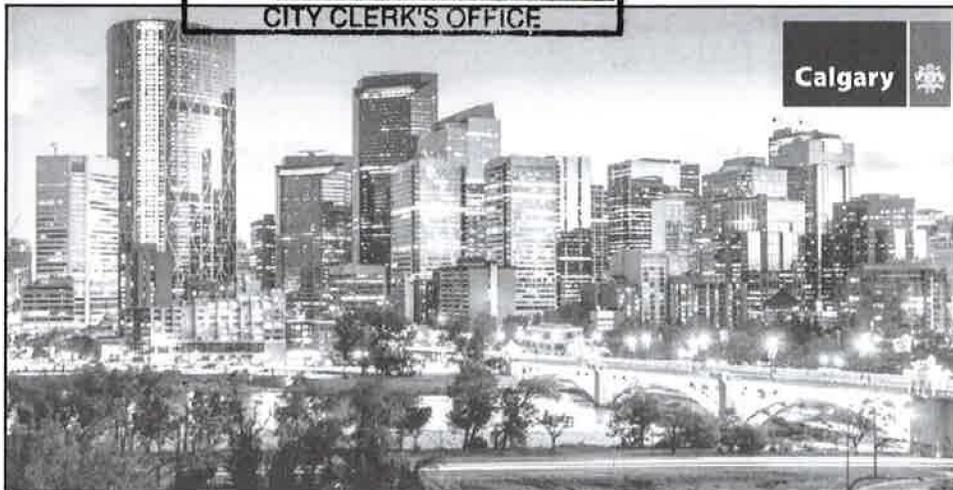


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E-Cigarette Exemption Update CPS2016-0042

SPC on Community and Protective Services
February 3 2016

02/03/2016

CPS2016-0042

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Calgary 

Council Direction

- In 2015 June, Council approved amendments to Smoking Bylaw #57M92 prohibiting use of e-cigarettes where tobacco smoking is prohibited.
 - An exemption allows enclosed vape shops to provide sampling of e-cigarette products inside their premises.
- Council members directed Administration to review and monitor the implications of the exemption, including:
 - Consulting with key stakeholders and adjacent businesses regarding potential public nuisance impacts, and
 - Conducting a review of the exemption in relation to provincial and federal legislation.
 - Further reporting back to this Committee on the findings.

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Engagement with Vape Shops

Engagement with exempted vape shops found:

- 75 per cent provide the opportunity to sample e-cigarette products in store
- 100 per cent train staff to prohibit minors from entering the vape shop
- 83 per cent have a formal policy prohibiting minors from entering the vape shop
- 92 per cent have signage prohibiting minors from entering the vape shop
- 100 per cent require staff to be age 18 or older

Engagement with Adjacent Businesses

Engagement with adjacent businesses found:

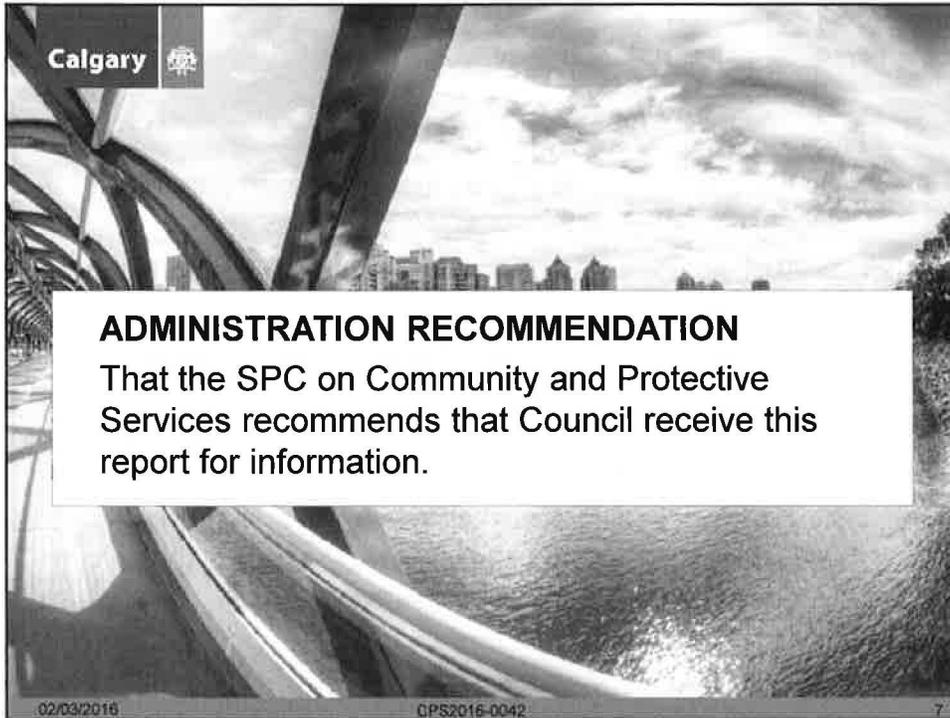
- No concerns regarding sampling of e-cigarette products inside the neighbouring vape shops
- Four businesses expressed concerns about e-cigarette use outdoors, not related to the exemption.
 - Smoking Bylaw information has been provided to the vape shops and adjacent businesses, and officers are monitoring these locations for compliance.

Monitoring

- Community Standards officers monitored exempted vape shops and found no minors entering the shops.
- In 2015, no citizen complaints were received related to the exemption.
- Administration continued monitoring the legislative context:
 - Health Canada has not yet responded publicly to the previous government's study recommending development of a regulatory framework;
 - The Mayor's Office is advocating for a provincial strategy;
 - More municipalities are enacting bylaws prohibiting use of e-cigarettes where smoking is prohibited.

Ongoing Work

- Continuing public awareness efforts
- Response to service requests
- Monitoring of Federal and Provincial legislation
- Monitoring of the international context

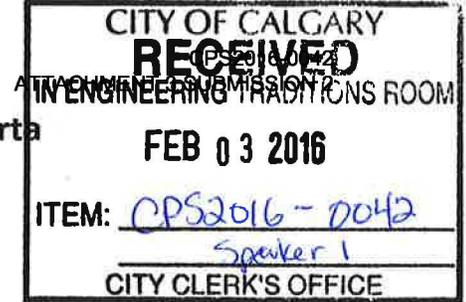


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ADMINISTRATION RECOMMENDATION
That the SPC on Community and Protective Services recommends that Council receive this report for information.

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United Vape Retailers Association of Alberta



Vaping versus Smoking

Smoking is the burning (combustion) of tobacco and hundreds of additives. Combined, these combinations produce thousands of chemicals, of which over 50 are known to cause cancer.

Vaping is a practice of using a heating element to atomize a liquid solution known e-liquid or 'juice' into an aerosol or vapour. There are only four ingredients in 'juice' or e-liquid:

- 1) Vegetable glycerine - Glycerin doesn't carry flavour very well, but does produce a lot of vapour
- 2) Propylene glycol (PG) - A main ingredient in albuterol, or asthma inhalers, and is perfectly safe to inhale when vaporized. PG has proven safe for inhalation for over 50 years and is incidentally one of the most tested products used in the Food and Beverage as well as Medication industries.
- 3) Flavourings - which are food-grade, can be natural or artificial.
- 4) Pharmaceutical-grade nicotine - all juice manufacturers make their product available in varying nicotine strengths from 0 to 24 mg/mL

E Cigarettes versus Vaping

An **electronic cigarette** looks like regular cigarettes; they are readily available at convenience stores and gas stations. The most popular brands are Vuze and Blu which are produced and marketed by large tobacco companies; specifically Imperial Tobacco and RJ Reynolds. These devices are pre-filled and must be replaced with new cartridges. They have very limited choice in flavours, nicotine concentrations and are not reusable over the long term.

