

UPDATE: DRUG DIVERSION BY HEALTHCARE PROFESSIONALS

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INTRODUCTION

Drug diversion occurs when an individual transfers drugs or prescriptions for drugs away from their intended recipient to him or herself for his or her personal use, distribution, or transfer to another person. Healthcare experts define diversion as “any criminal act or deviation that removes a prescription drug from its intended path from the manufacturer to the patient.”¹ Healthcare professionals who divert drugs in healthcare facilities do so in a number of ways, including by: (1) tampering with medications intended for patients (e.g., using the medication and replacing it with another substance such as saline); (2) injecting, ingesting, or otherwise using a medication and reporting it as waste (i.e., medication prescribed for a patient that is either not administered or only partially administered to that patient); (3) stealing medication from drug storage; or (4) writing fraudulent prescriptions for themselves.²

Drug diversion by healthcare professionals is substantially underestimated, undetected, and underreported.³ A survey of 140 healthcare facilities found that 65 percent of respondents believe that the majority of diversion goes undetected, while another study estimated that one in every 100 healthcare professionals diverts drugs.⁴ Drug diversion in health care is a serious issue that can result in patient harm, financial loss to the healthcare entity, and civil and criminal litigation.

THE SCOPE OF THE PROBLEM

Experts estimate that 10-15 percent of healthcare professionals have substance use disorder, similar to that among the general population.⁵ In fact, healthcare professionals may have an increased risk of developing a substance use disorder as they have easy access to drugs and, as one study found, “perceived invincibility or immunity to substance-related impairments, and work role-related stress.”⁶ Healthcare professionals with substance use disorder may resort to diverting drugs either for personal use or for financial gain. Because of the availability of and access to medications inside of healthcare facilities, drug diversion by healthcare professionals can be difficult to detect. It is often not until patient harm occurs that the diversion is discovered.

Patient harm can occur in a variety of ways, including by receiving poor quality of care from an impaired healthcare professional. The impairment may be due to the acute intoxication of the healthcare professional or being distracted about obtaining the next dose. Drug diversion can also lead to patients not receiving essential medications, which can result in unnecessary pain and suffering.

¹ Melissa K. Schaefer and Joseph F. Perz, “Outbreaks of Infections Associated with Drug Diversion by US Healthcare Personnel,” *Mayo Clinic Proceedings* 89, no. 7 (July 2014): 878-887, [Outbreaks of infections associated with drug diversion by US healthcare personnel - PMC](#).

² See, e.g., Julie Nyhus, “Drug Diversion in Healthcare: Prevention and Detection for Nurses,” *American Nurse Journal* 15, no. 5 (May 2021): at 26, [Drug diversion in healthcare - prevention and detection for nurses](#).

³ See, e.g., Keith H. Berge et al., “Diversion of Drugs within Health Care Facilities, a Multiple-victim Crime: Patterns of Diversion, Scope, Consequences, Detection, and Prevention,” *Mayo Clinic Proceedings* 87, no. 7 (July 2012): 674-682; Julie Nyhus, “Drug Diversion in Healthcare: Prevention and Detection for Nurses,” *American Nurse Journal* 15, no. 5 (May 2021): at 26, [Drug diversion in healthcare - prevention and detection for nurses](#).

⁴ “Detecting Drug Diversion in Health-system Data Using Machine Learning and Advanced Analytics,” Tom Knight, et al., *American Journal of Health-system Pharm.* (Feb. 2022), [Detecting drug diversion in health-system data using machine learning and advanced analytics - PMC](#); and “2023 Diversion Digest,” *Protenus* (2023), [DiversionDigest_Diversion_2023_Protenus.pdf](#).

⁵ Pauline M. Geuijen, et al., “Success Rates of Monitoring for Healthcare Professionals with a Substance Use Disorder: A Meta-analysis,” *Journal of Clinical Medicine* 10, no. 2 (2021): at 1, [Success Rates of Monitoring for Healthcare Professionals with a Substance Use Disorder: A Meta-Analysis - PMC](#).

