



## Adolescent Health Report Card 2006-2014

### Introduction

The greatest threat to the health of MetroWest adolescents is not illness or chronic disease. It is the consequences of risky behaviors that can lead to disability, social problems and even death. Since the MetroWest Health Foundation was founded, it has had an interest in keeping children and adolescents safe in their communities. In its first five years of grantmaking, the foundation funded a variety of responsive projects focused on youth, such as self-injury and suicide prevention training for school personnel, a crisis stabilization program for deaf students, and the creation of several wellness centers in schools. Then in 2004, the foundation launched its first major proactive initiative, the Youth Substance Abuse Initiative. In 2013 the foundation reinforced its interest in youth health by establishing adolescent mental health as one of its three priority areas.

As an extension of its work in the area of adolescent health, the trustees of the foundation made a commitment in 2006 to conduct the MetroWest Adolescent Health Survey every two years for a total of ten years. Based on the Youth Risk Behavior Survey, this census of middle and high school students is now implemented in each of the foundation's 25 communities.

The survey data provides invaluable insight for schools and communities about the behavior of its adolescents. This data has been used to change policies, improve prevention and intervention programs, apply for national funding, and educate parents and other stakeholders. For the foundation, it has been used to help determine priority areas as well as measure the success of our funding initiatives.

As we come to the conclusion of the initial ten-year commitment, it seems like an ideal time to reflect on the foundation's impact in risk behaviors addressed in the health survey. This "report card" looks at data from four areas – bullying, mental health, substance use and sexual behaviors – and discusses the foundation's efforts and impact. In doing so, we do not imply causation but rather seek to explore our *contribution* to any changes in behaviors.

An overall grade is provided for each of the four initiative areas based on the level of improvement in the data at the grantee and regional levels. We rate our progress as follows:

- Bullying – Significant Improvement
- Mental Health – In Progress
- Sexual Behavior – Moderate Improvement
- Substance Use – Significant Improvement

## Bullying – Significant Improvement

BULLYING VICTIMIZATION	2006	2008	2010	2012	2014
Bullying victim (past 12 months)	43.9	48.9	37.7	32.4	28.8
Bullying victim on school property (past 12 months)	38.8	42.7	31.7	26.7	23.5
Cyberbullying victim (past 12 months)	15.6	15.9	17.2	16.6	18.6

In December of 2011, the foundation made grants to five school districts – Holliston, Hopkinton, Hudson, Natick and Needham – to implement anti-bullying strategies at the middle school level. The trustees understood that bullying was related to mental health and was therefore an important topic to address. As part of this effort, the foundation also contracted with the Massachusetts Aggression Reduction Center to provide technical assistance to school staff around best practices. DMA Health Strategies was hired to conduct a formal evaluation of the initiative. In addition, the foundation purchased and disseminated “Bullying: True Stories,” a DVD and discussion guide recommended for students grades 4-12, for all 25 school districts in the foundation’s service area.

All five school systems implemented common strategies as well as unique approaches to bullying prevention. All schools reported training their staff in how to identify bullying, intervene appropriately, and encourage pro-social student behavior. All invited experts to address school assemblies, sent staff and student groups offsite for trainings (e.g., to the Anti-Defamation League), and conducted parent nights and PTA workshops focused on bullying prevention. Most engaged motivational speakers or purchased anti-bullying videos for students and staff to watch. Each school selected evidence-based violence prevention curricula, the most common being *Steps to Respect* and *Second Step*, which are taught in each grade.

Grantee schools carried out a number of different activities as part of the bullying prevention initiative. Several schools had or developed some form of peer leadership model. Peer leaders are trained as trainers and then are invited into lower grade classrooms to conduct bullying prevention trainings. Several schools developed a bullying prevention brochure for parents. Most schools display laminated posters created by students and murals depicting acceptance and respect for diversity. In addition, a number of students created and acted in their own videos, which depict how bullying and cyberbullying can cause harm and how students can confront the problem.

DMA Health Strategies received permission from the five school districts to use their bullying data from the MetroWest Adolescent Health Survey and compare it to data from the remaining districts. The results were very favorable:

- In 2012 (posttest), students at grantee schools reported being bullied at school significantly less often than students at non-grantee schools, while in 2010 (pretest) their reports were similar.
- Students at grantee schools reported bullying others significantly less often in 2012 than in 2010; students at non-grantee schools also reported bullying others less in 2012, but this decrease was not as dramatic as the change among grantee schools.

