Smoking Cessation and E-cigarettes

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Objectives

• Understand tobacco use prevalence

• Describe recommendations and evidence for e-cigarettes and cessation

• List public health concerns about e-cigarettes

• Utilize evidence-based smoking cessation medication and Chinese-language counseling resources
What are E-Cigarettes?

- Battery-powered devices
- Heated aerosol
  - Propylene glycol
  - Nicotine
  - Flavorings
  - Other additives
### Tobacco and E-Cigarette Use

**TABLE 1. Percentage of persons aged ≥18 years who reported tobacco product use “every day” or “some days” and met established thresholds, by tobacco product and selected characteristics — National Adult Tobacco Survey, United States, 2013–2014**

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Tobacco product % (95% CI)</th>
<th>Any combustible tobacco product</th>
<th>Cigars/Cigarillos/Filtered little cigars</th>
<th>Regular pipe</th>
<th>Water pipe/Hookah</th>
<th>E-cigarettes</th>
<th>Smokeless tobacco</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Overall</strong></td>
<td>21.3 (20.8–21.7)</td>
<td>18.4 (18.0–18.8)</td>
<td>17.0 (16.6–17.4)</td>
<td>1.6 (1.6–1.9)</td>
<td>0.3 (0.2–0.4)</td>
<td>0.6 (0.5–0.7)</td>
<td>3.3 (3.1–3.5)</td>
</tr>
<tr>
<td><strong>Sex</strong></td>
<td></td>
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<tr>
<td>Male</td>
<td>26.3 (25.6–27.0)</td>
<td>21.5 (20.8–22.1)</td>
<td>19.3 (18.6–19.9)</td>
<td>2.8 (2.5–3.1)</td>
<td>0.6 (0.5–0.7)</td>
<td>0.8 (0.6–0.9)</td>
<td>4.0 (3.6–4.3)</td>
</tr>
<tr>
<td>Female</td>
<td>16.7 (16.2–17.3)</td>
<td>15.7 (15.1–16.2)</td>
<td>15.1 (14.5–15.6)</td>
<td>0.8 (0.6–0.9)</td>
<td>−***</td>
<td>0.4 (0.3–0.5)</td>
<td>2.8 (2.6–3.0)</td>
</tr>
<tr>
<td><strong>Race/Ethnicity</strong></td>
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<tr>
<td>White, non-Hispanic</td>
<td>21.3 (20.8–21.8)</td>
<td>17.8 (17.3–18.3)</td>
<td>16.6 (16.2–17.1)</td>
<td>1.5 (1.3–1.7)</td>
<td>0.3 (0.2–0.4)</td>
<td>0.4 (0.3–0.5)</td>
<td>3.6 (3.4–3.9)</td>
</tr>
<tr>
<td>Black, non-Hispanic</td>
<td>25.1 (23.7–26.6)</td>
<td>23.5 (22.0–24.9)</td>
<td>21.3 (19.9–22.6)</td>
<td>3.3 (2.7–3.9)</td>
<td>0.3 (0.1–0.5)</td>
<td>0.9 (0.5–1.2)</td>
<td>2.1 (1.6–2.6)</td>
</tr>
<tr>
<td>Asian, non-Hispanic</td>
<td><strong>11.2 (9.2–13.1)</strong></td>
<td>9.3 (7.6–11.1)</td>
<td>8.1 (6.5–9.7)</td>
<td>−***</td>
<td>−***</td>
<td>−***</td>
<td><strong>2.8 (1.8–3.8)</strong></td>
</tr>
<tr>
<td>Other, non-Hispanic</td>
<td>32.6 (30.1–35.2)</td>
<td>29.1 (26.3–31.6)</td>
<td>27.5 (25.1–30.0)</td>
<td>2.1 (1.5–2.8)</td>
<td>0.6 (0.3–1.0)</td>
<td>−***</td>
<td>5.2 (4.0–6.5)</td>
</tr>
<tr>
<td>Hispanic</td>
<td>17.6 (16.3–19.0)</td>
<td>16.2 (14.9–17.5)</td>
<td>14.7 (13.5–16.0)</td>
<td>1.8 (1.3–2.3)</td>
<td>−***</td>
<td>1.1 (0.7–1.5)</td>
<td>2.7 (2.1–3.2)</td>
</tr>
</tbody>
</table>

*Note: Numbers in bold indicate statistical significance.*
California Asian American Men

Smoking prevalence among men in China: \textbf{52.9\%} \textit{(2010 GATS)}

- National smoking prevalence among adult men: 18.8\%
VOTE

Recommend?

