

# Youth E-Cigarette Prevention and the CATCH My Breath Program: Policy, Prevention, and Implementation

November 10, 2016  
11:00 a.m. (CDT)



**CATCH**<sup>®</sup>  
MY BREATH  
YOUTH E-CIGARETTE PREVENTION PROGRAM

**CATCH**<sup>®</sup>  
COORDINATED APPROACH TO CHILD HEALTH

  
UTHealth  
The University of Texas  
Health Science Center at Houston  
School of Public Health

  
MICHAEL & SUSAN DELL  
CENTER for HEALTHY LIVING



@CATCHhealth  
@MSDCenter



/CATCHhealth  
/MSDCenter

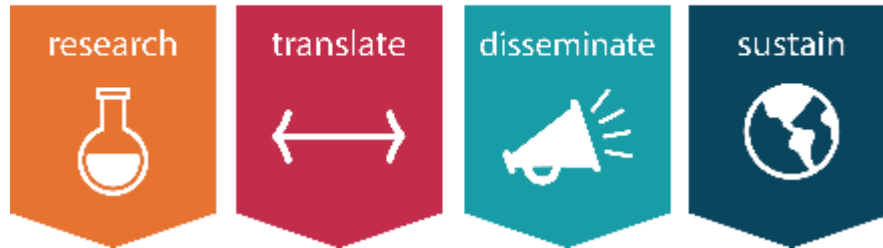


# MICHAEL & SUSAN DELL CENTER *for* HEALTHY LIVING

**Healthy children in a healthy world.**

We advance health and healthy living for children and families through cutting-edge research, innovative community-based programs, and dissemination of evidence-based practices.

## STRATEGIC PLAN GOALS





## Founding Partners



## Board of Directors

Peter Cribb (CGF, Program Director)

Dr. Ernest Hawk (MD Anderson)

Dr. Steven H. Kelder (UTHealth)

Duncan Van Dusen (CGF, Executive Director)

### *Emeritus*

Susan Combs (Former Texas Comptroller)

Dr. Eduardo Sanchez (American Heart)

Our mission is to improve children's health worldwide by developing, disseminating and sustaining the CATCH platform in collaboration with researchers at UTHealth and the University of Texas MD Anderson Cancer Center.

The Foundation links underserved schools and communities to the resources necessary to create and sustain healthy change for future generations.



# Current E-Cigarette Use and State Policy



**Barry Sharp**

MSHP, MACM, MCHES

**Manager, Tobacco Prevention & Control Branch  
of the Texas Department of State Health Services**



# What are we talking about?

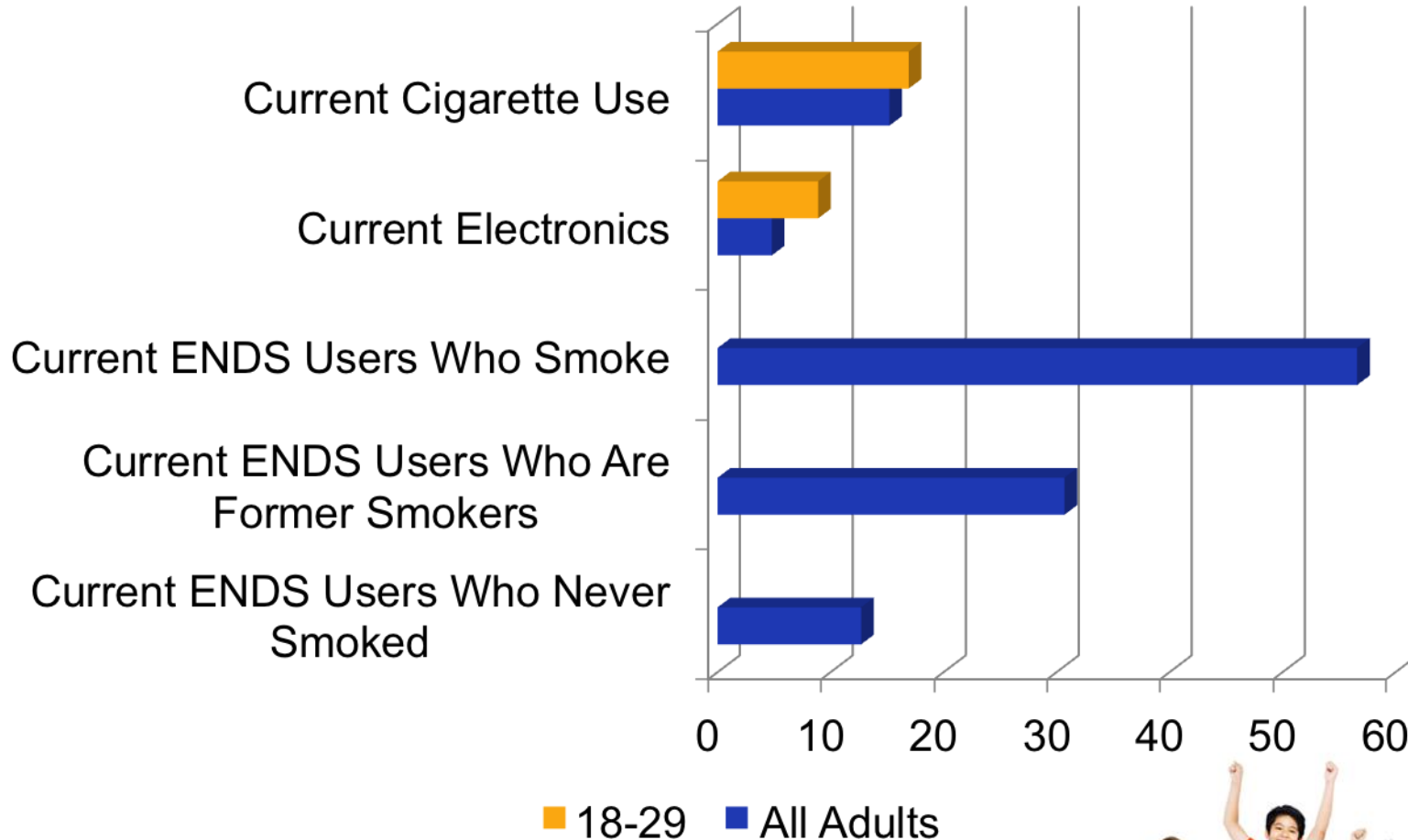
"E-cigarette" means an electronic cigarette or any other device that simulates smoking by using a mechanical heating element, battery, or electronic circuit to deliver nicotine or other substances to the individual inhaling from the device. The term does not include a prescription medical device unrelated to the cessation of smoking. The term includes:

- (A) a device described by this subdivision regardless of whether the device is manufactured, distributed, or sold as an e-cigarette, e-cigar, or e-pipe or under another product name or description; and
- (B) a component, part, or accessory for the device, regardless of whether the component, part, or accessory is sold separately from the device.

*Texas Health & Safety Code, Section: 161.081*

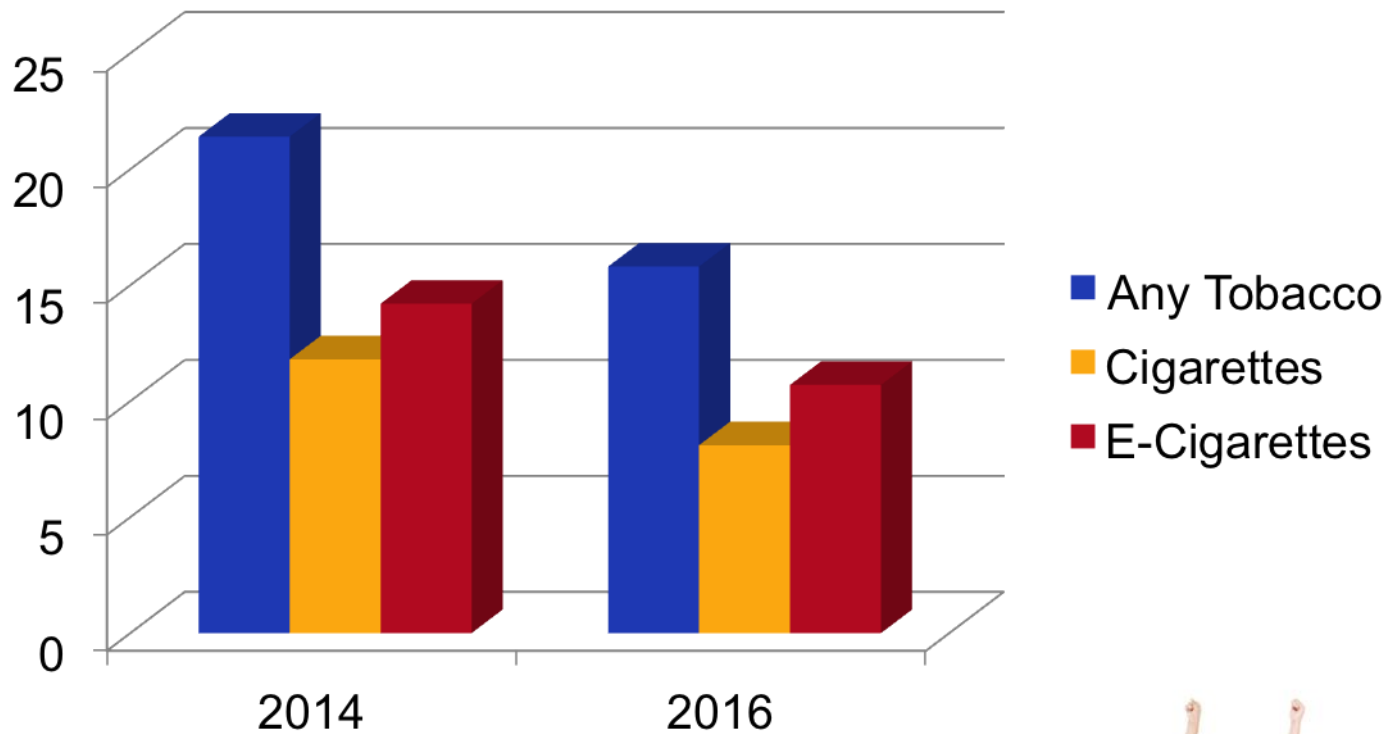


# 2015 BRFSS



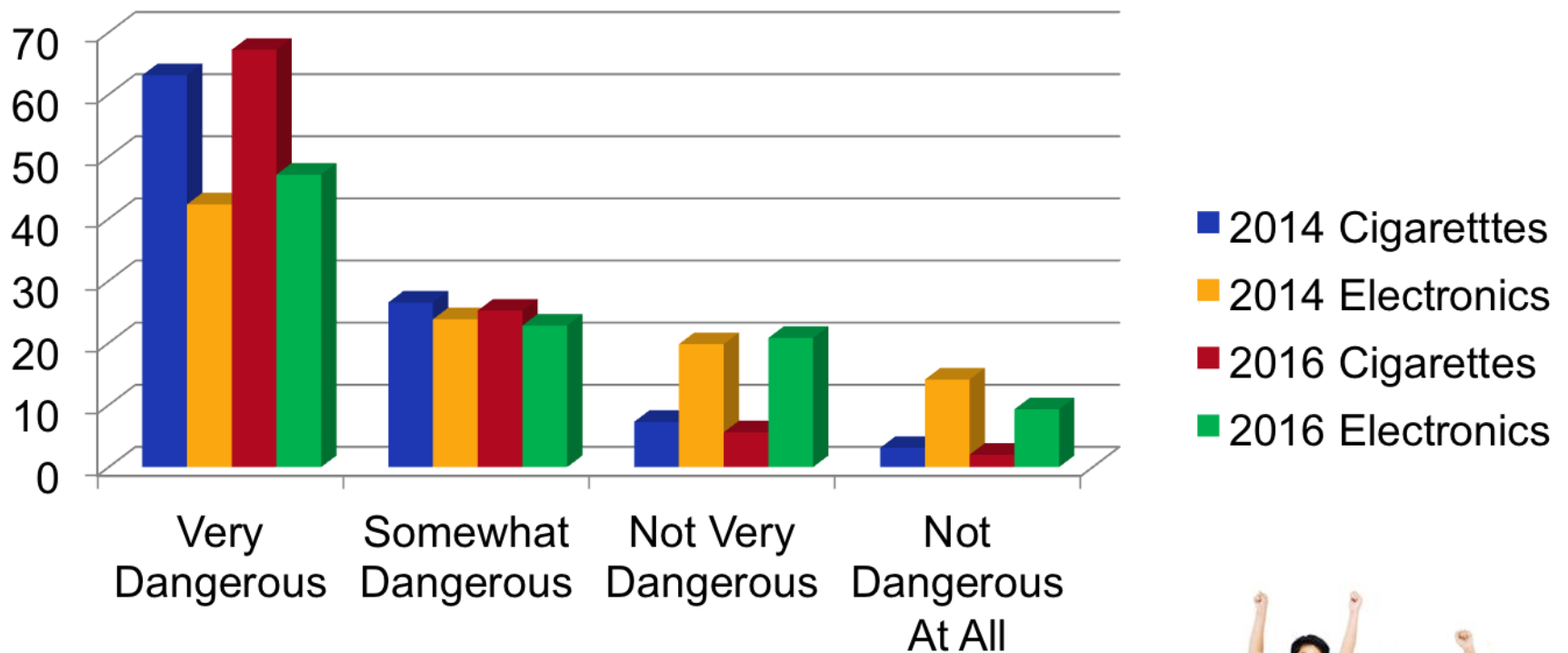
# Texas Youth Tobacco Survey

Past Month, Grades 6-12



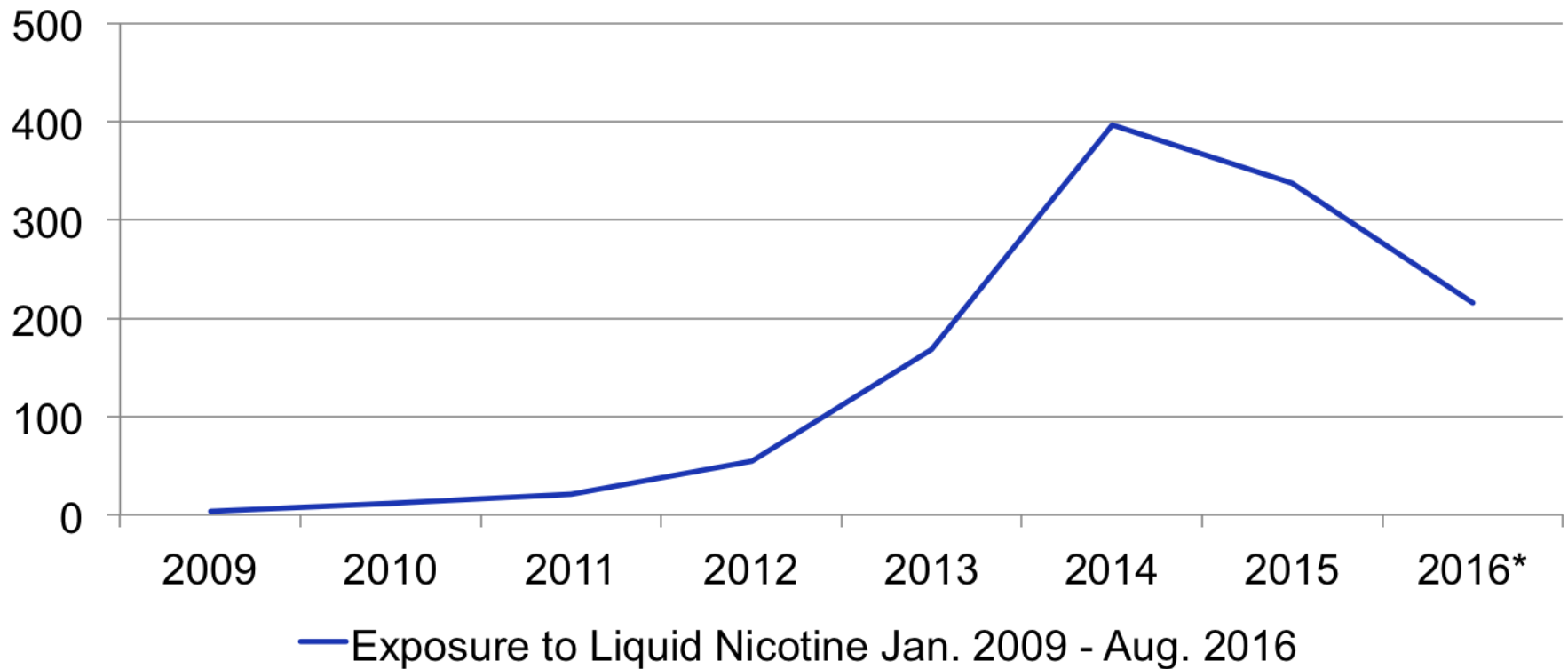
# Texas Youth Tobacco Survey

Do you consider these dangerous to health?





