



## Smoke-Free Policies in Multi-Unit Housing Policy Guidance (Updated June 2021)

### POSITION

The American Heart Association has long advocated for strong public health measures that will reduce the use of tobacco products in the United States and limit exposure to secondhand smoke and vapor. The various policies prioritized by the Association and its national partners include adequate funding for tobacco cessation and prevention programs, comprehensive smoke-free air laws, taxation of tobacco products, robust FDA regulation of tobacco, implementation of the sales age for tobacco to 21, and removing flavorings from all tobacco products. Smoke-free policies in multi-unit housing are evolving as an important strategy to address smoking and exposure to tobacco smoke and e-cigarette vapor in homes where children, adolescents, the elderly and the disabled are especially vulnerable. Research has shown that smoke-free policies in the home reduce second-hand and thirdhand exposure for all residents, can increase cessation among smokers, and can decrease relapse in former smokers.<sup>1,2,3,4,5</sup>

Accordingly, the American Heart Association supports comprehensive smoke-free policies for multi-unit housing. These policies should maintain access to housing with restorative approaches to enforcement and access to comprehensive cessation services. In public housing, these policies could be mandated as part of regulation since taxpayer dollars are used to subsidize the health and economic consequences of smoking. In privately-owned housing, legislation or regulation could provide incentives to owners such as insurance discounts, or funding for education, communication, and cessation resources as motivation to adopt comprehensive smoke-free policies.

Determining public and subsidized housing can be complex as ownership and administration is often decentralized and fragmented between the federal government and local public housing authorities.<sup>6</sup> For example, there are publicly-owned and subsidized apartment buildings and there are voucher programs for privately owned properties where tenants receive a subsidy from the federal government to help cover their private housing rent. Additionally, states offer supplemental public housing programs that operate without federal funding. Despite the complexity, in each of these cases, at least some tax dollars are being used to subsidize all or a portion of the housing costs which makes policy levers for smoke-free publicly-funded housing viable. A comprehensive approach to smoke-free multi-unit housing would include a variety of policy levers that address both publicly-, privately-owned, and mixed-financed properties.

### BACKGROUND

#### Multi-Unit Housing and Exposure to Second-hand Smoke

An estimated 80 million Americans live in multi-unit housing properties (apartments, condominiums, and townhouses), representing about 1 in 4 people in the United States.<sup>7</sup> Recent federal government data show that approximately 7 million Americans live in government-subsidized housing.<sup>7</sup> Of these individuals, about 970,000 households live in public housing where the housing is owned or operated by a Housing Authority.<sup>8</sup> Surveillance

## Policy Guidance: Smoke-Free Policies in Multi-Unit Housing

data show that the smoking rate is higher in federally subsidized housing where 33.6% of adults smoke cigarettes which is nearly double the rate of in the general population.<sup>9</sup>

As more states and localities have passed smoke-free air laws for public spaces and workplaces, the home has become the most significant source of exposure to second-hand smoke, especially for children.<sup>10</sup> Despite progress on smoke-free air laws, an estimated 28 million Americans who reside in multi-unit housing are still exposed to second-hand smoke in their home or apartment.<sup>11</sup> Americans on average, spend about two thirds of their time each day in their residences.<sup>12</sup> However, only half of U.S. households with both children and smokers have complete home smoking bans. Significant inequities exist within multi-unit housing as smoke-free bans are less common among smoking families with older children, in households located in predominantly Black and Hispanic neighborhoods, and in households in states where there is a higher smoking prevalence.<sup>13</sup>

Significant strides have been made in the last two decades increasing the prevalence of households with smoke-free home rules from 43% in 1993 to 83% in 2011, however more work needs to be done.<sup>14</sup> On December 5, 2016, HUD issued a smoke-free rule requiring all public housing to implement a smoke-free policy by July 30, 2018. The policy prohibits smoking in all indoor areas, including individual units, common areas, and storage units, and outdoor areas within 25 feet of housing buildings. However, the rule only prohibits combustible tobacco products (cigarettes, cigars, pipe tobacco, and hookah) and does not apply to electronic cigarettes or other nicotine vapor products. The rule also does not apply to buildings in mixed-financed projects, Section 8 public housing, tribal housing, and public housing authority properties under the Rental Assistance Demonstration Program.<sup>15</sup> Only 16 states, American Samoa, the District of Columbia, the Northern Marian Islands, Puerto Rico, and the U.S. Virgin Islands have restrictions on smoking in government or private multi-unit housing facilities as of September 2020.<sup>16</sup>

