

You've read 1 of 5 stories this month. **Register** to get 10 per month.

bat use of

By **ERYN BROWN**

JANUARY 28, 2015, 8:13 PM

Arguing that the rising popularity of electronic cigarettes soon would undermine California's leadership in reducing tobacco use, state health officials Wednesday called for tighter regulation of the devices and announced an educational campaign to combat their use.

Addressing "vaping" by minors and young adults, the fastest-growing group of users in the state, will be a key focus, California's Department of Public Health said in a 21-page report. E-cigarette use among young adults ages 18 to 29 in California tripled between 2012 and 2013, according to the agency.

"I'm advising Californians, including those who currently use tobacco, to avoid using e-cigarettes," state health officer Dr. Ron Chapman said during a conference call following the document's release. "E-cigarettes ... re-normalize smoking behavior and introduce a new generation to nicotine addiction."

Chapman did not provide specifics about the campaign, including its expected cost. In addition to the report, the department issued an advisory recommending healthcare providers do more to educate parents and the public.

"This is just the beginning of getting the word out," he said.

The battery-operated devices, which often look like traditional cigarettes, work by heating and aerosolizing a liquid which may contain nicotine that users then inhale. The vapor does not contain some of the dangerous components of tobacco smoke.

One key question is whether e-cigarettes help smokers quit or simply get more people hooked on nicotine, exposing them to a different set of toxic chemicals. With the health effects not yet comprehensively studied, there is debate over whether vaping devices are in fact a danger.

Citing a number of studies, the state's report concluded that there was "no scientific evidence that e-cigarettes help smokers successfully quit traditional cigarettes or that they reduce their consumption."

Proponents, however, said Wednesday that e-cigarettes can help smokers kick their dangerous tobacco habits and called the state's position "irresponsible."

"It's public health malpractice to tell an adult who is inhaling burning smoke into their lungs on a daily basis that they shouldn't even try to quit smoking [by] using vaping," said Gregory Conley, president of the American Vaping Assn.

Stanton Glantz, a professor of medicine at UC San Francisco's Center for Tobacco Control Research and Education, called the report a "fair reading of the evidence" and said he hoped that Californians would press the health department to reveal when its effort might launch.

"It's true that this is a new area [of research] ... but there's a pretty clear picture emerging," he said. "The whole: 'We don't know enough, the research is incomplete, bla bla bla,' that's what the cigarette companies have said since the 1950s."

The report detailed the increase in e-cigarette use among younger Californians.

Asked in 2012 if they had used e-cigarettes in the last 30 days, 2.3% of those between 18 and 29 years of age said they had. A year later, that number had more than tripled to 7.6%. Young adults were three times more likely to use e-cigarettes than people over 30.

Teen vaping in the U.S. also was on the rise, surpassing traditional cigarette use for the first time in 2014.

Nicotine exposure among teens, the report said, is believed to harm brain development. The aerosols emitted by e-cigarettes, including secondhand aerosols, contain at least 10 chemicals known to cause cancer, birth defects or reproductive harm.

One way companies make e-cigarettes appealing to children, Chapman said, was by offering e-liquid — as the nicotine solution the devices vaporize is sometimes called — in flavors like chocolate, gummy bear and bubble gum. That could make youngsters want to use e-cigarettes or ingest the liquid.

Poisonings among children age 5 and under linked to e-cigarettes grew from seven in 2012 to 154 in 2014, the health department report stated.

Amid the debate over the risks or benefits of electronic cigarettes, local and federal officials have put some regulations in place.

Los Angeles in 2013 adopted rules controlling the sale and use of e-cigarettes. At least one state legislator is pushing a bill that would ban vaping in locations where tobacco is prohibited, although similar attempts to regulate e-cigarettes statewide previously failed.

In April 2014, the U.S. Food and Drug Administration proposed rules for regulating the product; those still are under review.

eryn.brown@latimes.com

Twitter: @LATerynbrown

Copyright © 2015, Los Angeles Times

State Health Officer's Report on E-Cigarettes

*A Community
Health Threat*



State Health Officer's Report on E-Cigarettes

A Community Health Threat

Ron Chapman, MD, MPH
CDPH Director and State Health Officer
California Department of Public Health

January 2015

Edmund G. Brown Jr., Governor
State of California

Diana S. Dooley, Secretary
California Health and Human Services Agency



Suggested Citation

California Department of Public Health, California Tobacco Control Program, *State Health Officer's Report on E-Cigarettes: A Community Health Threat*, Sacramento, CA 2015

Introduction from the State Health Officer

As the California Department of Public Health (CDPH) Director and State Health Officer, I am pleased to present CDPH's second issue of the State Health Officer's Report which focuses on electronic cigarettes (e-cigarettes). While there is still much to be learned about the individual and public health impact of e-cigarette use, this report provides factual information about e-cigarettes, the marketing of these products, and the public health concerns related to their use. It outlines a number of steps to protect children from nicotine poisoning, adolescents from nicotine addiction, and non-users from exposure to the toxic aerosol emitted from e-cigarettes.



Ron Chapman, MD, MPH
CDPH Director and State Health Officer

As the State Health Officer, of particular concern to me is the impact of e-cigarettes on the health and safety of children, teens, and young adults. The availability of e-cigarettes in a variety of candy and fruit flavors such as cotton candy, gummy bear, chocolate mint, and grape makes these products highly appealing to young children and teens. The use of marketing terms such as “e-juice” may further mislead consumers into believing that these products are harmless and safe for consumption.

Among children ages 0 to 5 years old, e-cigarette poisonings increased sharply from 7 in 2012 to 154 in 2014. By the end of 2014, e-cigarette poisonings to young children tripled in one year, making up more than 60 percent of all e-cigarette poisoning calls.

E-cigarette use is rapidly rising among teens and young adults. Nationally, the use of e-cigarettes by high school students tripled in just two years and e-cigarette use by teens now surpasses the use of traditional cigarettes. With this age group the long-term impact that nicotine has on adolescent brain development is of particular concern. In California, use among young adults ages 18 to 29 tripled in one year. While the long term health impact resulting from use of this product by this population is presently unknown – it is known that e-cigarettes emit at least 10 chemicals that are found on California's Proposition 65 list of chemicals known to cause cancer, birth defects, or other reproductive harm. Comprehensive steps taken now can prevent a new generation of young people from becoming addicted to nicotine, avoid future health disparities and avert an unraveling of California's approximately \$2 billion, 25-year investment in public health efforts to prevent and reduce tobacco use in California.

This report highlights several steps to address the health and safety issues related to e-cigarette use. First and foremost, education is needed to counter the marketing of e-cigarettes which is often misleading and highly appealing to teens. Second, there is a need to treat e-cigarettes in a comprehensive manner

that is consistent with how we approach traditional cigarettes. Existing laws that currently protect minors and the general public from traditional tobacco products should be extended to cover e-cigarettes. Third, immediate action is needed to protect children and workers from the toxicity associated with unintentional exposure and handling of e-liquid and the toxic aerosol emitted from e-cigarettes.

I trust that this report provides you with new information and that you will join me in this effort to protect our communities.

Sincerely,

A handwritten signature in black ink, appearing to read 'Ron Chapman', written in a cursive style.

Ron Chapman, MD, MPH
CDPH Director and State Health Officer

CONTENTS

Executive Summary	1
The Problem: E-Cigarettes	3
A Significant Public Health Concern	3
E-Cigarette Use by Youth	4
E-Cigarette Use by Adults	5
Health Effects of Nicotine	5
Exposure to Secondhand Aerosol	6
Harm Reduction Claims and Myths about Cessation	6
Unrestricted Marketing	7
Where E-Cigarettes are Sold in California	8
Local Efforts	11
Summary of FDA Proposed Regulation	13
Public Education Campaign on E-Cigarettes	15
Conclusions.....	17
References	19

Executive Summary

While there is still much to be learned about the ingredients and the long-term health impacts of e-cigarettes, this report provides Californians with information on e-cigarette use, public health concerns related to e-cigarettes, and steps that can be taken to address the growing use of these products. The following are key highlights from the report:

E-Cigarette Use

- In 2014, teen use of e-cigarettes surpassed the use of traditional cigarettes for the first time, with more than twice as many 8th and 10th graders reporting using e-cigarettes than traditional cigarettes. Among 12th graders, 17 percent reported currently using e-cigarettes vs. 14 percent using traditional cigarettes.
- In California, adults using e-cigarettes in the past 30 days doubled from 1.8 percent in 2012 to 3.5 percent in 2013. For younger adults (18 to 29 years old), e-cigarette use tripled in only one year from 2.3 percent to 7.6 percent.
- Young adults are three times more likely to use e-cigarettes than those 30 and older.
- Nearly 20 percent of young adult e-cigarette users in California have never smoked traditional cigarettes.

Health Effects of E-Cigarettes

- E-cigarettes contain nicotine, a highly addictive neurotoxin.
- Exposure to nicotine during adolescence can harm brain development and predispose youth to future tobacco use.
- E-cigarettes do not emit water vapor, but a concoction of chemicals toxic to human cells in the form of an aerosol. The chemicals in the aerosol travel through the circulatory system to the brain and all organs.
- Mainstream and secondhand e-cigarette aerosol has been found to contain at least ten chemicals that are on California's Proposition 65 list of chemicals known to cause cancer, birth defects, or other reproductive harm.

Heightened Concern for Youth

- The variety of fruit and candy flavored e-cigarettes entice small children who may accidentally ingest them. Even a fraction of e-liquid may be lethal to a small child.
- E-cigarette cartridges often leak and are not equipped with child-resistant caps, creating a potential source of poisoning through ingestion and skin or eye contact.
- Calls to poison control centers in California and the rest of the U.S. have risen significantly for both adults and children accidentally exposed to e-liquids.
- In California, the number of calls to the poison control center involving e-cigarette exposures in children five and under tripled in one year.



Harm Reduction Claims and Myths

- There is no scientific evidence that e-cigarettes help smokers successfully quit traditional cigarettes.
- E-cigarette users are no more likely to quit than regular smokers, with one study finding 89 percent of e-cigarette users still using them one year later. Another study found that e-cigarette users are a third less likely to quit cigarettes.

Unrestricted Marketing

- In three years, the amount of money spent on advertising e-cigarettes increased more than 1,200 percent.
- E-cigarette advertisements (ads) are on television (TV) and radio where tobacco ads were banned more than 40 years ago. Most of the methods being used today by e-cigarette companies were used long ago by tobacco companies to market traditional cigarettes to kids.
- Many ads state that e-cigarettes are a way to get around smoking bans, which undermines smoke free social norms. Various tactics and claims are also used to imply that these products are safe.
- The fact that e-cigarettes contain nicotine, which is highly addictive, is not typically included in e-cigarette advertising.

In Conclusion

California has been a leader in tobacco use prevention and cessation for over 25 years, with one of the lowest youth smoking rates in the nation. The promotion and increasing use of e-cigarettes threaten California's progress. These data suggest that a new generation of young people will become addicted to nicotine, accidental poisonings of children will continue, and involuntary exposure to secondhand aerosol emissions will impact the public's health if e-cigarette marketing, sales and use continue without restriction. Additionally, without action, it is likely that California's more than two decades of progress to prevent and reduce traditional tobacco use will erode as e-cigarettes re-normalize smoking behavior.

The Problem: E-cigarettes

E-cigarettes are battery-operated devices, often designed to resemble cigarettes, which deliver a nicotine containing aerosol, not just water vapor. E-cigarettes have many names, especially among youth and young adults, such as e-cigs, e-hookahs, hookah pens, vapes, vape pens, vape pipes, or mods.

E-cigarettes were first introduced in the U.S. in 2007 and have skyrocketed in popularity, availability, and variety. From disposable and rechargeable e-cigarettes to “tank systems” that can hold a large volume of a liquid solution (e-liquid), customers can modify e-cigarettes in many ways.¹

A Significant Public Health Concern

Unlike traditional cigarettes where the tobacco leaf is burned and the resulting smoke inhaled, e-cigarettes heat e-liquid that generally contains nicotine, flavorings, additives, and propylene glycol. The heated e-liquid forms an aerosol, not just water vapor, that is inhaled by the user. The aerosol has been found to contain toxic chemicals like formaldehyde, lead, nickel, and acetaldehyde all of which are found on California’s Proposition 65 list of chemicals known to cause cancer, birth defects, and other reproductive harm.²⁻⁴ These chemicals travel through the circulatory system to the brain and all organs. The aerosol also contains high concentrations of ultrafine particles that are inhaled and become trapped in the lungs.⁵

E-liquids are available in thousands of candy and fruit flavors, including bubble gum, cherry and chocolate, which are especially appealing to youth and small children who may accidentally ingest them. Even a small amount of e-liquid may be lethal to a small child.⁶ In addition, e-cigarette cartridges often leak and are not equipped with child-resistant caps, creating a potential source of poisoning through ingestion and skin or eye contact.

There has been a significant rise in the number of calls to poison control centers in California and nationally for both adults and children who were accidentally exposed to e-liquids, many of whom are children aged five and under.⁷ Nationally, the number of calls rose from one per month in September 2010 to 215 per month in February 2014.⁸ In California, from 2012 to 2013, the number of calls to the poison control center involving e-cigarette exposures in children ages five and under increased sharply from 7 to 154. By the end of 2014, e-cigarette poisonings to young children tripled in one year, making up more than 60% of all e-cigarette poisoning calls (see Figure 1). Adults have also mistakenly used e-liquid in harmful ways, such as eye drops, and have been harmed by exploding cartridges and burning batteries.

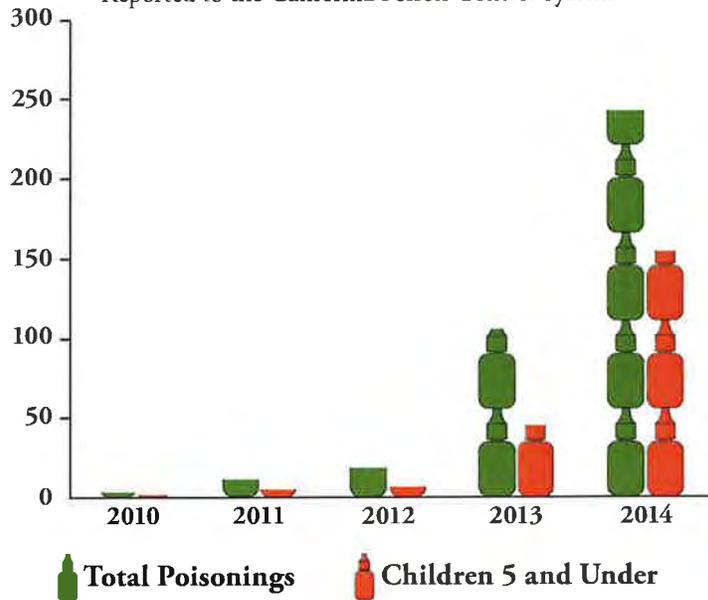
School and law enforcement officials have reported that e-cigarette devices are also used to inhale illegal substances, such as marijuana and hash oil.⁶ Because many of these devices are similar in appearance to a ball point pen, school and law enforcement personnel are not aware that inappropriate use of nicotine and illegal substances is occurring.



Figure 1

E-Cigarette Poisonings, 2010-2014

Reported to the California Poison Control System



California Poison Control System, San Diego, CA, Jan. 2015

Despite the lack of manufacturing standards, quality control, and external oversight by a federal regulatory agency of e-cigarettes, they are heavily marketed, widely available, and a significant public health concern.

E-Cigarette Use by Youth

Aggressive marketing has led to an increase in e-cigarette use and experimentation by youth. Many are concerned that e-cigarettes are a gateway to using traditional cigarettes.⁹ Research suggests that kids who may have otherwise never smoked cigarettes are now becoming addicted to nicotine through the use of e-cigarettes and other e-products.⁹ An analysis of the 2011-2012 National Youth

Tobacco Survey (NYTS) found that adolescents who used e-cigarettes were more likely to progress from experimenting with traditional cigarettes to becoming established smokers and were less likely to quit.⁹

In 2014, for the first time ever, teen use of e-cigarettes surpassed the use of traditional cigarettes. The Monitoring the Future study, which tracks substance abuse trends among 40,000 youth nationally, found that among 8th and 10th graders, current e-cigarette use was double that of traditional cigarettes (8.7 percent vs. 4 percent for 8th graders and 16.2 percent vs. 7.2 percent for 10th graders). Among 12th graders, 17.1 percent reported current e-cigarette use vs. 13.6 percent traditional cigarette use.¹⁰ This 2014 finding that e-cigarette use exceeds traditional cigarette use among teens comes on the heels of the 2013 NYTS which found that e-cigarette use tripled among high school students, increasing from 1.5 percent in 2011 to 4.5 percent in 2013.¹¹ An analysis of the 2011-2013 NYTS also reported that more than a quarter million youth who had never smoked a traditional cigarette used e-cigarettes in 2013, a three-fold increase since 2011, and that youth who had used e-cigarettes were nearly twice as likely to try traditional cigarettes as those who never used e-cigarettes.¹²

In California, preliminary data of more than 430,000 middle and high school students from the California Healthy Kids Survey found that in 2013, 6.3 percent of 7th graders, 12.4 percent of 9th graders, and 14.3 percent of





11th graders had used e-cigarettes in the past 30 days. In all instances, California teens were found to use e-cigarettes at much higher rates than traditional cigarettes. The survey data also show that 11.4 percent of 7th graders, 23.6 percent of 9th graders, and 29.3 percent of 11th graders have ever tried e-cigarettes.¹³ While the California Healthy Kids Survey is not representative of all California youth, the large sample size and consistency with the recent national data and data from other U.S. states, specifically Minnesota and Hawaii, suggest that California youth are experimenting with e-cigarettes at a rapidly increasing rate.^{14, 15}

E-Cigarette Use by Adults

Nationally, 8.1 percent of adults have tried e-cigarettes

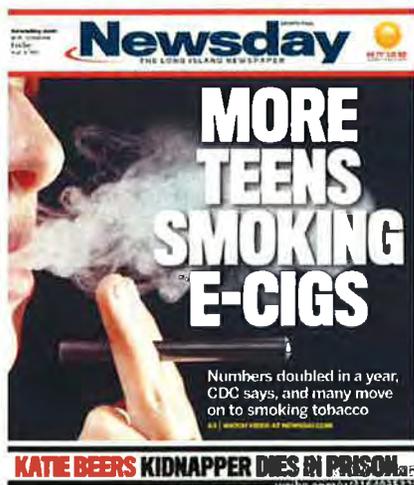


while 1.4 percent were current users in 2012.¹⁶ New California data shows that adults using e-cigarettes in the past 30 days also doubled from 1.8 percent in 2012 to 3.5 percent in 2013. For young adults (18 to 29 year old), e-cigarette use tripled in only one year from 2.3 percent to 7.6 percent. Young adults are three times more likely to use e-cigarettes than those 30 and older. Nearly 20 percent of young adult e-cigarette users have never smoked traditional cigarettes.¹⁷

Health Effects of Nicotine

In 1990, the Office of Environmental Health Hazard Assessment of the California Environmental Protection Agency added nicotine to the Proposition 65 list of chemicals known to cause cancer, birth defects, or reproductive harm.⁴

Nicotine is a highly addictive neurotoxin, proven as addictive as heroin and cocaine.¹⁸ Nicotine affects the cardiovascular and central nervous systems, causing blood vessels to constrict, raising the pulse and blood pressure.¹⁹ Nicotine adversely affects maternal and fetal health during pregnancy, contributing to low birth weight, preterm delivery, and stillbirth.²⁰ Nicotine is also known to cross the placenta and is detectable in the breast milk of smoking mothers as well as mothers exposed to secondhand smoke.^{21, 22}



Preliminary studies have shown that using a nicotine-containing e-cigarette for just five minutes causes similar lung irritation, inflammation, and effect on blood vessels as smoking a traditional cigarette, which may increase the risk of a heart attack.^{1, 23}

Adolescents are especially sensitive to the effects of nicotine and are likely to underestimate its addictiveness. Research shows that adolescent smokers report some symptoms of dependence even at low levels of cigarette consumption.²⁵

Adolescents are still going through critical periods of brain growth and development and are especially vulnerable to the toxic effects of nicotine. Exposure to nicotine during adolescence can harm brain development and affect future tobacco use and smoking-related harms.^{20, 24, 25} Even a brief period of continuous or intermittent nicotine exposure in adolescence elicits lasting neurobehavioral damage.²⁶

Exposure to Secondhand Aerosol

While e-cigarettes pollute the air less than traditional cigarettes, contrary to popular belief, e-cigarettes do not emit a harmless water vapor, but a concoction of chemicals toxic to human cells in the form of an aerosol. Vapors are purely gases, whereas aerosols also contain particulate matter.⁵



Although several studies have found lower levels of carcinogens in e-cigarette aerosol compared to smoke emitted by traditional cigarettes, the mainstream and secondhand e-cigarette aerosol has been found to contain at least ten chemicals that are on California's list of chemicals known to cause cancer, birth defects, or other reproductive harm, including acetaldehyde, benzene, cadmium, formaldehyde, isoprene, lead, nickel, nicotine, N nitrosornicotine, and toluene.^{1-3, 27} There is also evidence that e-cigarette aerosol

contains propylene glycol and higher levels of other toxicants including heavy metals (tin, nickel) and silicate nanoparticles than are present in traditional cigarettes.³

Overall, research confirms that e-cigarettes are not emission-free and their pollutants could be of health concern for both users and those exposed to the secondhand aerosol. Although it may not be as dangerous as secondhand smoke from cigarettes, people passively exposed to e-cigarette aerosol absorb nicotine at levels comparable to passive smokers.²⁸ They are also exposed to volatile organic compounds (VOCs) and fine/ultrafine particles.²⁷ These ultrafine particles can travel deep into the lungs and lead to tissue inflammation.²³

Harm Reduction Claims and Myths about Cessation

Despite numerous claims, the effectiveness of e-cigarettes as cessation aids has not been proven. Unlike the U.S. Food and Drug Administration (FDA)-approved nicotine replacement therapies, e-cigarettes are not FDA-approved cessation aids. There is no scientific evidence that e-cigarettes help smokers successfully quit traditional cigarettes or that they reduce their consumption.^{9, 29}

A number of recent studies have shown that e-cigarette users are no more likely to quit than regular smokers, with one study finding that 89 percent of e-cigarette users are still using them one year later.³⁰ Another study found that e-cigarette users are a third less likely to quit cigarettes, suggesting that e-cigarettes inhibit people from successfully kicking their nicotine addiction.^{31, 32}



89%
of e-cigarette
users are still
using them
one year later

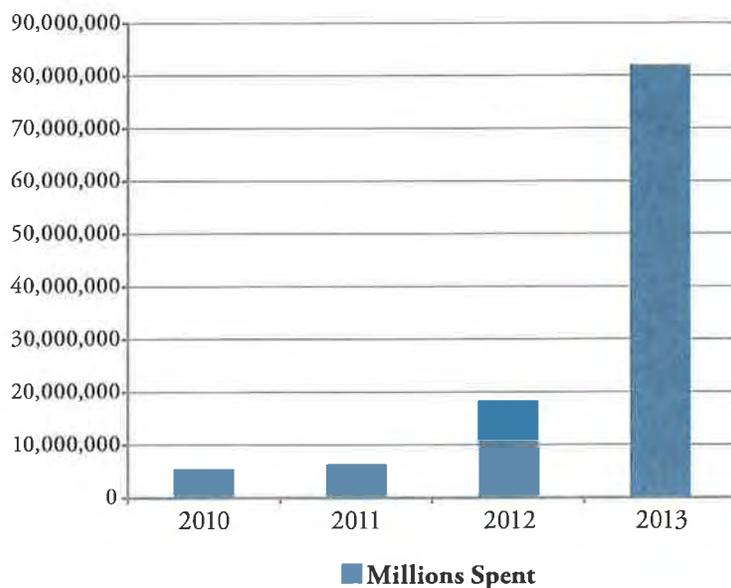
In addition, dual use of cigarettes and e-cigarettes is continuing to rise, which may diminish any potential benefits of cutting back on traditional cigarettes.³³ Continuing to smoke traditional cigarettes, while also using e-cigarettes, does not reduce cardiovascular health risks.^{1, 34, 35}

Unrestricted Marketing

In just three years, the amount of money spent on advertising e-cigarettes increased more than 1,200 percent or 12-fold (Figure 2).^{36, 37} E-cigarette ads are found in all forms of media, including TV and radio where cigarette ads were banned more than 40 years ago.

Figure 2

Estimated E-Cigarette Advertising, U.S.



Sources:

2010 and 2013 estimates from: Kantar Media Intelligence e-cigarette competitive spend data as reported in Legacy, 'Vaporized: E-Cigarettes, Advertising, and Youth', (2014).

2011 and 2012 estimates from: A. E. Kim, K. Y. Arnold, and O. Makarenko, 'E-Cigarette Advertising Expenditures in the U.S., 2011-2012', *Am J Prev Med*, 46 (2014), 409-12.

(Facebook, Instagram, YouTube and Twitter), which are heavily used by youth and young adults, and sponsoring sports, music, and cultural events in California where free samples may also be provided.³⁷

Most of the e-cigarette marketing tactics were previously used by tobacco companies to market traditional cigarettes to kids, such as featuring celebrities.³⁹ Advertising appeals include rebelliousness, sexual appeal, glamour, trendy and fun—all of which strongly resonate with youth who have a desire to be cool and fit in. Cartoon characters, which are also prohibited in traditional cigarette advertising for their youth appeal, are used by some brands and there are numerous youth oriented designs for e-cigarette products, including “Hello Kitty.”

Many TV networks with a substantial proportion of youth viewers, are airing e-cigarette TV advertising. E-cigarette ads have appeared on highly viewed broadcasts, including the 2013 and 2014 Super Bowls, which had more than 110 million viewers.^{38, 37}

In addition to TV, e-cigarette ads are on the radio, magazines, newspapers, online, and in retail stores. In Style, Us Weekly, Star, Entertainment Weekly and Rolling Stone are some of the tabloids and magazines with e-cigarette ads reaching millions of youth and young adults.^{38, 39} Manufacturers are also promoting their products on social media sites



Give the gift of change to that special smoker in your life looking to make the switch from tobacco. It's our 'Elf on the Inventory Shelf' sale, brought to you by Elf! Check out our website to order: <http://bit.ly/Qsb1sy>



Tobacco companies have historically enlisted convenience stores, the type of store most frequented by youth, as their most important partners in marketing tobacco products and opposing policies that reduce tobacco use.⁴³ More than 60 percent of convenience stores sold e-cigarettes in 2013, with almost one third selling e-cigarettes near candy, ice cream, or slushie/soda machines. Drug stores and pharmacies (other than CVS Pharmacy which will no longer sell tobacco as of October 2014), which people visit to improve their health, are also selling e-cigarettes at a rate higher than the state average (56 percent vs. 44 percent), with 88 percent of those stores placing e-cigarettes visibly in the main check-out area.⁴¹

Figure 3



Local Efforts

While the FDA has proposed a rule that would provide limited regulation of e-cigarettes, the FDA does not have the authority to regulate “where” e-cigarettes may be used. Thus, the responsibility lies with states and local governments to implement restrictions that protect youth, workers, and the public from exposure to e-cigarette aerosol emissions.

Given that much of e-cigarette marketing focuses on the users’ ability to circumvent smoke-free laws and “smoke anywhere,” local communities play a critical role in protecting nonsmokers and youth from the secondhand exposure to the e-cigarette aerosol.

Many California cities and counties are taking steps to treat e-cigarettes the same as cigarettes and other tobacco products. To date, more than one hundred cities and counties in California have passed policies regulating the use of e-cigarettes in their jurisdictions, some requiring retailers to obtain a license to sell e-cigarettes, while others prohibit the use of e-cigarettes in indoor and/or outdoor areas, including in multi-unit housing complexes.⁴⁴



Los Angeles E-Cigarette Ban Takes Effect

After months of heated debate, the ban on the controversial use of e-cigarettes became official. By Irene Moore, Hedy Chang, and Kate Larsen.

Summary of FDA Proposed Regulation

In 2011 the U.S. Court of Appeals determined that e-cigarettes may not be regulated by the FDA as a drug or medical device, but may be regulated as a tobacco product under the Family Smoking Prevention and Tobacco Control Act of 2009.⁴⁵ As described below, on April 24, 2014, the FDA released its proposed deeming rule to regulate the sale and distribution of e-cigarettes.⁴⁶ The proposed rule is limited in scope and may take several years to be finalized and even longer to be implemented. As written now, the proposed rule would:

- Prohibit the sales of e-cigarettes to anyone under the age of 18 nationally
- Restrict vending machines to adult-only facilities
- Prohibit free samples
- Require a nicotine health warning statement on packaging and in advertisements
- Require all manufacturers to register their e-cigarette product with the FDA
- Require ingredients to be disclosed
- Allow the FDA to review any new or changed products before being sold
- Require manufacturers to show scientific evidence to support a claim that an e-cigarette product is less harmful and demonstrate the overall public health benefit



E-cigarette samples provided at an event.



 **blu cigs** shared Neon Desert Music Festival's photo.
May 23

We'll be at Neon Desert Music Festival all weekend! Stop by our tent to say hi and get free samples! #NeonDesert #NDMF2014

NDMF'ers! Take back your freedom at the blu cigs tent with free samples from the most electric #eCig company in the biz. #bluFreedom #bluNation #NeonDesert #NDMF2014. Restricted to adults +18, ID required upon entry. NOT FOR SALE TO MINORS.



E-cigarette sponsorship of events and samples.

Public Education Campaign on E-Cigarettes

As the State of California Health Officer, and in the face of public health and safety concerns, aggressive e-cigarette marketing, and increasing number of e-cigarette users, I am announcing the intentions of CDPH to launch an educational campaign to inform the public about the dangers of e-cigarettes. The campaign will include:

- **Partnering with the public health, medical, and child care communities:** CDPH will disseminate information to the public health, medical, and child care communities to increase awareness about the known toxicity of e-cigarettes and the high risk of poisonings, especially to children. We will continue to promote and support the use of proven effective cessation therapies.
- **The launch of a media and public education campaign:** California was the first state in the nation to comprehensively address smoking in 1990, including a bold public education campaign. We must do the same today to address the proliferation of e-cigarette marketing and products.
- **Joining with the California Department of Education (CDE) and school officials:** The Department will work with CDE and school officials to assist in providing accurate information to parents, school administrators, and students on the dangers of e-cigarettes.

**IT'S NOT JUST
"HARMLESS WATER VAPOR"**

**E-cigarette aerosol contains
at least 10 chemicals on
California's Prop 65 list of
chemicals known to cause
cancer, birth defects or other
reproductive harm.**

TOLUENE
ACETALDEHYDE
CADMIUM BENZENENE
FORMALDEHYDE
ISOPRENE
LEAD NICKEL
NICOTINE
N-NITROSONORNICOTINE

©2014 CALIFORNIA DEPARTMENT OF PUBLIC HEALTH

Conclusion

The facts outlined in this report indicate a high need to educate the public regarding safety concerns associated with e-cigarettes. These devices pose a poisoning hazard, particularly for children, but also for adults who may confuse e-liquid bottles with other products. The nicotine in e-cigarettes has lasting health implications to the brain development of teens and young adults, and there are indications that chemicals in e-liquids may pose a respiratory hazard to users and to those exposed to the aerosol emitted from these devices. Furthermore, there are worker safety and biohazard concerns regarding the conditions under which e-liquids are mixed and how materials are disposed. Increasingly, there are reports from schools and law enforcement agencies about the use of these e-cigarettes for other illicit substances.

The adverse health effects of e-cigarettes and their by-products make it clear that these products should be strictly regulated. Restrictions on marketing to youth and access by youth, protections to prevent poisonings—particularly among children—and education of the public on the dangers of e-cigarettes are important measures to take to address this growing public health threat.

References

1. Grana, R., N. Benowitz, and S. Glantz, *Background Paper on E-cigarettes*. Center for Tobacco Control Research and Education, University of California, San Francisco and WHO Collaborating Center on Tobacco Control, 2013.
2. Goniewicz, M.L., et al., *Levels of selected carcinogens and toxicants in vapour from electronic cigarettes*. *Tob Control*, 2014. **23**(2): p. 133-9.
3. Williams, M., et al., *Metal and silicate particles including nanoparticles are present in electronic cigarette cartomizer fluid and aerosol*. *PLoS One*, 2013. **8**(3): p. e57987.
4. California Office of Environmental Health Hazard Assessment, *Safe Drinking Water and Toxic Enforcement Act of 1986*. Current Proposition 65 List [Online].
5. Fuoco, F.C., et al., *Influential parameters on particle concentration and size distribution in the mainstream of e-cigarettes*. *Environ Pollut*, 2014. **184**: p. 523-9.
6. Cobb, N.K. and D.B. Abrams, *E-cigarette or drug-delivery device? Regulating novel nicotine products*. *N Engl J Med*, 2011. **365**(3): p. 193-5.
7. Cantrell, F.L., *Adverse Effects of e-Cigarette Exposures*. *J Community Health*, 2014. **39**(3): p. 614-6.
8. Chatham-Stephens, K., et al., *Notes from the field: calls to poison centers for exposures to electronic cigarettes - United States, september 2010-february 2014*. *MMWR Morbidity and mortality weekly report*, 2014. **63**(13): p. 292-3.
9. Dutra, L.M. and S.A. Glantz, *Electronic Cigarettes and Conventional Cigarette Use Among US Adolescents: A Cross-sectional Study*. *JAMA Pediatr*, 2014.
10. Miech, R.A., Johnston, L. D., O'Malley, P. M., Bachman, J. G., & Schulenberg, J. E., *E-cigarettes surpass tobacco cigarettes among teens*, in *National press release*. 2014, University of Michigan News Service: Ann Arbor.
11. Centers for Disease Control and Prevention, *Tobacco Use Among Middle and High School Students — United States, 2013*. *MMWR. Morbidity and mortality weekly report*, 2014. **63**(45): p. 1021-1026.
12. Bunnell, R.E., et al., *Intentions to smoke cigarettes among never-smoking U.S. middle and high school electronic cigarette users, National Youth Tobacco Survey, 2011-2013*. *Nicotine & Tobacco Research*, 2014.
13. California Department of Education, *Preliminary findings from the California Healthy Kids Survey (CHKS)*. 2013-2014.
14. Wills, T.A., et al., *Risk Factors for Exclusive E-Cigarette Use and Dual E-Cigarette Use and Tobacco Use in Adolescents*. *Pediatrics*, 2015. **135**(1): p. e43-e51.
15. Minnesota Department of Health, *2014 Minnesota Youth Tobacco Survey*. 2014.
16. King, B.A., et al., *Awareness and ever-use of electronic cigarettes among U.S. adults, 2010-2011*. *Nicotine Tob Res*, 2013. **15**(9): p. 1623-7.
17. California Tobacco Control Program. California Department of Public Health, *Behavioral Risk Factor Surveillance System (BRFSS) 2012-2013*. 2014.
18. C Everett Koop, M., *Health Consequences of Smoking: Nicotine Addiction a Report of the Surgeon General 1988*. 1988: DIANE Publishing.
19. US Department of Health Human Services, *How tobacco smoke causes disease: the biology and behavioral basis for smoking-attributable disease: a report of the Surgeon General*. Atlanta, GA: US Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2010. **2**.

20. US Department of Health Human Services, *The health consequences of smoking—50 years of progress: A report of the Surgeon General*, in Atlanta, GA: US Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health. 2014.
21. Koren, G., *Fetal toxicology of environmental tobacco smoke*. *Curr Opin Pediatr*, 1995. 7(2): p. 128-31.
22. Luck, W. and H. Nau, *Nicotine and cotinine concentrations in serum and milk of nursing smokers*. *Br J Clin Pharmacol*, 1984. 18(1): p. 9-15.
23. Schober, W., et al., *Use of electronic cigarettes (e-cigarettes) impairs indoor air quality and increases FeNO levels of e-cigarette consumers*. *Int J Hyg Environ Health*, 2013.
24. Centers for Disease Control and Prevention, *Incidence of initiation of cigarette smoking--United States, 1965-1996*. *MMWR. Morbidity and mortality weekly report*, 1998. 47(39): p. 837.
25. US Department of Health Human Services, *Preventing tobacco use among youth and young adults: A report of the Surgeon General*. Atlanta, GA: US Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2012. 3.
26. Abreu-Villaca, Y., et al., *Nicotine is a neurotoxin in the adolescent brain: critical periods, patterns of exposure, regional selectivity, and dose thresholds for macromolecular alterations*. *Brain Research*, 2003. 979(1-2): p. 114-28.
27. Schripp, T., et al., *Does e-cigarette consumption cause passive vaping?* *Indoor Air*, 2012. 23(1): p. 25-31.
28. Flouris, A.D., et al., *Acute impact of active and passive electronic cigarette smoking on serum cotinine and lung function*. *Inhal Toxicol*, 2013. 25(2): p. 91-101.
29. World Health Organization, *Marketers of Electronic Cigarettes Should Halt Unproven Therapy Claims*. September 19, 2008.
30. Etter, J.F. and C. Bullen, *A longitudinal study of electronic cigarette users*. *Addict Behav*, 2014. 39(2): p. 491-4.
31. Vickerman, K.A., et al., *Use of electronic cigarettes among state tobacco cessation quitline callers*. *Nicotine Tob Res*, 2013. 15(10): p. 1787-91.
32. Gardiner, P. *E-cigarettes: The vapor this time*. in *141st APHA Annual Meeting and Exposition (November 2-November 6, 2013)*. 2013. APHA.
33. Adkison, S.E., et al., *Electronic nicotine delivery systems: international tobacco control four-country survey*. *Am J Prev Med*, 2013. 44(3): p. 207-15.
34. Pope, C.A., 3rd, et al., *Cardiovascular mortality and exposure to airborne fine particulate matter and cigarette smoke: shape of the exposure-response relationship*. *Circulation*, 2009. 120(11): p. 941-8.
35. Barnoya, J. and S.A. Glantz, *Cardiovascular effects of secondhand smoke: nearly as large as smoking*. *Circulation*, 2005. 111(20): p. 2684-98.
36. Kim, A.E., K.Y. Arnold, and O. Makarenko, *E-cigarette Advertising Expenditures in the U.S., 2011-2012*. *Am J Prev Med*, 2014. 46(4): p. 409-12.
37. A report written by the staff of Senator Richard J. Durbin (D-IL), Representative Henry Waxman (D-CA), Senators Tom Harkin (D-IA), John D. Rockefeller IV (D-WV), Richard Blumenthal (D-CT), Edward J. Markey (D-MA), Sherrod Brown (D-OH), Jack Reed (D-RI), Barbara Boxer (D-CA), Jeff Merkley (D-OR), and Representative Frank Pallone (D-NJ), *Gateway to Addiction?: A Survey of Popular Electronic Cigarette Manufacturers and Targeted Marketing to Youth*. 2014.
38. Legacy, *Vaporized: E-cigarettes, Advertising, and Youth*. 2014.
39. Campaign for Tobacco Free Kids, Fact Sheet: "7 Ways E-Cigarette Companies Are Copying Big Tobacco's Playbook". 2013.
40. *Philip Morris to Sell Real Tobacco 'HeatSticks' As Cigarette Alternative*. TIME, 2014.

41. California Tobacco Control Program. California Department of Public Health. *Health Stores for a Health Community*. 2013; Available from: <http://www.healthystoreshealthycommunity.com/>.
42. California Tobacco Control Program. California Department of Public Health, *Final report for the California Tobacco Advertising Survey (2011)*. 2013.
43. Campaign for Tobacco-Free Kids, *Deadly Alliance. How Big Tobacco and Convenience Stores Partner to Market Tobacco Products and Fight Life-Saving Policies*. 2012.
44. American Lung Association in California. The Center for Tobacco Policy & Organizing. 2014; Available from: <http://center4tobaccopolicy.org/tobacco-policy/electronic-cigarettes/>.
45. Deyton, L. and J. Woodcock, *Regulation of e-cigarettes and other tobacco products, letter to stakeholders*. 2011.
46. Food and Drug Administration, *Deeming Tobacco Products To Be Subject to the Federal Food, Drug, and Cosmetic Act*. 2014.

the 1990s, the number of people with a mental health problem has increased in the UK (Mental Health Act 1983, 1990).

