

Healthy Decisions



Health
Rocks!®

Healthy Decisions



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Introduction

The world is experiencing a health crisis that can cause catastrophic effects; for youth, these effects are often the result of smoking, binge drinking and illegal drug use. Tennessee has not escaped this crisis, and, in many ways, the crisis is worse in our state than elsewhere. The Centers for Disease Control and Prevention (2011) report the following among Tennessee high school students:

- 12.7 percent have smoked a cigarette before their 13th birthday. This figure is significantly above the national average of 10.3 percent.
- 12.6 percent have used chewing tobacco, snuff or dip on at least one day during the past 30 days before being surveyed. This statistic is significantly above the national average of 7.7 percent.
- 19.7 percent drank, other than a few sips, of alcohol for the first time before their 13th birthday.
- 33.3 percent had at least one drink of alcohol on at least one day during the past 30 days before being surveyed.
- 37.8 percent have used marijuana one or more times during their life.
- 11.6 percent have sniffed glue, breathed contents of aerosol spray cans or inhaled paints/sprays to get high at least once.

Smoking, binge drinking and illegal drug use are particularly harmful for adolescents. Substance abuse among adolescents is linked to depression, unintentional injuries, suicide and homicide. They are at a great risk due to their cognitive and physical stages of development; thus, they are more likely to take bigger risks than adults, often with tragic consequences.

4-H Health Rocks! is a UT Extension program that helps young people resist tobacco, alcohol and other drugs. The program includes a two-part, evidence-based curricula with the beginning level curriculum geared toward youth ages 8 to 12 and the intermediate curriculum designed for youth ages 12 to 14. The program focuses on the skills, assets and knowledge that will serve youth for life. Youth involved in 4-H Health Rocks! learn to make better decisions and are less influenced by peer pressure, media and other emotional factors. Major grant funding for the program is provided by the National 4-H Council.

Reach

From 2008-2012, 63,528 youth participated in and completed at least 10 hours of 4-H Health Rocks! programming. In 2011 and 2012, more Tennessee youth completed the curriculum than in any other state. In 2008 and 2009, the program focused on sixth-12th graders, typically ages 12 and above. However, many teachers, school guidance counselors, volunteers and parents familiar with the program



asked that it be aimed at youth as young as 8 years old. Beginning in 2010, program resources were reallocated to the beginning level curriculum. By 2011, 40.1 percent of participants were fourth graders, and 32.2 percent were fifth graders.

See table below for the demographics of youth reached with the 4-H Health Rocks! program.

Demographics of 4-H Health Rocks! youth in Tennessee (2008-2012)

