

Significant Legislative Rule Analysis

WAC 246-919-601 and 246-919-603

Rules concerning the use of nitrous oxide in office based surgery settings

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SECTION 1

A brief description of the proposed rule including the current situation/rule, followed by the history of the issue and why the proposed rule is needed.

The Washington Medical Commission (commission) is proposing amendments to WAC 246-919-601 and creating a new section, WAC 246-919-603, to establish the use of nitrous oxide by allopathic physicians in office-based settings.

This is the commission's second proposal on this topic. The commission held a formal rules hearing on August 22, 2025, under the previously filed CR-102, WSR 25-14-080. The commission did not adopt the proposed language presented at the hearing after considering public testimony and commissioner feedback indicated that additional revisions were needed.

In 2010, the commission implemented WAC 246-919-601, Safe and effective analgesia and anesthesia administration in office-based settings, to enhance patient safety by establishing consistent standards and competency for procedures involving analgesia, anesthesia, or sedation performed in office-based settings.

The rule sets forth specific requirements for physicians licensed under chapter 18.71 RCW and chapter 246-919 WAC who perform surgical procedures and use anesthesia, analgesia or sedation in office-based settings to ensure patient safety during procedures in a physician's office. These requirements include accreditation or certification of the facility, competency standards, separation of surgical and monitoring functions, written emergency care and transfer protocols, the ability to rescue patients who enter a deeper level of sedation than intended, and the presence or immediate availability of a licensed healthcare practitioner certified in advanced resuscitation techniques appropriate for the patient's age group.

WAC 246-919-601(3)(a) provides an explicit exemption from rule requirements for procedures involving only minimal sedation. According to WAC 246-919-601(2)(e), minimal sedation is restricted to medications administered orally, intranasally, or intramuscularly. In 2020, the commission updated the rule to include "intranasal" in the definition of minimal sedation. However, the rule does not specify whether the use of nitrous oxide qualifies as minimal sedation and thus exempts it from the rule.

Nitrous oxide, an inhaled anesthetic, produces a sedative effect dependent on the dosage and can be used for procedural sedation, general anesthesia, dental anesthesia, and managing severe acute pain. When used as the sole anesthetic agent at a concentration of 50% or less (combined with oxygen), nitrous oxide minimally affects respiration and does not induce muscle relaxation. In this capacity, nitrous oxide induces brief sedation with low risk to the patient, provided specific safeguards are in place.

The commission proposes exempting nitrous oxide administration from WAC 246-919-601 under certain circumstances, which are outlined in the proposed new section, WAC 246-919-603. The new section establishes standards for the safe use of nitrous oxide in office-based settings. These include physician training, the presence of a basic life support (BLS)-certified provider, and a requirement that the physician performing the procedure does not administer the nitrous oxide. The rule mandates patient monitoring, emergency equipment, a hospital transfer plan, and special precautions for pediatric patients. Licensed physicians must ensure their facilities maintain appropriate safety measures, including controls for excess nitrous oxide

and secure storage, and that patients are discharged only after meeting established stability criteria.

SECTION 2

Significant Analysis Requirement

As defined in RCW 34.05.328, portions of the rule require significant analysis because they adopt substantive provisions of law under delegated legislative authority, impose penalties or sanctions for violations, establish qualifications or standards for the issuance, suspension, or revocation of a license or permit, and implement a regulatory program. See Section 5 for the analysis.

SECTION 3

Goals and objectives of the statute that the rule implements.

Chapter 18.71 RCW describes the regulatory framework for the practice of medicine. RCW 18.71.002 provides that the overall goal of the commission is to ensure the public health and safety as a prerequisite to granting and renewing licensure under the chapter. The proposed rules implement the statute's goals and objectives by supporting the overarching goal of RCW 18.71.002 by protecting and promoting public health, safety, and welfare.