There is a growing awareness of the need to improve the lives of people with mental health problems. The Department of Health (1999) has set out a strategy for mental health care in the UK. The strategy is based on the following principles:

- People with mental health problems should be treated as individuals and not as a group.
- People with mental health problems should be given the opportunity to participate in decisions about their care.
- People with mental health problems should be given the opportunity to live in their own homes and communities.

The strategy also states that people with mental health problems should be given the opportunity to live a full and active life.

The strategy is based on the following principles: people with mental health problems should be treated as individuals and not as a group; people with mental health problems should be given the opportunity to participate in decisions about their care; people with mental health problems should be given the opportunity to live in their own homes and communities; and people with mental health problems should be given the opportunity to live a full and active life.

The strategy also states that people with mental health problems should be given the opportunity to live a full and active life.

The strategy is based on the following principles: people with mental health problems should be treated as individuals and not as a group; people with mental health problems should be given the opportunity to participate in decisions about their care; people with mental health problems should be given the opportunity to live in their own homes and communities; and people with mental health problems should be given the opportunity to live a full and active life.

The strategy also states that people with mental health problems should be given the opportunity to live a full and active life.

The strategy is based on the following principles: people with mental health problems should be treated as individuals and not as a group; people with mental health problems should be given the opportunity to participate in decisions about their care; people with mental health problems should be given the opportunity to live in their own homes and communities; and people with mental health problems should be given the opportunity to live a full and active life.

The strategy also states that people with mental health problems should be given the opportunity to live a full and active life.

The strategy is based on the following principles: people with mental health problems should be treated as individuals and not as a group; people with mental health problems should be given the opportunity to participate in decisions about their care; people with mental health problems should be given the opportunity to live in their own homes and communities; and people with mental health problems should be given the opportunity to live a full and active life.

The strategy also states that people with mental health problems should be given the opportunity to live a full and active life.

The strategy is based on the following principles: people with mental health problems should be treated as individuals and not as a group; people with mental health problems should be given the opportunity to participate in decisions about their care; people with mental health problems should be given the opportunity to live in their own homes and communities; and people with mental health problems should be given the opportunity to live a full and active life.

The strategy also states that people with mental health problems should be given the opportunity to live a full and active life.

The strategy is based on the following principles: people with mental health problems should be treated as individuals and not as a group; people with mental health problems should be given the opportunity to participate in decisions about their care; people with mental health problems should be given the opportunity to live in their own homes and communities; and people with mental health problems should be given the opportunity to live a full and active life.

The strategy also states that people with mental health problems should be given the opportunity to live a full and active life.



HEALTH ADVISORY – January 28, 2015

Electronic Cigarettes: A Summary of the Public Health Risks and Recommendations for Health Care Professionals

This health advisory seeks to inform health care professionals of the public health risks posed by the marketing, sale and use of electronic cigarettes (e-cigarettes) especially to children and young people. Electronic cigarettes (e-cigarettes) are battery-operated devices, often designed to resemble a cigarette, that deliver and emit a nicotine-containing aerosol. E-cigarettes are considered electronic nicotine delivery devices (ENDS) and have many names. They are frequently referred to as e-cigs, e-hookahs, hookah pens, vapes, vape pens, vape pipes, or mods. There are disposable and rechargeable e-cigarettes as well as refillable “tank systems” that hold a larger volume of the e-cigarette liquid (e-liquid) and that heat the e-liquid to higher temperatures.¹

Toxicity of E-cigarettes and Exposure to Emissions

The heated e-liquid forms an aerosol that contains high concentrations of ultrafine particles that are inhaled and become trapped in the lungs.² Chemicals in the aerosol are absorbed through the blood stream and delivered directly to the brain and all body organs. Analyses of e-liquids by the Food and Drug Administration (FDA) and other laboratories found variability in the content of e-liquids and inaccurate product labeling related to nicotine content and chemicals.³

Typically, e-liquids contain nicotine, flavoring agents, propylene glycol and toxic chemicals known to cause cancer, birth defects and other reproductive harm.^{1, 4-7} While several studies found lower levels of carcinogens in the e-cigarette aerosol compared to smoke emitted by traditional cigarettes, both the mainstream and secondhand e-cigarette aerosol have been found to contain at least ten chemicals that are on California’s Proposition 65 list of chemicals known to cause cancer, birth defects or other reproductive harm, including acetaldehyde, benzene, cadmium, formaldehyde, isoprene, lead, nickel, nicotine, n-nitrosornicotine, and toluene.^{1, 5-7}

E-cigarette emissions are also a health concern for those exposed to the secondhand aerosol. Although not as dangerous as secondhand smoke from combustible tobacco products, people exposed to e-cigarette aerosol absorb nicotine at levels comparable to people exposed to secondhand smoke.⁸ E-cigarette emissions also contain volatile organic compounds (VOCs) and fine/ultrafine particles.⁶ These ultrafine particles can travel deep into the lungs where they get trapped and may lead to tissue inflammation.⁹

Health Effects of Nicotine

Nicotine, the primary psychoactive ingredient in e-liquid, stimulates pleasure/reward pathways in the brain. It is a highly addictive neurotoxin that is as addictive as heroin and cocaine.^{10,11} It affects the cardiovascular and central nervous systems, causing blood vessels to constrict, raising the pulse and blood pressure.¹² Nicotine adversely affects maternal and fetal health during pregnancy, contributing to low birth weight, preterm delivery and stillbirth.¹³ Nicotine is also known to cross the placenta and is detectable in the breast milk of smoking mothers as well as mothers exposed to secondhand smoke.^{14,15} Preliminary studies show that using a nicotine-containing e-cigarette for just five minutes causes similar lung irritation, inflammation and effect on blood vessels as smoking a traditional cigarette, which may increase the risk of a heart attack.^{1,9}

Exposure to and use of nicotine products by adolescents is of particular concern because adolescence is a critical period for brain growth and development. As a consequence, adolescents are especially vulnerable to the toxic effects of nicotine. Exposure to nicotine during adolescence may harm brain development and predispose future tobacco use.^{13,16,17} Even a brief period of continuous or intermittent nicotine exposure in adolescence elicits lasting neurobehavioral damage.¹⁸

Nicotine Poisonings

E-liquids are available in flavors such as bubble gum, cherry and chocolate, which makes them appealing to children and youth. E-cigarette cartridges and e-liquid bottles are not equipped with child resistant caps and often leak, creating a potential source of poisoning through ingestion and skin or eye contact. Even a small amount of e-liquid ingested by a small child can be lethal.¹⁹

There has been a significant rise in the number of calls to poison control centers for both adults and children who were accidentally exposed to e-liquids.²⁰ Nationally, the number of calls rose from one per month in September 2010 to 215 per month in February 2014.²¹ Figure 1 depicts e-cigarette-related calls to the California Poison Control Center over a five year period. In California, from 2012 to 2014, the number of calls to the poison control center

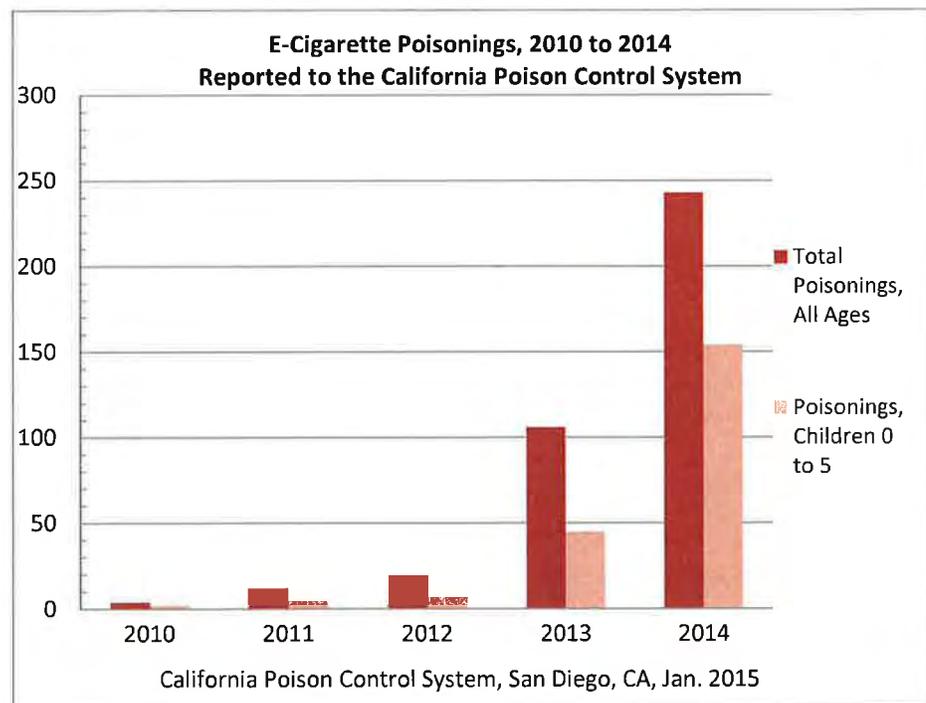


Figure 1: E-cigarette-related calls to the California Poison Control System.

involving e-cigarette exposures in children five and under increased sharply from 7 to 154. By the end of 2014, e-cigarette poisonings to young children tripled in one year, making up more than 60% of all e-cigarette poisoning calls. Adults have also mistakenly used e-liquid in harmful ways, such as eye drops, and have been harmed by exploding cartridges.

E-cigarette Use and Youth

Recent national and preliminary California data show that youth are experimenting with e-cigarettes at an alarming rate. In 2014, the Monitoring the Future survey, which tracks substance abuse trends among over 40,000 youth nationally, found that the use of e-cigarettes among teens surpassed the use of traditional cigarettes. More than twice as many 8th and 10th graders reported using e-cigarettes than traditional cigarettes in the survey, and among 12th graders, 17 percent reported currently using e-cigarettes vs. 14 percent using traditional cigarettes.²² Another survey, the National Youth Tobacco Survey, found that in 2013, that e-cigarette use among high school students tripled between 2011 and 2013, increasing from 1.5 percent to 4.5 percent.²³ Over a quarter million students who reported using e-cigarettes had never used traditional cigarettes.²⁴ Overall, studies suggest that youth who may have otherwise never smoked cigarettes are now getting hooked on nicotine due to e-cigarettes, and that adolescents who use e-cigarettes are more likely to progress from experimenting with cigarettes to becoming established smokers.^{25, 26}

E-cigarette devices may also be used to inhale illegal substances, such as marijuana and hash oil.¹⁹ Because many of these devices are similar in appearance to a ball point pen, school and law enforcement personnel are unaware that inappropriate use of nicotine and illegal substances is occurring.

E-cigarette Use and Adults

Among California adults, use of e-cigarettes in the past 30 days doubled from 1.8 percent in 2012 to 3.5 percent in 2013. For younger adults (18 to 29 year old), e-cigarette use tripled in one year from 2.3 percent to 7.6 percent. Young adults are three times more likely to use e-cigarettes than those 30 and older. Nearly 20 percent of young adult e-cigarettes users have never smoked traditional cigarettes.²⁷

E-cigarette Availability

E-cigarettes are readily accessible throughout California, and the number of stores selling e-cigarettes quadrupled between 2011 and 2013, increasing from 12 percent to 46 percent.^{28, 29} Figure 2 depicts the percent of tobacco stores selling e-cigarettes in California counties.

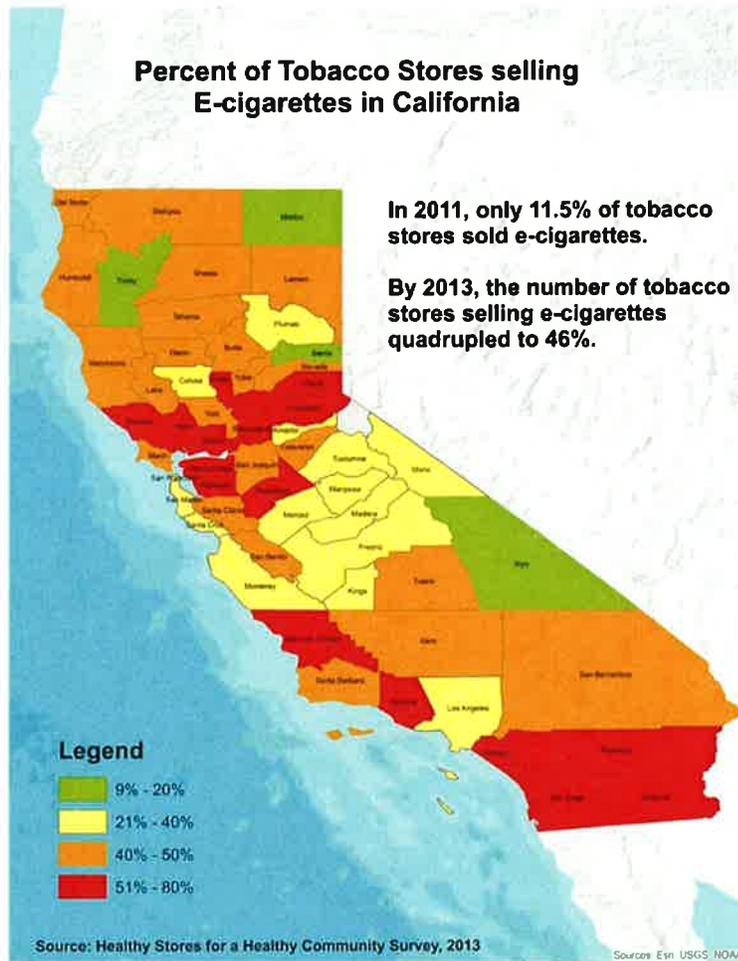


Figure 2: Percent of tobacco stores selling e-cigarettes in CA.

E-cigarette Marketing

Over the past 40 years, great strides have been made to protect youth from tobacco marketing. Numerous state and federal laws and litigation regulate the sale, marketing and distribution of traditional tobacco products and tobacco-related paraphernalia. These restrictions include: prohibiting tobacco advertising on television, radio and billboards; prohibiting youth-oriented tobacco products marketing, including a ban on the sale of flavored cigarettes and the use of cartoon characters; prohibiting free sampling of cigarettes and restrictions on sampling of other tobacco products; restrictions on brand name sponsorship of sporting, music, and cultural events; restrictions on giving away branded promotional items such as t-shirts.³⁰ Presently in California, these restrictions are not interpreted to apply to e-cigarettes. As a result, the e-cigarette industry is legally allowed to use marketing strategies and tactics that are no longer permissible for traditional tobacco products.

Many television networks (e.g., ABC Family, USA, Bravo, E!, MTV, VH1 and Comedy Central) with a substantial proportion of youth viewers, are airing e-cigarette advertising. There is also e-cigarette advertising on radio, internet, billboards, in magazine and print publications, and in stores.³¹ E-liquid containing nicotine is frequently marketed as “e-juice” and is sold in fruit and candy flavors. Promoting and labeling nicotine containing products as “juice” may mislead consumers to believe that e-liquid is safe to ingest and that e-cigarettes pose no health risk.



The use of cartoon characters in advertising and promoting of e-cigarettes as fashion accessories are other ways these products appeal to youth with the implication that these products are harmless (see Figure 3). E-cigarette manufacturers report sponsoring concerts, sporting events, and parties that include the distribution of free samples; many of these events occurred in California.³² Another tactic to create a perception that e-cigarettes are family friendly is through the association of these products with family oriented attractions.



Figure 3: E-cigarette products and accessories.

Cessation Claims

There is no scientific evidence that e-cigarettes help smokers to successfully quit traditional cigarettes or that they reduce consumption of traditional cigarettes.^{25, 33} A number of recent studies show that e-cigarette users are no more likely to quit than regular smokers. One study found that 89 percent of e-cigarette users are still using them one year later and another study found that e-cigarette users are a third less likely to quit cigarettes.^{34, 35} These studies suggest that e-cigarettes are effectively inhibiting people from successfully kicking their nicotine addiction. In addition, dual use of cigarettes and e-cigarettes is continuing to rise, which may diminish any potential benefits of cutting back on traditional cigarettes.³⁶ Continuing to smoke traditional cigarettes, while also using e-cigarettes, does not reduce the cardiovascular health risks.^{1, 37, 38}

California health care providers are recommended to:

Educate, Advise and Protect Unborn Children, Young Children and Adolescents.

- Educate parents, adolescents, and the public, as well as health care personnel, school personnel, child care providers, and community leaders, about these products:
 - Nicotine is contained and is highly addictive and toxic
 - Increases in e-cigarette related poisonings, especially to children.
- Advise that these products are especially harmful to adolescents and pregnant women.
- Advise and warn e-cigarette users about toxicity of these products to themselves and those subjected to secondhand emissions.

Educate About Clean Indoor Air.

- Educate parents and the public to take steps to protect children and themselves from exposure to e-cigarette emissions.

Encourage Cessation.

- Current smokers and e-cigarette users should be advised to quit and offered support.
- Refer users to cessation resources offered by their health insurance plan including access to FDA approved cessation medications.
- The California Smokers' Helpline at 1-800-NO BUTTS is another cessation resource.

Protect Children from Nicotine Poisoning.

- Inform parents and e-cigarette users that e-cigarette cartridges and e-liquid bottles are a potential source of poisoning through ingestion, skin or eye contact. Store these materials out of the reach of children, away from medications, and call the California Poison Control Center at 1-800-222-1221 for expert help in case of accidental exposure.

Promote Health Literacy: Educate about Misleading Marketing.

- Educate parents and e-cigarette users about misleading advertising and labeling.
- Educate adolescents, parents and others about unknown ingredients and rights as consumers to have ingredient disclosure readily accessible.

References

1. Grana, R., N. Benowitz, and S. Glantz, *Background Paper on E-cigarettes*. Center for Tobacco Control Research and Education, University of California, San Francisco and WHO Collaborating Center on Tobacco Control, 2013.
2. Fuoco, F.C., et al., *Influential parameters on particle concentration and size distribution in the mainstream of e-cigarettes*. *Environ Pollut*, 2014. **184**: p. 523-9.
3. Food and Drug Administration, *FDA and public health experts warn about electronic cigarettes*. 2009.
4. California Office of Environmental Health Hazard Assessment, *Safe Drinking Water and Toxic Enforcement Act of 1986*. Current Proposition 65 List [Online].
5. Goniewicz, M.L., et al., *Levels of selected carcinogens and toxicants in vapour from electronic cigarettes*. *Tob Control*, 2014. **23**(2): p. 133-9.
6. Schripp, T., et al., *Does e-cigarette consumption cause passive vaping?* *Indoor Air*, 2012. **23**(1): p. 25-31.
7. Williams, M., et al., *Metal and silicate particles including nanoparticles are present in electronic cigarette cartomizer fluid and aerosol*. *PLoS One*, 2013. **8**(3): p. e57987.
8. Flouris, A.D., et al., *Acute impact of active and passive electronic cigarette smoking on serum cotinine and lung function*. *Inhal Toxicol*, 2013. **25**(2): p. 91-101.
9. Schober, W., et al., *Use of electronic cigarettes (e-cigarettes) impairs indoor air quality and increases FeNO levels of e-cigarette consumers*. *Int J Hyg Environ Health*, 2013.
10. C Everett Koop, M., *Health Consequences of Smoking: Nicotine Addiction a Report of the Surgeon General 1988*. 1988: DIANE Publishing.
11. *Diagnosis Dictionary - Nicotine*. Available online at <http://www.psychologytoday.com/conditions/nicotine>. Psychology Today.
12. US Department of Health Human Services, *How tobacco smoke causes disease: the biology and behavioral basis for smoking-attributable disease: a report of the Surgeon General*. Atlanta, GA: US Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2010. **2**.
13. US Department of Health Human Services, *The health consequences of smoking—50 years of progress: A report of the Surgeon General*, in Atlanta, GA: US Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health. 2014.
14. Koren, G., *Fetal toxicology of environmental tobacco smoke*. *Curr Opin Pediatr*, 1995. **7**(2): p. 128-31.
15. Luck, W. and H. Nau, *Nicotine and cotinine concentrations in serum and milk of nursing smokers*. *Br J Clin Pharmacol*, 1984. **18**(1): p. 9-15.
16. Centers for Disease Control and Prevention, *Incidence of initiation of cigarette smoking--United States, 1965-1996*. *MMWR. Morbidity and mortality weekly report*, 1998. **47**(39): p. 837.
17. US Department of Health Human Services, *Preventing tobacco use among youth and young adults: A report of the Surgeon General*. Atlanta, GA: US Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2012. **3**.
18. Abreu-Villaca Y., S.J., Tate C.A., Slotkin T.A., *Nicotine is a neurotoxin in the adolescent brain: critical periods, patterns of exposure, regional selectivity, and dose thresholds for macromolecular alterations*. *Brain Research*, 2003. **979**: p. 114-128.
19. Cobb, N.K. and D.B. Abrams, *E-cigarette or drug-delivery device? Regulating novel nicotine products*. *N Engl J Med*, 2011. **365**(3): p. 193-5.
20. Cantrell, F.L., *Adverse Effects of e-Cigarette Exposures*. *J Community Health*, 2014. **39**(3): p. 614-6.
21. Chatham-Stephens, K., et al., *Notes from the field: calls to poison centers for exposures to electronic cigarettes - United States, september 2010-february 2014*. *MMWR Morbidity and mortality weekly report*, 2014. **63**(13): p. 292-3.
22. Miech, R.A., Johnston, L. D., O'Malley, P. M., Bachman, J. G., & Schulenberg, J. E., *E-cigarettes surpass tobacco cigarettes among teens.*, in *National press release*. 2014, University of Michigan News Service: Ann Arbor.
23. Centers for Disease Control and Prevention, *Tobacco Use Among Middle and High School Students — United States, 2013*. *MMWR. Morbidity and mortality weekly report*, 2014. **63**(45): p. 1021-1026.
24. Bunnell, R.E., et al., *Intentions to smoke cigarettes among never-smoking U.S. middle and high school electronic cigarette users, National Youth Tobacco Survey, 2011-2013*. *Nicotine & Tobacco Research*, 2014.
25. Dutra, L.M. and S.A. Glantz, *Electronic Cigarettes and Conventional Cigarette Use Among US Adolescents: A Cross-sectional Study*. *JAMA Pediatr*, 2014.
26. Lee, S., R.A. Grana, and S.A. Glantz, *Electronic Cigarette Use Among Korean Adolescents: A Cross-Sectional Study of Market Penetration, Dual Use, and Relationship to Quit Attempts and Former Smoking*. *J Adolesc Health*, 2013.
27. California Tobacco Control Program. California Department of Public Health, *Behavioral Risk Factor Surveillance System (BRFSS) 2012-2013*. 2014.
28. California Tobacco Control Program. California Department of Public Health, *Final report for the California Tobacco Advertising Survey (2011)*. 2013.
29. California Tobacco Control Program. California Department of Public Health. *Health Stores for a Health Community*. 2013; Available from: <http://www.healthystoreshealthycommunity.com/>.
30. ChangeLab Solutions, *Tobacco Laws Affecting California*. 2014.
31. Legacy, *Vaporized: E-cigarettes, Advertising, and Youth*. 2014.
32. A report written by the staff of Senator Richard J. Durbin (D-IL), Representative Henry Waxman (D-CA), Senators Tom Harkin (D-IA), John D. Rockefeller IV (D-WV), Richard Blumenthal (D-CT), Edward J. Markey (D-MA), Sherrod Brown (D-OH), Jack Reed (D-RI), Barbara Boxer (D-CA), Jeff Merkley (D-OR), and Representative Frank Pallone (D-NJ), *Gateway to Addiction?: A Survey of Popular Electronic Cigarette Manufacturers and Targeted Marketing to Youth*. 2014.
33. World Health Organization, *Marketers of Electronic Cigarettes Should Halt Unproven Therapy Claims*. September 19, 2008.
34. Etter, J.F. and C. Bullen, *A longitudinal study of electronic cigarette users*. *Addict Behav*, 2014. **39**(2): p. 491-4.
35. Vickerman, K.A., et al., *Use of electronic cigarettes among state tobacco cessation quitline callers*. *Nicotine Tob Res*, 2013. **15**(10): p. 1787-91.
36. Adkison, S.E., et al., *Electronic nicotine delivery systems: international tobacco control four-country survey*. *Am J Prev Med*, 2013. **44**(3): p. 207-15.
37. Barnoya, J. and S.A. Glantz, *Cardiovascular effects of secondhand smoke: nearly as large as smoking*. *Circulation*, 2005. **111**(20): p. 2684-98.
38. Pope, C.A., 3rd, et al., *Cardiovascular mortality and exposure to airborne fine particulate matter and cigarette smoke: shape of the exposure-response relationship*. *Circulation*, 2009. **120**(11): p. 941-8.



City Council Staff Report

DATE: October 1, 2014

AGENDA ITEM NO: **New Business
Agenda Item 6-B.**

TO: The Honorable Mayor and City Council
FROM: Paul Talbot, City Manager
SUBJECT: Moratorium on "Vaping Stores"

RECOMMENDATION:

It is recommended that the City Council consider:

1. Whether to adopt an urgency ordinance upon a 4/5 vote to temporarily prohibit the City from issuing permits to allow the construction or operation of "vaping stores" as defined in the draft ordinance; or
2. Take such additional, related, action that may be desirable.

EXECUTIVE SUMMARY:

At its meeting of September 17, 2014, the City Council requested that the City Attorney's office draft an ordinance that, if adopted, would temporarily prohibit the City from issuing permits for the construction or operation of "vaping stores." The City Council was concerned that Monterey Park would receive an influx of vaping stores because neighboring jurisdictions adopted their own moratoria regarding this land use. In particular, the City Council was concerned that the Monterey Park Municipal Code ("MPMC") did not adequately regulate vaping and electronic cigarette sales. The City Council believed that without additional regulation, public health and safety would be adversely affected by the use of electronic cigarettes.

BACKGROUND:

In September, the City Council adopted Ordinance No. 2112 which amended the MPMC to add electronic cigarettes and vaping into the City's regulation of tobacco retailers and outdoor smoking (respectively). As expressed by Councilmembers on September 17th, however, the City may wish to consider taking additional steps to protect public health and safety.

Neither the federal nor the state governments have adopted any substantive regulations affecting the manufacture, sale or use of electronic cigarettes. Yet, the sale and use of such devices have resulted in both literal and figurative explosions in the marketplace. News reports from Colorado – which legalized the use of marijuana in 2012 – suggest that availability of electronic cigarettes contribute to the increased use of concentrated

marijuana products including butane hash oil (or "BHO"). An unexpected secondary effect of such use is a spike in the number of residential fires resulting from butane explosions caused by manufacturing BHO. These, and other similar reports, suggest that – absent leadership from the federal or state governments – the City should consider adopting regulations that will protect its residents from the primary and secondary effects of electronic cigarette sales and use.

Additionally, Councilmembers noted that neighboring cities (such as Alhambra) recently adopted temporary prohibitions on the operation of vaping stores. Accordingly, unless the City Council took similar action, there is the possibility that the City could experience an influx of applications to operate vaping stores since the prohibitions in surrounding jurisdictions would push interested persons into the City of Monterey Park. A review of the MPMC shows that it does not regulate vaping stores.

The draft ordinance would, if adopted by a 4/5 vote of the City Council, impose a temporary moratorium on issuing permits for vaping stores. As defined by the draft ordinance, a vaping store is "a vaping retailer that devotes a regular and substantial portion of its business to the display and sale of electronic cigarettes"; a "vaping retailer" is "any person that operates a store, stand, concession, or other place at which sales, or other exchanges for value, of electronic cigarettes are made to purchasers for consumption or use."

A moratorium can be adopted through an interim urgency ordinance under Government Code § 65858. If adopted as an urgency ordinance, the moratorium would be immediately effective for 45 days after the ordinance was adopted, but could be extended before its expiration for 10 months and fifteen days. The ordinance may again be extended for another year (totaling a possible 2 year moratorium period). Such extensions require a four-fifths vote and public notice must be published and posted at least 10 days before a public hearing pursuant to Government Code §§ 6061 and 65090. Ten days before the initial 45 day period, or any extended time period, the City Council must issue a written report describing the measures taken to alleviate the condition which led to the adoption of the ordinance.

To adopt the draft ordinance immediately will require the Council to find that there is an immediate threat to public safety, health, or welfare and that adoption of the ordinance is required in order to protect the public.

FISCAL IMPACT:

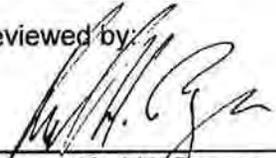
There is a de minimis fiscal impact to the General Fund for publication costs.

Respectfully submitted by:



Paul Talbot
City Manager

Reviewed by:



Karl H. Berger
Assistant City Attorney

ORDINANCE NO. _____

AN ORDINANCE PROHIBITING PERMITS FOR CONSTRUCTION OR PLACEMENT OF VAPING STORES WITHIN THE CITY'S JURISDICTION TO CONSIDER AMENDING THE MONTEREY PARK MUNICIPAL CODE.

The Council of the city of Monterey Park does ordain as follows:

SECTION 1: This Ordinance is adopted pursuant to Government Code §§ 36937, 65858, and other applicable laws.

SECTION 2: Findings. The City Council finds, determines and declares as follows:

- A. The City can adopt and enforce all laws and regulations not in conflict with the general laws and the City holds all rights and powers established by California law.
- B. Electronic cigarettes, as defined by the Monterey Park Municipal Code ("MPMC") and California law, are currently being considered for regulation by the State of California and the United States Food and Drug Administration (FDA).
- C. Various studies have demonstrated that electronic cigarettes contain carcinogens, vary in nicotine content, and can be used for various controlled substances besides nicotine including, without limitation, cannabis.
- D. In addition to those studies identified by the FDA at www.federalregister.gov/a/2014-09491, and as set forth in the entire administrative record, the City Council takes specific notice of the following studies that are contained within the record:
 1. Corey, Wang, et al., *Notes From the Field: Electronic Cigarette Use Among Middle and High School Students—United States, 2011-2012* (2013) Morbidity and Mortality Weekly Report, 62(35):729-730;
 2. Rogers, Feighery, et al., *Current Practices in Enforcement of California Laws Regarding Youth Access to Tobacco Products and Exposure to Secondhand Smoke* (2007) Survey Report — June 2007, Technical Assistance Legal Center, California Department of Public Health, Tobacco Control; and

3. *Regulating Toxic Vapor, A Policy Guide to Electronic Smoking Devices* (2014) ChangeLab Solutions;

- E. The FDA asserts that electronic cigarettes should be regulated as drug delivery devices.
- F. Based upon reports from the FDA and the State of California, there are no objective scientific reports demonstrating that electronic cigarettes can help smokers to quit smoking.
- G. While the City Council previously amended the MPMC to help regulate electronic cigarettes, the City anticipates receiving applications for placing "Vaping Stores" (as defined below) within the City's jurisdiction based upon the decision by neighboring jurisdictions to adopt interim land use regulations affecting electronic cigarettes.
- H. The provisions of the MPMC that may regulate the construction and placement of Vaping Stores in the City are inadequate and need review, study, and revision. The current provisions also fail to fully take into account the impacts related to the location and manner of construction of Vaping Stores, and the related public health, safety, and welfare concerns.
- I. Additionally, the City Council has concerns about the construction and installation of Vaping Stores and the impacts they may have on parking, surrounding uses, and the community.
- J. The City Council further desires to evaluate and enhance the public works and aesthetic standards regarding such facilities, if necessary.
- K. Without the enactment of this Ordinance, multiple applicants could receive entitlements that would allow the installation of Vaping Stores that pose a threat to the public health, safety, and welfare.
- L. The City Council determines that the MPMC requires updating to protect the public against health, safety, and welfare dangers caused by multiple applicants each constructing separate Vaping Stores. The City needs additional time to prepare, evaluate and adopt reasonable regulations regarding the placement and construction of Vaping Stores and to ensure such regulations are applied in a nondiscriminatory manner.
- M. In order to prevent frustration of these studies and the

implementation of new regulations, the public interest, health, safety, and welfare require enactment of this Ordinance. The absence of this Ordinance would impair the orderly and effective implementation of contemplated MPMC amendments, and any further authorization of these uses within the City during the period of the moratorium may be in conflict with or may frustrate the contemplated updates and revisions of the MPMC.

- N. Based on the foregoing, the City finds that that this Ordinance is necessary in order to protect the City from the potential effects and impacts of uncoordinated and conflicting construction of Vaping Stores in the City, potential increases in crime, fire hazards, multiple obstructions of traffic and commerce on City streets, impacts on parking availability in the business areas of the City, the aesthetic impacts to the City, and other similar or related effects on property values and the quality of life in the City's neighborhoods.
- O. The City Council further finds that this moratorium is a matter of local and City-wide importance and is not directed towards any particular business that currently seeks to construct a Vaping Store.
- P. The City Council finds that this Ordinance is authorized by the City's police powers. The City Council further finds that the length of the moratorium imposed by this Ordinance will not in any way deprive any person of rights granted by state or federal laws, because the moratorium is short in duration and essential to protect the public health, safety and welfare.

SECTION 3: Environmental Assessment. Adoption of this Ordinance is exempt from further environmental review under the California Environmental Quality Act (California Public Resources Code §§ 21000, *et seq.*, "CEQA") and CEQA Guidelines (14 California Code of Regulations §§ 15000, *et seq.*) because it establishes rules and procedures for operation of existing facilities; minor temporary use of land; minor alterations in land use; new construction of small structures; and minor structures accessory to existing commercial facilities. This Ordinance, therefore, is categorically exempt from further CEQA review under CEQA Guidelines §§ 15301; 15303, 15304(e); 15305; and 15311. Further, the adoption of this Ordinance is also exempt from review under CEQA pursuant to CEQA Guidelines § 15061(b)(3) because the Ordinance is for general policies and procedure-making. This Ordinance does not authorize any new development entitlements, but simply establishes policies and procedures for allowing the previously approved project to be constructed. Any proposed project that will utilize the changes set forth in this Ordinance will be subject to CEQA review as part of the entitlement review of the project. The Ordinance will not adversely impact the environment and is therefore exempt from the provisions of CEQA.

SECTION 4: *Interim regulations.* The following provisions are adopted as interim requirements for issuing permits pursuant to the MPMC for construction or operation of Vaping Stores, and any construction or operation in the City in conflict with these provisions is expressly prohibited:

- A. **Restricted Activities.** For a period of forty-five (45) days after adoption of this Ordinance, the City will not issue a permit or land use entitlement to any person for constructing, placing, or operating new Vaping Stores within the City's jurisdiction. The City Manager, or designee, must review any application for a permit or land use entitlement to determine compliance with the provisions of this Ordinance. City staff, including City boards and commissions, are directed to refrain from accepting or processing any application for any land use entitlement, including, without limitation, use permits, variances, building permits, licenses and certificates of occupancy, necessary for constructing, placing, or operating Vaping Stores within the City's jurisdiction, and to refrain from issuing any land use entitlement for any pending applications already received. These prohibitions will remain effective for forty-five (45) days following adoption of this Ordinance.

- B. **Definitions.** In addition to the definitions contained in the MPMC, the following words and phrases will, for the purposes of this Ordinance, be defined as follows, unless it is clearly apparent from the context that another meaning is intended. Should any of the definitions be in conflict with the current provisions of the MPMC, the following definitions will prevail:
 - 4. "Electronic Cigarette" has the same meaning as set forth in Health and Safety Code § 119405 and similar devices intended to emulate smoking, which permit a person to inhale vapors or mists that may or may not include nicotine.
 - 5. "Vaping Retailer" means any person that operates a store, stand, concession, or other place at which sales, or other exchanges for value, of electronic cigarettes are made to purchasers for consumption or use.
 - 6. "Vaping Store" means a vaping retailer that devotes a regular and substantial portion of its business to the display and sale of electronic cigarettes.

SECTION 5: *Construction.* This Ordinance must be broadly construed in order to achieve the purposes stated in this Ordinance. It is the City Council's intent that the provisions of this Ordinance be interpreted or implemented by the City and others in a manner that facilitates the purposes set forth in this Ordinance.

SECTION 6: *Enforceability.* Repeal of any provision of the MPMC does not affect any penalty, forfeiture, or liability incurred before, or preclude prosecution and imposition of penalties for any violation occurring before this Ordinance's effective date. Any such repealed part will remain in full force and effect for sustaining action or prosecuting violations occurring before the effective date of this Ordinance.

SECTION 7: *Validity of Previous Code Sections.* If this entire Ordinance or its application is deemed invalid by a court of competent jurisdiction, any repeal or amendment of the MPMC or other city ordinance by this Ordinance will be rendered void and cause such previous MPMC provision or other the city ordinance to remain in full force and effect for all purposes.

SECTION 8: *Severability.* If any part of this Ordinance or its application is deemed invalid by a court of competent jurisdiction, the city council intends that such invalidity will not affect the effectiveness of the remaining provisions or applications and, to this end, the provisions of this Ordinance are severable.

SECTION 9: *Publication.* The City Clerk is directed to certify the passage and adoption of this Ordinance; cause it to be entered into the City of Monterey Park's book of original ordinances; make a note of the passage and adoption in the records of this meeting; and, within fifteen (15) days after the passage and adoption of this Ordinance, cause it to be published or posted in accordance with California law.

SECTION 10: *Report.* Pursuant to Government Code § 65858, the City Manager, or designee, must prepare a report for City Council consideration describing the measures taken to address the conditions which led to adoption of this Ordinance. This report must be provided to the City Council so that it may be considered and issued not later than 10 days before this Ordinance expires.

SECTION 11: *Effective Date.* This Ordinance will become effective immediately upon adoption pursuant to Government Code §§ 36937 and 65858 for the immediate preservation of the public peace, health, safety, and welfare. Pursuant to those statutes this Ordinance is adopted by a four-fifths vote.

SECTION 12: *Expiration Date.* After adoption, this Ordinance will be repealed by operation of law on _____, 2014, unless a subsequent ordinance is adopted by the City Council that extends this date.

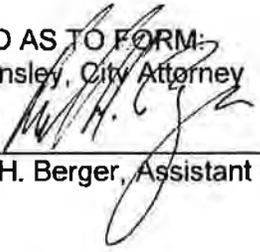
PASSED AND ADOPTED this ____ day of _____, 2014.

Anthony Wong, Mayor

ATTEST:

Vincent D. Chang, City Clerk

APPROVED AS TO FORM:
Mark D. Hensley, City Attorney

By: 

Karl H. Berger, Assistant City Attorney

Current Practices in Enforcement of California Laws Regarding Youth Access to Tobacco Products and Exposure to Secondhand Smoke

Survey Report — June 2007

Todd Rogers, Ph.D.

Ellen C. Feighery, R.N., M.S.

Harry H. Haladjian, B.A.

Technical Assistance Legal Center

**Funded by the California Department of Public Health,
Tobacco Control Section under Contract #04-35336**



Table of Contents

Acknowledgments	i
Executive Summary	ii
Introduction	1
Methods	2
Results – Enforcement of Youth Access Laws	4
Warnings and Citations for Violations by Merchants	4
Warnings and Citations for Violations by Minors	6
Illegal Sales of Tobacco to Minors	8
Predictors of Youth Access Enforcement	11
Plans for Youth Access Enforcement	15
Enforcement in Jurisdictions with Strong Retail Tobacco Ordinances	15
Results – Enforcement of Secondhand Smoke Laws	17
Smoke-free Workplaces (Excluding Bars)	17
Smoke-free Bar Provision	33
Smoke-free Doorway and Window Areas	42
Discussion	47
References	50
Attachments.....	51

Acknowledgments

This project would not have been possible without the exceptional survey management efforts of Christine Case-Lo. Thanks also to David Cowling and his colleagues at the California Department of Public Health, Tobacco Control Section for their support.