⁶ Lisa J. Merlo et al., “Essential Components of Physician Health Program Monitoring for Substance Use Disorder: A Survey of Participants 5 Years Post Successful Program Completion,” *American Journal of Addiction* 31 (Dec. 2021): 115-122.

Another way in which patients can be harmed by drug diversion is through exposure to infectious agents. Tampering with injectable medications may place a patient at risk of infection if the healthcare professional substitutes unsterile substances, such as tap water, for a sterile drug or if the healthcare professional exposes the patient to a used syringe. The latter can expose a patient to HIV and hepatitis viruses. Additionally, exposure to bacterial pathogens can lead to sepsis and, in some cases, death. The U.S. Centers for Disease Control and Prevention has a [webpage](#) listing U.S. outbreaks associated with drug diversion by healthcare professionals between 1983 and 2018.

There are frequent news reports from across the country about healthcare professionals who have been caught diverting drugs. Recent stories include those of:

- A nurse in Ohio was suspected of stealing fentanyl from patients' IV bags at one hospital and, after the prosecutor chose not to pursue charges against her, was arrested a year later and sentenced to two years of probation for the same crime at a different hospital;⁷
- A pharmacist who lost his license due to diverting stimulants and a nurse found to have diverted opioids more than 100 times over the course of a year, both employed by the same facility in Colorado;⁸
- A nurse in Oregon who diverted patients' fentanyl and replaced it with unsterile tap water leading to numerous patients developing bacterial infections, as many as 16 of whom are suspected to have died as a result;⁹
- A certified pharmacy technician in Ohio, in charge of counting pills and acting as pharmacy buyer, who stole controlled substances including more than 16,000 oxycodone tablets and more than 50 vials of fentanyl of various strengths through placing fraudulent orders with a wholesaler;¹⁰ and
- A traveling radiologic technician who was ultimately sentenced to 39 years in prison for causing a widespread hepatitis C outbreak due to his diversion of and tampering with patient medications. The healthcare professional in this case would inject himself with fentanyl, refill it with saline, and replace the syringe for use on patients. He worked in at least eight different states, and diverted drugs in each state, ultimately getting caught in New Hampshire. In all, nearly 50 patients were infected with hepatitis C due to his actions.¹¹

Facilities where these healthcare professionals practice can be subject to liability for the actions of those healthcare professionals. The hospital in the Oregon case listed above is facing multiple lawsuits seeking damages totaling almost \$500 million. The plaintiffs in those cases allege that the hospital should have known of the likelihood of drug diversion and taken measures to better protect its patients. In another case, seven former patients of the Yale University Reproductive Endocrinology and Infertility Clinic sued Yale University after allegedly undergoing painful surgeries and procedures with little to no analgesic due to drug diversion by a nurse.¹² In her criminal case, the nurse admitted to stealing fentanyl from the clinic for her own use, stating that she used a syringe to withdraw fentanyl from the vials and then reinjected them with saline to cover up the tampering.

Signs of diversion by healthcare professionals include: (1) when patients report high pain scores or complain of pain after having been administered pain medication; (2) when patients complain about not having received medications that were documented as having been administered; (3) evidence of drug use in facility bathrooms or other locations

⁷ "Former Ross County Nurse Caught Again Stealing Fentanyl from Patients," *The Scioto Valley Guardian*, May 27, 2024, [Former Ross County nurse caught again stealing fentanyl from patients](#).

⁸ Marco Cummings, "2 Colorado Health Care Workers Fires for Drug Diversion, Including Opioids," *Denver Gazette*, February 28, 2025, https://denvergazette.com/news/health/colorado-health-care-pharmacist-cna-drug-diversion-intermountain-health-opioids/article_15a786d4-f3d0-11ef-89ba-b3d0d0c2e32c.html.

