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

Emergency Medicine faculty, residents honored by Society for Academic Emergency Medicine

Congratulations to **Caroline Freiermuth, MD**, associate professor, on receiving the SAEM Academy for Women in Academic Emergency Medicine (AWAEM) Social Medicine Advocacy Award, which honors a female faculty who has made significant contributions toward social justice and advocacy on behalf of patients or the community within emergency medicine. **(CAR member and Population Health and Health Services Core Co-Leader, Dr. Caroline Freiermuth)**

Black leaders address opioid crisis, drug abuse stigma in central Ohio

COLUMBUS, Ohio (WCMH) — Black community leaders are drawing attention to the growing opioid crisis in Franklin County. Through an event called "Opioid Community Conversation," dozens of residents and leaders joined together for a meeting around opioid awareness here in Columbus. Recovering addicts used as cheap labor for Ohio nonprofit, judge rules "We want to promote community advocacy, with people who...

Lake, Trumbull counties need extensive programs to reverse effects of opioid crisis, expert testifies

CLEVELAND, Ohio — Programs and services needed to reverse the opioid epidemic in Lake and Trumbull counties are extensive and urgently needed, a Johns Hopkins epidemiologist testified Wednesday in the penalty phase of the first opioid trial

against pharmacy companies in the country. Caleb Alexander laid out a plan that he said would help rollback the effects of the opioid crisis in the Northeast Ohio communities. His list included...

Drug overdose deaths rise in U.S. and Ohio

SANDUSKY — Drug overdose deaths have been increasing nationally and in Ohio, but they have been falling in Erie County, new reports show. Preliminary data from federal and state agencies shows that drug overdoses jumped nationally and also in Ohio in 2021. But a new report from the Erie County Health Department reveals a significant drop last year in Erie County. While there have been many different efforts by local health officials and...

Lorain County experiences recent spike in opioid overdoses

LORAIN COUNTY, Ohio — Lorain County is experiencing a spike in opioid overdoses, with three spikes, or anomalies, reported since the beginning of May. According to a press release from Lorain County Public Health, from May of 2021 to May of 2022, there were five total anomalies. The releases, dating May 11 and May 16, report that there were "unusually high rates of opioid overdose-related emergency department visits" on May 1, May 7...

Governor DeWine Awards \$3.6 Million to Help Law Enforcement Combat Illegal Drug Activity

COLUMBUS, Ohio) -- Ohio Governor Mike DeWine today announced over \$3.6 million in funding for 41 local law enforcement agencies to help their drug task forces enforce the state's drug laws and combat illegal drug activity. Grants from the 2022 Ohio Drug Law Enforcement Fund will support drug task forces that impact 67 counties on issues of drug trafficking, pharmaceutical diversion, and other organized criminal activity...

Dealer or killer? As perceptions of drug users soften, prosecutors more likely to treat deaths as homicide

LIMA — At the peak of the overdose epidemic, when synthetic opiates like fentanyl led to a record 39 accidental overdose deaths in Allen County in 2017, the Allen County Prosecutor's office adopted a new strategy: treat the deaths as homicide. Soon, prosecutors were bringing charges of involuntary manslaughter or reckless homicide against those who provided drugs that resulted in a person's death. To Allen County Prosecutor...

<u>National News</u>

Deaths Related To Alcohol Use Disorder Soared During Pandemic, Analysis Finds.

The Hill (5/16, 5.69M) reports, "Deaths related to alcohol use disorder surged during the pandemic, with young adults seeing an especially sharp increase, according to a recent study." Researchers "used predictive modeling, based on data from the

Centers for Disease Control and Prevention (CDC) to project alcohol use disorder deaths before comparing them to actual numbers" and "found that the mortality rates increased among all ages and sexes studied." The findings were published in JAMA Network Open.

Critics Worried About Delta-8 Products Being Sold In Maryland.

The Baltimore Sun (5/12, Bologna, 629K) reports, "Maryland voters are expected to legalize recreational cannabis in a November referendum, but it could take a couple of years" before state residents can legally buy that drug. People who do not want to wait that long may decide to purchase cannabis-derived Delta-8 products, which "have a psychoactive effect" that is similar to the one cannabis users experience. Maryland Medical Cannabis Commission Executive Director Will Tilburg and other critics have expressed concern about Delta-8 products. Tilburg stated, "They are untested" and unregulated. Nicholas Patrick, "who sells Delta-8 at his three Embrace CBD stores in Maryland," said, "We want regulation not just for Delta-8" products, but "for all hemp products."