This report was prepared under contract #04-35336 from the California Department of Public Health, Tobacco Control Section to the Public Health Institute (Technical Assistance Legal Center).

Executive Summary

Since the inception of the tobacco control program in California, the Department of Public Health, Tobacco Control Section (TCS) has devoted considerable resources to stimulate adoption of state laws and local ordinances, conduct media advocacy and education to stimulate compliance, and train enforcement agencies to increase active enforcement of laws designed to reduce illegal sale of tobacco to minors and exposure to secondhand smoke

From 1996-2000, TCS tracked the activities of local enforcement agencies as part of the Independent Evaluation (IE) of the California Tobacco Control Prevention and Education Program. Beginning late 2003, the Technical Assistance Legal Center (TALC) took on the task of periodic assessment of local enforcement agencies activities.

This report presents findings on the amount and type of enforcement of youth access and secondhand smoke laws occurring throughout California in 2006 and early 2007, and compares these findings to the results of our 2004 statewide enforcement agency surveys. In addition, trend analyses of data collected from enforcement agencies in the 18 counties that were the focus of the IE are also included to determine changes in enforcement activity since 1996.

Methods

Youth Access Enforcement Survey

The youth access survey addressed enforcement of Penal Code (PC) §308(a), prohibiting the sale of tobacco products to people less than 18 years of age, and PC§308(b), prohibiting anyone less than 18 years of age to buy or possess tobacco. Of the 297 surveys received, 26 were removed from the analyses because they were submitted by an agency that was not the main enforcement agency, or because they were duplicates from the same agency. This resulted in a valid sample of 271 agencies.

Secondhand Smoke Enforcement Survey

The secondhand smoke (SHS) survey focused on enforcement of: Labor Code (LC) §6404.5 Smoke-free Workplaces; LC§6404.5 Smoke-free Bars; and Government Code (GC) §7596-7598 that bans smoking proximal to entrances, exits, and operable windows, and covered parking areas of city, county, and state government buildings. Of the 259 surveys received, 195 self-identified as primary enforcers for LC§6404.5, and 169 self-identified as primary enforcers for GC§7596-7598, and 58 agencies shared enforcement responsibilities with the primary enforcers.

Summary of Findings and Discussion

Youth Access

- The youth access survey results indicate that enforcement agency actions have continued to decline since 1998. Statewide, about one-quarter of enforcement agencies conducted youth decoy operations in 2007, down significantly from about 30% in 2004.
- Fewer than 5% of enforcement agencies report that warnings and citations were issued to merchants “often” or “very often.” This decrease may be related to the dramatic drop in the average number of youth decoy operations from almost 11 operations per year reported in 2004 down to 3.6 per year in 2007.
- From 2004 to 2007, there was a slight drop in the proportion of law enforcement agencies reporting that they issued warnings to minors possessing tobacco products, but those issuing citations remained the same. There were no significant changes in these types of activities since the 2004 survey.
- Law enforcement agencies continue to rank various policies and procedures such as suspension/revocation of licenses, and civil and criminal penalties for owners and clerks, as effective strategies to reducing youth access to tobacco.
- The continuing reduction in the percent of agencies actively enforcing PC308(a) is disappointing, given that TCS has continued to expend resources to stimulate enforcement through trainings, and technical assistance to law enforcement agencies.
- In 2007, significant predictors of whether decoy operations were conducted were: perceptions of greater collaboration with other agencies; lower perceived barriers to enforcement; and receipt of funding. These findings confirm the importance of providing ongoing support for local law enforcement agencies.
- Agencies operating in jurisdictions with strong local retail licensing ordinances reported conducting four times as many decoy operations over the prior 12 months than did agencies in jurisdictions without strong ordinances, underscoring the value of local policy actions.
- Law enforcement agencies’ perspectives on various policies and procedures as effective strategies to reducing youth access to tobacco may be useful to local programs attempting to strengthen youth access laws in their communities, and may represent an opportunity for collaboration with their local law enforcement agencies on these efforts.

Secondhand Smoke

Enforcement of LC§6404.5 — Smoke-free Workplaces (Excluding Bars)

- Almost two-thirds of enforcement agencies throughout California reported conducting at least one workplace-related SHS enforcement activity in year prior to the 2007 statewide SHS survey.
- About half the agencies reported in 2007 that they responded to inquiries and complaints and conducted compliance checks, but relatively few agencies issued fines or citations. Agencies in rural counties reported issuing significantly fewer warnings for violations of LC§6404.5 than did agencies in urban and suburban counties.
- Among the agencies that completed both the 2004 and 2007 statewide SHS surveys, there is a significant decline in the percent reporting involvement in all types of SHS workplace enforcement actions. Agencies in the IE sub-sample from 1996 to 2007 shows similar declines in nearly every enforcement actions across the five survey waves.
- Most enforcement agencies perceive that the rate of compliance with workplace SHS laws is high, and few believe that the workplace SHS problem is very serious in their community.
- Agency ratings of the relative importance of enforcement of SHS laws, as compared to other laws, is the only independent predictor of whether any SHS compliance checks were conducted in the prior year. Even so, agencies rate enforcement of laws that prohibit smoking in indoor public areas as being only moderately important.
- Significant declines are seen statewide from 2004 to 2007 in the percent of agencies reporting collaboration with businesses, voluntary health organizations, and educational organizations on SHS workplace law enforcement.
- As in 2004, salient barriers to enforcement of SHS laws are limited agency staff and insufficient budget.

Enforcement of LC§6404.5 — Smoke-free Bar Provision

- Levels of enforcement of the smoke-free bar provision are higher than for other workplace provisions included in LC§6404.5. Almost three-quarters of the responding agencies in 2007 conducted at least one bar-related SHS enforcement activity during the previous six months, about the same as in 2004.
- Half or more of all agencies reported that they responded to inquiries and complaints, down from 2004, and about the same percentage educated bar owners and others about the law. More than two-third of agencies report conducting compliance checks, fewer than half issued warnings, and fewer than one-quarter of all agencies issued citations or fines for violation of the smoke-free bar provision, all down from 2004.

- Significant declines are seen statewide from 2004 to 2007 in the percent of agencies reporting that they had responded to inquiries, responded to complaints, conducted compliance checks, issued warnings, and issued citations related to SHS laws in bars.
- Only one variable was found to be an independent predictor of whether SHS compliance checks were conducted in bars during the previous six months: greater relative importance of enforcement of SHS laws in bars. Nevertheless, compared to other laws enforced by respondent agencies, enforcement of laws that prohibit smoking in bars specifically is rated by agencies as being only moderately important, down from the rating level reported in 2004.
- Among all agencies reporting that they issued any citations for violation of the LC§6404.5 smoke-free bar provision, only 3% reported having issued at least one citation for a hookah bar or lounge violation in the previous six months.

Enforcement of GC§7596-7598 — Smoke-free Doorway and Window Areas

- The levels of enforcement activities related to GC§7596-7598 are lower than for either of the smoke-free workplace provisions of LC§6404. Statewide, only about half of the responding agencies reported conducting any enforcement activities related to this law. Fewer than half conducted compliance checks related to this law, more than one-third responded to inquiries and complaints, and less than one-third issued warnings. Very few agencies issued citations or fines for violations of the law.
- Most of the agencies believe that this issue is less serious than other community problems, and that there is fairly good compliance in their jurisdiction..
- Barriers to enforcement, such as limited staff and insufficient funding, ranked at about the same level as the perceived barriers to enforcing smoke-free workplace laws.
- The only significant predictor of whether an agency conducted any enforcement activity regarding GC§7596-7598 is the level of collaboration with other community groups and agencies.
- Enforcement agencies believe that there are high rates of compliance in their communities with the three SHS laws that were addressed in the survey. There is, however, variability in enforcement of SHS laws at the local level.
- The findings point to important roles Local Lead Agencies and their partners can play both in educating their communities and enforcement agencies about reducing exposure to secondhand smoke through law enforcement, and in facilitating collaboration with SHS enforcement agencies.

Introduction

Since the inception of the tobacco control program in California, the Department of Public Health, Tobacco Control Section (TCS) has identified as high priorities reducing the illegal sale of tobacco to minors and reducing exposure to secondhand smoke. Strategies have been pursued at the state and local levels to stimulate adoption of state laws and local ordinances, conduct media advocacy and education to stimulate compliance, and train enforcement agencies to increase active enforcement of these laws. Technical resources [e.g., Technical Assistance Legal Center (TALC), Bar and Restaurant Employees Against Tobacco Hazards (BREATH), and the Center for Tobacco Policy and Organizing (the Center)] have been funded at varying points in time by TCS to work with local jurisdictions on policy development and enforcement strategies.

During the period 1996-2000, TCS tracked the activities of local enforcement agencies as part of the Independent Evaluation (IE) of the California Tobacco Control Prevention and Education Program . The IE tracked activities and assessed outcomes in 18 “focal counties” selected to represent the entire state, and employed multiple data collection methods that were implemented in three waves (1996, 1998, and 2000).

Independent Evaluation Focal Counties (1996-2000)

Media Markets	Medium-Density
Fresno	Monterey
Los Angeles	San Bernardino
Sacramento	Shasta
San Diego	Yuba
San Francisco	
High-Density	Low-Density
Alameda	Lake
Contra Costa	Lassen
Orange	Mono
San Mateo	Plumas
Santa Clara	

In late 2003, the TALC scope of work was amended to include the assessment of the level of enforcement of state laws pertaining to illegal tobacco sales to minors and secondhand smoke through two survey waves (2004 and 2007). The 2004 and 2007 TALC law enforcement surveys represent an extension of the earlier IE survey efforts which were limited to enforcement agencies in the 18 focal IE counties. In contrast to the IE, the TALC law enforcement surveys were disseminated to all enforcement agencies responsible for enforcing these two categories of laws in California.

This report presents findings on the amount and type of enforcement of youth access and secondhand smoke laws occurring throughout California in 2006 and early 2007, and compares these findings to the results of the 2004 TALC enforcement agency survey. In addition, trend analyses of data collected from enforcement agencies in the 18 counties that were the focus of the IE are also included to determine changes in enforcement activity since 1996.

Methods

Enforcement Agency Surveys

Two separate written surveys were administered to enforcement agencies in California. One survey focused on the enforcement of state policies related to youth access to tobacco while the other survey focused on the enforcement of state and local policies related to exposure to tobacco smoke.

Specifically, the youth access (YA) survey focused on enforcement of Penal Code (PC) §308(a), prohibiting the sale of tobacco products to people under 18 years of age, and PC§308(b), prohibiting anyone under 18 years of age to buy or possess tobacco. The secondhand smoke (SHS) survey focused on enforcement of: Labor Code (LC) §6404.5 Smoke-free Workplaces; LC§6404.5 Smoke-free Bars; and Government Code (GC) §7596-7598 that bans smoking proximal to entrances, exits, and operable windows, and covered parking areas of city, county, and state government buildings. Both survey instruments contained primarily closed-ended questions that asked about enforcement activities over the past six or 12 months. Areas queried in the surveys included: issue salience, perceived importance of agency enforcement, perceived compliance with policies, involvement in enforcement activities, perceived barriers to enforcement, collaboration with other agencies on enforcement efforts, and perceived effectiveness of enforcement policies/procedures.

Survey Respondents

Youth Access Enforcement Survey. All police and sheriff offices in all California counties and municipalities were initially targeted for the survey. Our 2004 survey database of enforcement agencies was reviewed and updated through phone and e-mail contacts with TCS staff, Kelly Gordon, and Capricia Borrero (TALC). Additionally, TCS staff e-mailed a request to LLAs that they update they review the 2004 contacts and update the contacts in their jurisdictions. More than 43 LLAs provided updated contact information.

Surveys were mailed to 341 police departments, 103 sheriff offices or substations, and 41 city and county agencies (including 10 code enforcement departments), for an attempted census of 485 agencies. (Note that in some jurisdictions surveys were sent to multiple agencies and/or individuals to ensure response from the correct enforcement agency.) After removing agencies stating that they were not responsible for enforcement or did not currently enforce, incorrect contacts at agencies, and duplicates where one agency was responsible for multiple jurisdictions, the total sampling pool was 392, out of which 297 agencies returned completed surveys, for a response rate of 76%. Of the 297 surveys received, 26 were removed from the analyses because they were submitted by an agency that was not the main enforcement agency, or because they were duplicates from the same agency. This resulted in a valid sample of 271 agencies. County-level data were obtained from all 58 counties except Alpine, Del Norte, Glenn County, Humboldt, Imperial, Kings, Lake, Lassen, Los Angeles, Merced, Modoc, Monterey, San Diego, San Joaquin, San Luis Obispo, Santa Barbara, Santa Cruz, Solano, Stanislaus, and Ventura;

however, information was received from at least one jurisdiction within each of these counties with the exception of Alpine.

Secondhand Smoke Enforcement Survey. Our 2004 survey database of enforcement agencies was reviewed and updated through phone and e-mail contacts with TCS staff and Dian Kiser (RESPECT). Additionally, TCS staff e-mailed a request to LLAs that they update they review the 2004 contacts and update the contacts in their jurisdictions. More than 43 LLAs provided updated contact information.

Surveys were mailed to 225 police departments, 65 sheriff offices or substations, 54 code enforcement agencies, and 124 miscellaneous city and county agencies (including city attorneys, city managers, health departments, fire departments), for an attempted census of 468 agencies. After removing agencies replied stating that they were not responsible for enforcement, incorrect contacts and duplicate agencies responsible for multiple jurisdictions, the total sampling pool was 403, out of which 259 agencies returned completed surveys, for a response rate of 64%. Of the 259 surveys received, 195 self-identified as primary enforcers for LC§6404.5, and 169 self-identified as primary enforcers for GC§7596-7598, and 58 agencies shared enforcement responsibilities with the primary enforcers. Sixteen of 58 counties were not represented by main enforcement agency respondents: Alpine, Colusa, Contra Costa, Del Norte, El Dorado, Imperial, Inyo, Kern, Kings, Lake, Lassen, Mono, Santa Cruz, Sierra, Trinity, Tulare.

Procedures

Youth Access Enforcement Survey. The youth access survey was sent to all potential respondents during the last week of January 2007. In addition to the first mailing, agencies received up to two reminder postcards, a second survey, and reminder phone calls in order to maximize the response rate. Data collection was completed by the end of April 2007.

Secondhand Smoke Enforcement Survey. The SHS survey was mailed to all potential respondents in mid-February 2004. In addition to the first mailing, agencies received up to two reminder postcards, a second survey, and reminder phone calls in order to maximize the response rate. Data collection was completed by early May 2007.

All surveys were written in English. Public Health Institute staff checked each returned survey for completeness and clarity prior to data entry. In some cases, phone calls and faxes to agencies were necessary to clarify responses. Following detailed review of each returned survey, 281 YA surveys and 261 SHS surveys were electronically key-entered and verified by Data4U in Sunnyvale. Analyses were conducted using SPSS 11.5 for Windows and SPSS 11.0 for Macintosh.

Results: Enforcement of Youth Access Laws

In this section we present our findings from the 2007 statewide survey of agencies charged with enforcing PC§308(a), prohibiting the sale of tobacco products to persons under 18 years of age, and PC§308(b), prohibiting anyone under 18 years of age to buy or possess tobacco. Data are reported from only one main agency per jurisdiction (municipality or county). The report contains results from the total samples of respondents in 2004 and 2007, and analyses of change between 2004 and 2007 in a subset of respondents with youth access (YA) data from both surveys. The report also contains data reported by enforcement agencies that are situated in the 18 focal counties of the 1996-2000 Independent Evaluation (referenced as the IE sample) and a subset of IE enforcement agencies for which we have five waves of YA enforcement data.

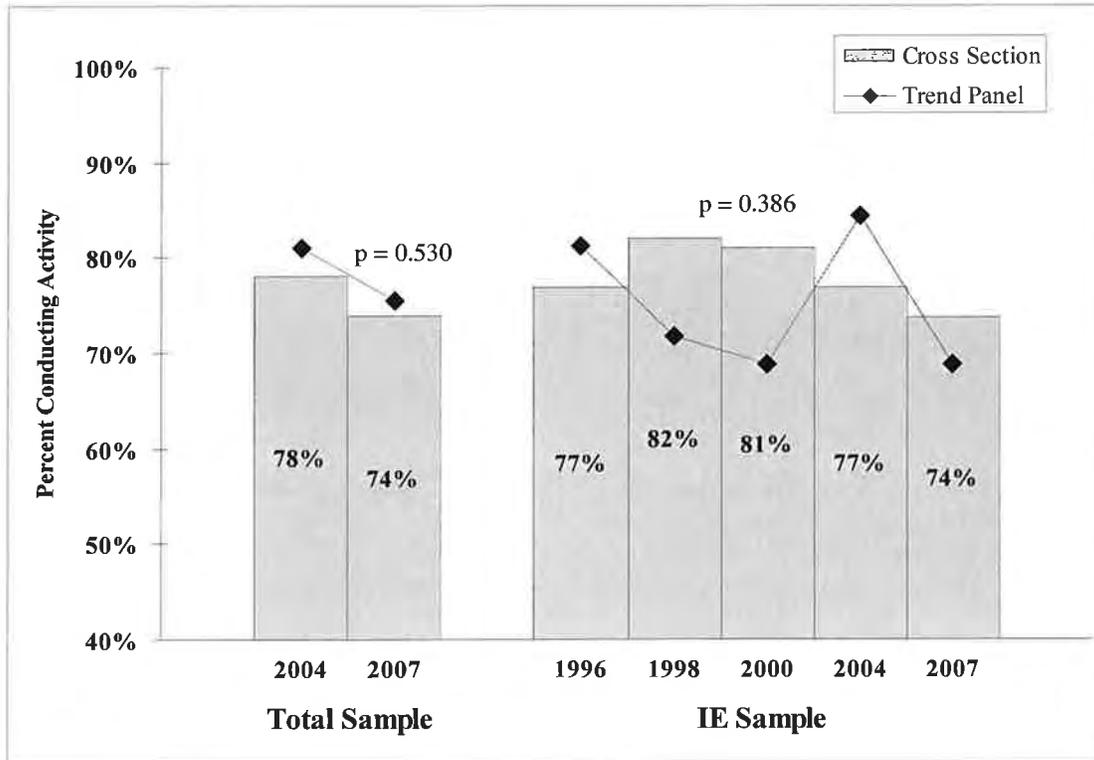
Warnings and Citations for Violations by Merchants

Warnings. On the left side of Figure YA-1a, we report data for all agencies responding to this item in the 2004 and 2007 statewide SHS surveys, both as serial cross-sections with all valid responses in either wave (bars), and for the panel of agencies that reported valid responses in both 2004 and 2007 (trend line). On the right side of the figure, we report 1996-2007 data only for those agencies from the 18 focal IE counties, also as serial cross-sections and as a panel.

Figure YA-1a shows that statewide, 74% of YA enforcement agencies reported having issued warnings to merchants selling tobacco products to minors in the year prior our 2007 survey. Of the 210 agencies responding to this question, about one-third (31%) reported that they only “rarely” issued warnings to merchants, and only 3% reported that they issued warnings “very often.” There are no differences among LLA-designated urban, suburban, and rural counties on this variable, and the decrease from 81% in 2004 to 76% in the 2004-2007 statewide panel is not significant (Chi-squared = 0.40, $p = 0.530$, $n = 106$).

Among the 127 IE-county enforcement agencies that provided valid responses in 2007, 74% had issued warnings to merchants in the previous 12 months (see Figure YA-1a). In the panel of IE respondents with valid data across all survey waves, no significant differences were detected on this measure (Cochran’s $Q = 4.15$, $p = 0.386$, $n = 32$).

Figure YA-1a
Percent of Agencies Issuing Warnings for Youth Access Violations by Merchants

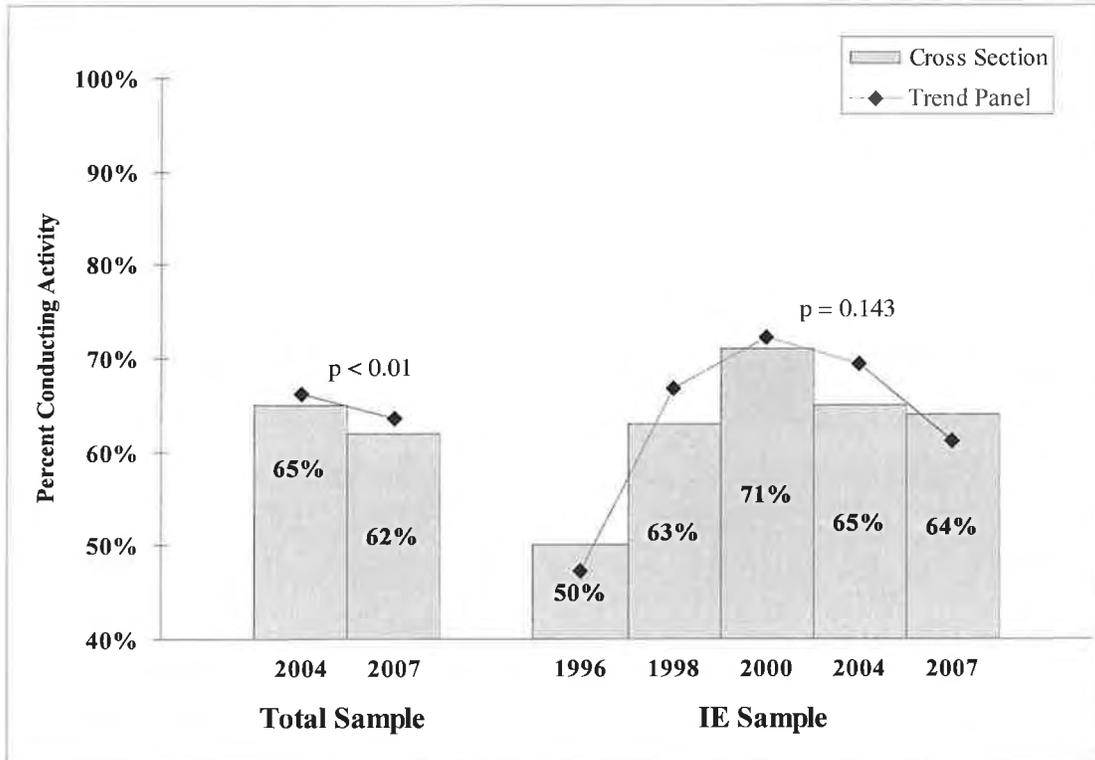


Source: IE Youth Access Enforcement Survey, 1996, 1998, 2000; Statewide Youth Access Enforcement Survey, 2004, 2007.

Citations. Figure YA-1b shows that statewide in 2007, 62% of YA enforcement agencies statewide reported having issued citations to merchants in the prior 12 months. The frequency distribution of responses to this question is skewed, with 28% of 221 agencies reporting that they “rarely” issued citations, and 4% reporting that they did so “very often.” There are no differences among urban, suburban, and rural counties on this variable; however, the decline in citations issued to merchants from 2004 (66%) to 2007 (64%) is statistically significant (Chi-squared = 9.00, $p < 0.01$, $n = 118$).

The percent of agencies within the IE panel that issued citations is not significantly different across the five survey waves (Cochran’s Q = 6.87, $p = .143$, $n = 36$).

Figure YA-1b
Percent of Agencies Issuing Citations for
Youth Access Violations by Merchants



Source: IE Youth Access Enforcement Survey, 1996, 1998, 2000; Statewide Youth Access Enforcement Survey, 2004, 2007.

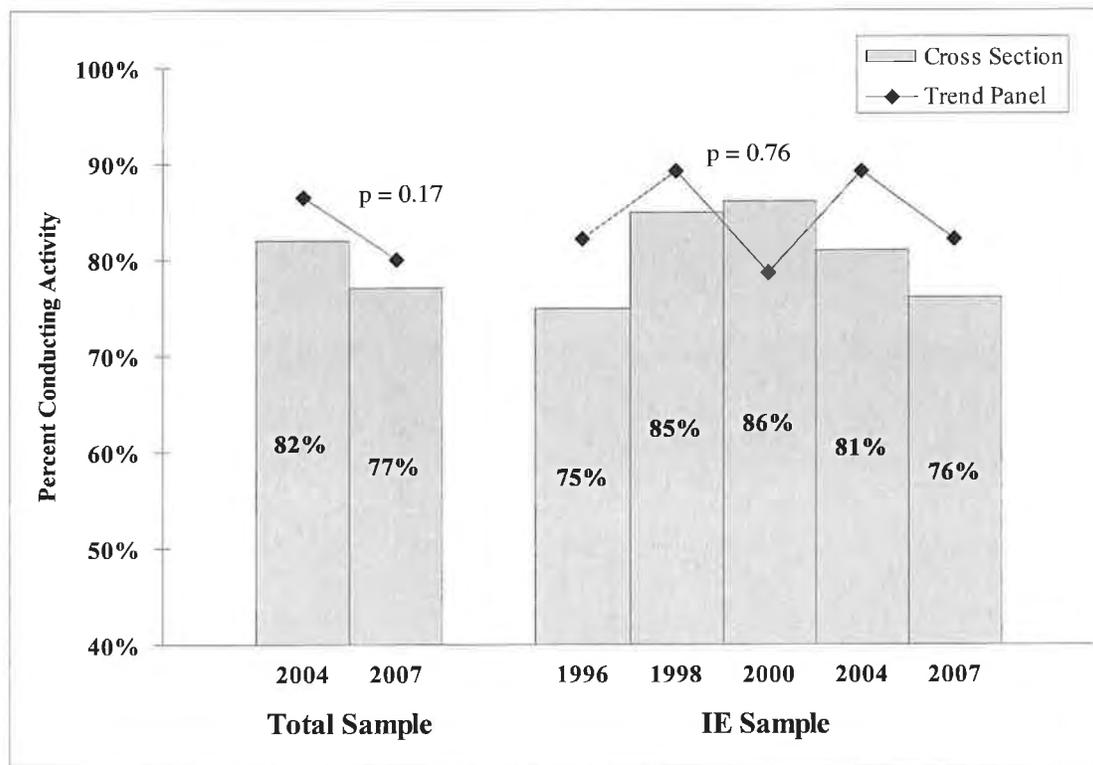
About one-third (33%) of all agencies reported having issued at least one citation to persons giving or selling tobacco products to minors (not only merchants illegally selling tobacco products). This rate did not differ significantly across agencies in urban (34%), suburban (40%), or rural (24%) counties ($p = 0.013$). Among the agencies that reported having issued at least one citation for violations of PC§308(a), a mean of 8.3 citations were issued during the prior year. Averages for agencies in urban (mean = 10.6 citations issued), suburban (mean = 7.6), or rural (mean = 6.0) counties did not differ significantly ($p = 0.32$). Of the agencies that responded to the 2004 and 2007 surveys, only 16% reported having issued at least one citation to persons giving or selling tobacco products to minors.

Warnings and Citations for Violations by Minors

Warnings. Figure YA-2a shows that 77% of YA enforcement agencies statewide reported in 2007 having issued YA warnings to minors in the previous 12 months. Of the 210 agencies responding to this question, fewer than one-third (30%) reported that they “rarely” issued such warnings to minors, and only five agencies (2%) reported that they issued warnings “very often.”

There were no differences among urban, suburban, and rural counties on this variable, and no significant change was detected statewide from 2004 to 2007 ($p = 0.17$) or across the five waves for the IE panel ($p = 0.76$).

Figure YA-2a
Percent of Agencies Issuing Warnings for Youth Access Violations by Minors



Source: IE Youth Access Enforcement Survey, 1996, 1998, 2000; Statewide Youth Access Enforcement Survey, 2004, 2007.

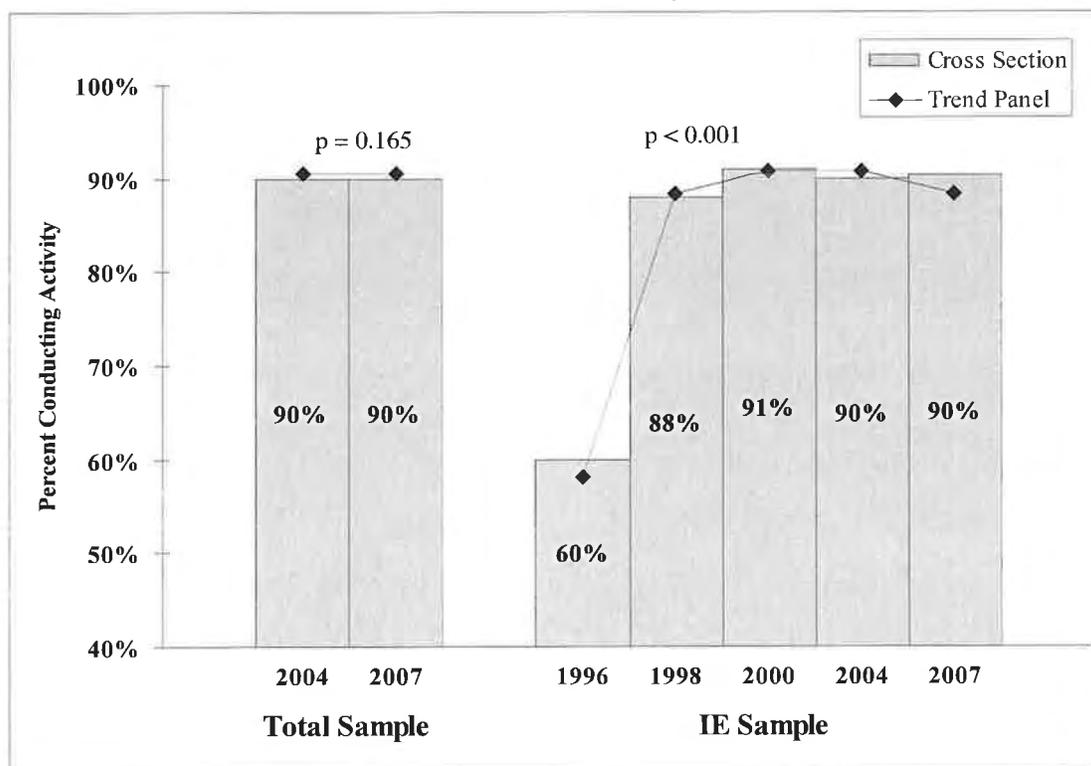
Citations. Figure YA-2b also shows that 90% of YA enforcement agencies statewide in 2007 reported having issued citations to minors in the previous 12 months. This is unchanged from 2004. The frequency distribution of responses to this question shows that 17% of 249 agencies reported that they “rarely” issued citations, and 24% reported that they did so “often” or “very often.” There were no differences among urban, suburban, and rural counties on this variable ($p = 0.68$), and no significant changes were detected statewide from 2004 to 2007 ($p > 0.9$).

In the 12 months prior to the 2007 survey, agencies across the state reported issuing an average of 24.1 citations to minors for possession of tobacco products [PC§308(b)]. Among those agencies that issued at least one citation to a minor for violation of PC§308(b), the average was 29.4 citations in the prior 12 months. Citation activity for agencies from urban (mean = 42.3

citations issued), suburban (mean = 28.8) or rural (mean = 16.3) counties differed significantly in the 2007 survey ($p = 0.014$).

The agencies in the IE panel reported that citations to minors for PC§308(b) violations increased from 1996 to 1998, but have remained relatively flat since (Figure YA-2b). Our five-wave analysis reveals a significant difference over time, but this is due to the low rate in 1996 ($p < 0.001$). No significant changes on this variable were detected statewide between 2004 and 2007 ($p = 0.165$).

Figure YA-2b
Percent of Agencies Issuing Citations for Youth Access Violations by Minors



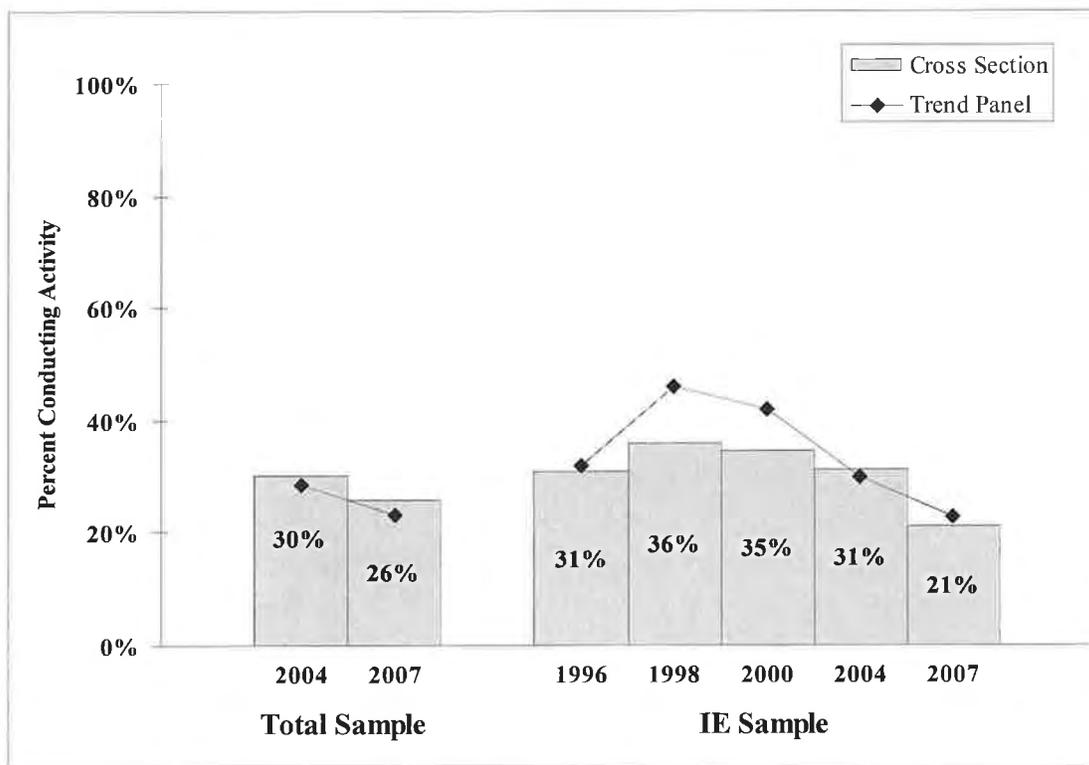
Source: IE Youth Access Enforcement Survey, 1996, 1998, 2000; Statewide Youth Access Enforcement Survey, 2004, 2007.

Illegal Sales of Tobacco to Minors

Decoy Operations. Decoy operations (also known as stings or undercover buying attempts) are conducted by enforcement agencies to determine if retail tobacco outlets are in compliance with the law. Figure YA-3 shows that 26% of all YA enforcement agencies statewide reported having conducting at least one decoy operation in the 12 months prior to the 2007 survey. Among the agencies reporting data in both 2004 and 2007, there is a significant decline in decoy operations (Chi-squared = 22.46, $p < 0.001$, $n = 161$). Similarly, we see a significant difference in the

percentage of agencies conducting decoy operations among the sub-sample of IE-county agencies that had responded to this item (or the earlier “sting” IE survey item) in all five waves of the YA survey (Cochran’s $Q = 10.20$, $p = 0.037$, $n = 57$).

Figure YA-3
Percent of Agencies Conducting Decoy Operations



Source: IE Youth Access Enforcement Survey, 1996, 1998, 2000; Statewide Youth Access Enforcement Survey, 2004, 2007.

Among the agencies that conducted at least one decoy operation in the previous year, an average of 64% of local tobacco outlets in the enforcement jurisdiction were included in one or more decoy operation. Most stores visited in decoy operations were chosen: (a) in response to complaints (27% of agencies reporting); (b) selected at random (21%); or (c) as part of a census of all stores in the jurisdiction (18%). Among those conducting at least one decoy operation, agencies statewide conducted an average of 3.6 operations in the prior year, down from almost 11 operation per year reported in 2004. Agencies in urban, suburban, and rural counties conducted an average of 5.9, 3.7 and 1.5 operations, respectively, a significant overall difference ($p = 0.02$).

Estimates of Illegal Tobacco Sales. Agencies that conducted decoy operations during the 12 months prior to the 2007 survey reported that an average of 13.7% of retail outlets visited made illegal sales to youth decoys. The rates estimated by agencies in urban (14%), suburban (10%), and rural (19%) counties were not significantly different from one another ($p = 0.085$).

Prosecution of Illegal Sales. In 2007, enforcement agencies statewide reported that, on average, about 57% of citations issued to retailers were prosecuted in the prior 12 months. The prosecution rate reported from agencies in urban (68%), suburban (56%), and rural (47%) counties did not differ significantly ($p = 0.50$). The serial cross-sectional differences between 2004 (19% of citations issued to retailers were reported to have been prosecuted) and 2007 (57% reported prosecuted), but the apparent effect vanishes in the analysis of the panel of agencies that report both 2004 (51%) and 2007 (52%) prosecutions.

Summary data on PC §308 (a) and (b) activities by enforcement agencies responding to the 2007 survey are presented in Table YA-1.

Table YA-1
Frequency of enforcement activities related to Penal Code §308
conducted by agency during the last 12 months

	<i>Mean (SD)*</i>	<i>Ever **</i> <i>(% agencies)</i>	<i>Valid N</i>
a. Issued warnings to minors attempting to purchase tobacco products	2.74 (1.53)	77	210
b. Issued warnings to merchants selling tobacco products to minors	2.66 (1.59)	74	210
c. Issued citations to minors for illegal possession or purchase of tobacco products	3.95 (1.80)	90	249
d. Issued citations to merchants for illegal sales of tobacco products to minors	2.51 (1.76)	62	221
e. Issued warnings or citations to individuals (other than merchants) for giving tobacco products to minors	2.10 (1.19)	67	202
f. Issued warnings or citations to merchants for selling bidis to minors	1.79 (1.34)	39	185
g. Issued warnings or citations to merchants for selling individual cigarettes or packages of less than 20	1.73 (1.30)	39	204
h. Issued warnings or citations to merchants for not posting 1-800-ASK4ID sign	1.89 (1.51)	40	207

* 1 = Never, 2 = Rarely, 7 = Very Often

** Ever is any valid response other than "Never"

Predictors of Youth Access Enforcement

Data on the following factors were collected in the 2007 YA survey to determine their influence on youth access enforcement: impact of the problem; relative importance of enforcement; barriers to enforcement; collaboration between enforcement and health groups; beliefs about the effectiveness of youth access laws; and funding for local enforcement. We first review the findings on these individual factors that may influence youth access enforcement and then report on results of multivariate analyses focusing on the 2004 and 2007 statewide surveys.

Seriousness of the Problem. In 2007, most enforcement agencies reported that kids getting tobacco products is “not at all serious” (18% of 248 valid responses) or only “somewhat serious” (51%). Fewer than one-third of agencies reported that this problem is “serious” (22%) or “very serious” (9%). and, there was a significant overall difference in mean ratings of the seriousness of this community problem among urban (mean = 2.89 on a 4-point scale, with 1 = “very serious” and 4 = “not at all serious”), suburban (mean = 2.91), and rural agencies (mean = 2.51) ($F = 5.55$, $df = 2$, $p = 0.004$).

Importance of Enforcement. As compared to other policies that the agency enforces, only 3% of agencies (9 of 267) reported that enforcement of policies that prevent retailers from selling tobacco products to minors is “not at all important.” Relative to other policy enforcement responsibilities, enforcement of tobacco sales to minors policies is, on average, neither unimportant or very important to reporting agencies (mean = 4.34 on a 7-point scale, with 1 = “not at all important” and 7 = “very important”). Likewise, only 3% (8 of 265) agencies reported that enforcement of policies regulating youth possession of tobacco products is “not at all important” as compared to other policies that the agency enforces, and the distribution of responses is relatively flat (mean = 4.45 on the 7-point importance scale). There were no differences in ratings of the importance of enforcement of youth access policies among agencies from urban, suburban, or rural counties.

