

PEA Committee

From: Don Weisman <Don.Weisman@heart.org>
Sent: Thursday, September 14, 2017 12:14 PM
To: PEA Committee
Subject: Testimony in support of PEA-41 "Prohibiting smoking in vehicles when persons under the age of 18 are present"
Attachments: AHA testimony in support of PEA-41 Prohibiting smoking in vehicles when persons under the age of 18 are present.docx

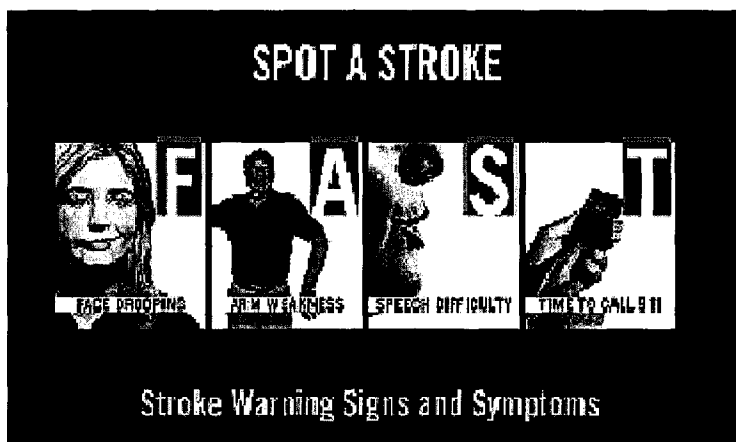
Aloha,

Attached is testimony in support of PEA-41 "Prohibiting smoking in vehicles when persons under the age of 18 are present." Thank you for this opportunity to submit testimony supporting this important legislation.

Don Weisman
Hawaii Government Relations/Communications and Marketing Director

American Heart Association
Western States Affiliate
Serving Hawaii
677 Ala Moana Blvd., Ste. 600
Honolulu, HI 96813
808-377-6636
FAX: 808-524-0556
don.weisman@heart.org

Click on the link below to learn how to quickly identify the signs and symptoms of stroke, and appropriate action to take.





**American Heart Association Testimony in SUPPORT of PEA-41,
“Prohibiting smoking in vehicles when persons under the age of 18 are present”**

The American Heart Association (AHA) supports PEA-41, “Prohibiting smoking in vehicles when persons under the age of 18 are present.” The body of research on the dangers of smoking has long been acknowledged by health and science experts. However, over the last decade, research focus has been extended to the dangers of being exposed to secondhand smoke and that growing body of research has been eye-opening to the point that many have shown that breathing secondhand smoke is not only deadly, but that it can be more dangerous than smoking.

The California Environmental Protection Agency released in 2005 a report on the health effects of secondhand smoke based on a body of more than 1,000 research studies that went through four years of intense scientific, public and independent review. Among other things, the report found a causal link between secondhand smoke exposure and pre-term delivery, asthma induction in adults (the link between asthma induction in children had already been well established), a 70 percent increase in risk for breast cancer in younger, primarily premenopausal women, and altered vascular properties. Based on the report, California became the first state to declare secondhand smoke a toxic air pollutant. The decision by the California Air Resources Board put secondhand smoke in the same category as diesel exhaust, arsenic and benzene and blamed it for 4,000 deaths each year in California from lung cancer and heart disease alone.

Also in 2005, a study done at the University of California at San Francisco (UCSF) found that non-smokers exposed to secondhand smoke are negatively affected in a much higher dose to response ratio than are smokers. Another November 2006 UCSF study showed that Philip Morris Tobacco Company had done extensive animal research on secondhand smoke at a secret laboratory in Germany and found it to be more toxic to non-smokers than inhaled cigarette smoke is to a smoker. The three-year review of Philip Morris documents made public by the multi-state settlement with the tobacco industry showed that the company did experiments on rats, which are less sensitive to smoke than humans. The documents show that Philip Morris scientists learned that secondhand smoke is chemically different than mainstream smoke inhaled by a smoker. The smoke drifting off the lit end of a cigarette releases larger, more poisonous molecules than those inhaled at the filter end. The heating that takes place in the process of smoking a cigarette helps to break down some toxins. Secondhand smoke was found to be three times more toxic to tissue culture cells than mainstream smoke.

The effects of secondhand smoke on the cardiovascular system are substantial and immediate. Within 5 minutes of exposure to secondhand smoke blood platelets become stickier. Within 15 minutes of exposure, scarring of the blood vessel walls occurs causing plaque that leads to atherosclerosis to adhere more easily. Within 30 minutes of exposure, the risk for heart attack doubles.



In 2008, the CDC asked the Institute of Medicine to convene a committee to assess the relationship between secondhand-smoke exposure and effects on the heart. The IOM reviewed 11 key international studies and concluded that secondhand-smoke exposure increases the risk of coronary heart disease and heart attacks and that smoking bans reduce heart attacks. Given the prevalence of heart attacks, and the resultant deaths, smoking bans save more than half a million lives each year in the U.S. alone. The savings, as measured in human lives, is undeniable.

Another study, published in the journal Environmental Health Perspectives in 2005 used the Third National Health and Nutrition Examination Survey (NHANES III), conducted from 1988 to 1994, to investigate the relationship between environmental tobacco smoke exposure and cognitive abilities among U.S. children and adolescents 6–16 years of age. The findings of that study confirmed previous research indicating an inverse relationship with ETS exposure and cognitive outcomes. The authors also provided new information indicating that ETS is neurotoxic at extremely low levels. Exposure to ETS in U.S. children therefore has substantial public health impact beyond asthma, otitis media (a group of inflammatory diseases of the middle ear), and other widely recognized adverse consequences. Using population estimates employing the appropriate sampling weights, they estimated that over 21.9 million American children are at risk for ETS-related reading deficits.

In addition, a new danger related to tobacco smoke emissions emerged early this decade, a danger termed "third-hand smoke." A Lawrence Berkeley National Laboratory (Berkeley Lab) study published in February 2010 found that nicotine in thirdhand smoke is a hazardous exposure resulting from cigarette smoke residue that accumulates in cars, homes, and other indoor spaces. Tobacco derived toxicants can react with other common gases to form potent cancer causing compounds. Exposure to thirdhand smoke can occur through the skin, by breathing, and by ingestion long after smoke has cleared from a room. Therefore, children exposed to thirdhand smoke in an automobile or home can be exposed to cancer-causing compounds through either inhalation of dust or the contact of skin with carpet or clothes. The study's findings indicate that opening a window or deploying a fan to ventilate the enclosed space while a cigarette burns does not eliminate the hazard of third-hand smoke. (https://en.wikipedia.org/wiki/Third-hand_smoke)

Smoking and its inherent dangers are a choice that should be limited to adults. Children should not be subjected to those dangers as a result of the poor health choices made by the adults who surround them. The AHA supports passage of PEA-41.

Respectfully submitted,

Don Weisman
Hawaii Government Relations/Communications Director