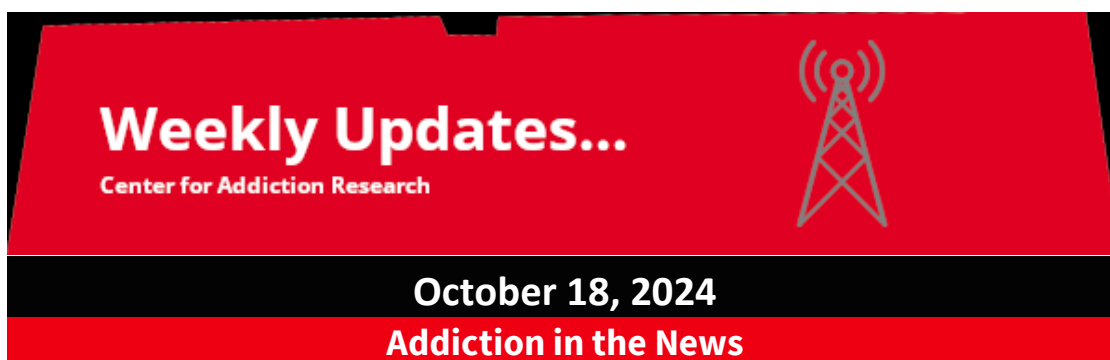


Welcome to the weekly newsletter from the Center for Addiction Research! Each newsletter includes highlights from addiction in the news topics, active funding opportunities offered by NIDA/NIAAA, and information about any new publications from CAR members. Please email Jen Rowe (roweji@ucmail.uc.edu)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

Researchers report effects of intervention on overdose education and naloxone distribution

New research shows that the HEALing (Helping to End Addiction Long-term) Communities Study (HCS) significantly increased community access to naloxone, a lifesaving medication that quickly reverses the effects of opioids and helps restore breathing in someone who is experiencing an overdose. The paper, published in the American Journal of Public Health on Oct. 10, analyzed results from the HEALing Communities Study (HCS), which included the University of Kentucky as a research site. Launched in 2019, the landmark study was aimed at reducing overdose deaths in 67 communities across four states highly impacted by the opioid crisis: Kentucky, Massachusetts, New York and Ohio. Kentucky communities achieved... **(third author, Dr. T. John Winhusen, HEALing Communities Study Co-Principal Investigator for Ohio and CAR Director, see publication below in the newsletter)**

Clonidine Comparable to Morphine for Infants With Opioid Withdrawal

Length of treatment and neurobehavioral scores did not significantly differ between infants with prenatal opioid exposure randomized to either clonidine or morphine, researchers found. Among infants with neonatal opioid withdrawal syndrome (NOWS), median length of treatment was 15 days for infants who received morphine and 17 days for those who received clonidine ($P=0.48$), reported Henrietta Bada, MD, MPH, of the University of Kentucky in Lexington, and colleagues. At the end of treatment, neurobehavioral performance, a predictor of childhood outcomes, also did not differ between groups, Bada and colleagues

noted in Pediatrics. However, more of the clonidine-treated infants needed adjunct... **(fourth author, Dr. Kimberly Yolton, CAR member, see publication below in the newsletter)**

[Navigating the Storm - The Opioid Epidemic in Hamilton County](#)

Friday, November 22, 2024

8:30 AM – 4:30 PM

UC Tangeman University Center Room 400A-C

You are invited to a free full-day seminar **(flyer attached)** led by the Hamilton County Office of Addiction Response and hosted by the UC School of Criminal Justice. Policy makers, law enforcement, navigators, researchers, and family members are all contributing to the day's events, along with local agencies, who will provide information and resources. Space is limited, so [register now!](#)

[Study finds more bystanders are using naloxone to reverse opioid overdose](#)

Use of a lifesaving drug to reverse opioid drug overdoses is growing, but not fast enough. That's according to new research in JAMA Network Open from The Ohio State University College of Medicine, College of Public Health and the National Registry of Emergency Medical Technicians. In the first study of its kind, the research team looked at national use of naloxone by people without medical training to treat an opioid drug overdose. "Naloxone is a lifesaving medication that can reverse opioid overdose effects when given immediately," said Ashish R. Panchal, MD, Ph.D., clinical professor of emergency medicine and senior author. "Similar to CPR, stepping up to help before emergency crews arrive can be...