Top Federal Drug Official Pressed On Marijuana, Kratom And Drug Decriminalization At Congressional Hearing.

Marijuana Moment (5/12) reports that on Wednesday, members of the "House Appropriations subcommittee for the Departments of Labor, Health and Human Services, Education, and Related Agencies directed several cannabis questions at National Institute on Drug Abuse (NIDA) Director Nora Volkow." Legislators "also talked about the therapeutic potential of kratom, as well as broader drug decriminalization issues." The publication says that Volkow "has previously been vocal about her opposition to drug criminalization as a policy, stressing that substance misuse should be treated as a public health matter and noting that prohibition has had racially disparate impacts." However, "she didn't provide that perspective at Wednesday's hearing."

NIH To Fund Studies Exploring Marijuana's Role In Cancer Treatment.

420 with CNW (5/18) reports, "The National Institutes of Health (NIH) has published a notice calling on interested researchers to apply for funding to facilitate studies related to the role cannabis can play in various aspects of cancer treatment." The NIH "revealed that one out of every four patients with cancer report using marijuana products in order to manage the symptoms they experience." However, the agency "points out that despite these reasons for using marijuana, there is scant research about its efficacy and any potential risks that the cancer patients may be exposing themselves to." Consequently, the funding is "intended to promote studies geared at understanding the different mechanisms through which cannabinoids and cannabis in general influence cancer biology, interception and treatment as well as cancer resistance."

Smokers Who Switch To E-Cigarettes May Adopt Other Healthy Routines: Study.

India Blooms News Service (5/16) reports that adult smokers who switched to ecigarettes in their 30s "reported better physical health, exercised more and had more active social engagement," according to a study published in Drug and Alcohol Dependence. Study co-author Marina Epstein, a research scientist with the Social Development Research Group in the UW School of Social Work, said, "Despite the obvious risks to nonsmokers, e-cigarettes have the potential to play a healthpromoting role in the lives of smokers." Study lead author Rick Kosterman, a research scientist with the Social Development Research Group, said, "Although the study cannot show a causal relationship, we think that because e-cigarettes have less stigma, less odor and are less physically harmful, they may increase healthpromoting opportunities among smokers. E-cigarette users may be more likely to be in settings that promote physical activity and have more opportunities to interact with nonsmokers." The study was funded by the National Cancer Institute, the National Institute on Aging, and the National Institute on Drug Abuse. [Article attached.]

Scientists Are Developing Patch That Warns Of Oncoming Drug Overdose.

HealthDay (5/17, Thompson, 11K) reports that the National Institute on Drug Abuse has awarded an Indiana University Bloomington research team a three-year, \$3.8 million grant to develop "a wearable patch that can detect an oncoming opioid" overdose "and deliver doses of a drug that could save lives." According to HealthDay, "The patch – roughly the size of a nicotine patch – would contain sensors that track the wearer's pulse, blood pressure and blood oxygen levels. … At that point, the second set of technologies would kick in – hundreds of microneedles lining the inside of the patch filled with the OD-reversing drug naloxone."

Embracing Harm Reduction Tools As The First Step In Reducing Overdose Deaths.

The Verywell Health1 (5/16, Bugos) reports that to address the overdose epidemic, "the Biden Administration sent its first National Drug Control Strategy to Congress last month," mapping "out the Administration's plan for tackling untreated addiction and drug trafficking." According to the article, "This Administration is the first to embrace harm reduction as a tool for minimizing overdose deaths." As recently as 2020, Rensselaer Polytechnic Institute Professor Nancy Campbell, PhD, "said an executive director of the National Institute of Drug Abuse told her harm reduction 'was a dirty word in the federal research apparatus."" However, "the new drug control strategy aims to embrace harm reduction by expanding safe syringe programs, rather than criminalizing and stigmatizing drug use."

Analysis: Opioid Abuse Treatment Not Reaching Higher-Risk Patients.