SECTION 4

Explanation of why the rule is needed to achieve the goals and objectives of the statute, including alternatives to rulemaking and consequences of not adopting the proposed rule.

The proposal supports the goals of RCW 18.71.002 by enhancing patient safety and ensuring responsible use of nitrous oxide in office-based settings. By establishing clear guidelines for physician training, patient monitoring, emergency preparedness, and facility safety measures, the proposed rules minimize risks associated with sedation. These safeguards protect public health and welfare while allowing for safe, controlled use of nitrous oxide, aligning with the statute's objective of promoting patient safety and high standards in medical practice.

These rules help close a gap in oversight by making sure office-based procedures led by physicians follow the same safety and competency standards as ambulatory surgical facilities (ASF) under chapter 70.230 RCW. ASFs have clear rules for licensing, patient safety, and emergency planning, but office-based procedures haven't always had the same level of regulation, which could put patients at risk.

The proposed new rule, WAC 246-919-603, establishes specific guidelines for using nitrous oxide in office settings, making sure it's administered safely while still giving providers flexibility. It lays out key safety steps like requiring physician training, patient monitoring, emergency plans, and clear discharge criteria. This helps reduce risks while keeping outpatient care accessible and affordable.

By proposing these rules, the commission may ensure that patients in office-based settings get safe, high-quality care similar to what they'd receive in an ASF. At the same time, the proposed rules give providers the flexibility to continue offering services safely without adding unnecessary barriers that could make it harder for patients to get care.

SECTION 5

Analysis of the probable costs and benefits (both qualitative and quantitative) of the proposed rule being implemented, including the determination that the probable benefits are greater than the probable costs.

WAC 246-919-601 Safe and effective analgesia and anesthesia administration in office-based settings.

Description: WAC 246-919-601(3) establishes the exemptions for when physicians need not comply with these specific rules.

The proposed amendment to WAC 246-919-601(3)(b) creates an exemption allowing nitrous oxide use when conducted in accordance with WAC 246-919-603.

Cost(s): The commission and department do not expect any additional costs for licensed physicians due to the proposed changes in WAC 246-919-601, as the only proposed change is the addition of exemptions for the use of nitrous oxide.

Benefit(s): Exempting nitrous oxide from the requirements of WAC 246-919-601 under specific conditions provides regulatory clarity, ensuring consistent application of sedation rules. It increases access to care by allowing more medical offices to offer safe, in-office sedation without requiring higher-cost surgical facilities. Patients, particularly those who are anxious or pediatric, benefit from a well-tolerated sedation option that enhances comfort during minor procedures. The exemption also reduces administrative burdens by simplifying compliance, minimizing paperwork, and streamlining procedural requirements. At the same time, patient safety is maintained through the safeguards outlined in WAC 246-919-603, ensuring responsible use without unnecessary regulatory barriers.

New Section WAC 246-919-603 Use of nitrous oxide in office-based settings.

Description: This proposed rule establishes safety standards for allopathic physicians when using nitrous oxide in office-based settings (medical offices) while exempting it from other sedation regulations under certain conditions.

Cost(s): The commission can reasonably assume that an allopathic physician who chooses to administer or oversee the administration of nitrous oxide in an office-based setting:

- Already possesses appropriate training in sedation techniques and emergency response, especially if nitrous oxide has been part of their clinical practice.
- Will fulfill the requirement to complete a CME course in nitrous oxide administration as part of their ongoing professional competency.
- Has a foundational obligation, under the broader standard of care, to verify that the clinical environment is safe and staffed with appropriately trained personnel.

Therefore, the commission and the department do not anticipate any additional costs due to the proposed rule in these areas.

Benefit(s): These requirements enhance patient safety by ensuring that nitrous oxide is administered in a controlled, well-monitored environment with trained personnel and emergency protocols in place. The rule provides clear, standardized expectations for physicians, reducing the risk of adverse outcomes and liability while promoting consistent care across office-based settings. It also supports professional accountability and reinforces public trust.

