

February 26, 2018

Cal/OSHA Advisory Committee
Department Of Industrial Relations
Division of Occupational Safety and Health
Attn: Amalia Neidhardt
1515 Clay Street, Suite 1901
Oakland, CA 94612

Re: Comment on proposed cannabis regulations

Dear Cal/OSHA Advisory Committee Members,

On behalf of our members in California, Americans for Nonsmokers' Rights (ANR) supports Cal/OSHA's proposal to amend *Section 5148 Prohibition of Smoking in the Workplace* by adding "cannabis or cannabis products" to the current prohibition of smoking tobacco products in enclosed spaces of places of employment, and to add that cannabis or cannabis products cannot be smoked in a location where smoking tobacco is prohibited. ANR is a national, member-supported public health non-profit organization established in 1976 that advocates for smokefree environments to protect nonsmokers' health and safety.

ANR staff attended the January 31 Cannabis Advisory Meeting in Oakland and was very concerned to hear several marijuana business owners and consultants claim that secondhand marijuana smoke exposure is not an issue or concern because they have installed ventilation systems and filters at their business. **ANR strongly recommends that Cal/OSHA not permit indoor marijuana smoking or vaping even if ventilation systems are required.**

The American Society for Heating, Refrigeration, and Air-Conditioning Engineers (ASHRAE), the standard setting body for the HVAC industry, affirms that mechanical solutions like **ventilation and other air cleaning technologies cannot control for the health hazards of secondhand smoke**. ASHRAE now bases its ventilation standard (62.1) for acceptable indoor air quality on an environment that is completely free from secondhand tobacco smoke, secondhand marijuana smoke, and emissions from electronic smoking devices.¹

The exemptions permitted in *Section 5148 Prohibition of Smoking in the Workplace* reflect exemptions in California Labor Code 6404.5, often referred to as the smokefree workplace law. The relevant exemptions permit smoking in retail tobacco shops and in smoking lounges attached to retail tobacco shops, which is how marijuana dispensaries, retailers, and attached lounges are able to allow indoor marijuana smoking and vaping.

ANR strongly recommends that the retail shop and attached smoking lounge exemptions—for marijuana smoking as well as tobacco smoking—be narrowed to require that these businesses be located in freestanding buildings and not in mixed-use buildings so that workers, residents, and patrons in attached businesses and residences are not exposed to secondhand smoke.

Since marijuana is illegal under federal law, there have been a limited number of studies examining health risks associated with marijuana use and exposure in the United States. However, peer-reviewed and published studies indicate that exposure to secondhand marijuana smoke may have similar harmful health effects due to its similar composition to secondhand tobacco smoke.²

Secondhand smoke from combusted marijuana contains fine particulate matter which is a form of indoor air pollution, which can be breathed deeply into the lungs and can cause lung irritation, asthma attacks, and makes respiratory infections more likely.^{3,4}

In several peer-reviewed research studies, tobacco and marijuana smoke have both been shown to impair blood vessel function⁵ and secondhand marijuana smoke contains many of the same carcinogens and toxic chemicals as secondhand tobacco smoke, including acetaldehyde, ammonia, arsenic, benzene, cadmium, chromium, formaldehyde, hydrogen cyanide, isoprene, lead, mercury, and nickel.⁶ Lastly, THC or THC metabolites show up in blood, urine, and saliva following exposure to marijuana.⁷

In 2009, the California Office of Environmental Health Hazard Assessment added marijuana smoke to its Proposition 65 list of carcinogens and reproductive toxins, also known as the Safe Drinking Water and Toxic Enforcement Act of 1986. It reported that at least 33 individual constituents present in both marijuana smoke and tobacco smoke are Proposition 65 carcinogens.⁸

To protect health and safety, ANR encourages Cal/OSHA to amend *Section 5148 Prohibition of Smoking in the Workplace* to **not allow marijuana smoking and vaping in workplaces** and public places where the secondhand smoke and emissions pose a health risk to workers and others in the buildings.

Thank you for your leadership and work to promote safe and healthy workplaces in California. Please feel free to contact me at 510-841-3045 if you have any questions, comments, or feedback.

Sincerely,



Cynthia Hallett, MPH
President and CEO

Americans for Nonsmokers' Rights is a national, member-based, not-for-profit organization based in Berkeley, CA that is dedicated to helping nonsmokers breathe smokefree air since 1976.

¹ ANSI/ASHRAE Standard 62.1-2013, Addenda 2015 - Ventilation for Acceptable Indoor Air Quality. American Society of Heating, Refrigerating, and Air-Conditioning Engineers, Inc. https://ashrae.iwrapper.com/ViewOnline/Standard_62.1-2016

² Springer, M.L.; Glantz, S.A. "Marijuana Use and Heart Disease: Potential Effects of Public Exposure to Smoke," University of California at San Francisco. April 13, 2015.