⁹ Justin Higginbottom, "Asante Faces over \$400 Million in Damages with New Drug Diversion Lawsuit," *OPB*, March 4, 2025, [Asante faces over \\$488 million in damages with new drug diversion lawsuit - OPB](#).

¹⁰ Tara Morgan, "Fentanyl Stolen from Cleveland Clinic Hillcrest Found in Employee's Apartment in Federal Drug Diversion Case," *News 5 Cleveland*, December 17, 2024, [Fentanyl stolen from Cleveland Clinic Hillcrest found in employee's apartment](#).

¹¹ "Former Employee of Exeter Hospital Sentenced to 39 Years in Connection with Widespread Hepatitis C Outbreak," *Federal Bureau of Investigation, Boston Division*, accessed March 4, 2025, [FBI — Former Employee of Exeter Hospital Sentenced to 39 Years in Connection with Widespread Hepatitis C Outbreak](#).

¹² *Melissa Cowan, et al. v. Yale University*, Connecticut Superior Court, Judicial District of Waterbury, Case No. UWY-CV21-6063194-S (suit filed November 17, 2021).

in the facility; (4) evidence of tampering with controlled substance packaging;¹³ and (5) evidence of behavioral and physical changes in the healthcare professional. Some of these changes may include: (1) wastage issues (e.g., wasting complete doses, never wasting doses, frequently wasting doses that never reach the patient, failing to document wastage, and frequently asking colleagues to sign off on wastage that they did not witness); (2) paying extra attention to or reviewing the medication orders of patients receiving controlled substances; (3) errors in documentation, charting and medication errors, and other types of recurrent mistakes; (4) volunteering for overtime or coming in to work on his or her days off; (5) taking frequent sick days, arriving late, or failing to notify anyone when he or she does not come to work when scheduled; and (6) general signs of drug use that include forgetfulness, drowsiness, euphoria, and paranoia.¹⁴

PREVENTING AND DETECTING DRUG DIVERSION

Diversion by healthcare professionals can lead to serious patient harm. Both the Mayo Clinic and the American Society of Health-system Pharmacists (ASHP) have developed best practices for the prevention and detection of diversion.¹⁵ Many of these practices are included in laws and regulations across the country, including that controlled substances must be stored in a locked location and access should be limited to authorized staff only. These best practices also include the installation of automated systems to identify “unusual ‘peaks’ in quantity or frequency of [controlled substances] ordered” in pharmacies.¹⁶ In the Ohio case about the pharmacy technician mentioned above, the state board of pharmacy found that the technician was successful in diverting such a large quantity of drugs because he was not being supervised as required and was, thus, able to submit fraudulent orders.

Another method for preventing and detecting diversion is to implement comprehensive wastage procedures that include: (1) a requirement that another healthcare professional act as a witness; and (2) random tests of wastage for content. Moreover, the Mayo Clinic recommends that prevention and detection procedures in healthcare facilities include the use of automation and technology including automated dispensing cabinets and diversion monitoring software. ASHP recommends that facilities implement monitoring and surveillance procedures that include regular controlled substance audits. ASHP’s best practices also emphasize the need for education and training for staff in healthcare facilities.

The Drug Enforcement Administration (DEA) recently launched a hospital initiative to prevent drug diversion. Known as “Operation Regulatory Wellness,” it is designed to help hospitals “better understand DEA regulations and expand on the prevention of diversion in a hospital setting.”¹⁷ In a one to two-hour session, the DEA covers regulatory requirements, DEA inspections, and best practices for preventing diversion. Launched in Texas as a result of an increase in regulatory violations in its healthcare facilities, the goal of the initiative is to “proactively educate registrants on regulatory requirements.”¹⁸

If diversion is detected, facilities should immediately begin an investigation and, upon confirming that diversion has occurred, report the diversion to the DEA. Theft or significant loss of any controlled substance, disposal receptacle, or federally listed chemical must be reported to the DEA within one business day of the discovery.¹⁹ The DEA provides guidance as to what makes a loss “significant,” which can be found here: [Diversion Control Division | Theft or Loss Q&A](#). Diversion should also be reported to law enforcement and, if patient harm is suspected, to public health agencies.

