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

Campaign leads to a 37% drop in overdose deaths from drugs mixed with opioids, including fentanyl

Expanded treatment options, increased naloxone distribution and targeted education campaigns likely led to a 37% reduction in overdose deaths from opioids combined with stimulant drugs other than cocaine, according to the results of a large study. The finding came from a planned study of secondary outcomes of the HEALing (Helping to End Addiction Long-Term) Communities Study (HCS), which tested an intervention encompassing data-driven adoption of evidence-based practices for reducing overdose deaths in Kentucky, Massachusetts, New York and Ohio. Death rates from specific combinations of opioids with stimulants other than cocaine, most commonly fentanyl mixed with methamphetamine... (co-author, Dr. T. John Winhusen, HEALing Communities Study Co-Principal Investigator for Ohio and CAR Director, see publication below in the newsletter)

Virtual Zoom Webinar: Community-Led Innovations: Reducing Overdose Deaths through the HEALing Communities Study

November 5, 2024, at 2:30 PM

This webinar highlights community-driven efforts to address substance use disorder and reduce overdose deaths, spotlighting innovative programs from four diverse HEALing Communities Study (HCS) communities. Presenters will share insights into their community's specific challenges, the strategies they selected from the Opioid-overdose Reduction Continuum of Care Approach (ORCCA) menu, the outcomes achieved, and key lessons learned throughout the process. Attendees will gain

insights from real-world examples, learning what worked and what didn't and how these efforts can serve as models for broader application in various settings. The NIH HCS was a large implementation study conducted in 67 communities across four states (Kentucky, Massachusetts, New York, and Ohio) that tested a set of evidence-based interventions and approaches for reducing overdose deaths. Central to the study was the Opioid-overdose Reduction Continuum of Care Approach (ORCCA), which provided a menu of evidence-based practices to guide community action. These practices focused on opioid education and naloxone distribution, medication for opioid use disorder, and safer opioid prescribing and dispensing. Communities participating in HCS were encouraged to select and implement strategies that best aligned with their specific needs and contexts. (Dr. T. John Winhusen is the HEALing Communities Study Co-Principal Investigator for Ohio and CAR Director)

New harm reduction vending machine available at UC Clermont

The University of Cincinnati Clermont College is proud to announce the installation of a new harm reduction vending machine, one of two in Clermont County. The machine is designed to provide essential health and safety items to registered users, free of charge. To access the vending machines items, users must complete an online registration process. This registration is confidential and can be completed online. Once registered, access to the machine will be activated within approximately one business day. The machine is located near the rear entrance of the McDonough Building on campus. The harm reduction vending machine offers a range of free items, including: Narcan spray, Deterra drug disposal bags, First-aid...

Responding to Addiction: Ohio Pilot Study

Addiction Policy Forum's case study details the outcomes of a pilot study in Ohio to evaluate the outcomes of Responding to Addiction, a new anti-stigma intervention. The project is a collaboration between APF, Governor DeWine's RecoveryOhio initiative, the Ohio Department of Mental Health and Addiction Services, and the University of Delaware. The Responding to Addiction program, developed by the Addiction Policy Forum, was deployed throughout Ohio to increase addiction literacy, correct misconceptions about addiction, and reduce stigma. Responding to Addiction is a multidisciplinary anti-stigma program that teaches participants about the science of addiction and equips them with the knowledge and tools to...

Local state senator proposes more oversight of drug addiction, mental health boards

State lawmakers are beginning to propose changes after recent controversial budgetary decisions from the Montgomery County Alcohol, Drug Addiction and Mental Health Services (ADAMHS) board—including the board reducing its spending by 38%—contributed to a reduction in funding allocations for area agencies providing mental health services. State Sen. Niraj Antani, R-Miami Twp., is proposing a bill that would give county commissioners across the state more

oversight over budgets for alcohol, drug addiction, and mental health service districts within their regions, while other lawmakers say they are working on...