<https://tobacco.ucsf.edu/sites/tobacco.ucsf.edu/files/u9/MSHS%20fact%20sheet%20for%20CA%204-13-15.pdf>

³ Hillier, FC.; et al. "Concentration and particle size distribution in smoke from marijuana cigarettes with different Δ^9 -tetrahydrocannabinol content." *Fundamental and Applied Toxicology*. Volume 4, Issue 3, Part 1, June 1984, Pages 451-454.

<http://www.sciencedirect.com/science/article/pii/0272059084902021>

⁴ "Air and Health: Particulate Matter." National Environmental Public Health Tracking Network, U. S. Environmental Protection Agency. <http://ephtracking.cdc.gov/showAirHealth.action#ParticulateMatter>

⁵ Wang, X., et al., "Brief exposure to marijuana secondhand smoke impairs vascular endothelial function" (conference abstract). *Circulation* 2014; 130: A19538. http://circ.ahajournals.org/content/130/Suppl_2/A19538.abstract

⁶ Moir, D., et al., A comparison of mainstream and sidestream marijuana and tobacco cigarette smoke produced under two machine smoking conditions. *Chem Res Toxicol* 21: 494-502. (2008). <http://www.ncbi.nlm.nih.gov/pubmed/18062674>

⁷ Holitski, et al. Health effects of exposure to secondhand and thirdhand marijuana smoke: a systematic review, *CMAK Open*, 2017.

⁸ "Evidence on the Carcinogenicity of Marijuana Smoke." Reproductive and Cancer Hazard Assessment Branch, Office of Environmental Health Hazard Assessment, California Environmental Protection Agency. August 2009.

http://oehha.ca.gov/prop65/hazard_ident/pdf_zip/FinalMJsmokeHID.pdf

SMOKEFREE IS SMOKEFREE

Nobody should have to breathe secondhand marijuana smoke at work, in public, or where they live.

Smoke is smoke — regardless of the device or description. Secondhand marijuana smoke contains hundreds of chemicals — just like secondhand tobacco smoke. Many of the chemicals in secondhand marijuana smoke are toxic and contain hazardous fine particles that pose a significant health risk to non-smokers.

- More laws legalizing marijuana = increased exposure to secondhand marijuana smoke.
- Employees and patrons protected by current smokefree laws may have their health put at risk by exposure to marijuana smoke. Marijuana smoking should not be allowed in smokefree spaces.
- The commercialized marijuana industry looks and sounds a lot like Big Tobacco. Together they are working to circumvent progress on smokefree air.
- The vast majority of the population are non-smokers. Smokefree means smokefree — no cigarettes and cigars, e-cigarette use, or marijuana use.

SECONDHAND MARIJUANA SMOKE

contains many of the same **CANCER-CAUSING SUBSTANCES** and **TOXIC CHEMICALS** as secondhand tobacco smoke, including:



3 times
the amount of
ammonia



significant levels of mercury,
lead, formaldehyde, benzene,
hydrogen cyanide, & toluene.

PROTECT HEALTH

Protect workers and the public from exposure to secondhand smoke
by prohibiting marijuana smoking in all workplaces and enclosed public places.



Currently, approximately **266 municipalities** and **11 states** specifically restrict marijuana use in smokefree spaces in some manner. **Protect smokefree workplace laws — include marijuana in your policy!**

For more information about
marijuana and smokefree laws, visit



www.no-smoke.org

ANRF

AMERICAN
NONSMOKERS'
RIGHTS FOUNDATION

Secondhand Marijuana Smoke

"Smoke is smoke. Both tobacco and marijuana smoke impair blood vessel function similarly. People should avoid both, and governments who are protecting people against secondhand smoke exposure should include marijuana in those rules."

-Matthew Springer, cardiovascular researcher and Associate Professor of Medicine, University of California, San Francisco

Facts about secondhand marijuana smoke:

- Marijuana smoke is created by burning components of plants in the genus Cannabis.
- Secondhand marijuana smoke is a complex chemical mixture of smoke emitted from combusted marijuana and the smoke that is exhaled by the user.
- Secondhand marijuana smoke contains fine particulate matter that can be breathed deeply into the lungs.
- Secondhand marijuana smoke contains many of the same cancer-causing substances and toxic chemicals as secondhand tobacco smoke. Some of the known carcinogens or toxins present in marijuana smoke include: acetaldehyde, ammonia, arsenic, benzene, cadmium, chromium, formaldehyde, hydrogen cyanide, isoprene, lead, mercury, nickel, and quinoline.¹
- Marijuana smoke contains tetrahydrocannabinol (THC), the active chemical in cannabis.

Health risks of exposure to secondhand marijuana smoke:

Since marijuana is illegal under federal law, there have been a limited number of studies examining health risks associated with marijuana use and exposure in the United States. Health risks from primary and secondhand smoke exposure may also be difficult to determine as marijuana is often used in combination with tobacco.

However, peer-reviewed and published studies do indicate that exposure to secondhand marijuana smoke may have health and safety risks for the general public, especially due to its similar composition to secondhand tobacco smoke.