Unlike gas stations or convenience stores, Vape Shops market "**Personal Vaporizer Devices**" occasionally called "**Vapes**" or "**Mods**". These devices contain electronics allowing the user to regulate the power levels and produce vapour. Mods, so named because the original vaporizers were a heating coil mounted on a modified flashlight, are for use with reusable atomizers.

Keys to successfully switching from smoking:

- Right device and proper training
- Right amount of nicotine based on current smoking habit
- Flavour of choice
- Community of fellow Vapers to provide an ongoing support network and continuing information so as to increase ability to modify tobacco habits.

What are the risks from 'vaping'?

There is no smoke, and thus no second hand smoke risk.

Public Health of England did an extensive study which determined there is a 95% harm reduction to the user and 100% reduction to secondary harm.

Who are the United Retailers Association (UVRA)?



New CDC Data Blows Away Popular E-Cigarette Criticism

Posted By [Guy Bentley](#) On 2:03 PM 11/02/2015 In | [6 Comments](#)

A new study from the Centers for Disease Control and Prevention has blown a major hole in the case against e-cigarettes.

Many of the most vehement critics of e-cigarettes fear the devices could prove to be a gateway drug and will raise the risk of non-smoking vapers being lured into trying the real thing.

Critics also fear that we haven't seen the long-term health effects of vaping and that regulators and lawmakers should take a stricter stance on taxing e-cigarettes and raising the age at which they can be bought.

But according to a CDC report released on Monday, public health activists have little reason to fear a rising tide of new smokers in wake of the vaping revolution. The report is the first of its kind with the first estimates of e-cigarette use among U.S. adults from a nationally representative household survey.

The CDC study shows that just 0.4 percent of people who had never smoked tobacco were current vapers, using the device either every day or some days. Among the adults who had never smoked cigarettes a meagre 3.4 percent had ever tried and e-cigarette. In total, 12.6 percent of Americans have tried an e-cigarette.

SOURCE: CDC/NCHS, National Health Interview Survey, 2014.

Supporters of e-cigarettes received some good news with the figures showing that 47.6 percent of current smokers had tried vaping and 55.4 percent of smokers who had quit had used e-cigarettes.

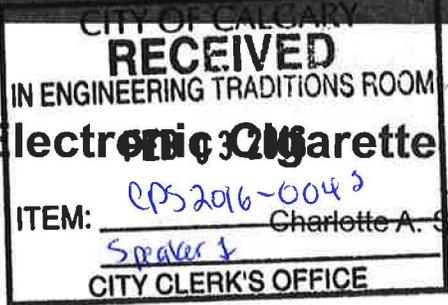
A little over 20 percent of current smokers who had tried to give up in the last year were using e-cigarettes, according to the CDC. Just under four percent Americans are classified as regular e-cigarette users.

The study follows data released by the CDC in April showing regular smoking continuing to fall among high school students while e-cigarette use was increasing, with 9.2 percent of students saying they smoked a cigarette in the last month – a fall of 3.5 percent from 2013. Over the same time period, students who reported using e-cigarettes jumped from 4.5 percent to 13.4 percent.

While there remains a significant degree of skepticism about e-cigarettes, not least from Senate Democrats who are urging tighter regulation, prominent anti-smoking groups have attempted to dispel the myths surrounding their use.

In August, Action on Smoking and Health released a study concluding there is no link between the surge in teens taking up e-cigarettes and then switching to regular cigarettes.

Published in the journal Public Health and conducted with polling company YouGov, the research showed teens are experimenting more with e-cigarettes. In 2013, four percent of U.K. 11-18 year-olds said they had tried e-cigarettes "once or twice," with that figure rising to 10 percent in 2015. But According to ASH, "almost all of those reporting regular use were young people who



Electronic Cigarette Use Among Adults: United States, 2014

Charlotte A. Schoenborn, M.P.H.; and Renee M. Gindi, Ph.D.

