June 14, 2017

The Honorable Benjamin S. Carson, Sr., MD
Secretary
Department of Housing and Urban Development
451 Seventh Street SW
Washington, DC 20410

Re: Reducing Regulatory Burden; Enforcing the Regulatory Reform Agenda Under Executive Order 13777; Docket No. FR-6030-N-01

Dear Secretary Carson:

As health organizations dedicated to reducing the death and disease caused by tobacco use and exposure to secondhand smoke, we appreciate this opportunity to respond to a request for comment published in the *Federal Register* on May 15, 2017 (Docket No. FR-6030-N-01), "Reducing Regulatory Burden; Enforcing the Regulatory Reform Agenda Under Executive Order 137775." We understand that the Department of Housing and Urban Development (HUD) will be establishing a Regulatory Task Force to evaluate "current regulations that may be outdated, ineffective, or excessively burdensome, and, therefore, warranting repeal, replacement, or modification." As organizations that strongly support the HUD rule finalized last year that implements smokefree policies in government-owned public housing, we write to urge you to maintain this important policy that will greatly improve the health of public housing residents. This rule is innovative, effective, and is not excessively burdensome to implement. It has represented a major step forward in protecting the millions of Americans who currently live in federally-owned public housing from the harms of tobacco.

Secondhand Smoke Exposure Poses Serious Health Threats to Children and Adults

Secondhand smoke (SHS) contains many poisons and cancer-causing chemicals, including nicotine, carbon monoxide, ammonia, formaldehyde, hydrogen cyanide, nitrogen oxides, phenol, sulfur dioxide, lead, and others.[1] Twenty years ago, in 1992, the US Environmental Protection Agency classified SHS as a Class A known human carcinogen.[2] As such, SHS poses health concerns for all individuals, particularly children and pregnant women.

The reports of direct health effects of SHS exposure are numerous and growing in number. The most comprehensive report of these effects is the 2006 US Surgeon General's report, *The Health Consequences of Involuntary Exposure to Tobacco Smoke*.[3] The report details how even small amounts of exposure can have serious health effects and concludes that there is no safe level of exposure to SHS. The 2006 report also found that SHS can cause or exacerbate a wide range of adverse health effects, including lung cancer, heart disease, respiratory infections, sudden infant death syndrome (SIDS) and asthma. The 2014 Surgeon General's report, *The Health Consequences of Smoking—50 Years of Progress: A Report of the Surgeon General* found that SHS is also a cause of stroke.[4]

The evidence supporting the association of SHS exposure of children with respiratory illnesses is strong. Increased rates of lower respiratory illness, middle-ear infections, tonsillectomy and adenoidectomy, cough, asthma and asthma exacerbations, hospitalizations, and SIDS have been reported.[5] It has been estimated that SHS exposure causes asthma symptoms in 200,000 to one million children.[6] One study indicated that children with asthma who were exposed to SHS had additional co-morbid conditions including higher levels of obesity and less healthcare usage compared with unexposed children.[7] The scope of these illnesses is huge: SHS exposure exacerbates many chronic diseases. Children with sickle cell disease who are exposed to SHS have a higher risk of crises that require hospitalization than do unexposed children.[8] Finally, in addition to the exacerbating chronic conditions, SHS is immediately life-threatening, especially among vulnerable populations such as infants. In one year alone, SHS exposure resulted in the death of 900 infants.[9]

Another effect of SHS exposure is increased school absenteeism. Analysis of data from the National Health Interview Survey (NHIS) indicated that 24 to 36 percent of school absenteeism was related to SHS exposure in children ages 6 to 11. The study also showed that the number of days that a child was absent from school predictably increased with the number of active smokers in the household.[10] Even very low levels of SHS exposure, such as those seen in a child with a parent who smokes only outside,[11] have been associated with decreases in reading and math scores.[12]

In addition to SHS exposure for developing children and adolescents, prenatal exposure to SHS has been associated with low birthweight, prematurity[13], and future susceptibility to nicotine addiction as well as significant adverse events in childhood development. One of the significant consequences of prenatal tobacco exposure is sensitization of the fetal brain to nicotine, which results in increased likelihood of addiction when the brain is exposed to nicotine at a later age. Studies of rodents[14] and primates[15,16] that were exposed prenatally to tobacco have demonstrated subtle brain changes that persist into adolescence and are associated with tobacco use, nicotine addiction, and reduced cognitive function.[17] Population-based human studies have demonstrated associations between prenatal tobacco exposure and early tobacco experimentation[18] as well as increased likelihood of tobacco use in adolescence and adulthood.[19] In addition, further research has indicated adverse developmental effects on infants,

children, and adolescents including lessened perceptual skills, deficits in information processing, and a significantly higher likelihood of being diagnosed with attention deficit hyperactivity disorder (ADHD).[20]

Smoking materials are also one of largest causes of injuries, deaths and direct property damage from fires. National Fire Protection Association data from 2014 show that smoking materials, including cigarettes, pipes and cigars started as an estimated 17,200 fires in the U.S. causing 570 deaths, 1,140 injuries and $426 million in direct property damage. When compared to fire injuries and deaths overall, smoking materials are responsible for 21 percent of home fire deaths and 10 percent of home fire injuries.[21]