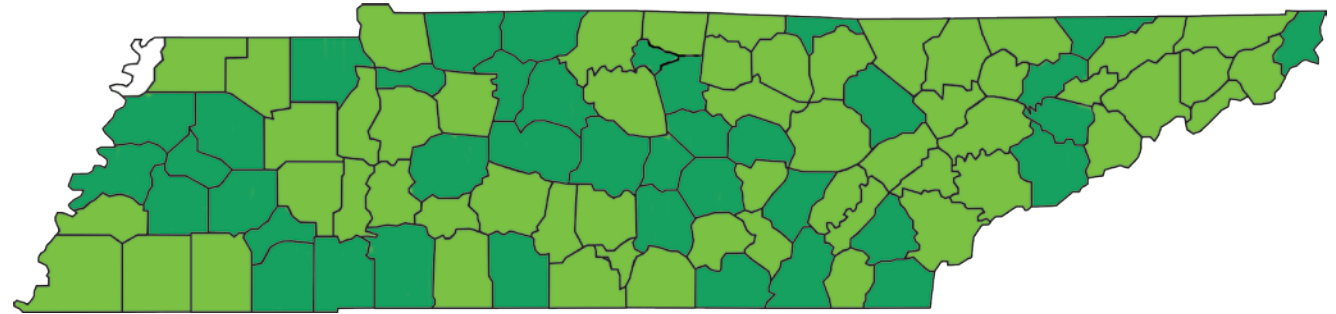
	2008	2009	2010	2011	2012
Total Youth	18,000 (100%)	3,181 (100%)	8,523 (100%)	15,155 (100%)	18,850 (100%)
Gender					
Female	8,622 (47.9%)	1,525 (47.9%)	4,211 (49.4%)	7,860 (51.8%)	9,379 (50.0%)
Male	9,378 (52.1%)	1,656 (52.1%)	4,312 (50.6%)	7,295 (48.2%)	9,471 (50.0%)
Grade					
4 th grade	1,140 (8.0%)	255 (8.0%)	1,705 (20.0%)	6,081 (40.1%)	5,272 (28.0%)
5 th grade	1,350 (7.5%)	238 (7.5%)	1,423 (16.6%)	4,877 (32.2%)	2,102 (11.1%)
6 th grade	4,248 (23.6%)	750 (23.6%)	2,674 (31.3%)	1,391 (9.0%)	3,296 (17.5%)
7 th grade	3,168 (17.6%)	559 (17.6%)	1,747 (20.4%)	1,439 (9.5%)	4,043 (21.4%)
8 th grade	3,006 (16.7%)	530 (16.7%)	943 (11.4%)	1,357 (9.1%)	3,820 (20.3%)
9 th -12 th grades	4,788 (26.6%)	849 (26.7%)	31 (<1%)	13 (<1%)	317 (1.7%)
Race					
African American/Black	6,804 (37.8%)	1,204 (37.8%)	1,674 (20.0%)	3,452 (22.7%)	3,915 (21.0%)
Asian	50 (0.3%)	5 (0.2%)	95 (1%)	169 (1.1%)	206 (1.0%)
Caucasian/White	11,124 (61.8%)	1,966 (61.8%)	6,306 (74.0%)	11,405 (75.2%)	14,216 (75.4%)
Multiracial	10 (<1%)	3 (0.1%)	259 (3.0%)	83 (<1%)	125 (<1%)
Native American	12 (<1%)	3 (0.1%)	66 (1.0%)	4 (<1%)	90 (>1%)
Unknown	0	0	123 (1.0%)	42 (>1%)	298 (1.6%)
Ethnicity					
Hispanic/Latino	720 (4.0%)	119 (3.7%)	364 (4.2%)	363 (2.4%)	887 (5.0%)
Not Hispanic/Latino	17,280 (96.0%)	3,062 (96.3%)	8,159 (95.8%)	14,792 (97.6%)	17,963 (95.0%)

Percentages may not equal 100 percent due to rounding.





Out of 95 Tennessee counties, 94 have offered 4-H Health Rocks! (Lake County does not have Extension 4-H programs.) 4-H Health Rocks! was held in community and 4-H camp settings. The community settings included schools, 4-H clubs, Boys and Girls Clubs, YMCA programs, and after-school programs. The program reach throughout Tennessee counties is shown in Figure 1.



Legend:

- Lake County does not have Extension 4-H programs.
- 4-H Health Rocks! in community setting (2008-2012).
- 4-H Health Rocks! in junior 4-H camps (2011).

Figure 1. 4-H Health Rocks! statewide reach (2008-2012).

Outcomes

In 2011 and 2012, the program reached a combined 34,005 Tennessee youth, who received at least 10 hours of instruction. Youth in this program increased their knowledge about the health risks associated with smoking and other drug use. In addition, they improved skills for leading healthier lives and built assets for productive living. Pre- and post-surveys of 2,307 randomly selected youth participants (7 percent of the total number of participants) were used for program evaluation purposes. Of the 2,307 participants, 1,899 returned completed surveys (and parental consent/youth assent forms) for a response rate of 82.3 percent.

Knowledge

Knowledge of smoking and doing drugs was measured in three areas:

- Knowledge of physical health effects (i.e., death from lung cancer).
- Knowledge of psychotic behavior (i.e., drug use may cause people to see or hear things that are not really there).
- Knowledge of relationship effects (i.e., drug abuse ruins relationships with families and friends).

