



COUNTY OF SONOMA

575 ADMINISTRATION
DRIVE, ROOM 102A
SANTA ROSA, CA 95403

SUMMARY REPORT

Agenda Date: 8/25/2026

To: County of Sonoma Board of Supervisors

Department or Agency Name(s): Department of Health Services

Staff Name and Phone Number: Nolan Sullivan 707-565-4774; Amelyn Olson, 707-565-2696

Vote Requirement: Majority

Supervisory District(s): Countywide

Title:

Adoption of an Ordinance Adding Article VII to Chapter 14 to the Sonoma County Code, entitled Restrictions on the Retail Sales and Distribution of Nitrous Oxide - First Reading

Recommended Action:

- A) Receive an update on County and city coordination efforts related to the non-medical inhalation of nitrous oxide as an intoxicant.
- B) Adopt a Resolution introducing, reading the title of, and waiving further reading of an ordinance adding Article VII to Chapter 14 of the Sonoma County Code entitled Restrictions on the Retail Sales and Distribution of Nitrous Oxide. (First Reading)

Executive Summary:

This item presents a focused approach to addressing health, safety, and environmental concerns associated with non-medical nitrous oxide use. Based on coordination with local jurisdictions, community stakeholders, and County departments, as well as review of existing legal authority, staff recommend adoption of an ordinance restricting the retail sales and distribution of nitrous oxide and nitrous oxide dispensing devices in the unincorporated area of Sonoma County, subject to specified exemptions for legitimate commercial, medical, dental, culinary, automotive, industrial, and research uses.

Nitrous oxide has legitimate and beneficial medical, dental, industrial, automotive, research, and food production applications. However, misuse-including retail access to cartridges and large-capacity canisters-has been associated in Sonoma County with neurological injury, impaired driving, emergency medical responses, and environmental impacts from discarded cartridges and cylinders. Consistent with actions already adopted or under consideration in other California jurisdictions, the proposed ordinance would:

- 1. Restrict the retail sales and distribution of nitrous oxide and nitrous oxide dispensing devices, except as expressly exempted;
- 2. Allow wholesale transactions to qualifying businesses for lawful exempt uses;
- 3. Establish multiple enforcement tools, including criminal, civil, administrative, nuisance-abatement, and Tobacco Retail License consequences, to support compliance;
- 4. Declare violations a public nuisance, while expressly limiting enforcement against property owners unless they caused, permitted, or participated in the violation; and
- 5. Provide that violations by Tobacco Retail License (TRL) holders may also constitute violations of Chapter

32A and may result in suspension or revocation of the retailer's TRL.

The ordinance is intended to protect public health and safety by reducing retail access to nitrous oxide products intended for or susceptible to non-medical inhalation, while preserving legitimate uses.

Outreach and coordination demonstrated broad support for a retail sales restriction, provided that exemptions remain for legitimate medical, dental, culinary, commercial, and industrial uses. If approved today, a pre-adoption summary will be published at least five days before the adoption hearing. After adoption, a post-adoption summary will be published, and the ordinance will take effect 30 days thereafter.

Successful implementation of the ordinance will require sustained retailer education, community outreach, and coordination with Sonoma County communities during the initial implementation period. The Department of Health Services (DHS) is coordinating with cities by providing a model ordinance for consideration by their local councils; each jurisdiction would be responsible for adopting and enforcing its own ordinance. DHS would support countywide implementation by promoting voluntary compliance and advancing proactive retailer education to reduce the need for enforcement penalties.

Discussion:

Background

Nitrous Oxide (N₂O) is a colorless gas with legitimate medical, commercial, industrial, scientific, automotive, and food-related applications. In medically supervised clinical settings, Nitrous Oxide is used as an anesthetic and analgesic to reduce pain and anxiety during certain medical and dental procedures. However, when inhaled outside clinical settings for non-medical purposes, Nitrous Oxide can produce psychoactive and intoxicating effects and has been associated with serious substance use disorders and health consequences, including neurological injury, oxygen deprivation, impaired judgment, loss of consciousness, and impaired driving. These acute effects may occur suddenly and can significantly impair driving ability, increase the likelihood of traffic collisions and other accidental injuries, and place both users and members of the public at risk.

Local inspections, community reports, and observations from County public and behavioral health staff, public safety and environmental partners indicate increasing concerns regarding the misuse of nitrous oxide products sold through retail outlets such as smoke shops and convenience stores. In addition to health and safety impacts, discarded nitrous oxide cartridges and cylinders contribute to litter and hazardous waste disposal challenges.