- Secondhand smoke from combusted marijuana contains fine particulate matter that can be breathed deeply into the lungs,² which can cause lung irritation, asthma attacks, and makes respiratory infections more likely. Exposure to fine particulate matter can exacerbate health problems especially for people with respiratory conditions like asthma, bronchitis, or COPD.³
- Significant amounts of mercury, cadmium, nickel, lead, and chromium are found in marijuana smoke, as well as 20 times the amount of ammonia and 3-5 times more hydrogen cyanide in marijuana smoke than is in tobacco smoke.⁴
- In 2009, the California Office of Environmental Health Hazard Assessment added marijuana smoke to its Proposition 65 list of carcinogens and reproductive toxins, also known as the Safe Drinking Water and Toxic Enforcement Act of 1986. It reported that at least 33 individual constituents present in both marijuana smoke and tobacco smoke are Proposition 65 carcinogens.^{5, 6}

- Secondhand smoke from marijuana has many of the same chemicals as smoke from tobacco, including those linked to lung cancer.⁷
- Secondhand marijuana exposure impairs blood vessel function. Thirty minutes of exposure to secondhand marijuana smoke at levels comparable to those found in restaurants that allow cigarette smoking led to substantial impairment of blood vessel function. Marijuana smoke exposure had a greater and longer-lasting effect on blood vessel function than exposure to secondhand tobacco smoke.⁸
- Secondhand marijuana smoke and secondhand tobacco smoke likely have similar harmful health effects because of their similar chemical composition, including atherosclerosis (partially blocked arteries), heart attack, and stroke.⁹
- People who are exposed to secondhand marijuana smoke can have detectable levels of THC in their blood and urine.¹⁰
- Marijuana also can be contaminated with mold, insecticides or other chemicals that may be released in secondhand smoke.¹¹

Including Marijuana Smoking in Smokefree Public Place and Workplace Laws:

- Everyone has the right to breathe smokefree air. Smokefree policies are designed to protect the public and all workers from exposure to the health hazards caused by exposure to secondhand tobacco smoke. The same should be true for secondhand marijuana smoke.
- The percent of U.S. adults who use marijuana more than doubled from 4.1% to 9.5% between 2001-2002 and 2012-2013,¹² which may also indicate an increase in exposure to secondhand marijuana smoke.
- The American Society for Heating, Refrigeration, and Air Conditioning Engineering (ASHRAE) is the organization that develops engineering standards for building ventilation systems. ASHRAE now bases its ventilation standard for acceptable indoor air quality on an environment that is completely free from secondhand tobacco smoke, secondhand marijuana smoke, and emissions from electronic smoking devices.¹³
- In order to protect public health, improve consistency, and aid enforcement, smokefree laws for public places and workplaces should include tobacco as well as marijuana, whether it is smoked or aerosolized. Allowing marijuana smoking in places where smoking is now prohibited could undermine laws that protect the public from exposure to secondhand smoke. The Tobacco Control Legal Consortium issued an informative brief on [Lessons from Tobacco Control for Marijuana Regulation](#).¹⁴
- Smokefree policies provide incentives to quit smoking, help denormalize smoking behavior, and are particularly effective among youth and young adults who are vulnerable to visual cues and social norms of smoking. It is likely that smokefree policies for marijuana will have a similar effect.
- Currently, there are approximately 157 municipalities and 5 states that explicitly restrict marijuana use in smokefree spaces in some manner.

In the interest of public health, the use of combustible or aerosolized marijuana should be prohibited wherever tobacco smoking is prohibited.

ANR's Position on Exposure to Secondhand Marijuana Smoke:

Marijuana smoke is a form of indoor air pollution. Therefore, ANR includes marijuana within our definition of smoking, and all of our model laws and policies include a prohibition on smoking marijuana wherever smoking of tobacco products is not allowed. ANR does not have a position on whether marijuana should be legalized; however ANR is against smoking in ways that harm other people. In states where marijuana is legalized, marijuana use should be prohibited in all smokefree spaces.

Nobody should have to breathe secondhand marijuana smoke at work, in public, or where they live. If we want healthy, smokefree air for workers and the public, then products like marijuana and electronic smoking devices (which can be used to "vape" a wide range of substances, including marijuana and hash oil) must not be used in smokefree environments where others are forced to breathe the secondhand emissions.

