

January 19, 2016

Regulations Division, Office of General Counsel Department of Housing and Urban Development 451 7th Street SW, Room 10276 Washington, DC 20410-0500

Re: Instituting Smoke-Free Public Housing; Docket No. FR 5597-P-02 RIN 2577-AC97

Dear Secretary Castro:

On behalf of the Asthma and Allergy Foundation of America (AAFA, <u>www.aafa.org</u>) I am pleased to submit comments in response to the above referenced request for comments. AAFA, a not-for-profit organization founded in 1953, is the leading patient organization for people with asthma and allergies, and the oldest asthma and allergy patient group in the world. AAFA is dedicated to improving the quality of life for people with asthma and allergic diseases through education, advocacy, and research.

AAFA wishes to commend the Department of Housing and Urban Development (HUD) for its proposal to require all public housing agencies (PHAs) to institute a smoke-free housing policy. If implemented, this proposed policy would be a critical step towards protecting low-income children from dangerous secondhand smoke exposure. As exposure to secondhand smoke (SHS) is one of the most significant triggers of asthma attacks among children – especially for low income and minority children – we are particularly supportive of policies that promote reduced exposure to SHS.

This proposal and HUD's previous leadership on the issue of smoke-free housing are highly laudable, and AAFA is proud to support these efforts. However, we also urge HUD to expand its proposed smoking ban to protect children where they play outdoors on public housing property, and to expand its definition of tobacco products to include e-cigarettes and waterpipe tobacco. In addition, we strongly believe that the only way to fully protect children living in federally-assisted multifamily housing is to adopt a nationwide smoke-free policy covering all multifamily housing under HUD's control, including units in mixed-finance buildings.

Secondhand Tobacco Smoke

SHS is an asthma trigger and overall a major contributor to the burden of childhood asthma. According to the Centers for Disease Control and Prevention, in 2013, 9.3% of children were affected by asthma,ⁱ making asthma the single most common chronic condition among children in the United States. Asthma exacts a disproportionate toll on low-income and minority childrenⁱⁱ – the populations who are most likely to live in public housingⁱⁱⁱ. One in three children with asthma lives in poverty, and the rate of asthma is significantly higher among African-American and Puerto Rican children.^{iv} The poorest children, whose family's

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income is below 100% of the federal poverty line (FPL), have an asthma prevalence of 11.2%, compared to just 7.3% asthma prevalence among children above 200% FPL.

According to the U.S. Surgeon General, SHS is a major asthma trigger, largely due to the fact that a child's developing body and lungs are especially susceptible to the health effects of environmental pollutants.^v Children with asthma are more likely to be affected by cigarette exposure compared with adults,^{vi,vii} and, according to the Surgeon General, there is no safe level of SHS exposure – even brief exposure can cause immediate harm to children.^{viii}

The home is the main source of SHS exposure for children, as approximately 25 percent of children live with a smoker.^{ix} Household smoking is associated with a significantly increased risk of pediatric asthma: children who live in smoking households show a rate of asthma 44% higher than children in nonsmoking households.^{x,xi} Because public housing residents smoke at a rate almost twice as high as residents of non-public housing, children in public housing are more likely to live with a smoker or experience exposure to SHS from other units.^{xii,xiii,xiv,xv} Studies show that the majority of nonsmoking units in public housing buildings where smoking is allowed have detectable air nicotine levels.^{xvi,xvii,xvii,xvii,xix} This research demonstrates what an immense challenge it is to avoid daily exposure to tobacco smoke in multiunit buildings.

Where public housing smoking bans are in place, studies show an increase in smoking cessation and substantial reductions in air nicotine levels, leading to reduced SHS exposure.^{xx, xxi, xxii} These improvements in indoor air quality are only achieved by total, building-wide bans – partial smoke-free policies (e.g. banning smoking in hallways or common areas) are not sufficient to protect residents from the harms of SHS exposure.^{xxiii}

AAFA applauds HUD for initiating rulemaking to require building-wide smoking bans for all PHAs, and we strongly encourage HUD to finalize this rule as soon as possible.