Barriers to Enforcement. In the 2007 statewide survey, agencies rated two factors as the top barriers to enforcement of youth tobacco access policies: limited staff (mean = 5.57 on a 7-point scale with 1 = “not at all a barrier” and 7 = “a large barrier”), and insufficient budget (mean = 4.6) (see Table YA-2). Perceived lack of support from community leaders (mean = 2.36), the belief that the District or City Attorney will not prosecute (mean = 2.49), and issues around working with juveniles on decoy operations (mean = 2.70) were the three lowest-rated barriers to enforcement.

The mean of all barriers to enforcement items was calculated as a factor for use in multivariate analyses (mean = 3.37, $SD = 1.26$, $n = 260$). The mean barrier factor did not differ across agencies from urban, suburban or rural counties, nor did any of the individual barriers listed in Table YA-2.

Table YA-2**Perceived extent of barriers to enforcement of youth tobacco access policies in enforcement agency's community**

	<i>Mean (SD)*</i>	<i>Valid N</i>
a. No money in our budget	4.56 (2.19)	255
b. Limited staff	5.57 (1.69)	258
c. Issues around working with juveniles (e.g., safety, parental consent, agency liability involving youth)	2.70 (1.84)	251
d. Problem getting youth volunteers	3.02 (1.97)	249
e. District Attorney will not prosecute	2.49 (1.82)	240
f. Not a priority in our community	3.10 (1.69)	252
g. Lack of support from community leaders	2.36 (1.57)	247
h. Judge reluctant to assess fines	2.35 (1.61)	236
i. Other (e.g., limited time, funding)	2.93 (2.31)	15

* 1= Not at all a barrier, 7 = A large barrier

Perceived Effectiveness of Youth Access Laws. Agency respondents were asked to rate the perceived effectiveness of various enforcement policies or procedures in reducing youth access to tobacco. As shown in Table YA-3, the most highly rated policies were: suspension or revocation of a tobacco license for stores repeatedly selling tobacco to minors (mean = 6.38 on a 7-point scale with 1 = “not at all effective” to 7 = “very effective”); civil or criminal penalties for store clerks caught illegally selling tobacco to minors (mean = 5.89); civil penalties for store owners caught illegally selling tobacco to minors (mean = 5.88); criminal penalties for store owners caught illegally selling tobacco to minors (mean = 5.76); and tobacco decoy operations (mean = 5.58). Promotion of 18005ASK4ID, merchant education, and fines for minors in possession of tobacco products ranked the lowest (means of 3.97, 4.90, and 5.00, respectively). The mean of all perceived policy effectiveness items was calculated as a factor for use in multivariate analyses (mean = 5.41, SD = 1.00, n = 249). The effectiveness factor did not differ across agencies from urban, suburban, or rural counties, nor did any of the individual items listed in Table YA-3.

Table YA-3
**Perceived effectiveness of enforcement policies or procedures
in reducing youth access to tobacco**

	<i>Mean (SD)*</i>	<i>Valid N</i>
a. Tobacco decoy operations (undercover tobacco purchase surveys)	5.58 (1.37)	234
b. Merchant education regarding illegal sale of tobacco products to minors	4.90 (1.52)	243
c. Tobacco merchant licensing	5.07 (1.62)	224
d. Civil penalties for store owners caught illegally selling tobacco to minors	5.88 (1.28)	241
e. Criminal penalties for store owners caught illegally selling tobacco to minors	5.76 (1.43)	241
f. Civil or criminal penalties for store clerks caught illegally selling tobacco to minors	5.89 (1.27)	246
g. Suspension or revocation of a tobacco license for stores repeatedly selling tobacco to minors	6.38 (0.97)	145
h. Fines for minors in possession of tobacco products	5.00 (1.78)	145
i. Promotion of 1-800-ASK4ID	3.97 (1.86)	202

* 1= Not at all effective, 7 = Very effective

Collaboration. As shown in Table YA-4, enforcement agencies reported in 2007 collaborating on youth access enforcement activities most frequently during the prior 12 months with educational organizations (64% of agencies ever having collaborated), local government officials (59%), and county health departments (51%). Collaboration was reported to be lowest with voluntary health organizations (32%), merchants or business organizations (40%) and tobacco prevention coalitions (42%).

The mean of all collaboration items was calculated as a factor for use in multivariate analyses (mean = 2.27, SD = 1.23, n = 265). The collaboration factor did not differ across agencies from urban, suburban, or rural counties; however, as compared to agencies from urban counties, agencies from rural counties reported higher levels of collaboration with county health departments (mean diff = 0.85 on a 7-point scale, Tukey HSD p = 0.010), and with tobacco prevention coalitions (mean diff = 0.71, Tukey HSD p = 0.028).

Table YA-4
Frequency of agency collaboration on enforcing policies
to reduce youth access to tobacco, during the last 12 months

	<i>Mean (SD)*</i>	<i>Ever **</i> <i>(% agencies)</i>	<i>Valid N</i>
a. County health department (e.g., local tobacco control programs)	2.43 (1.91)	51	260
b. Local government officials (e.g., city council, code enforcement, District Attorney)	2.38 (1.66)	59	261
c. Voluntary health organizations (e.g., American Cancer Society)	1.65 (1.22)	32	262
d. Educational organizations (e.g., local schools)	3.03 (2.06)	64	262
e. Merchant and business organizations (e.g., Chamber of Commerce)	1.84 (1.30)	40	261
f. Tobacco prevention coalitions	2.20 (1.83)	42	265
g. State law enforcement agencies	2.23 (1.66)	48	258
h. Other (e.g., merchants, Probation Dept.)	2.53 (2.24)	43	30

* 1 = Never, 7 = Very Often

** Ever is any valid response other than "Never"

Funding. Agencies were asked to indicate all sources of funding for enforcement activities during calendar year 2006. Approximately 11% of the 271 agencies responding to this question received some funding. Funding was received from local health departments (6%), state law enforcement (4%), CDHS/TCS (4%), or from the local tobacco retail licensing program (3%).

Multivariate Analyses. Table YA-5 presents findings from logistic regression analyses using data from our 2004 and 2007 statewide YA surveys. In 2007, three of seven variables measured were found to be statistically independent predictors of whether decoy operations were conducted: perceptions of greater collaboration with other groups on enforcing youth access policies ($p < 0.01$), lower perceived barriers to enforcement ($p < 0.01$), and receipt of any funding for local enforcement ($p < 0.01$). This model explained 47% of the variance in whether decoy operations were conducted in the previous 12 months. This is an improvement over the 38% explained by the 2004 model, which also included an enforcement training variable that was excluded from the 2007 survey due to an end to the PC§308(a) statewide training program.

Table YA-5
Associations between independent enforcement variables and whether decoy operations were conducted in the previous 12 months

<i>Independent Variables</i>	<i>Survey Year</i>	<i>Odds Ratio</i>	<i>Confidence Interval</i>	<i>P value</i>
Importance of problem	2004	1.61	0.98 – 2.62	0.06
	2007	1.46	0.90 – 2.37	0.13
Relative importance of enforcement	2004	0.97	0.76 – 1.24	0.80
	2007	1.04	0.80 – 1.37	0.79
Barriers to enforcement	2004	0.81	0.58 – 1.12	0.21
	2007	0.51	0.35 – 0.74	< 0.01
Collaboration	2004	1.71	1.30 – 2.29	< 0.01
	2007	2.08	1.51 – 2.88	< 0.01
Effectiveness of youth access laws	2004	1.38	0.94 – 2.03	0.10
	2007	0.74	0.51 – 1.09	0.13
Funding for local enforcement	2004	4.66	1.45 – 14.70	< 0.01
	2007	15.52	4.39 – 54.90	< 0.01
Training for local enforcement	2004	2.57	1.23 – 5.39	< 0.05
	2007	---	---	---

NOTE: 2004 and 2007 analyses include non-missing data from 227 agencies statewide; factor scores (means) were used for barriers to enforcement, barriers to compliance, and collaboration on enforcement independent variables; Hosmer Lemeshow Goodness of Fit: p = 0.26 (2004); p = 0.53 (2007).
Source: Statewide Youth Access Enforcement Survey, 2004, 2007.

Plans for Youth Access Enforcement

In 2007, agencies were asked to rate their agreement with the statement: “In the next six months, my agency will be actively enforcing PC§308(a).” Statewide, agencies somewhat agreed with this statement (mean = 3.58 on a 7-point scale where 1 = “strongly disagree” and 7 = “strongly agree”), and there were no differences among agencies from urban, suburban, or rural counties.

Enforcement in Jurisdictions with Strong Retail Tobacco Ordinances

In recent years, TCS has encouraged the passage of strong local licensing ordinances in an effort to drive down rates of illegal sales to minors. As defined by the Center for Tobacco Policy and Organizing (<http://www.californialung.org/thecenter/>), a strong local tobacco licensing includes: all retailers that sell tobacco products must obtain a license and renew it annually; a fee to sufficiently fund an effective program including administration and enforcement; an enforcement plan; coordination of tobacco regulations so that a violation of any existing local, state or federal

tobacco regulation violates the license; and a financial deterrent through fines and penalties including the suspension and revocation of the license.

In an effort to evaluate the impact of strong local licensing ordinances on enforcement, we identified ten agencies situated in jurisdictions with strong ordinances as defined above that were in effect as of January 1, 2006. We chose this date because our survey questions referenced specific activities within the previous 12 months. Our 2007 YA enforcement survey revealed that agencies in jurisdictions with strong ordinances reported conducting significantly more decoy operations over the prior 12 months (mean = 80%) than did agencies in jurisdictions without strong ordinances (mean = 24%) ($p < 0.001$). Additionally, agencies in jurisdictions with strong ordinances also perceived fewer barriers to enforcement than did agencies in jurisdictions without strong ordinances (mean = 2.7 and 3.4, respectively, $p = 0.09$), and they reported greater collaboration with other community groups (mean = 3.0 and 2.2, respectively, $p = 0.07$). Although the latter two differences were not statistically significant, they are promising particularly in light of the extreme imbalance in group size (10 agencies in the strong ordinance group vs. 261 agencies with no or weak ordinances).

Results: Enforcement of Secondhand Smoke Laws

In this section we present our findings from the 2007 statewide survey of agencies charged with enforcement of two selected California laws protecting people from exposure to secondhand smoke (SHS): Labor Code (LC) §6404.5, which requires that smoking be prohibited in virtually all enclosed places of employment; and Government Code (GC) §7596-7598, which prohibits smoking within 20 feet of government building entrances, exits, and operable windows.

California SHS laws are enforced by a variety of local agencies including county health departments, police and sheriff departments, fire departments, code enforcement officers, building officials, and others. Each jurisdiction (municipality or county) typically designates one agency to be responsible for enforcement; however, in some jurisdictions more than one agency has responsibility. Data are reported in this section only for one primary agency per jurisdiction, and only for those agencies responsible for enforcement of LC§6404.5 or GC§7596-7598, as appropriate. We also compare 2007 SHS law enforcement results with data from our statewide survey conducted in 2004, and report on trends among the subset of enforcement agencies surveyed in 2007 that were also in the 18 focal counties of the 1996-2000 IE.

Enforcement of LC§6404.5 — Smoke-free Workplaces (Excluding Bars)

Current Enforcement Activities. Table SHS-1 shows that half of enforcement agencies conducted compliance checks (50% of responding agencies statewide) and responded to inquiries and complaints (49% and 51% respectively) to enforce LC§6404.5 provisions governing restaurants and other indoor workplaces during one year prior to the 2007 survey. Nearly half (44%) also educated owners and others about LC§6404.5. Relatively few agencies issued fines (9%) or citations (11%) in response to violations detected. Almost two-thirds of agencies statewide (61%) reported conducting at least one SHS enforcement activity during the year prior to survey completion, which did not differ significantly among agencies located in LLA-designated urban (62%), suburban (55%), or rural (56%) counties ($p = 0.49$).

Figure SHS-1 displays rates for specific SHS enforcement activities in workplaces (excluding bars) for agencies located in urban, suburban, and rural counties. As compared to agencies in urban and suburban counties, significantly fewer rural-county agencies reported that they had issued any warnings for violations of LC§6404.5 ($p = 0.03$). There were no differences in the percent of agencies conducting any other type of SHS enforcement in workplaces across urban, suburban, or rural counties.

Among the 145 agencies stating that they are responsible for issuing LC§6404.5 citations at non-bar workplaces, only 5.5% reported having issued at least one citation in the previous year. The average number of citations issued by these 8 agencies was 7.1 (SD = 8.66), with no significant differences among urban, suburban, or rural agencies. Only about half of all citations issued, however, were prosecuted (mean = 4.17, SD = 4.22).

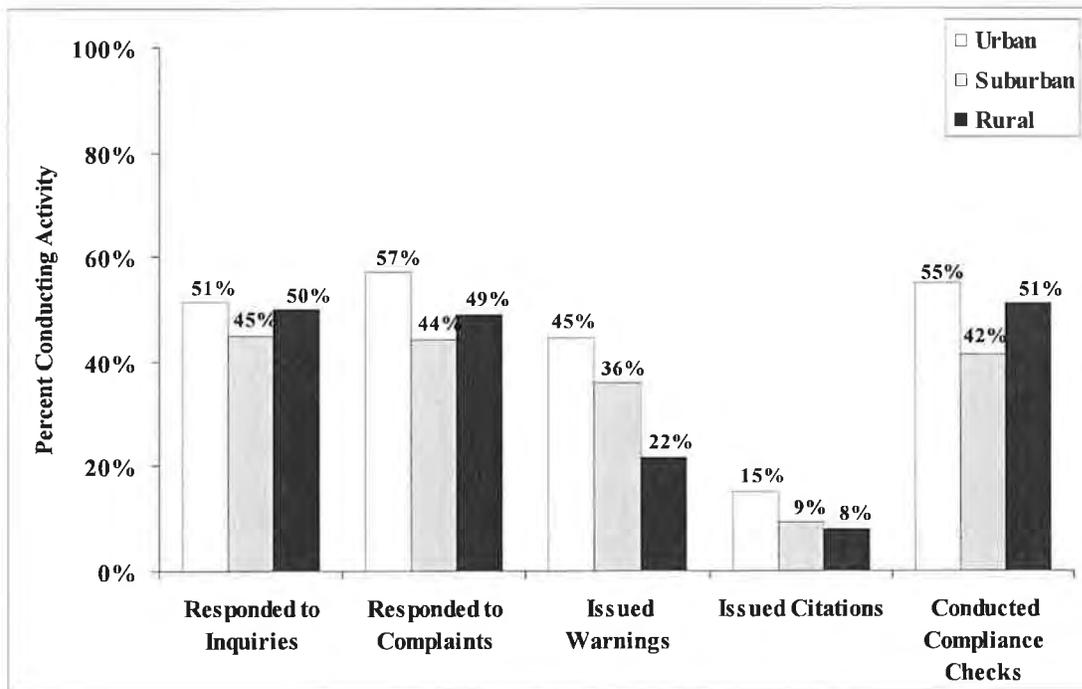
Table SHS-1
Frequency of enforcement activities related to LC§6404.5
conducted by agency, during the last year

	<i>Mean (SD)*</i>	<i>Ever **</i> <i>(% agencies)</i>	<i>Valid N</i>
a. Responded to inquiries	1.97 (1.47)	49	169
b. Responded to complaints	2.01 (1.51)	51	173
c. Issued warnings	1.69 (1.32)	35	171
d. Issued citations	1.27 (0.98)	11	171
e. Issued fines	1.22 (0.91)	9	162
f. Conducted compliance checks	2.40 (1.93)	50	175
g. Educated owners about LC §6404.5	2.14 (1.72)	44	170
h. Educated others about LC §6404.5	2.01 (1.66)	39	168
i. Other (e.g., training officers)	1.25 (1.01)	10	40

* 1= Never, 2 = Rarely, 7 = Very Often

** Ever is any valid response other than “Never”

Figure SHS-1
Secondhand Smoke Enforcement Activities in
Indoor Workplaces for Agencies in Urban, Suburban, and Rural Counties

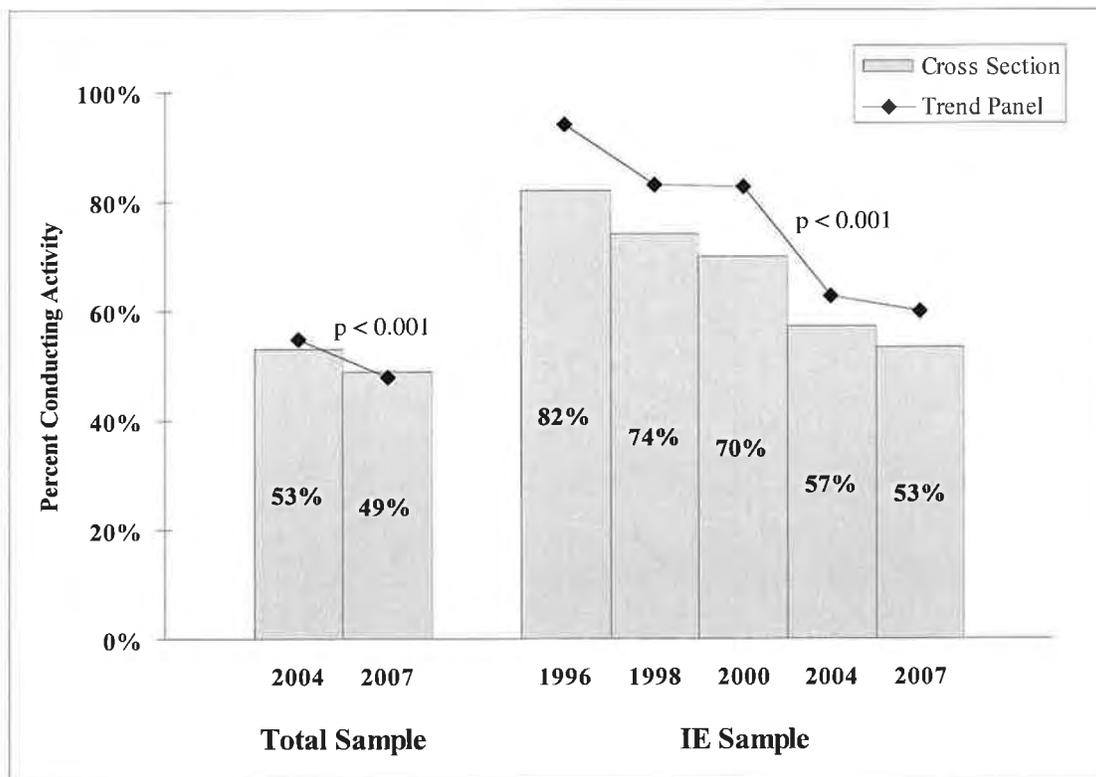


Note: Percentages reflect the number of agencies that reported doing at least one enforcement activity in the year prior to the survey. Source: SHS Enforcement Survey 2007.

Trends in Enforcement. Figure SHS-2a presents data on the percent of surveyed agencies that reported they had **responded to inquiries** regarding enforcement of workplace SHS laws activities in the 2004 and 2007 Statewide SHS Surveys, and among the sub-sample of agencies in the three IE survey waves (1996, 1998, and 2000) and 2004 and 2007 surveys. On the left side of the figure, we report data for all agencies responding to this item in the 2004 and 2007 statewide SHS surveys, both as serial cross-sections with all valid responses in either wave (bars), and for the panel of agencies that reported valid responses in both 2004 and 2007 (trend line). On the right side of the figure, we report 1996-2007 data only for those agencies from the 18 focal IE counties, also as serial cross-sections and as a panel.

As shown in Figure SHS-2a, there is a significant decline in the percent of agencies reporting that they had responded to workplace SHS inquiries among the agencies in the statewide sample that completed both the 2004 and 2007 surveys (Chi-squared = 23.73, $p < 0.001$, $n = 108$). Similarly, we see a significant difference in the percentage of agencies responding to workplace SHS inquiries among the sub-sample of IE-county agencies that had responded to this item in all five waves of the SHS survey (Cochran's $Q = 20.55$, $p < 0.001$, $n = 35$).

Figure SHS-2a
Secondhand Smoke Enforcement Agency Activities in
Restaurants and Indoor Workplaces (Excluding Bars):
Respond to Inquiries

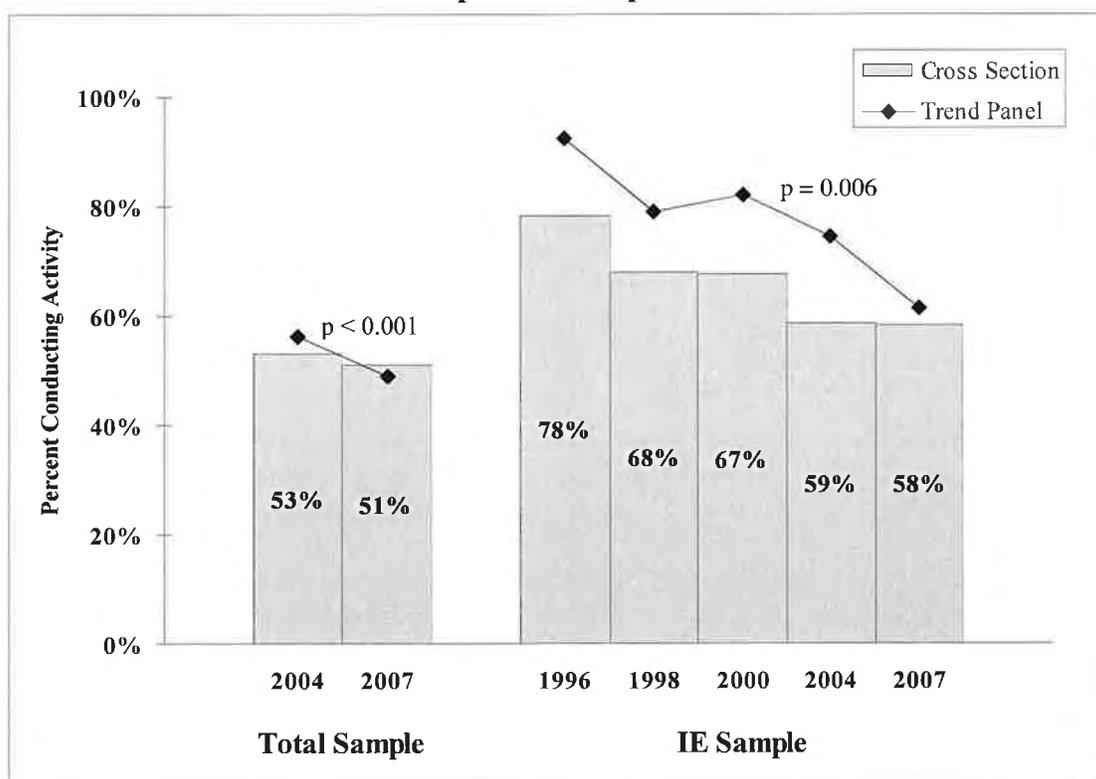


Note: Percentages reflect the number of agencies that reported doing at least one enforcement activity in the six months prior to the survey (1996-2000) or one year prior to the survey (2004-2007).
 Source: SHS Enforcement Survey, 1996, 1998, 2000, 2004, and 2007.

Figures SHS-2b through SHS-2e present cross-sectional and panel data for the percent of responding agencies involved in other workplace SHS enforcement activities: respond to complaints (2b); issue warnings (2c); issue citations (2d); and conduct compliance checks (2e). Significant declines are seen statewide from 2004 to 2007 in the percent of agencies reporting involvement in all types of enforcement actions: respond to complaints (Chi-squared = 26.22, $p < 0.001$, $n = 114$); issue warnings (Chi-squared = 7.62, $p = 0.006$, $n = 112$); issue citations (Chi-squared = 18.44, $p < 0.001$, $n = 105$); and conduct compliance checks (Chi-squared = 25.11, $p < 0.001$, $n = 113$).

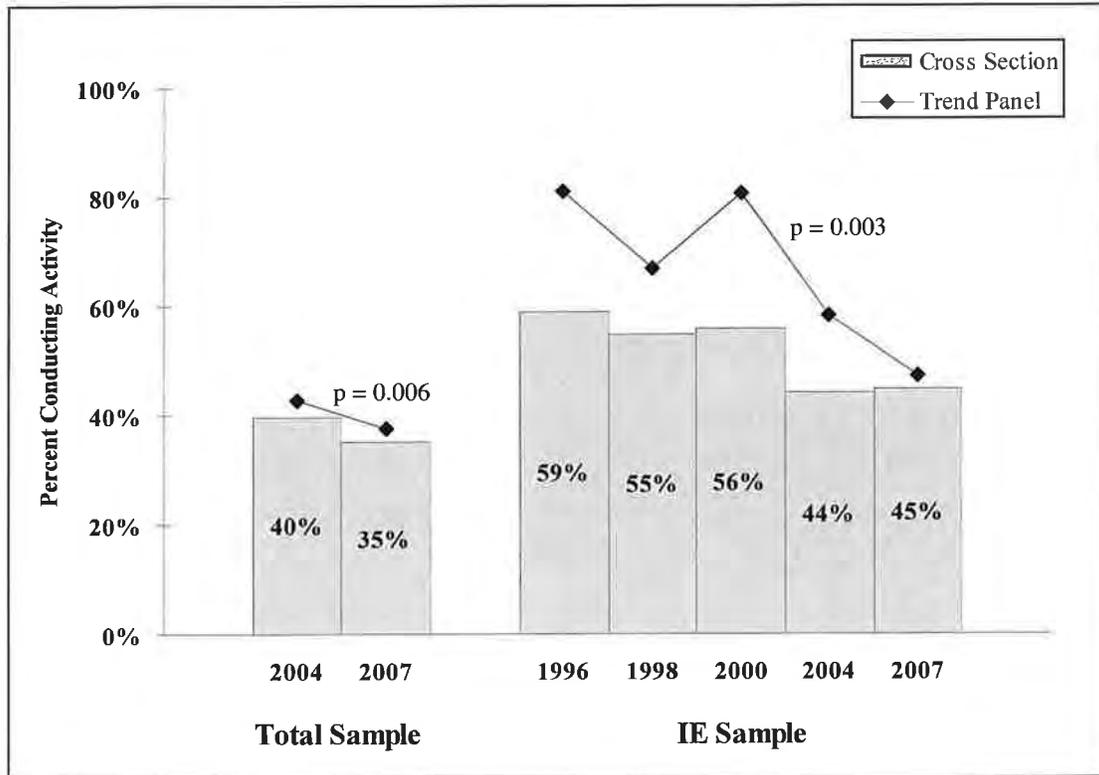
Similarly, the IE panel also shows some differences in the percent of agencies reporting workplace SHS enforcement activity across the five waves: respond to complaints (Cochran's Q = 14.57, $p = 0.006$, $n = 39$); issue warnings (Cochran's Q = 16.36, $p = 0.003$, $n = 36$); issue citations (Cochran's Q = 3.55, $p = 0.471$, $n = 37$); and conduct compliance checks (Cochran's Q = 3.79, $p = 0.436$, $n = 36$).

Figure SHS-2b
Secondhand Smoke Enforcement Agency Activities in
Restaurants and Indoor Workplaces (Excluding Bars):
Respond to Complaints



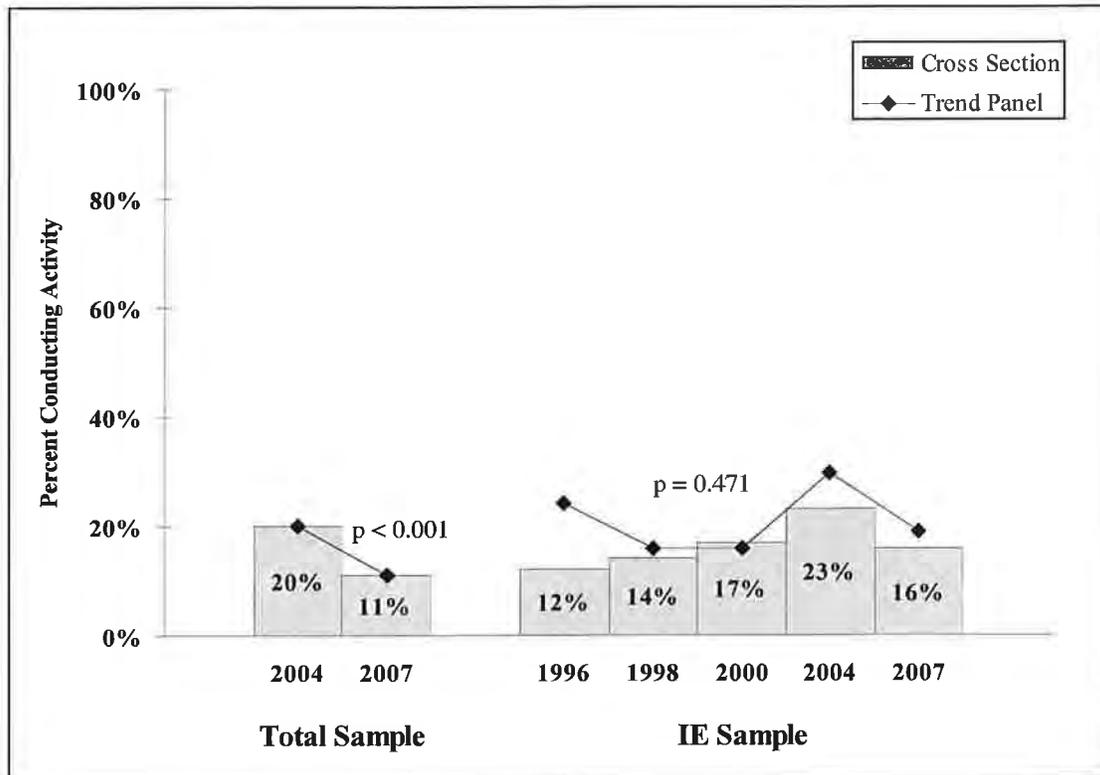
Note: Percentages reflect the number of agencies that reported doing at least one enforcement activity in the six months prior to the survey (1996-2000) or one year prior to the survey (2004-2007).
Source: SHS Enforcement Survey, 1996, 1998, 2000, 2004, and 2007.

Figure SHS-2c
Secondhand Smoke Enforcement Agency Activities in
Restaurants and Indoor Workplaces (Excluding Bars):
Issue Warnings



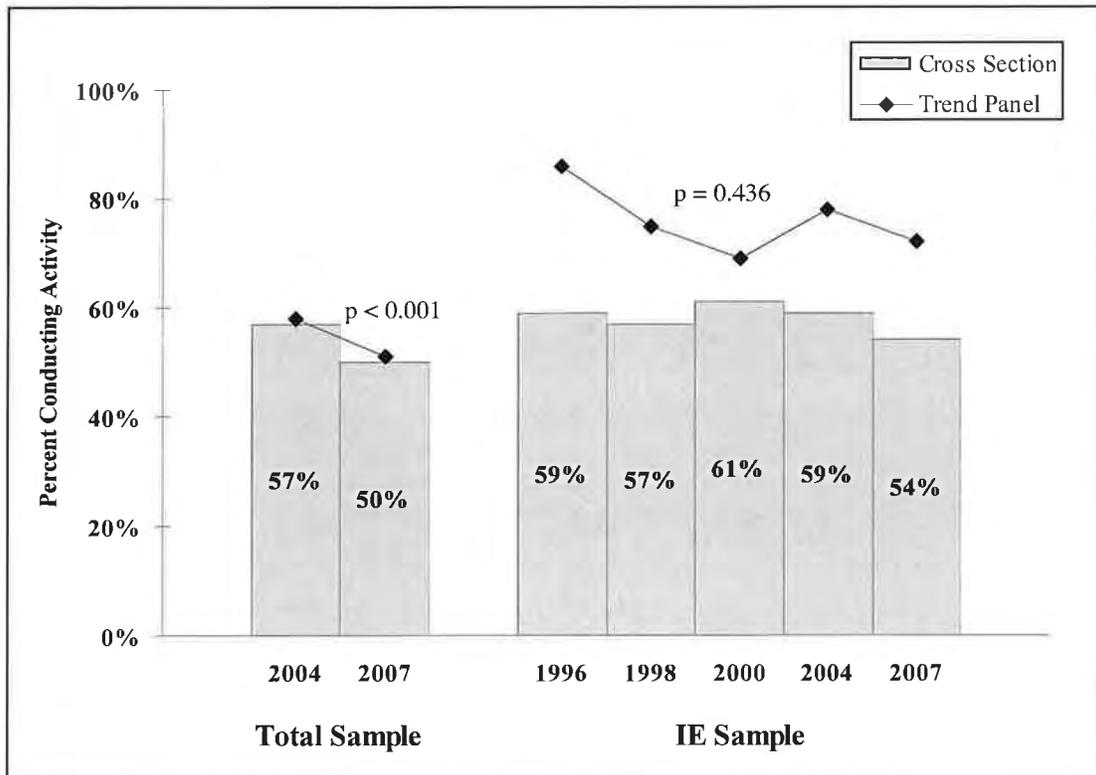
Note: Percentages reflect the number of agencies that reported doing at least one enforcement activity in the six months prior to the survey (1996-2000) or one year prior to the survey (2004-2007).
 Source: SHS Enforcement Survey, 1996, 1998, 2000, 2004, and 2007.

Figure SHS-2d
Secondhand Smoke Enforcement Agency Activities in
Restaurants and Indoor Workplaces (Excluding Bars):
Issue Citations



Note: Percentages reflect the number of agencies that reported doing at least one enforcement activity in the six months prior to the survey (1996-2000) or one year prior to the survey (2004-2007).
 Source: SHS Enforcement Survey, 1996, 1998, 2000, 2004, and 2007.

Figure SHS-2e
Secondhand Smoke Enforcement Agency Activities in
Restaurants and Indoor Workplaces (Excluding Bars):
Conduct Compliance Checks



Note: Percentages reflect the number of agencies that reported doing at least one enforcement activity in the six months prior to the survey (1996-2000) or one year prior to the survey (2004-2007).
 Source: SHS Enforcement Survey, 1996, 1998, 2000, 2004, and 2007.

It should be noted that the relatively large differences in trend and cross-sectional values in the IE sample on several of enforcement variables suggests that agencies that were consistent respondents across the five survey waves were more actively engaged in certain SHS enforcement actions than were those agencies that did not consistently respond to all waves of the survey. Thus, the IE panel data should not be used to estimate statewide levels of enforcement, only to demonstrate a continuing downward trend in SHS enforcement actions, even among those agencies most engaged in SHS enforcement.

Predictors of Enforcement. We looked at various factors that have in the past been shown to be predictors of local enforcement activities related to LC§6404.5, including: relative seriousness of SHS as a community problem; relative importance of enforcement of SHS laws; perceived compliance with SHS laws; beliefs about the barriers to conducting enforcement operations of SHS laws; beliefs about the barriers to achieving compliance with LC§6404.5; and the extent of enforcement agency collaboration with other groups on enforcing SHS laws.

Seriousness of SHS problem. Compared to other community problems, most agencies believe that it is “not at all serious” (25%) or only “somewhat serious” (35%) that non-smokers breathe other people’s smoke when in indoor public areas such as restaurants and workplaces. Only 14% of the 166 agencies providing valid responses to this question rated the SHS problem as “very serious” compared to other problems, down from 20% in 2004. As seen in the 2004 survey, there were no differences in ratings of the relative seriousness of SHS as a community problem among urban, suburban, or rural agencies.

Importance of enforcement. Compared to other laws enforced by respondent agencies, enforcement of laws that prohibit smoking in indoor public areas is only moderately important (mean = 4.02 on a 7-point scale where 1 = “not at all important” and 7 = “very important”, SD = 2.03). This variable did not differ across agencies from urban, suburban, or rural counties, but the statewide mean importance rating was slightly lower than reported in 2004 survey (mean = 4.42).

Perceived compliance. Most enforcement agencies (92%) believe that workplaces are compliant with SHS laws (mean = 6.23 on a 7-point scale, SD = 1.02). This variable did not differ significantly across agencies from urban, suburban, or rural counties, and these statewide results are also nearly identical to that found in the 2004 SHS enforcement survey.

Barriers to enforcement. Statewide, limited staff ranked as the top barrier to agencies conducting enforcement activities related to SHS laws (mean = 4.55 on a 7-point scale with 1 = “not at all a barrier” and 7 = “a large barrier”) (see Table SHS-2). Additionally, insufficient budget (mean = 3.72), low community priority (mean = 3.05) and other issues (e.g., lack of training, no complaints) were moderately rated barriers to enforcement. The mean of all barriers to enforcement items was calculated as a factor for use in multivariate analyses (mean = 3.49, SD = 1.75). There were no significant differences in perceived barriers to enforcement among rural, suburban or urban agencies.

Table SHS-2

**Perceived extent of barriers to enforcing
secondhand smoke/clean indoor air laws**

	<i>Mean (SD)*</i>	<i>Valid N</i>
a. No money in our budget	3.72 (2.41)	179
b. Limited staff	4.55 (2.37)	181
c. Not a priority in our community	3.05 (2.06)	179
d. Lack of support from community leaders	2.25 (1.71)	175
e. Other (e.g., lack of training, no complaints)	3.04 (2.54)	25

* 1= Not at all a barrier, 7 = A large barrier

Barriers to compliance. All barriers to achieving compliance contained in the survey were rated very low by agencies statewide (see Table SHS-3), and none of the individual barriers differed significantly among agencies from urban, suburban, or rural counties. We calculated the mean of all barriers to compliance items for use in multivariate analyses (mean = 2.24, SD = 1.26), and this value did not differ by county type.

Table SHS-3
Perceived extent of barriers to achieving compliance
with Labor Code 6404.5

	<i>Mean (SD)*</i>	<i>Valid N</i>
a. Insufficient enforcement operations conducted	2.86 (2.02)	175
b. Fines/penalties are insufficient deterrents	2.28 (1.69)	169
c. Exemptions, such as owner-operated bars and worksite with five or fewer employees, create an uneven playing field	2.21 (1.61)	175
d. Lack of signage posted for English-speakers	1.79 (1.28)	177
e. Lack of signage posted for Spanish-speakers	1.87 (1.35)	177
f. Lack of awareness among worksites regarding the requirements of the law	2.05 (1.51)	176
g. Lack of stories in the local media supporting and/or covering results of enforcement operations	2.36 (1.71)	174
h. Other (e.g., lack of training, no complaints)	2.14 (1.73)	22

* 1= Not at all a barrier, 7 = A large barrier

Collaboration. Most enforcement agencies statewide in 2007 reported that they have collaborated on education or enforcement of SHS laws at least once in the past year with county or state health departments (55% of agencies reporting) (see Table SHS-4). Just under half reported having collaborated at least once with other law enforcement agencies (49%), local government officials (47%), local tobacco control programs (45%), educational organizations (45%), and businesses (42%). Only about one-third of agencies reported that they had collaborated with tobacco control coalitions or voluntary health organizations during the prior year (36% each).

We calculated the mean of all collaboration items for use in multivariate analyses (mean = 2.16, SD = 1.44, n = 186). The collaboration factor did not differ across agencies from urban, suburban, or rural counties, nor did any individual collaboration item listed in Table SHS-4.