Knowledge of Physical Health Effects

The percentage of youth who know that people who smoke or do drugs can have serious health issues increased from 81.6 percent before participating in the program to 95.4 percent after completing the program, an increase of 13.8 percent. Nine in 10 youth (92.8 percent) understand now that smoking is addictive, up from 79.8 percent before participating in the program (Figure 2).

“I learned a lot! It was cool, some of the games were fun and funny! I learned some things about smoking and tobacco that I never knew!” — Seventh grade Dyer County participant

“I enjoyed getting to know how drugs, alcohol and tobacco can really slow you down and make you not be able to do things.” — Fourth grade Monroe County participant

“It is amazing about people could [be] so stupid to smoke. I mean it’s ridiculous. Who would want to risk dying? I mean who?” — Fifth grade Anderson County participant

Knowledge of Psychotic Behavior

The percentage of youth who know that people who use drugs can “see or hear things that are not really there” increased from 73 percent before participating in the program to 90 percent after completing the program, an increase of 17 percent (Figure 2).

Knowledge of Relationship Effects

Nine in 10 youth (94 percent) know that using drugs can ruin their relationships with family and friends, compared to 78.6 percent of youth who had this understanding before participating in the program (Figure 2).

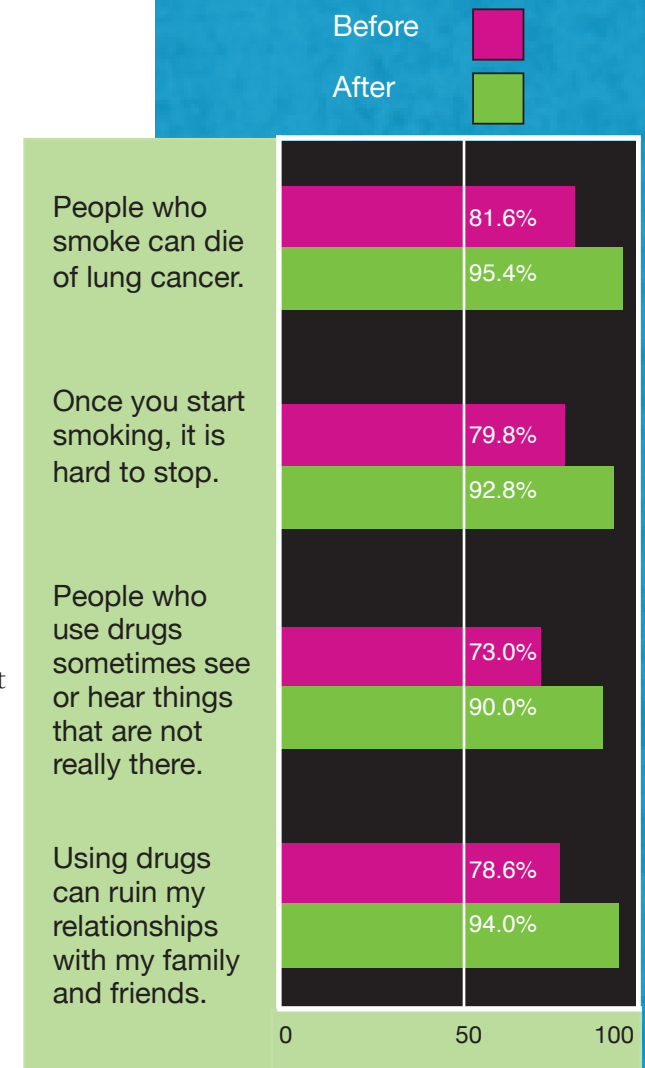


Figure 2. Percentage of youth who agree or strongly agree regarding knowledge of smoking and doing drugs (n=1,899).