# Calls to TX Poison Control Network



# Tobacco Control is a Tapestry



# State Level Prevention Efforts

- SAY WHAT!
  - Middle and High School Statewide
  - Focuses on peer education, advocacy
- Peers Against Tobacco
  - Colleges – 2 year, 4 year, Health Science Centers
  - Peer education
  - Campus policy changes
- Enforcement
  - State and Federal Youth Access Laws
  - State laws changed in 2015 to include ENDS
  - FDA rules changed in 2016 to include ENDS



# Middle School E-Cigarette Prevention and CATCH My Breath Program



Steven Kelder, PhD, MPH

- **Associate Regional Dean**, University of Texas School of Public Health, Austin Campus
- **Professor**, Division of Epidemiology, Human Genetics and Environmental Sciences
- **Co-Director**, Michael & Susan Dell Center for Healthy Living
- **Author** of CATCH My Breath Program



# TOBACCO USE AMONG MIDDLE AND HIGH SCHOOL STUDENTS—UNITED STATES, 2011-2015

There has been **no significant change in overall tobacco use** among high school students since 2011.

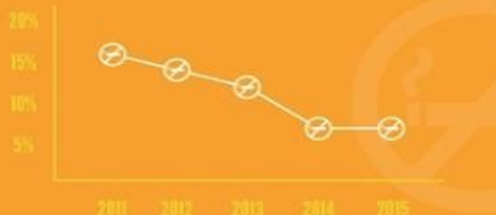


**3 million** middle and high school students were **current users of e-cigarettes** in 2015



up from 2.46 million in 2014.

There was a **significant decrease in current cigarette use** among high school students from 2011–2015



2011 - 15.8%, 2012 - 14%, 2013 - 12.7%, 2014 - 9.2%, 2015 - 9.2%



About half of middle school and high school students who used tobacco products in 2015 were current users of **two or more tobacco products**.