References

- ¹ Moir, D., et al., A comparison of mainstream and sidestream marijuana and tobacco cigarette smoke produced under two machine smoking conditions. *Chem Res Toxicol* 21: 494-502. (2008). <http://www.ncbi.nlm.nih.gov/pubmed/18062674>
- ² Hillier, FC.; et al. "Concentration and particle size distribution in smoke from marijuana cigarettes with different Δ^9 -tetrahydrocannabinol content." *Fundamental and Applied Toxicology*. Volume 4, Issue 3, Part 1, June 1984, Pages 451-454. <http://www.sciencedirect.com/science/article/pii/0272059084902021>
- ³ "Air and Health: Particulate Matter." National Environmental Public Health Tracking Network, U. S. Environmental Protection Agency. <http://ephrtracking.cdc.gov/showAirHealth.action#ParticulateMatter>
- ⁴ Moir, D., et al., A comparison of mainstream and sidestream marijuana and tobacco cigarette smoke produced under two machine smoking conditions. *Chem Res Toxicol* 21: 494-502. (2008). <http://www.ncbi.nlm.nih.gov/pubmed/18062674>
- ⁵ "Evidence on the Carcinogenicity of Marijuana Smoke." Reproductive and Cancer Hazard Assessment Branch, Office of Environmental Health Hazard Assessment, California Environmental Protection Agency. August 2009. http://oehha.ca.gov/prop65/hazard_ident/pdf_zip/FinalMJsmokeHID.pdf
- ⁶ Wang, X., et al., "Brief exposure to marijuana secondhand smoke impairs vascular endothelial function" (conference abstract). *Circulation* 2014; 130: A19538. http://circ.ahajournals.org/content/130/Suppl_2/A19538.abstract
- ⁷ "Evidence on the Carcinogenicity of Marijuana Smoke." Reproductive and Cancer Hazard Assessment Branch, Office of Environmental Health Hazard Assessment, California Environmental Protection Agency. August 2009. http://oehha.ca.gov/prop65/hazard_ident/pdf_zip/FinalMJsmokeHID.pdf
- ⁸ Wang, X., et al., "Brief exposure to marijuana secondhand smoke impairs vascular endothelial function" (conference abstract). *Circulation* 2014; 130: A19538. http://circ.ahajournals.org/content/130/Suppl_2/A19538.abstract
- ⁹ Springer, M.L.; Glantz, S.A. "Marijuana Use and Heart Disease: Potential Effects of Public Exposure to Smoke," University of California at San Francisco. April 13, 2015. <https://tobacco.ucsf.edu/sites/tobacco.ucsf.edu/files/u9/MSHS%20fact%20sheet%20for%20CA%204-13-15.pdf>
- ¹⁰ Herrmann ES, et al., "Non-smoker exposure to secondhand cannabis smoke II: Effect of room ventilation on the physiological, subjective, and behavioral/cognitive effects." *Drug and Alcohol Dependence*. 2015 Jun 1;151:194-202. <http://www.ncbi.nlm.nih.gov/pubmed/25957157>
- ¹¹ Associated Press. "Marijuana may be contaminated with mold, mildew." CBS News, December 2, 2013. <http://www.cbsnews.com/news/marijuana-contaminated-with-mold-mildew/>
- ¹² Hasin DS, et al. "Prevalence of Marijuana Use Disorders in the United States Between 2001-2002 and 2012-2013." *JAMA Psychiatry*. Published online October 21, 2015. <http://archpsyc.amanetwork.com/article.aspx?articleid=2464591>
- ¹³ ANSI/ASHRAE Standard 62.1-2013, Addenda 2015 - Ventilation for Acceptable Indoor Air Quality. ta, GA: American Society of Heating, Refrigerating, and Air-Conditioning Engineers, Inc. Atlanta, GA: American Society of Heating, Refrigerating, and Air-Conditioning Engineers. www.ashrae.org/File%20Library/docLib/StdAddenda/62_1_2013_2015Supplement_20150203.pdf
- ¹⁴ Cork, Kerry. "Toking, Smoking & Public Health: Lessons from Tobacco Control for Marijuana Regulation." Tobacco Control Legal Consortium. June 2015. http://www.publichealthlawcenter.org/sites/default/files/resources/tclc-synopsis-marijuana-tobacco-2015_0.pdf

Adapted from Group to Alleviate Smoking Pollution (GASP of Colorado)

Protecting Nonsmokers from Secondhand Marijuana Smoke

2017

Many states have now legalized marijuana for medical (26 plus DC) and/or recreational use (seven plus DC), with many more considering it. A new industry for marijuana consumption is being created in the U.S. and it has one goal: to normalize marijuana use, including smoking, everywhere and to have it regulated “just like alcohol.” As the trend toward normalizing public smoking of marijuana grows, we need to be aware that more laws will likely be proposed to weaken smokefree protections and allow for broader use of smoking marijuana in public places and even in workplaces. The marijuana industry wants to accomplish this goal, in part, by borrowing tactics from Big Tobacco’s playbook and chipping away at smokefree protections.

Therefore, it is not surprising that the growing marijuana industry is starting to look more like the tobacco industry – a commercial industry seeking to maximize sales, profits, and product consumption, and backed by marketing campaigns, lobbyists, and lawyers to shape regulation. At the same time, tobacco is starting to look a little more like marijuana – seeking to dovetail on any opportunity to renormalize smoking in social environments, like bars, and pushing to allow for indoor use of e-cigarettes and “vape pens” that can be used to consume both tobacco and marijuana products.

As the marijuana industry grows and is legalized, health professionals are trying to keep up with the changes this entails for their communities, such as an increase in marijuana smoking and exposure to secondhand marijuana smoke. Regardless of the debate of possible benefits of marijuana products, there is simply no need to use them inside shared air spaces (such as workplaces, public places, and multi-unit housing) where others are then subject to the hazardous secondhand smoke or secondhand aerosol from electronic smoking devices. Just like traditional cigarettes, marijuana should be used in ways that don’t impact the health of others.