Smoke-free Outdoor Perimeters

The proposed rule restricts smoking in outdoor areas within 25 feet from public housing and administrative office buildings, but leaves it to the discretion of each PHA as to whether they will designate additional outdoor areas as smoke-free or whether they will make their entire grounds smoke-free. AAFA urges HUD to consider an extension of smoke-free policies to all grounds owned by the public housing agency.

We note that studies have shown that concentrations of secondhand smoke in many outdoor areas are often as high as in indoor areas and that the risks posed by such exposure can be significant.^{xxiv} Drifting tobacco smoke – even outdoors – can trigger an asthma attack. There is no "risk-free" level of SHS exposure,^{xxv} and a 25 foot perimeter around buildings may be inadequate to protect children who play on playgrounds or use

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other recreation areas outside of the public housing building itself. We urge HUD to further study this issue in order to determine whether the 25 foot perimeter around buildings is the appropriate restriction, or if a more protective health measure would be necessary.

Definition of Tobacco Products

HUD specifically asks whether the proposed smoking ban in PHAs should be extended to electronic cigarettes (e-cigarettes) and waterpipe tobacco smoking. We strongly urge HUD to extend this regulation to cover these harmful products, given their hazardous chemical composition, rising use in the US, the common misconceptions about their safety, and their link to childhood asthma.

E-cigarettes: E-cigarettes are often marketed as a safer alternative to smoking tobacco, but recent measurements of e-cigarette emissions indicate that harmful contaminants are inhaled by users and exhaled into the environment, including glycols, formaldehyde, nitrosamines, nicotine, and flavorants.^{xxvi}

While e-cigarettes may produce smaller exposures relative to tobacco cigarettes,^{xxvii} data shows that the vapor released or exhaled from e-cigarettes is a source of secondhand exposure to nicotine.^{xxviii,xxix,xxx,xxi} Persons exposed to e-cigarette vapor secondhand can also be exposed to substantial amounts of harmful chemicals, including fine and ultrafine particles that can be deposited in the deeper parts of the lung and may harm the respiratory system and exacerbate or increase the risk of acquiring asthma.^{xxxii}

Waterpipe tobacco: The chemical composition of waterpipe tobacco smoke contains toxicants in quantities similar or even higher than cigarette smoke.^{xxxiii,xxxiv,xxxvi} Not surprisingly, secondhand smoke from waterpipes is very harmful.^{xxxvii,xxxviii} Multiple studies have documented the presence of significant quantities of carbon monoxide, aldehydes, polycyclic aromatic hydrocarbons, ultrafine particles and respirable particulate matter in secondhand waterpipe smoke.^{xxxii,xli,xlii,xliii} Waterpipe smoke may be even more dangerous than cigarette smoke, as waterpipe smoking results in higher emissions of these toxic chemicals than do cigarettes.^{xliv} Even more concerning is that a waterpipe smoking session typically occurs over a longer period of time than occurs when smoking a regular cigarette, exposing the smoker and passive bystanders to more smoke over an extended timeframe.^{xiv}

E-cigarettes and waterpipe smoke emit dangerous chemicals into the environment. HUD's proposal to limit use of tobacco products in low-income housing will not be as effective if these products are not regulated in the same manner as tobacco smoke. AAFA strongly urges HUD to include waterpipe tobacco and e-cigarettes under the definition of tobacco products under § 965.653(c).

Extending Policies to All Mixed-Financing Units

The current proposed smoking ban is not applicable to dwelling units in mixed-finance

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buildings. AAFA asks that HUD reconsider this proposed policy, and extend the smoke-free housing policy to all mixed-financing units, giving equal protection to the children living there.

Conclusion

AAFA commends the leadership HUD has demonstrated in protecting children from dangerous environmental pollutants. We support the above referenced proposal to eliminate the use of tobacco products in public housing. While opponents of the proposal may argue that the ban infringes on residents' civil rights, nothing should trump the right of every person to breathe clean air free of toxins and contaminants. Smoking is not a basic human need, and an activity that has the potential to harm others' health should be sharply restricted.