**Current use of tobacco products** by high school students in 2015



**YOUTH USE OF TOBACCO IN ANY FORM IS UNSAFE.**

[bit.ly/YouthTobaccoUse](http://bit.ly/YouthTobaccoUse)



**Do E-Cigarettes cause less damage than combustible cigarettes?**

**YOUTH USE OF TOBACCO IN ANY FORM IS UNSAFE.**

[bit.ly/YouthTobaccoUse](http://bit.ly/YouthTobaccoUse)



Source: National Youth Tobacco Survey 2011-2015



# Youth are underappreciated in the debate on adult E-cigarette harm reduction

- Youth and young adults are uniquely vulnerable to detrimental consequences of brain exposure to nicotine, including:
  - Addiction, priming for other addictive substances, reduced impulse control, deficits in attention and cognition, and mood disorders.
- Nicotine can cross the placenta and has known effects on fetal and postnatal development; therefore, nicotine delivered by e-cigarettes during pregnancy can result in multiple adverse consequences:
  - Preterm delivery, stillbirth or sudden infant death syndrome, altered corpus callosum, deficits in auditory processing, and child obesity.
- An unanswered question regards the addictive potential of youthful users who only smoke E-cigarettes.
  - E-cigarette smokers have blood nicotine and cotinine levels equivalent, to combustible cigarette smokers – the addictive potential exists, but has not been carefully documented to date.



# Formaldehyde, Acrolien, Explosions, Fires, Accidental poisonings



**H A R M L E S S**

\* Some call it harmless water vapor. But it's neither water, nor vapor, nor harmless.

**WAKE UP**

[StillBlowingSmoke.org](http://StillBlowingSmoke.org)

**freedom**

\* E-cig companies say vaping will set you free. But nicotine addiction is the opposite of freedom. *Wake up.*

# CATCH My Breath ; Development

## Sept 2015 – March 2016

- Minnesota Smoking Prevention Program is foundation: Social Cognitive Theory
- Literature review suggests key components:
  - Knowledge, Attitudes, Beliefs, Media literacy, Norm leveling for social desirability, Peer group facilitation, Social inoculation skills
- Interviews with Teens
  - Curiosity; misinformation, social media information
- Interviews with teachers; feedback on first draft





# Goal & Outcomes

- GOAL: To prevent the initiation of E-Cigarette use among pre-teen and teen adolescents.
- 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.
  - Influence friends and peers not to use E-cigarettes.



# Curriculum Organization

- Divided into 6 sessions lasting about 30 minutes each.
- Content delivered by teachers, nurses or tobacco educators with active student-centered learning facilitated by peer leaders
- Variety of educational strategies used, including: cooperative learning groups, group discussions, goal setting, interviews, and analyzing mass media.
- Sessions include everything needed to teach a lesson. They are:
  - User friendly & flexible
  - Aligned with National Academic Standards and Texas Essential Knowledge & Skills



# Session 1: Negative Consequences of Smoking E-cigarettes

Print Lesson

Add to Favorites

0 Comments

Show My Notes

All Teacher/Student Materials

Slides

Slide Notes

## Outline

Activities	Materials
<b>1. Introduction</b>  ⌚ 10-15 minutes	<b>Teacher Materials:</b> <ul style="list-style-type: none"><li>Video: <b>What is an E-cigarette and How does it Work?</b> (1 minute 53 seconds)</li><li>Video: <b>Are E-cigarettes Harmful?</b> (1 minute 38 seconds)</li></ul> <b>Student Materials:</b> <ul style="list-style-type: none"><li><b>Parent Letter</b></li></ul>
<b>2. Group Work – Brainstorming Negative Consequences</b>  ⌚ 10-15 minutes	<b>Teacher Materials:</b> <ul style="list-style-type: none"><li>Document Projector</li><li><b>Visual 1, Session 1: Picture of E-cigarettes</b></li><li><b>Visual 2, Session 1: Negative Consequences of E-cigarettes</b></li><li>Marker</li></ul> <b>Student Materials:</b> <ul style="list-style-type: none"><li><b>Peer Leader Sheet 1, Session 1: Negative Consequences</b></li></ul>
<b>Total Time: 20-25 minutes</b>	<b>IMPORTANT:</b> Before this session, have students take the <b>pre-test</b> . It should take no more than 10 minutes.

See Texas TEKS Standards for this Lesson

## Learner Outcomes

### Students will:

- Discover general facts about tobacco use.
- Identify the negative consequences of using E-cigarettes.

## Overview

Young people are generally aware of the many negative consequences of using tobacco, particularly lung cancer, heart disease and asthma. Almost everyone knows tobacco has nicotine, which is addictive, and that once you get hooked, it's hard to quit using tobacco. However, young people don't know much about e-cigarettes, and fewer kids know that e-cigarettes are addictive. Unfortunately, kids today are curious and have heard positive things about them (e.g., smoke ring contests, delicious flavors, nicotine is as safe as coffee, etc.). In this session we start setting the record straight and telling your students the truth about E-cigarettes.

During this first session, students are given the opportunity to discuss what they know in small groups about the negative consequences of smoking E-cigarettes. The important point of this brainstorming activity is not that students learn complex information, but that they participate in a discussion about the many physical and social consequences of smoking E-cigarettes. This discussion will set the tone for the general disapproval of using E-cigarettes and the norm of Non-Use.