New Subsection WAC 246-919-603(2)(c)(x)

Description: The proposed provision in WAC 246-919-603(2)(c)(x) addresses the management of excess nitrous oxide in office-based procedure rooms. Nitrous oxide can accumulate in these settings and expose staff to low levels of gas over time. Even when patient doses are limited, repeated exposure may pose occupational health concerns.

To address this risk in a consistent and measurable way, the rule requires that excess nitrous oxide be managed through one of the following methods: a scavenging system, demand-flow delivery, or exposure monitoring using dosimeters. A scavenging system captures and removes excess nitrous oxide from the procedure room, reducing the amount of gas released into the environment. A demand-flow delivery system releases nitrous oxide only when the patient inhales, which limits the amount of unused gas escaping into the room. Dosimeters are monitoring devices worn by staff that measure nitrous oxide exposure over time, allowing facilities to verify that exposure levels remain within accepted safety limits.

This approach supports both patient and staff safety while allowing flexibility in how facilities meet the requirement. This requirement places responsibility on the physician to ensure that the facility where the procedure is performed has appropriate equipment available to manage excess nitrous oxide through one of these methods.

Cost(s): The physician's primary responsibility is to provide the time and professional oversight necessary to ensure that the facility where the procedure is performed meets the established safety criteria. While implementation costs may vary, they are not borne by the allopathic physician. However, the physician is responsible for confirming that appropriate safeguards are in place. This includes ensuring measures are implemented to reduce occupational exposure to nitrous oxide, limit the risk of unintended deeper sedation, and support proper monitoring and discharge practices.

Scavenging

Scavenging systems are designed to physically capture and remove excess nitrous oxide from the procedure room. These systems typically connect to the patient delivery interface (such as a mask) and route unused or exhaled gas away from the breathing zone, often through vacuum suction or dedicated exhaust systems. Scavenging is a preventive, engineering-based control that reduces ambient nitrous oxide levels at the source.

Scavenging Equipment

- Nitrous Oxide Scavenger Kit - A complete kit that typically includes tubing, connectors, and interfaces designed to capture exhaled or excess nitrous oxide from the patient delivery system. These kits are often compatible with existing nitrous oxide equipment

and can be installed without replacing the entire delivery system. The approximate cost is \$876¹ per kit.

- Scavenging Circuit - A component-level system that integrates with nitrous oxide masks and tubing to route excess gas away from the procedure area. These circuits are often used as part of a broader vacuum or exhaust setup and may be replaced periodically due to wear. The approximate cost is \$743.85² per circuit.
- Accutron Scavenging Circuit II with Control Valve - A branded scavenging circuit that includes a control valve to regulate suction and flow. This allows for more precise control of gas removal and compatibility with various delivery systems. The control valve helps prevent excessive suction that could interfere with patient breathing. The approximate cost is \$914³ per circuit. These require regular checks, maintenance, and component replacement based on wear or failure.

Demand-flow

Demand-flow delivery systems are designed to limit the release of nitrous oxide by delivering gas only when the patient actively inhales. Unlike continuous-flow systems, demand-flow equipment minimizes unused gas escaping into the room, thereby reducing environmental exposure for staff without relying on room-level exhaust.

Demand-flow Equipment

- Nitronox Plus - A complete demand-flow nitrous oxide delivery system commonly used in medical and emergency settings. It integrates oxygen and nitrous oxide delivery and only releases gas during inhalation, significantly reducing ambient waste gas. The approximate cost is \$8,500⁴ per system.
- Parker Porter Nitronox Delivery System - A demand-flow system designed specifically for nitrous oxide and oxygen delivery in outpatient or office-based environments. These systems are often mobile or semi-fixed and are engineered to meet clinical sedation needs while limiting environmental exposure. The approximate cost is \$5,500⁵ per system.
- Belmed Nitrous Oxide/Oxygen Gas Supply 4-Cylinder Flowmeter System - A multi-cylinder delivery system with integrated flowmeters that can be configured for demand-flow operation. These systems are more comprehensive and may support higher patient volumes or longer procedures. The approximate cost is \$4,738.95⁶ per system.