Table SHS-4
Frequency of agency collaboration on education or enforcement
of secondhand smoke/clean indoor air laws, during the last year

	<i>Mean (SD)*</i>	<i>Ever **</i> <i>(% agencies)</i>	<i>Valid N</i>
a. County or state health department	2.63 (2.05)	55	183
b. Local tobacco control programs	2.28 (1.90)	45	185
c. Local government officials (e.g., city council, board of supervisors)	2.07 (1.53)	47	186
d. Park and recreation programs	1.90 (1.48)	40	182
e. Voluntary health organizations (e.g., ACS)	1.89 (1.60)	36	183
f. Educational organizations (e.g., local schools)	2.24 (1.79)	45	183
g. Businesses (e.g., restaurant associations)	2.00 (1.57)	42	184
h. Tobacco control coalitions	2.10 (1.91)	36	183
i. Other law enforcement agencies (e.g., fire department, code enforcement, city manager)	2.28 (1.74)	49	179
j. Other (e.g., DA's office, Park Ranger)	1.40 (1.04)	17	30

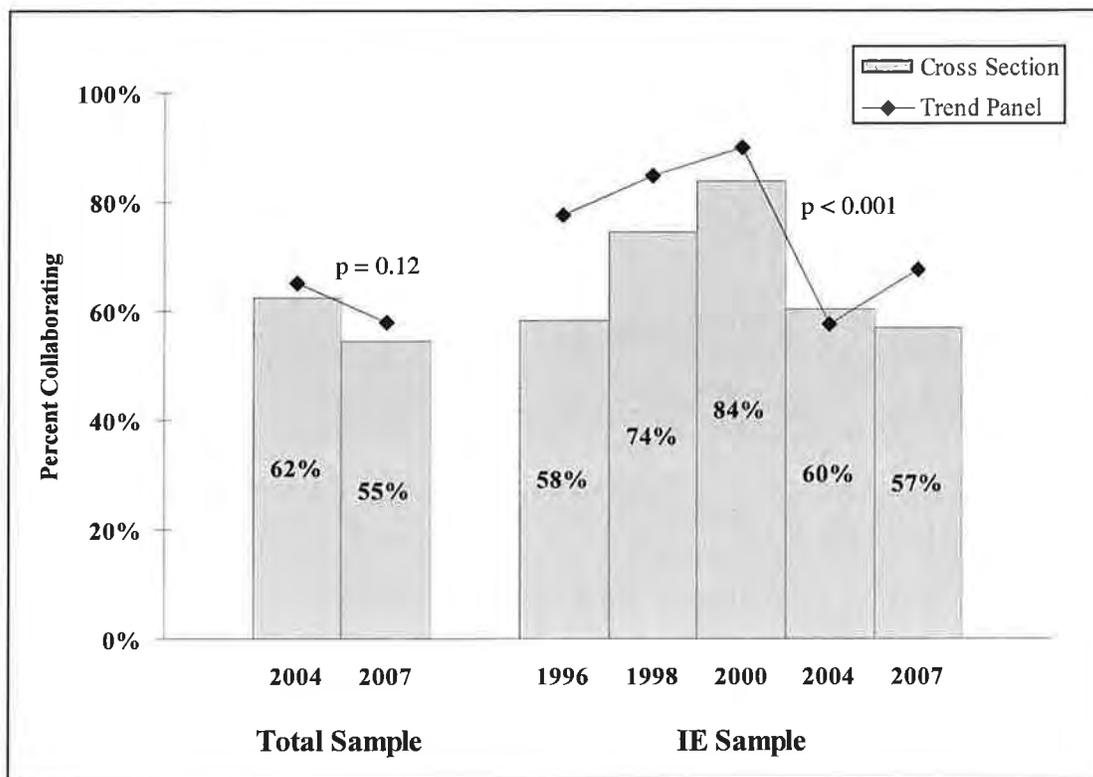
* 1 = Never, 7 = Very Often

** Ever is any valid response other than "Never"

Trends in Collaboration. Figures SHS-3a through SHS-3e present cross-sectional and panel data for the percent of responding agencies reporting that they had collaborated with various others on SHS enforcement at least once during the prior year: county health departments (3a); local government officials (3b); businesses (3c); tobacco coalitions (3d); voluntary health organizations (3e), and educational organizations (3f). Significant declines are seen statewide from 2004 to 2007 in the percent of agencies reporting collaboration with: businesses (Chi-squared = 4.43, $p = 0.035$, $n = 131$); voluntary health organizations (Chi-squared = 8.25, $p = 0.004$, $n = 130$); and educational organizations (Chi-squared = 14.34, $p < 0.001$, $n = 128$). No significant changes were seen in the percent of enforcement agencies collaborating with county health departments, local government officials, and tobacco coalitions.

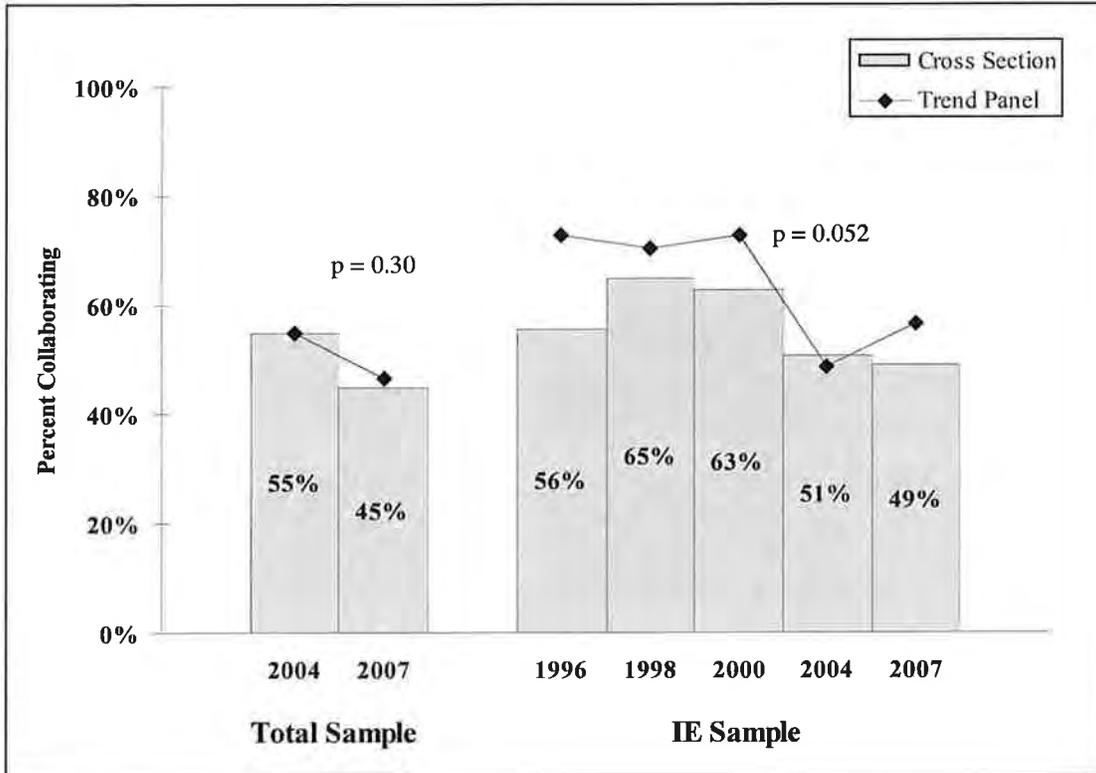
In contrast, the IE panel only showed significant differences in the percent of agencies reporting collaboration on workplace SHS enforcement with county health departments (Cochran's $Q = 20.15$, $p < 0.001$, $n = 40$); collaboration among all other agencies in the IE focal counties was not significantly different across the five survey waves.

Figure SHS-3a
Secondhand Smoke Enforcement Agency
Collaboration with Other Groups: County Health Departments



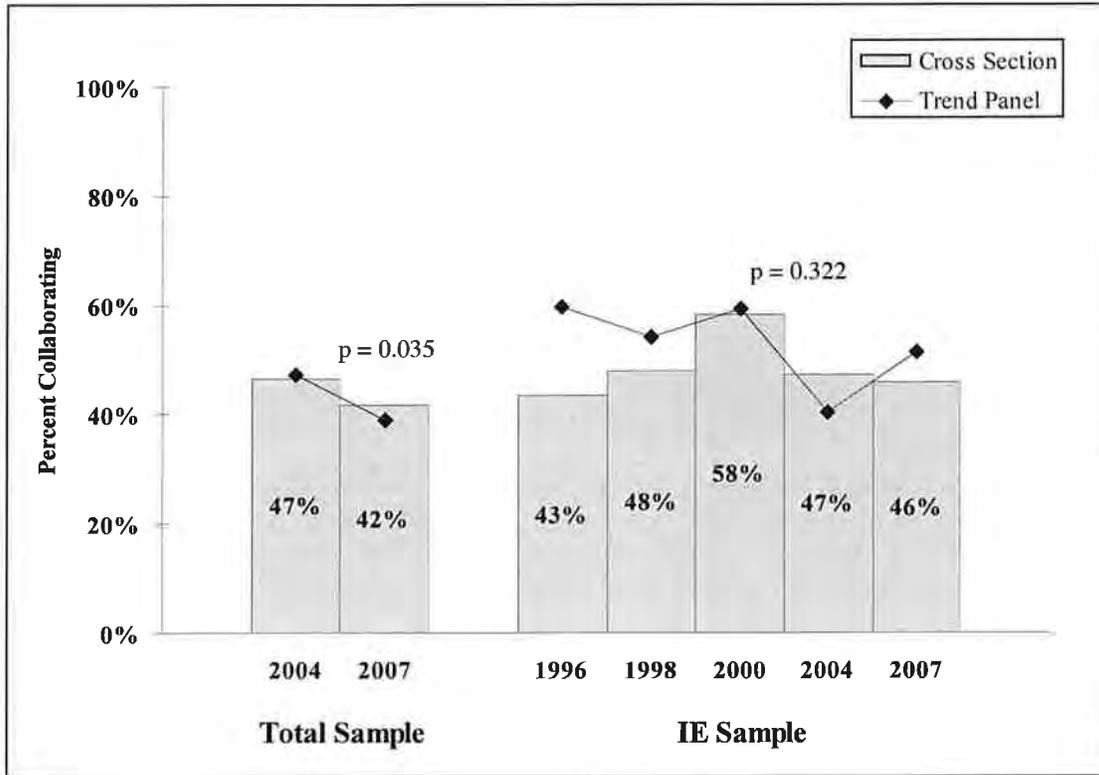
Total Sample includes data for all agencies statewide, not only those from Independent Evaluation counties.
 Source: SHS Enforcement Survey, 1996, 1998, 2000, 2004, and 2007.

Figure SHS-3b
Secondhand Smoke Enforcement Agency
Collaboration with Other Groups: Local Government Officials



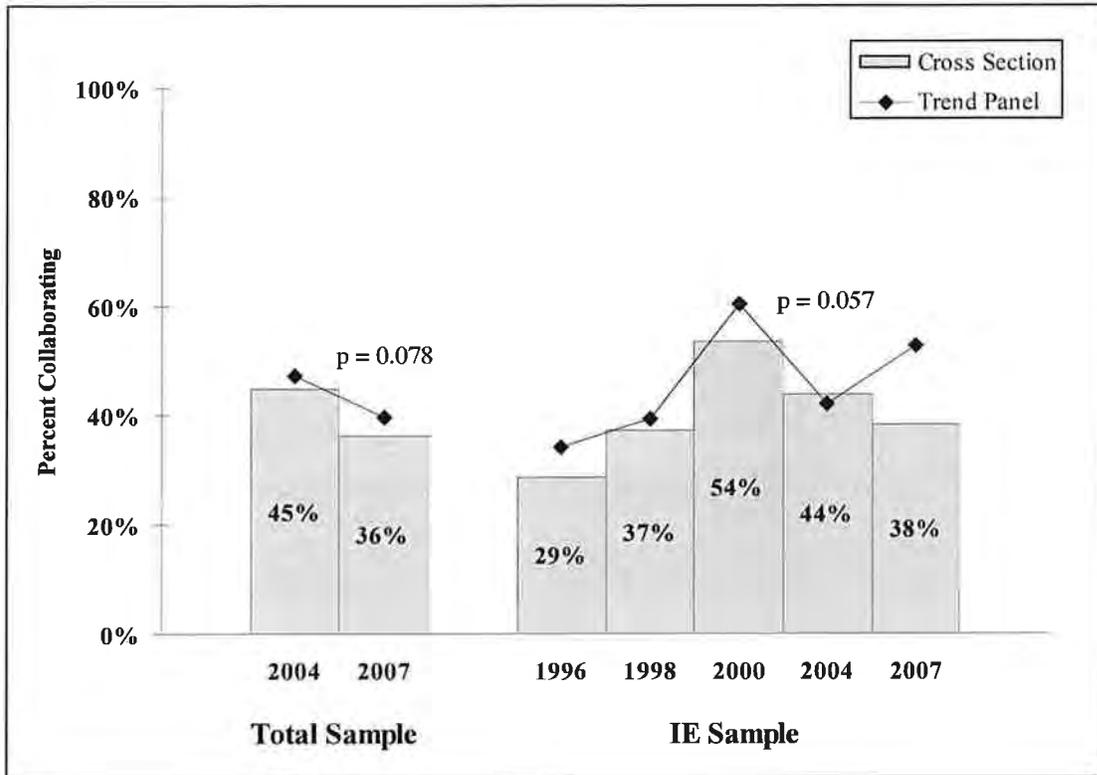
Total Sample includes data for all agencies statewide, not only those from Independent Evaluation counties.
 Source: SHS Enforcement Survey, 1996, 1998, 2000, 2004, and 2007.

Figure SHS-3c
Secondhand Smoke Enforcement Agency
Collaboration with Other Groups: Businesses



Total Sample includes data for all agencies statewide, not only those from Independent Evaluation counties.
 Source: SHS Enforcement Survey, 1996, 1998, 2000, 2004, and 2007.

Figure SHS-3d
Secondhand Smoke Enforcement Agency
Collaboration with Other Groups: Tobacco Coalitions*

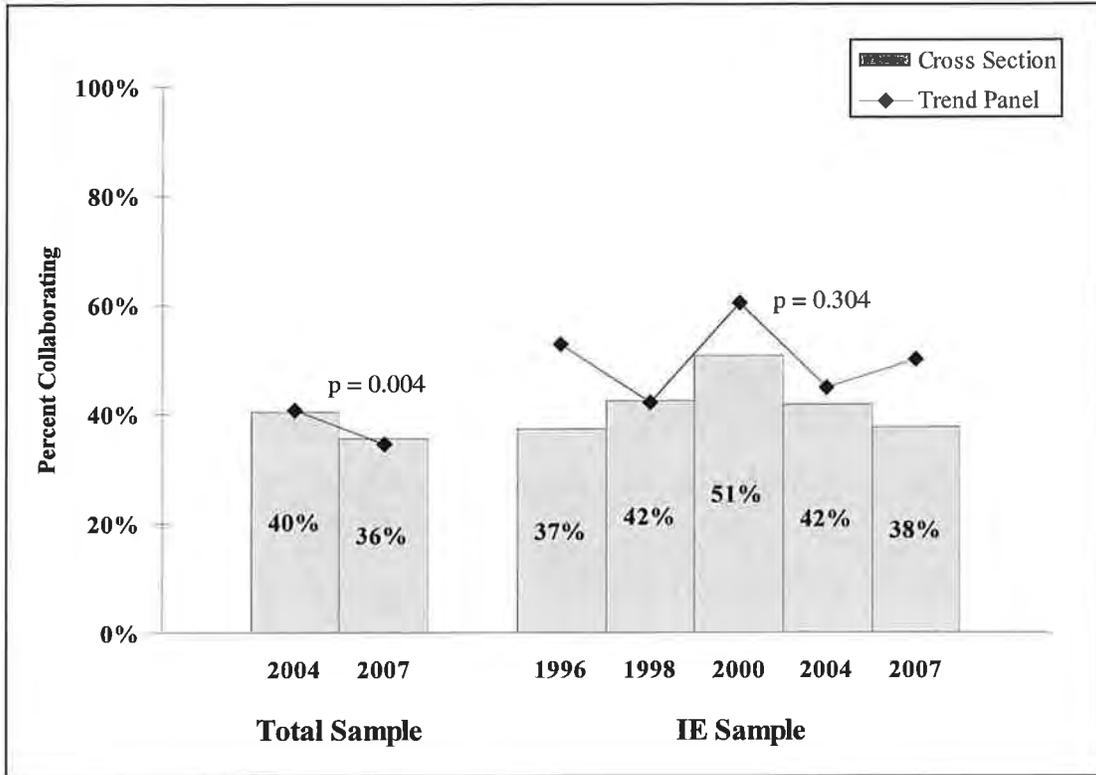


Total Sample includes data for all agencies statewide, not only those from Independent Evaluation counties.

* Collaboration was not measured for this group in 1996.

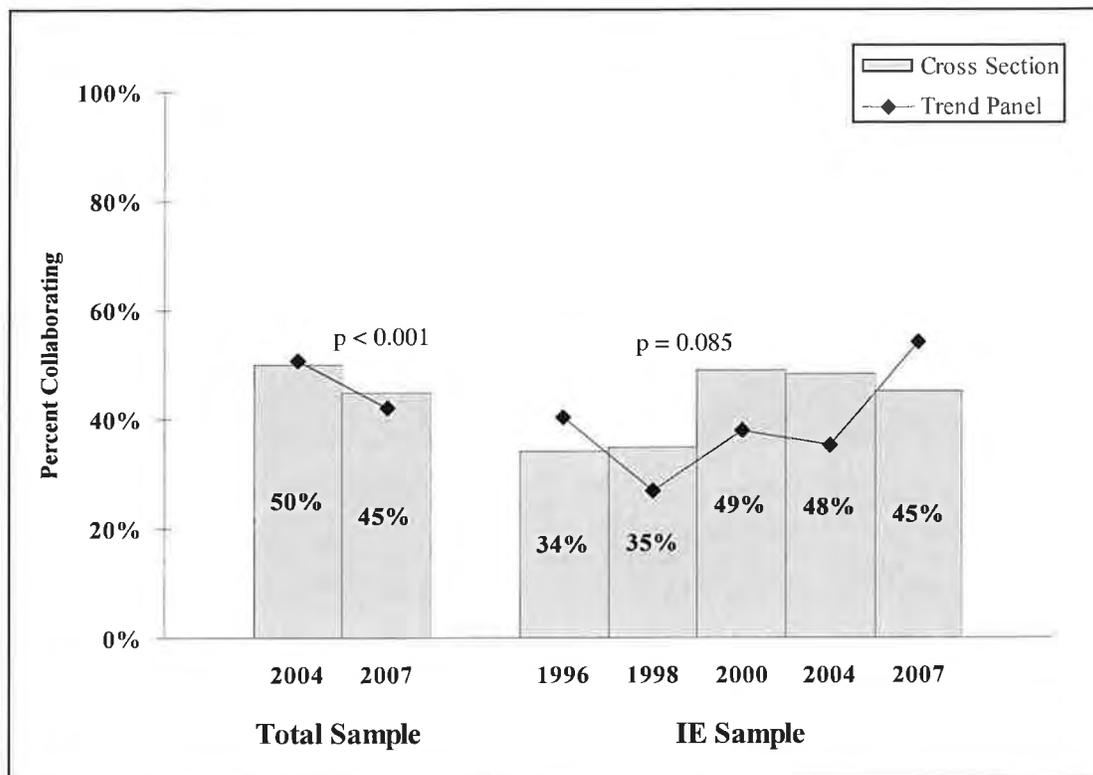
Source: SHS Enforcement Survey, 1996, 1998, 2000, 2004, and 2007.

Figure SHS-3e
Secondhand Smoke Enforcement Agency
Collaboration with Other Groups: Voluntary Health Organizations



Total Sample includes data for all agencies statewide, not only those from Independent Evaluation counties.
 Source: SHS Enforcement Survey, 1996, 1998, 2000, 2004, and 2007.

Figure SHS-3f
Secondhand Smoke Enforcement Agency
Collaboration with Other Groups: Educational Organizations



Total Sample includes data for all agencies statewide, not only those from Independent Evaluation counties.
 Source: SHS Enforcement Survey, 1996, 1998, 2000, 2004, and 2007.

Multivariate analyses. In our multivariate analyses we looked at the degree to which the above six variables/factors were independent predictors of three different dependent variables: whether agencies engaged in any type of workplace SHS enforcement activity in the prior year (as enumerated in Table SHS-1); whether agencies engaged in any high-level SHS enforcement activity in the prior year (any Table SHS-1 enforcement activity except educating owners or educating others); and whether agencies conducted any compliance checks during the prior year. Results of these analyses were generally comparable, so we report here only on predictors of SHS compliance check activities in workplaces, excluding bars.

Table SHS-5 presents findings from logistic regression analyses using data from 138 agencies statewide. Only one variable measured was shown to be a statistically independent predictor of whether compliance checks were conducted in the prior year: greater relative importance of enforcement of laws that prohibit smoking in indoor public areas such as restaurants and workplaces ($p = 0.023$). This model, however, explained only 11% of the variance in whether SHS compliance checks were conducted in the prior year.

Table SHS-5

Associations between independent variables and whether any SHS compliance checks were conducted in workplaces (excluding bars)

<i>Independent Variables</i>	<i>Odds Ratio</i>	<i>Confidence Interval</i>	<i>P value</i>
Relative seriousness of SHS problem	0.98	0.64 – 1.50	0.94
Relative importance of enforcement	1.28	1.03 – 1.59	0.02
Perceived compliance	0.90	0.61 – 1.32	0.59
Barriers to enforcement	1.00	0.78 – 1.30	0.99
Barriers to compliance	1.21	0.84 – 1.75	0.30
Collaboration on enforcement	1.09	0.83 – 1.43	0.53

NOTE: Analyses include non-missing data from 138 agencies statewide; factor scores (means) were used for barriers to enforcement, barriers to compliance, and collaboration on enforcement independent variables; Hosmer Lemeshow Goodness of Fit: $p = 0.54$.

Enforcement of LC§6404.5 — Smoke-free Bar Provision

Current Enforcement Activities. Table SHS-6 shows that about half or more enforcement agencies conducted compliance checks (69% of responding agencies statewide), educated bar owners (55%), responded to complaints (53%), responded to inquiries (51%), and educated others about the law (49%). Many agencies issued warnings (42%), but few agencies issued citations (23%) or fines (14%) in response to violations detected. Most agencies statewide reported conducting at least one bar SHS enforcement activity during the previous six months (70%), which did not differ significantly among agencies located in urban (76%), suburban (60%), or rural (71%) counties ($p = 0.12$).

Statewide, agencies reported a higher level of any enforcement activities for the smoke-free bar provision of LC§6404.5 (mean = 2.13 on a 7-point scale) than for the workplace (non-bar) provision of the law (mean = 1.87) (paired T-test = 4.80, $df = 160$, $p < 0.001$). Also, a significantly higher percentage of agencies reported issuing citations for violations of the smoke-free bar provision (21%) than for the workplace provision of the law (11%) ($p = 0.001$).

Table SHS-6
Frequency of enforcement activities related
to the smoking ban in bars during the prior six months

	<i>Mean (SD)*</i>	<i>Ever **</i> <i>(% agencies)</i>	<i>Valid N</i>
a. Responded to inquiries	2.16 (1.67)	51	160
b. Responded to complaints	2.19 (1.68)	53	163
c. Issued warnings	1.95 (1.57)	42	155
d. Issued citations	1.53 (1.21)	23	160
e. Issued fines	1.33 (1.03)	14	144
f. Conducted compliance checks	3.17 (2.09)	69	166
g. Educated bar owners about Labor Code 6404.5	2.48 (1.92)	55	160
h. Educated others about Labor Code 6404.5	2.25 (1.81)	49	152
i. Other (e.g., no complaints)	1.64 (1.79)	14	22

* 1= Never, 2 = Rarely, 7 = Very Often

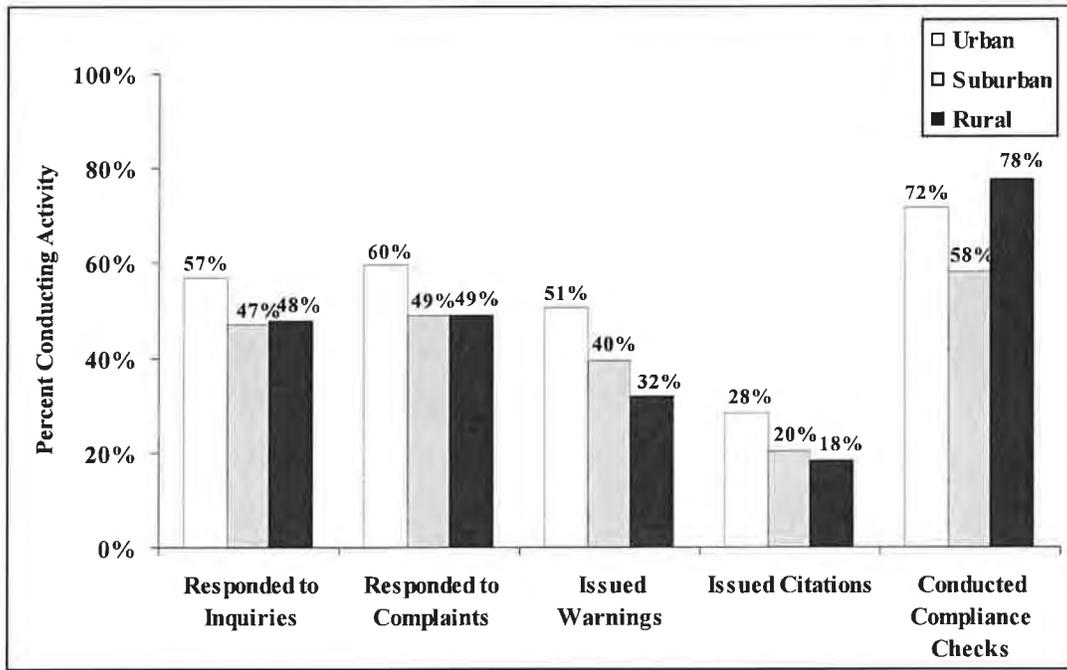
** Ever is any valid response other than "Never"

Stand-alone and in-restaurant bars were reported to be in the jurisdiction of 184 enforcement agencies that responded to the 2007 survey. Agencies in LLA-designated urban counties reported a significantly higher concentration of bars than did agencies in suburban or rural counties (Chi-squared = 31.47, $p < 0.001$). Figure SHS-4 displays rates for specific SHS enforcement activity in bars for agencies located in urban, suburban, and rural counties. Despite apparent difference, enforcement activity rates were not significantly different among urban, suburban, or rural agencies.

Among the 146 agencies stating that they are responsible for issuing LC§6404.5 smoke-free bar citations, only 8% reported having issued at least one citation for a **restaurant/bar** violation in the previous six months. The average number of citations issued by these 11 agencies was 4.6 (SD = 3.4), with most prosecuted (mean = 3.9, SD = 3.8). There were no significant differences among urban, suburban, or rural agencies on reported restaurant/bar citations.

Only 10% of agencies reported that they issued any LC§6404.5 smoke-free bar citations for violations in **stand-alone bars** during the previous six months. The average number of citations issued by these 14 agencies was 4.64 (SD = 4.2), with no significant differences among urban, suburban, or rural agencies. Again, most stand-alone bar citations issued were prosecuted (mean = 3.4, SD = 3.5).

Figure SHS-4
Secondhand Smoke Enforcement Activities in Bars
for Agencies in Urban, Suburban, and Rural Counties



Note: Percentages reflect the number of agencies that reported doing at least one enforcement activity in the six months prior to the survey. Source: SHS Enforcement Survey 2007.

Among all agencies reporting that they issued any citations for violation of the LC§6404.5 smoke-free bar provision, a mean of 7% of citations were issued to patrons and a mean of 3% were issued to bar owners or employees. There was no statistically significant difference in the estimated percentage of citations issued to patrons or bar owners/employees across agencies in urban, suburban, or rural counties.

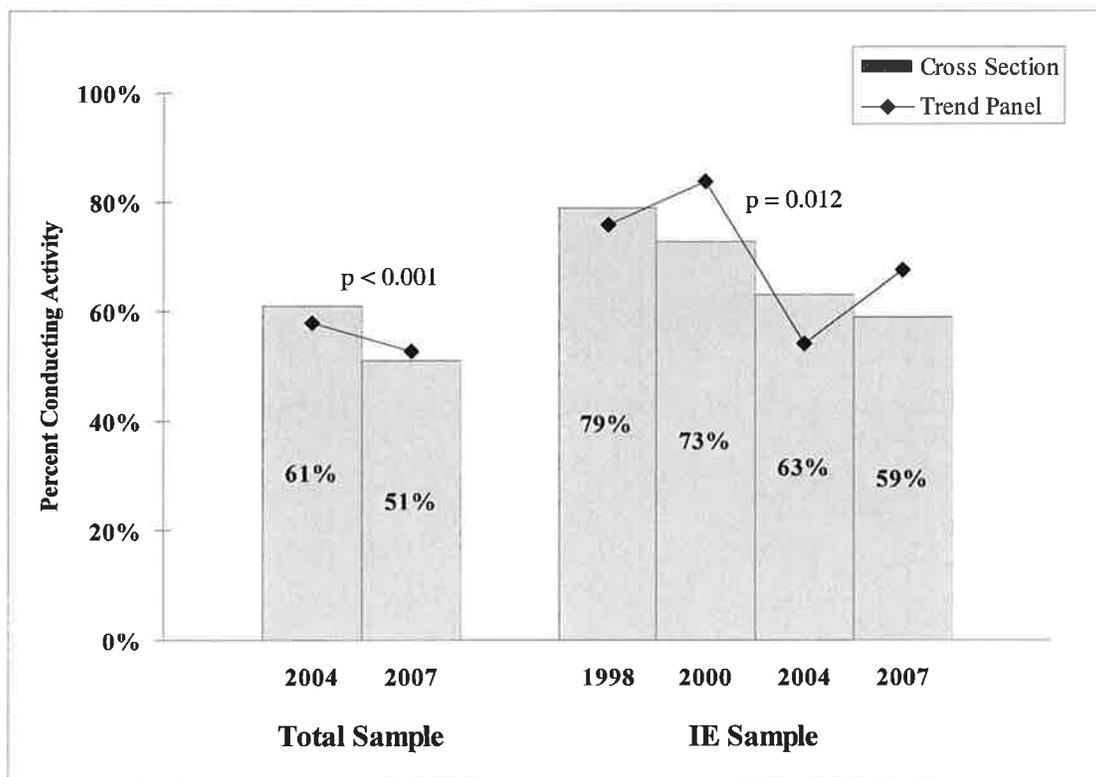
Among all agencies reporting that they issued any citations for violation of the LC§6404.5 smoke-free bar provision, only 3% reported having issued at least one citation for a **hookah bar or lounge** violation in the previous six months. The average number of citations issued by these 5 agencies was 5.6 (SD = 3.4), and three of these agencies prosecuted all 8 cited hookah bars.

Trends in Enforcement. Figures SHS-5a through SHS-5e present cross-sectional and panel data on specific smoke-free bar enforcement activities reported by respondents to the 2004 and 2007 statewide SHS surveys and for the two IE surveys (1998 and 2000) in which these data were collected: respond to inquiries (5a); respond to complaints (5b); issue warnings (5c); issue citations (5d); and conduct compliance checks (5e). Significant declines are seen statewide from 2004 to 2007 in the percent of agencies reporting that they had: responded to inquiries (Chi-squared = 17.50, $p < 0.001$, $n = 95$); responded to complaints (Chi-squared = 22.48, $p < 0.001$, $n = 101$); issued warnings (Chi-squared = 16.15, $p < 0.001$, $n = 94$); issued citations (Chi-squared

= 20.96, $p < 0.001$, $n = 92$); and conducted compliance checks (Chi-squared = 18.18, $p < 0.001$, $n = 105$).

In contrast, the IE panel only showed significant differences across the 1998-2007 surveys in the percent of agencies reporting that they had responded to inquiries (Cochran's $Q = 11.00$ $p = 0.012$, $n = 37$).

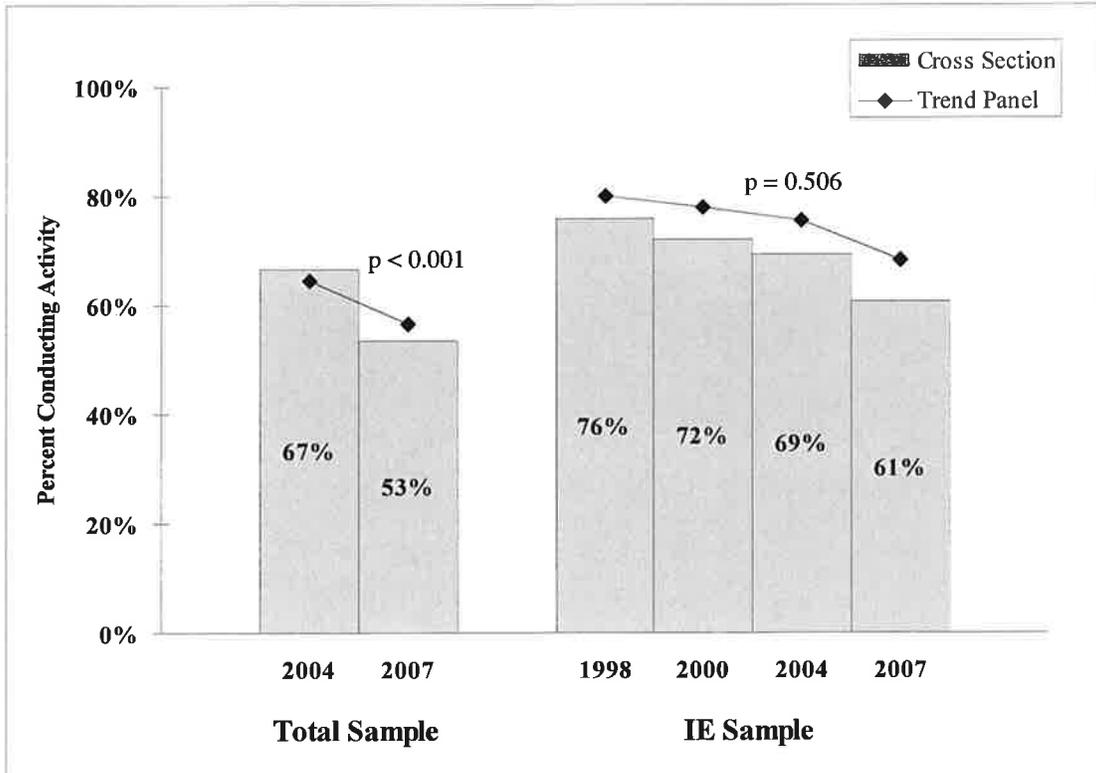
Figure SHS-5a
Secondhand Smoke Enforcement Agency Activities in Bars:
Respond to Inquiries



Note: Percentages reflect the number of agencies that reported doing at least one instance of enforcement in the six months prior to the survey.

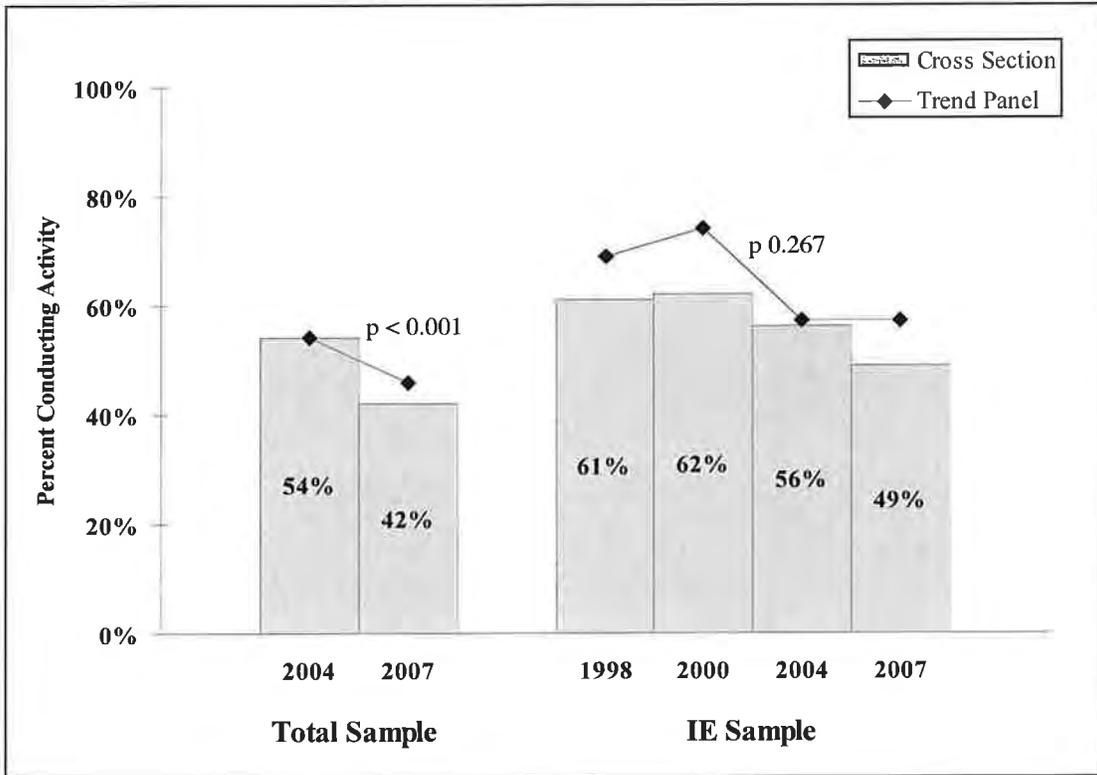
Source: SHS Enforcement Survey, 1996, 1998, 2000, 2004, and 2007.

Figure SHS-5b
Secondhand Smoke Enforcement Agency Activities in Bars:
Respond to Complaints



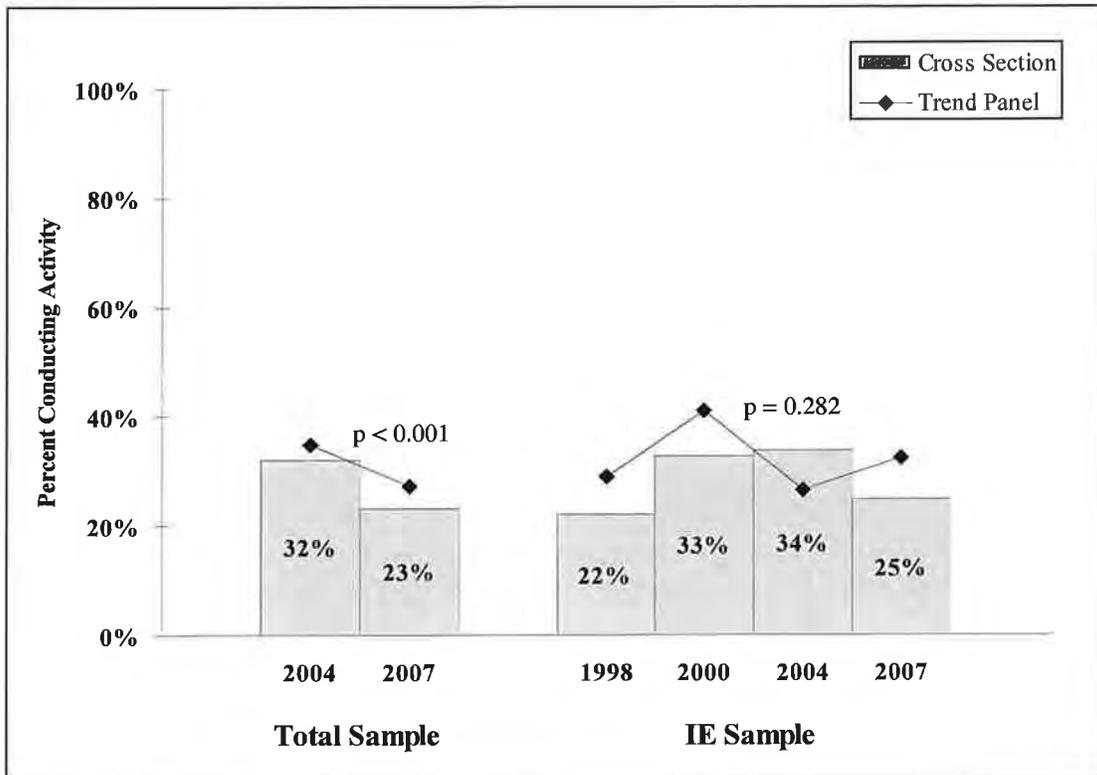
Note: Percentages reflect the number of agencies that reported doing at least one instance of enforcement in the six months prior to the survey.
 Source: SHS Enforcement Survey, 1996, 1998, 2000, 2004, and 2007.