In response to these concerns, the DHS has been working with local jurisdictions and community partners to explore potential policy approaches. Cloverdale adopted retail restrictions on nitrous oxide in 2018. All other Sonoma County cities and the Town of Windsor have expressed support for a coordinated regional approach.

Need for a Local Ordinance

California law currently prohibits the sale of nitrous oxide products to persons under 18 years of age and prohibits certain sales associated with unlawful inhalation. Despite these restrictions, County staff have documented the continued retail availability of Nitrous Oxide products marketed and sold for non-medical inhalation, including flavored products, large-capacity containers, and products sold alongside inhalation accessories.

Prior to developing the proposed ordinance, Sonoma County conducted extensive retailer outreach regarding existing California laws governing the sale and distribution of nitrous oxide. On March 11, 2026, the County

issued a notice to retailers describing applicable state law, identifying product characteristics and sales practices associated with unlawful inhalation, and encouraging compliance with existing requirements. On June 17, 2026, the County issued a follow-up notice providing additional clarification regarding the County's interpretation of state law, identifying factors that may indicate unlawful sales, and encouraging retailers to voluntarily discontinue the sale of nitrous oxide products commonly associated with non-medical inhalation. Despite these outreach and education efforts, County staff continued to document through periodic retail inspections the sale of nitrous oxide products marketed and sold in forms commonly associated with non-medical inhalation. Staff therefore concluded that education and voluntary compliance efforts alone are insufficient to adequately address the resulting public health, safety, and environmental concerns.

Accordingly, the proposed ordinance is intended to supplement, rather than replace, existing state law by establishing a local education and enforcement framework designed to reduce the availability of nitrous oxide products intended for non-medical inhalation while preserving legitimate medical, commercial, industrial, scientific, automotive, and food-related uses.

Local and Emerging Data

Comprehensive surveillance data on non-medical nitrous oxide use is limited at the local, state, and national levels. However, available information indicates that misuse of nitrous oxide is an emerging public health concern.

Since 2018, Sonoma County has documented four deaths where nitrous oxide was identified as a contributing factor. Two deaths were accidental and involved additional substances, including cocaine and alcohol, and two deaths were suicides involving intentional inhalation. Additional deaths from 2026 remain under investigation.

Preliminary data indicate Sonoma County hospitals treated approximately five nitrous oxide-related emergency department visits per month between October and December 2025. County staff are continuing to evaluate historical trends and demographic characteristics of these visits.

Similar concerns have been reported by public health agencies throughout California. Recent reports from other jurisdictions describe increasing availability of flavored products and large-capacity canisters that may facilitate nitrous oxide inhalation. Nationally, poison center calls, emergency department visits, and emergency medical service responses associated with nitrous oxide misuse have increased in recent years, prompting public health advisories from federal agencies.

COMMUNITY OUTREACH SUMMARY

Staff conducted outreach with local jurisdictions, public safety partners, environmental stakeholders, retailers, medical and commercial users, and youth-serving organizations. A virtual meeting invitation was sent to over 1,000 stakeholders with 24 people attending the presentation and Q & A session on July 8th. On July 9th, staff made a presentation to the Lower Russian River Municipal Advisory Committee. Feedback consistently emphasized concerns about the proliferation and sizes of products, ease of access, health and safety impacts associated with non-medical use, environmental impacts from discarded cartridges and cylinders, and the importance of regional alignment. Stakeholders also highlighted the need for retailer education, clear exemptions for legitimate uses, coordinated public information efforts, and practical enforcement strategies. Staff have also coordinated with the Sonoma County Sheriff's Office regarding implementation and enforcement considerations.

PROPOSED ORDINANCE

Prohibitions:

Retail sale of, or for any person providing or offering, nitrous oxide or any device capable of dispensing or administering nitrous oxide.

Exceptions:

- Commercially packaged and factory-sealed food products in their original packaging containing nitrous oxide as a propellant;
- Food-grade nitrous oxide cartridges clearly labeled and packaged for culinary purposes.
- Wholesale transactions to licensed business entities for lawful exempt uses, subject to recordkeeping requirements;
- Automotive nitrous oxide systems manufactured and labeled for vehicle performance.
- Medical and dental use under the supervision of licensed practitioners;
- Pharmacy and wholesaler distribution as authorized under state law;
- Research and development uses conducted by qualifying institutions or entities defined as universities, medical facilities, and other qualifying research institutions engaged in documented scientific or industrial research;
- Any other circumstances exempted under state or federal law.

