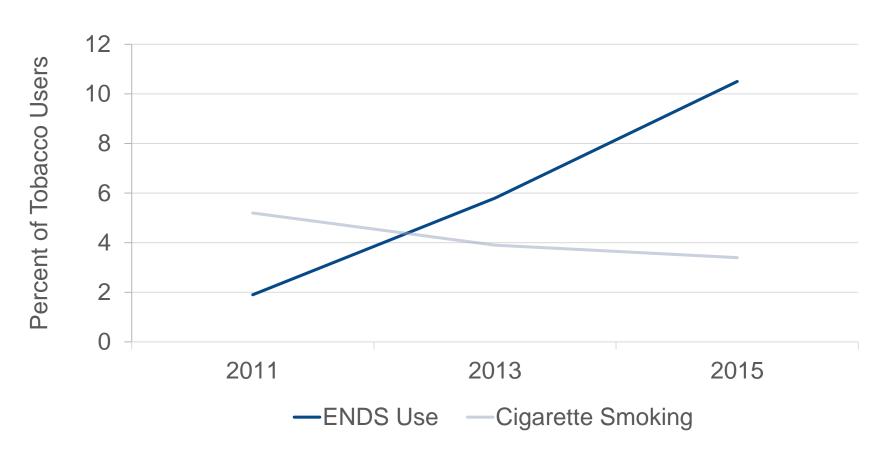
# **Evaluating Interventions to Curb ENDS Use Among Utah Youth**

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## The Challenge

Cigarette Smoking and ENDS Use Among Utah Students in Grades 8, 10, and 12, 2011-2015



Source: Utah SHARP Survey – Prevention Needs Assessment

## Background

#### Existing Utah ENDS Policies

ENDS Included in Indoor Clean Air Act (2012)

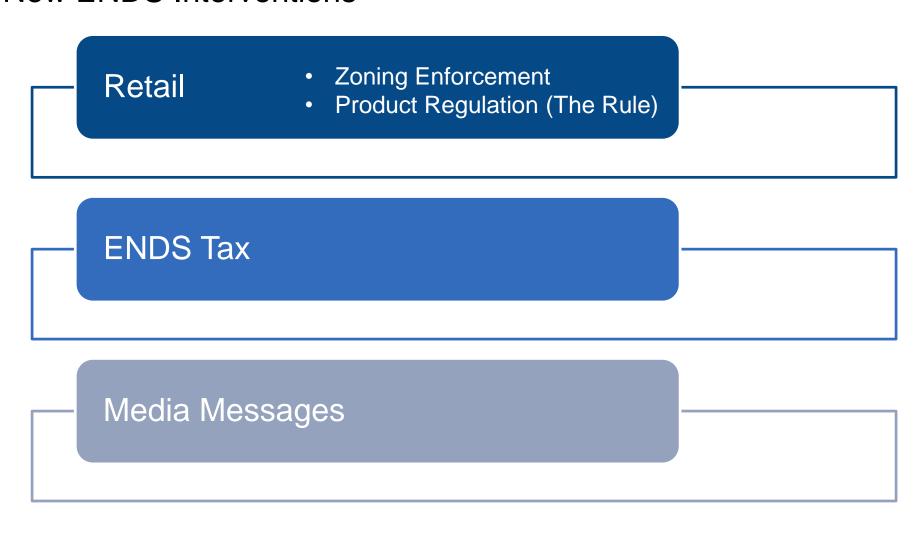
Age Restriction for ENDS Sales (19 and older)

#### Zoning Restrictions for Smoke and Vape Shops (2012)

- 1,000 feet of a community location
- 600 feet of another retail tobacco specialty business
- 600 feet from residential property

# Background

#### **New ENDS Interventions**



### Retail: Zoning Assessment

#### **Enforcement Challenge**

 ~20% of tobacco specialty shops and vape shops out of compliance with zoning restrictions

#### Assessment

 Key Informant Interviews with Business Licensing Offices and Local Health Departments (LHDs)

#### Recommendations

- LHDs develop and maintain relationships with Business Licensing Offices; conduct regular zoning checks
- Update definition of "tobacco specialty business" to include retail space and business names
- Develop LHD permitting procedure

#### ENDS Products Regulatory Challenges – THE RULE (2015)

- Labeling
- Nicotine Content
- Packaging
- Product Quality

#### Assessment – Project Vapefront

- Tobacco Retail Store Observations (annual)
  - Indoor and outdoor advertising
  - Price promotions, customer loyalty programs
  - Placement
  - Sampling
  - Signage
- Sample testing for nicotine content

#### Project Vapefront Findings

#### **Nicotine Content**

- N=162 samples; variety of brands and flavors
- Outcome: labeling relatively consistent with lab results

