Development and Application of Novel Chemical Approaches to Discover Therapeutic Targets for Substance Use Disorders](#)

Other Funding Opportunities:

[ASCP Announces \\$5,000 Nina Schooler Early Career Research Award](#)

Deadline: January 31, 2024

Nina Schooler, PhD, is a Professor of Psychiatry and Behavioral Sciences at SUNY Downstate Medical Center in Brooklyn, New York. Trained as a social psychologist, Dr. Schooler has been conducting research on the treatment of schizophrenia from its earliest identification to the long-term course and outcomes for many decades. Dr. Schooler has been an integral educator in the field of psychopharmacology and continues to further her personal goal of the development of early-career clinical trialists through leadership on the ASCP New Investigator Award Committee. Her passion for educating the next generation of clinical psychopharmacologists has inspired many of her past mentees to become educators.

Psychiatry residents and fellows, physicians who are currently in psychiatry residency or fellowship programs, and doctoral-level psychologists/pharmacists (i.e., PhD, PsyD, PharmD) who are currently involved in clinical internships, externships or fellowships who are interested in or are beginning to engage in clinical psychopharmacology research are eligible to apply and are invited to submit applications for the 2024-2025 ASCP Nina Schooler Early Career Research Award for \$5,000 USD. All applicants are required to be ASCP members. (Please note Society membership for residents and trainees is at no cost.) No prior research experience is required.

Funds may be used to assist with costs directly related to start-up or pilot research projects. This may include, but is not limited to, travel to research-related scientific meetings, relevant coursework, statistical consultation, or material project costs (e.g., supplies). Please note that awards will not include salary support nor payment of additional indirect costs to the awardee's institution.

Any project related to human clinical psychopharmacology may be considered for submission; basic science or animal research is not within the scope of this award.

CAR Member New Publications

SCH23390 and a humanized anti-cocaine mAb decrease the latency to cocaine-induced reinstatement of lever pressing behavior in rats that self-administer cocaine

Dakota B. Zinani, Jhanvi N. Desai & Andrew B. Norman

Scientific Reports

DOI: <https://doi.org/10.1038/s41598-023-41284-1>

ABSTRACT

In rats that self-administer cocaine, the latency to the reinstatement of lever pressing behavior induced by a single dose of cocaine is due to the time taken for cocaine levels to fall to the satiety threshold. The D1 dopamine receptor antagonist SCH23390, and the recombinant humanized anti-cocaine mAb h2E2 increase the cocaine satiety threshold and would be expected to alter the latency to reinstatement. Male rats acquired cocaine self-administration behavior on an FR1 schedule. These rats received a single injection of cocaine (12 $\mu\text{mol/kg}$ i.v.) after an i.v. injection of SCH23390 or an infusion of h2E2 or vehicle. The latency to, and the duration of, lever pressing was measured but the presses had no consequence. SCH23390 decreased the latency to lever pressing consistent with dose-dependent increases in satiety threshold. The duration of lever pressing behavior was inversely proportional to the SCH23390 dose suggesting that SCH23390 also increased the cocaine compulsion zone. The mAb h2E2 also produced a similar decrease in latency to responding that gradually reversed over 2 weeks. SCH23390 and h2E2 had an additive effect on the decreased latency to cocaine-induced lever pressing. The single cocaine dose reinstatement paradigm within the context of the compulsion zone theory is a useful pharmacological bioassay system to explore potential pharmacotherapies for relapse prevention in cocaine use disorder.

The cocaine compulsion zone theory explains the reinstatement of lever pressing behavior in rats in response to a single cocaine dose

Dakota B. Zinani, Jhanvi N. Desai & Andrew B. Norman

Heliyon

DOI: <https://doi.org/10.1016/j.heliyon.2023.e17988>

ABSTRACT

A single non-contingent dose of cocaine reinstates extinguished lever pressing behavior in rats trained to self-administer cocaine. This represents a model of relapse in cocaine use disorder and the number of lever presses has been the standard measure. Lever pressing behavior during self-administration occurs only when cocaine levels are below the satiety threshold and above the remission/priming threshold, a range termed the compulsion zone. Calculated cocaine levels at the time of each lever press during an FR1 self-administration session and following a single non-contingent dose of cocaine were compared. The mean latency to lever pressing behavior was dose dependent and ranged from 1 to 11 min after cocaine doses of 2 or 12 $\mu\text{mol/kg}$, respectively. This is consistent with higher cocaine doses producing levels above satiety threshold that take more time to fall back to that threshold. The level of cocaine when lever pressing occurred was similar whether cocaine was self-administered or after a single dose of cocaine. The number of lever presses after a single cocaine dose was variable and poorly dose dependent. The latency to the start of lever pressing behavior is a more reliable dependent measure than the number of lever presses. In addition, lever pressing behavior occurs only when cocaine levels are within the compulsion zone. The compulsion zone theory not only explains maintained cocaine self-administration behavior, but also explains the reinstatement of lever pressing behavior in response to a single non-contingent cocaine dose.

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