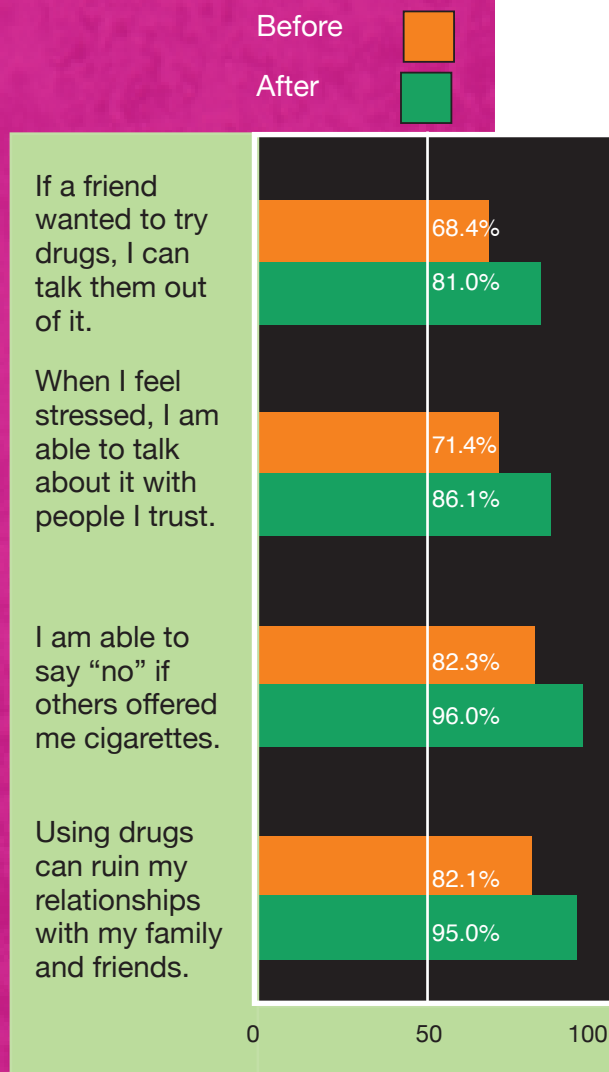


Figure 3. Percentage of youth who agree or strongly agree regarding skills (n=1,899).

Skills

Eight in 10 youth (84 percent) reported that if a friend wanted to try drugs, they could talk them out of it, compared to 68.4 percent of youth before participating in the program (Figure 3).

The program showed a 14.7 percent increase in the number of youth who can talk about their stress with people they trust, from 71.4 percent of youth before participating in the program to 86.1 percent after completing the program (Figure 3).

“I understand more about making decisions.” — Sixth grade Davidson County participant

Regarding peer pressure, the vast majority of participants (96 percent) reported that they can say “no” if others offered cigarettes; this figure represents 13.7 percent more youth who felt that they could say “no” before participating in the program (82.3 percent). See Figure 3.

Similarly, 95 percent of youth reported that they do not have to drink or smoke even if other young people do so, compared to 82.1 percent who felt that way before participating in the program (Figure 3).

“I learned not to do things your friends are doing to be cool. And if they try to get you to do it they aren’t very good friends.” — Sixth grade Cumberland County participant

“I did like learning about bad drugs and never use them even if my friend does it.” — Fourth grade McNairy County participant

Assets

The 2011 survey also examined specific assets that youth may or may not have gained through their participation in 4-H Health Rocks! The results show a 10.4 percent increase in the number of youth who place importance on being focused in school. Prior to participating in the program, 84 percent agreed or strongly agreed with the statement, “It is important for me to stay focused on learning at school,” while 94.4 percent agreed or strongly agreed after completing the program (Figure 4).

Regarding future plans, 96.3 percent of participants agreed or strongly agreed that they “need to think about how my choices will affect my future,” compared to 82.8 percent before participating in the program (Figure 4).

