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

Gold and Silver Apples Awards

Medical Sciences undergraduate students have named the 2024 recipients of Gold and Silver Apple Awards for the best courses this past academic year in the Medical Sciences Baccalaureate Program. The students selected their most impactful courses to recognize the excellent teaching by instructors. Congratulations to CAR Member, Dr. Terry, Kirley, PhD, Class of 1982, professor, Department of Pharmacology and Systems Physiology, who was the recipient of the Silver Apple in 4000 Level Courses for "Fundamentals of Medical Pharmacology".

OVERDOSE AWARENESS WEEK

The UC Early Intervention Program (EIP) is hosting a week of activities for UC College of Medicine and UC Health leading up to Overdose Awareness Day. The EIP will be set up at tables in the University Hospital cafeteria from 12pm-2pm Monday (8/26) through Friday (8/30). See attached event flyer for more details.

Additionally, the EIP will be providing resources and tabling at Addiction Services Counsel's Overdose Awareness Day event on Friday, 8/30 from 4-7pm. See attached event flyer for more details.

University of Cincinnati, Cincinnati Children's part of statewide mental health research initiative

The University of Cincinnati and Cincinnati Children's Hospital are part of a collaborative research initiative designed to identify contributors to the ongoing

epidemic of persistent emotional distress, suicide and drug overdose in the state of Ohio. The SOAR Study investigates the role of underlying biological, psychological and social factors. The Ohio Department of Mental Health and Addiction Services (OhioMHAS) is funding this statewide research project with an initial \$20 million grant. Like other areas of the country, Ohio has seen a rise in mental illness, suicide and deaths related to drug overdose over the past decade, and the COVID-19 pandemic exacerbated these problems. "The causes of...

Overdose deaths 'drastically down'

FINDLAY — Findlay Service-Safety Director Rob Martin said drug overdoses and overdose deaths are "drastically down" in the city, prompting concerns that state funding for response efforts could end. Findlay City Council voted Tuesday in regular session to accept a \$50,000 grant from the Ohio Attorney General's Drug Abuse Response Team program. Money from the grant is used to assist local agencies in their efforts to combat the opioid/fentanyl drug problem in their communities. Locally, the Findlay Police Department has worked with the Family Resource Center to operate a local Quick Response Team. The team was first established in 2017. The grant will reimburse the Family Resource Center for...

Parents torn on Strongsville's new mandatory student drug testing

STRONGSVILLE, Ohio — Drug testing in schools has been happening across Northeast Ohio for years. Now, another district has decided to test students, and it's not sitting well with everyone. Drug tests can be done for a job, in court and now, at Strongsville City Schools. Strongsville's new mandatory drug testing program was adopted on Aug. 1; it'll apply to students in 6th through 12th grade who play sports, participate in extracurricular activities or have driving privileges. They'll be tested by Great Lakes Biomedical using a 5-panel test that'll look for THC, nicotine, alcohol, as well as other substances. If a student fails a test, the school will offer a diversion program for education and support. "Any student who tests positive...

National News

Taking a trip down memory lane could be the key to drinking less alcohol

Researchers from the University of Portsmouth have explored the role memory plays in alcohol consumption and believe it could help people drink less booze. Previous research has found people don't eat as much food when they are reminded of an earlier meal just before tucking in. The new study wanted to further investigate the relationship between memory and consumption, but with alcohol instead. The team conducted a study involving 50 women aged 18- to 46-years-old who were randomly split into two groups: The first group were asked to recall a recent alcohol experience in detail, and the second had to recall a car journey...

Study finds vaping is linked to smoking cigarettes, using marijuana and other drugs over time

U.S. teens and young adults who vape are much more likely to start smoking cigarettes or to begin using cannabis or other drugs, a University of Michigan study, appearing in the journal Drug and Alcohol Dependence, found. Most vaping studies focus on adolescents (12–17) in short time windows of around two years. Less is known about vaping in young adults (18–25) or the risk of starting other substances like cigarettes, marijuana or other drugs. To that end, researchers examined data from 12-to-25-year-olds over an eight-year period. They found that those who vaped were more likely to start smoking cigarettes, using marijuana or...

Study finds experts have high credibility among young adults in social media health campaigns

Health information—and misinformation—is everywhere on social media. But does the messenger matter in social media e-cigarette information? Researchers at UMass Chan Medical School were interested in determining how young adults perceive information about vaping e-cigarettes based on who shared that information on Instagram. In a study led by Donghee Nicole Lee, Ph.D., a postdoctoral researcher in the Department of Population & Quantitative Health Sciences, which was published in May in Drug and Alcohol Dependence, investigators found that the source of health information on social media can...