While the proposed smoke-free policy is an excellent public health measure, AAFA urges HUD to consider strengthening the ban even further by expanding the definition of tobacco products and extending the smoking ban to all government-assisted housing.

AAFA thanks HUD for its recognition of this serious public health issue, and for the opportunity to provide these comments. Please do not hesitate to contact me at <u>csennett@aafa.org</u> or Meryl Bloomrosen, AAFA's Senior Vice President for Policy, Advocacy, and Research at <u>mbloomrosen@aafa.org</u> for further information.

Sincerely,

Cary Sorrett

Cary Sennett, MD, PhD President and CEO

¹ Centers for Disease Control and Prevention. Asthma surveillance data. Available at: http://www.cdc.gov/asthma/asthmadata.htm. Published 2014. Accessed December 27, 2015. ^{II} Homa DM. Disparities in nonsmokers exposure to secondhand smoke in the United States, 1999-2012. *Mortality and*

" Homa DM. Disparities in nonsmokers exposure to secondhand smoke in the United States, 1999-2012. *Mortality and Morbidity Weekly Report* February 3, 2015.

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ⁱⁱⁱ U.S. Department of Housing and Urban Development, Resident Characteristic Report available at:

http://portal.hud.gov/hudportal/HUD?src=/program_offices/public_indian_housing/systems/pic/50058/rcr.

^V Akinbami, L.J., Mooreman, J.E., Bailey, C., Zahran, H., King, M., Johnson, C., & Liu, X. Centers for Disease Control and Prevention, National Center for Health Statistics. (2012). Trends in asthma prevalence, health care use, and mortality in the United States, 2001-2010. Retrieved from http://www.cdc. gov/nchs/data/databriefs/db94.pdf

^vOffice of the Surgeon General. The health consequences of involuntary tobacco smoke: a report of the Surgeon General. Washington, DC: Department of Health and Human Services, 2006.

^{vi} Gren L.H., Taylor B., and Lyon J.L.: Childhood asthma utilization rates in a nonsmoking population of Utah compared to state and national rates. ISRN *Pediatr* 2011; 2011: pp. 750213

^{vii} Larsson M.L., Frisk M., Hallstrom J., Kiviloog J., and Lundback B.: Environmental tobacco smoke exposure during childhood is associated with increased prevalence of asthma in adults. *Chest* 2001; 120: pp. 711-717

^{viii} U.S. Department of Health and Human Services. The Health Consequences of Involuntary Exposure to Tobacco Smoke: A Report of the Surgeon General. 2006. http://www.surgeongeneral.gov/library/reports/secondhandsmoke/index.html. ^{ix}Waltraud, E. et al. The Asthma Epidemic. *NEJM* 2006;355(21): 2226-2235.

^x Adams, M. The Burden of Asthma in New England: A report by the Asthma Regional Council. March 2006. http://asthmaregionalcouncil.org/uploads/Surveillance/TheBurdenofAsthmainNewEnglandMarch2006.pdf.

^{xi} Goodwin, R.D.; Cowles, R.A. Household smoking and childhood asthma in the United States: a state-level analysis. Journal of Asthma 2008 Sep;45(7): 607-610.

xⁱⁱ Digenis-Bury, EC, Brooks, DR, Chen, L, et al. Use of a Population-Based Survey to Describe the Health of Boston Public Housing Residents. Am J Public Health. 2008 January; 98(1): 85–91.

xⁱⁱⁱ Rivo ML. Health corners: reducing chronic disease risks among Black public housing residents in the Nation's Capital. *Am J Public Health*. 1992 Apr;82(4):611-2.

xiv Zhang X, Martinez-Donate AP, Kuo D, Jones NR, Palmersheim KA. Trends in home smoking bans in the USA, 1995-2007: Prevalence, discrepancies and disparities. *Tobacco Control*. 2012 May;21(3):330-336.

