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**

### More opioid lawsuit settlement money headed to Butler County

Another \$19 billion is flowing to governments nationwide now that CVS, Walgreens and others have finalized a settlement in the massive opioid litigation and some Butler County jurisdictions are in line for the funds. County Administrator Judi Boyko informed the commissioners they have been notified federal settlement dollars are coming from litigation with CVS, Walgreens, Walmart and pharmaceutical manufacturers Tiva and Allergan. "Collectively, the federal litigation settlement is about \$19 billion of those five federal litigants," Boyko said. This settlement is part of the federal multidistrict litigation going on in Cleveland. She told the Journal-News at this juncture...

### DEA raises concerns about Xylazine, a new drug trend that started in Ohio

CLEVELAND — There are seven Drug Enforcement Administration laboratories across the country where chemists test, analyze and watch for drug trends. "We are in a position, here in the laboratory, that if something new is emerging by conducting analysis here, we are able to identify something new that would be there," said Melanie Domagala, the DEA's Chicago Laboratory director. Many times, nationwide trends start right here in Ohio. "Ohio historically has been one of the first places, the first states that we see a lot of these trends beginning, " said Orville Greene, DEA special agent in charge of the Detroit Division. There are already troubling trends on law enforcement's radar for...

# Attorney General Cameron announces \$10.5M award to combat opioid epidemic

FRANKFORT, Ky. — The Kentucky Opioid Abatement Advisory Commission awarded \$10.5 million to a Behavioral Health Conditional Dismissal Pilot Program, which will help provide treatment options as an alternative to incarceration for those struggling with substance abuse. The funding comes from Senate Bill 90, which passed the legislature last year. It allows those who have been charged with certain non-violent drug crimes to go through personalized treatment instead of incarceration if they are trying to recover from substance abuse. "This award of opioid settlement dollars is the first step toward bringing hope and help to Kentuckians struggling with substance use…

## Indiana schools working to cut down on student vaping

BOONE COUNTY, Ind. — Over the last decade, vaping has emerged into an epidemic of alarming proportions among U.S. teenagers. Last year, 20% of middle and high schoolers admitted to using nicotine products – despite the health dangers. Indiana schools are working to keep kids from getting hooked. Lebanon High School principal Kevin O'Rourke knows a lot of his students vape and says he knows the ecigarette industry is targeting his kids. "These companies have done a great job, if you want to call it that, of really marketing the product and in sending out misinformation," O'Rourke said. "Many people, including young people, think that it's not dangerous or...

### **National News**

### Al and genetics could help doctors treat alcohol addiction, research shows

Imagine a patient has been diagnosed with alcohol use disorder, and their health care provider is reviewing medication options to help them curb their drinking. The provider asks the patient some basic questions, like alcohol cravings and stress levels, and collects a blood sample for genetic testing. A computer model uses this information to determine which medication would most likely support the patient with managing their alcohol use. With the help of the model, the provider gives a medication recommendation that is the best fit for their patient. That is a possibility that Albert Arias, M.D., and...

### Alcohol brief intervention can improve health outcomes in hypertension

An alcohol brief intervention (BI) in primary care can improve health outcomes for adults with hypertension, according to a study published online Jan. 19 in BMJ Open. Felicia W. Chi, M.P.H., from Kaiser Permanente Northern California in Oakland, and colleagues examined the correlations between alcohol BI in primary care and outcomes among 72,929 adults with hypertension and 19,642 adults with type 2 diabetes (T2D) who screened positive for unhealthy alcohol use. The study was conducted in a health care system that implemented alcohol screening, BI, and referral to treatment. The...

# Limited evidence that cannabis 'hangover' blunts performance

The first systematic review examining the phenomenon of a "next day" hangover caused by cannabis has found scant evidence impairment exists hours after consumption. The research, due to be published in an upcoming issue of Cannabis and Cannabinoid Research, is available online ahead of print. Dr. Danielle McCartney, a research fellow with the University of Sydney's Lambert Initiative for Cannabinoid Therapeutics, led the analysis with colleagues Ms. Anastasia Suraev, a Research Fellow, and Professor Iain McGregor, the Academic Director. While cannabis has been known to impair cognition and...

# Study: Cannabis has same effect on adolescents and adults, and CBD doesn't dampen effects

The short-term effects of vaporized cannabis do not differ between adolescents and adults, while cannabidiol (CBD) does not dampen the effects of the drug, finds a new study led by UCL and King's College London researchers. For the experimental study published in Addiction, the researchers measured how regular cannabis users of different ages responded to inhaling cannabis with differing levels of CBD. The study participants included 24 adolescents (16-17 years old) and 24 adults (26-29 years old), all of whom were already regular users of cannabis (0.5 to three days per week...

### Youth cannabis vaping highest in medical marijuana states

More U.S. high school seniors reported vaping cannabis in states where it is legal only for medical purposes than states where all adult use is permitted—a study finding that surprised the researchers. About 27% of twelfth graders in medical marijuana states reported vaping cannabis compared to 19% in states that prohibited cannabis or allowed it for adult use, according to the Washington State University study. "More than a quarter of our youth in medical states were vaping cannabis. That's a lot," said Christian Maynard, a WSU sociology Ph.D. student and first author of the study published...