National News

[Hospitalizations involving alcohol withdrawal syndrome common](#)

Tessa L. Steel, M.D., M.P.H., from University of Washington in Seattle, and colleagues evaluated the incidence and proportional incidence of hospitalizations involving AWS in an adult primary care population overall and across patient characteristics. The analysis included electronic health records and insurance claims from Kaiser Permanente Washington (544,825 adults; July 1, 2018, to June 30, 2022). The researchers found that the incidence of hospitalizations involving AWS was 169 per 100,000 person-enrolled years overall but as high as 15,347 in patients with other alcohol-attributable diagnoses. Overall, the proportional...

[For heavy drinkers, chronic pain associated with alcohol withdrawal could be permanent](#)

One of the main physical symptoms of alcohol withdrawal is "allodynia"—increased sensitivity to mechanical stimuli that are normally innocuous, which is a clinical sign of chronic pain. In a new animal study published in Pharmacological Research, Scripps Research scientists show that the duration of this heightened sensitivity depends on the amount of alcohol an individual chronically imbibes. In

models of moderate alcohol consumption, pain sensitivity returned to baseline levels after around seven days of abstinence, but for "heavy" drinking models, withdrawal resulted in longer-lasting--perhaps permanent...

Students who feel more university connection may be more likely to binge-drink

Students who feel a sense of belonging at their university are more likely to binge-drink than those who do not feel the same connection, according to a new study by researchers at Penn State, the University of California, Santa Cruz and University of Oregon. In the study, published in the Journal of Studies on Alcohol and Drugs, scientists—including researchers in the Penn State College of Health and Human Development—found that college students with "good" mental health who felt connected to their university were more likely to binge-drink than those who did not feel as connected to their university. Stephane Lanza, professor...

Canada's medical cannabis system changed but didn't disappear after recreational legalization

When Canada legalized recreational cannabis use on Oct. 17, 2018, there were concerns about the potential impacts. Would it trigger greater cannabis use, boost economic growth or otherwise affect the country's health, safety and finances? Patients already using cannabis legally for medical purposes were especially concerned. They worried that recreational legalization might prompt physicians to stop authorizing cannabis treatments. Or that cannabis producers would abandon the small medical market to pursue the larger recreational one. After recreational legalization, the medical cannabis system did see...

Study finds legalization didn't increase recreational cannabis use among young adults in country of Georgia

Cannabis is one of the most widely used drugs, with an estimated 219 million users globally in 2021, with the highest number of users in the Americas. It is also the most used drug among young people. In the U.S., cannabis use among young adults (age 19 to 22) reached a historically high level in 2021, with 42.6% reporting use in the past year. Effects and impact of recreational cannabis legalization and decriminalization on societies is a topic of global relevance and increasing scientific interest. Despite a rapidly growing body of published evidence, findings remain mostly mixed with little attention given to young adults. A...

NIH and FDA leaders call for innovation in development of smoking cessation treatments

In a new commentary in the Annals of Internal Medicine, leaders at the National Institutes of Health (NIH) and U.S. Food and Drug Administration (FDA) highlight recommendations and opportunities to promote innovation in research and development of smoking cessation therapies, for which there is an urgent need. The authors provide an update on regulatory pathways for smoking cessation

treatment, as well as an overview of innovative therapeutic targets, research gaps, and opportunities. They emphasize that active engagement across clinicians, academia, industry, public health, patient advocacy groups, and other...

Large-scale human study finds Ozempic (or similar medications) may reduce opioid overdose risk by 40%

A study published in the journal *Addiction* has found that people with opioid or alcohol use disorder (OUD, AUD) who take Ozempic or similar medications to treat diabetic/weight-related conditions appear to have a 40% lower rate of opioid overdose and a 50% lower rate of alcohol intoxication than people with OUD and AUD who do not take Ozempic or similar medications. Ozempic is one of several medications, called glucagon-like peptide-1 receptor agonists or GLP-1 RAs, that are prescribed to treat diabetes, obesity, and other weight-related medical conditions. The medications interact with a region of the brain—the mesolimbic...

