Regulation of Smoking in Public Housing
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Although the hazards of exposure to tobacco smoke are well established, and laws mandating smoke-free indoor air are widespread, private homes have long been considered spaces beyond the legitimate reach of regulation. Reflecting this view, the federal government has not required public-housing units to be smoke-free. Historically, the Department of Housing and Urban Development (HUD) has maintained that although local Public Housing Authorities (PHAs) may opt to ban smoking, they are not required to do so.

This policy choice has important public health implications, given the difficulty of containing smoke in multiunit housing. More than 7 million people live in public housing in the United States, with 4 in 10 units occupied by families with children. Residents have had little recourse when they are exposed to tobacco smoke; however, policy and practice in this area are changing.

Over the past few years, many private landlords have made their housing units smoke-free for reasons of consumer demand, health, reduced fire hazard, lower insurance costs, and decreased cleaning costs. A small number of local governments have gone further, banning smoking in multifamily residential buildings. In public housing, however, no-smoking policies are rare. To date, only about 140 PHAs across the country (about 4% of the total) have reported that they have voluntarily banned smoking in the public-housing units they manage.

On July 17, 2009, a shift in federal policy occurred when a key department within HUD issued a memorandum that "strongly encourages Public Housing Authorities (PHAs) to implement nonsmoking policies in some or all of their public housing units." This development makes it timely to critically examine the state of the law and policy in this area. In this article, we explore current law concerning residential smoking regulations and consider whether the implementation of a nationwide ban on smoking in public housing would be desirable.
Health Implications of Exposure to Tobacco Smoke in Residential Buildings

The National Toxicology Program has identified more than 250 poisonous gases, chemicals, and metals in tobacco smoke, 11 of which are class A carcinogens.\textsuperscript{5} Numerous epidemiologic studies show that exposure to tobacco smoke can cause lung cancer and cardiac disease in nonsmokers,\textsuperscript{6} and the Surgeon General's report on involuntary smoking concluded that there is no safe level of exposure.\textsuperscript{5} Even brief exposures to tobacco smoke can adversely affect nonsmokers.\textsuperscript{7} Elderly or disabled persons with compromised cardiac or pulmonary function may be particularly susceptible. The rates and severity of asthma and other respiratory illnesses, as well as the rate of sudden infant death syndrome, are increased among children exposed to tobacco smoke.\textsuperscript{5}

A resident who smokes in a single unit within a multiunit residential building puts the residents of the other units at risk.\textsuperscript{8,9} Tobacco smoke can move along air ducts, through cracks in the walls and floors, through elevator shafts, and along plumbing and electrical lines to affect units on other floors.\textsuperscript{5,10,11} High levels of tobacco toxins can persist in the indoor environment long after the period of active smoking — a phenomenon known as third-hand smoke.\textsuperscript{12,13,14,15} Tobacco toxins are distributed as volatile compounds and airborne particulate matter that are deposited on indoor surfaces and reemitted in the air over a period of days to years.\textsuperscript{16,17} In households in which one or more people smoke, the urine levels of the tobacco-specific carcinogen nicotine-derived nitrosamine ketone (NNK) are consistently higher in infants than in nonsmoking adults, indicating either a differential response to the same toxin load or increased exposure of children through closer contact with smoke-contaminated rugs, furniture, clothing, and floors.\textsuperscript{18}

Tobacco-smoke exposure in public housing is particularly troubling because it afflicts disadvantaged and vulnerable populations. In 2008–2009, 32% of households in public housing included elderly persons, 35% included disabled persons, and 41% included children.\textsuperscript{19} The mean annual income of households in public housing during this period was $13,289. Adolescents who live in public housing are considered to be at high risk for early experimentation with cigarettes.\textsuperscript{20}

No-smoking rules in homes have been associated with substantially reduced levels of biochemical markers of tobacco exposure and lower health risks among nonsmokers.\textsuperscript{13,21,22,23,24} Such policies can also encourage smoking cessation among household members,\textsuperscript{25,26,27,28,29,30} discourage the initiation of smoking by adolescents,\textsuperscript{31,32,33,34} and decrease the incidence of house fires.\textsuperscript{35}