Figure SHS-5c
Secondhand Smoke Enforcement Agency Activities in Bars:
Issue Warnings



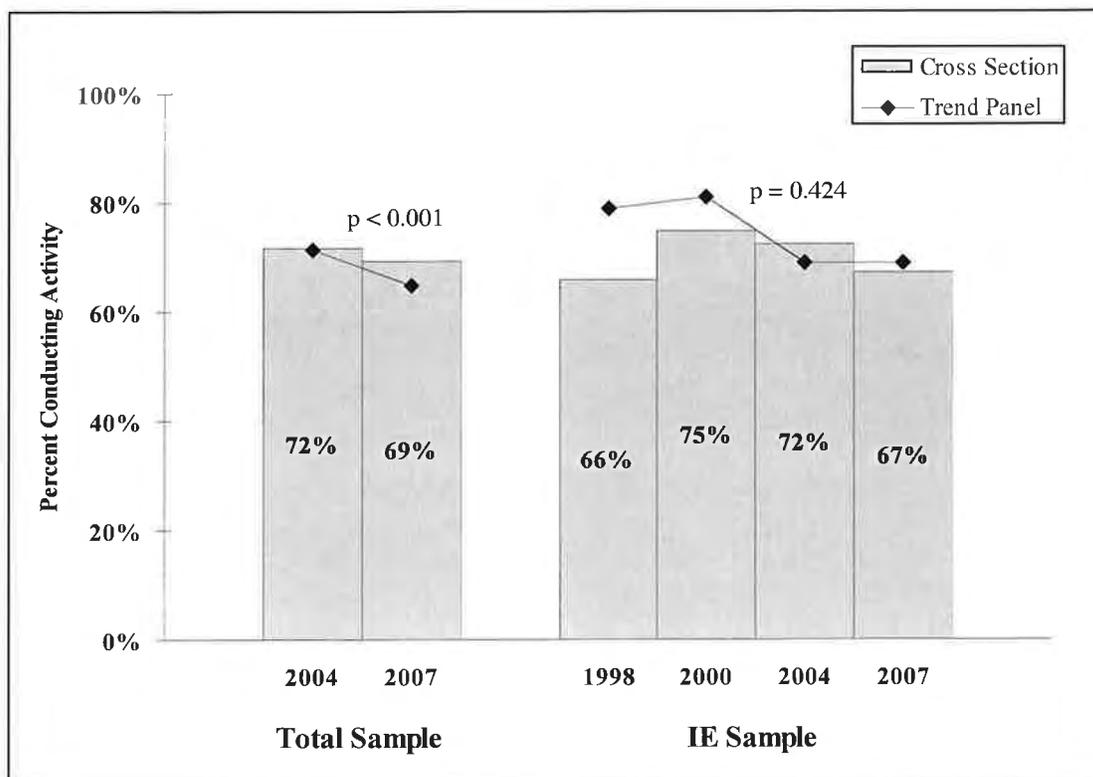
Note: Percentages reflect the number of agencies that reported doing at least one instance of enforcement in the six months prior to the survey.
 Source: SHS Enforcement Survey, 1996, 1998, 2000, 2004, and 2007.

Figure SHS-5d
Secondhand Smoke Enforcement Agency Activities in Bars:
Issue Citations



Note: Percentages reflect the number of agencies that reported doing at least one instance of enforcement in the six months prior to the survey.
 Source: SHS Enforcement Survey, 1996, 1998, 2000, 2004, and 2007.

Figure SHS-5e
Secondhand Smoke Enforcement Agency Activities in Bars:
Conduct Compliance Checks



Note: Percentages reflect the number of agencies that reported doing at least one instance of enforcement in the six months prior to the survey.
 Source: SHS Enforcement Survey, 1996, 1998, 2000, 2004, and 2007.

Predictors of Enforcement. Most of the factors used as predictors of local enforcement of smoke-free bar laws are the same as those used to predict enforcement of the non-bar provisions of LC§6404.5: relative seriousness of SHS as a community problem; beliefs about the barriers to conducting enforcement operations of SHS laws; beliefs about the barriers to achieving compliance with SHS laws; and the extent of enforcement agency collaboration with other groups on enforcing SHS laws. Each of these variables/factors has been described above as predictors of enforcement of the non-bar provisions of LC§6404.5. In addition to these items, we asked about two specific predictors of smoke-free bar enforcement: relative importance of enforcement of smoke-free bar laws; and perceived compliance with smoke-free bar laws.

Importance of enforcement. Compared to other laws enforced by respondent agencies, enforcement of laws that prohibit smoking in bars specifically is only moderately important (mean = 3.77 on a 7-point scale where 1 = “not at all important” and 7 = “very important”, SD = 1.95, n = 183). This variable did not differ across agencies from urban, suburban, or rural counties, and is down slightly from that reported statewide in 2004 (mean = 4.3).

Perceived compliance. The vast majority of enforcement agencies (90%) believe that bars are compliant with SHS laws (mean = 5.92 on a 7-point scale, SD = 1.12, n = 180). This variable did not differ significantly across agencies from urban, suburban, or rural counties, and these statewide results are also nearly identical to those found in the 2004 SHS enforcement survey (mean = 5.92).

Multivariate analyses. In our multivariate analyses of smoke-free bar enforcement data we looked at the degree to which the above six variables/factors were independent predictors of three different dependent variables: whether agencies engaged in any type of smoke-free bar enforcement activity in the previous six months (as enumerated in Table SHS-6); whether agencies engaged in any high-level SHS enforcement activity in the previous six months (any enforcement activity except educating bar owners or educating others); and whether agencies conducted any compliance checks in bars during the previous six months. Results of these analyses were generally comparable, so we report here only on predictors of SHS compliance check activities in bars.

Table SHS-7 presents findings from logistic regression analyses using data from 131 agencies statewide. Only one variable was found to be a statistically independent predictor of whether compliance checks were conducted in the previous six months: greater relative importance of enforcement of SHS laws in bars ($p < 0.03$). This model explained only 9% of the variance in whether compliance checks were conducted in bars during the previous six months.

Table SHS-7
Associations between independent variables and whether any SHS compliance checks were conducted in bars

<i>Independent Variables</i>	<i>Odds Ratio</i>	<i>Confidence Interval</i>	<i>P value</i>
Relative seriousness of problem	0.84	0.50 – 1.41	0.50
Relative importance of enforcement	1.40	1.04 – 1.88	0.03
Perceived compliance	0.75	0.48 – 1.18	0.22
Barriers to enforcement	1.05	0.77 – 1.44	0.74
Barriers to compliance	0.94	0.61 – 1.43	0.76
Collaboration on enforcement	1.09	0.76 – 1.57	0.64

NOTE: Analyses include non-missing data from 144 agencies statewide; factor scores (means) were used for barriers to enforcement, barriers to compliance, and collaboration on enforcement independent variables; Hosmer Lemeshow Goodness of Fit: $p = 0.54$.

Enforcement of GC§7596-7598 — Smoke-free Doorway and Window Areas

Current Enforcement Activities. Government Code §7596-7598 (AB 846) went into effect January 1, 2004 banning smoking within near entrances, exits, and covered parking lots and operable windows of municipal, county, regional, state buildings, and buildings of the University of California, California State University, and community colleges. About half of all agencies statewide (47%) reported conducting any GC§7596-7598-related enforcement activities in the year prior to the 2007 survey. The activity rate did not differ at all among agencies located in LLA-designated urban, suburban, or rural counties.

Table SHS-8 shows that about one-third of local agencies reported specific enforcement activities related to GC§7596-7598 during the previous year: conducting compliance checks (42% of responding agencies statewide), responding to complaints (38%) and inquiries (37%), issuing warnings (30%), and educating other agencies about the law (25%). No differences were observed on these enforcement activities among agencies located in urban, suburban, or rural counties.

Table SHS-8
Frequency of enforcement activities conducted by agency related to Government Code §7596-7598 during prior year

	<i>Mean (SD)*</i>	<i>Ever **</i> <i>(% agencies)</i>	<i>Valid N</i>
a. Responded to inquiries	1.77 (1.35)	37	136
b. Responded to complaints	1.75 (1.28)	38	138
c. Issued warnings	1.54 (1.04)	30	136
d. Issued citations	1.10 (0.41)	7	134
e. Issued fines	1.10 (0.45)	6	129
f. Conducted compliance checks	2.23 (1.80)	42	137
g. Educated other agencies about Government Code §7596-7598	1.59 (1.28)	25	134
h. Other (e.g., no complaints)	1.58 (1.74)	11	19

* 1= Never, 2 = Rarely, 7 = Very Often

** Ever is any valid response other than "Never"

Among the agencies stating that they issued any GC§7596-7598 citations in the prior year, the average number of citations issued was 6.33 (SD = 2.88), and all of these were prosecuted. There were no significant differences among urban, suburban, or rural agencies on reported GC§7596-7598 citations or prosecutions.

Predictors of Enforcement. We looked at various factors that may be predictors of local enforcement activities related to GC§7596-7598, including: relative seriousness of smoking near entrances, exists, covered parking lots, and operable windows as a community problem; relative importance of enforcement of these laws; perceived compliance with these laws; beliefs about the barriers to conducting enforcement operations of these laws; beliefs about the barriers to achieving compliance with these laws; and the extent of enforcement agency collaboration with other groups on enforcing GC§7596-7598.

Seriousness of the problem. Compared to other community problems, most agencies believe that the issue of smoking near entrances, exits, and windows is “not at all serious” (45%) or only “somewhat serious” (29%). Only 9% of the 145 agencies providing valid responses rated the problem as “very serious” compared to other problems. There were no differences in ratings of the relative seriousness of this problem among urban, suburban, or rural agencies.

Importance of enforcement. Compared to other laws enforced by respondent agencies, enforcement of GC§7596-7598 is only moderately important (mean = 3.74 on a 7-point scale where 1 = “not at all important” and 7 = “very important”, SD = 1.93, n = 164). This variable did not differ across agencies from urban, suburban, or rural counties.

Perceived compliance. Most enforcement agencies (80%) believe that people in their jurisdiction are compliant with GC§7596-7598 (mean = 5.69 on a 7-point scale, SD = 1.48, n = 164). This variable did not differ significantly across agencies from urban, suburban, or rural counties.

Barriers to enforcement. In 2007, one issue ranked as the top barrier to agencies conducting enforcement activities related to smoking near entrances, exits, and windows: limited staff (mean = 4.41 on a 7-point scale with 1 = “not at all a barrier” and 7 = “a large barrier”; SD = 2.43, n = 157), followed by limited funds for enforcement (mean = 3.73, SD = 2.42, n = 154) (see Table SHS-9). Low community priority (mean = 3.08) and lack of support from community leaders (mean = 2.26) were lower-rated barriers to enforcement.

Table SHS-9
Perceived extent of barriers to enforcing laws
that prohibit smoking near building entrances and windows

	<i>Mean (SD)*</i>	<i>Valid N</i>
a. No money in our budget	3.73 (2.42)	154
b. Limited staff	4.41 (2.43)	157
c. Not a priority in our community	3.08 (2.08)	153
d. Lack of support from community leaders	2.26 (1.61)	152
e. Other (e.g., lack of need, no enforcement money)	1.55 (1.23)	20

* 1 = Not at all a barrier, 7 = A large barrier

The mean of all barriers to enforcement items was calculated as a factor for use in multivariate analyses (mean = 3.40, SD = 1.79, n = 157). There were no differences on mean enforcement barrier scores among agencies from urban, suburban or rural counties. Agencies from suburban counties, however, rated lack of community priority as a significantly higher barrier to enforcement than did agencies from rural or urban counties (Tukey HSD, $p = 0.017$ and $p = 0.051$, respectively).

Barriers to compliance. None of the barriers to achieving compliance with GC§7596-7598 was rated especially high by agencies statewide, with the exception of insufficient enforcement operations conducted (mean = 3.04, SD = 2.21, n = 152) (see Table SHS-10). Nor did we detect differences in perceived barriers among agencies from urban, suburban or rural counties.

Table SHS-10
Perceived extent of barriers to achieving compliance with laws that prohibit smoking near building entrances and windows

	<i>Mean (SD)*</i>	<i>Valid N</i>
a. Insufficient enforcement operations conducted	3.04 (2.21)	152
b. Fines/penalties are insufficient deterrents	2.17 (1.67)	147
c. Lack of signage posted for English speakers	2.22 (1.68)	152
d. Lack of signage posted for Spanish speakers	2.24 (1.68)	152
e. Lack of awareness among English speakers	2.29 (1.75)	150
f. Lack of awareness among Spanish speakers	2.36 (1.84)	151
g. Lack of stories in the local media about the law	2.66 (2.00)	149
h. Other (e.g., no enforcement money)	1.65 (1.35)	20

* 1= Not at all a barrier, 7 = A large barrier

Collaboration. About half (49%) of all enforcement agencies reported having worked at least once with county or state health departments on education or enforcement of GC§7596-7598 during the year prior to the 2007 survey (see Table SHS-11). And, about one-third of agencies reported having collaborated at least once with other groups and agencies: other law enforcement agencies (39% of agencies reporting); local tobacco control programs (38%); local government officials (38%); educational organizations (36%); park and recreation programs (32%); businesses (31%); and tobacco control coalitions (30%). But, the level of collaboration was not high with any of these groups (see Table SHS-11). The mean of all collaboration items was calculated as a factor for use in multivariate analyses (mean = 1.83, SD = 1.22, n = 156). Neither this collaboration factor nor any individual collaboration item differed significantly across agencies from urban, suburban, or rural counties.

Table SHS-11
Frequency of collaboration on education or enforcement of laws that prohibit smoking near building entrances and windows during prior year

	<i>Mean (SD)*</i>	<i>Ever ** (% agencies)</i>	<i>Valid N</i>
a. County or state health department	2.18 (1.68)	49	155
b. Local tobacco control programs	1.91 (1.56)	38	154
c. Local government officials (e.g., city council, board of supervisors)	1.87 (1.42)	38	154
d. Park and recreation programs	1.69 (1.33)	32	154
e. Voluntary health organizations (e.g., ACS)	1.58 (1.30)	25	154
f. Educational organizations (e.g., local schools)	1.91 (1.54)	36	154
g. Businesses (e.g., restaurant associations)	1.66 (1.29)	31	154
h. Tobacco control coalitions	1.81 (1.62)	30	153
i. Other law enforcement agencies (e.g., fire department, code enforcement, city manager)	1.82 (1.37)	39	153
j. Other	1.12 (0.43)	8	26

* 1= Never, 7 = Very Often

** Ever is any valid response other than "Never"

Multivariate analyses. Because GC§7596-7598 is a relatively new set of laws, we focused our multivariate analysis on whether agencies engaged in *any* type of law enforcement activity regarding smoking proximal to entrances, exits, and windows in the prior year (as enumerated in Table SHS-8). Table SHS-12 presents findings from a logistic regression analysis using data from 136 agencies statewide. Only one variable measured is a statistically independent predictor of whether any GC§7596-7598 law enforcement activities were conducted during the prior year: more frequent collaboration with other groups on enforcing GC§7596-7598 ($p = 0.01$). This model explained only 16% of the variance in whether any GC§7596-7598 law enforcement activities were conducted during the prior year.

Table SHS-12

Associations between independent variables and whether any enforcement activities were conducted regarding the smoking near entrances or windows law

<i>Independent Variables</i>	<i>Odds Ratio</i>	<i>Confidence Interval</i>	<i>P value</i>
Relative seriousness of problem	1.19	0.72 – 1.97	0.49
Relative importance of enforcement	1.14	0.87 – 1.48	0.35
Perceived compliance	0.93	0.71 – 1.22	0.60
Barriers to enforcement	1.20	0.93 – 1.56	0.16
Barriers to compliance	1.02	0.77 – 1.35	0.90
Collaboration on enforcement	1.63	1.13 – 2.37	0.01

NOTE: Analyses include non-missing data from 136 agencies statewide; factor scores (means) were used for barriers to enforcement, barriers to compliance, and collaboration on enforcement independent variables; Hosmer Lemeshow Goodness of Fit: $p = 0.65$.

Discussion

Youth Access

The youth access survey results indicate that enforcement agency actions have declined somewhat much since the 2004 survey. About one-quarter of enforcement agencies conducted youth decoy operations in 2007, down from about 30% in 2004 and from 35% in 2000. The further reduction in the percent of agencies actively enforcing PC308(a) is disappointing, given that TCS has continued to expend resources to stimulate enforcement through trainings, and technical assistance to law enforcement agencies.

Agencies report a dramatic drop in the average number of youth decoy operations (“stings”) from almost 11 operations per year reported in 2004 to 3.6 per year in 2007. Despite the low rates of decoy operations, most agencies report that they issued warnings and citations to merchants selling tobacco products to minors, although these rates have declined from 2004. Fewer than 5% of enforcement agencies report, however, that warnings and citations were issued to merchants “often” or “very often.” The low rate of warnings and citations may also reflect the 14% illegal sales rate estimated by the agencies.

From 2004 to 2007, there was a slight drop in the proportion of law enforcement agencies reporting that they issued warnings to minors possessing tobacco products, but those issuing citations remained the same. There were no significant changes in these types of activities since the 2004 survey.

Three variables were identified as independent predictors of whether an agency enforced PC§308: perceptions of greater collaboration with other agencies; lower perceived barriers to enforcement; and receipt of funding for enforcement. These findings confirm the importance of maintaining support for local enforcement agencies through collaboration and funding.

Finally, agencies operating in jurisdictions with strong local retail licensing ordinances reported conducting four times as many decoy operations over the prior 12 months than did agencies in jurisdictions without strong ordinances, underscoring the considerable value of local policy actions.

Secondhand Smoke

Enforcement of LC§6404.5 — Smoke-free Workplaces (Excluding Bars). Almost two-thirds (61%) of enforcement agencies throughout California reported conducting at least one workplace-related SHS enforcement activity in year prior to the 2007 statewide SHS survey. Cross-sectionally, this level of activity did not change from what was reported from the 2004 statewide SHS survey. About half the agencies reported in 2007 that they responded to inquiries and complaints and conducted compliance checks, but relatively few agencies issued fines or citations. Agencies in rural counties reported issuing significantly fewer warnings for violations of LC§6404.5 than did agencies in urban and suburban counties of California.

Among the agencies that completed both the 2004 and 2007 statewide SHS surveys, there is a significant decline in the percent reporting involvement in all types of enforcement actions: responding to workplace SHS inquiries; responding to complaints; issuing warnings; issuing citations; and conducting compliance checks. An analysis of data collected from agencies in the IE sub-sample from 1996 to 2007 shows similar declines in nearly all enforcement actions across the five survey waves.

Multivariate analyses revealed that agency ratings of the relative importance of enforcement of SHS laws, as compared to other laws, is the only independent predictor of whether any SHS compliance checks were conducted by the agency in the prior year. Even so, agencies rate enforcement of laws that prohibit smoking in indoor public areas as being only moderately important, somewhat of a decline from the 2004 ratings. Most enforcement agencies perceive that the rate of compliance with workplace SHS laws is high, and few believe that the workplace SHS problem is very serious in their community. As in 2004, salient barriers to enforcement of SHS laws are limited agency staff and insufficient budget. In 2004, enforcement agency collaboration with other groups was shown to be an independent predictor of SHS compliance checks, but this is not the case in 2007. In fact, significant declines are seen statewide from 2004 to 2007 in the percent of agencies reporting collaboration on SHS workplace law enforcement with businesses, voluntary health organizations, and educational organizations. Non-significant declines were seen in the percent of enforcement agencies collaborating with county health departments, local government officials, and tobacco coalitions.

Enforcement of LC§6404.5 — Smoke-free Bar Provision. Enforcement of the smoke-free bar provision is higher than for other workplace provisions included in LC§6404.5. Almost three-quarters of the responding agencies in 2007 conducted at least one bar-related SHS enforcement activity during the previous six months, about the same as in 2004, and responses did not vary significantly among agencies in urban, suburban and rural counties. Half or more of a all agencies reported that they responded to inquiries and complaints, down from 2004, and about the same percentage educated bar owners and others about the law. More than two-third of agencies report conducting compliance checks, fewer than half issued warnings, and fewer than one-quarter of all agencies issued citations or fines for violation of the smoke-free bar provision, all down from 2004. Bar-related SHS enforcement activity rates were not significantly different among urban, suburban, or rural agencies

Among all agencies reporting that they issued any citations for violation of the LC§6404.5 smoke-free bar provision, only 3% reported having issued at least one citation for a hookah bar or lounge violation in the previous six months.

Significant declines are seen statewide from 2004 to 2007 in the percent of agencies reporting that they had responded to inquiries, responded to complaints, conducted compliance checks, issued warnings, and issued citations related to SHS laws in bars. Agencies in the IE sub-sample only show significant differences across the four 1998-2007 surveys in the percent of agencies reporting that they had responded to inquiries.

Only one variable was found to be a independent predictor of whether SHS compliance checks were conducted in bars during the previous six months: greater relative importance of

enforcement of SHS laws in bars. Nevertheless, compared to other laws enforced by respondent agencies, enforcement of laws that prohibit smoking in bars specifically is rated by agencies as being only moderately important, down from the rating level reported in 2004.

Enforcement of GC§7596-7598— Smoke-free Doorway and Window Areas. The levels of enforcement activities related to GC§7596-7598 is lower than for either of the smoke-free workplace provisions of LC§6404. Statewide, only about half of all agencies reported conducting any GC§7596-7598-related enforcement activities in the year prior to the 2007 survey, and the activity rate did not differ among agencies located in urban, suburban, or rural counties. More than 40% of the responding agencies reported conducting compliance checks related to this law, and more than one-third responded to inquiries and complaints, and less than one-third issued warnings. Very few agencies issued citations or fines for violations of the law.

Most of the agencies believe that this issue is less serious than other community problems, and that there is fairly good compliance in their jurisdiction. Barriers to enforcement, such as limited staff and insufficient funding, ranked at about the same level as the perceived barriers to enforcing smoke-free workplace laws. The only significant predictor of whether an agency conducted any enforcement activity regarding GC§7596-7598 is the level of collaboration with other community groups and agencies.

In general, enforcement agencies believe that there are high rates of compliance in their communities with the three SHS laws that were addressed in the survey. There is, however, variability in enforcement of SHS laws at the local level. Smoke-free bar provisions appear to be more actively enforced than other workplace provisions, while the law requiring smoke-free doorway, window and parking areas is enforced less than either of the other two laws. Perceptions about the importance of the laws and the amount of collaboration with other agencies on enforcement activities both predict whether an agency actively enforces these laws. The findings point to important roles Local Lead Agencies and their partners can play both in educating their communities and enforcement agencies about reducing exposure to SHS through law enforcement and in facilitating collaboration with SHS enforcement agencies.

References

Independent Evaluation Consortium. *Final Report. Independent Evaluation of the California Tobacco Control Prevention and Education Program: Waves 1, 2, and 3 (1996-2000)*. Rockville, Maryland: The Gallup Organization, 2002.

Rogers T, Feighery EC, Haladjian HH. *Current Practices in Enforcement of California Laws Regarding Youth Access to Tobacco Products and Exposure to Secondhand Smoke. Survey Report – June 2004*. Oakland, California: Public Health Institute, 2004.



Centers for Disease Control and Prevention

CDC 24/7: Saving Lives. Protecting People.™

Morbidity and Mortality Weekly Report (MMWR)

Notes from the Field: Electronic Cigarette Use Among Middle and High School Students — United States, 2011–2012

Weekly

September 6, 2013 / 62(35);729–730

Electronic cigarettes, or e-cigarettes, are battery-powered devices that provide doses of nicotine and other additives to the user in an aerosol. Depending on the brand, e-cigarette cartridges typically contain nicotine, a component to produce the aerosol (e.g., propylene glycol or glycerol), and flavorings (e.g., fruit, mint, or chocolate) (1). Potentially harmful constituents also have been documented in some e-cigarette cartridges, including irritants, genotoxins, and animal carcinogens (1). E-cigarettes that are not marketed for therapeutic purposes are currently unregulated by the Food and Drug Administration, and in most states there are no restrictions on the sale of e-cigarettes to minors. Use of e-cigarettes has increased among U.S. adult current and former smokers in recent years (2); however, the extent of use among youths is uncertain.

Data from the 2011 and 2012 National Youth Tobacco Survey (NYTS), a school-based, pencil-and-paper questionnaire given to U.S. middle school (grades 6–8) and high school (grades 9–12) students, were used to estimate the prevalence of ever and current (≥ 1 day in the past 30 days) use of e-cigarettes, ever and current (≥ 1 day in the past 30 days) use of conventional cigarettes, and use of both. NYTS consists of a cross-sectional, nationally representative sample of students in grades 6–12 from all 50 states and the District of Columbia (3).

During 2011–2012, among all students in grades 6–12, ever e-cigarette use increased from 3.3% to 6.8% ($p < 0.05$) (Figure); current e-cigarette use increased from 1.1% to 2.1% ($p < 0.05$), and current use of both e-cigarettes and conventional cigarettes increased from 0.8% to 1.6% ($p < 0.05$). In 2012, among ever e-cigarette users, 9.3% reported never smoking conventional cigarettes; among current e-cigarette users, 76.3% reported current conventional cigarette smoking.

Among middle school students, ever e-cigarette use increased from 1.4% to 2.7% during 2011–2012 ($p < 0.05$) (Figure); current e-cigarette use increased from 0.6% to 1.1% ($p < 0.05$), and current use of both e-cigarettes and conventional cigarettes increased from 0.3% to 0.7% ($p < 0.05$). In 2012, among middle school ever e-cigarette users, 20.3% reported never smoking conventional cigarettes; among middle school current e-cigarette users, 61.1% reported current conventional cigarette smoking.

Among high school students, ever e-cigarette use increased from 4.7% to 10.0% during 2011–2012 ($p < 0.05$) (Figure); current e-cigarette use increased from 1.5% to 2.8% ($p < 0.05$), and current use of both e-cigarettes and conventional cigarettes increased from 1.2% to 2.2% ($p < 0.05$). In 2012, among high school ever e-cigarette users, 7.2% reported never smoking conventional cigarettes; among high school current e-cigarette users, 80.5% reported current conventional cigarette smoking.

E-cigarette experimentation and recent use doubled among U.S. middle and high school students during 2011–2012, resulting in an estimated 1.78 million students having ever used e-cigarettes as of 2012. Moreover, in 2012, an estimated 160,000 students who reported ever using e-cigarettes had never used conventional cigarettes. This is a serious concern because the overall impact of e-cigarette use on public health remains uncertain. In youths, concerns include the potential negative impact of nicotine on adolescent brain development (4), as well as the risk for nicotine addiction and initiation of the use of conventional cigarettes or other tobacco products.

CDC and the Food and Drug Administration will continue to explore ways to increase surveillance and research on e-cigarettes. Given the rapid increase in use and youths' susceptibility to social and environmental influences to use tobacco, developing strategies to prevent marketing, sales, and use of e-cigarettes among youths is critical.

Reported by

*Catherine Corey, MSPH, Baoguang Wang, MD, Sarah E. Johnson, PhD, Benjamin Apelberg, PhD, Corinne Husten, MD, Center for Tobacco Products, Food and Drug Administration. Brian A. King, PhD, Tim A. McAfee, MD, Rebecca Bunnell, PhD, René A. Arrazola, MPH, Shanta R. Dube, PhD, Office on Smoking and Health, National Center for Chronic Disease Prevention and Health Promotion, CDC. **Corresponding contributor:** Brian A. King, baking@cdc.gov, 770-488-5107.*

References

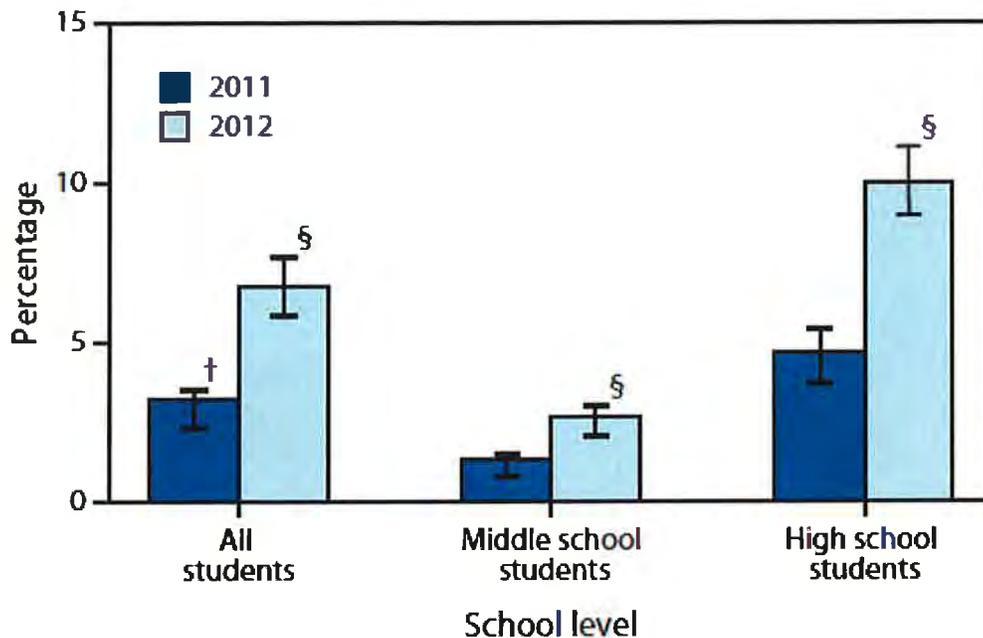
1. Cobb NK, Byron MJ, Abrams DB, Shields PG. Novel nicotine delivery systems and public health: the rise of the "e-cigarette." *Am J Public Health* 2010;100:2340–2.
2. King BA, Alam S, Promoff G, Arrazola R, Dube SR. Awareness and ever use of electronic cigarettes among U.S. adults, 2010–2011. *Nicotine Tob Res* 2013;15:1623–7.
3. CDC. National Youth Tobacco Survey. Atlanta, GA: US Department of Health and Human Services, CDC; 2013. Available at http://www.cdc.gov/tobacco/data_statistics/surveys/nyts.
4. Dwyer JB, McQuown SC, Leslie FM. The dynamic effects of nicotine on the developing brain. *Pharmacol Ther* 2009;122:125–39.

* Ever electronic cigarette use defined as having ever used electronic cigarettes, even just one time.

† 95% confidence interval.

§ Statistically significant difference between 2011 and 2012 (chi-square, $p < 0.05$).

FIGURE. Ever electronic cigarette use* among middle and high school students, by year — National Youth Tobacco Survey, United States, 2011–2012



Alternate Text: The figure above shows ever electronic cigarette (e-cigarette) use among middle and high school students, by year, in the United States during 2011-2012. During 2011-2012, among all students in grades 6-12, ever e-cigarette use increased from 3.3% to 6.8% ($p < 0.05$); current e-cigarette use increased from 1.1% to 2.1% ($p < 0.05$), and current use of both e-cigarettes and conventional cigarettes increased from 0.8% to 1.6% ($p < 0.05$).

Use of trade names and commercial sources is for identification only and does not imply endorsement by the U.S. Department of Health and Human Services.

References to non-CDC sites on the Internet are provided as a service to *MMWR* readers and do not constitute or imply endorsement of these organizations or their programs by CDC or the U.S. Department of Health and Human Services. CDC is not responsible for the content of pages found at these sites. URL addresses listed in *MMWR* were current as of the date of publication.

All *MMWR* HTML versions of articles are electronic conversions from typeset documents. This conversion might result in character translation or format errors in the HTML version. Users are referred to the electronic PDF version (<http://www.cdc.gov/mmwr>) and/or the original *MMWR* paper copy for printable versions of official text, figures, and tables. An original paper copy of this issue can be obtained from the Superintendent of Documents, U.S. Government Printing Office (GPO), Washington, DC 20402-9371; telephone: (202) 512-1800. Contact GPO for current prices.

**Questions or messages regarding errors in formatting should be addressed to mmwrq@cdc.gov.

Page last reviewed: September 06, 2013

Page last updated: September 06, 2013

Content source: [Centers for Disease Control and Prevention](#)

Centers for Disease Control and Prevention 1600 Clifton Rd. Atlanta, GA
30333, USA
800-CDC-INFO (800-232-4636) TTY: (888) 232-6348 - [Contact CDC-INFO](#)

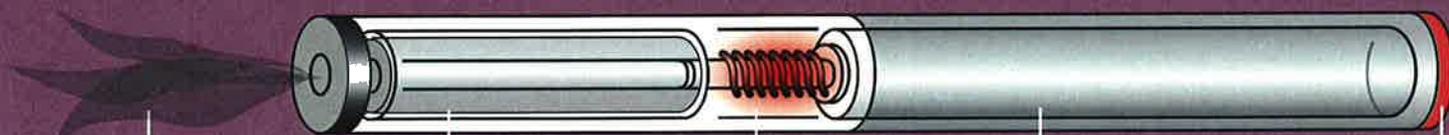


This fact sheet provides information about the public health concerns related to electronic smoking devices, the steps that have been taken to regulate electronic smoking devices, and what additional measures communities can take to limit access to and the availability of electronic smoking devices.

Regulating Toxic Vapor

A Policy Guide to Electronic Smoking Devices

Electronic smoking devices (also known as “electronic cigarettes,” “e-cigarettes,” “electronic nicotine delivery systems,” “e-cigars,” “e-cigarillos,” “e-pipes,” “e-hookahs,” “hookah pens,” etc.) are battery operated devices often designed to look like and be used in a similar manner to conventional tobacco products.¹ Electronic smoking devices are used to inhale a vaporized liquid solution that frequently, though not always, contains nicotine. Because the liquid solution is converted into vapor, electronic smoking device use is sometimes referred to as “vaping,” rather than smoking. The increasing popularity of electronic smoking devices, combined with loopholes in some existing tobacco control laws, have the potential to renormalize tobacco use.²



Vapor is inhaled by the user and exhaled into the environment putting bystanders at risk of secondhand vapor exposure

Cartridge contains liquid that is converted into vapor

Note: This liquid often comes in flavors that are appealing to youth like chocolate or mint

Atomizer creates vapor from the nicotine solution in the cartridge

Note: More recent designs have combined the atomizer and flavor cartridge

Battery is often rechargeable, typically lithium-ion

LED light comes on during inhalation to mimic the glow of a traditional tobacco product

Policy Rationales for Restricting the Availability & Use of Electronic Smoking Devices

Hazardous Contents

Liquid solutions have addictive levels of nicotine sometimes 20 mg or higher³ and contain potentially life-threatening carcinogens and toxic chemicals.^{4,5} More than one study, including one conducted by the U.S. Food and Drug Administration (FDA), have found that electronic smoking devices contain a number of dangerous substances including tobacco-specific nitrosamines, which are human carcinogens;⁶ tobacco-specific impurities suspected of being harmful to humans like anabasine, myosmine, and β -nicotyrine;^{7,8} and inconsistent labeling of nicotine levels in electronic smoking device products.^{9,10} In one instance, diethylene glycol, an ingredient used in antifreeze and toxic to humans, was found.¹¹



**ChangeLab
Solutions**

Law & policy innovation
for the common good.

This fact sheet includes information about model language ChangLab Solutions has developed to assist California cities and counties interested in regulating electronic smoking devices. ChangeLab Solutions' model ordinances offer a variety of policy options that can be tailored to the specific goals and needs of a particular community. For more information, please visit www.changelabsolutions.org/landing-page/model-policies.

While ChangeLab Solutions' *Model California Ordinance Regulating Electronic Smoking Devices* was designed for California communities, it can be adapted for use in other states. It is important to carefully review the existing law in your state, to understand the allowable regulations of other tobacco products, like electronic smoking devices. The best way to do this is to consult with an attorney licensed in your jurisdiction.



Exposure to Secondhand Vapor

The composition of the vapor emitted by an electronic smoking device has been found to contain several carcinogens, such as formaldehyde, acetaldehyde, lead, nickel, and chromium.^{12,13,14} Additionally, electronic smoking devices have been found to contain other hazardous substances such as PM_{2.5}, acrolein, tin, toluene, and aluminum,^{15,16,17} which are associated with a range of negative health effects such as skin, eye, and respiratory irritation,^{18,19,20,21} neurological effects,²² damage to reproductive systems,²³ and even premature death from heart attacks and stroke.²⁴

Though the quantity of these harmful compounds contained in the vapor emitted by electronic smoking devices is often less than what is found in traditional cigarette smoke,^{25,26} at least sodium, iron, aluminum, and nickel have been found in *higher* concentrations in emitted vapor than in cigarette smoke.^{27,28}

This is especially troubling given that more than one peer reviewed study has concluded that exposure to vapor from a electronic smoking devices may cause passive or secondhand vaping.^{29,30,31}

Rapid Growth in Popularity

There are over 400 brands of electronic smoking devices on the market.³² Awareness levels of electronic smoking device products among the general population has increased dramatically, from between 40.8 and 44.1 percent in 2010, to 60.9 percent in 2011.³³ Further, the number of current smokers who have ever used an electronic smoking device more than doubled between 2010 and 2011, with 21.2 percent of current smokers reporting they have tried electronic smoking devices in 2011.³⁴

Youth Appeal

The increase in use of electronic smoking devices among youth grades 6 to 12 is troubling. In 2012, 6.8 percent of all youth between 6th and 12th grade reported trying electronic smoking devices and 10 percent of high school students have tried them.³⁵

Between 2011 and 2012, the percentage of all youth in grades 6 to 12 who had tried electronic smoking devices doubled.³⁶

The solutions used in electronic smoking devices are often made in tempting flavors like chocolate and mint and are promoted as being healthy and environmentally friendly,³⁷ making them especially alluring to youth.³⁸ Recent national analyses of electronic smoking device users have indicated that young adults tend to be more likely to have tried them,³⁹ and that the perception of electronic smoking devices among smokers is that they are a safe alternative to cigarettes.⁴⁰

Some Electronic Smoking Devices Do Not Contain Tobacco

While many electronic smoking devices contain nicotine, some devices claim to be 100 percent nicotine and tobacco free.

Determining which electronic smoking devices are truly nicotine free may be difficult for local tobacco control enforcement, given that manufacturers are not required to disclose the ingredients that make up the liquid solution used in electronic smoking devices. Further, product testing has revealed that the information and ingredients listed on the packaging of electronic smoking devices can be misleading or incorrect.⁴¹

In some cases, vapor lounges or individuals create their own liquid solutions, and there is no way to be sure these homemade solutions are properly labeled or even safe for consumption. For these reasons, local jurisdictions may wish to regulate all electronic smoking devices, whether or not they contain nicotine. If so, communities will need to craft their policies carefully to ensure that all the products they wish to regulate are adequately covered (see the section, *Policy Options for Regulating the Use & Sale of Electronic Smoking Devices*, on page 5).

