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Agenda

• E-cigarette Usage Rates
• What Do Middle School Students Know?
• E-Cigarette Health Effects
• What Is CATCH My Breath?
• CATCH My Breath in Action: Round Rock ISD
• Next Steps
We Were Winning the Battle...

Historic Youth Smoking Rate

Cigarette Use Among Youth

1997 1999 2001 2003 2005 2007 2009 2011 2013
E-cigarettes Re-socialized Tobacco Use

E-Cigarettes Rise in Popularity

- E-cigarette
- Youth Tobacco Use (All)

Graph showing the rise in popularity of e-cigarettes compared to youth tobacco use.
But There’s Hope!

E-Cigarette Use Declines

- Blue line: E-cigarette
- Orange line: Youth Tobacco Use (All)


Values on the y-axis: 0, 5, 10, 15, 20, 25, 30
...and there's no way they're as dangerous as tobacco... I think... hope... unless they are...
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Electronic Nicotine Delivery Systems (ENDS) aka E-Cigarettes . . . What Do Middle Schoolers Know?
T/F Q1. E-Cigarette Vapor Contains Mostly Water.

Answer: FALSE

BEFORE

- FALSE: 33.6%
- TRUE: 66.4%

AFTER

- FALSE: 20.8%
- TRUE: 79.2%
T/F Q2. Nicotine Is Addictive & Harmful To The Body.

Answer: TRUE

BEFORE

7.3%

TRUE  FALSE

AFTER

3.9%

TRUE  FALSE
T/F Q3. Most E-cigarettes Contain Nicotine.

Answer: TRUE
T/F Q4. Most Sweet, Candy and Fruit Flavored E-Cigarettes Contain Nicotine.

Answer: TRUE
T/F Q5. It Is Illegal For Kids My Age To Use E-Cigarettes

Answer: TRUE

BEFORE

19.4%

TRUE    FALSE

AFTER

14.0%

TRUE    FALSE

NO SMOKING

NO VAPING

Possessing, smoking, or using tobacco products, including electronic cigarettes (e-cigarettes), electronic vaping devices, personal vaporizers (PV), or electronic nicotine delivery systems is prohibited.
Federal, State, and Local Policies Related to E-Cigarettes

• 2016: FDA “deeming” rule allowing its regulation of e-cigarettes
  • Deemed E-cigarettes to be Tobacco Products Subject to the Federal Food, Drug, and Cosmetic Act

• All 50 states have laws in place restricting E-Cigarette sales to minors

• States, cities and counties are rapidly setting restrictions on use
  – Possession and use by minors
  – Use in venues including workplaces, restaurants and bars
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Health Effects of E-Cigarettes

- Harmful effects of nicotine, especially to youth
- Unknown effects of other chemicals
- Danger of re-socialization of youth tobacco use
- Oh, and they sometimes explode
Nicotine Affects Brain Chemistry

1. Nicotine spreads through the body.
2. Nicotine enters the outer capillaries and crosses the blood-brain barrier.
3. Nicotine binds to receptors on brain cells and induces the release of neurotransmitters that lead to addiction.

Image courtesy of Nabi Biopharmaceuticals

CATCH®
MY BREATH
YOUTH E-CIGARETTE PREVENTION PROGRAM
Nicotine Is Addictive

• Just a few puffs can initiate development of addiction to nicotine
• Over 90% of teenagers who smoke 3-4 cigarettes are trapped into a career of regular smoking which typically lasts for 30-40 years
Other Nicotine Dangers

1. Some evidence of priming function for other addictions

2. Ingestion
   - E-Cig refill bottles generally are not child proof, are not labeled as poisonous, and are sold in colorful packaging with flavors attractive to children
   - Drinking E-Cig juice requires emergency medical attention; deaths have been reported

3. Pre-natal exposure
   - Nicotine exposure is harmful to the developing fetus and youth because these are critical periods of brain development
   - Effects include sudden infant death syndrome, altered corpus callosum, auditory processing deficits, effects on appetitive behavior, obesity, and attention and cognition

4. Social dysfunction
   - Reduced impulse control, attention & cognition deficits, and mood dysfunction
Unknown Effects of Other Chemicals

Chemicals in E-Cigarettes include:
- Nicotine
- Vegetable glycerin (GRAS for ingestion, not inhalation)
- Propylene glycol
- Carbonyl compounds
- Volatile organic compounds, poly-aromatic hydrocarbons, tobacco-specific nitrosamines and heavy metals

“The health effects and potentially harmful doses of heated and aerosolized constituents of E-cigarette liquids, which include solvents, flavorants, and toxicants, are not well understood. However, the presence of hazardous compounds have been found in e-cigarette liquids, or in the heated aerosol produced by e-cigarettes, including formaldehyde, acetaldehyde, and acrolein, which are known carcinogens.” – Surgeon General
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CATCH My Breath Summary