Key findings

Data from the National Health Interview Survey

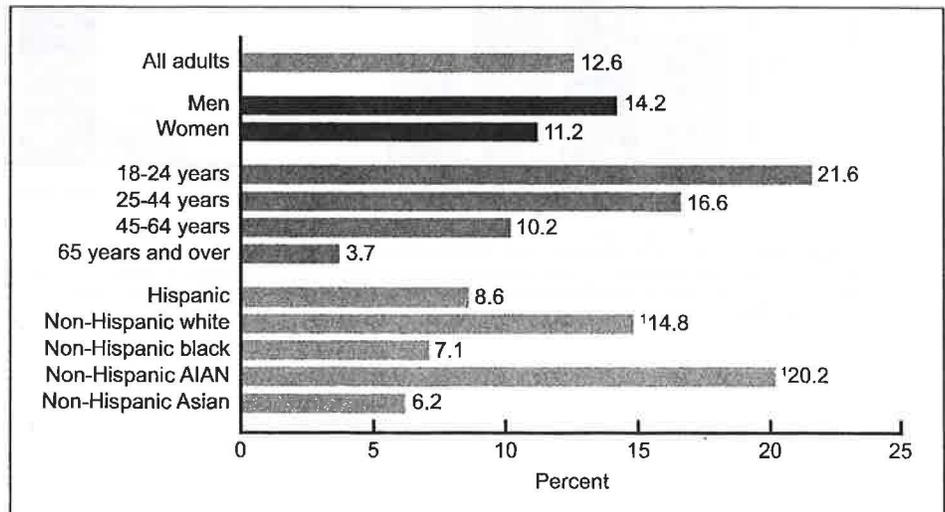
- In 2014, 12.6% of adults had ever tried an e-cigarette even one time, with use differing by sex, age, and race and Hispanic or Latino origin.
- About 3.7% of adults currently used e-cigarettes, with use differing by age and race and Hispanic or Latino origin.
- Current cigarette smokers and former smokers who quit smoking within the past year were more likely to use e-cigarettes than former smokers who quit smoking more than 1 year ago and those who had never smoked.
- Among current cigarette smokers who had tried to quit smoking in the past year, more than one-half had ever tried an e-cigarette and 20.3% were current e-cigarette users.
- Among adults who had never smoked cigarettes, 3.2% had ever tried an e-cigarette. Ever having used an e-cigarette was highest among never smokers aged 18–24 (9.7%) and declined with age.

Electronic cigarettes (e-cigarettes) are battery-powered products that typically deliver nicotine in the form of an aerosol (1). E-cigarettes have been marketed as both a smoking cessation tool and an alternative to conventional cigarettes (2). Results from several studies suggest recent rapid increases in e-cigarette use (3–7). In light of ongoing declines in conventional cigarette smoking prevalence (8), it is important to understand the extent to which e-cigarettes are being used among U.S. adults, both overall and by conventional cigarette smoking status. This report provides the first estimates of e-cigarette use among U.S. adults from a nationally representative household interview survey, by selected demographic and cigarette smoking characteristics.

Keywords: electronic nicotine delivery system (ENDS), e-cigarettes, National Health Interview Survey

In 2014, 12.6% of adults had ever tried an e-cigarette even one time in their lifetimes, with use differing by sex, age, and race and Hispanic or Latino origin.

Figure 1. Percentage of adults who had ever tried an e-cigarette in their lifetime, by sex, age, and race and Hispanic or Latino origin: United States, 2014



¹Significantly different from Hispanic, non-Hispanic black, and non-Hispanic Asian subgroups.
NOTES: AIAN is American Indian or Alaska Native. Within sex and age groups, all subgroups are significantly different from each other. There is a significant linear trend by age group.
SOURCE: CDC/NCHS, National Health Interview Survey, 2014.