State gets \$37.2M grant to continue fighting addiction, overdose

FRANKFORT, Ky. — Kentucky has received a \$37.2 million federal grant to support state government's ongoing work to prevent overdoses and save lives. Through the three-year Substance Abuse and Mental Health Services grant, the Kentucky Overdose Response Effort (KORE) will continue to address the overdose crisis by increasing access to prevention, harm reduction, treatment and recovery services for individuals facing addiction. Gov. Andy Beshear said KORE-funded programs in 2023 delivered free treatment and recovery services to over 32,600 people, distributed 96,700 free Narcan – a medication used to reverse opioid overdoses – kits and reached 145,000 youth through school and community-based...

National News

The effects of binge drinking on teenagers' brain development

Alcohol is deeply rooted in our cultures and habits, and in most Western countries, its significant economic weight grants it a much more favorable legal status and social perception than other drugs. This is likely why teenagers consider it the safest drug they can take, despite the fact that it is the leading risk factor for premature death and disability in people aged 15-49, and that myths like "a glass of wine a day is good for your health" have been thoroughly debunked. This perception is only reinforced by its central role in many traditions and celebrations, which link it to social success. Alcohol is the most widely...

Researchers say cannabis policies should shift to a harm reduction, health promotion approach

Millions of Americans use cannabis to treat a plethora of health conditions. They are rarely under a health care provider's supervision and their access to quality information about the substances they are consuming, and their potential risks is limited at best. A paper, published in the American Journal of Public Health by University at Buffalo researchers, calls attention to this concerning and potentially dangerous situation, which they say is a result of a policy environment historically driven by politics, not science. The paper explains why there needs to be a shift in cannabis policies to a public health approach as opposed to the...

Cannabis use in adolescence has visible effects on brain structure

Cannabis use may lead to thinning of the cerebral cortex in adolescents, according to a recent study led by Graciela Pineyro and Tomas Paus, researchers at CHU Sainte-Justine and professors at the Université de Montréal Faculty of Medicine. The work is published in The Journal of Neuroscience. A collaborative effort between two research laboratories with complementary approaches, the study demonstrates that THC—or tetrahydrocannabinol, an active substance in

cannabis—causes shrinkage of the dendritic arborization, the neurons' "network of antennae," whose role is critical for communication between neurons. This...

Even Hardcore Smokers May Quit If Given Right Tools, Study Finds

TUESDAY, Oct. 22, 2024 (HealthDay News) -- Smokers find it easier to quit if they're automatically offered support, even if they didn't ask for it, a new clinical trial finds. Quit rates were higher among health system patients placed in an "opt-out" program, in which tobacco cessation medications and counseling are automatically prescribed upon learning they smoke, researchers found. It's called an "opt-out" program because people get the meds and counseling unless they opt out of it. After a month, 22% of people in an opt-out group had quit smoking, compared with only 16% of smokers who had to opt into the cessation...

Mouse study links reward-seeking strategies to nicotine response

Individualistic reward-seeking strategies predict responses to nicotine among mice living in a micro-society, according to a study published October 24 in the open-access journal PLOS Biology by Philippe Faure from PSL Research University, France, and colleagues. Individual animals differ in their traits and preferences, which shape their social interactions, survival, and susceptibility to disease, including addiction. Nicotine use is highly variable and has been linked to personality traits. Although these relationships are well documented, relatively little is known about the neurophysiological mechanisms that give rise to...

Vaping Rates Hit Record Lows for U.S. High School Students

THURSDAY, Oct. 17, 2024 (HealthDay News) -- Is vaping finally losing its coolness for American teens? The latest tally of federal data finds that 550,000 school kids, mostly high schoolers, quit using e-cigarettes in 2024. Vaping rates fell from 10% of high school students in 2023 to 7.8% this year, "reaching the lowest level ever measured" by the National Youth Tobacco Survey, reported a team of researchers from the U.S. Centers for Disease Control and Prevention. "Reaching a 25-year low for youth tobacco product use is an extraordinary milestone for public health. However, with more than 2 million youth using tobacco...