CDC reports record drop in drug overdose deaths

Drug overdose deaths dropped a record amount during the past year, according to provisional data the Centers for Disease Control and Prevention. The CDC reported that 94,758 individuals died because of drug overdoses in the 12-month period ending May 2024—a 15% drop from the previous 12-month period. The agency estimates that number may rise to 98,820 when finalized, which would be a 12.7% drop. Rahul Gupta, director of the White House Office of National Drug Control Policy, commended the data, which showed a decline in nationwide drug-related deaths for the sixth month in a row. "We are at a critical..."

New rules should make methadone easier to get, but change is slow in many places

It should be easier to get methadone today than it has been in decades. In April, 2024, the federal government relaxed some of the rules around the treatment for opioid addiction. But many patients are still not benefitting from those changes. Kellyann Kaiser, 30, is among those in recovery who had been waiting eagerly for greater access to methadone. She said she was addicted to opioids from the age of 13 into her late 20s. She tried several different addiction medications, including buprenorphine and naltrexone. "I think just methadone is what got me sober," she said. "Without that, I think I would still be using." But it hasn't...

Poppy Seed Brew Triggers Morphine Overdose, Drawing Attention of Lawmakers

It sounds like a joke: poppy seeds infused with opioids. Indeed, it was a plotline on the sitcom *Seinfeld*. But for some it has been a tragedy. People have died after drinking tea brewed from unwashed poppy seeds. And after eating lemon poppy seed bread or an everything bagel, mothers reportedly have been separated from newborns because the women failed drug tests. Poppy seeds come from the plant that produces opium and from which narcotics such as morphine and codeine are

derived. During harvesting and processing, the seeds can become coated with the opium fluid. Members of the House and Senate have proposed...

Fighting the opioid epidemic: AI and optimization model leads to equitable treatment resource distribution

The opioid epidemic is a crisis that has plagued the United States for decades. One central issue of the epidemic is inequitable access to treatment for opioid use disorder (OUD), which puts certain populations at a higher risk of opioid overdose. New research in Manufacturing & Service Operations Management provides socioeconomically equitable solutions by utilizing artificial intelligence (AI) and optimization. It's the first research of its kind to target the opioid crisis and identify solutions at a state-by-state level. "Our proposed solution focuses on equitability and access to treatment facilities based on state data. We found that applying...

Men and women process pain differently, study finds

In a new study evaluating meditation for chronic lower back pain, researchers at University of California San Diego School of Medicine have discovered that men and women utilize different biological systems to relieve pain. While men relieve pain by releasing endogenous opioids, the body's natural painkillers, women rely instead on other, non-opioid based pathways. Synthetic opioid drugs, such as morphine and fentanyl, are the most powerful class of painkilling drugs available. Women are known to respond poorly to opioid therapies, which use synthetic opioid molecules to bind to the same receptors as naturally...

Philadelphia hospitals test new strategy for 'tranq dope' withdrawal

Unimaginable pain and restlessness. Vomiting so frequent and forceful that it can perforate the esophagus. Blood pressure and heart rate so high that they damage the heart. Sweating that drenches clothing and sheets. Nerve sensitivity that makes even the softest touch agonizing. A prolonged panic attack that is provoked and worsened by even mundane activities and conversations. The withdrawal symptoms from "tranq dope"—the combination of the synthetic opioid fentanyl and the animal tranquilizer xylazine that dominates Philadelphia's street opioid supply—tend to be far worse than those experienced by even...

Meth poisoning emerges as the leading cause for fatal overdoses in older Hawaii residents

A new study by researchers at the University of Hawaii at Mānoa's Center on Aging reveals a concerning trend: methamphetamine poisoning is the leading cause of fatal overdoses among midlife and older adults in Hawaii. The research, published in the Hawaii Journal of Health and Social Welfare, highlights an overlooked aspect of the state's drug crisis. Between July 2020 and December 2021, 263 drug-related deaths were recorded across the state. Of these, more than half (58.2%) involved individuals aged 50 to 79, with methamphetamine toxicity accounting for 64.3% of those deaths—compared to just 16.4% from opioid...

HIV diagnosis linked to higher risk of meth use in gay and bisexual men

People assigned male at birth who belong to a sexual or gender minority group were twice as likely to use methamphetamine following an HIV diagnosis, according to a study published in the Proceedings of the National Academy of Sciences. Methamphetamine use has been a concern for gay and bisexual men for decades, said Brian Mustanski, Ph.D., the study's lead author and director of the Institute for Sexual and Gender Minority Health and Wellbeing (ISGMH) and the Third Coast Center for AIDS Research. "What we're really trying to understand is the epidemiology of HIV, substance use and co-occurring mental health..."