¹³ Julie Nyhus, “Drug Diversion in Healthcare,” *American Nurse Journal*, May 6, 2021, <https://www.myamericannurse.com/drug-diversion-in-healthcare/>.

¹⁴ *Id.*

¹⁵ See John Clark et al, “ASHP Guidelines on Preventing Diversion of Controlled Substances,” *American Journal of Health-system Pharmacists* 79, no. 24 (Dec. 15, 2022): 2279-2306, at 2279 and “Controlled Substance Diversion, Detection and Prevention Program: Elements of Best Practice, eAppendix,” *Mayo Clinic Proceedings* (March 2012), [mmcl.pdf](#).

¹⁶ “Controlled Substance Diversion, Detection and Prevention Program: Elements of Best Practice, eAppendix,” *Mayo Clinic Proceedings* (March 2012), [mmcl.pdf](#).

¹⁷ “DEA Launches Hospital Initiative to Prevent Drug Diversion,” *DEA Diversion Control Division News* (March 2025).

¹⁸ *Id.*

¹⁹ “Theft or Loss Q&A,” *Drug Enforcement Administration* (accessed March 4, 2025), [Diversion Control Division | Theft or Loss Q&A](#).

ALTERNATIVE TO DISCIPLINE PROGRAMS

Another way in which to prevent diversion in healthcare facilities is through the early identification of healthcare professionals who may have substance use disorder or who may be misusing drugs and/or alcohol or practicing while impaired by drugs or alcohol. If such individuals can be identified before they begin diverting drugs, it greatly reduces the risks to patients and increases the odds that the healthcare professional will be able to receive treatment and, ultimately, return to practice. Alternative to discipline (ATD) programs, also called physician health programs or assistance programs, are a non-disciplinary approach to treating healthcare professionals with substance use disorder. Healthcare professionals are referred to ATD programs through a variety of ways including self-referrals and by their licensing board in lieu of discipline.²⁰ Currently, the boards of medicine in 47 states and the District of Columbia have implemented physician health programs and are members of the Federation of State Physician Health Programs.²¹ At least 43 states have alternative to discipline programs for nurses²² and, as of 2017, 46 states had programs to assist pharmacists with substance use disorder.²³

Such programs can provide numerous services including:

- Providing, or referring healthcare professionals for, a substance use disorder assessment to determine if the professional has substance use disorder;
- Referring healthcare professionals to approved treatment providers for inpatient or outpatient treatment;
- Providing support services for the healthcare professional (e.g., peer support groups facilitated by a credentialed peer support professional and comprised of healthcare professionals) and the healthcare professional's family; and
- Monitoring the status of a healthcare professional's treatment and program participation.

ATD programs are highly successful in helping healthcare professionals receive treatment, with participants remaining in recovery at a higher rate than the general population.²⁴ According to the Federation of State Physician Health Programs (FSPHP), long-term recovery rates for participants in physician health programs “are markedly higher than the general population.”²⁵ One study showed that, after five or more years, 81 percent of participants had completed their treatment agreements and did not have any positive toxicology tests, while 95 percent were practicing.²⁶ According to the FSPHP, the success of physician health programs, success which can be translated to other health professions, is due to a combination of factors, including the confidential nature of the programs, peer support, and oversight of participants.²⁷

LAWS AND REGULATIONS RELATED TO DRUG DIVERSION

Healthcare entities and professionals are required to comply with several federal laws and regulations pertaining to drug diversion. The 1983 Federal Anti-tampering Act (Anti-tampering Act) provides that “[w]hoever, with reckless disregard for the risk that another person will be placed in danger of death or bodily injury and under circumstances manifesting extreme indifference to such risk, tampers with any consumer product that affects interstate or foreign commerce, or the labeling of, or container for, any such product,” will be fined and/or imprisoned.²⁸ The statute's

²⁰ Kathleen Russell, “Components of Nurse Substance Use Disorder Monitoring Programs,” *Journal of Nursing Regulation* 11, no. 2 (July 2020): 20-27, at 20.