Even if people living in multi-unit housing have a smoke-free policy for their own home, they may still suffer incursions from others in the complex. Research has documented the transfer of second-hand smoke in the air<sup>17,18,19,20,21,22,23</sup> and transfer of second-hand smoke constituents through heating, ventilation, air conditioning systems and other connections between units.<sup>24,25,26</sup> As many as half of multi-unit housing residents report that smoke has entered their unit from elsewhere in the building or complex<sup>27,28</sup> and detectable levels of nicotine have been documented in multi-unit buildings where smoking is permitted.<sup>29,30,31</sup>

### Impact on Health

Cigarette smoking remains the leading cause of preventable morbidity and premature death in the United States.<sup>32</sup> Each year, approximately 467,000 persons in the U.S. die prematurely as a result of smoking and 49,000 from exposure to secondhand smoke.<sup>33</sup> Second-hand smoke is a carcinogen to children and adults who do not smoke<sup>34</sup> and produces immediate adverse effects on heart function, blood platelets, inflammation, endothelial function, and the vascular system.<sup>35</sup> Increased exposure to second-hand smoke, such as that experienced with chronic exposure in the home, amplifies the negative health impact. More than 88 million non-smokers over the age of 3 are exposed to second-hand smoke in the United States.<sup>36</sup> Additionally, with the increased popularity of electronic smoking devices among youth and adults, it is important to note the hazardous substances produced by these products as well as exposure to secondhand aerosol (vapor).<sup>37</sup> E-cigarettes and other vapor products produce aerosols that can contain nicotine, ultrafine particles, flavoring chemicals, heavy metals, and other cancer-causing agents when inhaled and exhaled.<sup>38</sup>

In public housing, children and adolescents are 36 percent of residents while older Americans comprise 17 percent of residents.<sup>39</sup> There is evidence that exposure to second-hand smoke disproportionately affects minorities,<sup>40,41</sup>

## Policy Guidance: Smoke-Free Policies in Multi-Unit Housing

women, and those in lower socioeconomic groups since a larger number of these individuals are more likely to reside in subsidized housing. Additionally, blue collar workers are less likely than white collar workers to be covered by smoke-free policies in their workplaces.<sup>3</sup>

Studies on the health impact of second-hand smoke are robust. No level of second-hand smoke exposure of any type is safe.<sup>42</sup> In 2009 the Institute of Medicine assessed the state of the science on the suggested causal relationship between secondhand smoke exposure and heart attacks. The IOM report<sup>43</sup> explored in a comprehensive way the strengths and weaknesses of population-based studies, the pathophysiology of secondhand smoke exposure and myocardial infarction, knowledge gaps, and strength of the relationship between low exposure and heart attack incidence. On the basis of its review of the available experimental and epidemiologic literature, including relevant studies on air pollution and particulate matter, the IOM concluded that there is a causal relationship between smoking bans and decreases in acute coronary events. However, the report did not estimate the effect size or magnitude of the impact. Studies from around the world have provided further evidence for the reduced incidence of heart attacks after implementation of smoke-free air policies.

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Other health effects of exposure to second-hand smoke include dementia in adults<sup>60</sup> and impairment on cognitive function and the ability to perform mental tasks.<sup>42</sup> In infants and children, second-hand smoke is a risk factor for heightened asthma attacks, acute respiratory illness, Sudden Infant Death Syndrome, and ear infections.<sup>42</sup> Pregnant women exposed to second-hand smoke show a greater risk of giving birth to low-birth-weight babies.<sup>42</sup>

**Estimates are that exposure to second-hand smoke causes 21,800-75,100 coronary heart disease deaths a year and 38,100-128,900 heart attacks annually.<sup>61</sup> Long-term exposure to second-hand smoke, such as that occurring in a home or the workplace, is associated with a 25%–30% increased risk for coronary heart disease in adult nonsmokers.<sup>62</sup> The Economics of Smoke-Free Multi-Unit Housing**

The health care costs associated with disease incidence caused by second-hand smoke exposure are estimated at \$1.8-6.0 billion.<sup>42</sup> If recent trends in the reduction in the prevalence of second-hand smoke exposure continue, the health and economic burden in the U.S. would be reduced by approximately 25%–30%.<sup>63</sup> This potential reduction has important ramifications for lowering Medicare, Medicaid, and private insurance costs.

