



## 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 Fundamental Smokefree Workplace Laws guidelines ([http://www.nosmoke.org/pdf/CIA\\_Fundamentals.pdf](http://www.nosmoke.org/pdf/CIA_Fundamentals.pdf)). 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 workers and the public in smoke-free workplaces 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. Tobacco smoke is a complex mixture of chemicals that have immediate adverse effects on heart function, blood vessel inflammation, endothelial function and the vascular system.

<sup>5</sup> The American Heart Association (AHA) has long advocated for strong public health measures that will curtail 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.<sup>7</sup>

There are other health impacts of second hand smoke. A recent study linked exposure to dementia in adults.<sup>8</sup> 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. 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. Pregnant women exposed to second hand smoke show a greater risk of giving birth to low-birth-weight babies.<sup>9</sup>

There is evidence that exposure to second hand smoke disproportionately affects minorities, 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 relationship between secondhand smoke exposure and acute coronary events. The IOM report released on October 15, 2009 and ~~described~~ <sup>described</sup> 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~~ <sup>the</sup> report did not estimate the effect size magnitude of the impact. ~~Studies~~ <sup>Studies</sup> from around the world have now provided evidence for the reduced incidence of acute myocardial infarction (AMI) after implementation of smoke-free air laws.<sup>12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28</sup>

### IV. Conclusion

Available evidence suggests that legislating for comprehensive smoke-free



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