Similarly, the program resulted in a 12.3 percent increase in the number of youth who reported that they had personal goals. Before participating in the program, 82.5 percent of youth reported that they had personal goals, but after completing the program, 94.8 percent reported they had set personal goals (Figure 4).

4-H Health Rocks! helped youth develop a greater sense of positive self-esteem. Before participating in the program, 81.2 percent of youth agreed or strongly agreed that “I feel good about myself,” but after completing the program, 94.1 percent agreed or strongly agreed, a 12.9 percent improvement (Figure 4).

Regarding altruistic attitudes, 81.7 percent of youth agreed or strongly agreed with the statement, “I would help other kids like me to stay away from alcohol or other drugs”; after completing the program, 94.3 percent agreed or strongly agreed with the statement (Figure 4).

“I think Health Rocks! could help many people. Keep doing Health Rocks!” — Fourth grade Henry County participant

Program Quality

In addition to measuring program outcomes, the survey of 1,899 youth participants was used to evaluate the quality of the program.

The Tennessee program demonstrated the following regarding program quality:

- 90.2 percent of youth indicated that the staff members were friendly.
- 86.7 percent of youth indicated that they learned a lot during the training.
- 86.8 percent of youth said that they actively participated in the 4-H Health Rocks! activities.

“It was very fun and creative and it made me feel healthy.” — Sixth grade Cumberland County participant

“I had really fun and had a great time. The staff helped us learn and so did teen leaders help us learn a lot.” — Sixth grade Cumberland County participant

“The Health Rocks! program helped me a lot. It taught me a lot of new things but in a fun way.” — Fifth grade Anderson County participant

Best Practices

Tennessee Extension 4-H personnel have produced a number of best practices for achieving the program’s objectives. The following practices represent practical approaches for implementing the 4-H Health Rocks! beginning and intermediate curricula and represent counties that implemented the project for at least two years. Practices have produced exceptional local results in school partnerships, community partnerships and parental involvement. These practices show promise for successful replication in other communities.

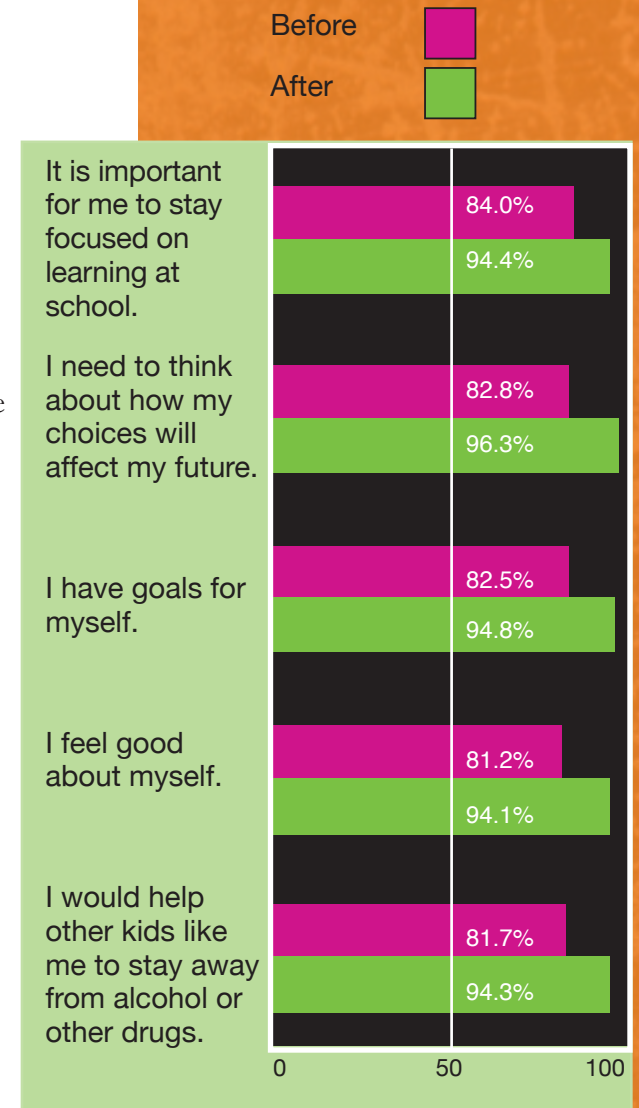


Figure 4. Percentage of youth who agree or strongly agree regarding assets (n=1,899).

