



Addressing Substance Use Disorder in Anesthesia Professionals

Position Statement

If you are reading this document to address a current situation with a Certified Registered Nurse Anesthetist (CRNA) or student registered nurse anesthetist (SRNA), call the AANA Helpline at 800-654-5167 for questions and additional guidance. If there is concern due to risk of imminent harm, call 911 immediately.

Purpose

This position statement provides data and educational background on addressing substance use disorder (SUD) in anesthesia professionals in a timely, safe, and non-punitive manner. It is directed at facilities where anesthesia professionals deliver anesthesia services, as well as state and local boards that license Certified Registered Nurse Anesthetists (CRNAs) and other anesthesia professionals.

Substance use and impairment in the safety-sensitive environment of the healthcare workplace requires early identification, drug diversion detection, and appropriate rapid response. This approach may reduce the risk of patient and provider harm and the potential for unaddressed SUD. Regardless of the drug (e.g., alcohol, opioids, cannabis), impairment is a risk. The use of highly potent anesthetic drugs significantly increases the risk for provider death.¹⁻³

The accompanying [Fitness for Duty Toolkit](#) provides workplace policy resources and education tools to mitigate impairment and drug diversion and support prioritizing the mental and physical well-being of healthcare professionals.

AANA Position on Healthcare Workplace Policies

The American Association of Nurse Anesthesiology (AANA) recommends all healthcare facilities create, improve, and enforce comprehensive and evidence-based policies and procedures to address at-risk substance use, drug diversion, impairment, and SUD in healthcare providers, including anesthesia professionals. A 2019 safety notice issued by The Joint Commission encouraged all healthcare organizations to establish a policy to help detect and deter drug diversion.⁴ Leaders have the responsibility to institute processes for rapid response to drug diversion and to create a safety culture that supports staff with uniform and equitable management of providers with at-risk use.⁴ This environment enables staff to feel safe and be empowered to speak up promptly with concerns, i.e., “see something, say something.”⁴⁻⁶ Key elements in the development and implementation of workplace policy and procedures detailed in the accompanying [Fitness for Duty Toolkit](#) include:⁵⁻⁹

- Apply a non-discriminatory and non-punitive fitness for duty policy equally across all facility personnel (e.g., employees, contracted providers, students in clinical training).
- Incorporate promotion of and support for mental and physical well-being and fitness for duty including emotional supports for grief and healing, e.g., experiencing a colleague’s death or following an adverse event, reporting another for drug diversion or impairment.
- Implement drug diversion deterrence strategies.
- Develop procedures to report and address a fitness for duty concern in an appropriate

manner.

- Respond rapidly to drug diversion or impairment observations. If action is required, follow established workplace policy and process.
- Follow best practice guidelines for fair, safe, empathetic, and non-punitive interventions.
- Transition the individual to an addiction treatment provider experienced in treating healthcare professionals, where a comprehensive evaluation will be conducted to develop a plan for inpatient treatment and aftercare aimed at disease remission and continuity of care. For more information, see the accompanying [Fitness for Duty Toolkit](#) for recommendations specific to anesthesia professionals.
- Establish a supportive workplace for individuals returning to work, including monitoring, return to use mitigation factors, and peer support from colleagues.
- Educate personnel in a judgment-free manner during the onboarding process and provide annual ongoing education and encourage open communication. Effective education includes:
 - The definition of fitness for duty and the personal and professional responsibility to be mentally and physically well.
 - Self-care strategies for resiliency and stress reduction.
 - The facility fitness for duty policy and process.
 - The disease of SUD for increased understanding and reduced stigma.
 - The risk of SUD in a healthcare workplace.
 - The signs and behaviors to identify impairment or drug diversion.
 - The importance of early identification.
 - The procedure to report a colleague anonymously or self-report.
 - The components of safe intervention, including the risk of suicide when addressed poorly.
 - The importance of a recovery-friendly environment for the return to clinical practice following SUD treatment.