¹ [Quality Dental Equipment](#) - accessed January 8, 2026.

² [Pearson Dental Supply](#) - accessed January 8, 2026.

³ [Net32](#) - accessed January 8, 2026.

⁴ [Medshift](#) - accessed January 8, 2026.

⁵ [All States M.E.D.](#) - accessed January 8, 2026.

⁶ [Net32](#) - accessed January 8, 2026.

Dosimeter

Dosimeters are monitoring devices rather than gas-removal systems. They measure the amount of nitrous oxide that staff are exposed to over time. Dosimeters do not prevent exposure directly, but they allow facilities to verify that exposure levels remain within accepted occupational safety limits and to take corrective action if elevated levels are detected.

Dosimeter Equipment

- Direct-Reading Dosimeter - A device that provides immediate feedback on nitrous oxide exposure levels. These are typically worn by staff during procedures and can display exposure data in real time or shortly thereafter. The approximate cost is \$165⁷ per badge per year.
- Wireless Monitoring Badge - A wearable badge that continuously tracks nitrous oxide exposure and transmits data wirelessly for analysis. These systems often operate on a subscription or annual service model and allow facilities to track exposure trends over time. The approximate cost is \$130⁸ per badge per year.
- OSL Dosimeter Badge - An optically stimulated luminescence badge that passively measures cumulative exposure over a set period, typically monthly or quarterly. These badges are sent to a laboratory for analysis and reporting. The approximate cost is \$130⁹ per badge per year.

Cost Range

- Scavenging systems range from approximately \$740 to \$915 per unit, reflecting one-time equipment purchases. These systems require regular checks, maintenance, and component replacement based on wear or failure.
- Demand-flow systems range from approximately \$4,700 to \$8,500 per system, representing higher upfront costs due to integrated delivery hardware. Demand-flow systems are designed to be durable devices. With proper care and adherence to manufacturer maintenance schedules, many systems can remain in service for several years, often in the 5–10-year range or longer, before full replacement is needed. Systems that are regularly serviced and used within normal operating conditions are less likely to require premature replacement.
- Dosimeters range from approximately \$57 to \$165 per item, with some priced annually per badge, reflecting ongoing costs rather than a one-time purchase.

Benefit(s): The time invested in reviewing policies, verifying equipment and protocols, and confirming staff readiness provides meaningful benefits for both patient safety and healthcare provider safety. These efforts promote consistent, safe office-based procedures and help prevent avoidable complications or workplace exposure risks. The rule also allows the

⁷ [Arrow-Tech](#) - accessed January 8, 2026.

⁸ [Dosimetry Badge](#) - accessed January 8, 2026.

⁹ [Radiation Safety](#) - accessed January 8, 2026.

flexibility to select an approach that aligns with clinical workflow and available resources, enabling safety objectives to be achieved without requiring a single, high-cost solution.

Summary of all Cost(s) and Benefit(s)

SA Table 2. Summary of Section 5 probable cost(s) and benefit(s)

WAC Section and Title	Probable Cost(s)	Probable Benefit(s)
246-919-601 Safe and effective analgesia and anesthesia administration in office-based settings.	No anticipated additional costs.	Exempting nitrous oxide under specific conditions provides regulatory clarity, expands access to safe in-office sedation, reduces administrative burdens, and maintains patient safety through defined safeguards.
246-919-603 Use of nitrous oxide in office-based settings.	No anticipated additional costs.	Clearer regulations, reduced liability, and expanded in-office sedation options improve patient safety, trust, and procedural efficiency.
WAC 246-919-603(2)(c)(x)	While the anticipated additional cost for an allopathic physician is negligible, the department explored what would be needed for an entity that would newly need to purchase equipment to comply with the proposed rule, costs ranged between \$57 and \$8,500.	Mitigates risk for both healthcare workers and patients.

