

ANNUAL REPORT

2014

www.vfhy.org

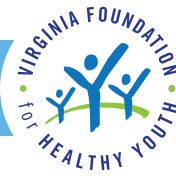


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Greetings!

I am pleased to report to you that the Virginia Foundation for Healthy Youth continued to make a positive impact on the health of young people across Virginia during 2015.

Y Street, our nationally recognized youth-led volunteer group for high school students, participated in several important initiatives this year, including our first 24/7 Tobacco-Free Spirit Day, held on Nov. 18, 2015. Virginia Lt. Gov. Ralph Northam, a former member of the VFHY Board of Trustees, helped us kick off this statewide celebration of tobacco-free schools with an event in Virginia Beach. With the help of Y Street volunteers who are speaking to their school boards and principals, more school systems across Virginia are adopting comprehensive, 100 percent tobacco-free schools policies, but there are still many more to go.

Our Y Street youth also helped out on May 15, 2015, at our third annual Rev Your Bev Day, which raises awareness of the health effects of sugary drinks. Due in part to VFHY's efforts a growing number of young people in Virginia are choosing to reduce their consumption of sugar-sweetened beverages.

We are proud of the progress we've made. By promoting active, nutritious and tobacco-free living, the Virginia Foundation for Healthy Youth empowers Virginia's youth to make healthy choices.

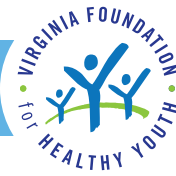
We must, however, remain vigilant. As new children reach the age of experimentation with smoking, the Virginia Foundation for Healthy Youth will continue to be there for them, keeping up with their ever-changing youth culture and helping them to grow into happy, healthy adults.

Thank you for your continued support of VFHY and Virginia's children.

Sincerely,

A handwritten signature in blue ink that reads "Marty H. Kilgore".

Marty H. Kilgore
Executive Director
Virginia Foundation for Healthy Youth



About VFHY

The Virginia Foundation for Healthy Youth (VFHY) empowers Virginia's youth to make healthy choices by promoting active, nutritious and tobacco-free living. In 1999, as a result of the Master Settlement Agreement (MSA), the Virginia General Assembly established VFHY to lead youth tobacco-use prevention efforts in Virginia. In 2009, due to our great success at reducing youth tobacco use, the General Assembly expanded our mission to include childhood obesity prevention. VFHY receives no taxpayer funds. Our budget comes from a small percentage of Virginia's annual Master Settlement Agreement (MSA) payments.

Master Settlement Agreement

In 1998, the Attorneys General of 46 states, including Virginia, signed the MSA with the nation's four largest tobacco manufacturers to settle state lawsuits to recover costs associated with treating smoking-related illnesses. The spirit and intent of the MSA was to provide states with funding for tobacco-use prevention efforts that would ultimately lower the prevalence of tobacco use, thus also lowering long-term medical costs.

VFHY's Goals Include:

- Leading youth tobacco-use and childhood obesity prevention efforts in the Commonwealth by building partnerships and collaborations
- Empowering young people to make healthy choices, such as living smoke-free, being physically fit and eating nutritious foods
- Promoting school- and community-based initiatives that target youth tobacco-use and childhood obesity prevention and reduction
- Developing marketing strategies, including prevention messaging and youth volunteerism, to promote VFHY's goals of reducing and preventing youth tobacco use and childhood obesity
- Funding collaborative research projects related to youth tobacco-use prevention and studying factors that impact youth tobacco use.

VFHY STAFF

CENTRAL OFFICE STAFF

701 East Franklin Street
Suite 500
Richmond, Virginia
23219

Marty Kilgore
Executive Director

Margaret White
Deputy Director

Eloise Burke
Senior Executive Assistant

Richard Foster
Public Affairs Manager

Donna Gassie
Director of Programs

Henry Harper
Director of Community Outreach and Development

Heidi Hertz
Childhood Obesity Prevention Coordinator

Wilma Jordan
Business Manager

Charlie McLaughlin Jr.
Training and Resource Manager

Danny Saggese
Director of Marketing

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SOUTHWEST REGION

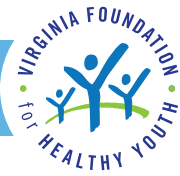
Jenny Martin
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1700 Kraft Drive
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DID YOU KNOW?
Tobacco use and obesity are the two leading causes of preventable deaths in the United States.

We Get Results

Since we began working with young people in 2001, the number of high school students who smoke in Virginia has been cut by more than 60 percent and the number of middle schools students who smoke has dropped by more than 75 percent! Members of our Y Street high school volunteer group logged 6,000 volunteer hours on projects in FY 2015. VFHY also funded 20 Healthy Communities Action Teams (HCATs) to prevent and reduce childhood obesity across Virginia in FY2015. These collaborative groups instituted a variety of projects ranging from running farmers' markets and building community playgrounds to offering youth nutrition classes and increasing opportunities for physical activity in localities statewide.



CHAIR

The Honorable John H. O'Bannon III, M.D., member, House of Delegates, representing the 73rd District (*concurrent with House term*)

VICE CHAIR

Sandy L. Chung, M.D., of Sterling, physician, Fairfax Pediatric Associates, PC (*term expires June 30, 2019*)

MEMBERS

Laura E. Beamer, of Richmond, Youth Member (*term expires June 30, 2017*)

Valerie L. Bowman, M.D., FAAP, of Richmond, pediatrician, Developmental Assessment Clinic, Bon Secours St. Mary's Hospital (*term expires June 30, 2018*)

January Britt, of Henrico, teacher (*term expires June 30, 2017*)

Edda Collins Coleman, of Springfield, vice president, Hill+Knowlton Strategies (*term expired June 30, 2015*)

Stacey Ely, of Abingdon, community and government relations director, Mountain State Health Alliance (*term expired June 30, 2015*)

The Honorable T. Scott Garrett, M.D., member, House of Delegates, representing the 23rd District (*concurrent with House term*)

The Honorable Thomas A. Garrett Jr., member, Senate of Virginia, representing the 22nd District (*concurrent with Senate term*)

Glory Gill, of Hampton, member, Virginia School Nurses' Association (*term expires June 30, 2018*)

Sarah Bedard Holland, of Richmond, executive director, Virginia Oral Health Coalition (*term expires June 30, 2018*)

Jimmy Jankowski, of Richmond, Youth Member (*term expires June 30, 2017*)

Ritsu Kuno, M.D., of Richmond, pulmonologist, Pulmonary Associates of Richmond (*term expires June 30, 2018*)

Marissa J. Levine, M.D., commissioner of health, Virginia Department of Health (*concurrent with appointment*)

Robert Leek, of Williamsburg, senior physician liaison, Sentara Healthcare (*term expires June 30, 2018*)

Sarah T. Melton, PharmD., BCCP, CGP, of Lebanon, director of addiction outreach and associate professor of pharmacy practice, Appalachian College of Pharmacy (*term expires June 30, 2018*)

The Honorable John Miller, Newport News State Senator representing the 1st District (*concurrent with Senate term*)

Jeffrey L. Painter, of Richmond, chairman, Virginia Department of Alcoholic Beverage Control (*concurrent with appointment*)

Kristina Powell, M.D., of Williamsburg, pediatrician, Pediatric Associates of Williamsburg (*term expires June 30, 2017*)

Davis Rennolds, of Richmond, consultant, McGuireWoods; state director, Share Our Strength (*term expired June 30, 2015*)

Vineeta Shah, MHS, R.D., of Richmond, independent consultant, Anna Julia Cooper Episcopal School and Virginia Commonwealth University (*term expires June 30, 2018*)

India Sisler, M.D., of Richmond, interim chief and assistant professor, Division of Hematology and Oncology, Department of Pediatrics, Virginia Commonwealth University (*term expires June 30, 2018*)

Board Service: July 1, 2014 - June 30, 2015

The Virginia Foundation for Healthy Youth and the Virginia Department of Health (VDH) conduct biennial surveys of youth health behaviors, including tobacco use, nutrition and physical activity. These results are reported to the Centers for Disease Control and Prevention (CDC).

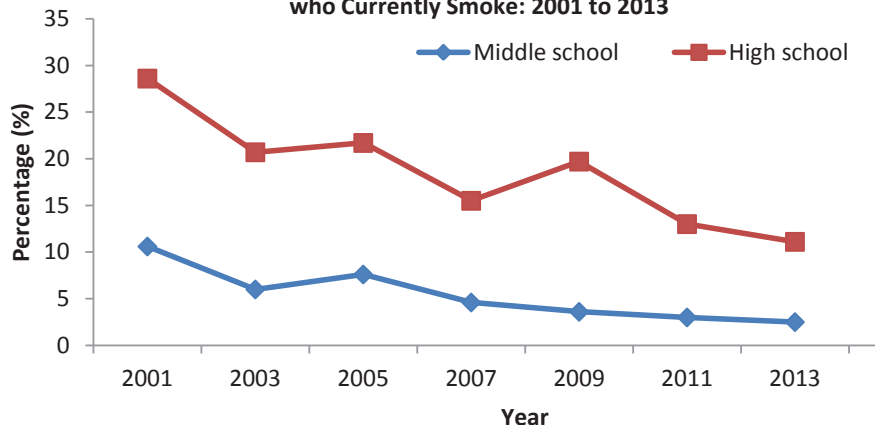
The Virginia Youth Survey (VYS) has been developed to monitor priority health risk behaviors that contribute markedly to the leading causes of death, disability and social problems among youth and adults within the commonwealth of Virginia.

VDH in collaboration with VFHY and the Virginia Department of Education administered the most recent Virginia Youth Survey in fall 2013. The survey was administered to students in grades 6-12 in randomly selected middle and high schools statewide. The survey questions were tested and validated by the Centers for Disease Control and Prevention.

Questions asked on the Virginia survey are directly comparable to the standardized questions asked in other states.