Axios (5/12, Bettelheim, 1.26M) reports <mark>a new analysis, published in JAMA Network</mark> <mark>Open, of prepandemic insurance claims from about 180,000 people found that</mark> "nearly 53% of patients with opioid use disorder were not prescribed buprenorphine, which reduces the risk of future overdoses." Additionally, "more than 70% of opioid users who also misuse other substances, such as alcohol or methamphetamine, weren't prescribed the drug." Additionally, the analysis "found buprenorphine was better at helping prevent future overdoses than another commonly used addiction treatment, naltrexone." However, "many doctors remain reluctant to prescribe buprenorphine for use at home without supervision," and "the American Medical Association recommends other strategies."

Seeking Pills, Young People Head To Social Media, With Deadly Results.

The New York Times (5/19, Hoffman, 20.6M) reports that there were "nearly 108,000 drug fatalities in the United States last year, a record, according to preliminary numbers released this month by the Centers for Disease Control and Prevention." According to the Times, "Law enforcement authorities say an alarming portion of them" involved "counterfeit pills tainted with fentanyl that teenagers and young adults bought over social media." Social media and messaging apps "have made for a swift, easy conduit during the coronavirus pandemic, when demand for illicit prescription drugs has jumped, both from anxious, bored customers and from those already struggling with addiction who were cut off from in-person group support." Supplies of pills tainted with fentanyl "have escalated commensurately." National Institute on Drug Abuse Director Dr. Nora Volkow said, "When you are putting fentanyl in pills that are sold as benzodiazepines or for pain, you are reaching a new group of customers that you wouldn't have if you were just selling fentanyl powder."

US Surpassed A Record 100,000 Drug Overdoses In 2021.

WJLA-TV^{••} Washington (5/11, 4K) reported in broadcast coverage that new CDC data indicates almost 108,000 people died of drug overdoses in 2021. In an interview, NIDA Director Dr. Nora Volkow said two factors are contributing to the rise in overdoses. She explained, "One of them, of course, all of the challenges of the COVID pandemic have made many people vulnerable to drug taking. But there's also the other element, which is the illicit drug market has expanded the outreach for fentanyl and synthetic opioids. Fentanyl is extremely potent and dangerous. And so Fentanyl is now not just used to contaminate heroin, but it's also used to lace cocaine, methamphetamine, illicitly manufactured prescription pills. And those people that in the past were not at risk for overdose because they were not taking opioids, with this new illicit market are."

Physicians Using Longer-Lasting Antipsychotic, Anti-Addiction Injections To Treat Patients For Addiction, Mental Illness.

The Wall Street Journal (5/16, Wernau, Walker, Subscription Publication, 8.41M) reports physicians are increasingly using longer-lasting antipsychotic and antiaddiction injections to treat patients with mental-health problems or addiction. These injectable treatments for opioid addiction and schizophrenia can cost up to \$5,000 a dose, but physicians say they have potential to reduce hospitalization risks for patients who missed appointments or quit taking their medications during the pandemic.

Officials Investigating Two Possible Overdose Deaths At DC Jail.

The Washington Post (5/16, Davies, 10.52M) reports, "Two people in custody died and another was hospitalized in two separate incidents inside the D.C. jail on Friday and Sunday, and authorities are investigating whether they might have overdosed on drugs, according to a spokesperson for the city's Department of Corrections." Emergency overdose treatment Narcan (naloxone) was administered by jail officials to the man who was hospitalized, authorities say.

Pennsylvania Third For Drug Overdose Deaths Nationally.

The Center Square (IL) (5/16, Hennen) reports, "Provisional data from the Centers for Disease Control and Prevention estimated that 107,622 Americans died from drug overdoses in 2021, with the majority of those deaths connected to synthetic opioids." Overdose deaths in Pennsylvania "only rose 3.5%, considerably less than the national average. A total of 5,360 people died from overdoses in 2021 in Pennsylvania, compared to 5,178 in 2020." However, "only California and Florida have higher numbers." The article says, "In a statement, Director of the National Institute on Drug Abuse Nora Volkow called 2021's numbers 'truly staggering.'"