Be prepared!

Nobody should have to breathe secondhand marijuana smoke at work or where they live, learn, shop, or play. **Smoke is smoke and marijuana smoke is a form of indoor air pollution.** Therefore, it is important to strengthen all smokefree laws – both existing and new -- to include marijuana in the definitions of smoking and vaping. Since 2010, ANR’s model smokefree ordinances and policies have included marijuana as a product prohibited in smokefree environments. By including marijuana smoke, it effectively eliminates any potential confusion by clearly defining smoking as “inhaling, exhaling, burning, or carrying any lighted or heated cigar, cigarette, or pipe, or any other lighted or heated tobacco or plant product intended for inhalation, including hookahs and marijuana, whether natural or synthetic, in any manner or in any form.”

For more information, refer to ANR’s Secondhand Marijuana Smoke fact sheet:

www.no-smoke.org/pdf/secondhand-marijuana-smoke.pdf

Secondhand Marijuana Smoke Contains Hundreds of Chemicals – Just Like Secondhand Tobacco Smoke

Several peer-reviewed and published studies indicate that exposure to secondhand marijuana smoke can have health and safety risks for the general public, especially due to its similar composition to secondhand tobacco smoke.

If marijuana smoking is allowed indoors in public places, both employees and patrons are at risk. Secondhand smoke exposure from marijuana can cause significant health issues including breathing problems.

- Secondhand smoke from combusted marijuana contains fine particulate matter that can be breathed deeply into the lungs,ⁱ which can cause lung irritation; asthma attacks, and makes respiratory infections more likely. Exposure to fine particulate matter can exacerbate health problems especially for people with respiratory conditions like asthma, bronchitis, or COPD.ⁱⁱ
 - Significant amounts of mercury, cadmium, nickel, lead, and chromium are found in marijuana mainstream smoke and there is 20 times the amount of ammonia and 3-5 times more hydrogen cyanide in mainstream marijuana smoke than there is in tobacco smoke.ⁱⁱⁱ
 - In 2009, the California Office of Environmental Health Hazard Assessment added marijuana smoke to the list of carcinogens and reproductive toxins cited as dangerous in the Safe Drinking Water and Toxic Enforcement Act of 1986, also known as Proposition 65. It reported that at least 33 individual constituents present in both marijuana smoke and tobacco smoke are Proposition 65 carcinogens.^{iv, v}
 - Secondhand smoke from marijuana has many of the same chemicals as smoke from tobacco, including those linked to lung cancer.^{vi}
-
- Secondhand marijuana smoke exposure impairs blood vessel function. Published studies on rats show thirty minutes of exposure to secondhand marijuana smoke at levels comparable to those found in restaurants that allow cigarette smoking led to substantial impairment of blood vessel function. Marijuana smoke exposure had a greater and longer-lasting effect on blood vessel function than exposure to secondhand tobacco smoke.^{vii}
 - Secondhand marijuana smoke and secondhand tobacco smoke is similar in many ways. More research is needed, but the current body of science shows that both tobacco and marijuana smoke have similar harmful health effects, such as atherosclerosis (partially blocked arteries), heart attack, and stroke, because of their similar chemical composition.
 - People who are exposed to secondhand marijuana smoke can have detectable levels of THC (tetrahydrocannabinol) in their blood and urine.^{viii}
 - Marijuana also can be contaminated with mold, insecticides, and other chemicals that may be released in secondhand smoke.^{ix}

Issue and Policy Trends

As the marijuana industry ramps up to become as influential and aggressive as Big Tobacco, there is a need for public health professionals and advocates to get ahead of policy trends for marijuana use in states and communities.

Here are some tips for what to expect from marijuana industry proponents and how to prepare to protect nonsmokers' rights:

1. Be sure smokefree laws specifically address marijuana, as well as electronic smoking devices.

If a state legalizes marijuana use, state and local smokefree laws should define smoking to include the smoking of marijuana as well as the use of electronic smoking devices. If a smokefree law does not prohibit the use of electronic smoking devices in smokefree spaces, this means that marijuana vaping is, by default, allowed in workplaces, bars, restaurants, and other public venues unless prohibited by an individual business policy. If not specifically prohibited, everyone else in the building has to breathe the smoke. Nonsmokers should not have to breathe other people's secondhand marijuana smoke or vaped aerosol in smokefree spaces like workplaces, public places, and apartment buildings. Contact ANR for sample policy language.

2. Social clubs and Semi-enclosed areas

A challenge for marijuana regulation is to identify appropriate places for use of the product. Expect a lot of pressure to enable marijuana use in enclosed areas (social smoking "clubs") and semi-enclosed areas (rooftop bars, alley bars, and patios). The question to ask is: how will allowing marijuana smoking affect other people? Do people work or volunteer there? Will non-users be exposed to secondhand marijuana smoke or thirdhand smoke residue? Will marijuana smoke drift into neighboring businesses or property?

People should not have to breathe smoke of any kind while at work or when in public places.

3. New definitions and terms

Expect marijuana industry proponents to come forward with new loosely defined terms not addressed by current smokefree laws. The industry will also try to redefine old terms like "public" in ways more favorable to their purposes of normalizing marijuana use everywhere.