Figure 1. Percentage of Middle School and High School Students in Virginia who Currently Smoke: 2001 to 2013

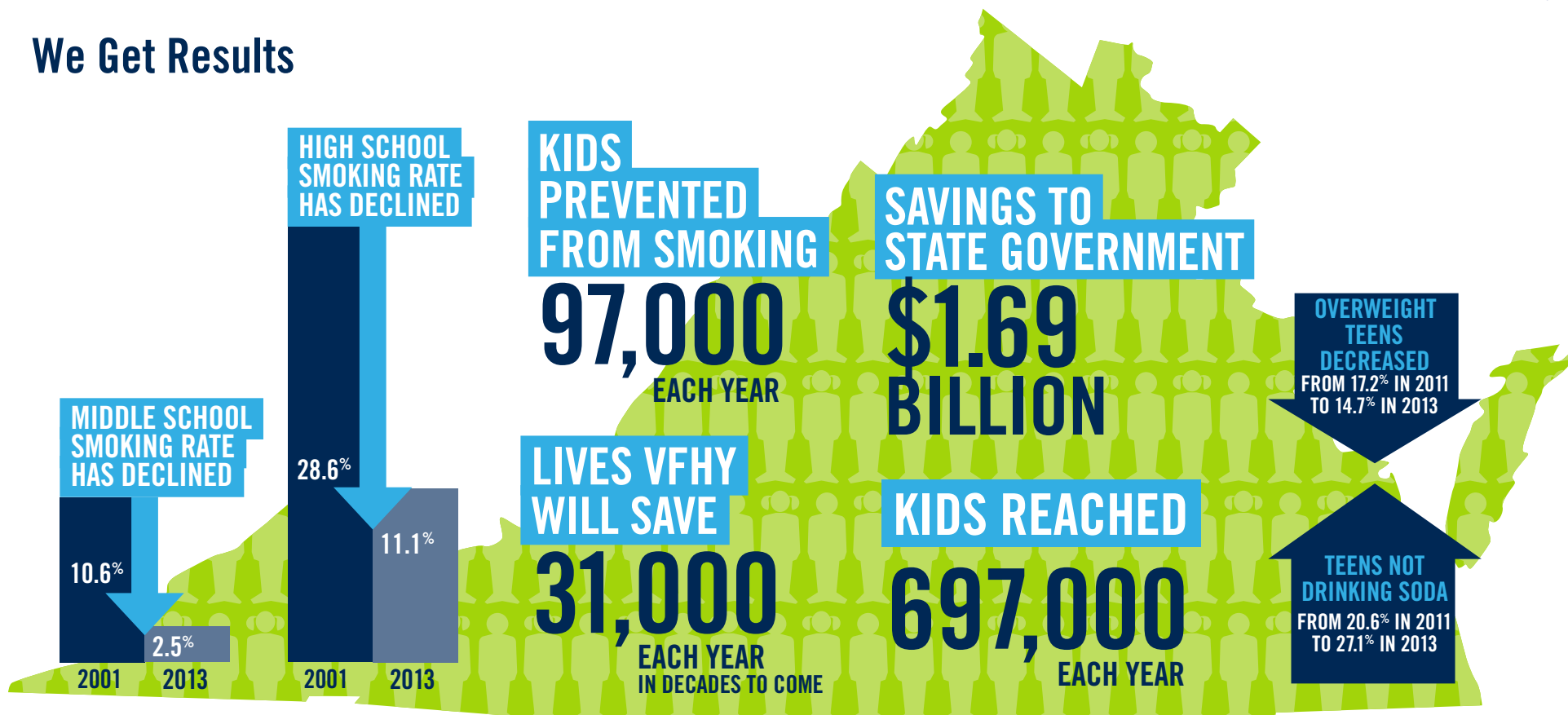


Source: Virginia Department of Health and Virginia Foundation for Healthy Youth Virginia Youth Survey, 2013





We Get Results



We Have More Work to Do

- 7,300 KIDS** UNDER AGE 18 ARE BECOMING SMOKERS EACH YEAR
- 110,878** OBESE AND OVERWEIGHT HIGH SCHOOL STUDENTS
- TAXPAYERS PAY \$3.11 BILLION** IN SMOKING-RELATED HEALTH CARE COSTS
- 5,000 YOUTH** DIAGNOSED WITH TYPE II DIABETES EACH YEAR NATIONALLY

Marion Nestle, the Paulette Goddard Professor at New York University's Department of Nutrition, Food Studies, and Public Health, delivered the keynote address at VFHY's fourth Weight of the State childhood obesity prevention conference, which was held in April 2015 in Richmond. Nestle's award-winning books include "Food Politics: How the Food Industry Influences Nutrition and Health."

Hundreds of prevention, education, health and medical professionals from across the Commonwealth attended the conference, which showcased the latest approaches in childhood obesity prevention and control. National, state and local presenters shared cutting-edge tactics for reducing and preventing obesity, including community-based approaches and policy changes.

Also during the conference VFHY released the results of a new survey examining Virginians' access to fresh fruit and vegetables. The survey was conducted by VFHY's nationally recognized volunteer group for high school students, Y Street, as part of its Fresh Spot campaign to increase the availability of fresh and healthy foods to all Virginians.

Survey respondents indicated that 28 percent of Virginians have difficulty finding fresh fruits and vegetables to purchase in their communities. More than 2,700 Fresh Spot surveys were collected in 169 Virginia communities between November 2014 and March 2015 by youth members of Y Street. The Fresh Spot survey also examines Virginians' demand for fresh and healthy food.

"In today's busy times, eating healthy can be a challenge," says Virginia Foundation for Healthy Youth Director of Marketing Danny Saggese. "Many communities in Virginia have only one major supermarket or large grocery store, making it difficult to find fast and convenient healthy food options. The Fresh Spot campaign unites Virginians across the state in asking stores to make healthy shopping easier for themselves and their families. Currently, two-thirds of Virginian shoppers say they want to improve their health, but only half of shoppers feel their local grocery stores help them make healthy choices."





CHILDHOOD OBESITY PREVENTION

First Lady of Virginia
Dorothy McAuliffe
participated in a Farm to
School kickoff event held at
J. Blaine Blayton Elementary
School in Williamsburg in
October 2015. VFHY helped
coordinate the event with
the Virginia Department of
Agriculture and Consumer
Services, Williamsburg-
James City County Public
Schools and the Virginia
School Nutrition Association.



The Virginia Foundation for Healthy Youth’s obesity prevention efforts emphasize policy and environmental strategies to make healthy eating and active living accessible for everyone. Through our work, VFHY is playing a leading role in creating communities that support healthy kids and healthy living. Since expanding the agency’s mission to include childhood obesity prevention, VFHY has served as a catalyst for partnership and collaboration, focusing on local, regional and state organizations with a commitment to reduce and prevent childhood obesity.

Through our Healthy Communities Action Teams (HCATs), VFHY has invested in community-led obesity prevention activities by using a team-based approach and promoting evidence-based practices from the Institute of Medicine. HCATs serve as coordinators and conveners for local activities and build momentum around increasing access to healthy foods, promoting physical activity and preventing childhood obesity. Stories from VFHY’s HCATs demonstrate that creating healthier environments leads to healthier behaviors. For example, VFHY-funded HCATs working to improve the built environment have demonstrated that students are more active when there are safe streets, sidewalks and crosswalks to walk or bike to school.

VFHY utilizes innovative approaches to address childhood obesity by creating state-wide campaigns to increase awareness and promote healthy eating and physical activity. VFHY celebrates Healthy Youth Day each January to promote increased physical activity, better nutrition and tobacco-free living for children. To increase awareness on the health impacts of sugar-sweetened beverages, VFHY and partners throughout the state celebrate Rev Your Bev Day in May. Also in May VFHY promotes Screen-Free Week, encouraging youth and families to get unplugged from televisions, computers and electronic devices and find fun ways to be physically active. And to focus attention on the issue of childhood obesity VFHY recognizes Childhood Obesity Awareness month each September. During the month VFHY highlights grantee success stories and this year provided a toolkit for schools and communities to use as a resource for their own Childhood Obesity Awareness Month celebrations.



“How can we expect Virginia’s children to be hungry to learn when they are just plain hungry?”

– First Lady of Virginia Dorothy McAuliffe

Healthy Starts with Early Childhood

With more than one in five children ages 2 to 5 years old already overweight or obese, prevention efforts must target our youngest children. Since most young children spend time in care outside of their home, VFHY is partnering with leaders in early childhood to reach children in preschool classrooms and childcare centers. Improving the early childhood education environment directly impacts children’s nutrition and physical activity, as well as helping them develop healthy habits for life. This year VFHY tailored two of its campaigns, Rev Your Bev and Screen Free Week, to early childhood education audiences. In May 2015 more than 100 early childhood education providers across the state celebrated Rev Your Bev Day with customized resources for preschoolers. Early childhood educators led lessons about choosing healthy beverages, read stories about the importance of drinking water and changed their classroom environments by providing fresh water instead of sugary drinks at snack times. To encourage reduced screen time among preschoolers, VFHY released a Screen Free Toolkit for early childhood educators to use to keep children active and to help teachers talk to preschoolers about the dangers of too much screen time from televisions, computers and video games.

Making connections between hunger and obesity

To address hunger and obesity in Virginia, the Virginia Foundation for Healthy Youth has developed new partnerships and explored innovative strategies to find a common solution to both of these issues.

Hunger and obesity are serious public health problems and often can co-exist in the same individual, family or community. More than 311,410 children in Virginia face food insecurity, living in homes with limited access to a dependable food supply. Hungry children are more frequently sick, more likely to be hospitalized and can experience more behavioral and social problems. Perpetuated by limited access to healthy and affordable foods, food-insecure children are at a greater risk of becoming overweight or obese as compared to their more affluent peers. In our state more than 26 percent of high school students and 30 percent of middle school students are overweight or obese.

Bridging the Nutritional Divide

On Nov. 20, 2014, Virginia Gov. Terry McAuliffe signed into effect Executive Order No. 34, creating the Commonwealth Council on Bridging the Nutritional Divide. Chaired by First Lady of Virginia Dorothy McAuliffe, this initiative aims to bridge the nutritional gap in Virginia through key objectives that strive to eliminate childhood hunger. Serving as a member of the council, VFHY is working to support local initiatives across the Commonwealth by enhancing communication, coordinating local efforts and convening partners.

Great Starts with Breakfast

Children in Virginia are not hungry because of a lack of federal child nutrition programs; rather, food insecurity is bolstered by an underutilization of these programs by those eligible. The school breakfast program is one of the most underutilized child nutrition programs, yet eating breakfast is essential for success in the classroom. In Virginia, just 51.3 percent of students receiving free and reduced price lunch also participate in the free- and reduced-price school breakfast program.