#### Store Observations – Wave I (2016)

- 849 store observations completed
- 84% of retailers sold ENDS products (72% e-liquids)
- Nearly all products reviewed included safety warnings, ingredient lists and child resistant packaging
- Vape shops were less likely than other retailers to post minimum age signs
- Nearly 20% of retailers displayed exterior ENDS ads; more than 40% displayed interior ENDS ads (advertising more likely at tobacco specialty and vape shops)

#### Project Vapefront Findings (Continued)

#### Store Observations – Wave II (2017)

- 774 store observations completed
- Oversample of retailers within 1,000 feet of schools
- Changes from Wave I to Wave II:
  - Decreases in exterior ENDS advertising and in ENDS price promotions
  - Increase in customer loyalty programs for vape shops
  - Decrease in *minimum age to enter* and *minimum age to purchase* signs
  - ENDS placement near candy/toys remained high (17.1%)
  - ENDS placement at child level overall lower with retailers close to schools (except for vape shops)

#### Recommendations

- Use zoning law to decrease exposure to advertising around schools and other community locations
- Continue to assess and provide signage
- Continue to review ENDS placement and work with retailers to decrease child-level placement

#### Other Interventions

- Continue ENDS product inspections
- Continue ENDS compliance checks
- Maintain tobacco retail law website: http://utahtobaccolaws.org



#### ENDS Tax

RTI Report - Implications of Taxation on ENDs: Youth Prevalence and Government Revenues

#### Summary

- Report includes models to estimate revenue increases and rate decreases for different ENDS tax rates
- Important considerations for ENDS taxes:
  - Define in legislation at what point and how the taxes will be collected
  - Define taxable products
  - Apply tax to both vaping device and usable liquid product

#### **ENDS Focus Groups**

#### Objective:

To understand vape-related knowledge, attitudes, and behaviors in Utah youth, young adults, and adults

#### Focus Group Topics

- Terminology
- Initiation, reasons for starting
- Access/availability/sources
- Current use patterns and settings
- Dual use (other tobacco use)
- Future intentions
- Knowledge of nicotine levels / other ingredients
- Perceived benefits and risks/harms; perceived social norms

#### Focus Group Details

#### 13 Focus Groups

- 6 groups (14-18 years)
- > 3 groups (19-24 years)
- > 3 groups (25+)
- ➤ 1 group (19+, mixed)
- All participants were either exclusive ENDS users or dual users (vape products and tobacco)

#### Recruitment

- Partnership with local focus group agency (adults)
- Alternative high schools and local health departments (youth)

Conducted by RTI International December 2015 – February 2016

# Terminology

	Youth	Young Adults	Adults
Product	mod, (vape) vape, vape pen, (mod, box)		
Use	vaping		
Product exhaled	vapor, water vapor		water vapor

### **Initiation and Continued Use**

	Youth	Young Adults	Adults		
Reasons for first use	<ul><li>Introduced by friend/family member</li><li>Flavor options</li></ul>				
Reasons for continued use	<ul> <li>Variety and taste of flavors</li> <li>Use where smoking is prohibited</li> <li>"Cleaner" than cigarettes, less smell, no ash, no bad breath</li> </ul>				
	<ul><li> "Cloud chasing"</li><li> Reduce or replace smoking</li></ul>	<ul><li>Manage nicotine cravings</li><li>Fun, trendy, cool</li></ul>	<ul><li>Manage nicotine cravings</li><li>Quit smoking</li></ul>		

#### Access to Products

	Youth	Young Adults	Adults
Sources	<ul> <li>Online retailers</li> <li>Peers</li> <li>Vape or tobacco specialty stores</li> </ul>	Vape or tobacco sp	ecialty stores

#### **Dual Use**

	Youth	Young Adults	Adults
Vaping locations	At school, at home, in cars, in restrooms	At work while on break, in bars, in restrooms	
Reasons for continued cigarette smoking	Amount of nicotine delivered by cigarettes		

# Knowledge / Social Norms

	Youth	Young Adults	Adults	
Ingredients: Nicotine	<ul> <li>Aware that vape products contain nicotine; nicotine is addictive</li> <li>Nicotine levels can be adjusted</li> </ul>			
Ingredients: Other	Some knowledge	Little knowledge (labels, internet searches)		
Health effects	<ul><li>Little knowledge - waiting for science</li><li>Vaping is safer than smoking</li></ul>			
Social norms	Parents prefer vaping to smoking	Positive reactions fr members, public; le		

#### Perceived Risks and Benefits

	Youth	Young Adults	Adults	
Benefits	<ul><li>Positive reactions f</li><li>Safer and healthie</li></ul>	<ul> <li>Positive reactions from friends or family members</li> <li>Safer and healthier than cigarettes</li> <li>Most people, including non-smokers are not bothered by</li> </ul>		
Risks	Shallow breathing	Addiction – hand-to-mouth and nicot (greater than cigarette smoking)		