- In 2012, students at grantee schools reported cyberbullying others significantly less than students at non-grantee schools, while in 2010 their reports were similar. There were decreases in cyberbullying in both groups.
- In 2012, in comparison to non-grantee schools, grantee schools reported significantly less:
  - ✓ Participation in bullying to go along with what their friends were doing
  - ✓ Participation in cyberbullying to go along with what their friends were doing
  - ✓ Seeing or hearing about bullying at school
  - ✓ Seeing or hearing about cyberbullying

### Mental Health – In Progress

MENTAL HEALTH	2006	2008	2010	2012	2014
Life "very" stressful (past 30 days)	27.9	27.9	28.3	28.9	34.9
Depressive symptoms (past 12 months)	20.1	20.3	19.1	19.7	22.0
Self-injury (past 12 months)	13.2	13.2	14.0	15.6	15.2
Considered suicide (past 12 months)	10.0	10.5	11.6	13.0	12.9
Attempted suicide (past 12 months)	4.1	4.1	4.0	4.7	4.5

Although the foundation has long had an interest in adolescent mental health, the trustees formally adopted this issue as one of its targeted priorities in its 2013–2018 strategic plan. The plan called for the foundation to invest in evidence-based universal mental health curricula and programs in local schools and evidence- and research-based mental health intervention services and programs for at-risk students.

The most significant result of this work to date has been the replication of the Bridge for Resilient Youth in Transition (BRYT) model out of the Brookline Mental Health Center. This program, the evaluation of which was supported by the Robert Wood Johnson Foundation, seeks to support students returning from psychiatric hospitalization and medical leave (mainly concussions). Since 2012, the foundation has supported the creation of BRYT models at Assabet Valley Regional Technical High School, Blackstone Valley Regional Technical School, King Philip Regional High School, Lincoln-Sudbury Regional High School, and Natick High School. Framingham High School and Milford High School were also funded to assist with the re-entry process as well as coordinate and refer students for in-school and external mental health counseling for students. Brookline Mental Health Center provides technical assistance to all BRYT model programs, including monthly “job-alike” meetings, an annual symposium, and one-on-one consultation. The model uses the common metrics of attendance/school completion, relapse rate, and coping skills. The foundation augments the job-alike program by hosting semi-annual information sharing meetings of funded BRYT programs.

In 2013 the foundation funded four school districts – Framingham, Holliston, Natick and Needham – to conduct a mental health capacity assessment. This tool, developed by Children’s Hospital, called for all teachers and staff to evaluate the strength of their schools’ policies, programs and procedures relating to student mental health. Each district was provided with normed results for each school that allowed administrators to see what areas should be prioritized for assistance. The four districts participated in a

learning community with the researcher so they could understand their results and determine how to intervene.

Needham Public Schools used its capacity assessment results to develop a Tiers of Intervention program, which the foundation funded in 2014. The objective of this project is to enhance the district’s evidence-based mental health curricula for all students and the staff’s ability to target resources for at-risk adolescents. The components of the program include counselor and nurse training in mindfulness and counselor training in Dialectical Behavior Therapy (DBT), an evidence-based treatment modality. Staff then incorporate these skills in working with at-risk students and include elements in the wellness curriculum.

Alarmed at the rate of self-injury among middle school students, Millis Public Schools applied for and received a one-year grant in 2013 to train guidance staff in DBT. These staff then offered a small group class for students identified as having self injured. In addition, academic staff received DBT skills training to then offer short interventions, such as breathing exercises and mindfulness, during classroom time. Despite a 73% reduction in referrals for cutting, the Adolescent Health Survey data showed an increase in self-harm at the middle school level. School officials are currently exploring the possible reasons for the varying results.

Natick Public Schools received funding in 2014 to target at-risk students by offering the evidence-based Early Risers Skills for Success program. This three-part program targets 6-12 years olds who are at risk for early development of conduct problems, including substance use. The three parts are a summer camp, school-year friendship groups and school support. Social and emotional skills training is incorporated into the camp and social and academic skills are included in the school-year program.

In response to the 8-10 week waiting time for an outpatient mental health appointment for Framingham youth, Wayside Youth and Family Support Network applied for a grant on behalf of the Framingham Public Schools for a rapid assessment and intervention program. Through this grant, Wayside hired a crisis consultant to perform psychiatric evaluations and short-term crisis stabilization to any Framingham public school student referred to the program. Urgent assessments are completed within 60 minutes, emergent referrals within the same day, and routine referrals within 72 hours. Following the assessment, the consultant provides stabilization services by developed a risk management/safety plan. A second staff member, the intensive care coordinator, provides care coordination and wraparound services in collaboration with school staff and family members. Results from the 2014 MAHS showed a very slight decrease in attempted suicide but a statistically significant increase in depressive symptoms among students.