Well-conceived and well-executed policy and procedures can help the healthcare professional restore their health and retain their licensure, career, and identity. A pathway to return to a workplace is an incentive for sustained remission. This approach may help decrease the costs by reducing the need for staff dismissal, recruitment, and replacement.⁶

AANA Position on Alternative to Discipline Programs

The nonpunitive approach also applies to licensing bodies. The AANA advocates and supports standardization of equitable alternative to discipline (ATD) options for all nursing professionals, including CRNAs, across all states' licensing bodies. Specific to CRNAs, the AANA calls for consideration of the higher risk of death from direct access to potent anesthetics and consistency in evidence-based treatment and monitoring across all states.¹⁰

Alternative to Discipline Programs Background

In 2017, the AANA joined the American Nurses Association and the Association of periOperative Registered Nurses in endorsing the joint Emergency Nurses Association and International Nurses Society of Addiction position statement, Substance Use Among Nurses and Nursing Students. This statement advocates for education on alcohol and other drug use, establishing “policies, procedure, and practice to promote safe, supportive, drug-free workplaces,” and addressing situations with fair ATD approaches for nurses, nursing students, and all healthcare providers rather than disciplinary actions. An ATD approach treats addiction

as the treatable disease it is, with the goal to safely retain careers and lives, rather than as a crime.

As of 2020, this ATD approach is reflected in over 40 states' Boards of Nursing (BON) monitoring programs.¹¹ They have turned to this approach "to address substance use within the nursing profession and to promote nurses' rehabilitation and safe return to practice."¹¹ Compared to discipline-based programs, ATD programs include 75 percent more new nurse participants and have better long-term recovery rates, program retention rates, and overall outcomes.^{5,11} The Federation of State Physician Health Programs (FSPHP) Guidelines for State Physician Health Programs (PHPs), which represent best practices, recommend a consistent ATD approach across all states for physician and some additional healthcare professions. In contrast, BON ATD programs, have great variability.¹¹ The FSPHP role, like BONs, is to protect the public receiving healthcare from providers with potentially impairing illness, including SUD. The PHPs are individual state "non-disciplinary program[s] of accountability for healthcare conditions that have the potential to compromise the ability to practice with reasonable skill and safety if left untreated".¹²

Compared to physicians, nurses incur double the disciplinary actions for issues related to SUD, likely resulting in a greater stigma in nursing.^{13,14} While potentially up to 20 percent of working nurses exhibit signs of SUD, a significant number of at-risk cases are unaddressed.¹⁵ Fewer than one percent of employed nurses enroll in a SUD monitoring program each year. The stigma and fear of loss of licensure and employment may be obstacles and increase the hesitancy of nurses with SUD to seek help.¹⁵

Recent research conducted by the National Council of State Boards of Nursing (NCSBN) identified several best ATD practices, such as five-year monitoring, drug testing twice per month, and an annual requirement to attend 25 support group meetings and 55 to 60 mutual support group meetings.¹¹ NCSBN will be convening an expert review panel to develop formal guidelines for testing.¹¹ The AANA believes evidence-based guidelines will benefit all nursing professionals and support the opportunity to receive appropriate treatment for addiction remission while retaining licenses and careers.

AANA Peer Assistance and Health & Wellness Program

The AANA supports and promotes the well-being of all CRNAs and student registered nurse anesthetists (SRNAs) through the AANA Peer Assistance and Health & Wellness Programs. Since 1983, the Peer Assistance Program, through the work of the Peer Assistance Panel (formerly known as the Peer Assistance Advisors Committee), has provided proactive support for issues related to SUD. This work is committed to educational endeavors and mitigation of at-risk substance use through informational support and resources. The Peer Assistance Panel collaborates with the network of AANA State Peer Advisors to build awareness through outreach within their states to state associations of nurse anesthetists, nurse anesthesia educational programs, BONs, and state SUD monitoring programs. The **AANA Helpline (800-654-5167)** responds to calls related to alcohol or other drug concerns for CRNAs and SRNAs. The AANA Helpline offers resources and support to help individuals be evaluated for appropriate, life-saving treatment. For information, visit aana.com/aboutpeerassistance.

Since 2004, the AANA continues to expand its focus to include overall well-being, supported by the collaboration of the Health & Wellness Committee and the Peer Assistance Panel to develop and disseminate well-being resources.