Report: Fentanyl Continues To Be Responsible For Majority Of Drug Deaths In Atlantic County, U.S.

The Press of Atlantic City (NJ) (5/12, Russo, 228K) reports that "overdose deaths connected to fentanyl continue to rise in Atlantic County and around the United States, according to recent data provided to law enforcement, acting county Prosecutor Cary Shill said Thursday." Over "107,000 Americans died of drug overdoses in 2021, the Centers for Disease Control and Prevention estimated in a report Wednesday." Overdose fatalities "are often attributed to more than one drug. Some people take multiple drugs, and inexpensive fentanyl has been increasingly cut into other drugs, often without the buyers' knowledge, officials say." National Institute on Drug Abuse Director Dr. Nora Volkow said, "The net effect is that we have many more people, including those who use drugs occasionally and even adolescents, exposed to these potent substances that can cause someone to overdose even with a relatively small exposure."

Drug Dealer Who Sold Mac Miller Fentanyl Leading To Overdose Death Sentenced To 17.5 Years In Prison.

Fox News (5/18, Wallace, 23.99M) reports in continuing coverage, "A man was sentenced Monday to 17.5 years in prison and five years of supervised release in Los Angeles federal court in connection to the 2018 overdose death of 26-year-old rapper Mac Miller." According to Fox News, "Stephen Andrew Walter, 48 and of Westwood, California, is now the second drug dealer to be sentenced to more than a decade behind bars over Miller's death. ... Walter struck a deal with federal prosecutors in October to serve 17 years if he pleaded guilty to one count of fentanyl distribution, a reduced charge from the original distribution of fentanyl resulting in death, the Los Angeles Times reported." However, "U.S. District Judge Otis D. Wright II rejected the agreement Monday, arguing that Walter continued to distribute dangerous substances after Miller's death."

Growing Opioid Epidemic Sparks Increases In Overdoses And Deaths In Harris County.

KTRK-TV Houston (5/18, 314K) reports, "A growing opioid epidemic that has seen increases in overdoses and deaths nationwide has been exacerbated in Harris County due to strained access to treatment and other factors during the COVID-19 pandemic, local officials said." ProvisionalNational Center for Health Statistics data indicate "there were an estimated 100,306 drug overdose deaths in the US in 2021, an increase of 28.5% from 2020." Meanwhile, "[in] Harris County, the number of drug overdose deaths similarly rose from 840 deaths between October 2019 and September 2020 to 1,039 deaths that occurred in the following 12 months, according to NCHS provisional data." The National Institute on Drug Abuse is mentioned.

Column: Vancouver's Safe Injection Sites Offer Lesson To California As It Debates Safe Consumption.

In a column for the Los Angeles Times (5/18, 3.37M), Anita Chabria writes, "Openuse drug havens such as San Francisco's Tenderloin and L.A.'s skid row have become notorious and contentious, but those places have nothing on East Hastings, part of a neighborhood called Downtown Eastside." Chabria explains that she traveled "to Vancouver to see what can be learned as we debate safe consumption in California, where more than 6,000 people die each year from overdoses." Chabria adds, "What I found in Vancouver is a tangle of perspectives that, at heart, comes down to whether we think success in fighting addiction has to be abstinence, or something lesser."

National Academies Report Cites 'Urgent' Need To Recruit More Diverse Participants For Clinical Trials.

STAT (5/17, McFarling, 262K) reports, "The persistent lack of diversity among participants in clinical trials is a critical issue that is harming both populations that have long been left out of pivotal medical studies and the entire biomedical research enterprise, according to" findings from an NIH-sponsored report released Tuesday by the National Academies of Sciences, Engineering and Medicine. STAT adds, "The sternly worded report said funding to include and recruit more diverse participants should be a priority that is enforced and said such investments could eventually lead to massive cost savings as the nation's health disparities are reduced." The report said, "An equitable clinical research enterprise would include trials and studies that match the demographics of the disease burden under study. ... However, we remain far from achieving this goal."

Additional Source. Bloomberg Law (5/17, Baumann, Subscription Publication, 4K) reports that the authors call "for changes in several health agencies to require that diversity considerations have more weight in the review of new drug and research grant applications." According to Bloomberg, "One of those recommendations for the Food and Drug Administration will be part of a House Energy and Commerce markup Wednesday." **[Report is attached.]**

Doctors Gave Her Antipsychotics. She Decided To Live With Her Voices.

