WHAT ARE E-CIGARETTES?
Electronic cigarettes, also called electronic nicotine delivery systems (ENDS), are designed to mimic the size, shape, and use of a conventional cigarette. A battery powers a heater, or atomizer, that vaporizes a solution usually containing nicotine and flavor additives suspended in propylene glycol or glycerin. Many e-cigarettes are rechargeable and users purchase replacement cartridges or refill vials.

KEY POINTS:
• More than 400 e-cigarette brands are available for sale in the U.S.¹
• There have been no national prevalence studies. The Tobacco Vapor Electronic Cigarette Association claims there are 4 million users in the U.S. and an estimated $1 billion in sales annually.²
• E-cigarette awareness among U.S. adults increased from 16.9% in 2009 to 32.2% in 2010 and ever use quadrupled.³
• The U.S. Food and Drug Administration (FDA) has the authority to regulate e-cigarettes as tobacco products, but has not yet done so.¹
• E-cigarettes may undermine current prevention and cessation efforts by normalizing the action of ‘smoking’ or ‘vaping’, triggering relapse and encouraging initiation.
• FDA has not approved e-cigarettes as effective cessation devices. There are other proven safe and effective methods to quit smoking. ¹

WHAT ARE THE RISKS?
There are limited independent published studies on the safety and risks of e-cigarettes. Some studies have indicated that:
• Quality control and labeling of nicotine levels is inaccurate, including detectable nicotine levels in “no nicotine” labeled e-cigarettes.¹
• Exhaled vapor is a mixture of water, propylene glycol and low levels of nicotine, tobacco specific nitrosamines, and other impurities.⁴ In one study, vapor did slightly increase particulate matter levels in indoor air.⁵
• One study showed increased short-term airway resistance after use of an e-cigarette.⁶
• Some e-cigarette users refill their own cartridges. Exposure to dangerous concentrations of nicotine through skin contact, inhalation, or ingestion is a possible risk.⁷
• E-cigarette marketing emphasizes:
  • Variety of attractive flavors
  • Odorless, smokeless
  • Social acceptance
  • Cost savings
  • Technological innovation
  • Freedom to use anywhere

• E-cigarettes are widely marketed on the internet, in television commercials, in magazine advertisements, and with celebrity endorsements.

• Prices range from around $7.99 to $100.

• Not covered by health warning requirements and TV/radio commercial bans of cigarettes, cigars, and smokeless tobacco products.

• Disposable e-cigarettes, rechargeable kits, and refill cartridges are widely available for purchase on the internet, at mall kiosks, in convenience stores, and in some retail stores and tobacco shops.

• U.S. tobacco companies are developing e-cigarette brands (RJ Reynolds’ VUSE and Altria to release new product in late 2013) or purchasing e-cigarette brands (Lorillard’s acquisition of Blu in 2012).

OPPORTUNITIES FOR ACTION

• Expand existing smoke-free air laws to include e-cigarettes. The U.S. Department of Transportation, Air Force, State of New Jersey, and King County of Washington State are among jurisdictions that have enacted rules restricting public use of e-cigarettes.

• Include e-cigarettes in youth access restrictions. The States of California, New York, and others have banned the sale of e-cigarettes to minors. Other options to limit access are e-cigarette provisions in retail licenses and the enactment of full sales bans, as in the case of Australia, China, and Brazil.

• Regulate marketing of e-cigarettes. Local governments have an interest in protecting consumers from false and misleading claims about products for sale, including e-cigarettes. Enforcing existing advertising protections may reduce marketing exposure.