These programs support CRNAs with their professional and personal responsibility to be mentally and physically fit for duty to perform safe patient care, as reflected in:

- [AANA Standards for Nurse Anesthesia Practice](#):¹⁶
 - Standard 13 Wellness: Is physically and mentally able to perform duties of the role.
 - Standard 14 A Culture of Safety: Foster a collaborative and cooperative patient care environment through interdisciplinary engagement, open communication, a culture of safety, and supportive leadership.
- [AANA Code of Ethics for the Certified Registered Nurse Anesthetist](#), Responsibility as a Professional, Competence and Responsibility in Professional Practice, 2.5:¹⁷
 - Is physically and mentally fit for duty.
- [AANA Professional Attributes of the Nurse Anesthetists](#), Professional Attribute VIII:¹⁸
 - The nurse anesthetist makes lifestyle choices that promote the positive and healthy balance of personal and professional environments.
- [Patient Safety: CRNAs and Health-Related Impaired Practice](#), Position Statement, Policy and Practice Considerations:
 - The AANA “emphasizes the CRNA’s responsibility to be physically and mentally able to perform duties for the delivery of safe, quality care.”¹⁹

Terminology and Glossary

The AANA supports the medically based terminology recommendations from the American Society of Addiction Medicine (ASAM) and encourages use of non-stigmatizing and non-judgmental language in policy development and open communication with respect to the treatment of the chronic disease of SUD.²⁰⁻²²

The words substance ‘*misuse*,’ ‘*abuse*,’ ‘*problem*’ or ‘*choice*’ imply intention or purpose. Alternatively, Table 1 offers preferred person first language, which can lead to a less punitive response and more supportive actions or interventions.²¹

Table 1. Preferred Substance Use Disorder (SUD)-related Terms^{20,21}

Preferred Term(s)	Outdated Term(s)
unhealthy, at-risk, risky, or hazardous use	misuse, abuse, or problem; inappropriate use
person with addiction or person with a substance use disorder	addict
toxicology results: positive or negative	dirty or clean
withdrawal; withdrawal management	detox; detoxification
substance use disorder treatment or mental health disorder treatment	rehab
remission	clean and sober
substance use disorder; (substance or drug) used; addiction involving (substance or drug) used	drug habit, bad habit; drug of choice or drug of abuse
return to use, recurrence	relapse

Addiction: Defined by ASAM in 2019, addiction is a treatable, chronic medical disease involving complex interactions among brain circuits, genetics, the environment, and an individual’s life experiences. People with addiction use substances or engage in behaviors that become compulsive and often continue despite harmful consequences. Prevention efforts and treatment approaches for addiction are generally as successful as those for

other chronic diseases.²²

Drug diversion: When prescription medicines are obtained or used illegally. The transfer of any substance from the purpose for which it is intended for any illicit use (e.g., personal use, sale).^{23,24}

Fitness for Duty: Fitness for duty, also known as fitness to practice, is the ability to be physically and mentally competent to safely perform the essential functions of the work.²⁵ It is the opposite of impairment, which is the inability to practice with reasonable skill and safety resulting from a mental or physical disorder, including SUD (see below definition).¹² Within the context of a healthcare workplace, a Fitness for Duty policy and process provides a necessary guide to addressing impairment concerns in an appropriate, timely, safe, and non-punitive manner.²⁵ See the accompanying [Fitness for Duty Toolkit](#) and the AANA's [Patient Safety: CRNAs and Health-Related Impaired Practice](#).¹⁹

Impairment: Related specifically to healthcare professionals, ASAM's Public Policy Statement on Physicians and other Healthcare Professionals with Addiction follows the Federation of State Medical Boards' definition which states, the "inability of a licensee to practice medicine with reasonable skill and safety as a result of: (a) mental disorder... or (b) physical illness or condition... or (c) substance related disorders..."⁹ Further: "Impairment is a functional classification which exists dynamically on a continuum of severity and can change over time rather than being a static phenomenon. Illness, per se, does not constitute impairment. When functional impairment exists, it is often the result of an illness in need of treatment. Therefore, with appropriate treatment, the issue of potential impairment may be resolved while the diagnosis of illness may remain."⁹

Substance-Use Disorder: Substance use disorder is a disease of the brain characterized by the recurrent use of substances (e.g., alcohol, drugs) that cause clinical and functional impairment such as health problems, disability, and failure to meet major responsibilities at work, school, or home as defined in the fifth edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-5).^{26,27} The disease involves a circuit of reward, withdrawal, memory and motivation and can be classified as mild, moderate or severe depending on the level of impairment. Related diagnostic terms include alcohol use disorder (AUD) and opioid use disorder (OUD).

