The Science of Decision-Making: Connecting People and Policy

Use of Tobacco Products among US Adults: Results from 2014 and 2015 National Surveys
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INTRODUCTION
This study assessed the awareness and use of electronic nicotine delivery systems (ENDS) and dual use of tobacco products with ENDS among US adults in 2014 and 2015.

METHODOLOGY
Data Source
- The Tobacco Products and Risk Perceptions Surveys from 2014 and 2015 of cross-sectional probability samples of 5,717 and 6,051, respectively, US adults from GfK's KnowledgePanel.
- 2015 findings are preliminary and should not be cited.

MEASURES
- Demographics
  - Sex, Race/Ethnicity, Education, Annual household income, and Sexual orientation.
- Cigarette Smoking Status
  - Current Smokers: have smoked at least 100 cigarettes in their lives and currently smoked every day or some days.
  - Former Smokers: have smoked at least 100 cigarettes in their lives and currently smoke no longer.
  - Never Smokers: have not smoked 100 cigarettes in their lives.
  - Non-recent former smokers: quit smoking 5+ years ago.
  - Recent former smokers: quit < 5 years ago.

Awareness and Use of ENDS
- Aware: have heard of the product before taking the survey.
- Ever Users: have tried the product, even just one time.
- Current Users: have used the product at least once during the past 30 days.

RESULTS
In 2014, nearly 1 in 20 US adults were currently using ENDS, (Table 1) use was highest among current smokers, with more than 1 in 5 reporting current ENDS use (dual use).

In 2015, an estimated 5.4% of US adults were current ENDS users, with 31.6% of current smokers reporting current ENDS use.

Among current users of ENDS, Figure 1 shows:
- 68% (2014) and 35% (2015) were current smokers (dual users).
- 20% (2014) and 22% (2015) were non-recent smokers.
- 2% (2014) and 3% (2015) were non-recent smokers (potentially former smokers returning to nicotine).
- 10% (2014) and 17% (2015) were never smokers.

Furthermore, 23% (2014) and 30% (2015) of current ENDS users reported current use of any other combustible tobacco (LCCs, large e-cigarettes, and hookah; excludes cigarettes), and 75% (2014) and 82% (2015) reported current use of any combustible tobacco, suggesting substantial poly-use.

Current ENDS use was highest among young adults and those reporting lower educational attainment. (Table 2). An apparent increase in use between 2014 and 2015 is observed for 18-24 year olds and those with less than an HSE education.

ENDS use was highest among those at the lowest income and those reporting poorer physical health, although these associations were statistically significant only in 2014.

CONCLUSIONS
ENDS use is highest among smokers and, conversely, the majority of ENDS users are also currently using cigarettes and other combustible products. It is unclear whether dual use will promote quitting combustible tobacco products or not.

Because one-sixth of ENDS users have never smoked and one-quarter are former smokers, some who may have started after they quit smoking. ENDS use among these groups should continue to be monitored.

Continued surveillance of socio-demographic patterns of ENDS use is needed to assess whether ENDS may reduce or increase smoking-related health disparities.

Patterns of trial and use of ENDS are evolving rapidly and merit continued surveillance and study.

LIMITATIONS
Use of an internet panel may decrease representativeness of the sample. Self-reporting may raise issues regarding accuracy of measuring ENDS use.

Rapid changes in available ENDS products raise questions regarding accuracy of terminology used to refer to ENDS in the surveys.

Caution is warranted when comparing 2014 and 2015 estimates due to changes in measurement.

2015 estimates are preliminary and no tests were conducted to evaluate the statistical significance of prevalence differences between 2014 and 2015.

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