The New York Times (5/17, Bergner, 20.6M) reports, "Caroline Mazel-Carlton began hearing voices when she was in day care," and ended up receiving a mix of psychotropic pills: "antipsychotics, mood stabilizers, an antidepressant, a benzodiazepine for anxiety, a stimulant for attention deficit." When she was older, Mazel-Carlton signed up for a neuroscience seminar at Indiana University Bloomington, "figuring, she said, 'I'll learn why I'm crazy.'" Eventually, she "began leading Hearing Voices Network support groups – which are somewhat akin to Alcoholics Anonymous meetings – for people with auditory and visual hallucinations." Now, Mazel-Carlton and the Wildflower Alliance are "leaders in a growing effort to thoroughly reform how the field of mental health approaches severe psychiatric conditions. Their views remain marginal to the medical establishment." The conventional mode maintains "that antipsychotic drugs, despite their downsides, can reduce the long-term odds of mental disintegration, suicide and...violent eruptions," but the evidence for that approach "is countered by other studies suggesting that maintenance on the drugs may actually worsen outcomes and even cause brain atrophy, though these findings have been debated." Former National Institute on Mental Health Director Thomas R. Insel is quoted.

Psychotropic Compound Synthesized From Rainforest Tree.

Genetic Engineering & Biotechnology News (5/16, Sterling, 189K) says, "Scripps Research scientists report that they have developed a method to synthesize one of the chemicals found in the Galbulimima belgraveana tree, found only in remote rainforests of Papua New Guinea and northern Australia and long used by indigenous people for both healing and ceremony." According to researchers, the method "let them produce enough of one of the tree bark's compounds, GB18, to study its effects on human brain cells." The "screening experiments conducted through the National Institute of Mental Health Psychoactive Drug Screening Program" found "that GB18 bound to two different opioid receptors in the brain."

Removing Medical Abbreviations Can Boost Patient Portal Understanding.

PatientEngagementHIT (5/18, Rodriguez) reports, "Medical abbreviations and acronyms have adverse effects on patient understanding of information during patient portal use, a study funded by the National Institutes of Health found."

Automated expansion of the abbreviated terms "could be a potential solution to increase patient understanding, the researcher stated." In the study "published in the JAMA Network Open, researchers involved English-speaking adult patients with diagnosed heart failure to evaluate the impact expansion had on the overall comprehension of 10 common abbreviations in health records."

Science Still Doesn't Understand How Our Sex Affects Our Health.

Scientific American (5/16, McDonough, 3.1M) reports, "In 1993, Congress passed a law requiring the inclusion of women in all clinical research funded by the National Institutes of Health." However, "in 2019 only 42 percent of articles in the biological sciences that included both male and female individuals analyzed data by sex." In "the first episode of Scientific American's new series, A Question of Sex," scientists "explore discoveries being made in this small but growing area of research."

Funding Opportunities



<u>RFA-DA-23-008</u> <u>Stimulants and HIV: Addressing Contemporary and Recurring Epidemics</u> (R61/R33 - Clinical Trial Required)

<u>RFA-DA-23-027</u> <u>Workshops on Computational and Analytical Research Methods (R25 - Clinical Trial</u> <u>Not Allowed)</u>

CAR Member New Publications

Pain Severity and Interference and Substance Use Among Community Pharmacy Patients Prescribed Opioids: A Secondary Analysis of the PHARMSCREEN Study Charron, Elizabeth, Okifuji, Akiko, Bryan, M. Aryana, Reese, Sarah,

Brown, Jennifer L., Ferguson, Andrew, Ghitza, Udi E., Winhusen, T., Cochran, Gerald

Journal of Pain DOI: <u>https://doi.org/10.1016/j.jpain.2022.03.238</u>

Highlights:

- Use of non-medical opioids, sedatives, and tobacco increased with increasing pain
- Alcohol use decreased with increasing pain
- Pain severity was linked to reduced alcohol use among women
- Pain interference was linked to increased tobacco use among women