In order to support efforts to decrease hunger among Virginia school children VFHY and our Y Street high school volunteer group have partnered with the Office of the First Lady to create the Great Starts with Breakfast initiative. This effort aims to expand availability, accessibility and participation in the school breakfast program. Findings from statewide surveys revealed that being pressed for time is a primary reason cited when students are asked why they don't eat school breakfast and that students would be more likely to eat school breakfast if alternative breakfast models such as breakfast after the bell or grab-and-go breakfast options were available.

Rev Your Bev Day 2015

On May 13, 2015, students, teachers, youth activists, community organizations and health advocates statewide posed a simple question to more than 60,000 Virginians across the state: Do you know what's hidden in your drink?

This question was answered at more than 300 events held across Virginia in celebration of the third annual Rev Your Bev Day – part of VFHY's initiative to raise awareness about the contents of sugary drinks.

"Data collected from Rev Your Bev Day since 2013 has revealed that one in three Virginians, both youth and adults, drink at least one sugar-sweetened beverage each day," says Virginia Foundation for Healthy Youth Obesity Prevention Coordinator Heidi Hertz. "This underscores the need for continued education on sugary drinks and alternative healthy options."

Schools, organizations and businesses participating in Rev Your Bev Day also assisted in a statewide data collection project being conducted by Y Street, the Virginia Foundation for Healthy Youth's award-winning teen volunteer group for high school students.

Sugary drinks remain the top source of sugar and calories in Americans' diets, despite the health impacts; for every additional sugar-sweetened beverage consumed per day, a child's risk of becoming overweight increases by 60 percent.



Virginia Healthy Youth Day

About 450 Richmond-area school children attended VFHY's sixth annual Virginia Healthy Youth Day celebration, which was held on Jan. 20, 2015, on the State Capitol lawn.

First Lady of Virginia Dorothy McAuliffe served as keynote speaker. Students from Chesterfield County middle schools participated in the event, which included exercise sessions with fitness specialists from the YMCA of Greater Richmond and fun smoking prevention lessons from Mad Science of Central Virginia.

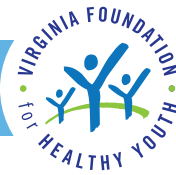
Other dignitaries in attendance included Virginia Secretary of Health and Human Resources Dr. Bill Hazel.

Established by a Virginia General Assembly resolution, Virginia Healthy Youth Day is held every January by VFHY and promotes physical fitness, good nutrition and healthy lifestyles for Virginia's children.

"Virginia Healthy Youth Day reminds us that being physically active should be a year-round goal for Virginia's young people and not limited to just warm summer days," says VFHY Executive Director Marty Kilgore.

"Virginia Healthy Youth Day reminds us that being physically active should be a year-round goal for Virginia's young people and not limited to just warm summer days."
– Marty Kilgore, VFHY Executive Director





VFHY HEALTHY COMMUNITIES ACTION TEAM GRANTS

REGION	GRANTEE	TOTAL GRANT AWARD	FY 2015 PORTION
CENTRAL	Greater Richmond Fit4Kids	\$62,800	\$35,095
	Page County Public Schools - Page Alliance for Healthy Community Action	\$39,000	\$20,565
	Project GROWS	\$63,000	\$36,150
	City of Richmond Department of Social Services - Richmond Health Action Alliance	\$63,000	\$35,050
	Rockbridge Community Services - Rockbridge Area Healthy Community Action Team	\$62,584	\$35,542
	Rockingham Memorial Hospital - Healthy Community Council Obesity Action Team	\$63,000	\$34,984
NORTH	Arlington County Parks and Recreation	\$29,286	\$22,243
	City of Alexandria	\$62,718	\$34,062
	Stafford Junction	\$60,960	\$32,792
	Warren Coalition	\$63,000	\$36,000
SOUTHEAST	Eastern Virginia Medical School- Eastern Shore	\$36,000	\$36,000
	Eastern Virginia Medical School -Hampton Roads	\$36,000	\$36,000
	Halifax United Way	\$36,000	\$36,000
	Middle Peninsula-Northern Neck Community Services Board	\$36,000	\$36,000
	Suffolk Partnership for a Healthy Community	\$36,000	\$36,000
SOUTHWEST	Carilion Medical Center	\$60,700	\$35,134
	LENOWISCO Health District	\$60,437	\$33,915
	Martinsville Henry County Coalition for Health and Wellness	\$60,210	\$32,815
	New River Valley Community Services	\$62,996	\$33,764
	United Way Virginia Highlands	\$61,335	\$35,100



PROGRAMS

Children get a look at the thick, sticky black tar that smoking leaves behind in the body during a VFHY-funded LifeSkills after-school prevention program implemented by Loudoun County Community Services Board at Sugarland Elementary School in Sterling.



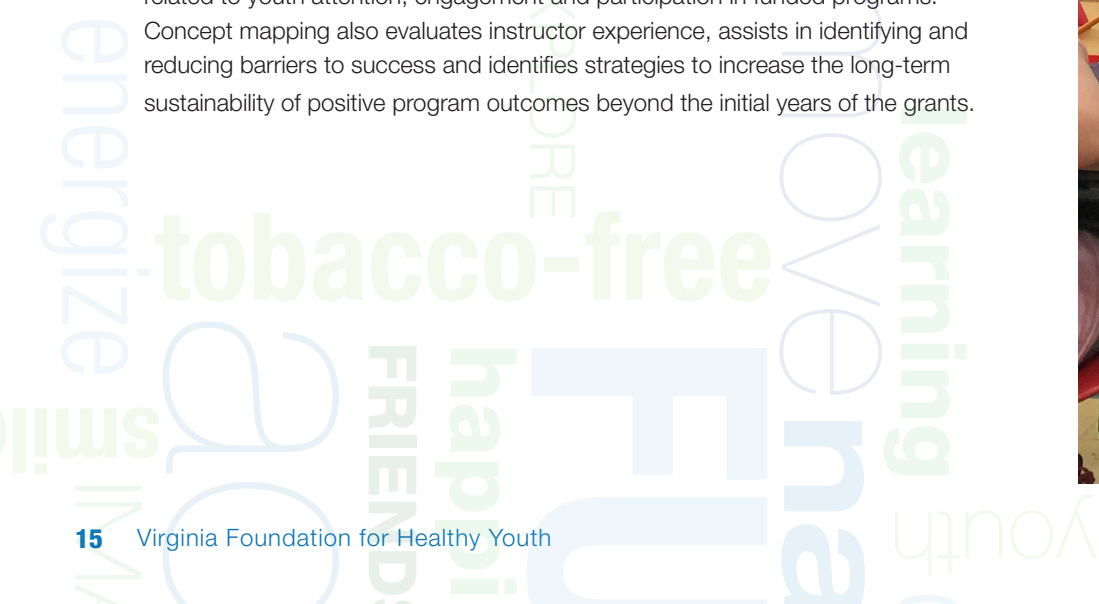
Since 2001 VFHY has reached more than 1 million children with classroom-based tobacco-use prevention and cessation programs in communities across Virginia.

Taught at hundreds of public schools, community centers, faith centers, day cares and preschools statewide, VFHY’s evidence-based educational programs provide direct interaction with children and teens and are a key element in changing youth attitudes and behaviors about tobacco use.

During FY 2015 VFHY served more than 50,000 youth across Virginia through 55 tobacco-use prevention grant programs. Grant recipients included a variety of organizations teaching kids from preschool through high school. VFHY has awarded more than 1,000 such grants since we started our work in 2001.

Program Evaluation

VFHY conducts trainings, site visits and ongoing monitoring to evaluate its community-based grant programs throughout implementation to ensure that each program is being completed as designed. In addition, VFHY contracts with the Virginia Commonwealth University Institute for Drug and Alcohol Studies to conduct concept mapping evaluation of VFHY grant programs for both tobacco-use and obesity prevention. This innovative strategy for program evaluation collects data related to youth attention, engagement and participation in funded programs. Concept mapping also evaluates instructor experience, assists in identifying and reducing barriers to success and identifies strategies to increase the long-term sustainability of positive program outcomes beyond the initial years of the grants.



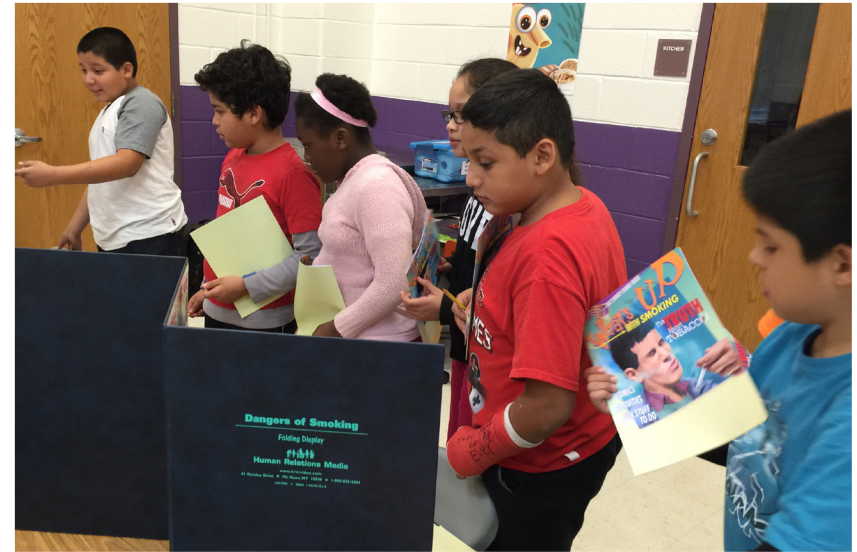
Compendium

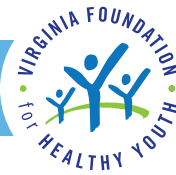
All of the funded grants used programs found in VFHY's Compendium of Tobacco-Use Prevention Programs for Youth. The compendium programs address issues relative to tobacco-use prevention, including primary tobacco-use prevention education, tobacco cessation, early tobacco intervention and reduction, youth empowerment and social-skills building. These evidence-based programs have been recognized by national, state and nonprofit organizations as model, promising or effective tobacco-use prevention programs.

VFHY provides extensive training and technical assistance to help facilitators more effectively reach young people through our compendium programs.