\$76 Million in Illegal E-Cigarettes Seized in Joint Federal Operation

Today, the U.S. Food and Drug Administration, in collaboration with U.S. Customs and Border Protection (CBP), announced the administrative seizure of approximately three million units of unauthorized e-cigarette products, with an estimated retail value of \$76 million. The seizures were part of a July joint operation to examine incoming shipments and prevent illegal e-cigarettes from entering the country. "The FDA is on high alert and, in coordination with our federal partners, remains committed to stopping unauthorized e-cigarettes at our nation's borders," said FDA Commissioner Robert M. Califf, M.D. "These products too...

Young men who vape may be at greater risk for future heart disease

E-cigarettes, commonly known as vapes, contain nicotine and various chemicals, including some used for flavorings, which make them more attractive to young people. Despite measures to protect youth, such as age restrictions and flavor bans, all types of vaping products remain easily available online. As a result, Canada has one of the highest youth vaping rates in the world. In response to the urgent need to understand the long-term health effects of vaping, researchers at the Research Institute of the McGill University Health Center (RI-MUHC), in collaboration with colleagues at the Lady Davis Institute for Medical...

Study: OUD Patients More Likely to Stay on Methadone Than Buprenorphine/Naloxone

Patients with opioid use disorder (OUD) had a lower risk of discontinuing methadone compared with buprenorphine/naloxone, and with a similar mortality risk, according to a population-based cohort study published in JAMA. In a video interview, researcher Bohdan Nosyk, PhD, of Simon Fraser University in Burnaby, British Columbia, discusses the findings and their implications for public policy. The following is a transcript of his remarks: Our objective was to use all of B.C.'s [British Columbia's] linked provincial health administrative data, keeping in mind it's a universal healthcare system, single-payer system, so we...

Medicaid limits access to life-saving doses of addiction care

Consensus is growing around the idea that for some patients higher doses of a gold-standard opioid addiction treatment drug may be better than lower doses at keeping patients healthy and in treatment, especially for those who use fentanyl. But whether someone can access higher doses of buprenorphine—which works by curbing cravings and withdrawal from opioids—depends on where they live. In most states, Medicaid—the largest payer of substance use disorder treatment in the U.S.—caps the doses it will pay for at arbitrary levels, typically at no more than 24 milligrams. In some states, like Tennessee, that level is...

Anonymous distribution of naloxone via vending machines raises uptake by exprisoners, researchers find

Retailers love vending machines for the consumer convenience and low overhead. These same attributes are starting to appeal to public health experts looking to reduce rates of opioid-related overdose deaths. In a new study published in the Journal of Substance Use and Addiction Treatment, Rutgers University-New Brunswick drug policy researcher Grant Victor found that by distributing free naloxone—a nasal spray used to reverse or limit the effects of opioids (also known by its brand name Narcan)—via vending machines, county jails could sharply increase the number of doses provided to inmates at release. "While...

Implantable device may prevent death from opioid overdose

The opioid epidemic claims more 70,000 lives each year in the U.S., and lifesaving interventions are urgently needed. Although naloxone, sold as an over-the-counter nasal spray or injectable, saves lives by quickly restoring normal breathing during an overdose, administrating the medication requires a knowledgeable bystander—limiting its lifesaving potential. A team from Washington University School of Medicine in St. Louis and Northwestern University in Chicago has developed a device that may rescue people from overdose without bystander help. In animal studies, the researchers found that the...

Researchers discover promising treatment to counteract the effects of fentanyl for overdose cases

A team of Lawrence Livermore National Laboratory (LLNL) researchers has discovered a promising new treatment to counteract the effects of fentanyl and related opioids. The new treatment could, over time, be a boon to doctors and medical professionals dealing with the crisis of fentanyl, a drug whose lethal effects has killed more than 210,000 Americans during the past three years. The treatment is described in a paper published in ACS Central Science. "The development of a medical countermeasure candidate for the treatment of exposure to a variety of opioids is a really exciting advancement in the fight to counter the opioid...

New Guides Offer Practical Ways to Support Recovery Post-Incarceration

People reentering the community from incarceration are at the highest risk of an overdose or death during the first 48 hours. However, reentry professionals and family members can help to mitigate this risk. Two new guides from the CSG Justice Center and Addiction Policy Forum, with support from the Bureau of Justice Assistance, seek to promote effective recovery strategies for reentry professionals and offer tips and resources for families to support their loved ones. Implementing Evidence-Based Strategies to Reduce Overdose Risk During Reentry: A Primer for Reentry Professionals. This guide provides an overview...