Brain imaging of neuromelanin may be key to understanding extensive substance use

A study that used a specialized type of magnetic resonance imaging (MRI)--neuromelanin-sensitive MRI-- has shown that this type of MRI signal was increased in regions of the midbrain in young adults ages 20 to 24 who had an extensive alcohol and drug use history. The research was conducted by a team of investigators in the Department of Psychiatry and Behavioral Health in the Renaissance School of Medicine at Stony Brook University. The findings are published in the American Journal of Psychiatry. The research involved 135 individuals, 105 women and 30 men. Neuromelanin accumulates naturally...

How climate change may affect addiction recovery

As growing evidence shows that climate change will influence nearly every aspect of our health, a University at Buffalo School of Social Work researcher is the first to explore how climate change may affect individuals who are recovering from addiction. Using the theory of recovery capital, Elizabeth Bowen, Ph.D., associate professor in the UB School of Social Work, outlines many ways climate change may impact addiction recovery, including how marginalization because of race, income or age could magnify these effects for particular groups. While other studies have examined the effect of climate change on substance...

Experts Highlight Alarming Jump in HIV Infections Among Latinos

More resources are urgently needed to overcome the growing HIV crisis among Latinos in the U.S., researchers argued. While annual HIV surveillance reports released by the CDC in May showed that the number of estimated new HIV infections per year nationwide fell by 19% opens in a new tab or window from 2010 through 2022, there was a 12% increase in infections among Latino people, reported Vincent Guilamo-Ramos, PhD, MPH, of the Institute for Policy Solutions at the Johns Hopkins School of Nursing in Washington, D.C., and co-authors. In comparison, the estimated number of new HIV infections per year decreased...

Funding Opportunities



GRANTS & FUNDING

NIH Central Resource for Grants and Funding Information

[RFA-DA-25-072](#)

[Ending the Epidemic: New Models of Integrated HIV/AIDS, Addiction, and Primary Care Services \(R01 Clinical Trial required\)](#)

[RFA-DA-25-070](#)

[Ending the Epidemic: New Models of Integrated HIV/AIDS, Addiction, and Primary Care Services \(R34 Clinical Trial Optional\)](#)

[RFA-NS-24-038](#)

[Human Brain Single-cell Genomics Explorer \(U24 - Clinical Trial Not Allowed\)](#)

[NOT-DA-24-050](#)

[Notice of NIDA Participation in PA-25-080 "NIH Support for Conferences and Scientific Meetings \(Parent R13 Clinical Trial Not Allowed\)"](#)

[NOT-NS-24-126](#)

[Notice of Intent to Publish a Funding Opportunity Announcement for CCRP Initiative: Countermeasures Against Chemical Threats \(CounterACT\) Therapeutics Discovery and Early-Stage Development \(UG3/UH3 Clinical Trial Not Allowed\)](#)

CAR Member New Publications

Effect of the Communities That HEAL Intervention on Overdose Education and Naloxone Distribution: A Cluster-Randomized, Wait-List Controlled Trial

Patricia R. Freeman PhD, Alexander Y. Walley MD, MSc, T. John Winhusen PhD, Emmanuel A. Oga MD, MPH, Jennifer Villani PhD, MPH, Timothy Hunt PhD, Redonna K. Chandler PhD, Douglas R. Oyler PharmD, Brittni Reilly MSW, Kitty Gelberg PhD, Christian Douglas DrPH, Michael S. Lyons MD, JaNae Holloway MSPH, Nathan A. Vandergrift PhD, Joella W. Adams PhD, Katherine Asman MSPH, Trevor J. Baker MS, Candace J. Brancato MS, Debbie M. Cheng ScD, Janet E. Childerhose PhD, James L. David MS, Daniel J. Feaster PhD, Louisa Gilbert PhD, LaShawn M. Glasgow DrPH, Dawn A. Goddard-Eckrich EdD, Charles Knott MPA, Hannah K. Knudsen PhD, Michelle R. Lofwall MD, Katherine R. Marks PhD, Jason T. McMullan MD, Carrie B. Oser PhD, Monica F. Roberts PharmD, Abigail B. Shoben PhD, Michael D. Stein MD, Scott T. Walters PhD, Josie Watson CPhT, Gary A. Zarkin PhD, Rebecca D. Jackson MD, Jeffrey H. Samet MD, Sharon L. Walsh PhD, and Nabila El Bassel PhD