One study<sup>64</sup> estimated the annual cost-savings associated with smoke-free policies in multi-unit housing by calculating savings for second-hand smoke related health care costs, renovations of housing units that permit smoking, and smoking-attributed fires. Renovations or repairs include paint to cover smoke stains, cleaning of ducts, replacing stained window fixtures, and replacing carpets. The calculations from this study showed that prohibiting smoking in all U.S. subsidized housing could save approximately \$521 million per year, including \$341 million in second-hand smoke-related health care expenditures, \$108 million in renovation expenses, and \$72 million in smoking-attributable fire losses. Just prohibiting smoking in public housing alone would save approximately \$154 million annually, including \$43 million in costs from cleaning in apartments people have smoked and \$16 million in fire-related costs.<sup>65</sup> Another study of multi-unit housing owners in California showed that comprehensive smoke-free policies implemented statewide could save owners over \$18 million a year.<sup>66</sup> Clearly there are economic motivations for smoke-free policies that go beyond the critically important health benefits.

### Residents' Acceptance of Smoke-Free Policies

Several studies have reviewed whether tenants support smoke-free policies in multi-unit housing. Generally, former smokers, non-smokers, ethnic minorities, and those living with children support these policies specifically for improved health, fire safety, and building cleanliness.<sup>67,68,69,70</sup> A clear majority of tenants report having a smoke-free

3

## Policy Guidance: Smoke-Free Policies in Multi-Unit Housing

policy in their own homes, but as already mentioned, these residents experience incursions of second-hand smoke from other tenants and for almost 10% of residents, that incursion is daily.<sup>71</sup> Current smokers are less supportive of smoke-free policies and can be non-compliant as they note these policies infringe upon their personal liberties.<sup>72</sup> Additionally, the lack of enforcement of other non-smoking related policies and lapses in other responsibilities undermines managements' authority to efficiently uphold smoke-free policies noted in lease agreements.<sup>73</sup> It is important that there is acceptance and buy-in from all tenants, as well as building management, with implementation of any smoke-free policies to minimize enforcement issues and maximize the health benefits. Use of messaging on the communal impact of smoking as well as readily available cessation services and resident engagement can help facilitate acceptance.<sup>74</sup>

### Multi-Unit Housing Owners' Acceptance

Landlords, public authorities, or owners of multi-unit housing are more skeptical of instituting smoke-free policies due to concerns about enforcement, tenant objections, loss of market share, vacancy, and turnover.<sup>75</sup> However, only a small percentage of owners who have actually implemented smoke-free policies report increased vacancy and turnover.<sup>75</sup> So there is some inconsistency in what is expected to happen versus the actual response, perhaps because of less availability of other housing options for low income tenants. Studies show greater adoption of smoke-free policies in higher income housing units. In surveys, owners who had not yet implemented smoke-free policies showed some interest in learning more about how to implement them.<sup>75</sup> There is also some indication that owners would be motivated by economic incentives such as insurance discounts and subsidies to promote advertising of smoke-free buildings.<sup>76</sup>

It is estimated that 1 in 3 multi-unit housing residents are covered by smoke-free policies.<sup>77</sup> Smoke-free multi-unit housing policies have become increasingly popular as housing providers and public housing entities have realized the health and safety benefits associated with eliminating secondhand smoke exposure. Taking steps to reduce smoking and vaping in units can reduce the risk of fire and lower maintenance costs related to smoke property damage.<sup>78</sup> Additionally, thirdhand smoke, smoke residue absorbed into non-porous surfaces that is slowly released over time, can pose a significant health hazard even after smoking tenants have vacated their units.<sup>78</sup> Further education of landlords about the capacity for second-hand smoke to pass between units and expose non-smoking tenants, as well as the financial advantages of adopting smoke-free policies, could motivate them to implement smoke-free housing.<sup>79</sup> Several activities can move owners/landlords along toward adopting smoke-free policies (see Appendix A) and cost-effective media strategies have been developed to educate tenants and owners about the advantages of adopting comprehensive smoke-free policies.<sup>80</sup>

One of the most difficult challenges for implementing a comprehensive smoke-free policy is enforcement.<sup>81</sup> Monitoring and compliance reporting mechanisms must be established with sanctions for noncompliance. However, threats of eviction can be especially difficult in multi-unit housing where the fundamental tenet is to protect against homelessness for vulnerable populations. Enforcement polices for a smoke-free policy would be very much like holding tenants accountable for other rules like sanitation or pet ownership where enforcement and monitoring may already be in place, but also must account for serious implications that can further exacerbate socio-economic disparities.