#### Conclusions and Recommendations

- Update terminology
- Counteract the perceived social benefits of vaping
- Provide more information regarding ingredients and nicotine content
- Draft policies restricting flavored vape products
- Improve enforcement of existing youth access laws and explore options to reduce online sales

# Youth ENDS Prevention Media Concept Development and Testing

### **Purpose**



Learn about youth knowledge and perceptions of ENDS and other vape products

Obtain information on youth reactions and perceptions to ENDS prevention messages

### Methods



Literature Review



Key Informant Interviews



Ad Concept Development



Focus Groups

### Methods: Literature Review and Key Informant Interviews

- R&R Partners reviewed existing anti-tobacco and anti-e-cigarette primary and secondary research
  - > Existing campaigns from state and national health organizations
  - The body of academic research addressing both traditional and new tobacco products
  - Emerging research on Gen Zs
- Conducted key informant interviews to provide additional context
  - > This helped particularly with understanding the perspectives of "Gen Zs"
- Both research methods provided multiple avenues for potential messaging and were incorporated into the ad concepts tested
  - Health effects of tobacco products
  - Tobacco industry and the history of deceit
  - Peer and family influence
  - Fear of addiction

### Methods: Ad Concept Development

R&R Partners developed four ad concepts for testing









#### Ingredients

Three teen boys playing video games discussing the dangerous ingredients found in e-liquid.

#### **Never Thought**

A teacher lectures his class about the brain and addiction while a snake-like object representing addiction creeps up and consumes one of the students.

#### Addicted

A teen boy talking about his new e-liquid flavor to another teen boy and girl. The other teens talk about nicotine addiction and discourage him from using.

#### **Spitting**

A teen boy and girl at a party spit on each other as they talk.
Another teen boy and girl leave the party disgusted by what they see. The spitting represents the secondhand e-cigarette vapor.

### Methods: Focus Groups

### Recruitment

- Partnered with two high schools in Salt Lake City, UT
- Administered a brief survey to screen for eligible youth

  - ©Ever or current ENDS users OR open to using ENDS

**O**Items used to assess openness to using ENDS included:

	Definitely Not	Probably Not	Maybe	Probably Yes	Definitely Yes	Prefer Not to Answer
Do you think you will use a vape product/e-cigarette soon?						
Do you think you will use a vape product/e-cigarette during the next year?						
If one of your best friends were to offer you a vape product/e-cigarette, would you use it?						
Have you ever been curious about using vape products/e-cigarettes?						

### Methods: Focus Groups

### Facilitation

- RTI facilitated 3 90-minute groups in December 2016 (N=27)
- Participants completed an intake survey before the groups
- Conversation topics included:
  - Knowledge and familiarity of ENDS
  - © Reactions and perceptions of the ad concepts
  - Perceptions of vape users and cigarette smokers
  - Access to vape products
- Groups were audio-recorded and transcribed
- Participants received a \$50 Target gift card

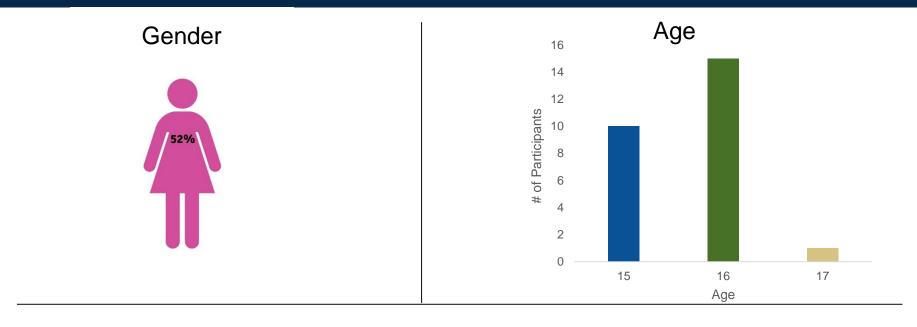
## Results: Focus Groups



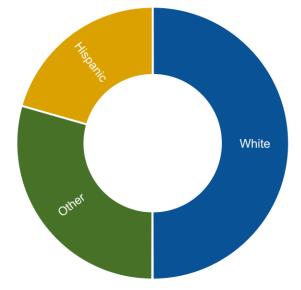
Perceptions of ENDS use and product availability

Reactions and perceptions of ad concepts

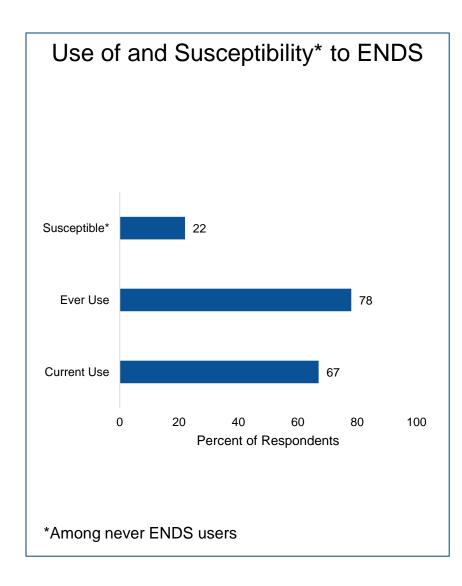
### Results: Participant Demographic Characteristics