Smoke-Free Housing and the "Right to Smoke"

Private owners of multiunit residential buildings are beginning to respond to market demand and the prospect of reduced costs by adopting no-smoking policies. Survey findings indicate that tenants are often bothered by tobacco smoke and that four out of five nonsmokers would prefer a smoke-free building policy.\textsuperscript{56} A new, 440-unit high-rise building in Chicago is the first in that city to prohibit smoking in all units, common areas, and outside spaces.\textsuperscript{37} In Oregon, a major property-management company has adopted no-smoking policies for about 8000 units.\textsuperscript{38}

In addition to private initiatives, some local governments have restricted smoking in multiunit dwellings. Three California cities recently enacted ordinances prohibiting smoking in some or all units of multiunit
residential housing. Since 2006, around a dozen diverse communities have debated whether to impose smoking restrictions that would affect multiunit dwellings. In 1997, the Utah legislature passed a law expressly permitting landlords to ban smoking in residential units.

Despite the documented risks of tobacco-smoke exposure, these initiatives are controversial. Critics argue that neither governments nor landlords should interfere with residents' liberty to smoke and that such restrictions violate privacy rights. However, courts have held that the due-process clause of the Fifth and Fourteenth Amendments of the U.S. Constitution, which limits government interference in personal liberty and privacy, provides only the most minimal level of protection for smoking. Governments need only show a reasonable basis for restricting smoking. Courts evaluating privacy provisions in state constitutions have held similar views. Neither the federal Americans with Disabilities Act nor other disability discrimination laws protect smokers as "disabled" persons.

According to HUD, the PHAs may adopt no-smoking policies in public housing at their discretion, as long as state and local laws permit such policies, because federal laws, including the Fair Housing Act and the Civil Rights Act of 1964, do not provide protection for a right to smoke. No-smoking policies may be applied to both incoming public-housing residents and current residents, as long as the application to current residents is delayed for a reasonable period of time — for example, until the lease is up for renewal.

To our knowledge, no state or local laws or judicial decisions prohibit property owners from restricting smoking in their rental properties. In the absence of such laws, landlords are free to ban smoking in living units and common areas. Generally, this is accomplished with new leases, lease renewals, or written notification to month-to-month tenants.

Smoke-Free Policies for Public Housing

The decentralized nature of the ownership and administration of public housing creates challenges to those attempting to develop a cohesive smoke-free policy. Public housing takes a variety of forms, including publicly owned and subsidized apartment buildings, which currently house 2.1 million tenants, and voucher or so-called Section 8 programs, which currently provide 4.9 million tenants with a HUD subsidy to help cover their rent in private housing. These programs are administered by separate departments within HUD, each of which sets its own policies. In addition, states may offer supplemental public-housing programs that operate without HUD funding.

This fragmented regulatory structure fosters inconsistency in the quality of programs and facilities provided, as well as the policy-making and enforcement practices across public-housing programs and local housing authorities. Reflecting such variation, no-smoking policies are at present the rare exception rather than the rule among PHAs.

Historically, HUD has made it clear that it neither requires PHAs to adopt nor precludes them from adopting smoke-free policies for their properties or programs. HUD's notice of July 17, 2009, signals an important change in its position on this issue. The notice stresses the health effects of tobacco-smoke exposure, particularly among children and the elderly, and the risk of fire-related deaths and injuries. HUD has directed PHAs that implement a smoking ban to formalize it by updating the
annual plans that they are required to file with HUD, which will enable HUD to track the response to its notice, and has urged PHAs to provide residents with information about smoking-cessation resources and programs. The new policy applies only to publicly owned multunit housing that is administered by the HUD Office of Public and Indian Housing.

It is difficult to gauge how PHAs will respond. Their market incentive to provide smoke-free housing is less than that for private landlords. Public-housing tenants are often in a position in which they cannot "vote with their feet" for smoke-free units as other tenants can. For the same reason, however, PHAs are well positioned to implement smoking restrictions, notwithstanding community resistance.