### Sexual Behavior – Moderate Improvement

SEXUAL BEHAVIOR	2006	2008	2010	2012	2014
Lifetime sexual intercourse	28.9	29.4	28.3	26.6	24.3
Currently sexually active (past 3 months)	22.3	22.9	21.8	20.7	19.1
Condom use at last intercourse (among sexually active youth)	66.6	65.0	63.2	66.3	65.1

While the foundation has not addressed sexual behaviors in a targeted way, it did convene a teen pregnancy prevention coalition in 2012 and subsequently funded Planned Parenthood for two years beginning that same year to provide sex education for young people and parents. Through this grant, Planned Parenthood offered parent education programs as well as training for staff at youth serving agencies in Milford and Marlborough where it operates clinics. Planned Parenthood encountered some community resistance, especially in Milford, and therefore was not able to reach its projected targets. That said, over 90% of parents who attended reported increased knowledge and comfort in discussing sex and sexuality with their children.

Framingham Public Schools received three years of funding to offer a teen pregnancy prevention program for high-risk boys. The 2010 MetroWest Adolescent Health Survey revealed that 3.4% of all Framingham High School students had either been pregnant or gotten someone pregnant. Another 8% reported being forced to have sexual intercourse. The project, which began in 2013, sought to implement an evidence-based curriculum for 250 8<sup>th</sup> grade male students and a 10-week psycho-educational group for 16 boys. Framingham data from the Health Survey showed that condom use increased slightly from 2010 to 2014 and lifetime sexual intercourse decreased slightly.

In the wake of the murder of a Wayland teenage girl by her ex-boyfriend, REACH Beyond Domestic Violence applied for three years of foundation funding to reduce teen dating violence in Wayland. Through the grant, REACH offered an evidence-based curriculum to all high school freshmen and juniors each year as part of the school's wellness program. The 2014 MetroWest Adolescent Health Survey showed significant decreases in the number of Wayland students reported having been threatened with physical harm by a dating partner and the number of students reported being forced to have sexual intercourse.

### Substance Use – Significant Improvement

SUBSTANCE USE	2006	2008	2010	2012	2014
Lifetime cigarette smoking	35.3	33.3	25.9	22.0	17.3
Current cigarette smoking (past 30 days)	14.7	13.9	12.1	9.1	6.2
Lifetime alcohol use	66.5	62.8	58.0	55.6	53.8
Current alcohol use (past 30 days)	42.2	39.1	34.7	33.4	32.9
Binge drinking (past 30 days) <sup>†</sup>	25.1	23.2	20.8	18.7	17.5
Rode with driver who had been drinking (past 30 days)	25.2	25.8	22.5	19.5	16.7
Lifetime marijuana use	33.2	33.4	34.6	32.3	30.4
Current marijuana use (past 30 days)	20.2	22.8	23.5	21.5	20.3
Lifetime prescription drug misuse <sup>‡</sup>	11.0	10.1	10.1	8.8	7.3

In 2005, the foundation undertook its first multi-site proactive initiative, that of reducing youth substance abuse. Although the MetroWest region is generally healthier than the state, the foundation was concerned about the rate of alcohol and marijuana use by its adolescent residents. The foundation funded two cohorts of towns to implement community-wide prevention, intervention and access to

treatment strategies. The first group, awarded grants in 2005, included Framingham, Hopkinton, Milford/Bellingham, Needham, and Wayland; the second set of grants was made in 2007 to Ashland, Holliston, Hopedale, Medfield and Natick. Education Development Center was hired to provide extensive technical assistance to the cohort groups and Brandeis University conducted a formal evaluation. As evidenced by the trend data listed above, alcohol use and prescription drug misuse has declined significantly in the past ten years. Marijuana use has remained relatively flat overall.

Subsequent to this proactive initiative, the foundation has made several responsive grants to reduce substance use among youth. Ashland Public Schools has received several years of funding to reduce the marijuana rates through a social norms campaign and other prevention activities. Dover-Sherborn also implemented a social norms campaign to reduce alcohol use through a one-year grant from the foundation. The social norms approach is based on the idea that people often increase their participation in certain behaviors through their belief that the majority of other people are engaging in these behaviors when, in fact, the opposite is true. Ashland did see lifetime and current marijuana use decrease from 2012 to 2014.