VFHY Compendium of Programs

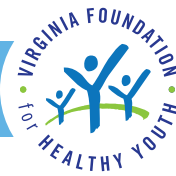
<i>All Stars</i>	<i>Minnesota Smoking Prevention Program</i>
<i>Al's Pals</i>	<i>Not On Tobacco</i>
<i>ATHENA (Athletes Targeting Healthy Exercise & Nutrition Alternatives)</i>	<i>Positive Action</i>
<i>Botvin LifeSkills Training</i>	<i>Project Alert</i>
<i>Creating Lasting Family Connections</i>	<i>Project EX</i>
<i>Helping Teens Stop Using Tobacco (TAP)</i>	<i>Project Toward No Drug Use (TND)</i>
<i>Intervening with Teen Tobacco Users (TEG)</i>	<i>Project Toward No Tobacco Use (TNT)</i>
<i>Know Your Body</i>	<i>Strengthening Families (ages 6-11)</i>
<i>Media Detective</i>	<i>Strengthening Families (ages 10-14)</i>
<i>Media Ready</i>	<i>Too Good for Drugs</i>





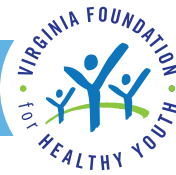
VFHY TOBACCO-USE PREVENTION & CESSATION PROGRAMS THREE-YEAR GRANTS

REGION	GRANTEE	COMPENDIUM PROGRAM	FY 2015 AMOUNT	TOTAL GRANT AMOUNT
CENTRAL	Central Shenandoah Valley Office on Youth	Positive Action	\$60,000	\$180,000
	Chesterfield County Public Schools	Botvin LifeSkills Training	\$60,000	\$180,000
	Hanover Community Services Board	Positive Action	\$51,576	\$151,069
	Horizon Behavioral Health	Too Good For Drugs	\$47,029	\$159,356
	HumanKind	Botvin LifeSkills Training	\$56,937	\$171,385
	Medical Home Plus	Al's Pals	\$59,987	\$179,961
	Orange County Office on Youth	Strengthening Families	\$59,772	\$177,749
	Page County Public Schools	All Stars	\$7,702	\$40,265
	ReadyKids	Al's Pals	\$52,900	\$158,872
	Richmond City Health District	Positive Action	\$28,032	\$98,114
	Rockbridge Area Community Services Board	Too Good For Drugs	\$59,801	\$179,602
	Rockingham Memorial Hospital	Project TNT	\$59,385	\$178,770
	Skyline CAP	Al's Pals	\$32,106	\$101,655
	Southside Area Rural Health Education Center	Al's Pals	\$27,924	\$87,596
	Virginia Rural Health Resource Center	Too Good For Drugs	\$32,295	\$96,990
	YMCA of Richmond	Al's Pals	\$15,319	\$91,904
NORTH	Alexandria Community Services Board	Al's Pals	\$59,735	\$175,729
	Arlington County Community Services Board	Strengthening Families	\$58,907	\$175,413
	Boys & Girls Club of Northern Shenandoah Valley	Positive Action	\$16,942	\$52,744
	Boys & Girls Clubs of Greater Washington	Botvin LifeSkills Training	\$37,896	\$120,288
	Ethiopian Community Development Council	Botvin LifeSkills Training	\$44,927	\$131,740
	Fairfax County Neighborhood & Community Services	Project TNT and TND	\$60,000	\$180,000
	Fairfax/Falls Church Community Services Board	Al's Pals	\$60,000	\$180,000
	Fauquier CADRE	Too Good for Drugs	\$58,280	\$175,266
	Global Wellness Solutions	Too Good For Drugs, Botvin LifeSkills Training	\$61,992	\$179,651
	Loudoun County Mental Health	Botvin LifeSkills Training	\$57,037	\$167,456
	Manassas City Public Schools	Botvin LifeSkills Training	\$22,468	\$68,447
	Smart Beginnings Rappahannock	Al's Pals	\$59,832	\$179,613
	Warren Coalition	Botvin LifeSkills Training, Not on Tobacco (NOT)	\$56,478	\$172,149
	Winchester Public Schools	Too Good for Drugs	\$3,663	\$14,276
Youth Apostles	All Stars Core and Plus	\$38,065	\$112,192	



VFHY TOBACCO-USE PREVENTION & CESSATION PROGRAMS THREE-YEAR GRANTS

REGION	GRANTEE	COMPENDIUM PROGRAM	FY 2015 AMOUNT	TOTAL GRANT AMOUNT
SOUTHEAST	Alternatives	Al's Pals	\$59,886	\$179,772
	Boys & Girls Clubs of Southeast Virginia	Positive Action	\$56,860	\$170,405
	Boys & Girls Clubs of Virginia Peninsula	Positive Action	\$59,460	\$178,664
	Crossroads Community Services Board	Too Good for Drugs	\$52,621	\$178,664
	C. Waldo Scott Center for H.O.P.E.	Too Good for Drugs	\$23,395	\$70,155
	Eastern Shore Community Services Board	Al's Pals	\$59,704	\$179,260
	Hampton Parks and Recreation	Positive Action	\$42,691	\$179,805
	Hampton-Newport News Community Services Board	Botvin LifeSkills Training	\$59,903	\$139,573
	Middle Peninsula-Northern Neck Community Services Board	Botvin LifeSkills Training	\$59,944	\$179,888
	Peninsula Metropolitan YMCA	Know Your Body	\$40,520	\$120,993
	Southside Area Rural Health Education Center	Al's Pals/Botvin LifeSkills Training	\$59,904	\$179,805
	The UP Center	Changing Lasting Family Connections	\$59,910	\$179,820
	Three Rivers Health District	Too Good For Drugs	\$34,520	\$104,441
	William Hunton YMCA	Positive Action	\$60,000	\$180,000
YMCA South Hampton Roads	Positive Action	\$49,223	\$178,509	
SOUTHWEST	Blue Ridge Behavioral Healthcare	Too Good for Drugs	\$42,901	\$126,999
	Galax City Schools	Botvin LifeSkills Training, Youth Media Network	\$32,969	\$95,310
	Henry County Schools	Too Good for Drugs	\$51,726	\$152,408
	Highlands Community Services Board	Botvin LifeSkills Training	\$60,000	\$180,000
	Mount Rogers Community Services Board	Botvin LifeSkills Training, Youth Media Network	\$39,071	\$117,213
	New River Valley Community Services	Toward No Drug Use	\$59,993	\$179,979
	Piedmont Community Services	Too Good for Drugs	\$60,000	\$180,000
	Planning District One Behavioral Health Services	Toward No Tobacco Use	\$14,599	\$42,201
	Pulaski County Public Schools	Too Good For Drugs, Project TND, Intervening with Teen Tobacco Users	\$59,045	\$178,225



CAPACITY BUILDING

Each year VFHY offers capacity building and obesity and tobacco-use prevention program training for grantees and other organizations throughout Virginia. In FY 2015, in collaboration with the Department of Behavioral Health and Developmental Services (DBHDS) and the Virginia Department of Health (VDH), VFHY offered nearly 30 workshops. Through a small registration fee and scholarship funding provided by DBHDS and VDH, all trainings were self-funded. The following organizations and trainers were contracted to provide the listed workshops:

TRAINER	WORKSHOP(S)	AMOUNT PAID
Kim Brown	Promoting Proven Practices and Processes for Sustainable Community-Level Outcomes	\$1,100
Kim Brown and Ginny Hardin	Substance Abuse Prevention Skills Training (SAPST)	\$3,200
Keith Cartwright	Lead & Seed Training	\$800
Janis Dauer	Electronic Cigarettes: What We Know, What We Don't Know, What We Should Do	\$1,600
Alejandro Garcia-Barbon	Effective Tobacco Use Prevention and Cessation Strategies for Youth and Young Adults	\$600
Ted Groves	Using Virginia Kids Count Data to Determine the Well-Being of Children in Your Locale	\$500
Eletta Hansen	Reducing Tobacco Use Among Pregnant Teens and Young Adult Women	\$1,100
Ginny Hardin and Valerie Liggins-Law	Substance Abuse Prevention Skills Training (SAPST)	\$3,200
Steve Hixon	The Culturally Competent Professional: Working With an Open Mind	\$500
Steve Hixon and Keith Cartwright	Substance Abuse Prevention Skills Training (SAPST)	\$1,600
Leading to Change	BOYS WILL BE BOYS: Reaching and Teaching Young Men	\$2,000
	Generational XROADS: When X, Y and Boomers Collide	
	Virtual Realities: Social Networking and Today's Youth	
Valerie Liggins-Law	Grant-Writing: It's a Process and There are No Quick Fixes	\$600
Alayne MacArthur	Spice Up Your Prevention Program: Teaching Strategies and Activities for Engagement	\$1,200
	Engaging Students Who Don't Seem to Care	
	Ways of Asking	
Jim Martin	Planning and Implementing Evidence-Based Tobacco-Use Prevention Strategies	\$800
Cydney Neville	Together We Move! Developing, Managing and Maintaining Effective Community Partnerships	\$600
Rachel Rose	From Time-Out to Outstanding: How Dietary Changes can Improve Children's Overall Health	\$500
Freddie Simons and Keith Cartwright	Substance Abuse Prevention Skills Training (SAPST)	\$1,600



MARKETING

Virginia Lt. Gov. Ralph Northam celebrates tobacco-free schools during the Virginia Beach kickoff of VFHY's statewide 24/7 Tobacco-Free Spirit Day on Nov. 18, 2015, with help from Y Street teen volunteers Brittany Williams and Daryl Anderson of Green Run High School.



Approach

The Virginia Foundation for Health Youth (VFHY) recognizes that not all youth are the same. Some youth will never use tobacco products regardless of VFHY’s efforts. Others are very likely to use tobacco products unless someone intervenes. The latter are our target audience. Reaching these youth requires that we change their knowledge, environment and culture. VFHY’s goals in each of these are:

Knowledge

Educate teens on the health, social and environmental consequences of tobacco use and encourage them to choose to live a tobacco-free lifestyle.

Environment

Encourage community stakeholders and institutions, such as parents, community leaders and schools to reject youth tobacco use, tobacco marketing to youth and tobacco sales to youth and create an environment that encourages tobacco-free lifestyle choices.