Smokefree Housing Policies Save Money

Smokefree policies also have collateral benefits for building managers as nonsmoking units are significantly less expensive to turn over than smoking units when a tenant moves out. Turnover costs are two to seven times higher in homes when smoking is allowed, smokefree policies in public housing can result in millions of dollars in savings to PHAs and property managers annually.[22,23] A 2014 study found that prohibiting smoking in all government subsidized housing would produce cost savings of almost $500 million per year, including over $133 million in renovation expenses and over $52 million in smoking-attributable fire losses.[24] Because the risk of fire is also reduced when smokefree policies are implemented, some insurance companies offer discounts on property casualty insurance.[25] Reductions in SHS will also lead to lower costs to society, both from decreased health care costs and improved productivity. Smokefree policies may also encourage existing smokers to quit.

Residents of Public Housing are Involuntarily Exposed to Secondhand Smoke

SHS is clearly a significant public health hazard, and maintaining a smokefree home is a wise decision to decrease a family's exposure to SHS. Unfortunately, this step alone is often not sufficient to prevent all exposure to SHS for residents of multi-unit buildings. Tobacco smoke does not stay confined within a single room nor does it stay confined within a single unit in multi-family apartment buildings. Ventilation systems can distribute SHS throughout a building.[26] SHS can seep through walls and cracks.[27]

Data clearly demonstrate that the residents of smokefree units in multi-family buildings without smokefree policies are not safe from tobacco smoke exposure. A Boston-based study published in 2009 measured levels of nicotine, an indicator of SHS exposure, in 49 low-income units in multi-unit buildings. Overall, 94 percent of units had detectable nicotine levels, including 89 percent of units where no one smoked in the home.[28]

A 2011 nationally representative study, conducted through the Social Climate Survey, found that among individuals who lived in multi-family housing where no one smokes inside the home, 31 percent smelled smoke in their building. Of these respondents that reported smelling smoke in their building, approximately half (49 percent) reported smelling smoke in their own units, 38 percent reported smelling smoke in their unit at least once per week, and 12 percent reported smelling smoke in their unit at least once per day.[29] This nationally representative study confirms the results of several state- and community-level studies measuring prevalence of smoke incursions into smokefree units.[30] This trend is echoed in a 2012 study that indicated that although 63 million of the 79 million Americans who live in multi-unit housing do not allow smoking in their homes approximately 28 million of those reported secondhand smoke infiltration in their home.[31] Finally, a 2016 study that analyzed data from

the 2013-2014 National Adult Tobacco Survey, found that one-third of multi-unit housing residents that voluntarily prohibited smoking in the home were still exposed to secondhand smoke.[32]

Studies published in 2011 and 2012 confirmed that children who live in multi-unit housing have significantly higher exposure to SHS than those who live in detached housing, and that 15 million children aged 3-11 years were exposed to SHS, representing the highest prevalence of SHS exposure among all age groups. The studies, using data from the National Health and Nutrition Examination Survey (NHANES), showed that levels of cotinine, a chemical marker of nicotine in the blood, among children living in multi-unit housing were significantly higher than those of children living in detached housing, and that SHS prevalence was second-highest among adolescents aged 12 to 19, only superseded by young children.[33,34]

Prevention of Secondhand Smoke Exposure Requires Smokefree Policies

The above evidence clearly demonstrates that residents of multi-family housing are exposed to SHS even if they live in a unit where no one smokes. Therefore, the only way to fully protect children and adults who live in multi-family housing from secondhand exposure is to implement building-wide smokefree policies. In 2007, the World Health Organization (WHO) presented its clear conclusion that "implementing 100 percent smokefree environments [is] the only effective strategy to reduce exposure to tobacco smoke to safe levels in indoor environments and to provide an acceptable level of protection from the dangers of SHS exposure."[35] The organization reaffirmed its recommendation in 2014 and called for a prohibition on the use of ENDS indoors due to the risks presented by secondhand exposure to the devices.[36]

Partial smokefree policies, such as those that prohibit smoking in common areas such as hallways, do not protect all residents from SHS. The 2011 Social Climate Survey showed that multi-unit residents in buildings with the strongest smokefree air policies were the least likely to report smelling smoke. The data also showed that policies that only prohibited smoking in common spaces—and not individual units—did little to prevent residents from smelling smoke.[37] Research published in the *American Journal of Public Health* has further shown that SHS exposure for nonsmokers persists despite separating smokers from nonsmokers within housing, indicating that partial smokefree policies are not effective in protecting nonsmokers from harm.[38]

Experts in building ventilation agree that keeping individual units smokefree is not sufficient to remove health risks. The American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) explained in a policy statement in 2010 and reaffirmed in 2016 that the only means of effectively eliminating the health risks associated with indoor exposure to SHS is to make the entire indoor area smokefree.[39] Recent research by public health professionals has reinforced the fact that scrubbing and ventilating the air in buildings, cannot completely eliminate exposure SHS and the other harmful substances associated with it.[40]

HUD Must Maintain a Nationwide Smokefree Policy

Our organizations commend the Department of Housing and Urban Development (HUD) for expanding its efforts over the last several years to better protect the health of residents of federally assisted housing by requiring broader adoption of smokefree policies in public housing. Previously, HUD pursued a voluntary approach that left many residents, including 775,000 children, unprotected from the

dangers of tobacco smoke in their own homes. Our organizations strongly supported HUD's proposed rule to make all public housing smokefree because the only way to protect all residents of public housing is to adopt a nationwide smokefree policy.