²¹ “FAQs,” Federation of State Physician Health Programs, last visited Jan. 22, 2025, [FAQs](#).

²² Amanda Choflet et al., “Accessibility and Financial Barriers in the Utilization of Alternative to Discipline Programs in the United States,” *Online Journal of Issues in Nursing* 28, no. 1 (Jan. 31, 2023): at 3, [Accessibility and Financial Barriers in the Utilization of Alternative to Discipline Programs in the United States | OJIN: The Online Journal of Issues in Nursing](#).

²³ Kim Edward Light, et al., “State Programs Assisting Pharmacy Professionals with Substance Use Disorders,” *Journal of the American Pharmacists Assn.* 57, no. 6 (2017): 704, 705, [State programs assisting pharmacy professionals with substance use disorders](#).

²⁴ See Richard Smiley and Kyran Reneau, “Outcomes of Substance Use Disorder Monitoring Programs for Nurses,” *Journal of Nursing Regulation* 11, no. 2 (July 2020): 28-35, at 28.

²⁵ Linda Bresnahan, “The Role & Success of Physician and Healthcare Professional Programs,” *NMA Advocate* 24, no. 1 (2024): 14-17, at 14.

²⁶ *Id.*

²⁷ *Id.*, at 15-16.

²⁸ 18 U.S.C. § 1365(a) (2023).

definition of “consumer product” includes food, drugs, medical devices, and cosmetics as defined by the Federal Food, Drug, and Cosmetic Act.²⁹

Per 21 C.F.R. § 1301.92, pertaining to manufacturers, distributors, and dispensers of controlled substances, employees “who possess, sell, use, or divert controlled substances will subject themselves not only to state or federal prosecution for any illicit activity, but shall also immediately become the subject of independent action regarding their continued employment.”³⁰ Additionally, the DEA notes that its “position [is] that an employee who has knowledge of drug diversion from his employer by a fellow employee has an obligation to report such information to a responsible security official of the employer.”³¹ The failure of an employee to report knowledge of a co-worker’s drug diversion to an employer can jeopardize his or her continued employment in a drug security area.³²

As a condition of participation in Medicare and Medicaid, the Centers for Medicare and Medicaid Services requires a hospital to report abuses and losses of controlled substances – in accordance with applicable federal and state laws – to the individual responsible for pharmaceutical services at the hospital and the chief executive officer.³³ The failure of a hospital to properly detect and report drug diversion could jeopardize its participation in Medicare and Medicaid. A jurisdiction may have specific laws and rules that regulate the reporting of drug diversion in healthcare settings. For example, North Carolina law states that “[e]very licensee has a duty to report in writing to the [state Medical] Board within 30 days any incidents that [the] licensee reasonably believes to have occurred involving . . . fraudulent prescribing, drug diversion, or theft of any controlled substances by another person licensed by the [Medical] Board.”³⁴ In Utah “[a]n individual is guilty of a class B misdemeanor if the individual: (1) knows that a practitioner is involved in diversion; and (2) knowingly fails to report the diversion to a peace officer or law enforcement agency.”³⁵

Despite these state and federal laws, however, there are reports of healthcare facilities failing to make the required reports. In 2016, the district attorney in Sullivan County, Tennessee brought charges against a nurse who had previously been caught diverting drugs from a local hospital, was fired and, years later, was caught diverting again.³⁶ The nurse under investigation “admitted that she diverted every day that she worked at every hospital that she was employed at and that when she would be caught diverting and fired, she would simply go on and seek and gain new medical employment.”³⁷ In order to address this lapse by healthcare facilities, the Legislative Analysis and Public Policy Association drafted a model law that addresses drug diversion, which will be published later this year.