Enforcement:

The ordinance affords the County access to a variety of enforcement tools, ranging from:

- Misdemeanor penalties of up to \$1,000 and/or six months in County Jail;
- Civil penalties of up to \$1,000 per day, with attorneys' fees recoverable by County Counsel;
- License suspension or revocation for licensed tobacco retailers under Chapter 32A;
- Public nuisance designation with explicit protection for non-participating property owners;
- Cumulative remedies, including administrative enforcement.

Legal Structure and Safeguards

The ordinance includes several protections to ensure fair and appropriate enforcement:

- Property owners are not liable unless they caused, permitted, or participated in the violation;
- Enforcement is directed toward retailers engaged in prohibited sales or distribution;
- A preemption clause clarifies that the ordinance applies only where not in conflict with state or federal law.

IMPLEMENTATION

Implementation will build on existing coordination, education, inspection, and outreach activities carried out by the DHS and partner agencies. Public Health will serve as the lead agency for routine surveillance and compliance monitoring through the existing Tobacco Retail License (TRL) inspection program, which will continue to conduct inspections at retail locations where nitrous oxide sales have been documented. A public

reporting mechanism will be established to allow residents to report suspected unlawful sales of nitrous oxide products. Public Health will triage these complaints, conduct follow-up inspections, and initiate enforcement when violations are substantiated.

Cases involving repeat violations, unlicensed retailers, or more complex fact patterns will be coordinated with County Counsel for enforcement using nuisance abatement authority and available civil or administrative penalties. When circumstances indicate potential criminal activity or require field level investigation, Public Health will refer cases to the Sheriff's Office for further investigation or criminal enforcement.

The ordinance also provides the Sheriff's Office with additional enforcement tools relevant to impaired driving and public safety. It allows deputies to seize bulk nitrous oxide cylinders or large quantities of cartridges found in situations suggesting illegal sales or distribution. These tools complement existing Vehicle Code enforcement and strengthen the County's ability to address nitrous oxide-related harms in the field.

Public Health will continue to promote responsible disposal of nitrous oxide canisters and chargers in coordination with Zero Waste Sonoma. Behavioral Health programs will continue to provide educational materials and linkage to treatment and recovery services for individuals seeking support related to nitrous oxide misuse and will offer consultation and resources to substance use treatment and recovery providers. Public Health, with support from the Health Officer, will also provide clinicians with awareness materials and clinical guidance on prevention, screening, and early intervention for nitrous oxide related harms. This multiagency approach supports a coordinated response across prevention, enforcement, and treatment systems.

To support successful implementation through a focus on education and outreach activities, staff will serve as the primary liaison to retailers, local jurisdictions, and community partners by providing education regarding ordinance requirements, conducting outreach to businesses, coordinating implementation efforts with Sonoma County communities, responding to community inquiries, assisting with complaint intake and follow-up, and supporting public awareness activities. By emphasizing education and voluntary compliance during the first year of implementation, the County can establish consistent expectations across jurisdictions while allowing enforcement resources to focus on repeat or willful violations.

CITY COORDINATION

DHS staff convened local jurisdictions to discuss concerns related to nitrous oxide misuse and potential policy responses. Cloverdale adopted a local nitrous oxide sales restriction in 2018. The remaining Sonoma County cities and towns have expressed interest in a coordinated regional approach and are preparing to consider aligned ordinances following County adoption.

The proposed ordinance is consistent with actions already adopted or under consideration in multiple California jurisdictions and reflects a growing statewide trend toward restricting retail access to nitrous oxide products and supplementing current state law with local education and enforcement tools to enhance compliance.

Strategic Plan:

N/A

Racial Equity:

Was this item identified as an opportunity to apply the Racial Equity Toolkit?

Yes

A Racial Equity Analysis was completed and is attached. The analysis found that the ordinance is intended to reduce health harms associated with nitrous oxide misuse while preserving legitimate access for medical, culinary, automotive, industrial, and research uses. Outreach, retailer education, and phased implementation strategies are intended to support equitable implementation and enforcement.

Prior Board Actions:

N/A

FISCAL SUMMARY

Narrative Explanation of Fiscal Impacts:

There is no fiscal impact associated with this item. Funding for extra staff can be absorbed within the FY 26-27 Adopted Budget and will be supported by already-appropriated 1991 Public Health Realignment.

Staffing Impacts:

Narrative Explanation of Staffing Impacts (If Required):

None

Attachments:

Attachment 1 - Resolution

Attachment 2 - Ordinance Draft

Attachment 3 - Pre-Adoption Summary

Attachment 4 - Racial Equity Analysis

Attachment 5 - Presentation

Related Items “On File” with the Clerk of the Board:

N/A