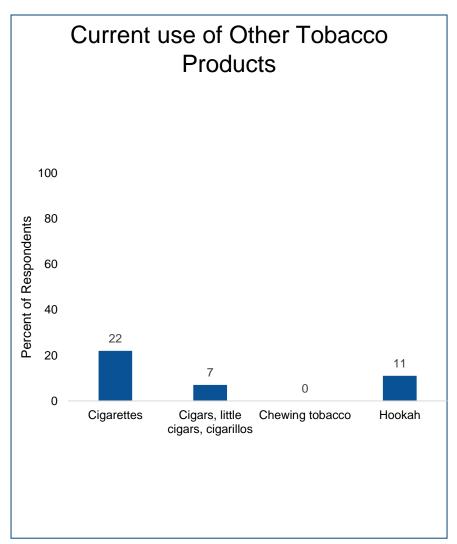






#### Results: Participant Use of and Susceptibility to Tobacco Products





## Results: Perceptions of ENDS Use and Product Availability

#### Perceptions

- OUse is wide-spread among youth
- More socially acceptable, less harmful, "cleaner", smells better, and fewer chemicals compared to cigarettes

#### Availability

- Online vendors
- **©**Friends
- ©Family members
- •Vape shops

## Results: Ad Concept Perceptions and Receptivity

#### Ad Elements that Resonated with Youth

#### • Authentic, real-life scenarios

• "People can relate to the situation and you can compare yourself. Good for high school students because you will get stuff offered to you."

#### ©Facts, research

• "I think that it would bring more awareness because you use facts, like the chemical used to preserve dead people.

#### Ad Elements that Did Not Resonate with Youth

- Abstract concepts
  - "The relation between spitting and vaping doesn't make sense."
- © Comparison between ENDS use and smoking
  - "The comparison to cigarettes probably wasn't the best because cigarettes are way different from vaping so there won't be a connection."

### Results: Youth Recommendations to Improve Ad Concepts

- Voiced the importance of including more facts "Focus on the facts."
- Interested in the chemicals in e-juice and the health effects of using ENDS

"Instead of using one extreme example of the ingredients in vapes, add some other chemicals or other things that are in vapes."

Suggested using testimonial-style ads

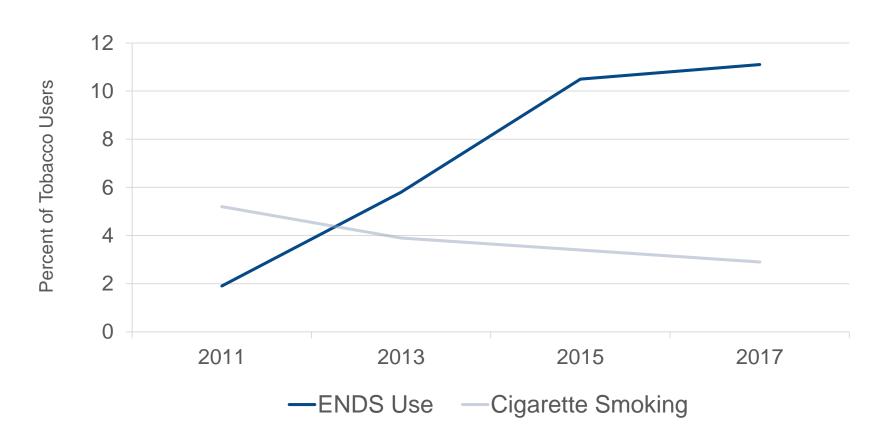
"I think someone who has actually used [vape products] explaining their story of using it."

### Conclusions: Ad Concepts

- The tested ad concepts are unlikely to resonate with target audience
- Youth want to know the harms and facts about ENDS, which is still emerging and largely unknown
- Premature to develop ENDS prevention campaign targeted at adolescents based on the tested ad concepts

### Data Update

Cigarette Smoking and ENDS Use Among Utah Students in Grades 8, 10, and 12, 2011-2017



Source: Utah SHARP Survey – Prevention Needs Assessment

## **Next Steps**

The Tobacco Talk: ENDS prevention media campaign targeting parents and educators

#### Media

- Digital
- Presentations by local partners and youth advocates

#### Objectives

- Increase knowledge of ENDS product types and nicotine addiction
- Increase support for Flavor Restrictions and Tobacco 21

#### Discussion

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