Simply put, drug diversion in healthcare settings places healthcare entities and professionals at legal and financial risk. Healthcare facilities face civil litigation, fines, loss of eligibility for Medicare and Medicaid reimbursement, and loss of public trust. Healthcare professionals who divert substances put themselves at risk for criminal prosecution, civil malpractice suits, and administrative discipline, including the loss of their professional license(s).

CONCLUSION

Drug diversion by healthcare professionals can be prevented by implementing best practices, that include adhering to proper wastage procedures and the early identification of healthcare professionals who may be misusing drugs and/or alcohol, have untreated substance use disorder, or might be practicing while impaired. If a healthcare professional is

²⁹ *Id.*; 21 U.S.C. § 321 (2023).

³⁰ 21 C.F.R. § 1301.92 (2023).

³¹ 21 C.F.R. § 1301.91 (2023).

³² *Id.*

³³ 42 C.F.R. § 482.25(b)(7) (2023).

³⁴ N.C. GEN. STAT. ANN. § 90-5.4 (West 2022).

³⁵ UTAH CODE ANN. § 76-10-2204 (West 2023). The law defines “practitioner” as an individual: (1) licensed, registered, or otherwise authorized by the appropriate jurisdiction to administer, dispense, distribute, or prescribe a drug in the course of professional practice; or (2) employed by a person who is licensed, registered, or otherwise authorized by the appropriate jurisdiction to administer, dispense, distribute, or prescribe a drug in the course of professional practice or standard operations.

³⁶ “Prosecutor Says Some Hospitals Don’t Report Nurses Who Steal Drugs,” *WJHL*, December 21, 2016, [Prosecutor says some hospitals don't report nurses who steal drugs](#).

³⁷ *WJHL*, “Prosecutor Says.”

identified early, he or she should be referred, or encouraged to self-refer, to an ATD program for treatment and support services. If diversion is detected, the healthcare facility must abide by federal and state laws regarding reporting and investigating diversion.

RESOURCES

Healthcare Diversion.org <https://healthcarediversion.org/>.

“Healthcare-Associated Infections (HAI) Drug Diversion Planning and Response Toolkit for State and Local Health Departments,” *Council of State and Territorial Epidemiologists*, June 2019, https://cdn.ymaws.com/www.cste.org/resource/resmgr/pdfs/pdfs2/Drug_Diversion_Toolkit_LiveL.pdf.

Berge, Keith H., et al. “Diversion of Drugs Within Health Care Facilities, a Multiple-Victim Crime: Patterns of Diversion, Scope, Consequences, Detection, and Prevention,” *Mayo Clinic Proceedings* 87, no. 7 (July 2012): 674-682, <https://doi.org/10.1016/j.mayocp.2012.03.013>.

Nyhus, Julie. “Drug Diversion in Healthcare: Prevention and Detection for Nurses,” *American Nurse Journal* 15, no. 5 (May 2021): 26-30, <https://www.ismp.org/sites/default/files/attachments/2021-05/an5-Drug%20Diversion-406a%20%282%29.pdf>.

The Joint Commission. “Drug Diversion and Impaired Health Care Workers.” *Quick Safety* 48 (April 2019), https://www.jointcommission.org/-/media/tjc/newsletters/quick_safety_drug_diversion_final2pdf.pdf.

Melissa K. Schaefer and Joseph F. Perz, “Outbreaks of Infections Associated with Drug Diversion by US Healthcare Personnel,” *Mayo Clinic Proceedings* 89, no. 7 (July 2014): 878-887, [Outbreaks of infections associated with drug diversion by US healthcare personnel - PMC](#).

“Detecting Drug Diversion in Health-system Data Using Machine Learning and Advanced Analytics,” Tom Knight, et al., *American Journal of Health-system Pharm.* (Feb. 2022), [Detecting drug diversion in health-system data using machine learning and advanced analytics - PMC](#).

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