^{xv} Stein A, Suttie J, Baker L, Agans R, Xue W, Bowling JM. Predictors of smoke-free policies in affordable multiunit housing, North Carolina, 2013. *Preventing Chronic Disease*. 2015;12(5):E73.

^{xvi} Kraev TA et al. Indoor concentrations of nicotine in low-income, multi-unit housing: associations with smoking behaviours and housing characteristics. *Tob Control*. 2009 Dec;18(6):438-44.

^{xvii} King BA et al. Multiunit housing residents' experiences and attitudes toward smoke-free policies. *Nicotine Tob Res.* 2010 Jun;12(6):598-605.

^{xviii} U.S. Department of Health and Human Services. The Health Consequences of Involuntary Exposure to Tobacco Smoke: A Report of the Surgeon General. 2006. http://www.surgeongeneral.gov/library/secondhandsmoke/

^{xix} King BA, Babb SD, Tynan MA, Gerzoff RB. National and state estimates of secondhand smoke infiltration among U.S. multiunit housing residents. *Nicotine and Tobacco Research*. 2013 Jul;15(7):1316-1321.

^{xx} Levy DE, Adamkiewicz G, Rigotti NA, Fang SC, Winickoff JP. Changes in tobacco smoke exposure following the institution of a smoke-free policy in the Boston Housing Authority. *PLoS ONE.* 2015 Sep;10(9):e0137740.

^{xxi} Pizacani BA, Maher JE, Rohde K, Drach L, Stark MJ. Implementation of a smoke-free policy in subsidized multiunit housing: Effects on smoking cessation and secondhand smoke exposure. *Nicotine and Tobacco Research*. 2012 Sep;14(9):1027-1034.

^{xxii} Russo ET et al. Comparison of indoor air quality in smoke-permitted and smoke-free multiunit housing: Findings from the Boston housing authority. *Nicotine and Tobacco Research* 2014. 10(1093)

^{xxiii} Wilson KM, Torok M, McMillen R. Tanski S, Klein JD, Winickoff JP. Tobacco smoke incursions in multiunit housing. *American Journal of Public Health*. 2014 Aug;104(8):1445-1453.

xiv Potera C. Outdoor Smoking Areas: Does the Science Support a Ban? Environ Health Perspect. 2013 Jul; 121(7): a229.

^{XXV} Bartholomew KS. Policy options to promote smokefree environments for children and adolescents. *Current Problems in Pediatric and Adolescent Health Care.* 2015 Jun;45(6):146-181

^{xxvi} Offermann FJ. Chemical emissions from e-cigarettes: Direct and indirect (passive) exposures. *Building and Environment*. 2015 Nov;93(P1):101-105.

^{xxvii} Goniewicz ML, Knysak J, Gawron M, Kosmider L, Sobczak A, Kurek J, Prokopowicz A, Japlonska-Czapla M, Rosik-Dulewska C, Havel C, Jacob III P, Benowitz N. Levels of selected carcinogens and toxicants in vapour from electronic cigarettes. *Tobacco Control*. 2014 Mar; T

^{xxviii} Ballbe M, Martinez-Sanchez JM, Sureda X, Fu M, Perez-Ortuno R, PAscual JA< Salto E, Fernandez E. Cigarettes vs. ecigarettes: Passive exposure at home measured by means of airborne makers and biomarkers. *Environmental Research*. 2014 Nov;135:76-80.

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^{xxix} Czogala J, Goniewicz ML, Fidelus B, Zielinska-Danch W, Travers MJ, Sobczak A. Secondhand exposure to vapors from electronic cigarettes. *Nicotine and Tobacco Research*. 2014 Jun;16(6):655-662.