Research suggests Americans face disparities in exposure to tobacco on streaming platforms

Tens of millions of Americans are being exposed to tobacco content on streaming services, according to new research from The University of Texas MD Anderson Cancer Center. The researchers found that the odds of encountering tobacco products being advertised, marketed or promoted on these platforms increased based on race, ethnicity, socioeconomic status and smoking habits. The nationally representative study, published in JAMA Network Open, revealed an estimated 12.4% of American adults were exposed to tobacco promotion on streaming services. Exposure was highest among those with a high school education...

Study shows naloxone benefits in both drug-related and non-drug-related cardiac arrests

Patients who overdose on opioids and have a pulse are often given naloxone (Narcan) by first responders, a common life-saving measure. However, emergency medical service (EMS) agencies have different protocols for administering naloxone, so there is little evidence to support its use in patients without a pulse who experienced opioid-associated out of hospital cardiac arrest (OHCA). A recent study by UC Davis Health researchers set out to assess the effects of giving naloxone administration by paramedics to patients with OHCA. The study, published in JAMA Network Open, concluded there was an association between...

New data shows decline in opioid overdose deaths in New York over past 12 months

Opioid and overdose deaths are down an estimated 9% across New York state over the past 12 months, Gov. Kathy Hochul announced Wednesday. This is according to new provisional data released by the Centers for Disease Control and Prevention (CDC). According to the data, the CDC estimated 3,253 drug overdose deaths in areas of New York outside New York City during the 12 months from April 2023 to March 2024. This represents a 9% decrease compared to the estimated 3,575 overdose deaths in those parts of the state from April 2022 to March 2023. "I'm committed to keeping New Yorkers safe and turning the tide against...

Leave-behind kits in Metro Detroit aimed to prevent opioid overdoses

BIRMINGHAM, Mich. (CBS DETROIT) – First responders in Birmingham are taking a hands-on approach to help those struggling with opioid addiction. Inside each rig at the fire department off South Adams Road sits a case with kits filled with free resources if first responders get a call for an overdose. "These kits are meant to be left behind for someone who had an opioid emergency," said Birmingham Fire Chief Paul Wells. Wells says the kits are part of a new program in Birmingham in collaboration with Oakland County health agencies, including The Alliance of Coalitions for Healthy Communities and Oakland County...

A compound in rosemary extract can reduce cocaine sensitivity

A team of researchers led by the University of California, Irvine has discovered that an antioxidant found in rosemary extract can reduce volitional intakes of cocaine by moderating the brain's reward response, offering a new therapeutic target for treating addiction. The study, recently published in the journal Neuron, describes team members' focus on a region of the brain called the globus pallidus externus (GPe), which acts as a gatekeeper that regulates how we react to cocaine. The team discovered that within the GPe, parvalbumin-positive neurons are crucial in controlling the response to cocaine by changing the...

Methamphetamine-involved psychiatric hospitalizations have increased, study says

A new study, out now in Drug and Alcohol Dependence, that details trends among psychiatric hospitalizations between 2015-2019 finds that while most hospitalizations did not involve any substances, methamphetamine-related hospitalizations have increased while overall number of psychiatric hospitalizations remained stable. Additionally, researchers detail that psychiatric hospitalizations caused by methamphetamine use were highest in the Mountain West region but were also shifting geographically. "Rates of methamphetamine-involved psychiatric hospitalizations with were by far the highest in the Mountain West. As...

Meth addiction, HIV and a struggling health system are causing a perfect storm in Fiji

Like many Pacific states that rely on tourism, Fiji had a hard time during the main pandemic years. But as tourism recovers, another crisis threatens the island nation's stability—one fueled by rising methamphetamine addiction. Driven by foreign drug cartels using Fiji as a staging post for operations in New Zealand and Australia, the drug has also spread into local communities. In turn, it has fueled a surge in HIV infections and put extra burdens on stretched health and justice sectors. Known locally as "ice," methamphetamine (meth) is highly addictive, widely available and increasingly linked to risky behavior. Needle...

Biden-Harris Administration Announces More Than \$1.4 Billion to Provide Lifesaving HIV Medications and Health Care Services to Individuals with HIV with Low Incomes

Today, the Health Resources and Services Administration (HRSA) of the U.S. Department of Health and Human Services (HHS), announced more than \$1.4 billion in Ryan White HIV/AIDS Program funding for the HRSA AIDS Drug Assistance Program and related awards. This HRSA funding ensures that individuals with HIV who have low incomes receive lifesaving medication, quality HIV health care and essential support services. This announcement supports and advances the Biden-Harris Administration's National HIV/AIDS Strategy. HRSA-supported AIDS Drug Assistance Programs pay for HIV medication, co-pays and...