- FACT:** Nearly all e-cigarettes contain nicotine; nicotine is addictive; nicotine harms your brain.
- FACT:** E-cigarette vapor is not water. It contains a mixture of nicotine and harmful chemicals.
- FACT:** Nicotine is very harmful to a developing fetus.
- FACT:** Nicotine liquid (aka, e-juice) is very harmful and possibly fatal for babies and toddlers.

There are two main activities in Session 1.

# Feasibility Study: March 2016 – May 2016

- 26 schools taught CATCH My Breath; 15 schools administered pre-post student surveys (across 5 states – IL, TX, AR, TN & OK); Reached 2,255 6-8<sup>th</sup> grade students
- **TEACHER FEEDBACK:**
  - **91%** agreed that the lessons are culturally appropriate.
  - **91%** felt confident in their ability to teach the CATCH My Breath lessons.
  - **86%** agreed that the additional teacher resources provided sufficient background information to teach the lessons.



# Feasibility Study: March 2016 – May 2016

- **STUDENT FEEDBACK:**
  - **86%** agreed that they are less likely to use E-cigarettes as a result of participating in the CATCH My Breath program.
  - **82%** agreed that they will look at E-cigarette advertising differently from now on.
  - **86%** agreed that CATCH My Breath increased what they know about E-cigarette use.
  - **70%** agreed that they discussed what they learned from CATCH My Breath with friends or family.
  - **9%** increase in mean knowledge score,  $p < .001$
  - **14%** increase in mean media awareness score,  $p < .001$



# Future Directions

- Continued pilot testing
  - Development of E-cigarette learning community in Central Texas funded by St David's Foundation.
  - Since end of pilot, 20 more schools including 2 more states have implemented program
  - At least 2 states and 1 county health department planning to offer CMB free of charge to all middle schools in their area (total 1,000+ schools) - stand by for news
- Curriculum revision
  - School posters and PE activities
  - 4<sup>th</sup> and 9<sup>th</sup> grade lessons
- NIH Randomized control trial



# CATCH My Breath in DeKalb County

## Participating Middle Schools:

Clinton Rosette Middle School-7<sup>th</sup> grade

Genoa Middle School-6<sup>th</sup> grade



**Lisa Cumings, RN**

KishHealth System, Part of Northwestern Medicine



# “CATCH My Breath” in DeKalb County

Participating Middle Schools:  
Genoa Middle School-6<sup>th</sup> grade  
Clinton Rosette Middle School-7<sup>th</sup> grade

**Lisa Cumings RN, KishHealth System, Part of Northwestern Medicine**





# KishHealth System Community Needs Assessment

- Every three years a CNA is conducted throughout DeKalb county
- Top Priorities are chosen to implement a community implementation plan for the health system
- Health Priority: Cancer, specifically Lung cancer is the leading cancer site for both genders in DeKalb County



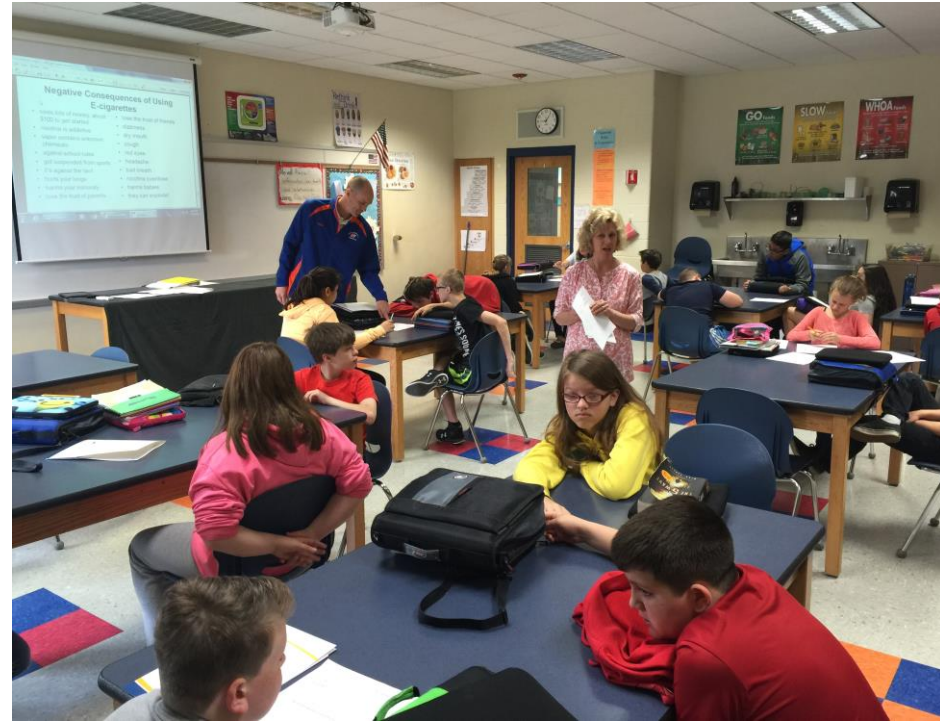
# KishHealth System Community Needs Assessment