Landlords and housing authorities can actually reduce their legal liability by restricting or banning smoking since there are liability concerns for exposing their non-smoking tenants to second-hand smoke.<sup>82, 83</sup> The Federal Fair Housing Act of 1992, the Americans with Disabilities Act, the Rehabilitation Act, and state disability discrimination laws provide protection against housing discrimination for people with disabilities, including those with sensitivities to tobacco smoke.<sup>82</sup> There is currently no state or federal law that prohibits multi-unit housing operators from

## **Policy Guidance: Smoke-Free Policies in Multi-Unit Housing**

implementing smoke-free policies.<sup>84</sup> Those who use tobacco do not have a “right to smoke” and smokers are not a protected class under the fair housing laws.

The American Heart Association supports efforts that promote the equitable development and preservation of affordable housing in good condition, as it may also go a long way to promote population health and overall wellbeing. We encourage policymakers and stakeholders to work with communities to ensure that equitable investments are made to promote safe and socially supportive neighborhoods and mitigate unhealthy housing conditions for current residents so they may achieve and maintain good health.

### **Voluntary vs. Mandatory Implementation**

Smoke-free policies in multi-unit housing are gaining momentum and have been approached either voluntarily or in a mandatory way. There is evidence that as broader clean indoor air laws for public places are adopted, there is increased implementation of smoke-free policies in multi-unit housing because shifting social norms are driving continued policy change.<sup>85</sup>

As momentum grows, homeowner associations, landlords, or housing authorities seeking to implement smoke-free policy should consider several factors: support within the resident community, how the policy should be implemented, how comprehensive it should be, how to handle new tenants versus those who have been living in the complex for some time, procedures for adopting the policy and communicating it to tenants, costs associated with implementation, enforcement, any potential legal challenges, and impact on resale.

### **Equity Considerations**

Smoke-free housing policies are implicitly targeted to promote safe and healthy living environments for all, however it is important to consider the societal and structural factors that may further complicate the living situations of certain individuals. For those who are already in vulnerable social positions, more commonly those who reside in public housing, smoking is often used as a coping mechanism.<sup>72</sup>

Violations of smoke-free housing policies can result in penalties such as citations, fees, and unfortunately at times evictions. It is important for housing authorities and property owners of multi-unit housing units, to consider implications of enforcing policies that result in the eviction of tenants putting families and individuals at risk for homelessness and other physical, social, and environmental harms.<sup>72</sup> The promotion of smoking cessation and other community-based interventions designed to promote quitting behavior should be prioritized when assessing penalties associated for violations rather than evictions. For example, a study supported by the Boston Housing Authority that aimed to increase utilization of smoking cessation services trained current public housing residents who volunteered to serve as tobacco treatment advocates for their respective communities.<sup>86</sup> Results from the study demonstrated that residents who engaged with tobacco treatment advocates were more likely to abstain from smoking and twice as likely to utilize tobacco cessation services.<sup>86</sup>

### **Marijuana**

Like tobacco smoke, marijuana smoke contains harmful substances such as fine particulate matter (PM<sub>2.5</sub>), toxins, and carcinogens.<sup>87</sup> Over the last decade, an increasing number of states have legalized medicinal and recreational marijuana resulting in a rise of marijuana smokers. Marijuana is often smoked indoors in homes as consumption is typically prohibited in public spaces.<sup>88</sup> A 2021 research study found that marijuana, regardless of the method of consumption (joint, glass pipe, bong, vape pen, etc.) produces extremely high indoor PM<sub>2.5</sub> concentrations. A pre-rolled joint produces 3.5 times the average emission rate of a Marlboro tobacco cigarette.<sup>89</sup> Although there's limited research examining the effects of secondhand marijuana smoke exposure, studies have shown that inhaled

**Policy Guidance: Smoke-Free Policies in Multi-Unit Housing**

secondhand smoke can have negative effects on nonsmoking people. This includes the presence of THC in the bloodstream and urine tests, mild impairments on performance in motor tasks due to “contact high,” and other mild effects of the drug.<sup>90</sup>

As more states and localities legalize marijuana, it is important for smoke-free policies to consider the inclusion of marijuana. However, it is equally important to consider the political and structural factors that might impact violators of the policy. Individuals and families who reside in federally subsidized housing are particularly susceptible given that marijuana remains a Schedule 1 drug by the Controlled Substance Act even if legalized for medicinal or recreational purposes in the state or locality where they reside.