Determination

Probable Benefits greater than Probable Costs

Based on this analysis, and given the range of options available, the total probable benefits of the proposed rule exceed the probable costs.

SECTION 6

List of alternative versions of the rule that were considered including the reason why the proposed rule is the least burdensome alternative for those that are required to comply and that will achieve the goals and objectives of the proposed rule.

Staff collaborated with interested parties to reduce the impact of these rules. Between July 2024 and January 2025, three rules workshops were conducted, offering the public, associations, and other interested parties a platform to provide feedback on the proposed rule language. A formal rules hearing was held on August 22, 2025. The draft language presented at the hearing was not adopted after public testimony and Commissioner feedback indicated that additional revisions were needed. Commissioners voted to convene another workshop to incorporate those changes, and a workshop was subsequently held on October 20, 2025, where the draft language was revised to reflect the suggestions raised at the hearing.

Lease Burdensome Determination

The commission's process encouraged interested parties to:

- Identify burdensome areas of the draft rules;
- Propose initial or draft rule changes; and
- Refine those changes.

The result of this process was a set of proposed rules that balance regulatory objectives with reduced burdens on affected parties. Through collaboration, multiple workshops, and a rules hearing, staff and interested parties identified concerns, proposed adjustments, and refined the rule language to minimize unnecessary burdens while maintaining essential safeguards.

Alternatives Considered

- **Not creating a new section to address the use of nitrous oxide**

The commission considered not creating a new section for nitrous oxide use to avoid adding regulatory complexity and to maintain consistency with existing sedation rules.

Due to the unique characteristics of nitrous oxide, such as its minimal sedative effects at low concentrations and its widespread use, the commission ultimately determined that a separate section with clear exemptions and safety standards was necessary to ensure both clarity and patient safety.

- **Listing several levels of life support training**

For WAC 246-919-603(2)(c)(ii), the commission considered listing advanced resuscitation techniques, including advanced cardiac life support, pediatric advanced life support, and advanced pediatric life support.

After extensive discussion in a workshop, the commission determined that requiring only BLS was adequate to ensure patient safety.

- **Clarifying qualifications for the provider administering nitrous oxide**

An earlier draft of the rule proposed the requirement that "The licensed provider administering the nitrous oxide must be different from the physician performing the procedure." The

commission received feedback from the public that the term “licensed” be removed so that other qualified healthcare professionals with appropriate training could administer the nitrous oxide. Also as a result of feedback at the hearing the language was expanded to clarify practitioner competency, required training, and scope of practice.

- **Limiting removal of excess nitrous oxide to a scavenging system**

In the earlier version of the proposed rule, a scavenging system was the only method allowed to remove excess nitrous oxide. Based on suggestions from Commissioners and public testimony at the hearing, the revised language now also allows the use of demand-flow delivery systems and dosimeters, in addition to scavenging systems, to ensure adequate ventilation and minimize occupational exposure.

SECTION 7

Determination that the rule does not require those to whom it applies to take an action that violates requirements of another federal or state law.

The rule does not require those to whom it applies to take action that violates the requirements of federal or state law.

SECTION 8

Determination that the rule does not impose more stringent performance requirements on private entities than on public entities unless required to do so by federal or state law.

The rule does not impose more stringent performance requirements on private entities than on public entities.

SECTION 9

Determination if the rule differs from any federal regulation or statute applicable to the same activity or subject matter and, if so, determine that the difference is justified by an explicit state statute or by substantial evidence that the difference is necessary.

The rule does not differ from any applicable federal regulation or statute.

SECTION 10

Demonstration that the rule has been coordinated, to the maximum extent practicable, with other federal, state, and local laws applicable to the same activity or subject matter.

There are no other applicable laws.