American Journal of Public Health

DOI: <https://doi.org/10.2105/AJPH.2024.307845>

ABSTRACT

Objectives: To determine whether the Communities That HEAL (CTH) intervention is effective in increasing naloxone distribution compared with usual care.

Methods: The HEALing (Helping to End Addiction Long-Term) Communities Study (HCS) is a cluster-randomized, parallel-arm, wait-list controlled implementation science trial testing the impact of the CTH intervention on increasing the use of evidence-based practices to lower opioid-related overdose deaths. Communities (n = 67) highly impacted by opioid overdose in Kentucky, Massachusetts, New York, and Ohio were allocated to CTH intervention (n = 34) or wait-list comparison (usual care; n = 33) arms. The primary outcome for this study was the number of naloxone units distributed in HCS communities during the comparison period (July 1, 2021–June 30, 2022), examined using an intent-to-treat negative binomial regression model.

Results: Naloxone distribution was 79% higher in the CTH intervention versus usual care arm (adjusted relative rate = 1.79; 95% confidence interval = 1.28, 2.51; P = .001; adjusted rates of naloxone distribution 3378 vs 1884 naloxone units per 100 000 residents), when controlling for urban–rural status, state, baseline opioid-related overdose death rate, and baseline naloxone distribution rate.

Conclusions: The CTH intervention increased naloxone distribution compared with usual care in communities highly impacted by the opioid crisis.

Trial Registration: ClinicalTrials.gov identifier: NCT04111939. (Am J Public Health. Published online ahead of print October 10, 2024:e1–e12.

Clonidine as Monotherapy for Neonatal Opioid Withdrawal Syndrome: A Randomized Trial

Henrietta S. Bada, MD, MPH; Philip M. Westgate, PhD; Thitinart Sithisarn, MD, PhD; Kimberly Yolton, PhD; Richard Charnigo, PhD; Massroor Pourcyrous, MD; Fei Tang, PharmD, PhD; Julia Gibson, PharmD; Jennifer Shearer-Miller, PhD; Peter Giannone, MD; Markos Leggas, PhD

Pediatrics Journal

DOI: <https://doi.org/10.1542/peds.2023-065610>

ABSTRACT

Objective: We sought to determine whether clonidine, a non-opioid α -2-adrenergic agonist, would effectively treat neonatal opioid withdrawal syndrome (NOWS).

Methods: This was an intention-to-treat randomized clinical trial. Enrollment criteria included prenatal opioid exposure, age ≤ 7 days, gestational age ≥ 35 weeks, no other

medical condition, and need for pharmacotherapy. Primary outcomes were length of treatment and neurobehavioral performance.

Results: A total of 1107 patients were screened for enrollment (645 ineligible, 91 parents or staff unavailable, 216 declined, 155 consented). Of 155 infants, 120 required treatment and were randomized to receive oral clonidine (n = 60) at 1 µg/kg/dose or morphine (n = 60), 0.06 mg/kg/dose, every 3 hours. Infants with no improvement had their doses increased by 25% of the initial dose every 12 to 24 hours. Those without improvement by the fourth dose increase, received adjunct therapy. Length of treatment did not differ between morphine and clonidine, with median (95% confidence interval [CI]) days, respectively, of 15 (13–17) and 17 (15–19), P = .48. More clonidine-treated infants (45%) needed adjunct therapy versus 10% in the morphine group, adjusted odds ratio (95% CI) = 8.85 (2.87–27.31). After treatment completion, the NICU Network Neurobehavioral Scales summary scores did not differ between clonidine-treated and morphine-treated infants.

Conclusions: Length of pharmacologic treatment and final neurobehavioral performance were not significantly different between the clonidine- and morphine-treated groups. Clonidine appears to be an effective non-opioid medication to treat NOWS. Future studies are needed to determine the optimal clonidine dosage for a quicker response and obviation of adjunct therapy.

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