Renormalization of Tobacco Use

As electronic smoking devices are used in places where tobacco products' use has previously been prohibited, such as workplaces, restaurants, and bars, and as marketing of electronic smoking devices expands into outlets where other tobacco products are prohibited such as television commercials,⁴² electronic smoking devices have the potential to renormalize tobacco use. By encouraging experimentation with tobacco, especially among youth, electronic smoking devices have the potential to increase nicotine addiction among young people⁴³ and serve as a gateway to other tobacco products.⁴⁴

Lack of Regulations Ensuring Safety & Quality Control

Electronic smoking devices have often been represented as a safe alternative to cigarettes. However, there are significant concerns about the safety of these products. For example, the vapor inhaled by electronic smoking device users often contains nicotine levels that are inconsistent with their labeling. Two separate studies found that the nicotine levels of two individual products from different manufacturers were over 20 percent higher than what their labeling indicated.^{45,46}

Additionally, some cartridges can be refilled with liquid nicotine solution, creating the potential for exposure to dangerous concentrations of nicotine.⁴⁷ A recent analysis of

electronic smoking device refill liquids found that “[t]he bottles of e-liquid are dangerous as they contain up to 720 mg of nicotine,” which is a potentially lethal amount of nicotine.⁴⁸

Analysis of reports of poisonings from electronic smoking devices finds that people are more likely to report adverse health effects when compared to traditional cigarettes.⁵⁰

Poisonings from electronic smoking devices have increased dramatically in the last three and half years from “one [a month] in September 2010 to 215 a month in February 2014.”⁴⁹

Clinical studies about the safety and efficacy of electronic smoking devices for their intended use have not been submitted to the FDA.⁵¹ This means that consumers have no way of knowing whether electronic smoking devices are safe for their intended use, what types or concentrations of potentially harmful chemicals the products contain, and what dose of nicotine the products deliver.



Public Health Support for the Regulation of Electronic Smoking Devices

The World Health Organization has strongly advised consumers against the use of electronic smoking devices until they are “deemed safe and effective and of acceptable quality by a competent national regulatory body.”⁵² The World Medical Association has determined electronic smoking devices “are not comparable to scientifically-proven methods of smoking cessation” and that “neither their value as therapeutic aids for smoking cessation nor their safety as cigarette replacements is established.”⁵³

Moreover, the State of California’s Tobacco Education and Research Oversight Committee (TEROC) “opposes the use of [electronic smoking devices] in all areas where other tobacco products are banned.”⁵⁴

The Legal & Regulatory Landscape

In many places, electronic smoking devices are completely unregulated. However, there is a growing patchwork of laws throughout the U.S. that regulate how electronic smoking devices are sold and, in some cases, where they are used. Here is an overview of the laws governing electronic smoking devices, as of May 2014. The current gaps in regulation are highlighted and the policy options available to local governments are explained.

At the Federal Level

As of February, 2014, the only existing federal restrictions on electronic smoking device use are as follows:

- The U.S. Department of Transportation interprets existing federal regulations against smoking on airplanes to apply to electronic smoking devices.⁵⁵
- The U.S. Air Force and U.S. Navy have both stated that their existing regulations governing tobacco use will apply to electronic smoking devices.^{56,57}

The 2009 Family Smoking Prevention and Tobacco Control Act (“the Tobacco Control Act”), which regulates the manufacturing and marketing of tobacco products, does not apply to electronic smoking devices, nor are electronic smoking devices subject to federal taxes. Therefore, no federal regulations currently exist for electronic smoking devices. There are also no federal regulatory standards for safety or quality control for electronic smoking devices before they can be sold to consumers. Under federal law, it is entirely legal to sell electronic smoking devices to children. Electronic smoking device advertisements are routinely seen on television, where conventional tobacco advertisements have not been seen for decades, and electronic smoking device manufacturers may freely introduce new products that have not been evaluated for safety.

The FDA issues the “deeming rule”

On April 25, 2014, the FDA took a significant step toward regulating these products by releasing its proposed “deeming rule,” which would extend the agency’s regulatory authority to a variety of tobacco products, including electronic smoking devices.⁵⁸ Although the Tobacco Control Act does not explicitly list all tobacco products by name, Congress gave FDA authority to issue a regulation deeming that any or all tobacco products are covered by the Tobacco Control Act. If the proposed deeming rule is finalized, it would extend several provisions of the Tobacco Control Act to electronic smoking devices. These provisions include the federal prohibition on sales to minors, the federal prohibition on free sampling, federal warning label requirements, and the requirement that tobacco manufacturers register with the FDA and seek the agency’s review of new tobacco products.

Until such time as the deeming rule is adopted, the FDA’s Center for Tobacco Products does not have authority to regulate the sale or use of electronic smoking devices as tobacco products. The FDA Center for Drug Evaluation and Research has limited authority to regulate electronic smoking devices as drugs or devices, but only if they are marketed for therapeutic purposes.⁵⁹

The FDA’s proposed deeming rule must go through a public notice and comment process before the agency can implement the rule, and the FDA will likely make changes to the rule in response to this process. Given the large volume of comments the agency has received, it will take at least a year, if not longer, for the FDA to implement the final rule. Thus, it is unclear when the FDA will release final regulations on electronic smoking devices.

The popularity of electronic smoking devices has boomed, and calls to regulate them have increased at all jurisdictional levels.

The Deeming Rule & Preemption

Many jurisdictions have questions about whether the FDA deeming rule would affect state or local laws. The proposed deeming rule makes clear that state and local governments can continue to adopt and enforce laws relating to tobacco product sales, use, distribution, and advertising (within constitutional limitations). According to the deeming rule, these state and local laws can be “in addition to, or more stringent, than the requirements of the Tobacco Control Act and its implementing regulations.”⁶⁰ For example, the deeming rule would not affect states’ and localities’ ability to pass laws regulating where electronic smoking devices can be used, taxing electronic smoking devices, or requiring retailers to obtain a local license to sell electronic smoking devices. The deeming rule does identify some areas where local and state action could be preempted if the rule is finalized as written, including laws relating to manufacturing standards and labeling.



At the State Level

In California, it is illegal to sell or otherwise furnish an electronic smoking device to a person under 18 years of age. For purposes of this state law, an electronic device is defined as a device that can deliver a dose of nicotine to the user through a vaporized solution.⁶¹ Local law enforcement agencies have the general authority to enforce this law under California Penal Code Section 830.1. Violators are subject to a fine of up to \$200 for a first violation; \$500 for a second violation; and \$1,000 for a third or subsequent violation.

The California smokefree workplace law, by contrast, does not expressly prohibit the use of electronic smoking devices in enclosed workplaces.⁶²

Local Policy Options for Regulating the Use & Sale of Electronic Smoking Devices

Regulating Use

Because the California state smokefree workplace law does not expressly prohibit the use of electronic smoking devices in places covered by that law,⁶³ many California communities are interested in prohibiting electronic smoking device use wherever conventional smoking is already prohibited. As discussed, it has been found that electronic smoking device vapor contains a variety of substances that are known to be toxic or carcinogenic. When electronic smoking devices are used in public places, bystanders may be involuntarily exposed to those chemicals resulting from secondhand vapor.

There is also considerable concern that the use of electronic smoking devices in places that are covered by a smokefree air law hinders enforcement of those laws.⁶⁴ Certain types of electronic smoking devices are often hard to distinguish from conventional cigarettes, and the confusion that results from inconsistently allowing their use in places where smoking is prohibited could have a chilling effect on enforcement of those laws altogether.⁶⁵ Relaxed enforcement of smokefree air laws could open the door for people to smoke conventional tobacco products in violation of smokefree laws without fear of consequences. Allowing electronic smoking device use in places that are otherwise smokefree also bears the risk of “re-normalizing” tobacco use, giving the mistaken impression that electronic smoking devices are safe or healthy rather than simply “less dangerous” than conventional cigarettes.⁶⁶

There are different ways for local governments to regulate electronic smoking device use. The most appropriate solution depends on whether there is an existing law in the jurisdiction that regulates smoking, and what the scope of any such law is.

The first step in regulating electronic smoking device use is therefore to review your local laws that govern smoking. In some cases, electronic smoking devices may actually be covered by an existing smokefree law.

To determine whether electronic smoking devices are covered by an existing smokefree law, look to see if the ordinance's definition of “smoke” is broad enough to cover vapor or aerosol, or if the definition of “smoking” expressly includes the use of electronic smoking devices, electronic cigarettes, electronic nicotine delivery systems, personal vaporizers, etc.

If it is determined that a jurisdiction's existing smokefree air law already applies to electronic smoking devices, the next step is to determine if that law is being enforced. It's possible that law enforcement may not be aware that the law applies to electronic smoking devices.

Amending an existing smokefree air law

For California jurisdictions that already have a local smokefree air law, one way to address electronic smoking devices is to amend the definitions of “smoke” and “smoking” in the law to explicitly include “electronic smoking device vapor” and “electronic smoking device use.” For model definitions of “smoke” and “smoking” that cover electronic smoking devices, see ChangeLab Solutions' *Model Comprehensive Smokefree Places Ordinance*.⁷⁰

Advocates who take this approach should be mindful of the fact that opening up any law to add an amendment gives potential opponents the opportunity to weaken it. For example, opponents might try to narrow the scope of places where smoking is prohibited.

In California, many cities and counties have smokefree air laws that cover some outdoor areas, but do not cover indoor workplaces, which are smokefree under state law. If one of these cities were to amend its ordinance to cover electronic smoking devices merely by updating its definitions of “smoke” and “smoking”, it would still not cover electronic smoking device use in indoor workplaces because the change still only applies to those places covered by *local* law. For this reason, in addition to updating its definitions of “smoke” and “smoking”, the jurisdiction would also need to amend its local smokefree air law to expressly prohibit the use of electronic cigarettes in those places of employment covered by the state smokefree workplace law.

More than one peer reviewed study has concluded that exposure to vapor from a electronic smoking devices may cause passive or secondhand vaping.^{67,68,69}

Adopting a stand-alone law

Another option is to pass a stand-alone law specifically to prohibit electronic smoking device use in any place where smoking is prohibited by law. The advantage of this approach is that it provides a catch-all to regulate electronic smoking device use in exactly the same way as conventional tobacco use, regardless of whether existing smokefree air laws are local, state, or federal, and would apply prospectively to any future smokefree air laws passed in that jurisdiction. This approach does not require any existing law to be amended, reducing the likelihood that opponents could use the opportunity to weaken or repeal it. For model language prohibiting electronic smoking device use in places where smoking is prohibited, see ChangeLab Solutions' *Model California Ordinance Regulating Electronic Smoking Devices*.⁷¹

Adopting a new smokefree air law & working with private companies

Finally, there are some jurisdictions where there may not yet be a local smokefree air law. These jurisdictions are completely free to include electronic smoking devices in any smokefree air law drafted in the future.

It's important to remember that many locations are also subject to voluntary smokefree policies created by individual property owners/managers or businesses. For example, the Starbucks Coffee Company prohibits smoking in all outdoor seating areas in its cafes.⁷² Many hotel chains, such as Marriot and Westin, have also adopted policies to prohibit smoking entirely on their premises.⁷³ Private entities have a free hand to prohibit electronic smoking device use, and communities can work with them to develop or enhance such policies.

To help determine the most appropriate solution for a specific community to address electronic smoking device use, ChangeLab Solutions has developed a visual flow chart, which is available on our website at: www.changelabsolutions.org/publications/e-cig-ord.

Regulating Sales

In California, localities can regulate how electronic smoking devices are sold in a variety of ways, up to and including prohibiting the sale of electronic smoking devices altogether. In practice, when deciding precisely how to regulate electronic smoking devices, many jurisdictions seek to achieve consistency with existing laws governing conventional cigarettes and other tobacco products. For example, jurisdictions may: prohibit the sale of electronic smoking devices to minors and require retailers to check ID; require retailers to keep electronic smoking device paraphernalia/ accessories behind the counter; and prohibit the distribution of free samples of electronic smoking devices.

*As of May 2014 "71 cities and counties in California [require] retailers to obtain a license to sell e-cigarettes."*⁷⁴

Any jurisdiction wishing to regulate sales of electronic smoking devices should first become familiar with the scope of existing laws regarding tobacco. It is possible that existing laws regulating tobacco sales (e.g. a local tobacco retailer licensing law) already apply to electronic smoking devices. To determine whether an existing sales restriction applies to electronic smoking devices, look to the definitions in the law ("tobacco," "tobacco product," etc.). In many cases, a law has a very inclusive definition of tobacco that includes all products that contain nicotine (and would therefore apply to electronic smoking devices that contain nicotine, or that are packaged with cartridges or e-liquid containing nicotine). In other cases, electronic smoking devices may be mentioned directly. If it is determined that existing tobacco laws in a jurisdiction already apply to electronic smoking devices, the next step is to determine if those laws are being enforced. It's possible that law enforcement may not be aware that the law(s) apply to electronic smoking devices.

Amending an existing tobacco retailer licensing law

In cases where a local jurisdiction has an existing law governing tobacco sales that does not apply to electronic smoking devices, it is possible to amend that law to cover those products. One way to do this is to broaden the definitions of "tobacco product" and "tobacco paraphernalia," to cover electronic smoking devices and their associated products, such as e-liquid. This can be done simply by referencing these products by name in the definitions.



For model definitions that cover electronic smoking devices in this way, contact ChangeLab Solutions for assistance.*

The advantage of this approach is that it is a simple way to uniformly and consistently apply a variety of tobacco laws to electronic smoking devices.

However, there are some reasons to be cautious with this approach. For example, opening up an existing law to the amendment process creates an opportunity for opponents of the law to limit the law's scope to (for instance) exempt certain types of products from the definition of "tobacco product" like new dissolvable tobacco or nicotine lozenges. This approach is also problematic in that it only affects the laws of the specific jurisdiction. If a city or county has a law prohibiting tobacco vending machines, and they amend the definition of "tobacco product" in their municipal code so that it includes electronic smoking devices, it would not address regulatory gaps at the state level, e.g. a state law like California's which prohibits self-service displays of tobacco products but does not prohibit self-service displays of electronic smoking devices.

Adopting a stand-alone law

In lieu of amending an existing tobacco retailer licensing law, a jurisdiction can adopt a stand-alone ordinance that regulates electronic smoking device in all the same ways that conventional tobacco products are regulated. For example, local governments can require retailers to check the ID of people who purchase electronic smoking device, prohibit self-service displays of electronic smoking devices, and prohibit retailers from giving out free samples to the public. Several states including California⁷⁵ have passed stand-alone laws that prohibit the sale of electronic smoking devices to minors. Many local governments in jurisdictions around the country have passed similar laws.⁷⁶ For communities that are interested in stand-alone laws such as these, see ChangeLab Solutions' *Model California Ordinance Regulating Electronic Smoking Devices* as a reference.⁷⁷

* Note, in some cases a jurisdiction may wish to regulate only those electronic smoking devices that contain nicotine or that can be used to deliver nicotine. This can be done by amending the definition of "tobacco product" to include all products containing nicotine that is either derived from tobacco or synthetically produced, and by changing the definition of tobacco or smoking-related "paraphernalia" to include devices that can be used to deliver a tobacco or nicotine product. For more on this approach, see ChangeLab Solutions' *Model Tobacco Retailer Licensing Ordinance* at: www.changelabsolutions.org/publications/model-TRL-Ordinance



Adopting a new tobacco retailer licensing (TRL) law

Local jurisdictions that don't already have a tobacco retailer licensing law might consider adopting one that covers both traditional tobacco products and electronic smoking devices and the various liquids sold with them as tobacco products and tobacco or smoking paraphernalia. Tobacco retailer licensing laws require retailers to abide by all applicable local, state and federal tobacco laws in order to maintain their license, and can contain a wide variety of additional conditions. For example, a TRL law may require retailers to agree not to sell electronic smoking devices to minors, to keep all electronic smoking devices behind the counter, or to agree not to give out electronic smoking device samples to prospective customers.

The advantage of including electronic smoking devices in a TRL law is that the requirements for tobacco retailing can be consistently applied to electronic smoking devices and other tobacco products in a uniform way, simplifying and streamlining enforcement. There are numerous city and county governments which have enacted TRL laws that apply to electronic smoking devices along with all other tobacco products.⁷⁸ For more information about tobacco retailer licensing, see *License to Kill? Tobacco Retailer Licensing as an Effective Enforcement Tool*, as well as ChangeLab Solutions' *Model Tobacco Retailer Licensing Ordinance*.⁷⁹

Taxing Electronic Smoking Devices

Finally, it may be possible for state and/or local governments to levy taxes on electronic smoking devices. In most jurisdictions, electronic smoking devices are currently not taxed the way that cigarettes and other tobacco products are, and federal law does not preempt state or local governments from taxing electronic smoking devices.

Numerous studies have shown that one of the most clearly effective ways of reducing tobacco use, particularly among minors, is to increase the price of those products.⁸⁰ Not only do higher excise taxes on tobacco products lower rates of use, but they also create a source of revenue that can be used to offset health costs related to tobacco and to fund public health efforts.⁸¹

If there is not an existing state or local law that levies a tax on electronic smoking devices, it may be possible to enact one in order to bring taxes on these products more in line with the taxes on conventional cigarettes and/or other tobacco products. Policy questions that may arise include how to set the taxation rate given the many different forms in which electronic smoking devices and their components are sold, and whether the taxation rate should be lower than the rate for conventional tobacco products. Minnesota is the first state in the country to tax electronic smoking devices as a tobacco product. Although the law itself does not explicitly mention electronic smoking devices, the definition of “tobacco products” is broad enough to cover any product that contains or is derived from tobacco.⁸² The Minnesota Department of Revenue has issued a notice clarifying that in its opinion the tobacco products tax applies to electronic smoking devices.⁸³ As of January 2014, several other states are considering this strategy, for example Delaware, Maine, Massachusetts, New Mexico, Oklahoma, and Utah.⁸⁴

Electronic Smoking Devices & the Minnesota Department of Revenue

In October, 2012, the Minnesota Department of Revenue clarified its position that the state’s tobacco products tax applies to electronic smoking devices. More specifically, the notice states that electronic smoking devices (or any components thereof) that contain nicotine constitute tobacco products under the assumption that all nicotine is derived from tobacco. Products containing nicotine that are not derived from tobacco are exempt from the tax; however, the burden is on the taxpayer to prove this to the department. Furthermore, the sales price of an entire electronic smoking device “kit” or package is subject to the tax unless a wholesaler sells the nicotine-containing component (such as a cartridge or liquid bottle) separately and can isolate the cost of the product.

How We Can Help

Additional materials related to electronic smoking devices are available on our [website](#) including our [Model California Ordinance Regulating Electronic Smoking Devices](#).

This material was made possible by funds received from the California Department of Public Health, under contract #09-11182. ChangeLab Solutions is a nonprofit organization that provides legal information on matters relating to public health. The legal information provided in this document does not constitute legal advice or legal representation. For legal advice, readers should consult a lawyer in their state.

© 2014 ChangeLab Solutions

June 2014

Photos by ChangeLab Solutions and Douglas Litchfield/Stock (p.4).



- 1 Legacy Foundation. (2012). Tobacco Fact Sheet: Electronic Cigarettes (E-Cigarettes). Available at: www.legacyforhealth.org/PDFPublications/ECIGARETTE_0909_temp.pdf
- 2 McMillen, R., Maduka, J., & Winickoff, J. (2012) Use of emerging tobacco products in the United States. *Journal of Environmental Public Health*. Doi:10.1155/2012/989474
- 3 Cobb, N. et al. (2010). "Novel Nicotine Delivery Systems and Public Health: The Rise of the 'E-Cigarette.'" *American Journal of Public Health*, 100 (12): 2340-2342.
- 4 U.S. Food and Drug Administration. (2009). News Release: FDA and Public Health Experts Warn About Electronic Cigarettes. Available at: www.fda.gov/NewsEvents/Newsroom/PressAnnouncements/ucm173222.htm
- 5 Cobb, N, et al. (2010). "Novel Nicotine Delivery Systems and Public Health: The Rise of the 'Electronic smoking device.'" *American Journal of Public Health*, 100(12): 2340-2342.
- 6 Department of Health and Human Services Food and Drug Administration. (2009). "FDA Evaluation of E-Cigarettes." Available at: www.fda.gov/downloads/drugs/ScienceResearch/UCM173250.pdf
- 7 Etter, J.-F., Zäther, E., & Svensson, S. (2013). Analysis of refill liquids for electronic cigarettes. *Addiction (Abingdon, England)*, 1-9. doi:10.1111/add.12235
- 8 Department of Health and Human Services Food and Drug Administration. (2009). "FDA Evaluation of E-Cigarettes." Available at: www.fda.gov/downloads/drugs/ScienceResearch/UCM173250.pdf
- 9 Department of Health and Human Services Food and Drug Administration. (2009). "FDA Evaluation of E-Cigarettes." Available at: www.fda.gov/downloads/drugs/ScienceResearch/UCM173250.pdf
- 10 German Cancer Research Center. (2013). Red Series Tobacco Prevention and Tobacco Control Volume 19: Electronic Cigarettes - An Overview. Available at: www.dkfz.de/de/tabakkontrolle/download/Publikationen/RoteReihe/Band_19_ecigarettes_an_overview.pdf
- 11 Department of Health and Human Services Food and Drug Administration. (2009). "FDA Evaluation of E-Cigarettes." Available at: www.fda.gov/downloads/drugs/ScienceResearch/UCM173250.pdf
- 12 State of California Environmental Protection Agency Office of Environmental Health Hazard Assessment Safe Drinking Water and Toxic Enforcement Act of 1986. (2013). Chemicals known to the State of California to cause cancer or reproductive toxicity. Available at: http://oehha.ca.gov/prop65/prop65_list/files/P65single091313.pdf
- 13 German Cancer Research Center. (2013). Red Series Tobacco Prevention and Tobacco Control Volume 19: Electronic Cigarettes - An Overview. Available at: www.dkfz.de/de/tabakkontrolle/download/Publikationen/RoteReihe/Band_19_ecigarettes_an_overview.pdf
- 14 Goniewicz, M. et al. (2013). Levels of selected carcinogens and toxicants in vapour from electronic cigarettes. *Tob. Control*. 1:1-8. Available at: www.ncbi.nlm.nih.gov/pubmed/23467656
- 15 German Cancer Research Center. (2013). Red Series Tobacco Prevention and Tobacco Control Volume 19: Electronic Cigarettes - An Overview. Available at: www.dkfz.de/de/tabakkontrolle/download/Publikationen/RoteReihe/Band_19_ecigarettes_an_overview.pdf
- 16 Goniewicz, M. et al. (2013). Levels of selected carcinogens and toxicants in vapour from electronic cigarettes. *Tobacco Control*,1:1-8. Available at: www.ncbi.nlm.nih.gov/pubmed/23467656
- 17 Williams, M., Villarreal, A., Bozhilov, K., Lin, S., & Talbot, P. (2013). Metal and silicate particles including nanoparticles are present in electronic cigarette cartomizer fluid and aerosol. *PLoS one*, 8(3), e57987. doi:10.1371/journal.pone.0057987
- 18 Agency for Toxic Substances and Disease Registry (ATSDR). (2008). Toxic Substances Portal – Aluminum. Available at: www.atsdr.cdc.gov/pbs/pbs.asp?id=1076&tid=34
- 19 Agency for Toxic Substances and Disease Registry (ATSDR). (2005). Toxic Substances Portal – Tin. Available at: www.atsdr.cdc.gov/pbs/pbs.asp?id=541&tid=98
- 20 United States Environmental Protection Agency. (N.d.) EPA Schools Monitoring Initiative Fact Sheet. Available at: www.epa.gov/air/sat/pdfs/acroleinupdate.pdf
- 21 Agency for Toxic Substances and Disease Registry (ATSDR). (2007). Toxic Substances Portal – Acrolein. Available at: www.atsdr.cdc.gov/PHS/PHS.asp?id=554&tid=102
- 22 State of California Environmental Protection Agency Office of Environmental Health Hazard Assessment. (n.d.). Chronic Toxicity Summary: Toluene. CAS Registry Number: 108-88-3. Available at: http://oehha.ca.gov/air/chronic_rels/pdf/108883.pdf
- 23 State of California Environmental Protection Agency Office of Environmental Health Hazard Assessment. (n.d.). Chronic Toxicity Summary: Toluene. CAS Registry Number: 108-88-3. Available at: http://oehha.ca.gov/air/chronic_rels/pdf/108883.pdf
- 24 Environmental Protection Agency. (2012). "Particle Pollution and Health." Available at: www.epa.gov/pm/2012/fshealth.pdf
- 25 German Cancer Research Center. (2013). Red Series Tobacco Prevention and Tobacco Control Volume 19: Electronic Cigarettes - An Overview. Available at: www.dkfz.de/de/tabakkontrolle/download/Publikationen/RoteReihe/Band_19_ecigarettes_an_overview.pdf
- 26 Goniewicz, M. et al. (2013). "Levels of selected carcinogens and toxicants in vapour from electronic cigarettes." *Tob. Control*. 1:1-8. Available at: www.ncbi.nlm.nih.gov/pubmed/23467656
- 27 German Cancer Research Center. (2013). Red Series Tobacco Prevention and Tobacco Control Volume 19: Electronic Cigarettes - An Overview. Available at: www.dkfz.de/de/tabakkontrolle/download/Publikationen/RoteReihe/Band_19_ecigarettes_an_overview.pdf
- 28 Williams, M., Villarreal, A., Bozhilov, K., Lin, S., & Talbot, P. (2013). "Metal and silicate particles including nanoparticles are present in electronic cigarette cartomizer fluid and aerosol." *PLoS one*, 8(3), e57987. doi:10.1371/journal.pone.0057987
- 29 German Cancer Research Center. (2013). Red Series Tobacco Prevention and Tobacco Control Volume 19: Electronic Cigarettes - An Overview. Available at: www.dkfz.de/de/tabakkontrolle/download/Publikationen/RoteReihe/Band_19_ecigarettes_an_overview.pdf
- 30 Schripp, T., Markewitz, D., Uhde, E., & Salthammer, T. (2013). "Does e-cigarette consumption cause passive vaping?" *Indoor Air*. 23(1), 25-31. Doi:10.1111/j.1600-0668.2012.00792.x
- 31 Schober, W, et al. (2013). Use of electronic cigarettes (e-cigarettes) impairs indoor air quality and increases FeNO levels of e-cigarette consumers. *International Journal of Hygiene and Environmental Health*.
- 32 Chen, L. (2013). "FDA Summary of Adverse Events on Electronic Cigarettes." *Nicotine & Tobacco Research: Official Journal of the Society for Research on Nicotine and Tobacco*. 15(2): 615-6. Doi:10.1093/ntr/nts145.
- 33 King, B, et al. (2013). Awareness and Ever Use of Electronic Cigarettes Among U.S. Adults, 2010-2011. *Nicotine & tobacco research: official journal of the Society for Research on Nicotine and Tobacco*. 1-5. doi:10.1093/ntr/ntt013
- 34 King, B, et al. (2013). Awareness and Ever Use of Electronic Cigarettes Among U.S. Adults, 2010-2011. *Nicotine & tobacco research: official journal of the Society for Research on Nicotine and Tobacco*. 1-5. doi:10.1093/ntr/ntt013
- 35 Corey, C, et al. (2013). Notes from the Field: Electronic Cigarette Use Among Middle and High School Students - United States, 2011- 2012. *Morbidity and Mortality Weekly Report (MMWR)*, 62(35), 729-730. Available at: www.cdc.gov/mmwr/preview/mmwrhtml/mm6235a6.htm
- 36 Corey, C, et al. (2013). Notes from the Field: Electronic Cigarette Use Among Middle and High School Students - United States, 2011- 2012. *Morbidity and Mortality Weekly Report (MMWR)*, 62(35), 729-730. Available at: www.cdc.gov/mmwr/preview/mmwrhtml/mm6235a6.htm
- 37 Sutfin, E, et al. (2013). Electronic cigarette use by college students. *Drug and alcohol dependence*. 131(3): 214-21. doi:10.1016/j.drugalcdep.2013.05.001
- 38 McMillen, R., Maduka, J., & Winickoff, J. (2012). Use of emerging tobacco products in the United States. *Journal of environmental and public health*. doi:10.1155/2012/989474
- 39 King, B. et al. (2013). Awareness and Ever Use of Electronic Cigarettes Among U.S. Adults, 2010-2011. *Nicotine & tobacco research: official journal of the Society for Research on Nicotine and Tobacco*. 1-5. doi:10.1093/ntr/ntt013
- 40 King, B. et al. (2013). Awareness and Ever Use of Electronic Cigarettes Among U.S. Adults, 2010-2011. *Nicotine & tobacco research: official journal of the Society for Research on Nicotine and Tobacco*. 1-5. doi:10.1093/ntr/ntt013

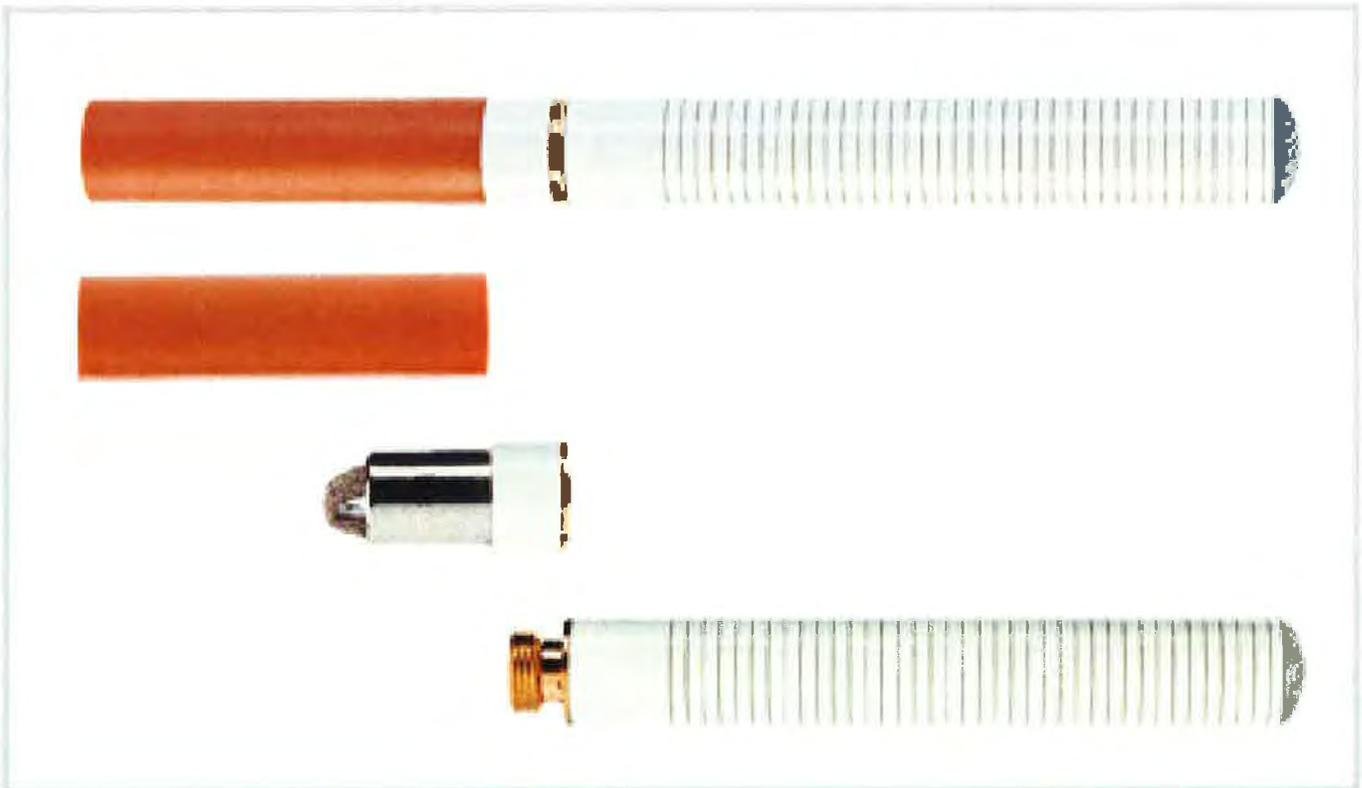
- ⁴¹ For example, the vaporized solution that people who use e-cigarettes inhale often contains nicotine levels that are different from their labeling. Two separate studies found that the nicotine levels of two individual products were over 20% higher than what their labeling indicated. See: Etter, Jean-François, Eva Zäther, and Sofie Svensson. "Analysis of Refill Liquids for Electronic Cigarettes." *Addiction* (May 23, 2013): 1–9. doi:10.1111/add.12235.; Goniewicz, Maciej L, Tomasz Kuma, Michal Gawron, Jakub Knysak, and Leon Kosmider. "Nicotine Levels in Electronic Cigarettes." *Nicotine & Tobacco Research: Official Journal of the Society for Research on Nicotine and Tobacco* 15, no. 1 (January 2013): 158–66. doi:10.1093/ntr/nts103.
- ⁴² Hodge, J, et al. (2013). Reconsidering the legality of cigarette smoking advertisements on television public health and the law. *The Journal of law, medicine & ethics : a journal of the American Society of Law, Medicine & Ethics*. 41(1): 369–73. doi:10.1111/jlme.12026
- ⁴³ U.S. Food and Drug Administration. (2010). E-Cigarette: Questions and Answers, Available at: www.fda.gov/forconsumers/consumerupdates/ucm225210.htm
- ⁴⁴ McMillen, R., Maduka, J., & Winickoff, J. (2012). Use of emerging tobacco products in the United States. *Journal of Environmental and Public Health*. doi:10.1155/2012/989474
- ⁴⁵ Goniewicz, M, et al. (2013). Nicotine levels in electronic cigarettes. *Nicotine & tobacco research: official journal of the Society for Research on Nicotine and Tobacco*, 15(1): 158–66. doi:10.1093/ntr/nts103
- ⁴⁶ Etter, J., et al. (2013). "Analysis of Refill Liquids for Electronic smoking devices." *Addiction*:1–9. doi:10.1111/add.12235
- ⁴⁷ Etter, J., Zäther, E., & Svensson, S. (2013). Analysis of refill liquids for electronic cigarettes. *Addiction* 108(9): 1671-1679. doi:10.1111/add.12235
- ⁴⁸ Etter, J., Zäther, E., & Svensson, S. (2013). Analysis of refill liquids for electronic cigarettes. *Addiction* 108(9): 1671-1679. doi:10.1111/add.12235
- ⁴⁹ Chatham-Stephens, K., Law, R., Taylor, E., Melstrom, P., Bunnell, R., Wang, B., & Apelberg, B. (2014). Calls to Poison Centers for Exposures to Electronic Cigarettes - United States, September 2010 –February 2014. *Morbidity and Mortality Weekly Report (MMWR)*, 63(13), 292–294.
- ⁵⁰ Chatham-Stephens, K., Law, R., Taylor, E., Melstrom, P., Bunnell, R., Wang, B., & Apelberg, B. (2014). Calls to Poison Centers for Exposures to Electronic Cigarettes - United States, September 2010 –February 2014. *Morbidity and Mortality Weekly Report (MMWR)*, 63(13), 292–294.
- ⁵¹ U.S. Food and Drug Administration. (2009). FDA Warns Of Health Risk Posed By E-Cigarettes. Available at: www.fda.gov/downloads/forconsumers/consumerupdates/UCM173430.pdf
- ⁵² World Health Organization. (2013). Questions and Answers on Electronic Cigarettes or Electronic Nicotine Delivery Systems (ENDS). Available at: www.who.int/tobacco/communications/statements/electronic_cigarettes/en/
- ⁵³ World Medical Association. (2012). Statement on Electronic Cigarettes and Other Electronic Nicotine Delivery Systems. Available at: [www.wma.net/en/30publications/10policies/e19/index.html.pdf?print-media-type&footer-right=\[page\]/\[toPage\]](http://www.wma.net/en/30publications/10policies/e19/index.html.pdf?print-media-type&footer-right=[page]/[toPage])
- ⁵⁴ State of California Tobacco Education and Research Oversight Committee. (2013). Position on Electronic Cigarettes (e-cigarettes). Available at: www.cdph.ca.gov/services/boards/teroc/Documents/Positions/TEROC%20Official%20Position%20of%20E-Cigs_June%202013_final.pdf
- ⁵⁵ U.S. Department of Transportation. (2013). DOT Policy on E Cigarettes. Available at: www.dot.gov/airconsumer/air-consumer/dot-policy-e-cigarettes
- ⁵⁶ See U.S Air Force. (2012). Air Force Instruction 40-102, Tobacco Use in the Air Force. Available at: http://static.e-publishing.af.mil/production/1/af_sg/publication/afi40-102/afi40-102.pdf
- ⁵⁷ Navy and Marine Corps Public Health Center. (2013). Frequent Questions about Electronic Cigarettes (citing U.S. Department of the Navy, SECNAV Instruction 5100.13E (2008)). Available at: www.med.navy.mil/sites/nmcpbc/Documents/health-promotion-wellness/tobacco-free-living/Frequent_Questions_about_Electronic_Cigarettes_March_2013.pdf
- ⁵⁸ Deeming Tobacco Products To Be Subject to the Federal Food, Drug, and Cosmetic Act, as Amended by the Family Smoking Prevention and Tobacco Control Act; Regulations on the Sale and Distribution of Tobacco Products and Required Warning Statements for Tobacco Products; Proposed Rule, 79 Fed. Reg. 23,142 (proposed Apr. 25, 2014) [hereinafter Proposed Deeming Rule].
- ⁵⁹ See *Sottera, Inc. v. FDA*, 627 F.3d 891 (D.C. Cir. 2010).
- ⁶⁰ Proposed Deeming Rule, 79 Fed. Reg. at 23, 195.
- ⁶¹ California Health and Safety Code § 119405.
- ⁶² California Labor Code § 6404.5.
- ⁶³ California Labor Code § 6404.5.
- ⁶⁴ American Cancer Society Cancer Action Network, American Heart Association, Campaign for Tobacco Free Kids, American Lung Association. *Policy Guidance Document Regarding E-Cigarettes*. (2011). Available at: www.acscan.org/content/wp-content/uploads/2013/06/Policy-Guidance-on-E-Cigarettes-.pdf
- ⁶⁵ American Cancer Society Cancer Action Network, American Heart Association, Campaign for Tobacco Free Kids, American Lung Association. *Policy Guidance Document Regarding E-Cigarettes*. (2011). Available at: www.acscan.org/content/wp-content/uploads/2013/06/Policy-Guidance-on-E-Cigarettes-.pdf
- ⁶⁶ McMillen, R., Maduka, J., and Winickoff, J. (2011). "Use of Emerging Tobacco Products in the United States" *Journal of Environmental and Public Health*. Doi: 10.1155/2012/989474.
- ⁶⁷ German Cancer Research Center. (2013). "Electronic Cigarettes - An Overview" Red Series Tobacco PRevention and Control. Available at: www.dkfz.de/de/labakkontrolle/download/Publikationen/RoteReihe/Band_19_e-cigarettes_an_overview.pdf
- ⁶⁸ Schripp, T., Markewitz, D., Uhde, E., & Salthammer, T. (2013). Does e-cigarette consumption cause passive vaping? *Indoor Air*. 23(1), 25–31. Doi:10.1111/j.1600-0668.2012.00792.x
- ⁶⁹ Schober W, Szendrei K, Matzen W, et al. (2013). Use of electronic cigarettes (e-cigarettes) impairs indoor air quality and increases FeNO levels of e-cigarette consumers. *Int. J. Hyg. Environ. Health*.
- ⁷⁰ ChangeLab Solutions. (2014). "Comprehensive Smokefree Places Model Ordinance." Available at: www.changelabsolutions.org/publications/comp-smokefree-places
- ⁷¹ ChangeLab Solutions. (2014). "Model Ordinance to Regulate Electronic Smoking Devices." Available at: www.changelabsolutions.org/publications/e-cig-ord
- ⁷² See Starbucks Coffee Company. (2013). "Policies." Available at: www.starbucks.com/responsibility/learn-move/policies. See also Americans for Nonsmokers' Rights. "Corporate Smokefree Policies." Available at: www.no-smoke.org/goingsmokefree.php?id=452
- ⁷³ See, e.g., Marriott International, Inc. (2013). "The Marriott Smoke-free Hotel Policy." (2013). Available at: www.marriott.com/marriott.mi?page=smokefree
- ⁷⁴ American Lung Association in California, the Center for Tobacco Policy and Organizing. (2014). Reducing Youth Access to Electronic Cigarettes Through Tobacco Retailer Licensing. Available at: <http://center4tobaccopolicy.org/wp-content/uploads/2014/05/E-cigarettes-in-TRL-May-2014.pdf>
- ⁷⁵ See, e.g., Cal, Health and Safety Code § 119405.
- ⁷⁶ For more information about jurisdictions that have regulated the use and/or sale of electronic smoking devices, See New Jersey GASP. (2014). "Electronic Smoking Devices." Available at: www.njgasp.org/E-Cigs_White_Paper.pdf; See also The Center for Tobacco Policy & Organizing. (2013). "Local Policies on the Use of Electronic Cigarettes." Available at: <http://center4tobaccopolicy.org/wp-content/uploads/2013/11/Local-Policies-on-Use-of-E-Cigs-Nov-2013.pdf>
- ⁷⁷ ChangeLab Solutions. (2014). "Model Ordinance to Regulate Electronic smoking devices." Available at: www.changelabsolutions.org/publications/e-cig-ord
- ⁷⁸ The Center for Tobacco Policy & Organizing. (2013). "Electronic Cigarettes and Tobacco Retailer Licensing." Available at: www.center4tobaccopolicy.org/CTPO/_files/_file/E-cigarettes%20in%20TRL%206_13_13.pdf
- ⁷⁹ Tobacco Control Legal Consortium. (2010). "License to Kill? Tobacco Retailer Licensing as an Effective Enforcement Tool." Available at: www.changelabsolutions.org/publications/TRL-enforcement-tool. See also ChangeLab Solutions. (2014). "Model Ordinance: Tobacco Retailer Licensing." Available at: www.changelabsolutions.org/publications/model-TRL-Ordinance
- ⁸⁰ See Campaign for Tobacco Free Kids. (2012). "Raising Cigarette Taxes Reduces Smoking, Especially Among Kids." Available at: www.tobaccofreekids.org/research/factsheets/pdf/0146.pdf
- ⁸¹ See Cal. Health and Safety Code §§ 104350-104480; 104500-104545.
- ⁸² Minn. Laws § 297F.1.
- ⁸³ Minn. Dept. of Revenue, Revenue Notice No. 12-10, Tobacco Products Tax—Taxability—E-Cigarettes (October 22, 2012).
- ⁸⁴ See, e.g., Minn. Laws § 305.2.