Carla Bush, Cannon County

In Cannon County, 4-H Health Rocks! messages are prominently displayed on an encased bulletin board located at the front entrance of the school. The contents of the bulletin board are selected by the 4-H agent and reinforce messages taught during the weekly classes.

Tonya Bain, Extension agent, Crockett County

In Crockett County, Bain developed a 4-H Health Rocks! Back-to-School Bash. She recruited teachers and other volunteers to conduct the event. Previous focus group interviews with parents of Tennessee 4-H Health Rocks! participants identified that “kids don’t think snuff is dangerous.” To help combat this misconception, Bain used hands-on exhibits, including a “make your own spit” display about the dangers of smokeless tobacco.

Deborah Seward, Extension agent, Gibson County

In Gibson County, Seward partnered with the county “Weed and Seed” federally funded drug education program to deliver 4-H Health Rocks! at the local housing authority. This partnership provided a new program contact and additional 4-H age youth for the program.

Tracy Buckles, former Extension agent, Johnson County

In Johnson County, the 4-H Health Rocks! program was delivered at the middle school. Buckles integrated 4-H Health Rocks! into the school’s physical education and health classes. The program was so popular that it was taught weekly in the fall. To maximize participation in the evaluation survey, Buckles also sent the 4-H Health Rocks! parental consent and youth assent forms home with the school registration packet.

Sharon Tubbs, Extension agent, Madison County

In Madison County, 4-H Health Rocks! was delivered to the YMCA summer program with support from the UT Extension Leaps and Bounds after-school grant. In addition, 4-H Health Rocks! exhibits were displayed at the West Tennessee State Fair, health fairs and school open houses.

Vicki Lofty, Extension agent and county director, Marion County

In addition to 4-H Health Rocks! lessons at school, Lofty coordinated a weekend camp for Marion County seventh and eighth graders at the Clyde York 4-H Center in Crossville. One participant at the camp shared the following: “Health Rocks! is very educational. The activities were fun and required teamwork and moving a lot.”

Julie Harstin, McNairy County

In McNairy County, the 4-H Health Rocks! program is a partnership between UT Extension and the Bethel Springs Junior High School KAMEL (Kids Against Meth Ending Lives) Club. KAMEL participants serve as 4-H teen leaders in delivering the program to elementary and middle school youth at Bethel Springs School.



Kathy Finley, Extension agent, Robertson County

In Robertson County, Finley conducted an in-service training for local school teachers to implement the 4-H Health Rocks! program in their classrooms. The county has a long history of outstanding teen leadership, including teen involvement in the in-service training.

Glenn Turner, Extension agent, Sevier County

In Sevier County, 4-H Health Rocks! is a partnership between UT Extension and the Boys and Girls Club. All of the 4-H Health Rocks! participants are both 4-H and BGC members, and classes are offered at the BGC facility. Teen leaders include 4-H and BGC teens who are the primary 4-H Health Rocks! instructors.

Trent Jones, Extension agent, Smith County; April Martin, Extension agent, DeKalb County; Carol McDonald, former Extension agent, Smith County

In Smith and DeKalb counties, 4-H Health Rocks! is a partnership between UT Extension and middle school guidance counselors. All of the middle school students are 4-H members who participate in the 4-H Health Rocks! program in the classroom with instruction from the school guidance counselor.

Partnerships

UT Extension personnel place an emphasis on the development of effective, sustainable community partnerships for the 4-H Health Rocks! program. Extension agents surveyed their local communities and selected program partners who were committed to positive youth development. The key ingredient for program partners was their willingness to provide effective, high-quality volunteers for direct teaching.