Culture

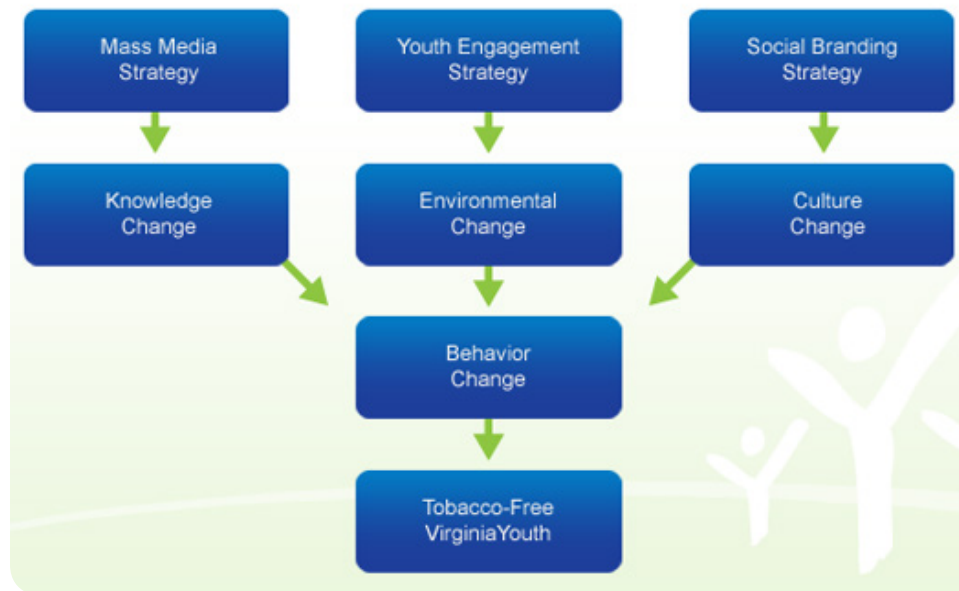
Promote cultural change within the “peer crowd” of every Virginia teen to ensure that living tobacco-free is perceived as a socially desirable choice.

Rather than try to address all three of these domains through a single approach, VFHY recognizes that knowledge, environment and culture are three uniquely important domains for change that require unique strategies. Consequently, VFHY has worked with its social marketing and advertising contractors to identify three separate strategies for these domains as illustrated on the following pages:



PEER CROWD:

Groups of youth who share a combination of fashion, music, language, culture, mannerisms, media consumption habits and other behaviors to define their social identity and differentiate themselves from other groups of youth.



YOUTH ENGAGEMENT

Some youth are proud to be tobacco-free and want to help make their world more tobacco-free. These leaders can contribute significantly to the health of Virginia's youth if their passion can be channeled towards tangible change. Through a hands-on, seven-year process of trying different models of youth engagement, VFHY discovered strategies to engage youth in projects and events that contribute to environmental change. This includes reaching parents, administrators, peers, community leaders and other stakeholders who have the power to change the environments where youth live and make them more conducive to tobacco-free lifestyles.

Youth engagement for tobacco prevention is defined by the Centers for Disease Control and Prevention (CDC) as providing the opportunity for young people to gain the ability and authority to make decisions that help improve the policy environment, change social norms and reduce smoking initiation and consumption in their communities. In 2004 VFHY launched its youth volunteer program, Y Street, to engage youth in changing tobacco-use norms. Over the years, Y Street has evolved constantly to adopt the most cost-effective strategies that engage the largest numbers of youth. In addition, when the Virginia legislature asked VFHY to tackle childhood obesity prevention in 2009, Y Street was the first VFHY program to step up by expanding its scope to include both tobacco-use and childhood obesity prevention.

Today, Y Street is one of the nation's largest and most efficient youth engagement programs, each year training more than 600 new high school students. Combined with youth trained in prior years, more than 8,000 youth have been trained, and they volunteer more than 6,000 hours annually.

The Y Street model simplifies how youth are engaged in changing their environment. First, campaigns are created that focus on clear, short-term goals, such as educating community members about the dangers of flavored tobacco products or the benefits of physical education in public schools. Next, Measures of Progress

(MOPs) are created for each campaign. MOPs are tangible outcomes that document incremental steps towards the campaign's goals, such as testimonials, surveys, message cards, etc. Then, youth volunteers develop events and projects that focus on the completion of these MOPs. Youth are empowered to produce any kind of project or event, allowing them to be creative while at the same time focusing all youth efforts on the overall campaign outcomes. In addition, MOPs help youth volunteers measure the impact of their projects, which keeps them motivated and encourages them to create more effective strategies.

As MOPs build up, Y Street youth volunteers are able to advocate for policy changes, such as preventing tobacco products from being advertised to youth, etc. Through this process, Y Street youth have completed more than 75,000 MOPs, leading to results such as reports on Virginians' opinions of clean indoor air, or Virginians' consumption of sugar-sweetened beverages. Y Street youth volunteers have even been invited to testify before the FDA, present findings at national conferences, and participate in press conferences with the Governor of Virginia and the U.S. Surgeon General.





Y STREET

Since 2004 VFHY's youth engagement program, Y Street, has trained more than 8,000 youth to be agents of change in their communities. Each year a dedicated group of these youth, called Y-Sters, become members of the Y Street Leadership Team (YSLT). Joshua Pritchett is one of the YSLT leaders who work towards Y Street's goal of creating a healthier Virginia.

Joshua joined Y Street as a sophomore from Chesapeake who wanted to make a difference. "I became a part of Y Street to better help my family, but it branched out to where I was helping to inspire my peers as well," he says. Joshua not only inspired his peers, but his reach extended both into the community and on a national scale when the Campaign for Tobacco-Free Kids named him its 2015 Youth Advocate of the Year for the Eastern Region of the United States.

Volunteering for Y Street, Joshua was especially passionate about his work on the 24/7 campaign, which helps school systems become tobacco-free 24 hours a day, seven days a week. Joshua spoke with parents, teachers and members of the community about the importance of tobacco-free schools, collected surveys to gauge the community's understanding of his school division's tobacco-free policy and met with school officials – including his local school board – to offer Y Street's help in providing 100 percent comprehensive tobacco-free school resources. These resources included free tobacco-free signs as well as a free toolkit to help schools implement, communicate and enforce their own 100 percent comprehensive tobacco-free school policy.

"Youth should be the group to take control and try to make change," Joshua says. "If youth are making change, then that will inspire future generations. Being part of your community is its own reward. Y Street puts forth that effort to ensure a healthier Virginia, especially for its youth."

"Youth should be the group to take control and try to make change."

– Joshua Pritchett, Y Street Leadership Team member

CULTURE CHANGE

Adults often cite “peer pressure” as the reason youth begin to smoke. But in reality, the reasons are more complicated than that. Few youth experience an isolated incident where one youth pressures him or her to smoke a cigarette. Instead, youth are more likely to experience an internalized pressure to use tobacco products from their peer crowd as a whole. When they believe smoking is the norm in their culture, they begin to feel the pressure to adopt the behavior. But peer crowds aren’t all bad; some promote tobacco-free norms. Consequently, VFHY has focused on identifying the peer crowds that are associated with tobacco use and then uses Social Branding strategies to change the norms within those peer crowds to promote tobacco-free lifestyles.

Making tobacco use uncool eliminates a young person's desire to use tobacco products. But that's easier said than done. Changing cultural norms among young people requires penetrating their peer crowd in an authentic manner. To do this, VFHY first has to identify and understand the most common peer crowds in Virginia and determine which of these niche youth cultures are most likely to use tobacco products.

With the help of its contractors Rescue Social Change Group and Market Decisions Health Care Research, VFHY has collected ongoing data on the most common peer crowds in Virginia. Five peer crowds are present in nearly every high school and each has a different tobacco-use rate.

Changing the norms within each of these peer crowds requires strategies that are tailored to the unique images, language and media that define their culture. Using Rescue Social Change Group's Social Branding model, VFHY reaches these high-risk teens in their own social venues in order to associate being tobacco-free with the situations where tobacco use is most likely to occur. In addition, Social Branding campaigns recruit influencers from each peer crowd and train them on tobacco control facts and messages, creating change agents within each high-risk culture.

VFHY began this strategy with the Alternative and Country/Rural peer crowds, which exhibit higher smoking rates than some other peer crowds. The SYKE and Down & Dirty campaigns target the Alternative and Country/Rural peer crowds, respectively, by hosting youth events, conducting social media campaigns, sending direct mail and training influencers. Recently the Fresh Society campaign was created to reach the Hip Hop peer crowd, another influential, at-risk group in Virginia.

Collectively, these strategies strive to create change from within each peer crowd, reducing the pressure for current and future teens within those peer crowds to use tobacco products.



KNOWLEDGE/MASS MEDIA

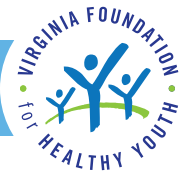
No other strategy reaches as many people as comprehensively as mass media advertising. Through TV, radio, outdoor and social media, VFHY reaches youth in every corner of the state. In addition, advertising campaigns have been proven by the Centers for Disease Control and Prevention (CDC) to reduce youth tobacco use. Consequently VFHY uses a mass media advertising approach to spread knowledge to young people statewide.

VFHY's award-winning advertising campaigns prioritize messages and media channels that evidence shows are most likely to reach at-risk teens. To select messages, VFHY first identifies which new piece of knowledge has the potential to

change behavior. Then, creative ideas are developed to present the selected message in the most effective manner possible. VFHY repeats this process every six to eight weeks by creating a new campaign with new advertisements to ensure that messages are refreshed often, constantly piquing the interest of high-risk teens.

In addition to mass media, each campaign is also promoted through Facebook, YouTube, Twitter and Instagram. These social media channels have proven to be the most popular among Virginia teens, allowing VFHY to communicate directly with teens. During each campaign VFHY has interactions with hundreds of teens through comments and direct messages. Each conversation deepens the brand's message and allows VFHY to interact with even the most skeptical high-risk youth.





RESEARCH AND EVALUATION

Ensuring VFHY's marketing efforts are effective is just as important as implementing them over time. VFHY develops and improves these strategies using comprehensive research with current and likely tobacco users. Then VFHY tracks and evaluates each effort through a comprehensive evaluation model that monitors statewide youth tobacco use.

