

ARE E-CIGARETTES SAFE?



KRISTIN BYRKJE, SPECIAL ADVISER,
NORWEGIAN CANCER SOCIETY



Patented in China 2003



Hon Lik – inventor and pharmacist (*thesync.com*)





http://shop.nhaler.com/Advanced-Personal-Vaporizers-Mods_c61.htm

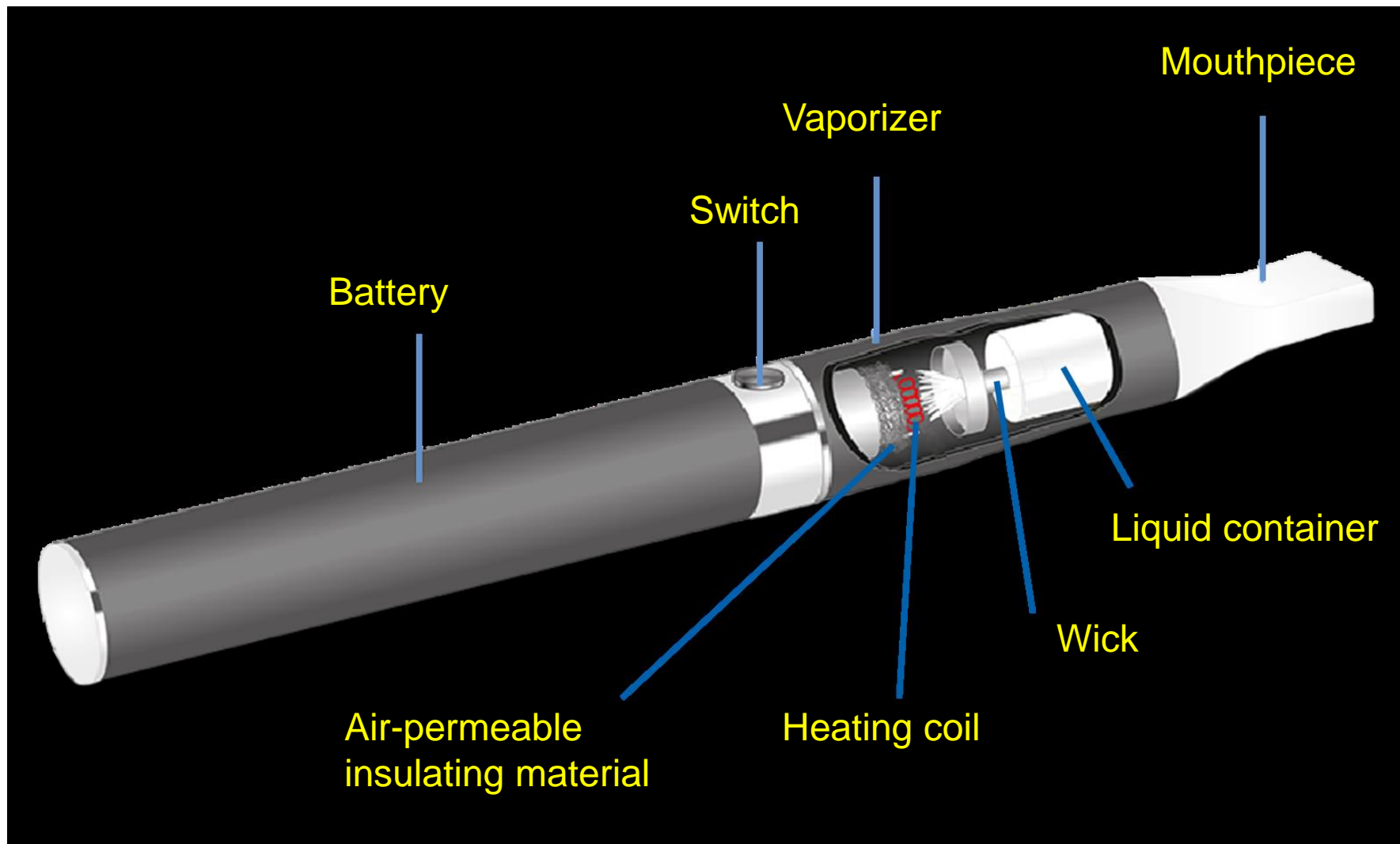


BATTERY

ATOMIZER

CARTRIDGE

3.6v



Nicotine and potential harmful toxins

Less harmful than conventional cigarettes

Long term effects not known

Main ingredients found in e-cigarettes

Propylene glycol

Glycerine

Flavours

Nicotine (sometimes)

Short term effects

Airway irritations

Dry cough

Dizziness

Adverse effects on pulmonary function

LONG TERM EFFECTS UNKNOWN

Improvement of acute tobacco-related health problems

Reported by users of e-cigarettes:

Less irritation of the throat

Improved breathing

Body fitness

Improved exercise capacity and gustatory senses

Less morning cough

Better sleep



Nicotine

Raises blood pressure and heart rate

Curbs appetite

Increases pain sensitivity

May cause dependence

Cancer-causing substances (in low amounts)

In some liquids:

Acetaldehyde

Formaldehyde

Crotonaldehyde

The tobacco-specific nitrosamine NNK

Heavy metals

Arsenic

In aerosol:

Formaldehyde

Acetaldehyde

Acrolein

Nickel

Chromium

E-cigarettes interfere with air purity

Increased

- particulate matter
- carcinogens
- nicotine
- potential irritants and allergens

Regulation is needed

The screenshot shows a web browser window with the address bar displaying http://www.tobaccofreekids.org/tobacco_unfiltered/. The page title is "An E-Cigarette Ad on an Itsy, Bitsy Bikini". The main content area features the "TOBACCO UNFILTERED" logo and a "BLOG" button. Below the logo, the text reads: "Home > Tobacco Unfiltered > An E-Cigarette Ad on an Itsy, Bitsy Bikini". The article title is "An E-Cigarette Ad on an Itsy, Bitsy Bikini" with a sub-headline "Teens sure to be attracted by ad in Sports Illustrated swimsuit issue" and a byline "Posted by: Editor | Feb 24, 2014". The main image is a composite: on the left, the cover of Sports Illustrated magazine's 50th anniversary issue featuring three models; on the right, a close-up of a person's midsection wearing a black bikini bottom with "blu ELECTRONIC CIGARETTES" printed on it. Below the bikini bottom, there is an advertisement for "blu" e-cigarettes, including a pack and a single cigarette, with the text "SLIM. CHARGED. READY TO GO. AVAILABLE NATIONWIDE! Visit us at blucigs.com/store-locator". The right sidebar contains a "Get Tobacco Unfiltered Email Alerts" sign-up form with fields for "Email Address", "ZIP Code", and "First Name", and a "SIGN UP" button. Below the form is a "Tobacco Unfiltered RSS" link. Further down, a "LATEST BLOG POSTS" section lists several articles, including "Baseball Great Curt Schilling: Chewing Tobacco 'Gave Me Cancer'", "For Back-To-School Supplies, Shop Tobacco-Free!", "Youth Leaders Sharpen Skills for Fight against Tobacco", "Despite Outrage, Philip Morris International Expands Global 'Be Marlboro' Campaign", and "WHO: Smoking Increases Risk of Dementia". A "TAGS" section is also visible at the bottom of the sidebar. The Windows taskbar at the bottom shows various application icons and the system clock displaying "12:00 22.08.2014".

THANK YOU!

kristin.byrkje@kreftforeningen.no