- Strategy: Directly or indirectly support activities related to smoking prevention programs in school age children



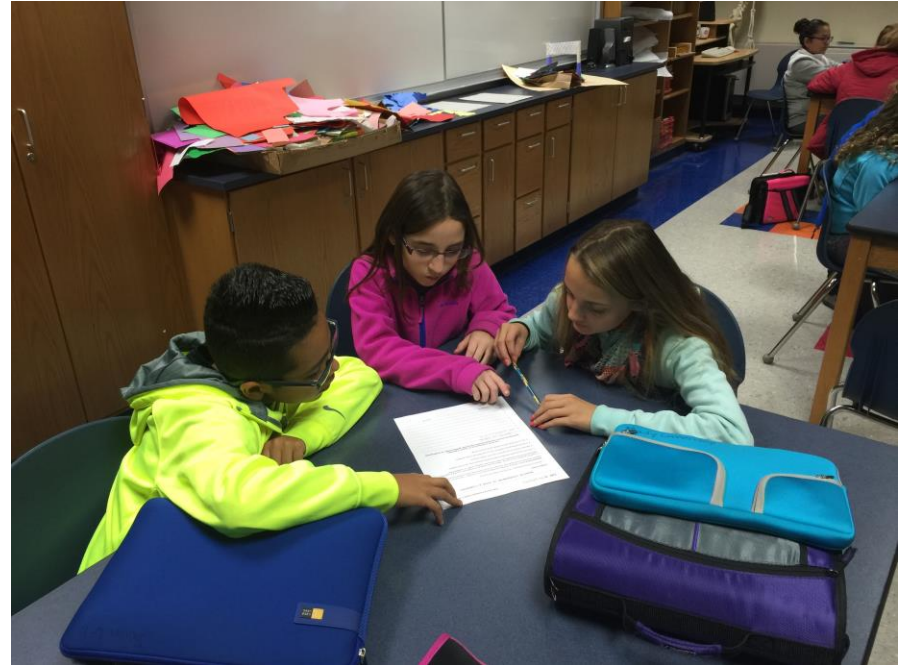
# Planning and Preparation

- Targeting two middle schools to pilot the CATCH MY Breath Program (6<sup>th</sup> and 7<sup>th</sup> grade)
- Deciding who and when the 6 lessons would be taught at each school
- Both schools chose health class to implement the program



# Planning and Preparation

- Combined 6 lessons into 3 with one day of presentations (2 nurses)
- Challenge to make sure all 6 lessons were taught within the 3 days
- Preparing Peer Leader folders-communication with teachers



# Implementation of Catch My Breath

- Peer leaders took the lead and directed the small groups
- Group activities led to good conversations
- Combination of group work, video and interactive exercises