The original *ydouthink* advertising campaign was based on the most extensive youth marketing research ever conducted in Virginia. VFHY continues to study and survey tobacco-related attitudes among Virginia middle and high school students, aiding us to further understand the associations between identity and tobacco use for individuals in the different peer crowds of youth existing in Virginia.

CONTRACTORS

VFHY currently works with numerous contractors for its marketing campaign, with the following FY 15 expenditures:

Market Decisions Research (\$13,400)

Market Decisions Research was founded in 1977 and has served clients in 25 states. They conduct large-scale telephone surveys, mail/paper surveys, online surveys and focus groups for health care providers and government. MDR has been active in tobacco cessation and prevention evaluation since 2001 and has conducted both telephone and in-school paper surveys on tobacco-use prevalence and obesity for VFHY since 2009. Learn more at marketdecisions.com.

Barber Martin Advertising (\$1,587,491)

Barber Martin Agency, one of the most stable and well-respected advertising agencies in Virginia, has served as the VFHY's creative and media strategy partner for several years. Founded in 1988, the agency was built almost exclusively with retail clients, which provides great experience, because in retail, results are everything. Barber Martin's track record of achieving results is part and parcel of its core competencies – strategic brand development, digital integration, print, television, radio, media planning and placement, out-of-home, new media and social media. Learn more at BarberMartin.com.

Rescue Social Change Group (\$1,338,325)

A VFHY contractor since 2004, Rescue Social Change Group is a social marketing agency focused exclusively on behavior change programs. Rescue SCG developed the Social Branding and Outcome Oriented Youth Engagement models utilized by VFHY and manages their implementation through the Y Street, Syke, Down & Dirty and Fresh Society programs. Learn more at rescueSCG.com.

Virginia Broadcast Solutions

Virginia Broadcast Solutions (VBS) is a unique Media Buying Service offered by the Virginia Association of Broadcasters. VBS works only with nonprofit organizations and Virginia government agencies on the development and implementation of powerful, effective and cost efficient media outreach programs. In addition to the strong relationships we have with 250 member broadcast radio and television stations, VBS also regularly works with a large number of media companies that include other types of traditional and new online digital/social media.

MEE Productions (\$29,900)

Founded in 1990, MEE is a nationally-recognized public health communications, market research and social marketing firm that specializes in developing cost-effective, cutting-edge and culturally relevant messages for hard-to-reach, low-income and underserved audiences. MEE designs effective behavioral-health interventions to motivate and educate underserved communities around a number of public health and social issues.



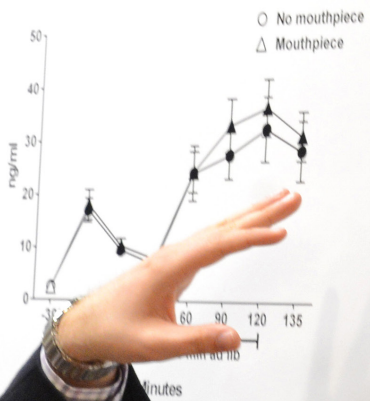
Introduction

- The efficacy with which ECIGs deliver nicotine varies. ECIGs are capable of delivering cigarette-like doses of nicotine (Spindle et al., 2015; Vansickel & Eissenberg, 2013). However, some ECIGs may deliver little to no nicotine to the user (Nides et al., 2014; Vansickel et al., 2010).
- User inhalation behavior (puff topography) may help explain how much nicotine an ECIG delivers, as several topography outcomes (e.g., puff volume, duration) have been shown to influence cigarette smokers' nicotine exposure (Zacny et al., 1987).
- Understanding of the relationship between puff topography and nicotine delivery is important for determining the likelihood that nicotine-naïve populations like adolescents will use and potentially abuse ECIGs.

Purpose

To the extent to which a mouthpiece-based measurement system interferes with ECIG nicotine delivery and liquid nicotine concentration (+/- SEM) from 22 experienced ECIG users using their preferred device and liquid nicotine strength/flavor in two sessions that differed by whether a mouthpiece-based topography system was attached to the ECIG. The filled symbols indicate that VAS scores after the directed and ad lib bouts were significantly reduced independent of condition, as represented by the filled symbols.

Results: Plasma Nicotine



Results: Subjective Effects

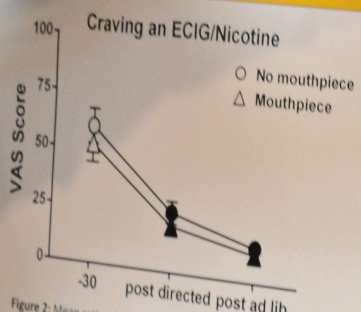


Figure 2: Mean ratings (+/- SEM) for a visual analog scale (VAS) item assessing "Craving an ECIG/Nicotine" from 22 experienced ECIG users using their preferred device and liquid nicotine strength/flavor in two sessions that differed by whether a mouthpiece-based topography system was attached to the ECIG. The filled symbols indicate that VAS scores after the directed and ad lib bouts were significantly reduced independent of condition. These observed reductions in "craving" were

Results: Puff Topography

	Duration (s)	Volume (ml)	Flow Rate (ml/s)
ECIGs (directed bout)	4.2 (1.1)*	122.7 (87.3)*	29.0 (21.1)*
Tobacco Cigarettes	1.4 (0.4)	51.3 (19.2)	38.0 (9.7)

Table 1: Mean (SD) puff parameters for present study N=22, and for previously published study with tobacco cigarettes (Kleykamp et al., 2008; N=123). Asterisks (*) Denotes significant difference from cigarette smokers.

T = topography condition	Duration (s)	Volume (ml)	Flow Rate (ml/s)
Directed bout (T)	4.2 (1.1)*	122.7 (87.3)	29.0 (21.1)
Ad lib bout (T)	6.11 (4.1)	148.3 (123.5)	27.4 (26.1)

Table 2: Mean (SD) puff parameters for present study N=22 for directed and ad lib bouts. Asterisk (*) Denotes significant difference between bouts.

Discussion

- ECIG use influenced plasma nicotine concentration and subjective effects similarly, independent of whether the mouthpiece-based topography device was present.
- ECIG users in the present study took significantly longer, larger, and slower puffs compared to cigarette smokers from a previous study. These ECIG users' observed puff durations are consistent with previous findings (e.g., Farsalinos et al., 2013).
- Also consistent with previous research, participants were able to obtain cigarette-like doses of nicotine after just 10 puffs from their preferred device and were able to far exceed the amount of nicotine often obtained from one cigarette when using their device without restriction.
- The relatively high amounts of nicotine delivered to these ECIG users suggests that ECIGs have the potential to foster nicotine dependence in vulnerable populations such as nicotine-naïve adolescents.

Grant Support

This research was supported by the National Institute on Drug Abuse of the National Institutes of Health under Award Number P50DA036105 and the Center for Tobacco Products of the U.S. Food and Drug Administration. The content is solely the responsibility of the authors and does not necessarily represent the views of the NIH or the FDA.

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RESEARCH

Tory Spindle, a doctoral student at Virginia Commonwealth University's Center for the Study of Tobacco Products, discusses a poster presentation during the Virginia Youth Tobacco Project's 2015 triennial research conference, funded by VFHY.





What Social and Molecular Factors Drive Nicotine Preference in Adolescent Mice?



Grant Award Amount (FY15): \$118,131

Principal Investigator: Karl Fryxell, Ph.D., School of Systems Biology

Collaborating Partner: Virginia Commonwealth University

Researchers at GMU are investigating the relationship between stress, social isolation and adolescent nicotine use. In addition to behavioral assays, their research focuses on the D2 dopamine receptor, which plays key roles in all drugs of abuse and which they have previously shown has an adolescent-specific response to nicotine exposure. The researchers are also investigating the adolescent functions of the Cd81 gene, which they have previously shown is able to limit voluntary nicotine consumption and stress reactivity in adult mice.

Behavioral tests of nicotine preference

The research team has purchased and set-up a Coulbourn automated system for measuring nicotine consumption in two-bottle tests. This required some modifications to ensure that the water spouts were low enough to be easily accessible to adolescent mice. To ensure that the drinkometers would not be aversive to adolescent mice, the researchers wound up using an optical rather than electrical detection. They have also written and tested computer software to record and analyze the results. It ultimately proved to be necessary to transfer the mouse colony and experimental apparatus to the Krasnow Institute (a separate building on the GMU Fairfax campus), and to revise our IACUC protocol (which is in progress).

mRNA assays of D2 gene expression in adolescent mice

The assays of D2 mRNA levels in male adolescent mice showed that their responses to the first dose of nicotine differed significantly between right vs. left prefrontal cortex. The researchers have now analyzed mRNA levels in additional brain areas of both male and female adolescent mice. The results showed that the mRNA levels of both D2L and D2S isoforms were higher on the right sides of the brain areas assayed (medial prefrontal cortex, ventral striatum, and ventral tegmentum) in both adolescent male and adolescent female mice. There were significant sex differences in lateralization, with greater lateralization in saline controls among the females, and greater

lateralization in the gene expression responses to nicotine among the males. Taken together, the results show that the mesolimbic dopamine system is lateralized, and suggest that this lateralization may play a role in the initiation of nicotine dependence in adolescents. Researchers also note that the acquisition of morphine dependence is also lateralized (*Glick et al., 1992*).

Protein assays of D2 gene expression in adolescent mice

The researchers at GMU have completed the nicotine dosing, sacrifice, dissection, and protein extractions for these experiments. Control experiments showed insufficient sensitivity on nitrocellulose membranes with an HRP (diaminobenzidine) label, and so they have shifted to PVDF membranes with a chemiluminescent (alkaline phosphatase) label. This required purchasing and setting up a new cooled CCD camera, and trouble-shooting its software. They also purchased a portable darkroom for this camera, then had to trouble-shoot multiple light leaks into this enclosure. The researchers also found that nonfat dry milk, which is used by most labs as a carrier protein in these experiments, interferes with our secondary antibody (donkey anti-goat IgG), presumably due to the presence of traces of bovine IgG in the dry milk. Therefore they have switched to gelatin (from fish skin) as a source of carrier protein that does not contain any mammalian herbivore IgGs. Although these development steps have taken longer than anticipated, the GMU researchers are excited about the prospects for quantifying how nicotine stimulates the turnover of D2 dopamine receptors in adolescent mice.