All people, regardless of income, should be able to enjoy healthy housing, free of SHS and other dangerous conditions. As private, higher-rent, market-rate buildings increasingly go smokefree, it is important that our poorest and most vulnerable citizens not be left out. The absence of smokefree air policies disproportionately impacts lower-income families who cannot move due to economic, health or other reasons. Higher-income individuals are better able to relocate their families to remove them from an unhealthy environment. Public housing residents are more likely to be members of vulnerable populations: 38 percent are children, 31 percent are seniors, 30 percent are disabled, and 89 percent are classified by HUD as "very low income."[41] Further, many residents in multi-family public housing are renters from low-income populations and are more likely to be racial or ethnic minorities, disproportionately exposing these populations to the dangers of SHS exposure.[42] The 2011 Social Climate Survey showed that multi-family housing residents were more likely to smell smoke in their building if they received government subsidies for their housing.[43] Rolling back HUD's smokefree policy would discriminates against vulnerable populations.

Multi-unit housing residents consistently report that they desire smokefree air policies. A majority of residents want smokefree air policies implemented where they live.[44] One study examined the 2012 voluntary implementation of a smokefree policy by the Boston Housing Authority in its housing, indicating that a year after implementation 91 percent knew of the policy prohibiting smoking indoors and 82 percent were strongly supportive of such a policy in their building.[45] Additionally, a survey of heads of household before and after a Colorado public housing authority implemented a smokefree policy found 87 percent of respondents before implementation and 89 percent of respondents after implementation strongly or somewhat supportive of the policy.[46]

Smoking inside buildings discriminates against the majority of nonsmoking disabled individuals because they cannot escape tobacco smoke infiltrating their own apartments. Smoking is not a basic human need. Nicotine addiction can be addressed using available, safe, FDA-approved options to help smokers quit. These include five forms of nicotine replacement therapy available as gum, patch, lozenge, nasal spray, and inhaler as well as two non-nicotine medications, buproprion and varenicline. With assistance, every smoker can quit and research has shown that almost 70 percent of smokers say they want to quit and approximately half have made a quit attempt in the past year.[47,48] Overall, the rights of the disabled population, including disabled children, veterans, and those with respiratory disabilities, are best protected by smokefree building policies that ensure a safe environment for all residents.[49]

Thank you for your leadership on this critical public health issue. This rule is innovative, effective, and is not excessively burdensome to implement. It has represented a major step forward in protecting the millions of Americans who currently live in federally-owned public housing from the harms of tobacco. We look forward to continuing to work with HUD to promote healthy living environments, free of exposure to SHS, for all children and adults. If you have any questions, please contact James Baumberger at the American Academy of Pediatrics (202.347.8600) or Erika Sward at the American Lung Association (202.785.3355).

Sincerely,

Action on Smoking & Health
American Academy of Family Physicians
American Academy of Oral & Maxillofacial Pathology
American Academy of Otolaryngology—Head and Neck Surgery
American Academy of Pediatrics
American Association for Dental Research
American Association for Respiratory Care
American Cancer Society Cancer Action Network
American College of Physicians
American Congress of Obstetricians and Gynecologists
American Heart Association
American Lung Association
American Public Health Association
Association of State and Territorial Health Officials
Big Cities Health Coalition
Campaign for Tobacco-Free Kids
Children's Health Alliance of Wisconsin
ClearWay Minnesota
COPD Foundation
Eta Sigma Gamma - National Health Education Honorary
Grand Rapids Urban League
GASP of Colorado (Group to Alleviate Smoking Pollution)
Hawai`i Public Health Institute
International Association for the Study of Lung Cancer
Live Smoke Free, Association for Nonsmokers MN
March of Dimes
National African American Tobacco Prevention Network
National Association of County & City Health Officials
National Center for Health Research
National Hispanic Medical Association
National Network of Public Health Institutes
North American Quitline Consortium
North Carolina Alliance for Health
North Carolina Association of Local Health Directors
Oncology Nursing Society
Perceptions
Prevention Institute
Public Health Solutions
Respiratory Health Association
Society for Public Health Education
Society for Research on Nicotine & Tobacco
Students Against Destructive Decisions
The Society of State Leaders of Health and Physical Education
Tobacco Control Legal Consortium
Tobacco Free Alliance of Virginia
Trust for America's Health
Truth Initiative
Wisconsin Association of Local Health Departments and Boards

Wisconsin Association of School Nurses
Wisconsin Asthma Coalition
Wisconsin Public Health Association

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