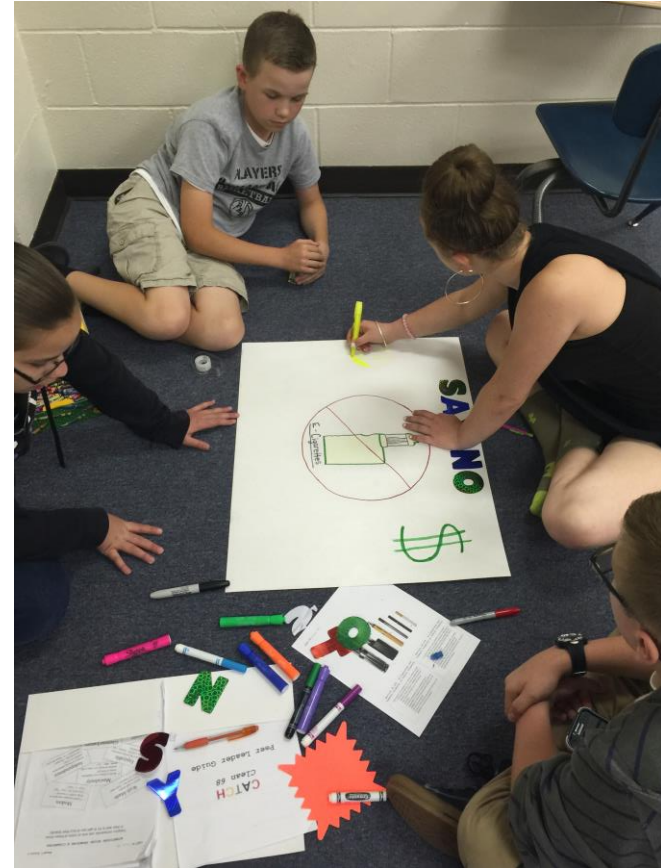


Parallel Lines Activity



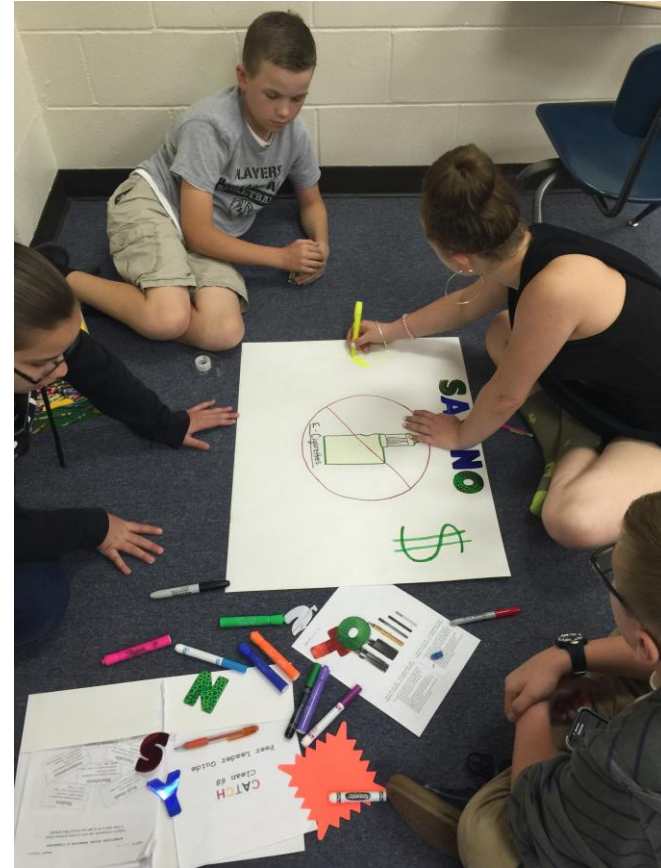
# Student Response

- Perception of safety with E-Cigarettes before and after the implementation of the program
- Concern about family members smoking e-cigs
- End of the program project was impactful



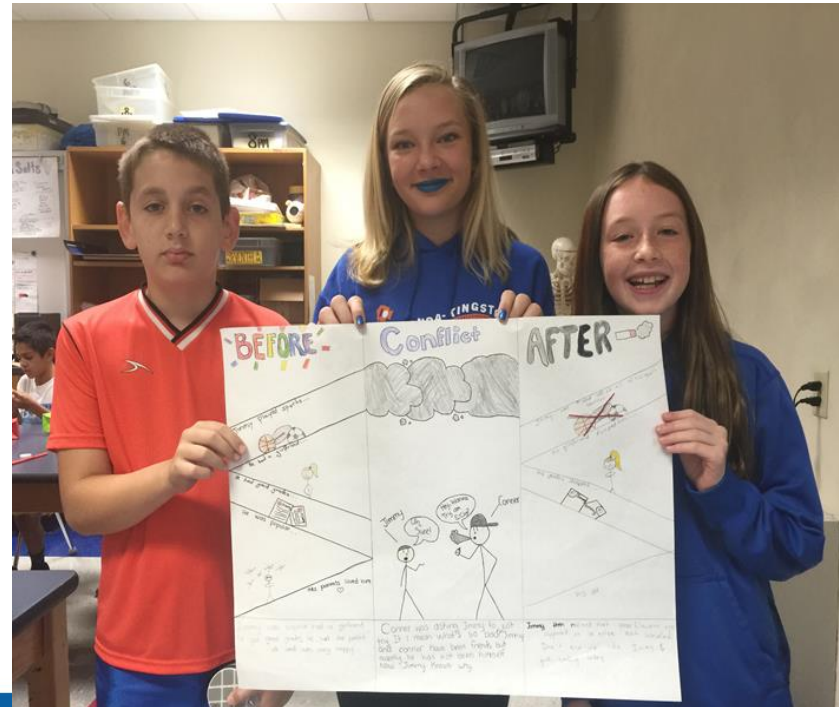
# Lessons Learned

- Being prepared to possibly modify the implementation of the program due to time constraints with the school
- Take the time to prepare/organize the peer leader folders prior to the start of the program
- Our experience was that 6<sup>th</sup> graders participated more and were more engaged than the 7<sup>th</sup> graders



# Future Implementation

- Combine E-Cig curriculum with the tobacco prevention section in health class
- Present at the school district wellness committee meetings throughout the county
- Pilot different ways to bring CATCH My Breath to the middle schools (PE, after school)





# Exit Poll

If you would please take 2-3 minutes to fill out our exit poll we would greatly appreciate it!

**Thank you for joining us today!**



# Thank you!

## Questions? Contact:

Megan Grayless

CATCH My Breath Program Manager  
[ecigs@catchglobalfoundation.org](mailto:ecigs@catchglobalfoundation.org)

For more information or  
to order the program, visit:

[www.catchmybreath.org](http://www.catchmybreath.org)

*A recording of today's webinar will be available online at  
[www.CATCHinfo.org/resources/webinar-archive](http://www.CATCHinfo.org/resources/webinar-archive)*



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