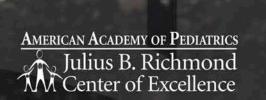
# Support for E-cigarette Regulations that Protect Children and Adolescents: Results from a Nationally Representative Survey

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# Background

- There are currently no Federal regulations on the marketing, manufacturing, and use of e-cigarettes
- Use has increased among adolescents and adults over the past four years
  - Nicotine & Tobacco, 2014
  - MMWR, 2015



# Background – Harms to Infants and Children

- Secondhand aerosol exposure
  - Formaldehyde, cadmium, lead, nickel, acetaldehyde, benzene, nicotine, toluene and nitrosamines
  - Cytotoxic to embryonic lung cells (Reproductive Toxicology, 2012)
  - Neonatal exposure effected weight and postnatal lung growth in mice (PLOS ONE, 2015)







# Objective

 To measure support among US adults for regulations that would protect children form poisonings, marketing, and ecigarette emissions.



# Design/Methods

- Administered Fall of 2014
- Random Digit Dial Telephone Frame
  - Survey Research Laboratory at the Social Science Research Center, Mississippi State University
- Probability-based Internet Panel
  - GfK: Panel members were recruited by probability-based sampling, and households were provided with access to the Internet and hardware if needed



#### Support for E-Cigarette Regulations

- E-cigarettes ads should be prohibited on television and radio, like they are for regular cigarettes.
- E-cigarette companies should be prohibited from paying for product placements in movies and television programs, like they are for regular cigarettes.
- Candy and fruit flavorings should be prohibited in e-cigarettes.



#### Support for E-Cigarette Regulations

- Menthol should be prohibited in ecigarettes.
- The sale of e-cigarettes should be prohibited to people who are not old enough to buy regular cigarettes.
- Child-proof packaging of e-liquids and cartridges should be required for ecigarettes.



### Support for E-Cigarette Regulations

• Would you favor or oppose a law that would prohibit the use of e-cigarettes in most public places, including workplaces, public buildings, offices, restaurants and bars?



#### Results

- RDD
  - N=1,511
  - Co-operation rate, 86.9%
- Probability-based Internet Panel
  - N=1,518
  - Final completion rate, 56%



#### Weighted Sample Characteristics

- Male, 48.3%
- Age
  - 18-24: 12.5%; 25-44: 35.0%; 45-64: 34.7%' 65+: 17.8%
- Child in the home: 36.1%
- Race/ethnicity
  - White, non-Hispanic: 66.6%, Black, non-Hispanic: 11.7%, Other, non-Hispanic: 6.8%, Hispanic: 7.6%



#### Weighted Sample Characteristics

- Region:
  - Northeast: 18.3%, Midwest: 21.4%, South: 36.9%, West: 23.4%
- Education
  - Less than HS: 12.3%, HS: 29.4%, Some college: 28.7%, Bachelor or higher: 29.1%
- Ever used e-cigarettes: 17.4%
- Past 30 day e-cig use: 7.3%



#### Strong Public Support

- Prohibiting ecigarette ads on television and radio – 69.9%
- Prohibiting product placements in movies and television programs – 70.9%
- Prohibiting sales to people who are not old enough to buy regular cigarettes –
   90.5%
- Requiring childproof packaging of eliquids and cartridges – 89.9%



#### Weaker Public Support

- Banning candy and fruit flavors in ecigarettes – 55.4%
- Banning menthol flavorings in ecigarettes – 52.7%
- Banning e-cigarette use in indoor public places
  - Favor: 55.6%
  - Oppose: 24.9%
  - Neither Favor or Oppose: 19.5%



#### Conclusions

- Support is nearly universal among U.S. adults for some of the regulations that would provide these protections
- Although support for banning e-cigarette use in indoor public places was substantially higher than opposition, a fifth of adults expressed ambivalence on this issue.
- The medical and public health communities needs to counter industry claims that these products are safe and only produce a harmless water vapor.



#### Limitations

- Self-report, cross-sectional data
- Potential noncoverage error



#### Questions?

Minh-Tri 1<sup>st</sup> Place winner, FAMRI/ AAP/Richmond Center Art Contest 2010

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