Policy Position Statement on Clean Indoor Air Laws and the Impact on Cardiovascular Disease

I. Position

The American Heart Association advocates for comprehensive smoke-free workplace laws at the state and local levels, in compliance with the Fundamentals of Smokefree Workplace Laws guidelines (http://www.no-smoke.org/pdf/CIA_Fundamentals.pdf).[1] These guidelines and fundamental principles were developed with several national partners in the public health community to guide and maximize the impact of smoke free policy efforts and increase the number of worii"žú "b) "'#Y & bb!â1 ' RÔj N "‘ Fál’Fá and public environments, that there should be no preemption of local ordinances, and no exemptions for hardship, opting out, or ventilation. Other exemptions to avoid include those for casinos and gaming organizations, bars, and private clubs.

II. Background

Cigarette smoking remains the leading cause of preventable morbidity and premature death in the United States. [illegible] inflammation, endothelial function and the vascular system.

[5] The American Heart Association (AHA) 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. Various policies prioritized by the AHA and its national partners include adequate funding for tobacco cessation and prevention programs,

term exposure to second hand smoke, such as that occurring in a home or workplace, is associated with a 25%–30% increased risk for coronary heart disease in adult nonsmokers.[7]

There are other health impacts of second hand smoke. A recent study linked exposure to dementia in adults.[8] Those people exposed to high levels of passive smoking were 44% more likely to suffer cognitive impairment, affecting their memory and ability to perform calculations.[8] 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.[3] Pregnant women exposed to second hand smoke show a greater risk of giving birth to low-birth-weight babies.[3]

There is evidence that exposure to second hand smoke disproportionately affects minorities,[9] women, and

III. Evidence for the Impact on Cardiovascular Disease

In 2008, the Centers for Disease Control and Prevention requested that the Institute of Medicine (IOM) convene an expert committee to assess the state of the science on the suggested causal relationship between secondhand smoke exposure and acute coronary events. The IOM report[18] was released on October 15, 2009 and 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 AMI 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 now provided evidence for reduced incidence of acute myocardial infarction (AMI) after implementation of smoke-free air laws.[12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28]

IV. Conclusion

Available evidence suggests that legislating for comprehensive smoke

References:

[1] Fundamentals of Smokefree Workplace Laws. November 2008. accessed on January 27, 2009 at http://www.no-smoke.org/pdf/CIA_Fundamentals.pdf

[2] Heart Disease and Stroke Statistics—2009 Update: A Report from the American Heart Association Statistics Committee and Stroke Statistics Subcommittee. *Circulation*. 2008.

[3] Centers for Disease Control and Prevention. Smoking-Attributed Mortality, Years of Potential Life Lost and Productivity Losses — United States, 2000–2004. *Morbidity and Mortality Weekly Report.* November 14, 2008.

[4] U.S. Department of Health and Human Services. *The Health Consequences of Involuntary Exposure to Tobacco Smoke: A Report of the Surgeon General—Executive Summary*. U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, Coordinating Center for Health Promotion, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2006.

[5] Dinno A. Clean indoorm [(D)12froean.easCh (H)1.1frrhev. —

[15] Glantz S. Meta-analysis of the effects of smokefree laws on acute myocardial infarction: an update. *Preventive Medicine*. 2008. 47: 452-453.

[16] Bartecchi C. Alsever RN. Nevin-Woods C. Thomas WM. Estacio RO. Bucher Bartelson B. Krantz MJ. Reduction in the Incidence of Acute Myocardial Infarction Associated With a Citywide Smoking Ordinance. *Circulation*. 2006;114:1490-1496.

[17] Centers for Disease Control and Prevention. Reduced hospitalizations for myocardial infarction after implementation of a smokefree ordinance - city of Pueblo, Colorado, 2002-2006. *Morbidity and Mortality Weekly Report*. January 2, 2009. 57(51&52).

[18] Juster HR. Loomis BR. Hinman TM. Farrelly MC. Birkhead GS. Declines in hospital admissions for acute myocardial infarction in New York State after implementation of a comprehensive smoking ban. *American Journal of Public Health*. 2007;97:2035-2039.

[19] Torabi MR. Reduced admissions for acute myocardial infarction associated with a public smoking ban: matched controlled study. *Journal of Drug Education*. 2007; 37(3):221-226.

[20] Sargent RP. Shepard RM. Glantz SA. Reduced incidence of admissions for myocardial infarction associated with public smoking ban: before and after study. *British Medical Journal*. 2004; 328:977-980.

[21] Lemstra M. Neudorf C. Opondo J. Implications of a public smoking ban. *Canadian Journal of Public Health*, January/February 2008; 99(1)

[22] Pell JP. Haw S. Cobbe S. Newby DE. Pell ACH. Fischbacher C. McConnachie A. Pell S. Murdoch D. Dunn F. Oldroyd K. MacIntyre P. O'Rourke B. Borland W. Smoke-free legislation and hospitalizations for acute coronary syndrome. *New England Journal of Medicine*. .2008;359:482.

[23] Gotz NK. Van Tongeren M. Wareing H. Wallace LM. Semple S. McCalman L. Changes in air quality and secondhand smoke exposure in hospitality sector businesses after introduction of the English smoke-free legislation. *Journal of Public Health*. December 2008.

[24] Semple S. Creely KS. Naji A. Miller BG. Ayres JG. Secondhand smoke levels in Scottish pubs: the effect of smokefree legislation. *Tobacco Control 2007;16:127-132.*

[25] Repace JL. Hyde JN. Brugge D. Air pollution in Boston bars before and after a smoking ban. *BMC Public Health* 2006.

-r118 Tw 13867 0 Td (132)Tj–006.