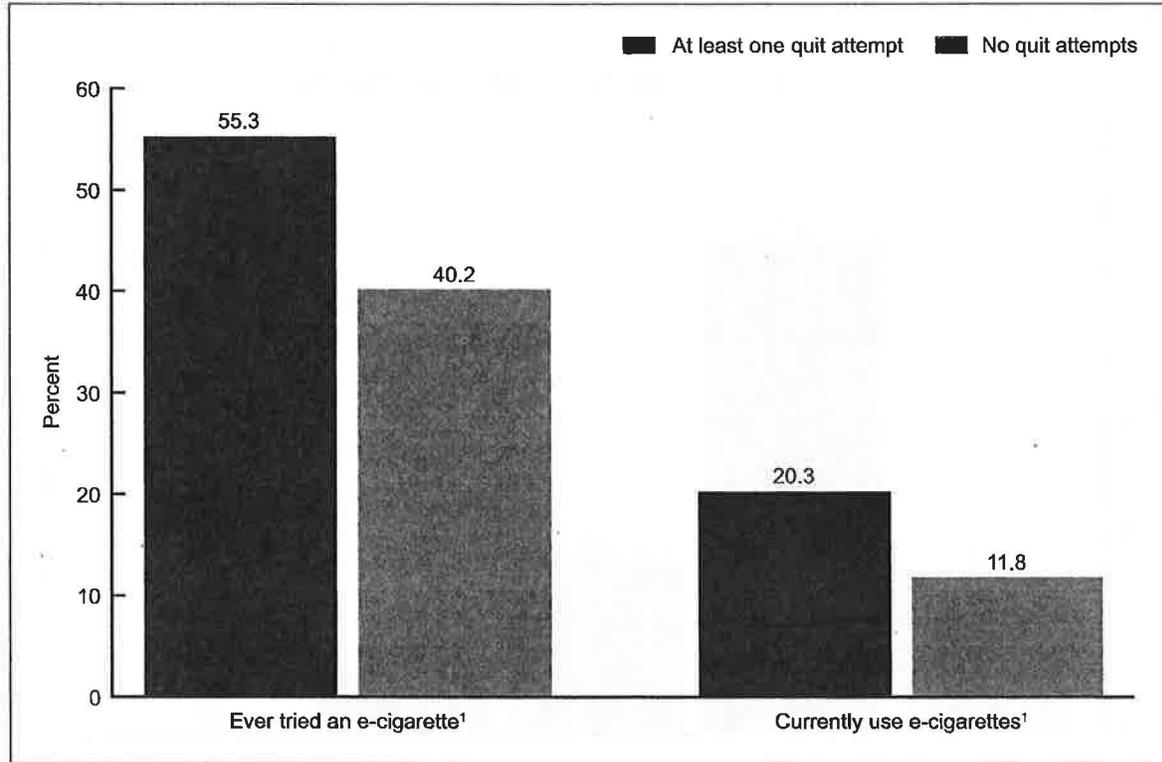


NCHS Data Brief ■ No. 217 ■ October 2015

Current cigarette smokers who had tried to quit in the past year were more likely to use e-cigarettes than those who had not tried to quit.

- Current cigarette smokers who had tried to quit smoking in the past year were more likely than smokers who had not tried to quit to have ever tried an e-cigarette (Figure 4).
- Current cigarette smokers who had tried to quit in the past year (20.3%) were almost twice as likely as cigarette smokers who had not tried to quit (11.8%) to currently use e-cigarettes.

Figure 4. Percentage of adult current cigarette smokers who had ever tried and percentage who currently use e-cigarettes, by past year cigarette smoking quit attempt status: United States, 2014



¹Percentages are significantly different across quit attempt groups.

NOTES: Current e-cigarette users have ever tried an e-cigarette and currently use them every day or some days. Information is not available on whether e-cigarettes were used before or after the quit attempt. Based on household interviews with adults aged 18 and over.

SOURCE: CDC/NCHS, National Health Interview Survey, 2014.

NCHS Data Brief ■ No. 217 ■ October 2015

Summary

The National Health Interview Survey (NHIS) first began collecting data about e-cigarette use in 2014. The estimates presented in this report provide a foundation for understanding who is using e-cigarettes and for monitoring changes in e-cigarette use among U.S. adults over time.

In 2014, men were more likely than women to have ever tried e-cigarettes but were not more likely to be current users. Younger adults were more likely than older adults to have tried e-cigarettes and to currently use e-cigarettes. Both non-Hispanic AIAN and non-Hispanic white adults were more likely than non-Hispanic black, non-Hispanic Asian, and Hispanic adults to have ever tried e-cigarettes and to be current e-cigarette users.