Cost is also a consideration for PHAs, since the price for complete decontamination of a two-bedroom unit can exceed $15,0000; even the simple cleaning of a unit in which one or more residents have smoked may cost two to three times as much as the cleaning of a unit in which there has been no smoking. After the policy is initially implemented, long-term cost savings may be realized through reductions in cleaning costs and the risk of fire, as well as other smoke-related costs.

The greatest disincentive for PHAs to implement smoke-free policies may be the challenge of enforcement. Effective mechanisms for monitoring and for reporting noncompliance would need to be established, along with sanctions for residents who do not comply. The threat of eviction cannot be wielded lightly, both because the process is legally onerous and because eviction undermines the purpose of public-housing programs — that is, protecting vulnerable populations from homelessness. Although daunting, these challenges to enforcement are not unlike those faced in attempts to enforce other rules relating to public housing, such as sanitary codes and antidrug provisions. For example, HUD has included a Tenancy Addendum for Section 8 leases that permits property owners to evict tenants who engage in drug use, crime, or alcohol abuse in the dwelling. Notwithstanding such mechanisms, the complexities of proving a violation as well as the burdens associated with enforcement may dissuade PHAs from acting on HUD's recommendation to adopt smoke-free policies.

**Is a Federal Ban Desirable?**

Exposure to tobacco smoke in the home can be avoided fully only through the implementation of a complete smoking ban. Mitigation measures such as the use of fans, air filters, and separate smoking rooms are ineffective. Ridding public housing of tobacco smoke would keep such settings in step with the trend toward no-smoking policies in workplaces, private housing, and even private vehicles.

Tenants in multunit housing have few alternative legal remedies for the problem of tobacco-smoke exposure. They can sue their landlords, claiming that tobacco smoke constitutes a nuisance or violates the warranty of habitability and the covenant of quiet enjoyment of housing, but litigation is an unreliable and arduous strategy. Tenants with medical sensitivities to tobacco smoke may also be able to obtain legal relief (through litigation or HUD's complaints process) under the federal Fair Housing Act, the Americans with Disabilities Act, the Rehabilitation Act, and state disability discrimination laws, but only if they can show that their reaction to the smoke substantially limits a major life activity and that the requested accommodation is not unduly burdensome to the landlord. Because other legal remedies are so limited and market remedies are unavailable to very-low-income tenants, the onus arguably is on public-housing regulators to ensure adequate protection from tobacco smoke for these
residents.

Several policy alternatives are available to HUD (Table 1). First, HUD could take no further action other than to monitor the PHAs' response to its recent exhortation to adopt smoke-free policies. It seems unlikely that such an approach will significantly accelerate the pace of local policy adoption, given that it is not accompanied by financial incentives or other mechanisms that might influence PHAs' decision making. This approach would minimize the number of tenants potentially displaced through the enforcement of smoke-free policies but would leave most residents at risk for injury caused by tobacco-smoke exposure.

Second, HUD could take the simple step of formally interpreting its existing regulatory standard for air quality to include tobacco smoke. HUD regulations for all public housing and Section 8 programs provide that "HUD housing must be decent, safe, sanitary and in good repair" and specifically state, "All areas and components of the housing must be free of health and safety hazards. These areas include, but are not limited to, air quality." The regulations list a number of specific hazards that are prohibited, such as garbage, lead paint, mice, vermin, mold, and "odor (e.g., propane, natural gas, methane gas)." The omission of tobacco smoke from this list may have been deliberate, but the "odor" and "air quality" provisions may be broad enough as written for HUD to construe them as including tobacco smoke, should it so choose. To send a clearer signal, HUD could amend the regulations to expressly list tobacco smoke as a prohibited hazard. This approach would reduce exposure and empower residents of public housing to press for smoke-free policies to achieve compliance with these HUD standards, but it could also lead to the displacement of residents who refused to comply with smoking restrictions.

Third, HUD could include stipulations on future grants to PHAs that make full funding for all programs, including Section 8, conditional on the submission of an acceptable plan to implement smoke-free policies over some defined time period. HUD used a variant of this approach in 2009 in connection with a funding opportunity under the federal economic stimulus package. PHAs that applied for stimulus funds were awarded one point in the competitive application process if they agreed to make proposed projects smoke-free as part of a Green Communities program incentive. Although the award of a substantial amount of grant funds on the condition that the applicant implement smoke-free policies would not constitute a federal ban on smoking in public housing, it would be likely to have the same practical effect as a ban because PHAs can ill afford to lose program funds.

