

2018

Early and Current Educational Information is Key in Preventing Smoking in Massachusetts Youth

Shawn Sanford

Follow this and additional works at: <https://scholarworks.uvm.edu/fmclerk>



Part of the [Medical Education Commons](#), and the [Primary Care Commons](#)

Recommended Citation

Sanford, Shawn, "Early and Current Educational Information is Key in Preventing Smoking in Massachusetts Youth" (2018). *Family Medicine Clerkship Student Projects*. 373.

<https://scholarworks.uvm.edu/fmclerk/373>

This Book is brought to you for free and open access by the Larner College of Medicine at ScholarWorks @ UVM. It has been accepted for inclusion in Family Medicine Clerkship Student Projects by an authorized administrator of ScholarWorks @ UVM. For more information, please contact donna.omalley@uvm.edu.

Early and Current Educational Information is Key in Preventing Smoking in Massachusetts Youth

Greenfield, Massachusetts

Shawn Sanford

June 2018

Tim Sweeney, Tobacco Treatment Specialist contracted by Valley Medical
Group

Kate Blaire, Health Educator at Frontier Regional School

Problem Identification

- In the United States, tobacco is still the leading preventable cause of disease and death. (1)
- Among adult daily smokers, 88% started smoking cigarettes by 18 years of age. (2)
- This challenge is complicated by the effective marketing techniques of the tobacco industry, which have been shown to cause the onset and continuation of smoking among adolescents. (2)
- A growing concern is the tobacco industry targeting youth with E-cigarettes. E-cigarettes have become the leading tobacco product among youth and is strongly associated with the use of combustible tobacco products. (3)
- The tobacco industry spends 9.5 billion dollars per year, or 26 million dollars per day, marketing tobacco products. (4)

Public Health Cost

- Each day in the United States 3,200 children under the age of 18 smoke their first cigarette. 5.6 million of today's youth will eventually die due to smoking-related diseases if current tobacco use trends continue. (1)
- Smoking-related illness in the United States costs more than 300 billion dollars each year. This includes roughly 170 million dollars in direct medical care and over 156 billion dollars in lost productivity. (4)
- 8.7% of annual healthcare spending could be attributed to cigarette smoking. With more than 60% of attributed spending paid for by programs like Medicare and Medicaid. (5)

Local Impact

Table 5: Tobacco

	8th grade	10th grade			12th grade		
	2016 FC/NQ	2015 U.S.	2015 MA	2016 FC/NQ	2015 U.S.	2015 MA	2016 FC/NQ
Ever tried cigarettes	12%	29%	26%	25%	38%	36%	42%
Smoked a whole cigarette before age 13	5%	8%	4%	4%	5%	4%	7%
Current cigarette smoking (past 30 days)	2%	9%	6%	7%	14%	10%	13%
Current daily cigarette smoking (past 30 days)	0%	2%	1%	1%	3%	2%	3%
Current chewing tobacco use (past 30 days)	2%	6%	5%	4%	8%	7%	9%
Current cigar use (past 30 days)	2%	10%	9%	6%	14%	15%	12%
Ever used electronic vapor products	17%	43%	45%	36%	51%	54%	51%
Current use of electronic vapor product (past 30 days)	9%	23%	23%	18%	28%	29%	28%
Current use of any tobacco product or e-vapor product (past 30 days)	12%	N/A	N/A	23%	N/A	N/A	36%

Data from 2016 Franklin County/North Quabbin Youth Risk Behavior Survey
(Massachusetts) (6)

Community Perspective

Tim Sweeney, Tobacco Treatment Specialist contracted by Valley Medical Group

On tobacco companies targeting youth:

“Back in the day more kids could recognize Joe Camel and what he did than Micky Mouse.”

“If E-cigarettes come in ice cream flavors they aren’t targeting the 57 year old smoker.”

Tim views age of first exposure to be the 3rd biggest factor in a patient’s trajectory with tobacco behind genetics and environment.

“I have not seen anyone below 18 years of age attend my smoking cessation groups under their own volition. They usually come after being caught by school or coaches.”

Tim predicts that “10 years from now we will see people even more deeply addicted but maybe with less lung damage, because with E-cigarettes you can take in such a large dose because there is no negative smoke or heat. It’s easier to consume so much more nicotine.”

He attributes the rise of E-cigarettes in youth to their “accessibility, availability, acceptability, and affordability.”

Community Perspective

Kate Blaire, Health Educator at Frontier Regional School

“Being in the health classroom for the past decade I have seen smoking tobacco come and go as we have kind of slayed that dragon. But now we have seen E-cigarettes come at a much faster rate, faster than we can develop curriculum to combat it.”

“In the health classroom we are looking for a universal way to teach about vaping.”

“The best we can do to combat the rising rates is to keep the information that we teach our students fresh. Kids will ignore the information if it is not current.”