Abstract

This secondary analysis examined relationships between pain severity and interference and substance use among patients filling opioid prescriptions in Indiana and Ohio community pharmacies (n = 1,461). We likewise sought to explore the moderating role of gender in pain-substance use relations. We used patient-reported data from a cross-sectional health survey linked with controlled substance dispensing data from statewide prescription drug monitoring programs. Multivariable logistic regression estimated associations between pain severity and interference and various indices of risky prescription opioid use and nonopioid substance use. Exploratory analyses examined whether gender moderated associations. Increased pain severity was associated with increased odds of moderate- to high-risk opioid use (OR: 1.23; 95% CI: 1.16-1.31) and opioid-benzodiazepine co-use (OR: 1.20; 95% CI: 1.03-1.40). Increased pain interference was associated with greater odds of receiving opioids from multiple pharmacies or providers (OR: 1.15; 95% CI: 1.01-1.31). Increased pain severity and interference were associated with higher odds of any tobacco use (severity: OR: 1.13; 95% CI: 1.06-1.21; interference: OR: 1.07; 95% CI: 1.01-1.12) and weekly to daily sedative use (severity: OR: 1.13; 95% CI: 1.03-1.25; interference: OR: 1.13; 95% CI: 1.04-1.22). Increased pain severity was associated with decreased odds of any alcohol use (OR: 0.93; 95% CI: 0.88-0.99). Gender was a significant effect modifier in associations between pain and alcohol, tobacco, and cannabis use. The study was registered in the database of clinicaltrials.gov (register number NCT03936985).

Perspective: This study suggests that pain severity and interference are associated with increased use of non-medical prescription opioids, sedatives, and tobacco and decreased use of alcohol, in ways that are different between women and men. Findings may guide the development of gender-sensitive evidence-based strategies to ameliorate or prevent substance misuse among patients living with pain.

Associations Between Elevated Depressive Symptoms and Substance Use, Prescription Opioid Misuse, Overdose History, Pain, and General Health Among Community Pharmacy Patients Prescribed Opioids Brown, Jennifer L., Cochran, Gerald, Bryan, M. Aryana, Charron, Elizabeth, Winhusen, T. John

Substance Abuse Journal DOI: <u>https://doi.org/10.1080/08897077.2022.2060450</u>

ABSTRACT

Background: Individuals with pain prescribed opioids experience high rates of comorbid depression. The aim of this study was to characterize pain, substance use, and health status as a function of depressive symptom level in individuals filling an opioid prescription at a community pharmacy.

Methods: Participants (N = 1268) filling an opioid prescription enrolled in a study validating a prescription drug monitoring metric completed an online survey assessing sociodemographics, depressive symptoms, substance use, prescription opioid misuse, overdose history, general health, and pain severity and interference.

Results: Approximately one-fifth (19.3%) had a positive depression screen result. In covariate-adjusted logistic regression analyses, individuals with a positive depression screen result were more likely to have moderate/high substance use risk scores for prescription opioids (adjusted odds ratio [AOR] = 2.06; 95% confidence interval [CI], 1.51–2.79); street opioids (AOR = 7.18; 95% CI, 2.57–20.01); cannabis (AOR = 2.00; 95% CI, 1.34–3.00); cocaine (AOR = 3.46; 95% CI, 1.46–8.22); tobacco (AOR = 1.59; 95% CI, 1.18–2.15); methamphetamine (AOR = 7.59; 95% CI, 2.58–22.35); prescription stimulants (AOR = 2.95; 95% CI, 1.59–5.49); and sedatives (AOR = 3.41; 95% CI, 2.43–4.79). Individuals with a positive depression screen were more likely to misuse prescription opioids (AOR = 3.46; 95% CI, 2.33–5.15), experience a prior overdose (AOR = 2.69; 95% CI, 1.76–4.11), report poorer general health (AOR = 0.25, 95% CI, 0.18–0.35), and report moderate/severe pain severity (AOR = 4.36, 95% CI, 2.80–6.77) and interference (AOR = 6.47, 95% CI, 4.08–10.26).

Conclusions: Individuals prescribed opioids with heightened depression were more likely to report other substance use, prescription opioid misuse, prior overdose, greater pain, and poorer health.

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