Best-practice-based youth E-cigarette prevention program targeting ages 11-18

Created in response to a 900% spike in youth E-cigarette use between 2011-15, which made E-cigarettes the most-frequently used tobacco product among youth

Authored in 2015-16 by Dr. Steven Kelder, UTHealth faculty member who was a Senior Scientific Editor of the Surgeon General’s Report on youth E-Cigarette use
Current Program Reach

20 STATES

A diverse community of support:

• Private Foundations
• State Education Agencies
• Local Departments of Health
• School Districts
Program Goal & Outcomes

• GOAL: To prevent the initiation of E-Cigarette use among pre-teen and teen adolescents (ages 11-18)

• The intended outcomes are to ensure that students will:
  – Resist their own curiosity and peer pressure to experiment with E-Cigarettes
  – Understand that E-Cigarettes are addictive, unhealthy and not as popular as they think
  – Be socially inoculated against deceptive media
  – Influence friends and peers not to use E-Cigarettes
Program Components

• Curriculum:
  • Four 35-40-minute lessons (6th, 7th, 8th, & HS)
  • Taught by middle-high school teachers, tobacco educators, counselors or nurses
  • Active student-centered learning led by Peer Group Facilitators
  • Suggested subjects: science, health, physical education and advisory/homeroom

• Teacher Resources:
  • Training
  • PowerPoints

• School signage
• Parent materials
• Evaluation templates
CATCH.org Portal

Middle School
- Grade 6 Nutrition: Life in the Balance
- Grade 7 Nutrition: Life in the Balance
- Grades 6-8 Physical Education Activities
- Grade 8 Nutrition: Life in the Balance
- Middle School Coordination Kit Resources

- Eat Smart School Nutrition Program Guide
- CATCH My Breath Middle School
- Coordinated School Health Best Practices
- Family Resources

High School
- CATCH My Breath High School
CATCH.org Portal

Training
A 55-minute training webinar for educators implementing CATCH My Breath.

Parent Resources
Resources for parents, including a parent handout, letter (to be sent home at the beginning of the program), videos, fact sheets, and more.

Teacher / Tobacco Educator Resources
Resources for teachers / tobacco educators who will be implementing CATCH My Breath. Includes policy templates, infographics, social media, and guides/toolkits.

Evaluation Tools
Links for student pre- and post-surveys, as well as a teacher feedback survey.

Signage
A series of 3 posters to be used to reinforce messaging.

Session 0: Getting Ready to Start the Program
Selecting and training Peer Group Facilitators
Session 2 Lesson Plan

Resisting Peer Pressure

Suggested length: 30 minutes

Lesson Objectives
Students will:

- Review the harmful consequences of E-cigarette use.
- Identify reasons why kids their age begin using E-cigarettes.
- Identify positive alternatives to using E-cigarettes.
- Identify the percentage of E-cigarette users in high school and middle school and describe nonsmokers as the majority.

Instructional Activities

1. Introduction
   2 minutes
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CATCH My Breath in RRISD

• **Step 1:**
  – **District approval**
    • Assistant Athletic Director & District CATCH Champion reviewed the program and discussed the best fit for RRISD

• **Step 2:**
  – **District created implementation plan**
    • Teach CMB to all 6th grade students during PE
      – Goal: reach the largest number of students possible AND get the information in the student’s hands early
    • District CATCH Champion mapped out a timeline for teaching CMB
      – once a week during a specified 6-week timeframe
**CATCH My Breath in RRISD**

- **Step 3:**
  - **Communicate action plan to the Principals/PE Teachers**
    1. Assistant Athletic Director emailed all principals to get their buy-in
    2. Assistant Athletic Director emailed all PE teachers
    3. Principals and PE Teachers signed an MOU that outlined the school’s responsibilities

- **Step 4:**
  - **Train 6th grade PE Teachers:**
    - CMB Program Manager delivered in-person one hour training (available as a webinar on catch.org) to RRISD PE Teachers on a Professional Development Day

- **Step 5:**
  - **Implement CATCH My Breath**
    - District CATCH Champion managed and relayed all communications with the PE Teachers:
      1. Student pre surveys prior to teaching the lessons
      2. Check-in re: lesson progress and feedback
      3. Student post surveys after teaching the lessons
      4. Teacher feedback surveys
Tips for Implementing CMB

1. Get district approval/buy-in
2. Create clear implementation plan
3. Get school approval/buy-in
4. Provide appropriate training
5. Communicate plan to all participating schools
6. Conduct regular check-ins with teachers to assess progress and address any issues
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Teacher Steps to Start Program

- Complete sign-up form including principal email affirmation
- Receive access code
- Begin lessons
Thank You For Your Interest In The CATCH My Breath Youth E-Cigarette Prevention Program!