Mothering Over Meds: Docs Say Common Treatment for Opioid-Exposed Babies Isn't Necessary

On learning last year she was pregnant with her second child, Cailyn Morreale was overcome with fear and trepidation. "I was so scared," said Morreale, a resident of the small western North Carolina town of Mars Hill. In that moment, her joy about being pregnant was eclipsed by fear she would have to stop taking buprenorphine, a drug used to treat opioid withdrawal that had helped counter her addiction. Morreale's fear was compounded by the rigidity of the most common approach to treating babies born after being exposed in the womb to opioids or some medications used to treat opioid addiction. For decades throughout the opioid

Innovative trial will use psilocybin to target relapse in opioid addiction

Imperial researchers will explore the potential for psilocybin therapy in drug recovery as part of a landmark trial. A 'first in the UK' clinical trial exploring the use of psychedelics in addiction has won funding from the National Institute for Health Research (NIHR) and the Government's Office for Life Sciences. The trial, led by Imperial College London, will focus on whether psilocybin – the active compound in magic mushrooms – combined with psychological support, can help to prevent relapse in people who have been addicted to opioids such as heroin. Combining Imperial's expertise in psychedelics and opioid...

Data show overdose deaths are down nationally, but up in many Western states

Despite an encouraging national dip in the past year, overdose deaths are still on the rise in many Western states as the epicenter of the nation's continuing crisis shifts toward the Pacific Coast, where deadly fentanyl and also methamphetamine are finding more victims. Overdose deaths remain sharply higher since 2019. Many states are working on "harm reduction" strategies that stress cooperation with people who use drugs; in some cases, states are getting tougher on prosecutions, with murder charges for dealers. Alaska, Nevada, Washington and Oregon have moved into the top 10 for rate of overdose deaths since...

Addiction treatment found to decrease suicide risk among people with opioid dependence

Treating opioid use disorder significantly lowers the very high rate (eight times the general population) of suicide among people with opioid dependence. A Scottish study led by Glasgow Caledonian University of over 45,000 patients receiving methadone or buprenorphine for opioid use disorder reported this result in the journal Addiction. There were 575 suicides among the group of 46,453 people with opioid use disorder, accounting for 1.2% of the group. Although every member of the group received an OAT prescription at some point between 2011 and 2020, some of those suicides occurred during periods when...

Who is choosing to use prescription opioids?

Opioid use disorder affects more than 2 million people in the U.S. and contributes to the public health crisis of opioid addiction and overdoses. While previous studies have focused on how prevalent prescription opioid use is, researchers from Mayo Clinic and the National Center for Complementary and Integrative Health looked into who is choosing to use prescription opioids for the first time. They found that, in a nationwide survey conducted in 2019 and 2020, about four out of every 100 people had started using prescription opioids, which was more than they expected. "One of the things that we noticed is that people...

Colorado's naloxone fund is drying up, even as opioid settlement money rolls in

On a bustling street corner one recent afternoon outside the offices of the Harm Reduction Action Center, employees of the education and advocacy nonprofit handed out free naloxone kits to passersby. Distributing the opioid reversal medication is essential to the center's work to reduce fatal overdoses in the community. But how long the group can continue doing so is in question. The center depends on Colorado's Opioid Antagonist Bulk Purchase Fund, also known as the Naloxone Bulk Purchase Fund, which now lacks a recurring source of money—despite hundreds of millions of dollars in national opioid lawsuit...

Opioid use linked to hormone health issues, study finds

A new Scientific Statement released today by the Endocrine Society highlights research gaps associated with the negative effects of opioid use on the endocrine system. The use and misuse of opioids is a growing global problem. Opioids are used to treat pain in people with cancer or other conditions (e.g., after an injury or surgery). However, they are highly addictive and people can develop opioid use disorder (OUD). The World Health Organization estimates that 125,000 people died of opioid overdose in 2019. The use and misuse of opioids has a negative effect on our hormones and can lead to reproductive, bone and adrenal health...