Funding Opportunities



RFA-DA-26-007

<u>Advancing Research on Molecular Targets and Mechanisms that Influence the Interplay Between Sex Hormones, HIV, and Addictive Substances (R01 Clinical Trials Not Allowed)</u>

RFA-DA-26-008

Advancing Research on Molecular Targets and Mechanisms that Influence the Interplay Between Sex Hormones, HIV, and Addictive Substances (R21 Clinical Trials Not Allowed)

NOT-NS-24-014

Notice of Intent to Publish a Funding Opportunity Announcement for Blueprint

<u>Neurotherapeutics Network (BPN): Biologic-based Drug Discovery and Development for Disorders of the Nervous System (UG3/UH3 Clinical Trial Optional)</u>

RFA-HD-25-003

Pediatric HIV/AIDS Cohort Study (PHACS) (U19 Clinical Trial Not Allowed)

CAR Member New Publications

Influence of Eat, Sleep, and Console on Infants Pharmacologically Treated for Opioid Withdrawal: A Post Hoc Subgroup Analysis of the ESC-NOW Randomized Clinical Trial

Lori A Devlin, Zhuopei Hu, Stephanie L Merhar, Songthip T Ounpraseuth, Alan E Simon, Jeannette Y Lee, Abhik Das, Margaret M Crawford, Rachel G Greenberg, P Brian Smith, Rosemary D Higgins, Michele C Walsh, Ward Rice, David A Paul, Jessie R Maxwell, Camille M Fung, Tanner Wright, Julie Ross, Jennifer M McAllister, Moira Crowley, Sophie K Shaikh, Lori Christ, Jaime Brown, Julie Riccio, Kara Wong Ramsey, Erica F Braswell, Lauren Tucker, Karen McAlmon, Krishna Dummula, Julie Weiner, Jessica R White, Sarah Newman, Jessica N Snowden, Leslie W Young; Eunice Kennedy Shriver NICHD Neonatal Research Network and NIH Environmental Influences on Child Health Outcomes (ECHO) Program Institutional Development Award States Pediatric Clinical Trials Network

JAMA Pediatrics

DOI: https://doi.org/10.1001/jamapediatrics.2024.0544

ABSTRACT

Importance: The function-based eat, sleep, console (ESC) care approach substantially reduces the proportion of infants who receive pharmacologic treatment for neonatal opioid withdrawal syndrome (NOWS). This reduction has led to concerns for increased postnatal opioid exposure in infants who receive pharmacologic treatment. However, the effect of the ESC care approach on hospital outcomes for infants pharmacologically treated for NOWS is currently unknown.

Objective: To evaluate differences in opioid exposure and total length of hospital stay (LOS) for pharmacologically treated infants managed with the ESC care approach vs usual care with the Finnegan tool.

Design, Setting, and Participants: This post hoc subgroup analysis involved infants pharmacologically treated in ESC-NOW, a stepped-wedge cluster randomized clinical trial conducted at 26 US hospitals. Hospitals maintained pretrial practices for pharmacologic treatment, including opioid type, scheduled opioid dosing, and use of adjuvant medications. Infants were born at 36 weeks' gestation or later, had evidence of antenatal opioid exposure, and received opioid treatment for NOWS between September 2020 and March 2022. Data were analyzed from November 2022 to January 2024.

Exposure: Opioid treatment for NOWS and the ESC care approach.

Main Outcomes and Measures: For each outcome (total opioid exposure, peak opioid dose, time from birth to initiation of first opioid dose, length of opioid treatment, and LOS), we used generalized linear mixed models to adjust for the stepped-wedge design and maternal and infant characteristics.

Results: In the ESC-NOW trial, 463 of 1305 infants were pharmacologically treated (143/603 [23.7%] in the ESC care approach group and 320/702 [45.6%] in the usual care group). Mean total opioid exposure was lower in the ESC care approach group with an absolute difference of 4.1 morphine milligram equivalents per kilogram (MME/kg) (95% CI, 1.3-7.0) when compared with usual care (4.8 MME/kg vs 8.9 MME/kg, respectively; P = .001). Mean time from birth to initiation of pharmacologic treatment was 22.4 hours (95% CI, 7.1-37.7) longer with the ESC care approach vs usual care (75.4 vs 53.0 hours, respectively; P = .002). No significant difference in mean peak opioid dose was observed between groups (ESC care approach, 0.147 MME/kg, vs usual care, 0.126 MME/kg). The mean length of treatment was 6.3 days shorter (95% CI, 3.0-9.6) in the ESC care approach group vs usual care group (11.8 vs 18.1 days, respectively; P < .001), and mean LOS was 6.2 days shorter (95% CI, 3.0-9.4) with the ESC care approach than with usual care (16.7 vs 22.9 days, respectively; P < .001).

Conclusions and Relevance: When compared with usual care, the ESC care approach was associated with less opioid exposure and shorter LOS for infants pharmacologically treated for NOWS. The ESC care approach was not associated with a higher peak opioid dose, although pharmacologic treatment was typically initiated later.

Trial Registration: Clinical Trials.gov Identifier: NCT04057820.

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