The Hudson Board of Health received a three-year grant in 2010 to implement a substance abuse intervention program. Through this project, the Board of Health, working in collaboration with the Hudson Public Schools, has created a community substance abuse coalition comprised of 71 members, adopted screening and referral procedures at the middle school, implemented a new wellness curriculum at the high school, created a peer leadership program, purchased a permanent medication take-back kiosk at the Hudson Police department, and banned tobacco sales to people under 21. Data comparing 2014 data to 2012 show reductions in current and lifetime cigarette smoking as well as lifetime marijuana use. Alcohol use, however, was up, which is contrary to regional data.

It is worth noting that several of the communities funded by the foundation for substance abuse prevention went on to receive federal Drug Free Communities grants.

## **Conclusion**

As the data shows, much progress has been made in addressing youth risky behaviors in the region. There is still more work to be done, however, especially in the area of mental health. Data across indicators reveals a small but steady increase in stress, depressive thinking, suicidal ideation, and self injury over the past ten years. The foundation has only recently implemented its strategy to address adolescent mental health. Staff will continue to monitor progress using individual grant results and public data.

## Appendix A – List of Grants

Organization	Amount	Title	Start Date
Ashland Public Schools	\$27,790	Ashland Marijuana Use Reduction	June 1, 2013 (two years)
Assabet Valley Regional Technical School	\$210,000	Assabet Valley CARES	December 1, 2014 (three years)
Blackstone Valley Vocational Regional School District	\$180,000	The BVT Bridge Program	August 15, 2014 (three years)
Dover-Sherborn Regional Schools	\$12,600	Parent Social Norms Campaign	June 15, 2014 (one year)
Framingham Public Schools	\$45,000	Acknowledging Boys: The Invisible Link to Teen Pregnancy	August 24, 2014 (two years)
Framingham Public Schools	\$224,425	Clinical Care Coordination	June 1, 2012 (three years)
Framingham Public Schools	\$9,110	Mental Health Capacity Assessment	September 3, 2013 (one year)
Holliston Public Schools	\$4,800	Mental Health Capacity Assessment	July 1, 2013 (one year)
Holliston Public Schools	\$59,500	Prevention of Bullying Among Middle School Students	December 1, 2010 (three years)
Hopkinton Public Schools	\$59,500	Building a Positive School Climate in Hopkinton Middle School	November 18, 2010 (three years)
Hudson Board of Health	\$181,586	Hudson Adolescent Substance Abuse Initiative	July 1, 2012 (three years)
Hudson Public Schools	\$59,500	Bullying Prevention Project	December 1, 2010 (three years)
King Phillip Regional High School	\$70,142	Transitions Program for King Phillip High School	January 5, 2015 (one year)
Lincoln Sudbury Regional School	\$220,500	Transition Program	August 28, 2014 (three years)
Millis Public Schools	\$6,740	DBT Skills Training for Students	September 2, 2013 (one year)
Natick Public Schools	\$220,100	PACE Program	January 1, 2012 (three years)
Natick Public Schools	\$7,801	Natick's Assessment of Mental Health	July 1, 2013 (one year)
Natick Public Schools	\$59,500	Improving Schools from Within: Developing Student Peer Leadership to Stop Bullying	December 1, 2010 (three years)
Needham Public Schools	\$59,500	Bullying Prevention Among Middle School Students	January 1, 2011 (three years)
Needham Public Schools	\$1,190	Conducting School Mental Health Capacity Assessment	July 1, 2013 (one year)

Needham Public Schools	\$35,471	Tiers of Intervention: A Response to Needham Public Schools Mental Health Capacity Assessment	July 1, 2014 (two years)
Planned Parenthood League of Massachusetts	\$90,420	Keeping Kids Healthy: Comprehensive Outreach and Sex Education for Young People and Parents	July 1, 2013 (two years)
Reach Beyond Domestic Violence	\$85,350	Peers Against Violence (PAVE)	June 1, 2012 (three years)
Wayside Youth and Family Support Network	\$200,488	Milford Student Assessment and Intervention Program	July 1, 2014 (three years)
Wayside Youth and Family Support Network	\$212,923	Rapid Access and Intervention Team (RAIT)	January 1, 2014 (three years)
Towns of Ashland, Bellingham, Framingham, Holliston, Hopedale, Hopkinton, Medfield, Milford, Natick, Needham and Wayland	\$1,941,723	Youth Substance Abuse Initiative	Cohort 1: April 1, 2005 (three years)  Cohort 2: January 1, 2007 (three years)