Such an outcome would protect the greatest number of residents from the harms caused by tobacco-smoke exposure but would constitute a heavy burden on residents and prospective residents who are addicted to nicotine. On balance, this burden can be justified. In other areas, the law allows burdens to be imposed on persons who smoke for reasons less important than the preservation of the health of others. For instance, under federal law and the laws of many states, employers may fire employees or

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refuse to hire job applicants because they smoke, and federal law allows health insurers to charge higher premiums for policyholders who habitually smoke and to levy financial penalties if smokers decline to participate in smoking-cessation programs. These actions by employers and insurers are motivated by the desire to maximize worker productivity and contain costs. Arguably, the objective of protecting public-housing residents, particularly children and the elderly, is sufficiently important to justify even more burdensome policies. When children's health is at risk, courts have permitted much heavier burdens to be imposed on people who smoke than the loss of public housing, such as loss of child custody.

Applying smoking bans to multiunit housing in the Section 8 program raises special concerns. Because such a ban would apply to market-rate tenants as well as to Section 8 tenants in this mixed-housing situation, it could result in long-time, market-rate residents being prohibited from smoking in their buildings if a Section 8 tenant moved in. Some state and local laws prohibit landlords from discriminating against prospective tenants because they receive Section 8 assistance, but private landlords in most jurisdictions can opt not to participate in the Section 8 program. By making apartments less marketable to private tenants who smoke, a smoking ban might lead some landlords to leave the program, reducing the supply of public housing. However, the growing demand for smoke-free buildings in the private market suggests that this might not be a significant problem. Providing a longer phase-in period for Section 8 housing would help address the problem.

What is morally offensive to some about smoking restrictions in public housing is that they affect only the poorest persons. Indeed, laws that disproportionately burden the most vulnerable segments of the population require strong justification. It should be recognized that public housing and other government benefit programs already impose many restrictions on the personal liberty of recipients (in the context of their use of the government benefits) that nonrecipients do not have to bear: for example, Women, Infants, and Children (WIC) vouchers cannot be used to purchase certain unhealthful foods, and public-housing tenants must abide by "house rules" that may be more restrictive than those contained in private leases. A smoking ban is harsher than these restrictions because the prohibited conduct cannot easily be avoided by tenants who are addicted to nicotine, but this problem is mitigated somewhat by the availability of other forms of nicotine, which permit smoke-free maintenance and treatment of the addiction.

Although it would burden a vulnerable population, a smoking ban in public housing would also promote social justice for this tenant group. Tobacco marketing and availability tend to be especially dense in low-income communities, and Americans living below the federal poverty level are 1.6 times as likely to smoke as are persons at or above this level. A permissive smoking policy perpetuates such disparities and also increases the tobacco-smoke exposure of nonsmokers in public housing, a group that has few alternative housing options available. No-smoking policies also advance social justice for children in public housing by addressing one aspect of their social disadvantage.

It is critical that no-smoking policies be accompanied by the provision of evidence-based smoking-cessation resources to public-housing residents, particularly since most state Medicaid programs currently do not cover comprehensive tobacco-dependence treatments. In addition, ethical concerns can be minimized by prohibiting the act of smoking on the premises rather than prohibiting the occupation of public-housing units by people who smoke. Such a policy would also maximize incentives

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for smoking cessation, since people who smoke would not be required to move out unless they continued to smoke at home.

**Conclusions**

The use of federal regulatory or contractual mechanisms to ensure that PHAs implement no-smoking policies in public housing raises ethical concerns and practical challenges; however, it is justified in light of the harms resulting from exposure to tobacco smoke, the lack of other avenues of legal redress for nonsmoking residents of public housing, and the languid pace at which PHAs have voluntarily implemented no-smoking policies. The same legal, practical, and health issues that have driven successful efforts to make workplaces, private vehicles, and private housing smoke-free militate in favor of extending similar protection to the vulnerable public-housing population.

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