4. Watch the money

The huge amount of money to be made by this new industry is hard for policy makers, states, communities, and organizations to resist. Yet this money comes with strings attached. Be sure to keep an eye open to this new industry masquerading as partners and "benefactors," all the while expecting policies to be passed to benefit smoking everywhere.

Be sure to refer back to ANR's model language for clearly defined terms and restrictions.

Ventilation Cannot Protect You From the Harmful Effects of Secondhand Smoke. Period.

The tobacco industry tactic of proposing ventilation systems to solve the secondhand smoke problem is being dusted off and promoted by the marijuana industry. Industry lobbyists and proponents say, "Just put a ventilation system into your marijuana club and the secondhand smoke problem is solved." Nothing could be further from the truth.

As has been proven time and time again, ventilation does not eliminate all the poisonous toxins and chemical components of secondhand smoke. The science is clear. Ventilation systems or air cleaning technologies may reduce odor, but they do not address the serious health risks caused by secondhand smoke exposure. Research is showing that negative health impacts, especially to the cardiovascular system, occur quickly even at extremely low levels of exposure to secondhand marijuana smoke. The only way to eliminate the health hazards of secondhand smoke is by having a 100% smokefree environment.

The Board of Directors for the American Society of Heating, Refrigerating, and Air Conditioning Engineers (ASHRAE), the international standard-setting body for indoor air quality, unanimously adopted an important position statement on secondhand tobacco smoke at its summer 2005 conference.

ASHRAE Standard 62.1 reaffirms:

- There is no safe level of exposure to secondhand smoke.
- Ventilation and other air filtration technologies cannot eliminate all the health risks caused by secondhand smoke exposure.
- Tobacco smoke does not belong in indoor areas.

In 2013, the Standard was amended and states:

- Marijuana smoke should not be allowed indoors.
- Emissions from electronic smoking devices should not be allowed indoors

The fact remains that the only way to eliminate the health hazards of secondhand smoke—from tobacco or marijuana smoke or emissions from electronic smoking devices—is with a 100% smokefree environment.



Addendum c to Standard 62.1-2013

Modify Section 3 as follows.

environmental tobacco smoke (ETS): the "aged" and diluted combination of both side-stream smoke (smoke from the lit end of a cigarette or other tobacco product) and exhaled main-stream smoke (smoke that is exhaled by a smoker). ETS is commonly referred to as secondhand smoke. This definition includes smoke produced from the combustion of cannabis and controlled substances and the emissions produced by electronic smoking devices.

Opposition Arguments and Activities

Remember: The marijuana industry's goal is to make marijuana use (including smoking) as "normal" as alcohol use. To achieve this goal, the industry will advance legislation for regulating marijuana just like alcohol and not like tobacco.

CASE STUDY: DENVER

Colorado voters legalized recreational marijuana in 2012. In Denver, the marijuana industry narrowly won a ballot initiative in November 2016 to allow marijuana use, including smoking or vaping, in "approved neighborhoods" throughout the city. This is a clear and present threat to public health and will result in more venues for smoking and vaping marijuana and possibly tobacco too. Measure 300 allows most businesses to apply for a one-year or event-specific permit for marijuana consumption areas. Many yoga studios, cafes, bars, and restaurants are now considering applying for a permit. Measure 300 allows for vaping and edibles indoors and allows for smoking outdoors provided it is out of sight – but what does "out of sight" mean? Does that mean roof-top bars would be exempt and if so, what about long-term exposure of the workers who are exposed to secondhand smoke and THC, the main mind-altering ingredient found in the Cannabis plant and in secondhand marijuana smoke?

CASE STUDY: COLORADO

In early 2017, shortly after Denver's Measure 300 was passed, legislation was introduced in Colorado to allow for marijuana clubs statewide. Senate Bill 184 is quickly making its way through the legislature, primarily because state lawmakers were tired of seeing and smelling marijuana smoke on the streets and in parks near the state capital. SB184 would allow local jurisdictions to permit marijuana consumption clubs in which marijuana could be vaped and/or eaten. In an alarming trend, SB184 proposes to allow local jurisdictions to create exemptions to the definition of "open and public" consumption, including smoking.

Local communities in Colorado have been strengthening, not weakening, their smokefree protections by adding electronic smoking devices and marijuana smoke to their local laws. SB184 would seek to reverse that trend for the state by increasing the number of places where smoking and vaping may occur.

Colorado's experience also speaks to the tactic by the marijuana industry to take advantage of loop-holes or exemptions in state smokefree laws. Because Colorado has an exemption in its state smokefree workplace law to allow smoking in small businesses with three or fewer employees and the law does not prohibit the use of electronic smoking devices, the marijuana industry is seeking to pass legislation that would allow marijuana smoking in such workplaces by taking advantage of these exemptions. There is great concern that marijuana consumption businesses will intentionally keep staff count low to allow indoor smoking. Also, indoor vaping of marijuana could soon be actively promoted by the industry.