Background

Research provides strong evidence that SUD is a disease of the brain for which there is no cure. Achieving short-term and lifetime recovery is possible and should be the goal.^{1,26,28,29} Building and enhancing the knowledge of risk factors and the importance of self-care, as well as recognizing the signs and behaviors of impairment and drug diversion, can help mitigate patient and provider harm.²⁶

General Population

In the United States, SUD continues to be a public health concern. In 2019, almost eight percent of the population over 18 had a diagnosed SUD and nearly four percent of adults had a co-occurring SUD and mental health disorder.³⁰ Samuelson and Bryson report, "Depending on the region, 10 to 15 percent of the general population is prone to develop SUD and will abuse drugs or alcohol at some point in their life."² Alcohol use disorder often co-exists with other conditions that predispose individuals to mental health problems, including feelings of loneliness and hopelessness, depression, suicidal ideation, and other psychiatric disorders.¹³

Hazardous opioid use, which includes heroin and opioid pain medications used other than prescribed, was reported in almost four percent of the population, which presents threats to personal health and safety and the risk for harm. Public health efforts to reduce opioid use resulted in decreases in hazardous opioid use in 2019 compared to 2018. Despite decreased use overall, opioid overdose rates increased by approximately five percent in 2019, “underscoring the risks of potent illicit synthetic opioids” and the continued need to “engage people in treatment/recovery services.”³⁰ While this increase was concerning, in the pandemic year of 2020, the overall drug overdose death rate jumped 30 percent over 2019.³¹ In 2020, the greatest number of overdose deaths was from synthetic opiates (e.g., fentanyl) and the most notable and significant increases were overdoses from psychostimulants (e.g., methamphetamine, cocaine).³¹

Scope of the Problem Among Healthcare Professionals

Research indicates SUD incidence among nurses at the same incidence as the general population.¹¹ Among healthcare professionals, risk factors include shift work, secondary trauma from an adverse event, male gender, post-traumatic stress disorder, family history of SUD, and presence of a comorbid psychiatric illness.^{2,13,32-35} However, the risk of harm is greater in anesthesia professionals with access to highly addictive controlled substances, such as anesthesia drugs.^{2,36} Additional risk factors in anesthesia professionals include the stress of working in a demanding profession and possible environmental sensitization to the effects of potent medications.^{23,37-40}

Anesthesia Professionals and Access

Compared with other healthcare professionals, anesthesia professionals are at an increased risk for SUD.^{34,41-46} Highly addictive and potentially lethal substances such as opioids (e.g., morphine, fentanyl), inhalational anesthetics, volatile agents (e.g., sevoflurane, nitrous oxide), and intravenous (IV) anesthetic agents (e.g., propofol, which is not a controlled substance) are readily available to anesthesia professionals and can be easy to divert in small amounts.^{34,47} Physician anesthesiologists are more likely to use IV drugs than other physicians.^{47,48}

Even when medication dispensing and audit controls are implemented, drugs may be diverted directly from pharmacies, automated dispensing units, leftover medications in syringes in sharps waste containers, patient medications, or indirectly through dilution of a medication to replace diverted amounts.^{6,36,44,49,50} Small gaps, errors, or flaws within these multiple systems when aligned create opportunities for drug diversion. The risk of diversion can be reduced by detection strategies, early identification, and rapid response.⁶