**Summary Table of American Heart Association Positions**

Issue	American Heart Association Supports	Key Points
<b>Comprehensive Multi-Unit Smoke-free Housing Polices</b>	Comprehensive smoke-free multi-unit housing policies that ensure the complete elimination of secondhand and thirdhand smoke exposure, including electronic vapor.	<ul style="list-style-type: none"> <li>• With the increased popularity of e-cigarettes and potential harm of e-cigarette vapor, nicotine vapor products need to be included in smoke free policies</li> <li>• Secondhand and thirdhand smoke exposure poses significant health risks to all residents in multi-unit housing residency</li> </ul>
<b>Equitable Enforcement</b>	Smoke-free multi-unit housing policies that promote cessation and other supportive approaches for violators of smoke-free policies rather than worsen existing disparities.	<ul style="list-style-type: none"> <li>• Penalties for violations of smoke-free policies should focus on community-driven, cessation, and restorative strategies rather than punitive punishments.</li> <li>• Societal and structural factors should be considered when assessing violators of smoke-free policies.</li> <li>• Promotion and access to tobacco cessation services should be a primary strategy when addressing policy violators.</li> </ul>
<b>Public and Private Multi-Unit Smoke-free Housing Policies</b>	A comprehensive approach to smoke-free multi-unit housing should include a variety of policy	<ul style="list-style-type: none"> <li>• Comprehensive smoke-free policies should be implemented in all multi-</li> </ul>

**Policy Guidance: Smoke-Free Policies in Multi-Unit Housing**

	<p>levers that address both publicly-, privately-owned, and mixed-financed properties.</p>	<p>unit housing, regardless of public or private, however policy levers may differ.</p> <ul style="list-style-type: none"><li>• In public housing, smoke-free policies could be mandated as part of regulation since taxpayer dollars are used to subsidize the health and economic consequences of smoking. In privately-owned housing, legislation or regulation could provide incentives to owners such as insurance discounts, or funding for education, communication, and cessation resources as motivation to adopt comprehensive smoke-free policies.</li><li>• These policies should maintain access to housing with restorative approaches to enforcement and access to comprehensive cessation services.</li><li>• Determining public and subsidized housing can be complex as ownership and administration is often decentralized and fragmented between the federal government and local public housing authorities.</li><li>• Private landlords, housing associations, and other housing authorities should consider community involvement, implementation and enforcement procedures for new and existing tenants, tenant communications, and costs associated with a</li></ul>
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**Policy Guidance: Smoke-Free Policies in Multi-Unit Housing**

		comprehensive smoke-free policy.
<b>Inclusion of Marijuana</b>	Inclusion of marijuana smoke in multi-unit housing policies in states that have legalized medicinal or recreational marijuana use.	<ul style="list-style-type: none"><li>• Particulate levels from marijuana smoke are higher than tobacco smoke. The average PM2.5 emission rate of pre-rolled marijuana joints is 3.5 times the average emission rate of Marlboro tobacco cigarettes.</li><li>• Smoking marijuana in multi-unit housing exposes non-smoking residents to dangerous secondhand smoke emissions and creates social justice implications for non-smoking residents who may be exposed in their homes.</li></ul>

**Conclusion**

Studies show that second-hand smoke transfer in multi-unit housing is still a significant concern, and a clear majority of tenants in multi-unit housing would choose a smoke-free building over housing where smoking is permitted if other amenities are equal. Additionally, as marijuana legalization becomes increasingly popular across states and localities, it is important to strengthen new and existing smoke-free laws to include marijuana. No level of second-hand or third-hand smoke exposure is safe.

Property managers who adopt no-smoking policies indicate that they are likely to continue doing so.<sup>91</sup> Whether adopted on a voluntary basis in housing units that are privately owned or mandated in housing units that are subsidized by public funding, there are clear health, economic, and legal benefits for tenants and owners. Public policy can also drive smoke-free policies in private housing by offering incentives or resources to owners who implement them. Policies in public and private housing units should prohibit smoking in all new and existing residences that share walls or common areas and outdoor common areas should be smoke-free except for designated smoking areas. Ideally, policies should be restorative, ensuring violators of these policies receive access to cessation services and other education materials rather than refused or forced removal from housing. The American Heart Association supports comprehensive equitable smoke-free policies in all multi-unit housing.

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American Heart Association • Advocacy Department • 1150 Connecticut Ave, NW • Suite 300 • Washington, D.C. 20036 • [policyresearch@heart.org](mailto:policyresearch@heart.org) • 202-785-7900 • [www.heart.org/policyfactsheets](http://www.heart.org/policyfactsheets) • @AmHeartAdvocacy • #AHAPolicy

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