CASE STUDY: ALASKA

Alaska voters legalized recreational marijuana in 2014, and the Marijuana Control Board has been working to set the regulatory process for marijuana growth, sales, and consumption for the state. During each of the three public comment periods for their regulatory process, the general public has submitted an abundance of comments against allowing marijuana smoking in public. However, regardless of proper procedure and overwhelming public comment against marijuana smoking and secondhand exposure, the Marijuana Control Board is moving forward with drafting regulations to allow smoking in public places. This is due in large part to two industry representatives who serve on the Board. This is yet another example of a Big Tobacco tactic being taken up by the marijuana industry to place industry representatives on regulatory boards. When the public voted to legalize recreational marijuana use, they were assured by bill language that marijuana would not be smoked or vaped openly and publicly. It is an industry tactic to then push legislation and regulations for redefining “public” spaces as indoors away from public view in “private” venues such as bars, yoga studios, coffee shops, on-site use clubs, etc. This is contrary to the will of the general public and opens up more places for indoor smoking. Due to the dangers of secondhand smoke exposure, the regulatory rule-making process for marijuana smoking should follow tobacco use rules instead of alcohol regulations.

The marijuana industry wants clarity on where marijuana can be used legally, but this can run headlong into smokefree workplace and public place laws. *What about bars and other entertainment venues? What about in a multi-unit apartment building where the smoke affects other residents and guests?*

ANR’s position is that marijuana smoking should be prohibited in these venues. Regardless of what is being smoked, it should not be smoked in ways that negatively impact other people’s health and well-being. Smoke is smoke. Secondhand marijuana smoke, like tobacco smoke, contains thousands of chemicals, many of which are toxic. The smoke also contains hazardous fine particles (PM 2.5) that pose a significant respiratory health risk to nonsmokers. Similarly, the secondhand aerosol emitted from electronic smoking devices also contains ultrafine particles, toxins, carcinogens, volatile organic compounds, and nicotine, and thus poses a public health risk.

We believe that laws and policies should make it clear that marijuana smoking and “vaping” should not be allowed in workplaces and public places, both indoors and outdoors, that are required by law or voluntary policy to be smokefree.

CASE STUDY: OHIO

Taking a page from Big Tobacco’s playbook, “Buddie the Marijuana Mascot” promotes marijuana use in Ohio. Is this the new Joe Camel targeting kids?

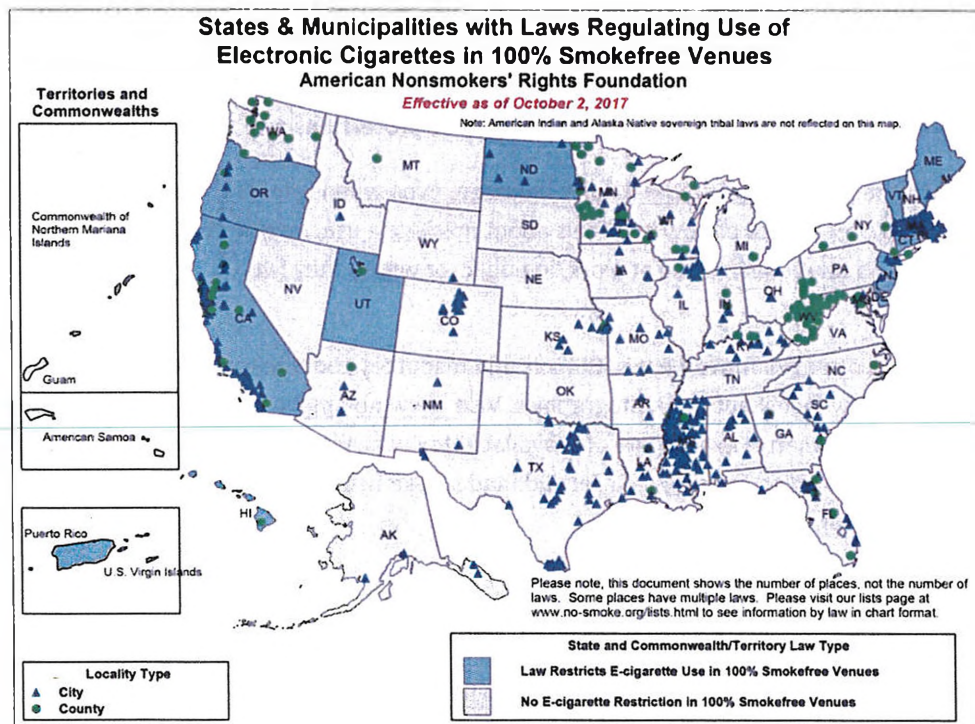
Ohio has legalized medical marijuana, and not recreational use, but even so, marijuana proponents are trying to normalize its use with tactics like “Buddie the Marijuana Mascot”.



Tobacco & Marijuana Smokefree Policy Trends

Laws addressing marijuana have grown from approximately 30 local laws in January 2014, to 68 local laws in January 2015 and 143 local laws in January 2016.