Primary Substance Used

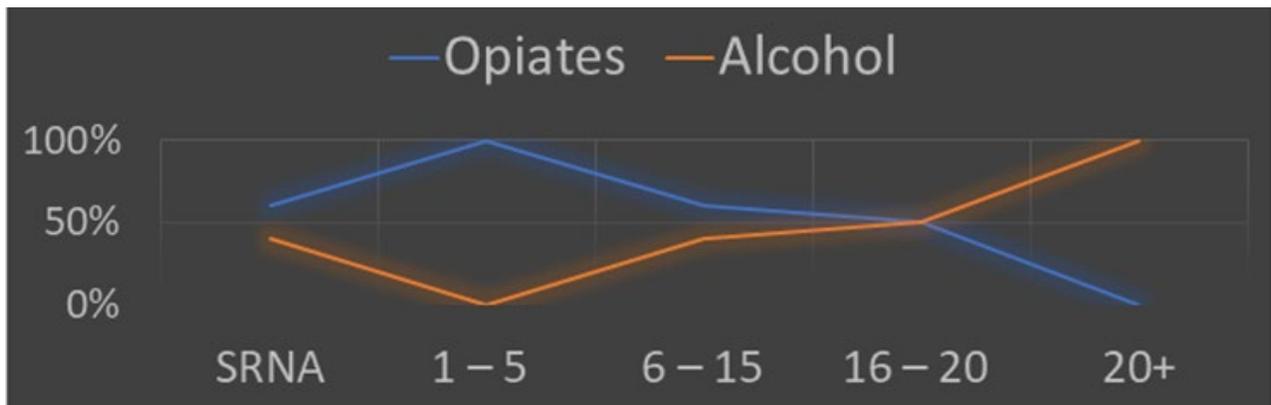
Research indicates varying results across different anesthesia professional specialties and age ranges regarding the substance(s) used. Alcohol and opioids are reported as the most frequently used drugs among anesthesia professionals.^{32,43,47,48,51} The incidence of opioid and non-opioid anesthetic use, in particular propofol, is continuing to increase.^{32,47,48,52,53} The increasing use of propofol, which is not a controlled substance, is concerning, and AANA strongly recommends that facilities with propofol on formulary develop and implement methods to reduce the likelihood of propofol diversion.^{32,48,52-54} See more in AANA’s [Securing Propofol Position Statement](#).

Other observed trends in anesthesia professionals’ drug use include an increase in the

hazardous use of inhaled anesthetic gases, although this is noted at a much lower rate than other drugs.³³ Burnett, et al. note that data collection on drug use trends may be impacted by a greater emphasis on recognition, monitoring, and reporting of certain drugs (e.g., propofol).³³

Graph 1 illustrates aggregate, unpublished, self-reported responses regarding primary drug use collected in 2019 – 2020 from AANA Helpline calls related to CRNA and SRNA workplace problems, legal issues, treatment, or SUD diagnosis. The information does not reflect polysubstance use history but only depicts the designated first drug. Further research involving a more representative sample is warranted to explore this trend in greater detail.

Graph 1. Primary Drug Use Over Anesthesia Career: SRNA to 20+ Years in CRNA Practice (N=86) (AANA Helpline 2019-2020, unpublished data, 2021).



High Risk of SUD

The relationships between SUD, employment problems, mental health disorders, and suicide are well established.^{13,15} Access to a lethal drug can result in an unintentional overdose or be used to facilitate a suicide.⁸

Among anesthesia professionals with SUD, death is a risk whether it occurs during the first presentation or following a later return to use.^{7,52}

- In a study of Australian and New Zealand anaesthetists, an 11 percent fatality rate occurred in first known use or due to subsequent recurrence, with propofol implicated in all drug related deaths.^{48,52}
- Although there are differing estimates on the prevalence of SUD among healthcare professionals, the risk is evident:
 - An estimated 10 to 15 percent of all healthcare professionals have reported at-risk use of alcohol and other drugs at some point during their career.^{6,39,44,55}
 - Up to 20 percent of working nurses exhibit signs of SUD.¹⁵
- Early career anesthesia professionals appear to be at an increased risk of SUD:
 - Chipas, et al.’s study of the impact of stress on SRNAs showed that 21 percent indicated suicidal ideation at one point in their training and 6.3 percent personally knew someone who completed suicide while in school.⁵⁶ As noted previously, stress is a contributing factor which may lead to unhealthy substance use and SUD.
 - Unhealthy substance use was reported in the first five years of anesthesia practice among 64 percent of CRNA patients in one treatment program over five-