Not recommend?
Differing Recommendations

UK (8/15): Support
“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.”

US (10/15): No recommendation
“Inadequate evidence on the benefit of ENDS to achieve tobacco cessation in adults or improve perinatal outcomes in infants...balance of benefits and harms cannot be determined”
E-cig users vs. non-e-cig users among all smokers vs. interested to quit

- 37% less likely to quit cigarettes

Only 1 trial compared e-cig to nicotine patch (voucher)
Public Health Concerns

- Adolescent uptake
- Nicotine poisonings
- Vapor chemicals
- Exposure from secondhand vapor
- Lithium battery explosions
- Marketing tactics
- Long-term health effects
A content analysis of electronic cigarette manufacturer websites in China

Tingting Yao¹,², Nan Jiang²,³, Rachel Grana², Pamela M Ling⁴, Stanton A Glantz⁵

• 2014 Chinese tobacco companies enter market
  – Lunar New Year smoker gift
• Marketing claims from 18 websites of 12 e-cig manufacturers in China on Alibaba
  – 89% health-related benefits
  – 78% no smoke exposure
  – 67% smoking cessation

Figure 1  “Realizing the dream of healthy smoking” in a Ruyan (Dragonite Ltd) web advertisement. Source: http://www.ruyantech.com/_d271668698.htm (accessed 10 Aug 2014).
E-Cig Fact Sheet on www.asianarch.org

- Dangers, safety issues, not approved quitting aid
- Resources to help friend or family quit
US FDA Authority to Start Regulating E-Cigarettes

In 2016, FDA’s Center for Tobacco Products (CTP) finalized a rule to regulate:

- E-Cigarettes
- Dissolvables
- Pipe Tobacco
- Hookah Tobacco
- Cigars
- Novel and Future Products

Since June 2009, CTP has regulated:

- Cigarettes
- Roll-Your-Own Tobacco
- Smokeless Tobacco

Provisions and Requirements

The final rule will subject all manufacturers, importers and/or retailers of newly-regulated tobacco products to any applicable provisions related to tobacco products in the Federal Food, Drug, and Cosmetic Act and FDA regulations, including:

- Registering manufacturing establishments and providing product listings to the FDA;
- Reporting ingredients, and harmful and potentially harmful constituents;
- Requiring premarket review and authorization of new tobacco products by the FDA;
PHS Tobacco Treatment Guidelines: Counseling and Medication

- **ASK** about tobacco USE and EXPOSURE
- **ADVISE** tobacco users to QUIT
- **ASSESS** READINESS to make a quit attempt
- **ASSIST** with the QUIT ATTEMPT
- **ARRANGE** FOLLOW-UP care

**REFER** to quitline
Long-term (> 6 month) Quit Rates Doubled for 7 FDA-approved Medications

Asian Smokers’ Quitline: Free Evidence-based Services

• Available nationwide
  – Operated by UC San Diego
  – >10,000 callers since 2012

• FREE 2-weeks nicotine patches mailed to Asian-language smoker

• FREE in-language counseling in Cantonese or Mandarin
Patient will be contacted in 1-2 business days by Helpline counselor.
Extra Slides
Provider Resources

• www.asiansmokersquitline.org
• www.asianarch.org
• www.ucquits.com
  – Quick provider resources
  – Brief training videos (free CME)
• www.stillblowingsmoke.org
Evidence for ASQ Counseling

- Randomized trial of counseling vs. self-help materials
  - 2277 Asian smokers
    - 729 Chinese-speaking smokers

- Counseling increased 6-month abstinence
  - Asian (16.4% vs. 8.0%, p<0.001)
  - Chinese (14.8% vs. 6.0%, p<0.001)
E-cigarette users vs. non-e-cigarette users among longitudinal and cross-sectional studies

- 28% less likely to quit cigarettes

Dual use concern