What Is the Recreational Drug 'Pink Cocaine'?

A recreational drug called "pink cocaine" is getting attention and causing confusion since it doesn't typically contain cocaine. The pink powder -- really a grab bag of different drugs dyed pink -- has turned up in drug seizures, prompting warnings from law enforcement. Pink cocaine is also known as "tusi," but both nicknames for the powder are more about marketing than reality. Experts say it rarely contains cocaine and is more likely to contain ketamine, a drug with very different effects. Pink cocaine is pink thanks to food coloring or dye, said Joseph Palamar, MPH, PhD, who studies drug trends at NYU Langone Health...

Study on addiction trends in the US indicates growing disparities in substance use disorders mortality

A newly published study by Akshaya Bhagavathula, NDSU associate professor of epidemiology, highlights the growing disparities in substance use disorders (SUD) mortality in the United States. The research, titled "Trends in Racial, Ethnic, and Geographic Disparities in Substance Use Disorder Mortality in the U.S. (2000–2019)," appears in the latest edition of the American Journal on Addictions. "Our findings are critical for informing public health policies," Bhagavathula said. "As a community, we need to engage in meaningful discussions on how to dismantle these health disparities. I hope this research will drive policy changes...

Experimental study in rats and humans show cognitive effort whets the appetite for reward

Mental fatigue may make rewards more desirable, according to a study in rats and humans. Exerting cognitive effort has been linked with making unhealthy choices. In the past, the link has been explained via a weakening of inhibitory control or will power. Marcello Solinas and colleagues explore the possibility that cognitive effort may also make unhealthy choices more tempting by increasing the perceived reward. The work is published in PNAS Nexus. Rats who completed a cognitively demanding task self-administered more cocaine than rats who did not complete a cognitive demanding task—or rats who were allowed to rest...

Funding Opportunities



RFA-MH-26-140

BRAIN Initiative: Brain Behavior Quantification and Synchronization- Next Generation Sensor Technology Development (U01 Clinical Trial Optional)

UC Foundation Funding Opportunity

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.

McKnight Reviews Letters of Intent for 'Neurobiology of Brain Disorders' Award Deadline - November 4, 2024, 6:00 PM ET (Letters of Intent)

The McKnight Foundation invites letters of intent for its Neurobiology of Brain Disorders Award which assists scientists working to apply the knowledge achieved through basic research to human brain disorders, and who demonstrate a commitment to equitable and inclusive lab environments. Awards of \$300,000 – \$100,000 per year for three years – will be given to support proposals addressing the biological mechanisms of neurological and psychiatric disorders. This includes proposals that provide mechanistic insights into neurological functions at the synaptic, cellular, molecular, genetic, or behavioral level across different species, including humans and vertebrate and invertebrate model organisms. An additional area of interest is the contribution of the environment to brain disorders. The foundation is particularly interested in proposals that incorporate new approaches and in those that provide potential paths for therapeutic interventions. Collaborative and cross-disciplinary applications are encouraged. Funding may be used toward a variety of research activities but may not be used for the recipient's

salary. To be eligible, applicants must work as an independent investigator at a not-for-profit research institution in the United States and must hold a faculty position at the rank of assistant professor or higher. According to the foundation, early-life environmental stress is a powerful disposing factor for later neurological and psychiatric disorders. Studies show communities of color are at higher risk for these stressors, which range from environmental (e.g. climate, nutrition, exposure to chemicals, pollution) to social (e.g. family, education, housing, poverty). From a clinical perspective, understanding how environmental factors contribute to brain disease is essential for developing effective therapies.