### Is vaping any healthier than smoking?

There's been plenty of scientific debate about whether vaping is safer than tobacco, and whether it may help some people stop smoking. According to a recent Cochrane Review analysis of 78 studies, electronic cigarettes show more success in helping people quit smoking than traditional nicotine-replacement therapies, such as nicotine patches and gums. "The most important finding from our recent review update is that for the first time there is high certainty evidence that nicotine ecigarettes are more effective than traditional nicotine-replacement therapies, such as patches, gum or...

## Fentanyl vaccine poised to be 'game changer' in fight against addiction

HOUSTON – The end to the fentanyl crisis may be in sight, thanks to a team of researchers in Texas who claim they have successfully developed a vaccine that

could be a "game changer" in addiction treatment. A team led by the University of Houston has developed what they say is a fentanyl vaccine that can block the synthetic opioid from entering the brain — essentially curing addiction by eliminating the euphoric high. "There's no question about it. We developed something that's a new game changer," Dr. Colin Haile, a research associate professor of psychology at UH and the Texas...

# New Research Reveals Dangerous Consequences of Stopping Opioid Treatment for Chronic Pain

Opioid-related overdose has become a major contributor to accidental deaths in the United States and Canada. A new study recently published in the journal PLOS Medicine, led by Mary Clare Kennedy of the University of British Columbia, Kelowna, Canada, indicates that stopping prescribed opioids may increase the risk of overdose. In an effort to decrease opioid-related illness and death, Canada and the United States have established guidelines to limit opioid prescriptions for chronic pain. However, the impact of discontinuing opioid treatments on overdose risk remains largely unstudied. To...

# New study shows number of West Virginia infants exposed to drugs in the womb is 10 times higher than national rate

Nearly one in eight infants born in West Virginia between 2020 and 2022 had in utero exposure to opioids, stimulants and/or cannabis, according to researchers at West Virginia University Health Sciences. Amna Umer, a pediatric research associate professor in the School of Medicine, said her team's new study showed West Virginia's rates of prenatal exposure to opioids and stimulants were 10 times higher than national rates. To estimate the effects of in utero exposure to substances, the study used data from Project WATCH, a state-mandated surveillance tool that captures maternal and...

### Teen overdose deaths lead California schools to stock reversal drug

SACRAMENTO, Calif. — When a student at a Sacramento high school collapsed in an apparent overdose last fall, staff were able to render immediate first aid, administering a newly stocked dose of the opioid reversal drug naloxone. "The results were pretty immediate," said Victoria Flores, a health administrator with the Sacramento Unified School District. "The individual's life was saved." Such incidents, though relatively rare, are behind a new push in California to not just stock school campuses with naloxone, sold under the brand name Narcan, but also allow students to carry and administer the drug. With…

# 'There's a Sense of Urgency': How Wearables Could Reshape Addiction Treatment

Wearables offer addiction treatment providers tantalizing opportunities to improve care outcomes. Increasingly sophisticated devices are now available at affordable price points. Effortless data collection opens the door to more objectivity in a highly

subjective field. But there's a serious problem. Researchers and practitioners still need to figure out what to do with the mountains of data that wearables could produce. "From our standpoint, the best use [of wearables] right now is to collect that data to figure out how we can best utilize that data," Dr. Greg Hobelmann, co-CEO of Havre de Grace...

# Venture capital is investing little in new treatment for addiction, report finds

There are about as many Americans living with addiction as there are Americans living with cancer — but you wouldn't know it based on the world of venture capital. In the past decade, investment firms have poured roughly 270 times more money into developing cancer drugs than addiction cures, according to a new report from BIO, the biotechnology industry trade group. When it comes to opioid addiction in particular, there's a simple reason for the lack of investment, according to David Thomas, BIO's vice president of industry research: There aren't many potential new drugs to invest in. "There's still a...

# Some pharmacies in Mexico passing off fentanyl, meth as legitimate pharmaceuticals

CABO SAN LUCAS, Mexico — If you walk down the right side street, the offers are plentiful, even in broad daylight. Young men in plain T-shirts draw near and call out their wares: Pills. Cocaine. Guns. But if you wave them away and go just a few feet farther, you can walk into a pharmacy where you might get something just as dangerous. You just won't know it. A Los Angeles Times investigation has found that pharmacies in several northwestern Mexican cities are selling counterfeit prescription pills laced with stronger and deadlier drugs and passing them off as legitimate pharmaceuticals. In...

### **Remaking America: Recovery High Schools And Teens Facing Addiction**

Overdose deaths among teens doubled in the first year of the pandemic, according to data from UCLA. Schools have spent decades trying to prevent teens from using drugs and alcohol. The Office of National Drug Control Policy spent \$2.9 billion on drug prevention last year alone, but the success rates of prevention programs remains in question. The Monitoring the Future Survey found 32 percent of 12th graders reported using an illicit substance in the past year. That's virtually unchanged from the survey's findings 30 years ago. As part of our "Remaking America" collaboration, we highlight reporting...