When examined in the context of conventional cigarette smoking, use of e-cigarettes was highest among current and recent former cigarette smokers, and among current smokers who had made a quit attempt in the past year. Although fewer than 4% of adults who had never smoked conventional cigarettes had ever tried an e-cigarette, nearly 1 in 10 never-smokers aged 18–24 had tried an e-cigarette at least once.

Definitions

Cigarette smoking status: Adults were asked if they had smoked at least 100 cigarettes in their lifetime and, if yes, whether they currently smoked cigarettes every day, some days, or not at all. Those who smoked every day or some days were classified as current smokers. Adults who had not smoked 100 cigarettes were classified as having never smoked. Adults who had smoked 100 cigarettes but were not smoking at the time of interview were asked how long ago they last smoked. Former smokers were then classified as recent former smokers (quit within the past year) or long-term former smokers (quit at least 1 year earlier).

E-cigarette use: Use of e-cigarettes was determined by first describing an e-cigarette for the respondent (“The next questions are about electronic cigarettes, often called e-cigarettes. E-cigarettes look like regular cigarettes, but are battery-powered and produce vapor instead of smoke.”). The respondent was then asked, “Have you ever used an e-cigarette, even one time?” Those who said “yes” were referred to as having “ever tried an e-cigarette.” Adults who had ever used an e-cigarette, even one time, were then asked, “Do you now use e-cigarettes every day, some days, or not at all?” Current e-cigarette use includes respondents who reported using e-cigarettes every day or some days.

Quit attempt: Adults who were current cigarette smokers were asked if they had stopped smoking cigarettes for more than 1 day in the past year because they were trying to quit smoking. Smokers responding “yes” were classified as having made a quit attempt in the past year.

Race and Hispanic or Latino origin: The revised 1997 Office of Management and Budget standards for race (9) were used for the classification of race and Hispanic or Latino origin. A person’s race is described by one or more of five racial groups: white, black or African American, American Indian or Alaska Native, Asian, and Native Hawaiian or Other Pacific Islander. Data on race and Hispanic or Latino origin are collected separately but combined for reporting. Not shown separately are data for Native Hawaiian or Other Pacific Islander, and for persons of two or more races, due to small sample sizes. Persons of Hispanic or Latino origin may be of any race.

**U.S. DEPARTMENT OF
HEALTH & HUMAN SERVICES**

Centers for Disease Control and Prevention
National Center for Health Statistics
3311 Toledo Road, Room 5419
Hyattsville, MD 20782-2064

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**National Center for Health
Statistics**

Charles J. Rothwell, M.S., M.B.A., *Director*
Nathaniel Schenker, Ph.D., *Deputy Director*
Jennifer H. Madans, Ph.D., *Associate
Director for Science*

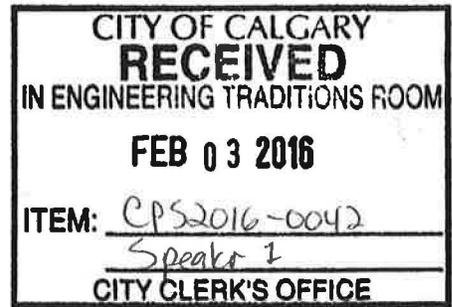
Division of Health Interview Statistics

Marcie L. Cynamon, *Director*
Stephen J. Blumberg, Ph.D., *Associate
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Public Health
England

Protecting and improving the nation's health

E-cigarettes: an evidence update

A report commissioned by Public Health England

Authors:

McNeill A, Brose LS, Calder R, Hitchman SC

Institute of Psychiatry, Psychology & Neuroscience, National Addiction Centre, King's
College London
UK Centre for Tobacco & Alcohol Studies

Hajek P, McRobbie H (Chapters 9 and 10)

Wolfson Institute of Preventive Medicine, Barts and The London School of Medicine and
Dentistry Queen Mary, University of London
UK Centre for Tobacco & Alcohol Studies



E-cigarettes: an evidence update

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E-cigarettes: an evidence update

Foreword

The role and impact of electronic cigarettes has been one of the great debates in public health in recent years and we commissioned this independent review of the latest evidence to ensure that practitioners, policy makers and, most importantly of all, the public have the best evidence available.