CAR Member New Publications

Communities That HEAL Intervention and Mortality Including Polysubstance Overdose Deaths

A Randomized Clinical Trial

Bridget Freisthler, PhD; Rouba A. Chahine, PhD; Jennifer Villani, PhD, MPH; Redonna Chandler, PhD; Daniel J. Feaster, PhD; Svetla Slavova, PhD; Jolene Defiore-Hyrmer, MPH; Alexander Y. Walley, MD, MSc; Sarah Kosakowski, MPH; Arnie Aldridge, PhD; Carolina Barbosa, PhD; Sabana Bhatta, MPH; Candace Brancato, MS; Carly Bridden, MA, MPH; Mia Christopher, MPH; Tom Clarke, PhD; James David, MA; Lauren D'Costa, BS; Irene Ewing, BSN; Soledad Fernandez, PhD; Erin Gibson, MPH; Louisa Gilbert, PhD; Megan E. Hall, MPH; Sarah Hargrove, MS; Timothy Hunt, PhD; Elizabeth N. Kinnard, MS; Lauren Larochelle, MS; Aaron Macoubray, BS; Shawn Nigam, PhD; Edward V. Nunes, MD; Carrie B. Oser, PhD; Sharon Pagnano, MPH; Peter Rock, MPH; Pamela Salsberry, PhD, MPH; Aimee Shadwick, MA; Thomas J. Stopka, PhD, MHS; Sylvia Tan, MS; Jessica L. Taylor, MD; Philip M. Westgate, PhD; Elwin Wu, PhD; Gary A. Zarkin, PhD; Sharon L. Walsh, PhD; Nabila El-Bassel, PhD; T. John Winhusen, PhD; Jeffrey H. Samet, MD, MA, MPH; Emmanuel A. Oga, MD, MPH

JAMA Network Open

DOI: https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2825142

ABSTRACT

Importance: The HEALing Communities Study (HCS) evaluated the effectiveness of the Communities That HEAL (CTH) intervention in preventing fatal overdoses amidst the US opioid epidemic.

Objective: To evaluate the impact of the CTH intervention on total drug overdose deaths and overdose deaths involving combinations of opioids with psychostimulants or benzodiazepines.

Design, Setting, and Participants: This randomized clinical trial was a parallel-arm, multisite, community-randomized, open, and waitlisted controlled comparison trial of communities in 4 US states between 2020 and 2023. Eligible communities were those reporting high opioid overdose fatality rates in Kentucky, Massachusetts, New York, and Ohio. Covariate constrained randomization stratified by state allocated communities to the

intervention or control group. Trial groups were balanced by urban or rural classification, 2016-2017 fatal opioid overdose rate, and community population. Data analysis was completed by December 2023.

Intervention: Increased overdose education and naloxone distribution, treatment with medications for opioid use disorder, safer opioid prescribing practices, and communication campaigns to mitigate stigma and drive demand for evidence-based interventions.

Main Outcomes and Measures: The primary outcome was the number of drug overdose deaths among adults (aged 18 years or older), with secondary outcomes of overdose deaths involving specific opioid-involved drug combinations from death certificates. Rates of overdose deaths per 100 000 adult community residents in intervention and control communities from July 2021 to June 2022 were compared with analyses performed in 2023.

Results: In 67 participating communities (34 in the intervention group, 33 in the control group) and including 8211506 participants (4251903 female [51.8%]; 1273394 Black [15.5%], 603983 Hispanic [7.4%], 5979602 White [72.8%], 354527 other [4.3%]), the average rate of overdose deaths involving all substances was 57.6 per 100000 population in the intervention group and 61.2 per 100000 population in the control group. This was not a statistically significant difference (adjusted rate ratio [aRR], 0.92; 95% CI, 0.78-1.07; P = .26). There was a statistically significant 37% reduction (aRR, 0.63; 95% CI, 0.44-0.91; P = .02) in death rates involving an opioid and psychostimulants (other than cocaine), and nonsignificant reductions in overdose deaths for an opioid with cocaine (6%) and an opioid with benzodiazepine (1%).

Conclusions and Relevance: In this clinical trial of the CTH intervention, death rates involving an opioid and non-cocaine psychostimulant were reduced; total deaths did not differ statistically. Community-focused data-driven interventions that scale up evidence-based practices with communications campaigns may effectively reduce some opioid-involved polysubstance overdose deaths.

Trial Registration: Clinical Trials.gov Identifier: NCT04111939.

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