### **Ketamine Clinics Are Jumping Ahead of the Evidence**

Almost a quarter of U.S. adults suffered from a mental illness in 2021, yet less than half of them received treatment. This has incredible impacts on individuals, families, the economy, and public health, and it is of utmost importance to address these untreated mental health needs. Understandably, innovation is important as people are often looking for creative solutions to treat their mental health concerns. Partially as a result, there has been a proliferation of "edgier" approaches, such as

boutique ketamine infusion clinics and at-home psilocybin therapies, which are not yet FDA approved...

# Millions of Americans are problem gamblers—so why do so few people ever seek treatment?

The opportunity to gamble has moved from a trip to Vegas, to a drive to a local casino, to the phone in your pocket. And if you're a sports fan, nudges to place bets have become nearly impossible to ignore, with sports gambling ads and promos routinely appearing on TV, social media, sports radio and in arenas. The stunning expansion of sports wagering following decades of casino expansion certainly gives any rational person reason to pause. For most bettors, gambling is an occasional form of entertainment—Powerball tickets when the jackpot swells to \$1 billion, Super Bowl squares with...

# I treat people with gambling disorder—and I'm starting to see more and more young men who are betting on sports

As a therapist who treats people with gambling problems, I've noticed a shift over the past few years—not only in the profile of the typical clients I treat, but also in the way their gambling problems develop. In 2018, the U.S. Supreme Court made the landmark decision to allow states to legalize sports wagering. Tennessee, where I am studying clinical psychology, took advantage of this ruling, and in late 2020, the state legalized online and mobile sports betting. With most sportsbooks offering betting apps, my clients are finding it more difficult to quit gambling than ever before. Unlike other forms…

# **Funding Opportunities**



#### RFA-DA-24-037

Accelerating the Pace of Drug Abuse Research Using Existing Data (R21 Clinical Trial Optional)

#### RFA-DA-24-027

<u>Education Activities for Responsible Analyses of Complex, Large-Scale Data</u> (R25- Clinical Trial Not Allowed)

#### NOT-OD-23-081

Notice of Intent to Publish a Funding Opportunity Announcement to Reissue RFA-OD-21-002, the Tobacco Regulatory Science (R01 Clinical Trial Optional)

#### NOT-NS-23-035

Notice of Intent to Publish a Funding Opportunity Announcement for BRAIN Initiative: New Technologies and Novel Approaches for Recording and Modulation in the Nervous System (R01 Clinical Trial Not Allowed)

### NOT-NS-23-036

Notice of Intent to Publish a Funding Opportunity Announcement for BRAIN Initiative: Optimization of Instrumentation and Device Technologies for Recording and Modulation in the Nervous System (U01 Clinical Trials Not Allowed)

#### NOT-NS-23-037

Notice of Early Expiration of NINDS BRAIN Initiative Funding Opportunity Announcements (FOA) RFA-NS-21-026 and RFA-NS-21-027

#### NOT-AA-23-007

Notice of NIAAA's participation in NOT-OD-23-044 "Notice of Special Interest (NOSI): Support for existing data repositories to align with FAIR and TRUST principles and evaluate usage, utility, and impact"

# **CAR Member New Publications**

Health outcomes associated with patterns of substance use disorders among patients with type 2 diabetes and hypertension: Electronic health record findings

Md Tareg Ferdous Khan, Daniel Lewis, David C. Kaelber, T. John Winhusen

Primary Care Diabetes

DOI: https://doi.org/10.1016/j.pcd.2022.11.006

#### **HIGHLIGHTS**

Substance use disorder patterns were identified in patients with type 2 diabetes and hypertension.

Tobacco use disorder (TUD) was associated with adverse diabetes outcomes and death.

Alcohol use disorder with TUD vs. TUD was associated with a higher risk of death.

Polysubstance use disorder vs. TUD associated with CVA, diabetic neuropathy, MI, and death.

#### ABSTRACT

**Aims:** To identify substance use disorder (SUD) patterns and their association with T2DM health outcomes among patients with type 2 diabetes and hypertension.

**Methods:** We used latent class analysis on electronic health records from the MetroHealth System (Cleveland, Ohio) to obtain the target SUD groups: i) only tobacco (TUD), ii) tobacco and alcohol (TAUD), and iii) tobacco, alcohol, and at least one more substance (PSUD). A matching program with Mahalanobis distance within propensity score calipers created the matched control groups: no SUD (NSUD) for TUD and TUD for the other two SUD groups. The numbers of participants for the target-control groups were 8009 (TUD), 1672 (TAUD), and 642 (PSUD).

**Results:** TUD was significantly associated with T2DM complications. Compared to TUD, the TAUD group showed a significantly higher likelihood for all-cause mortality (adjusted odds ratio (aOR) = 1.46) but not for any of the T2DM complications. Compared to TUD, the PSUD group experienced a significantly higher risk for cerebrovascular accident (CVA) (aOR = 2.19), diabetic neuropathy (aOR = 1.76), myocardial infarction (MI) (aOR = 1.76), and all-cause mortality (aOR = 1.66).

**Conclusions:** The findings of increased risk associated with PSUDs may provide insights for better management of patients with T2DM and hypertension co-occurrence.

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