Many people think the risks of e-cigarettes are the same as smoking tobacco and this report clarifies the truth of this.

In a nutshell, best estimates show e-cigarettes are 95% less harmful to your health than normal cigarettes, and when supported by a smoking cessation service, help most smokers to quit tobacco altogether.

We believe this review will prove a valuable resource, explaining the relative risks and benefits of e-cigarettes, in terms of harm reduction when compared with cigarettes and as an aid to quitting.

We will continue to monitor the position and will add to the evidence base and guidance going forward.



A handwritten signature in black ink that reads "Duncan Selbie". The signature is written in a cursive, flowing style.

Duncan Selbie, Chief Executive, PHE

E-cigarettes: an evidence update

Executive summary

Following two previous reports produced for Public Health England (PHE) on e-cigarettes (EC) in 2014, this report updates and expands on the evidence of the implications of EC for public health. It covers the EC policy framework, the prevalence of EC use, knowledge and attitudes towards EC, impact of EC use on smoking behaviour, as well as examining recent safety issues and nicotine content, emissions and delivery. Two literature reviews were carried out to update the evidence base since the 2014 reports and recent survey data from England were assessed.

EC use battery power to heat an element to disperse a solution of propylene glycol or glycerine, water, flavouring and usually nicotine, resulting in an aerosol that can be inhaled by the user (commonly termed vapour). EC do not contain tobacco, do not create smoke and do not rely on combustion. There is substantial heterogeneity between different types of EC on the market (such as cigalikes and tank models). Acknowledging that the evidence base on overall and relative risks of EC in comparison with smoking was still developing, experts recently identified them as having around 4% of the relative harm of cigarettes overall (including social harm) and 5% of the harm to users.

In England, EC first appeared on the market within the last 10 years and around 5% of the population report currently using them, the vast majority of these smokers or recent ex-smokers. Whilst there is some experimentation among never smokers, regular use among never smokers is rare. *Cigarette* smoking among youth and adults has continued to decline and there is no current evidence in England that EC are renormalising smoking or increasing smoking uptake. Instead, the evidence reviewed in this report point in the direction of an association between greater uptake of EC and reduced smoking, with emerging evidence that EC can be effective cessation and reduction aids.

Regulations have changed little in England since the previous PHE reports with EC being currently governed by general product safety regulations which do not require products to be tested before being put on the market. However, advertising of EC is now governed by a voluntary agreement and measures are being introduced to protect children from accessing EC from retailers. Manufacturers can apply for a medicinal licence through the Medicines and Healthcare products Regulatory Agency (MHRA) and from 2016, any EC not licensed by the MHRA will be governed by the revised European Union Tobacco Products Directive (TPD).

A summary of the main findings and policy implications from the data chapters now follows.

E-cigarettes: an evidence update

never smokers is very low, estimated to be 0.2%. The prevalence of EC use plateaued between 2013-14, but appeared to be increasing again in 2015.

Youth: Regular EC use among youth is rare with around 2% using at least monthly and 0.5% weekly. EC use among young people remains lower than among adults: a minority of British youth report having tried EC (~13%). Whilst there was some experimentation with EC among never smoking youth, prevalence of use (at least monthly) among never smokers is 0.3% or less.

Overall, the adult and youth data suggest that, despite some experimentation with EC among never smokers, EC are attracting few people who have never smoked into regular use.

Trends in EC use and smoking: Since EC were introduced to the market, cigarette smoking among adults and youth has declined. In adults, overall nicotine use has also declined (not assessed for youth). These findings, to date, suggest that the advent of EC is not undermining, and may even be contributing to, the long-term decline in cigarette smoking.