Virginia Youth Tobacco Projects Research Coalition Core



Grant Award Amount (FY15): \$149,989

Principal Investigators: Robert L. Balster, Ph.D., Alison Breland, Ph.D., J. Randy Koch, Ph.D., Institute for Drug and Alcohol Studies

Collaborating Partners: Virginia Youth Tobacco Projects Research Coalition – The College of William & Mary, George Mason University, Virginia Tech, James Madison University, University of Virginia, Old Dominion University, Virginia State University, and Virginia Commonwealth University

With funding from the Virginia Foundation for Healthy Youth (VFHY), the Virginia Youth Tobacco Projects (VYTP) Research Coalition was established in 2002 to advance the prevention of youth tobacco use through an integrated program of basic



and applied research, research translation and dissemination. The VYTP Research Coalition was funded for an additional three years (under the title of the VYTP Research Coalition Core) beginning July 1, 2012, to continue its successful efforts of the previous nine years.

Major accomplishments for the past year include:

The VYTP's fifth triennial conference on youth tobacco use. Titled The Future of Tobacco Control: Implications for the Prevention of Youth Tobacco Use in Virginia the conference was attended by 121 people representing universities, community-based prevention programs and government. Beginning with a welcome by Secretary of Health and Human Resources William A. Hazel Jr., the conference featured keynote and plenary panels on wide variety of topics of critical importance to the prevention of youth tobacco use, including the controversial topic of regulating electronic cigarettes, current initiatives of the FDA's Center for Tobacco Products, the Institute of Medicine's new report on raising the minimum age to purchase tobacco products and the use of technology in tobacco-use prevention programs.

The annual meeting of the VYTP Research Coalition was held on Jan. 8, 2015, and featured presentations on the five VYTP-funded small research projects for the FY 2013-15 grant period. In addition, a workshop was conducted by Dr. Thomas R. Kirchner, New York University School of Public Health on Ecological Momentary Tobacco Control. EMTC is a new technology that uses real-time data collection to assess participants' behaviors and environments to assess participant's tobacco use. The meeting ended with several brief presentations by graduate students and post-doctoral fellows as part of our effort to encourage the next generation of youth tobacco researchers.

Overall, the VYTP Research Coalition has been extremely successful in building a strong program of research on the causes and prevention of youth tobacco use. It has facilitated the entry of both junior and senior researchers into this field of research and stimulated collaborations across institutional and disciplinary boundaries. Its success can also be seen by the tremendous productivity of its participating faculty, who in FY15 submitted more than 10 grant applications, published or submitted for publication more than 60 manuscripts and made more than 30 conference presentations on youth tobacco use.

Exercise and Environmental Enrichment to Prevent Nicotine Addiction in Adolescent Males and Females



Grant Award Amount (FY15): \$149,997

Principal Investigators: Darlene H. Brunzell, Ph.D., Department of Pharmacology and Toxicology Co-Investigator: Wendy Lynch, University of Virginia

Collaborating Partners: University of Virginia

Cigarette smoking is the leading preventable cause of death in the United States, followed closely by obesity. Most smokers initiate tobacco use during adolescence or young adulthood. The researchers previous studies showed that only two hours of exercise available during a nicotine abstinence period significantly reduced relapse of male rats to nicotine-seeking when compared to rats that were sedentary during abstinence (*Sanchez et al., 2013*). They also found that female adolescent rats relapsed to nicotine seeking at equally low levels in the exercise and sedentary groups (*Sanchez et al., 2014*). To parse out the relative effect of exercise versus the effect of enriched environment, an extra group of animals was added that had no access to a wheel during the "quit period." Females benefited from having a running wheel in their cage even if it was locked, suggesting that environmental enrichment, as well as exercise, reduces nicotine seeking in females. Interestingly, this is consistent with reports in teens which show that girls enrolled in an after-school program showed a significant improvement of smoking cessation independent of exercise, whereas boys only showed better quit rates if they were engaged in physical activity. The studies in rodents suggest that there is an underlying biological mechanism which dictates the benefits of exercise on potential to quit. The researchers have found that nicotine and exercise have similar effects on brain signaling, suggesting that exercise may act as a healthy substitute to smoking or vaping.

As the best prognosis for tobacco cessation is to never begin smoking, a primary goal of these studies was to determine if exercise and/or environmental enrichment would prevent initiation of nicotine use in adolescent male and female rats. Adolescent rats were given two-hour access to a running wheel (exercise group) or a locked wheel (sedentary group) prior to daily nicotine self-administration, an animal model with good predictive validity for smoking. The findings were striking in that none of the animals that exercised initiated nicotine self-administration while 75% of the sedentary group

initiated by the end of the 15-day testing period. These results indicate that exercise is a far more effective prevention method than could have been predicted. These preclinical studies suggest that physical exercise may have an unexpected benefit to prevent initiation of tobacco use in teens.

The researchers examined the potential mechanisms for the efficacy of exercise at reducing nicotine-seeking focusing on its effects on structural plasticity in the reward pathway. Electron microscopy histological examination of synapses revealed a positive association between levels of nicotine-seeking and volumetric density of asymmetric synapses onto dendrites in nucleus accumbens core region. Interestingly, exercise during abstinence not only attenuated subsequent nicotine-seeking but also normalized the volumetric density of asymmetric synapses onto dendrites. They will next determine if levels of neurotrophins and cytokines predict the effectiveness of exercise in preventing the initiation of nicotine self-administration using blood samples that were collected prior to the first three self-administration sessions. Researchers have also begun parallel exercise studies in mice in order to benefit from transgenic and knockout technologies that manipulate nicotinic receptor expression. These studies will enable the researchers to determine the contributions of specific nicotinic receptor subunits to vulnerability to nicotine use during adolescence as well as to determine nicotinic receptor subtype contributions to exercise-related protection against nicotine use and relapse during adolescence.

Reducing Teen Tobacco Use Via Text Messaging: Motivational Interviewing Integrated with Social Network Counseling



Grant Award Amount (FY15): \$149,958

Principal Investigators: Michael Mason, Ph.D., Department of Psychiatry, Commonwealth Institute for Child and Family Studies

Collaborating Partners: Richmond Behavioral Health Authority

The purpose of this study is to test an innovative intervention that seeks to interrupt tobacco use of a sample of Virginia youth using evidence-based messaging delivered via mobile phone text messages, and to characterize the geographic nature (density/distance) of tobacco-selling outlets in relation to participating adolescents' routine

locations and examine the effects on tobacco use over time. Researchers will recruit 200 Richmond adolescents (ages 14-18) and randomize them to control or treatment groups. The participants will complete Ecological Momentary Assessments (EMA) every month and three follow-up assessments over six months

Subject recruitment/enrollment began in May 2013 and finished recruiting in August 2014. Researchers employed a respondent-driven sampling plan, where participants could recruit up to three eligible friends for compensation. This method produced a steady flow of eligible participants into the study. Subjects were randomized into either the treatment group, who received interactive motivational interviewing with social network counseling text message interventions, or to the control group, who received general health information text messages. The control group text messages were matched in number to the intervention group. Each subject completed a baseline "full battery" online survey, received text interventions the first week after their enrollment, and completed ecological momentary assessments (EMA) – brief phone-based survey every month and completed follow-up surveys at one, three and six months post-treatment. The first wave of EMAs started in the second week of June 2013 and the final wave of EMA concluded in the third week of February 2015.

Utilizing repeated measures general linear models they examined the effects of the intervention while controlling for race, gender, age, presence of a smoker in the home and mental health counseling. At six months the experimental condition decreased the number of days smoked cigarettes ($p < 0.05$) number of cigarettes smoked per day ($p < 0.01$), increased intentions not to smoke in the future ($p < 0.05$), increased peer social support among girls ($p < 0.05$), and for boys, reduced the number of close friends in their networks who smoke daily ($p < 0.05$) compared to controls. Effect sizes ranged from small to large. These results provide encouraging evidence of the efficacy of text messaging interventions to reduce smoking among adolescents and holds promise as a large-scale public health preventive intervention platform.

The initial analyses indicated that this intervention had a positive effect on participants, and the analyses from the full sample have continued to support and reinforce this. This brief, novel intervention positively impacted adolescents' tobacco use, social support and intentions to use tobacco in the future. Given that text-messaging is common among adolescents, protects privacy, is easily available and inexpensive, this intervention holds great potential in benefitting Virginia youth.

The researchers at VCU are excited to continue to further develop this intervention. In the future, they want to examine the utility and impact of expanding the intervention in both length of time and personalization. Given the intervention's impact on adolescent smoking when it went only for five days, they are interested to learn how it would impact adolescent smoking over a longer time frame, with more personalization and being adaptive to the teen's current tobacco use.

Can Parents Help Prevent Youth Tobacco Use? An Evaluation of Two Evidence-based Parenting Programs



Grant Award Amount (FY15): \$150,000

Principal Investigators: *Rosalie Corona, Ph.D., Department of Psychology, VCU Clark-Hill Institute for Positive Youth Development*

Collaborating Partners: *Richmond City Public Schools*

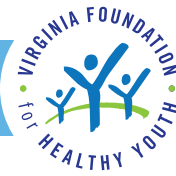
The overall goal of the proposed project is to determine the effectiveness of an evidence-based parent-focused program (Staying Connected with Your Teen) for decreasing adolescents' tobacco use, intentions to use tobacco and other risk behaviors by increasing parental monitoring, improving parent-adolescent communication about tobacco use and the parent-child relationship in a sample of youth referred for truancy. The current project has several strengths including a focus on an understudied group of high-risk youth (i.e., youth who are truant) and has potential to contribute to the national and local discourse on youth tobacco prevention. Findings from this study could provide the local community with a new strategy for preventing tobacco use (i.e., self-directed programs) and also ways of engaging families in youth tobacco prevention efforts (i.e., using motivational interviewing techniques to increase families' readiness for change).

Key findings:

To date, the researchers have collected baseline data from a total of 115 families (53 in the intervention group and 62 in the control group). Of the 115 families, 94 families have been eligible for their three-month assessment: 56 families completed the three-month assessment (24 intervention, 32 control), one family is currently scheduled for their three-month assessment, eight are currently being recruited, and 29 declined or were ineligible. Seventy-eight families have been eligible for their eight-month assessment: 43 families completed this assessment (23 intervention, 20 control), one family is scheduled for their eight-month assessment, four are being recruited, and the remaining families (30) declined or were ineligible.