- years (2016 – 2020).⁵⁷
- o Approximately 15 percent of anesthesiology residents have used drugs before starting training.³⁴
- o Anesthesiology residents are twice as likely to die from SUD than residents in other areas of medicine. Young male anaesthesia practitioners have three-times the rate of suicide due to substance use.^{58,59}
- Research on healthcare provider suicide shows risks from mental health and substance use:
 - o Physician anesthesiologists are more likely to return to use, overdose, and complete suicide than other physicians but are less likely to self-report SUD.³⁵
 - o Out of 203 nurse deaths from suicide between 2003 and 2017, 65 percent suffered from SUD or unhealthy substance use and over six percent diverted medications from the workplace.¹⁵
 - o Among CRNAs in one addiction treatment program from 2016 to 2020, 75 percent were involved in drug diversion, and 84 percent had a co-occurring SUD/mental health diagnosis.⁵⁷
 - o A comparative analysis of 2,306 nurses who completed suicide between 2003-2017 found that 31 percent had a history of harmful alcohol or other drug use.¹³
 - o A systematic review of 54 articles published in or after 1990 related to suicide in anaesthetists affirmed the following:
 - The method of suicide was more likely to involve drugs compared to the general population (86 percent compared to 33 percent).⁶⁰⁻⁶³
 - Propofol was noted as a suicide related drug.^{60,61}
 - While greater rates of suicide occur in males, an increasing trend was noted within the female population.^{61,64-67}

The full scope of the issue is likely underestimated due to the many factors that discourage disclosure, such as stigma, employment concerns, potential for licensure restriction or loss, possible legal action, and implications for patient care.^{37,39} The growing field of research will bring greater understanding of the scope of this problem in the anesthesia profession and contribute to the development of evidence-based risk mitigation techniques and guidelines for SUD treatment.

The Impact of Trauma

The COVID-19 pandemic has caused emotional distress, anxiety, and trauma, impacting the well-being of all healthcare professionals. Data support the alarming trend of increased mental health concerns and accelerating SUD and overdose rates. Negative mental health outcomes include depression, anxiety, insomnia, and extreme stress.^{13,68-70} The increased workplace stressors during the pandemic have led to newly emerging or exacerbated mental illness or at-risk substance use, increasing suicide risk among healthcare professionals.^{13,68,71} For some healthcare providers this stress is combined with other environmental susceptibility to SUD or suicide factors, such as a childhood history of abuse or trauma, previous personal, family, and/or peer at-risk alcohol or other drug use, and lack of familial or social support.^{8,34} Visit [AANA.com/askforhelp](https://www.aana.com/askforhelp) for a summary of emerging data.

Fortunately, there is a growing movement among healthcare professionals and leaders to address trauma, burnout, mental health, and suicide mitigation. Healthcare facilities will need to institute programs to support the mental well-being of all healthcare workers, especially pandemic frontline providers, such as CRNAs. Visible support from healthcare leaders is critical

for clinician engagement, building resiliency, and creating a culture of safety.⁷² Due to recent increased suicide rates, well-being programs should include a standardized suicide awareness, mitigation, and intervention protocol.¹⁵

* The research articles and studies cited in this report vary across different anesthesia professional specialties studied and are both US-based and international. The study population is noted for accuracy (e.g., anaesthetists, CRNAs, anesthesiologists), not with the intent to highlight problematic data in one anesthesia professional designation over another. All anesthesia professionals are at a great risk of SUD and potential related loss of life.

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The *Substance Abuse and Chemical Dependency* position statement was adopted by the AANA Board of Directors in 1984 and revised in 1998, 2007, and November 2011. In July 2016, the AANA Board of Directors archived the position statement and adopted *Addressing Substance Use Disorder for Anesthesia Professionals*. Revised by AANA Board of Directors in May 2021. Revised as *Addressing Substance Use Disorder in Anesthesia Professionals* by AANA Board of Directors in August 2021.

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