^{XXX} Kolar SK, Rogers BG, Hooper MW. Support for indoor bans on electronic cigarettes among current and former smokers. International Journal of Environmental Research and Public Health. 2014 Nov;11(12):12174-12189

^{xxxi} Schripp T, Markewitz D, Uhde E, Salthammer T. Does e-cigarette consumption cause passive vaping? *Indoor Air*. 2013 Feb;23(1):25-31

^{xxxii} Fromme H, Schober W. Waterpipes and e-cigarettes: Impact of alternative smoking techniques on indoor air quality and health. *Atmospheric Environment*. 2015 Apr;106:429-441.

^{xooiii} Waked M and Salameh P. Maternal waterpipe smoke exposure and the risk of asthma and allergic diseases in childhood: A post hoc analysis. *Int J Occup Med Environ Health*. 2015;28(1):147-56.

^{xxxv} Sepetdjian E, Shihadeh A, Saliba NA. Measurement of 16 polycyclic aromatic hydrocarbons in narghile waterpipe tobacco smoke. Food Chem Toxicol. 2008;46(5) :1582-90.

^{xxxv} Schubert J, Hahn J, Dettbarn G, Seidl A, Luch A, Schulz TG. Mainstream smoke of the waterpipe: Does this environmental matrix reveal as significant source of toxic compounds? Toxicol Lett. 2011;205:279-84.

^{xxxvi} Shafagoj YA, Mohammed FI, Hadidi KA. Hubble-bubble (water pipe) smoking: Levels of nicotine and cotinine in plasma, saliva and urine. Int J Clin Pharmacol Ther. 2002;40:249-55

^{xxxvii} Fromme H, Schober W. Waterpipes and e-cigarettes: Impact of alternative smoking techniques on indoor air quality and health. *Atmospheric Environment*. 2015 Apr;106:429-441.

^{xxxviii} Waterpipe Tobacco Smoking: Health Effects, Research Needs and Recommended Actions by Regulators. WHO Study Group on Tobacco Product Regulation. 2005. Available at:

http://www.who.int/tobacco/global_interaction/tobreg/Waterpipe%20recommendation_Final.pdf. Accessed December 29, 2015.

^{xxxix} Maziak W, Ibrahim I, Rastam S, Ward KD, Eissenberg T. Waterpipe-associated particulate matter emissions. *Nicotine Tob Res* 2008;10:519–23.

^{xi} Hammal F, Chappell A, Wild TC, Kindzierski W, Shihadeh A, Vanderhoek A, et al. "Herbal" but potentially hazardous: an analysis of the constituents and smoke emissions of tobacco-free waterpipe products and the air quality in the cafés where they are served. *Tob Control* 2013; doi: 10.1136/tobacco- control-2013-051169.

xⁱⁱ Cobb CO, Vansickel AR, Blank MD, Jentink K, Travers MJ, Eissenberg T. Indoor air quality in Virginia waterpipe cafes. *Tob Control* 2013;22:338–43.

^{xiii} Fromme H, Dietrich S, Heitmann D, Dressel H, Diemer J, Schulz T, et al. Indoor air contamination during a waterpipe (narghile)smoking session. *Food Chem Toxicol* 2009;47:1636–41.

^{xiiii} Markowicz P, Löndahl J, Wierzbicka A, Suleiman R, Shihadeh A, Larsson L. A study on particles and some microbial markers in waterpipe tobacco smoke. *Sci Total Environ* 2014;499:107–13.

^{xliv} Daher N, Saleh R, Jaroudi E, Sheheitli H, Badr T, Sepetdijan E, et al. Comparison of carcinogen, carbon monoxide, and ultrafine particle emissions from narghile waterpipe and cigarette smoking: sidestream smoke measurements and assessment of second-hand smoke emission factors. *Atmos Environ* 2010;44:8–14.

^{xiv} Waterpipe Tobacco Smoking: Health Effects, Research Needs and Recommended Actions by Regulators. WHO Study Group on Tobacco Product Regulation. 2005. Available at:

http://www.who.int/tobacco/global_interaction/tobreg/Waterpipe%20recommendation_Final.pdf. Accessed December 29, 2015.

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