Based on data that was ready for preliminary analysis from 98 families, caregivers ranged in age from 26 to 71 with a mean of 38.43 years. The majority of caregivers were the adolescents' biological mother (91%) and nearly all caregivers who participated were female (99%). A little over half of caregivers (58%) were single and had never been married; and 64% of caregivers had received a high school diploma or attended higher education. Caregivers' reported race/ethnicity included 92% African American, 5% White, and 2% Latino (1% missing data). A majority of caregivers (64%) reported an annual income below \$30,000. Twenty-nine percent of caregivers reported that their child had changed schools in the past year and 36% of caregivers had previously participated in a parenting program. Caregivers also reported on their lifetime substance use: 89% reported using alcohol, 63% used marijuana, 69% used cigarettes, 32% used cigars/cigarillos, 12% e-cigarettes and 58% said they had used tobacco products in front of their children.

Adolescents ranged in age from 11 to 16 years (mean age = 12.97); 25.5% were in sixth grade, 38.8% in seventh grade, and 35.7% in eighth grade. Fifty-four percent of adolescents were male and 79.6% were African American. Twenty-four percent of adolescents had tried smoking cigarettes at some point in their lifetime, 20% ever tried alcohol and 17.3% tried marijuana. In the 30 days preceding the survey, 7% of adolescents reported using cigars/cigarillos.



STATEMENT OF NET ASSETS AND GOVERNMENTAL FUNDS

BALANCE SHEET For the Fiscal Year Ended June 30, 2015

Governmental Funds

Special Revenue

ASSETS:

Cash and cash equivalents held by the Treasurer of Virginia (Note 1-A)	\$11,813,761
*Investments Held by the Treasurer (Note 1-B)	\$0
Lease Deposits (Note 2-A)	\$5,966
Undeposited Funds/Prepaid Expenses (Note 2-B)	\$25,000
Capital Assets, net of accumulated depreciation: (Note 3)	\$0
Operating equipment	\$0
TOTAL ASSETS	— \$11,844,727

LIABILITIES:

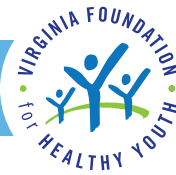
Accounts Payable (Note 4-A)	\$5,248
Accrued Payroll (Note 4-B)	\$87,290
Obligations Under Security Lend (Note 1-B)	\$0
Grants Payable (Note 4-C)	\$665,063
Compensated absences (Note 5)	\$112,782
Total Liabilities	\$870,383

NET ASSETS:

Investment in Capital Assets, net of related debt	\$0
Unrestricted	\$10,974,344
TOTAL NET ASSETS	— \$10,974,344

The accompanying notes are an integral part of the financial statements

* The Commonwealth's policy is to record unrealized gains and losses in the General Fund in the Commonwealth's basic financial statements. When gains or losses are realized, the actual gains and losses are recorded by the affected agencies. VFHY had none for this year.



STATEMENT OF ACTIVITIES AND CHANGES IN FUND BALANCE For the Fiscal Year Ended June 30, 2015

REVENUES:

Master Settlement payments (Note 6)	\$9,350,407
Interest Income (Note 6)	\$0
Proceeds from securities lending transactions* (Note 1-B)	\$0
Grants and other revenues (Note 6)	\$42,527
TOTAL REVENUES	— \$9,392,934

EXPENDITURES:

	Expenses	Adjustments	Net (Expense) Revenue and Changes in Net Assets
Tobacco Settlement Expense:			
Administration (Note 7)	\$970,493	\$0	-\$970,493
Depreciation Expense (Note 3)	\$0	\$0	\$0
Expenses for Securities Lending (Note 1-B)	\$0	\$0	\$0
Marketing (Note 4-C)	\$2,919,132	\$0	-\$2,919,132
Program Expense (Note 8)	\$2,939,359	\$0	-\$2,939,359
Research and Evaluation (Note 9)	\$902,313	\$0	-\$902,313
Obesity (Note 8)	\$1,204,739	\$0	-\$1,204,739
Grant Program Expenses (Note 8)	\$15,000	\$0	-\$15,000
Inter-Agency Expenses (Note 10)	\$65,000	\$0	-\$65,000
State General Fund Transfers Out (Note 11)	\$49,978	\$0	-\$49,978
Total Expenditures	\$9,066,014		-\$9,066,014

Excess (deficiency) of revenue over expenditures — \$326,920

Fund Balance/Net Assets, July 1, 2014 — \$10,647,424

Fund Balance/Net Assets, June 30, 2015 — \$10,974,344

The accompanying notes are an integral part of the financial statements

* The Commonwealth's policy is to record unrealized gains and losses in the General Fund in the Commonwealth's basic financial statements. When gains or losses are realized, the actual gains and losses are recorded by the affected agencies. VFHY had none this year.



NOTES TO FINANCIAL STATEMENTS

As of June 30, 2015

Note 1: CASH, CASH EQUIVALENTS, AND INVESTMENTS

A. Cash and Cash Equivalents

Cash and cash equivalents represent cash in the General Account at the Department of the Treasury. Treasury manages the General Account Investment Portfolio. Information related to the composition of this portfolio is available on a statewide level in the Commonwealth of Virginia’s Comprehensive Annual Financial Report.

B. Securities Lending Transactions

Investments and cash equivalents held by the Treasurer of Virginia represent the Virginia Foundation for Healthy Youth’s (VFHY) allocated share of cash collateral received and reinvested and securities received for the State Treasury’s securities lending program. Information related to the credit risk of these investments and the State Treasury’s securities lending program is available on a statewide level in the Commonwealth of Virginia’s Comprehensive Annual Financial Report. The Commonwealth’s policy is to record unrealized gains and losses in the General Fund in the Commonwealth’s basic financial statements. When gains or losses are realized, the actual gains and losses are recorded by the affected agencies.

Cash with the Treasurer of Virginia..... \$ 11,464,943
 Investments held by the Treasurer of Va. 0

**Total cash, cash equivalents,
 and investments \$11,464,943**

Note 2: LEASE DEPOSITS and RENTS

- A.** VFHY rents office space at 701 E. Franklin for the main office and as of June 30, 2015, had field staff offices located in Blacksburg and Hayes, Virginia.
- B.** Prepaid expenses are any payments made in the current fiscal year for expenses that will occur in the next fiscal year. Un-deposited funds represents funds received for current fiscal year but not in time for completion of deposit process. As of June 30, 2015, VFHY had funds to be deposited totaling \$25,000.

Note 3: CAPITAL ASSETS

Capital assets, which include property, plant, equipment, and infrastructure assets, are reported in the government-wide financial statements. The government defines capital assets as assets with an initial, individual cost of more than \$5000.00 and an estimated life in excess of two years. The Virginia Foundation for Healthy Youth did not procure assets that would meet the capital asset requirements; therefore, they are maintained in an internal inventory control system.

Note 4: LIABILITIES

A. Accounts payable

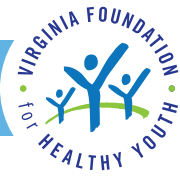
Operating expenses accrued but unpaid as of June 30, 2015, totaled \$5,248.

B. Accrued Payroll

All VFHY employees are paid on a semi-monthly schedule. Accrued payroll expenses of \$87,290 represents work performed prior to June 30, 2015 but registered in FY16 Commonwealth Accounting Reconciliation System.

C. Grants/Contractual payables

The VFHY awarded funding to programs all over the Commonwealth for the prevention of tobacco use and obesity by youths. The VFHY contracted with higher education universities to conduct research, surveys and evaluations on tobacco use and prevention. They also have contracts with marketing agencies to lead a major campaign geared toward youths throughout Virginia on the prevention of tobacco use and childhood obesity. At the end of the fiscal year there were outstanding payables for which VFHY had received invoices in the amount of \$665,063.



NOTES TO FINANCIAL STATEMENTS continued

As of June 30, 2015

Note 5: COMPENSATED ABSENCES

Compensated absences represent the amounts of annual, disability credits, and compensatory leave earned by VFHY employees, but not taken as of June 30, 2015. The \$112,782 represents the balances at the fiscal year end provided by the Commonwealth's leave liabilities tracking program. \$76,990 of the total is determined to be long-term liability, according to the Commonwealth's GASB 34 long-term liability report.

Note 6: REVENUES

The VFHY is funded by receiving 10% of Virginia's share of the Master Settlement Agreement (MSA) negotiated between the various Attorneys General and the tobacco manufacturers in 1998. In FY 2015, VFHY received \$9,350,407 in MSA payments and \$0 in interest payments. VFHY did not receive the full 10% due to legislation that decreased the amount to 8.5% for the fiscal year and due to deposits made into a dispute escrow fund by participating tobacco manufacturers resulting from estimated decreases in market share to non-participating manufacturers. VFHY also received grant funds from VDH to broaden scope of services in community projects for prevention of obesity and tobacco use prevention, and conference and training registration fees from participants that was used to offset expenses.

Note 7: ADMINISTRATION

Administrative costs are all of the operating expenses needed for the maintenance of the VFHY. These include expenses of the Board of Trustees, some payroll (including accrued leave liabilities), rents, utilities, insurances, equipment (repairs, maintenance, rental and purchases), furniture and supplies, postage and delivery, printing, state vehicle fees, some employee travel and trainings. In addition, it includes expenses incurred for professional services provided by private industries such as temporary employees, marketing services, IT service, and website design and maintenance, etc.

Note 8: PROGRAM and OBESITY

Program and Obesity Expenses include funding provided to local organizations to conduct obesity and tobacco-use prevention programs with youth and expenses associated with administering the programs.

Note 9: RESEARCH AND EVALUATION

These expenses include the contracts and agreements with higher education universities in Virginia focused on the research, evaluation of tobacco use prevention programs, evaluation of the statewide marketing campaign as well as the Virginia Youth Survey.

Note 10: INTER-AGENCY EXPENSE

These include expenses incurred as a result of Memorandums of Understanding with agencies such as the Department of Health for fiscal and payroll support.

Note 11: TRANSFERS

Transfers out are to reimburse the General Fund for expenses related to the Office of the Attorney General, Department of Taxation, DGS, DOA, and DHRM.



2015

ANNUAL REPORT

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