U.S. Food and Drug Administration
Protecting and Promoting *Your* Health

Electronic Cigarettes (e-Cigarettes)

What are electronic cigarettes?

Electronic cigarettes, also known as e-cigarettes, are battery-operated products designed to deliver nicotine, flavor and other chemicals. They turn chemicals, including highly addictive nicotine, into an aerosol that is inhaled by the user.



Most e-cigarettes are manufactured to look like conventional cigarettes, cigars, or pipes. Some resemble everyday items such as pens and USB memory sticks.

E-cigarettes have not been fully studied, so consumers currently don't know:

- the potential risks of e-cigarettes when used as intended,

- how much nicotine or other potentially harmful chemicals are being inhaled during use, or
- whether there are any benefits associated with using these products.

Additionally, it is not known whether e-cigarettes may lead young people to try other tobacco products, including conventional cigarettes, which are known to cause disease and lead to premature death.

FDA Regulation of e-Cigarettes

Only e-cigarettes that are marketed for therapeutic purposes are currently regulated by the FDA Center for Drug Evaluation and Research (CDER). Currently, the FDA Center for Tobacco Products (CTP) regulates

- cigarettes,
- cigarette tobacco,
- roll-your-own tobacco, and
- smokeless tobacco.

FDA has issued a proposed rule that would extend the agency's tobacco authority to cover additional products that meet the legal definition of a tobacco product, such as e-cigarettes. FDA's **Extending Authorities to Additional Tobacco Products webpage** (</TobaccoProducts/Labeling/ucm388395.htm>) offers more information on the proposed rule, including how to submit comments.

For more information on current regulation:

- **Tobacco Product Regulation** (</TobaccoProducts/ResourcesforYou/ucm335294.htm>)
- **Nicotine-Containing Products** (</Drugs/GuidanceComplianceRegulatoryInformation/ucm345928.htm>)

How to Comment

To comment on the proposed rule:

1. **Read the proposed rule** (<http://www.regulations.gov/#!documentDetail;D=FDA-2014-N-0189-20870>).
2. Through August 8, 2014, **go to Regulations.gov to submit comments**

<http://www.regulations.gov/#!submitComment;D=FDA-2014-N-0189-20870>.

Comment Now (<http://www.regulations.gov/#!submitComment;D=FDA-2014-N-0189-20870>)

eCigarettes and Adverse Events

What is an Adverse Event?

An adverse event is an undesirable side effect or unexpected health or product quality problem that an individual believes was caused by the use of a tobacco product.

Reporting an Adverse Event

Anyone can report an adverse event to the FDA. In fact, these reports help us identify safety concerns with tobacco products that could cause health or safety problems beyond those normally associated with tobacco product use.

Please report adverse events with e-cigarettes via:

- The [HHS Safety Reporting Portal \(https://www.safetyreporting.hhs.gov/\)](https://www.safetyreporting.hhs.gov/) or
- By calling 1-800-FDA-1088

Please send other information or inquiries regarding e-cigarettes to:

- 1-877-CTP-1373 or
- [AskCTP@fda.hhs.gov \(mailto:AskCTP@fda.hhs.gov\)](mailto:AskCTP@fda.hhs.gov)

Adverse Event Reports for e-Cigarettes

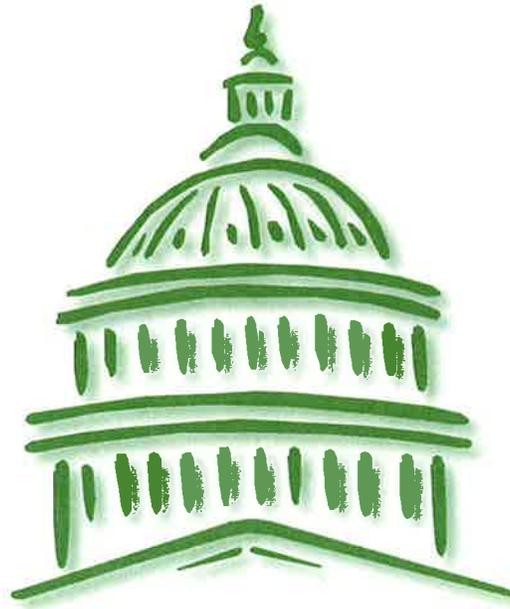
We regularly receive voluntary reports¹ of adverse events involving e-cigarettes from consumers, health professionals and concerned members of the public. The adverse events described in these reports have included hospitalization for illnesses such as

- pneumonia,

- congestive heart failure,
- disorientation,
- seizure,
- hypotension, and
- other health problems.

Whether e-cigarettes caused these reported adverse events is unknown. Some of the adverse events could be related to a pre-existing medical condition or to other causes that were not reported to FDA. You can review the adverse event reports for e-cigarettes that were voluntarily reported to FDA from 6/22/2009 to 3/12/2014 at the **CTP FOIA Electronic Reading Room** (**(/AboutFDA/CentersOffices/OfficeofMedicalProductsandTobacco/AbouttheCenterforTobaccoProducts/ucm221165.htm)**).

1. Under the Food, Drug and Cosmetic Act, as amended by the Family Smoking Prevention and Tobacco Control Act, FDA may accept voluntarily submitted information related to tobacco products, even if some of the information concerns tobacco products that are not yet regulated by FDA. **(back)**



**Current Practices
in Enforcement of
California Laws
Regarding Youth
Access to Tobacco
Products and
Exposure to
Secondhand Smoke**

**California Department of Public Health
California Tobacco Control Program**

Current Practices in Enforcement of California Laws Regarding Youth Access to Tobacco Products and Exposure to Secondhand Smoke

California Department of Public Health
California Tobacco Control Program

Prepared by

Todd Rogers, Ph.D.
Ellen C. Feighery, R.N., M.S.
Harry H. Haladjian, B.A.
Public Health Institute



Arnold Schwarzenegger, Governor
State of California

Kimberly Belshé, Secretary
California Health and Human Services Agency

Mark B Horton, MD, MSPH, Director
California Department of Public Health



This report was prepared under contract number 04-35336 from the California Department of Public Health, California Tobacco Control Program to the Public Health Institute.

Suggested Citation:

Rogers, T., Feighery, E.C., Haladjian, H.H. *Current Practices in Enforcement of California Laws Regarding Youth Access to Tobacco Products and Exposure to Secondhand Smoke*. Sacramento, CA: California Department of Public Health; 2008.

Contents

Introduction	1
Methods	3
Youth Access Enforcement Survey	3
Secondhand Smoke Enforcement Survey	4
Findings.....	5
Enforcement of Youth Access Laws	5
Enforcement of Secondhand Smoke Laws	7
Conclusions.....	13
Youth Access Enforcement Survey	13
Secondhand Smoke Enforcement Survey	14

Introduction

Since the inception of the tobacco control program in California, the California Department of Public Health (CDPH), California Tobacco Control Program (CTCP), has identified reducing the illegal sale of tobacco to minors and reducing exposure to secondhand smoke (SHS) as high priorities. Strategies have been pursued at the state and local levels to stimulate adoption of state laws and local ordinances, conduct media advocacy and education to stimulate compliance, and train enforcement agencies to increase active enforcement of these laws. Several technical resources have been funded at varying points in time by CTCP to work with local jurisdictions on policy development and enforcement strategies.

Between 1996 and 2000, CTCP tracked the activities of local enforcement agencies as part of the Independent Evaluation (IE) of the California Tobacco Control Prevention and Education Program. The IE tracked activities and assessed outcomes in 18 “focal counties” selected to represent the entire state, and employed multiple data collection methods that were implemented in three waves (1996, 1998, and 2000). In late 2003, the Technical Assistance Legal Center (TALC) assumed the task of periodic assessment of local enforcement agency activities pertaining to illegal tobacco sales to minors and SHS through two survey waves (2004 and 2007). The 2004 and 2007 Technical Assistance Legal Center (TALC) law enforcement surveys represent an extension of the earlier IE survey efforts which were limited to enforcement agencies in the 18 IE focal counties. In contrast to the IE, the TALC law enforcement surveys were disseminated to all enforcement agencies responsible for enforcing these two categories of laws in California.

This report presents findings on the amount and type of enforcement of youth access to tobacco and SHS laws occurring throughout California in 2006 and early 2007, and compares these findings to the results of the 2004 statewide enforcement agency survey. In addition, trend analyses of data collected from enforcement agencies in the 18 counties that were the focus of the IE are also included to determine changes in enforcement activity since 1996.

Methods

Two separate written surveys were administered to enforcement agencies in California. One survey focused on the enforcement of state policies related to youth access to tobacco while the other survey focused on the enforcement of state and local policies related to exposure to tobacco smoke. Both survey instruments contained primarily closed-ended questions that asked about enforcement activities over the past 6 or 12 months. Areas queried in the surveys included: issue salience, perceived importance of agency enforcement, perceived compliance with policies, involvement in enforcement activities, perceived barriers to enforcement, collaboration with other agencies on enforcement efforts, and perceived effectiveness of enforcement policies and procedures.

The youth access enforcement survey was sent to all potential respondents during the final week of January 2007; and data collection was completed by the end of April 2007. The SHS enforcement survey was mailed to all potential respondents in mid-February 2007 with data collection completed by early May 2007. In addition to the first mailing of both surveys, agencies received up to two reminder postcards, a second survey, and reminder phone calls in order to maximize response rates. All surveys were written in English. Public Health Institute staff checked each returned survey for completeness and clarity prior to data entry. In some cases, phone calls and faxes to agencies were necessary to clarify responses. Following detailed review of each returned survey, 281 youth access enforcement surveys and 261 SHS enforcement surveys were electronically key-entered and verified by Data4U in Sunnyvale, CA. Analyses were conducted using SPSS 11.5 for Windows and SPSS 11.0 for Macintosh.

Youth Access Enforcement Survey

The youth access enforcement survey addressed the enforcement of Penal Code (PC) Section 308(a), prohibiting the sale of tobacco products to people less than 18 years of age, and PC Section 308(b), prohibiting anyone less than 18 years of age to buy or possess tobacco. All police and sheriff offices in all California counties and municipalities were initially targeted for the survey. Police and sheriff offices were obtained via an updated database of enforcement agencies. Surveys were mailed to 485 agencies (341 police departments, 103 sheriff offices or substations, and 41 city and county agencies (including 10 code enforcement departments)). In some jurisdictions surveys were sent to multiple agencies and/or individuals to ensure a response from the correct enforcement agency. After removing agencies stating that they were not responsible for enforcement or did not currently enforce, incorrect contacts at agencies, and duplicates where one agency was responsible for multiple jurisdictions, the total sampling pool was 392, out of which 297 agencies returned completed surveys, for a response rate of 76 percent. Of the 297 surveys received, 26 were removed from the analyses because they were submitted by an agency that was not the main enforcement agency, or because they were duplicates from the same agency. This resulted in a valid sample of 271 agencies. County-level data were obtained

from all 58 counties except Alpine, Del Norte, Glenn, Humboldt, Imperial, Kings, Lake, Lassen, Los Angeles, Merced, Modoc, Monterey, San Diego, San Joaquin, San Luis Obispo, Santa Barbara, Santa Cruz, Solano, Stanislaus, and Ventura; however, information was received from at least one jurisdiction within each of these counties with the exception of Alpine.

Data from the 2007 statewide survey is from only one main agency per jurisdiction (municipality or county). The report contains results from the total sample of respondents in 2004 and 2007, and analyses of change between 2004 and 2007 in a subset of respondents with youth access data from both surveys. The report also contains data reported by enforcement agencies that are situated in the 18 focal counties of the 1996-2000 IE (referenced as the IE sample) and a subset of IE enforcement agencies for which we have five waves of youth access enforcement data.

Secondhand Smoke Enforcement Survey

The SHS enforcement survey focused on enforcement of Labor Code (LC) Section 6404.5 Smoke free Workplaces, LC Section 6404.5 Smoke-free Bars, and Government Code (GC) Section 7596-7598 that bans smoking proximal to entrances, exits, and operable windows, and also covered parking areas of city, county, and state government buildings. All police and sheriff offices in all California counties and municipalities were initially targeted for the survey. Police and sheriff offices were obtained via an updated database of enforcement agencies. Surveys were mailed to 468 agencies, 225 police departments, 65 sheriff offices or substations, 54 code enforcement agencies, and 124 miscellaneous city and county agencies including city attorneys, city managers, health departments, and fire departments. After removing agencies that replied they were not responsible for enforcement, incorrect contacts and duplicate agencies responsible for multiple jurisdictions, the total sampling pool was 403, out of which 259 agencies returned completed surveys, for a response rate of 64 percent. Of the 259 surveys received, 195 self-identified as primary enforcers for LC Section 6404.5, 169 self-identified as primary enforcers for GC Section 7596-7598, and 58 agencies shared enforcement responsibilities with the primary enforcers. Sixteen of 58 counties were not represented by main enforcement agency respondents: Alpine, Colusa, Contra Costa, Del Norte, El Dorado, Imperial, Inyo, Kern, Kings, Lake, Lassen, Mono, Santa Cruz, Sierra, Trinity, and Tulare.

Data presented from the 2007 statewide survey includes agencies charged with the enforcement of two selected California laws protecting people from exposure to SHS: LC Section 6404.5, which requires that smoking be prohibited in virtually all enclosed places of employment; and GC Section 7596-7598, which prohibits smoking within 20 feet of government building entrances, exits, and operable windows. Data reported in this section is for one primary agency per jurisdiction, and only for those agencies responsible for enforcement of LC Section 6404.5 or GC Section 7596-7598, as appropriate. 2007 SHS law enforcement results are compared with data from the statewide survey conducted in 2004, and this section discusses trends among the subset of enforcement agencies surveyed in 2007 that were also in the 18 focal counties of the 1996-2000 IE.

Findings

Enforcement of Youth Access Laws

Enforcement of PC Section 308(a)–

Sale of tobacco products to persons under 18 years of age

Statewide, a majority (74 percent) of youth access enforcement agencies reported issuing warnings to merchants selling tobacco products to minors in the year prior to the 2007 survey although only three percent reported that they issued warnings “very often.” No differences were found among urban, suburban, and rural counties as designated by local health departments on this variable. Among the 127 IE county enforcement agencies that provided valid responses in 2007, 74 percent had issued warnings to merchants in the previous 12 months with no significant differences detected within the panel of IE respondents with valid data across all survey waves (Cochran’s $Q = 4.15$, $p = 0.39$, $n = 32$).

Sixty-two percent of youth access enforcement agencies reported issuing citations to merchants in the prior 12 months; however, only four percent reported that they did so “very often.” There were no differences found among urban, suburban, and rural counties on this variable. The decline observed in citations issued to merchants (statewide) from 2004 to 2007 (66 percent to 64 percent) was statistically significant (Chi-square = 9.00, $p < 0.01$, $n = 118$) but no differences were detected across the five survey waves for the IE panel (Cochran’s $Q = 6.87$, $p = 0.14$, $n = 36$).

One-third (33 percent) of all agencies reported having issued at least one citation to persons giving or selling tobacco products to minors (not only merchants illegally selling tobacco products). This rate differed significantly across agencies in urban (34 percent), suburban (40 percent), or rural (24 percent) counties ($p = 0.01$).

Enforcement of PC Section 308(b) –

Purchase or possession of tobacco by anyone under 18 years of age

In 2007, 77 percent of youth access enforcement agencies statewide reported having issued warnings to minors in the previous 12 months; however, only five agencies (two percent) reported that they issued warnings “very often.” There were no differences across urban, suburban, and rural counties on this variable. No significant changes were detected statewide from 2004 to 2007 ($p = 0.17$) or across the five waves for the IE panel ($p = 0.76$).

In 2007, 90 percent of youth access enforcement agencies statewide reported having issued citations to minors in the previous 12 months, which was unchanged from 2004. Twenty-four percent of 249 agencies reported that they did so “often” or “very often.” There were no differences among urban, suburban, and rural counties on this variable ($p = 0.68$). In the 12 months prior to the 2007 survey, agencies across the state reported issuing an average of 24.1 citations to minors for possession of tobacco products. Among those agencies that issued at

least one citation, the average was 29.4 citations in the prior 12 months. Citation activity for agencies from urban (mean = 42.3 citations issued), suburban (mean = 28.8), or rural (mean = 16.3) counties differed significantly in the 2007 survey ($p = 0.01$). The agencies in the IE panel reported that citations to minors for PC Section 308(b) violations increased from 1996 to 1998, but have remained relatively flat since. Our five-wave analysis revealed a significant difference over time, but this was due to the low rate in 1996 ($p < 0.001$). No significant changes on this variable were detected statewide between 2004 and 2007 ($p = 0.17$).

Twenty-six percent of all youth access enforcement agencies statewide reported having conducted at least one decoy operation (also known as a sting or undercover buying attempt) in the 12 months prior to the 2007 survey. Among the agencies reporting data in both 2004 and 2007, there was a significant decline in decoy operations (Chi squared = 22.46, $p < 0.001$, $n = 161$). A similar significant decline was found among the sub-sample of IE-county agencies that responded to this item in all five waves of the youth access survey (Cochran's $Q = 10.20$, $p = 0.04$, $n = 57$).

Among the agencies that conducted at least one decoy operation in the previous year, an average of 64 percent of local tobacco outlets in the enforcement jurisdiction were included in one or more decoy operations. Most stores visited in decoy operations were chosen: 1) in response to complaints (27 percent); 2) selected at random (21 percent); or 3) as part of a census of all stores in the jurisdiction (18 percent). Among those conducting at least one decoy operation, agencies statewide conducted an average of 3.6 operations in the prior year, down from almost 11 operations per year reported in 2004. Agencies in urban, suburban, and rural counties conducted an average of 5.9, 3.7, and 1.5 operations, respectively, a significant overall difference ($p = 0.02$).

Predictors of Youth Access Enforcement

Data on the following factors were collected in the 2007 youth access survey to determine their influence on youth access enforcement: impact of the problem; relative importance of enforcement; barriers to enforcement; collaboration between enforcement and health groups; beliefs about the effectiveness of youth access laws; and funding for local enforcement. For each factor with multiple items (barriers to enforcement, perceived policy effectiveness, and collaboration) the mean of all items within that factor was calculated as a factor for use in multivariate analyses. In 2007, three of seven variables measured were found to be statistically significant independent predictors of whether decoy operations were conducted: perceptions of greater collaboration with other groups on enforcing youth access policies ($p < 0.01$), lower perceived barriers to enforcement ($p < 0.01$), and receipt of any funding for local enforcement ($p < 0.01$). This model explained 47 percent of the variance in whether decoy operations were conducted in the previous 12 months. This is an improvement over the 38 percent explained by the 2004 model, which also included an enforcement training variable that was excluded from the 2007 survey due to an end to the PC Section 308(a) statewide training program.

Enforcement in Jurisdictions with Strong Retail Tobacco Ordinances

In recent years, CTCF has encouraged the passage of strong local licensing ordinances in an effort to drive down rates of illegal sales to minors.¹ To evaluate the impact of strong local licensing ordinances on enforcement, ten agencies situated in jurisdictions with strong ordinances that were in effect as of January 1, 2006 were identified. Agencies in jurisdictions with strong ordinances reported conducting significantly more decoy operations over the prior 12 months (mean = 80 percent) than did agencies in jurisdictions without strong ordinances (mean = 24 percent) ($p < 0.001$). Agencies in jurisdictions with strong ordinances also perceived fewer barriers to enforcement compared to agencies in jurisdictions without strong ordinances (mean = 2.7 and 3.4, respectively; $p = 0.09$), and they reported greater collaboration with other community groups (mean = 3.0 and 2.2, respectively; $p = 0.07$). Although the latter two differences were not statistically significant, they are promising, particularly in light of the extreme imbalance in group size (10 agencies in the strong ordinance group versus 261 agencies with no or weak ordinances).

Enforcement of Secondhand Smoke Laws

Enforcement of LC Section 6404.5 — Smoke-free Workplaces (Excluding Bars)

In the 12 months prior to completion of the 2007 survey, half of the enforcement agencies conducted compliance checks and responded to inquiries and complaints (49 percent and 51 percent respectively) to enforce LC Section 6404.5 provisions governing restaurants and other indoor workplaces. Nearly half (44 percent) also educated owners and others about LC Section 6404.5. Relatively few agencies issued fines (9 percent) or citations (11 percent) in response to violations. Almost two-thirds of agencies statewide (61 percent) reported conducting at least one SHS enforcement activity during the year prior to survey completion. Compared to agencies in urban and suburban counties, significantly fewer rural-county agencies reported that they had issued any warnings for violations of LC Section 6404.5 ($p = 0.03$).

Among the agencies in the statewide sample that completed both the 2004 and 2007 surveys there was a significant decline in the percent of agencies reporting that they had responded to workplace SHS inquiries (Chi-square = 23.73, $p < 0.001$, $n = 108$). A significant decline was also found among the sub-sample of IE-county agencies that had responded to this item in all five waves of the SHS survey (Cochran's Q = 20.55, $p < 0.001$, $n = 35$).

Significant declines were also seen statewide from 2004 to 2007 in the percent of agencies reporting that they responded to complaints (Chi-square = 26.22, $p < 0.001$, $n = 114$), issued

¹ As defined by the Center for Tobacco Policy and Organizing (<http://www.californialung.org/thecenter/>), a strong local tobacco licensing law includes: all retailers that sell tobacco products must obtain a license and renew it annually; a fee to sufficiently fund an effective program including administration and enforcement; an enforcement plan; coordination of tobacco regulations so that a violation of any existing local, state, or federal tobacco regulation violates the license; and a financial deterrent through fines and penalties including the suspension and revocation of the license.

warnings (Chi-square = 7.62, $p = 0.006$, $n = 112$), issued citations (Chi square = 18.44, $p < 0.001$, $n = 105$), and conducted compliance checks (Chi square = 25.11, $p < 0.001$, $n = 113$). Similarly, the IE panel also showed some differences in the percent of agencies reporting that they had responded to complaints (Cochran's $Q = 14.57$, $p = 0.006$, $n = 39$), and issued warnings (Cochran's $Q = 16.36$, $p = 0.003$, $n = 36$). However, there were no differences in the percent of agencies on the IE panel issuing citations (Cochran's $Q = 3.55$, $p = 0.47$, $n = 37$) or conducting compliance checks (Cochran's $Q = 3.79$, $p = 0.44$, $n = 36$).

It should be noted that the relatively large differences in trend and cross-sectional values within the IE sample on several of the enforcement variables suggests that agencies that were consistent respondents across the five survey waves were more actively engaged in certain SHS enforcement actions than were those agencies that did not consistently respond to all waves of the survey. Thus, the IE panel data should not be used to estimate statewide levels of enforcement, only to demonstrate a continuing downward trend in SHS enforcement actions, even among those agencies most engaged in SHS enforcement.

Predictors of Enforcement of LC Section 6404.5 – Smoke-free Workplaces (Excluding Bars)

Data on the following factors was collected in the 2007 SHS survey to determine their influence on enforcement of the two selected SHS laws, including: relative seriousness of SHS as a community problem, relative importance of enforcement of SHS laws, perceived compliance with SHS laws, beliefs about the barriers to conducting enforcement operations of SHS laws; beliefs about the barriers to achieving compliance with LC Section 6404.5, and the extent of enforcement agency collaboration with other groups on enforcing SHS laws. For each factor with multiple items (barriers to enforcement, barriers to compliance, and collaboration) the mean of all items within that factor was calculated as a factor for use in multivariate analyses.

Multivariate analyses examined the degree to which the six variables/factors above were independent predictors of three different dependent variables: whether agencies engaged in any type of workplace SHS enforcement activity in the prior year, whether agencies engaged in any high-level SHS enforcement activity in the prior year, and whether agencies conducted any compliance checks during the prior year. Logistic regression analyses used data from 138 agencies statewide. Only one variable measured was shown to be a statistically significant independent predictor of whether compliance checks were conducted in the prior year: greater relative importance of enforcement of laws that prohibit smoking in indoor public areas such as restaurants and workplaces ($p = 0.02$). This model, however, explained only 11 percent of the variance in whether SHS compliance checks were conducted in the prior year.

Enforcement of LC Section 6404.5 – Smoke-free Bar Provision

In the 12 months prior to completion of the 2007 survey, roughly half (or more than half) of surveyed enforcement agencies conducted compliance checks (69 percent of responding agencies statewide), educated bar owners (55 percent), responded to complaints (53 percent), responded to inquiries (51 percent), and educated others about the law (49 percent). Many agencies issued warnings (42 percent), but few agencies issued citations (23 percent) or fines (14 percent) in response to violations detected. Most agencies statewide reported conducting at least one bar SHS enforcement activity during the previous six months (70 percent), which did not differ significantly among agencies located in urban (76 percent), suburban (60 percent), or rural (71 percent) counties ($p = 0.12$). Statewide, agencies reported a higher level of any enforcement activities for the smoke-free bar provision (mean = 2.13 on a 7-point scale) than for the workplace (non-bar) provision of the law (mean = 1.87) (paired t-test = 4.80, $df = 160$, $p < 0.001$). Also, a significantly higher percentage of agencies reported issuing citations for violations of the smoke-free bar provision (21 percent) than for the workplace provision of the law (11 percent) ($p = 0.001$).

Among the 146 agencies stating that they were responsible for issuing smoke-free bar citations, only eight percent reported having issued at least one citation for a restaurant/bar violation in the previous six months. The average number of citations issued by these 11 agencies was 4.6 (SD = 3.4), with most citations prosecuted (mean = 3.9, SD = 3.8). There were no significant differences found among urban, suburban, or rural agencies. Only ten percent of agencies reported that they had issued any smoke-free bar citations for violations in stand-alone bars during the previous six months. The average number of citations issued by these 14 agencies was 4.64 (SD = 4.2), with no significant differences among urban, suburban, or rural agencies. Again, most stand alone bar citations issued were prosecuted (mean = 3.4, SD = 3.5). Among all agencies reporting that they issued any citations for violation of the smoke-free bar provision, a mean of seven percent of citations were issued to patrons and a mean of three percent were issued to bar owners or employees with no statistically significant differences across agencies in urban, suburban, or rural counties. Among the same group, only three percent reported having issued at least one citation for a hookah bar or lounge violation in the previous six months. The average number of citations issued by these five agencies was 5.6 (SD = 3.4), and three of these agencies prosecuted all eight cited hookah bars.

Five questions were used to determine specific smoke-free bar enforcement activities reported by respondents to the 2004 and 2007 statewide SHS surveys and for the two IE surveys (1998 and 2000) in which this data was collected: 1) respond to inquiries, 2) respond to complaints, 3) issue warnings, 4) issue citations, and 5) conduct compliance checks. Significant declines were seen statewide from 2004 to 2007 in the percent of agencies reporting that they had: responded to inquiries (Chi-square = 17.50, $p < 0.001$, $n = 95$), responded to complaints (Chi-square = 22.48, $p < 0.001$, $n = 101$), issued warnings (Chi-square = 16.15, $p < 0.001$, $n = 94$), issued citations (Chi-square = 20.96, $p < 0.001$, $n = 92$), and conducted compliance checks (Chi

square = 18.18, $p < 0.001$, $n = 105$). In contrast, the IE panel only showed significant differences across the 1998-2007 surveys in the percent of agencies reporting that they had responded to inquiries (Cochran's $Q = 11.00$, $p = 0.01$, $n = 37$).

Predictors of Enforcement of LC Section 6404.5 – Smoke-free Bar Provision

Most of the factors used as predictors of local enforcement of smoke-free bar laws were the same as those used to predict enforcement of the non-bar provisions of LC Section 6404.5: relative seriousness of SHS as a community problem, beliefs about the barriers to conducting enforcement operations of SHS laws, beliefs about the barriers to achieving compliance with SHS laws, and the extent of enforcement agency collaboration with other groups on enforcing SHS laws. Each of these factors was described above as predictive of enforcement of the non-bar provisions of LC Section 6404.5. In addition to these items, we asked about two specific predictors of smoke free bar enforcement, relative importance of enforcement of smoke-free bar laws; and perceived compliance with smoke-free bar laws. Multivariate analyses of smoke-free bar enforcement data looked at the degree to which the above six variables/factors were independent predictors of three different dependent variables: whether agencies engaged in any type of smoke-free bar enforcement activity in the previous six months, whether agencies engaged in any high-level SHS enforcement activity in the previous six months (any enforcement activity except educating bar owners or educating others), and whether agencies conducted any compliance checks in bars during the previous six months. Logistic regression analyses used data from 138 agencies statewide. Only one factor, “greater relative importance of enforcement of SHS laws in bars” ($p < 0.03$) was found to be a statistically significant independent predictor of whether compliance checks were conducted in the previous six months. This model explained only nine percent of the variance in whether compliance checks were conducted in bars during the previous six months.

Enforcement of GC Section 7596-7598 – Smoke-free Doorway and Window Areas

GC Section 7596-7598 (Assembly Bill 846) went into effect January 1, 2004, banning smoking near entrances, exits, and covered parking lots and operable windows of municipal, county, regional, state buildings, and buildings of the University of California, California State University, and community colleges. About half of all agencies statewide (47 percent) reported conducting any GC Section 7596-7598-related enforcement activities in the year prior to the 2007 survey. The activity rate did not differ at all among agencies located in IJA-designated urban, suburban, or rural counties.

About one-third of local agencies reported specific enforcement activities related to GC Section 7596-7598 during the previous year: conducting compliance checks (42 percent of responding agencies statewide), responding to complaints (38 percent) and inquiries (37 percent), issuing warnings (30 percent), and educating other agencies about the law (25 percent). No differences were observed among agencies located in urban, suburban, or rural counties. Among the agencies stating that they issued any GC Section 7596-7598 citations in the prior year, the

average number of citations issued was 6.33 (SD = 2.88), and all of these were prosecuted. There were no significant differences among urban, suburban, or rural agencies on reported GC Section 7596-7598 citations or prosecutions.

Predictors of Enforcement of GC Section 7596-7598 – Smoke-free Doorway and Window Areas

Various factors that could possibly be predictors of local enforcement activities related to GC Section 7596-7598 were analyzed, including: relative seriousness of smoking near entrances, exists, covered parking lots, and operable windows as a community problem, relative importance of enforcement of these laws, perceived compliance with these laws, beliefs about the barriers to conducting enforcement operations of these laws, beliefs about the barriers to achieving compliance with these laws, and the extent of enforcement agency collaboration with other groups on enforcing GC Section 7596-7598. Because GC Section 7596-7598 is a relatively new set of laws, multivariate analysis focused on whether agencies engaged in any type of law enforcement activity regarding smoking proximal to entrances, exits, and windows in the prior year. For each factor with multiple items (barriers to enforcement, barriers to compliance, and collaboration) the mean of all items within that factor was calculated as a factor for use in multivariate analyses. Logistic regression analyses using data from 138 agencies statewide found that only one variable measured was a statistically significant independent predictor of whether any GC Section 7596-7598 law enforcement activities were conducted during the prior year: more frequent collaboration with other groups on enforcing GC Section 7596-7598 ($p = 0.01$). This model explained only 16 percent of the variance in whether any GC Section 7596-7598 law enforcement activities were conducted during the prior year.

Conclusions

Youth Access Enforcement Survey

Enforcement of PC Section 308(a) and PC Section 308(b)

- The youth access enforcement survey results indicated that enforcement agency actions have continued to decline since 1998. Statewide, about one-quarter of enforcement agencies conducted youth decoy operations in 2007, down significantly from about 30 percent in 2004.
- Less than five percent of enforcement agencies reported that warnings and citations were issued to merchants “often” or “very often.” This decrease may be related to the dramatic drop in the average number of youth decoy operations from almost 11 operations per year reported in 2004 down to 3.6 per year in 2007.
- From 2004 to 2007, there was a slight drop in the proportion of law enforcement agencies reporting that they issued warnings to minors possessing tobacco products. But those issuing citations remained the same. There were no significant changes in these types of activities since the 2004 survey.
- Law enforcement agencies continued to rank various policies and procedures such as suspension/revocation of licenses and civil and criminal penalties for owners and clerks, as effective strategies to reduce youth access to tobacco.
- In 2007, significant predictors of whether decoy operations were conducted were: perceptions of greater collaboration with other agencies, lower perceived barriers to enforcement, and receipt of funding. These findings confirm the importance of providing ongoing support for local law enforcement agencies.
- Agencies operating in jurisdictions with strong local retail licensing ordinances reported conducting four times as many decoy operations over the prior 12 months than did agencies in jurisdictions without strong ordinances, underscoring the value of local policy actions.
- The continuing reduction in the percent of agencies actively enforcing PC 308(a) was disappointing, given that CTCF has continued to expend resources to stimulate enforcement through trainings and technical assistance to law enforcement agencies.
- Law enforcement agencies’ perspectives on various policies and procedures as effective strategies to reduce youth access to tobacco may be useful to local programs attempting to strengthen youth access laws in their communities, and may represent an opportunity for collaboration with their local law enforcement agencies on these efforts.

Secondhand Smoke Enforcement Survey

Enforcement of LC Section 6404.5 – Smoke-free Workplaces (Excluding Bars)

- Almost two-thirds of enforcement agencies throughout California reported conducting at least one workplace-related SHS enforcement activity in the year prior to the 2007 statewide SHS survey.
- In 2007, about half the agencies reported that they responded to inquiries and complaints and conducted compliance checks, but relatively few agencies issued fines or citations. Agencies in rural counties reported issuing significantly fewer warnings for violations of LC Section 6404.5 than did agencies in urban and suburban counties.
- Among the agencies that completed both the 2004 and 2007 statewide SHS surveys, there was a significant decline in the percent reporting involvement in all types of SHS workplace enforcement actions. Agencies in the IE sub-sample from 1996 to 2007 showed similar declines in nearly every enforcement action across the five survey waves.
- Most enforcement agencies perceived that the rate of compliance with workplace SHS laws was high, and few believed that the workplace SHS problem was very serious in their community.
- Agency ratings regarding the importance of enforcement of SHS laws relative to other laws was the only independent predictor of whether any SHS compliance checks were conducted in the prior year. Unfortunately, agencies rated enforcement of laws that prohibit smoking in indoor public areas as being only moderately important.
- Significant declines were seen statewide from 2004 to 2007 in the percent of agencies reporting collaboration with businesses, voluntary health organizations, and educational organizations on SHS workplace law enforcement.
- As in 2004, salient barriers to enforcement of SHS laws were limited agency staff and insufficient budget.

Enforcement of LC Section 6404.5 — Smoke-free Bar Provision

- Levels of enforcement of the smoke-free bar provision were higher than for other workplace provisions included in LC Section 6404.5. Almost three-quarters of the responding agencies in 2007 conducted at least one bar-related SHS enforcement activity during the previous six months, about the same as in 2004.
- Half or more of all agencies reported that they responded to inquiries and complaints, down from 2004, and about the same percentage educated bar owners and others about the law. Over two-thirds of all agencies reported conducting compliance checks, but fewer than half reported issuing warnings, and fewer than one-quarter of all agencies issued citations or fines for violation of the smoke-free bar provision, all down from 2004.
- Significant declines were seen statewide from 2004 to 2007 regarding the percent of agencies reporting that they had responded to inquiries, responded to complaints, conducted compliance checks, issued warnings, and issued citations related to SHS laws in bars.
- Only one variable was found to be an independent predictor of whether SHS compliance checks were conducted in bars during the previous six months: greater relative importance of enforcement of SHS laws in bars. Nevertheless, compared to other laws enforced by respondent agencies, enforcement of laws that prohibit smoking in bars specifically was rated by agencies as being only moderately important, down from the rating level reported in 2004.
- Among all agencies reporting that they issued any citations for violation of the LC Section 6404.5 smoke-free bar provision, only three percent reported having issued at least one citation for a hookah bar or lounge violation in the previous six months.

Enforcement of GC Section 7596-7598 – Smoke-free Doorway and Window Areas

- The levels of enforcement activities related to GC Section 7596-7598 were lower than for either of the smoke-free workplace provisions of LC Section 6404. Statewide, roughly half of the responding agencies reported conducting any enforcement activities related to this law. Fewer than half conducted compliance checks related to this law, more than one-third responded to inquiries and complaints, and fewer than one-third issued warnings. Very few agencies issued citations or fines for violations of the law.
- Most of the agencies believed that this issue was less serious than other community problems, and that there was fairly good compliance in their jurisdiction.
- Perceived barriers to enforcing smoke-free doorways and windows provisions, such as limited staff and insufficient funding, ranked at about the same level as the perceived barriers to enforcing smoke-free workplace laws.
- The only significant predictor of whether an agency conducted any enforcement activity regarding GC Section 7596-7598 was the level of collaboration with other community groups and agencies.
- Enforcement agencies perceived high rates of compliance in their communities with the three SHS laws that were addressed in the survey. There was, however, variability in enforcement of SHS laws at the local level.
- The findings point to the important roles that Local Health Departments and their partners can play in educating both their communities and enforcement agencies about reducing exposure to SHS through law enforcement, and in facilitating collaboration with SHS enforcement agencies.