As of October 2, 2017 there are 266 municipalities and 11 states that specifically restrict marijuana use in some or all smokefree spaces. In addition, colleges and universities are also addressing marijuana in tobacco-free campus policies. There are now at least 1,536 campus sites that are 100% tobacco-free; of these, 1,400 also prohibit e-cigarette use, 701 also prohibit hookah use, and 120 also prohibit smoking/vaping marijuana. These numbers are the sum total of all laws/policies in the U.S. Tobacco Control Laws Database[®] that address or mention marijuana.



Resources and Recommendations

Legalization and commercialization of marijuana is posing significant challenges for public health in general. Marijuana, legal or not, still creates secondhand smoke, which is a form of indoor air pollution. If we truly want safe, healthy, smokefree spaces, then they should be free from particulate matter created by tobacco cigarette smoke, marijuana smoke, and secondhand aerosol from electronic smoking devices.

Therefore, ANR's model policies and ordinances have included marijuana as one of the products that cannot be used in a smokefree environment since 2010:

"Smoking" means inhaling, exhaling, burning, or carrying any lighted or heated cigar, cigarette, or pipe, or any other lighted or heated tobacco or plant product intended for inhalation, including hookahs and *marijuana*, whether natural or synthetic, in any manner or in any form. "Smoking" also includes the use of an electronic smoking device which creates an aerosol or vapor, in any manner or in any form, or the use of any oral smoking device for the purpose of circumventing the prohibition of smoking in this Article.

KEY RECOMMENDATIONS:

- Refer to ANR's **Model 100% Smokefree Ordinance** for language on including marijuana in smokefree policies.
- **Track and expose** opposition activities.
- If you haven't already done so, **add electronic smoking devices** to your smokefree laws.
- Be prepared for **proposed roll-backs of smokefree protections** and **redefining "public."**
- **Stick to the secondhand smoke health message**, even when referring to use of medical marijuana. Regardless of how one feels about marijuana use, no one should have to breathe secondhand marijuana smoke at work, in public, or where they live.

To assist the tobacco control movement with facts and resources about secondhand marijuana smoke, we have created a few fact sheets and infographics. Visit www.no-smoke.org/marijuana.html for these resources. Our subject matter experts are also available to speak to groups and coalitions about preparing for and responding to marijuana secondhand smoke issues and policies. Contact us at 510-841-3032 or anr@no-smoke.org.

ⁱ Hillier, FC.; et al. "Concentration and particle size distribution in smoke from marijuana cigarettes with different $\Delta 9$ -tetrahydrocannabinol content." *Fundamental and Applied Toxicology*. Volume 4, Issue 3, Part 1, June 1984, Pages 451-454. <http://www.sciencedirect.com/science/article/pii/0272059084902021>

ⁱⁱ "Air and Health: Particulate Matter." National Environmental Public Health Tracking Network, U. S. Environmental Protection Agency. <http://ephtracking.cdc.gov/showAirHealth.action#ParticulateMatter>

ⁱⁱⁱ Moir, D., et al., A comparison of mainstream and sidestream marijuana and tobacco cigarette smoke produced under two machine smoking conditions. *Chem Res Toxicol* 21: 494-502. (2008). <http://www.ncbi.nlm.nih.gov/pubmed/18062674>

^{iv} "Evidence on the Carcinogenicity of Marijuana Smoke." Reproductive and Cancer Hazard Assessment Branch, Office of Environmental Health Hazard Assessment, California Environmental Protection Agency. August 2009. http://oehha.ca.gov/prop65/hazard_ident/pdf_zip/FinalMJsSmokeHID.pdf

^v Wang, X., et al., "Brief exposure to marijuana secondhand smoke impairs vascular endothelial function" (conference abstract). *Circulation* 2014; 130: A19538. http://circ.ahajournals.org/content/130/Suppl_2/A19538.abstract

^{vi} "Evidence on the Carcinogenicity of Marijuana Smoke." Reproductive and Cancer Hazard Assessment Branch, Office of Environmental Health Hazard Assessment, California Environmental Protection Agency. August 2009. http://oehha.ca.gov/prop65/hazard_ident/pdf_zip/FinalMJsmokeHID.pdf

^{vii} Wang, X., et al., "Brief exposure to marijuana secondhand smoke impairs vascular endothelial function" (conference abstract). *Circulation* 2014; 130: A19538. http://circ.ahajournals.org/content/130/Suppl_2/A19538.abstract

^{viii} Herrmann ES, et al., "Non-smoker exposure to secondhand cannabis smoke II: Effect of room ventilation on the physiological, subjective, and behavioral/cognitive effects." *Drug and Alcohol Dependence*. 2015 Jun 1;151:194-202. <http://www.ncbi.nlm.nih.gov/pubmed/25957157>

^{ix} Associated Press. "Marijuana may be contaminated with mold, mildew." CBS News, December 2, 2013. <http://www.cbsnews.com/news/marijuana-contaminated-with-mold-mildew/>

May be reprinted with appropriate attribution to Americans for Nonsmokers' Rights,® 2017
For more information, contact us at anr@no-smoke.org or 510-841-3032

1710 [PP-39]