Partnerships were emphasized in a one-day 4-H Health Rocks! professional development workshop. Extension agents were encouraged to bring their program partners to the workshop. Educational programming occurred through a variety of delivery methods.

Some counties had ongoing relationships with local schools for a variety of 4-H programs. In other counties, 4-H Health Rocks! was a vehicle for developing new 4-H program partners who serve middle school youth. Some examples of UT Extension partnerships across the state include:

- Dyer County — Dyer County Board of Education (Rebecca K. Willis, Extension agent).
- Jefferson County — Boys and Girls Club of the Tennessee Valley (Adam Hopkins, Extension agent).
- Obion County — Obion County Board of Education (Una Johnson, Extension agent).
- Pickett County — Pickett County Board of Education (Emily Sells, former Extension program assistant).





- Trousdale County — Trousdale County Health Department (Janae Lawrence, Extension agent).
- Warren County — Warren County Board of Education (Jamie Harris, Extension area 4-H specialist).

Extension 4-H professionals, including those providing leadership for the state 4-H camping program, recognized the potential of these partnerships and the opportunities for greater 4-H Health Rocks! programming. In 2011, over 4,000 youth participated in Junior 4-H Health Rocks! camps at the state's three 4-H centers through partnerships with the 4-H center managers and program staff.

Tennessee 4-H Extension professionals have demonstrated how to form and manage effective community partnerships with many youth-serving agencies and organizations. These partnerships have created a sustainable program model that will help Tennessee young people live happy, productive lives.

Summary

Dangerous trends regarding smoking, binge drinking and illegal drug use among young people have been highlighted in recent studies. The Centers for Disease Control and Prevention reported that binge drinking was “common and dangerous” (2011, 2013). In a national study, Johnston, O'Malley, Bachman, and Schulenberg (2013) pointed to an alarming increase in the use of synthetic marijuana from 2011 to 2012 among 12th graders.

Yet, some trends are very promising. In a recent study of more than 7,000 youth from 44 states, 4-H members were shown to have had significantly lower drug, alcohol and cigarette use than their peers who were not 4-H members (Lerner and Lerner, 2012). This report, *Healthy Decisions*, highlights how the 4-H Health Rocks! program is helping to promote the knowledge, skills and assets that youth need to make healthy decisions. The Tennessee program demonstrated the following:

- 17 percent increase in the number of youth who now understand that illegal drug use causes psychotic behavior.
- 15 percent increase in the number of youth who understand that illegal drug use affects relationships with family and friends.
- 13 percent increase in the number of youth who report that they are able to say “no” if offered cigarettes.



- 13 percent increase in the number of youth who report that they would help other youth stay away from alcohol and other drugs.
- 12 percent increase in the number of youth who now have long-term goals for their lives.

4-H Health Rocks! has demonstrated that partnerships with schools, public agencies and youth-serving organizations are essential to effecting change. Like all 4-H efforts, 4-H Health Rocks! teaches young people how to use their heads, hearts, hands and health for productive living.

Acknowledgements

The Tennessee 4-H Health Rocks! program would not be possible without the dedication and professionalism of University of Tennessee Extension and Tennessee State University Cooperative Extension Program employees. The program also depends on the cooperation and involvement of countless volunteers, schools and organizations. UT Extension acknowledges the lead author of the 4-H Health Rocks! curriculum, Marilyn Fox of the University of Nebraska, as well as Jeanine Goldsmith, National 4-H Council accounts manager. The leadership of the Tennessee 4-H Camps was instrumental in implementing a successful program throughout the 2011 camping season. Those individuals include Daniel Sarver, Extension 4-H specialist, and Terri Quillen, Andrew Seals and Scottie Fillers, 4-H Camp managers. 4-H Health Rocks! depends on many program partners, especially Megan Miller Smith of the YMCA of Middle Tennessee and Melissa Dove of the Boys and Girls Club of the Smoky Mountains.

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For More Information

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