Policy implications

- Trends in EC use among youth and adults should continue to be monitored using standardised definitions of use.
- Given that around two-thirds of EC users also smoke, data are needed on the natural trajectory of 'dual use', ie whether dual use is more likely to lead to smoking cessation later or to sustain smoking (see also Chapter 6).
- As per existing NICE guidance, all smokers should be supported to stop smoking completely, including 'dual users' who smoke and use EC.

Summary of Chapter 5: Smoking, e-cigarettes and inequalities

Smoking is increasingly concentrated in disadvantaged groups who tend to be more dependent. EC potentially offer a wide reach, low-cost intervention to reduce smoking and improve health in disadvantaged groups.

Some health trusts and prisons have banned the use of EC which may disproportionately affect more disadvantaged smokers.

E-cigarettes: an evidence update

Summary of Chapter 7: Reasons for use and discontinuation

A number of surveys in different populations provide evidence that reducing the harm from smoking (such as through cutting down on their cigarette consumption or helping with withdrawal during temporary abstinence) and the desire to quit smoking cigarettes are the most important reasons for using EC. Curiosity appears to play a major role in experimentation. Most trial of EC does not lead to regular use and while there is less evidence on why trial does not become regular use, it appears that trial due to curiosity is less likely to lead to regular use than trial for reasons such as stopping smoking or reducing harm. Dissatisfaction with products and safety concerns may deter continued EC use.

Policy implications

- Smokers frequently state that they are using EC to give up smoking. They should therefore be provided with advice and support to encourage them to quit smoking completely.
- Other reasons for use include reducing the harm from smoking and such efforts should be supported but with a long-term goal of stopping smoking completely.

Summary of Chapter 8: Harm perceptions

Although the majority of adults and youth still correctly perceive EC to be less harmful than tobacco cigarettes, there has been an overall shift towards the inaccurate perception of EC being at least as harmful as cigarettes over the last year, for both groups. Intriguingly, there is also some evidence that people believe EC to be less harmful than medicinal nicotine replacement therapy (NRT).

Policy implications

- Clear and accurate information on relative harm of nicotine, EC and tobacco cigarettes is needed urgently (see also Chapter 10).
- Research is needed to explore how health perceptions of EC are developed, in relation to tobacco cigarettes and NRT, and how they can be influenced.

Summary of Chapter 9: E-cigarettes, nicotine content and delivery

The accuracy of labelling of nicotine content currently raises no major concerns. Poorly labelled e-liquid and e-cartridges mostly contained less nicotine than declared. EC used

E-cigarettes: an evidence update

Policy implications

- There is a need to publicise the current best estimate that using EC is around 95% safer than smoking.
- Encouraging smokers who cannot or do not want to stop smoking to switch to EC could be adopted as one of the key strategies to reduce smoking related disease and death.

Summary of Chapter 11: Other health and safety concerns

There is a risk of fire from the electrical elements of EC and a risk of poisoning from ingestion of e-liquids. These risks appear to be comparable to similar electrical goods and potentially poisonous household substances.

Policy implications

- The risks from fire or poisoning could be controlled through standard regulations for similar types of products, such as childproof containers (contained within the TPD but which are now emerging as an industry standard) and instructions about the importance of using the correct charger.
- Current products should comply with current British Standard operating standards.
- Records of EC incidents could be systematically recorded by fire services.

Summary of Chapter 12: International perspectives

Although EC use may be lower in countries with more restrictions, these restrictions have not prevented EC use. Overall, use is highest among current smokers, with low numbers of non-smokers reporting ever use. Current use of EC in other countries is associated with being a smoker or ex-smoker, similar to the findings in the UK. EC use is frequently misreported with experimentation presented as regular use. Increases in youth EC trial and use are associated with decreases in smoking prevalence in all countries, with the exception of one study from Poland.

Policy implications

- Future research should continue to monitor and evaluate whether different EC policies across countries are related to EC use and to smoking cessation and smoking prevalence.
- Consistent and agreed measures of trial, occasional and regular EC use among youth and adults are urgently needed to aid comparability.