Intervention

After reviewing the results of the local Youth Risk Behavior Survey and hearing testimony from local community members about the need for early and current smoking prevention information for youth I decided to put on a tobacco cessation presentation at a local elementary school. I used a curriculum designed by The American Academy of Family Physicians called Tar Wars. This was an interactive presentation with a group of thirty 6th grade students at Sunderland Elementary school. I adapted the presentation to provide current examples of tobacco advertisements targeting youth in an attempt to foster a sense of skepticism in these kids that they can take with them as they are bombarded by tobacco advertisements, promotions, and youth-targeted products. The presentation consisted of hands on activities with the students to help teach about the dangers of tobacco use. These included a “Sticky Man” activity, where students plaster a classmate with examples of health risks, a “straw breathing” activity to provide examples of what it would be like breathing after smoking for 10 years, and an “economics of cigarettes” activity to brainstorm all of the things that you can buy if you weren’t smoking a pack per day. (7)

Results

“Shawn did a WONDERFUL JOB today with our group of eager, curious 6th graders! His presentation style, warmth and his presence were much appreciated. Students were talking about the content of his presentation and how Shawn was flexible in sharing information, answering questions, etc. We are so lucky to have him share his skills with us.” –Email from Victoria Palmer, School Psychologist and Counselor at Sunderland Elementary School

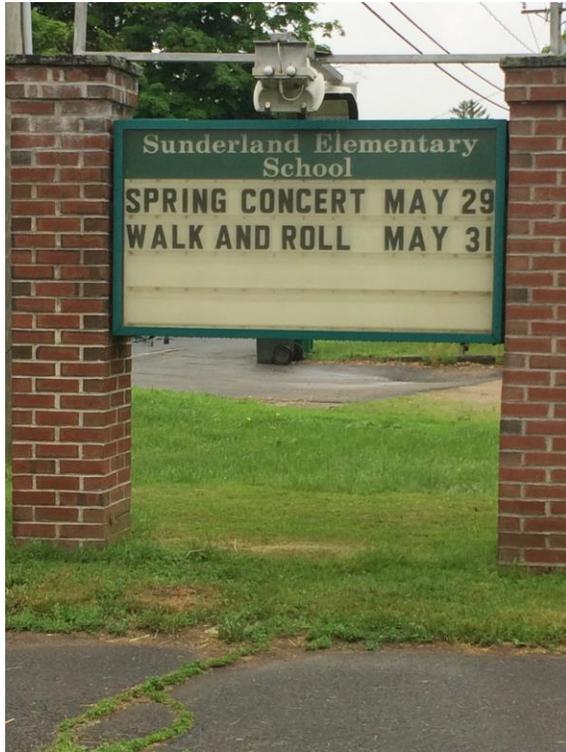


Image of the school where the Tar Wars presentation was given.



Shawn Sanford demonstrating the effects of smoking on the elasticity of the lung using a balloon.

Evaluation and Limitations

- The effectiveness of this presentation can be evaluated by looking at the data from the Franklin County/North Quabbin Youth Risk Behavior Survey in two, four, and six years when these current 6th grade students become 8th, 10th, and 12th graders, respectively. This evaluation will be limited by the fact that the survey includes the entire school districts of Franklin County and North Quabbin, not just the thirty 6th grade students that attended Sunderland Elementary.
- The effectiveness of the presentation was limited by scope of this project and time constraints and hence was only able to be given to one of the elementary schools in Franklin County and North Quabbin school districts.
- Tobacco companies are constantly finding new ways to target youth with new products, advertisements, promotional music festivals, and examples in the media. A limitation of the Tar Wars presentation is the need to be updated yearly to keep up with the tobacco industry. As Kate Blaire mentioned in her interview, the most important factor in designing curriculum for students is keeping the information “fresh” and “current.”
- This Tar Wars presentation was effectively given to youth at a vital age before most adolescents start experimenting with tobacco during the transition to high school. The presentation used current examples and engaged students with active learning activities.

Future Recommendations

- The American Academy of Family Physicians needs to keep the Tar Wars presentation up to date with current information. After hearing the input from Kate Blaire, I would recommend yearly updates to the presentation to keep the examples as fresh as possible and to keep students engaged.
- As Kate Blaire mentioned in her interview, a comprehensive E-cigarette educational curriculum is needed in the health classroom to help combat the extreme rate of E-cigarette use in local youth.
- With the abundance of technology and media use by adolescents, it would be important for future tobacco cessation education to incorporate as much social media and as many smart phone applications as possible. For example, a smartphone application could be used that quizzes students on the misleading and targeted advertising that they might encounter online. This would help foster analytical thinking in adolescents and provide skills to tease out the faulty messages being portrayed by the tobacco industry.
- A smartphone application or interactive website would also help overcome the limitations of providing an in person presentation to all students in the school district. This would allow the information to reach a broader audience and hopefully be easier for students to digest.

References

- 1) US Department of Health and Human Services. The health consequences of smoking—50 years of progress: a report of the Surgeon General. Atlanta, GA: US Department of Health and Human Services, CDC; 2014. <http://www.surgeongeneral.gov/library/reports/50-years-of-progress/full-report.pdf>
- 2) US Department of Health and Human Services. Preventing tobacco use among youth and young adults: a report of the Surgeon General. Atlanta, GA: US Department of Health and Human Services, CDC; 2012. <http://www.surgeongeneral.gov/library/reports/preventing-youth-tobacco-use/full-report.pdf>
- 3) US Department of Health and Human Services. Atlanta, GA: US Department of Health and Human Services, CDC; 2016. [E-cigarette use among youth and young adults: a report of the Surgeon General](#)
- 4) Economic Trends in Tobacco. 2016. Centers for Disease Control and Prevention. https://www.cdc.gov/tobacco/data_statistics/fact_sheets/economics/econ_facts/index.htm
- 5) Xu X, Bishop EE, Kennedy SM, Simpson SA, Pechacek TF. [Annual Healthcare Spending Attributable to Cigarette Smoking: An Update](#). American Journal of Preventive Medicine 2014;48(3):326–33
- 6) Franklin County/North Quabbin Youth Risk Behavior Survey. 2016. <http://www.communitiesthatcarecoalition.org/surveys>
- 7) The American Academy of Family Physicians. Tar Wars. <https://www.aafp.org/patient-care/public-health/tobacco-nicotine/tar-wars.html>