# Health Education in Massachusetts Secondary Schools, 2006

Survey Results
January, 2008

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January 24, 2008

Dear Colleagues, Parents, and Students:

We are pleased to release this report, *Health Education in Massachusetts Secondary Schools*, *2006.* The Massachusetts Department of Education gathered the information presented in this report through a survey of the principals and lead health teachers in all public middle, junior/senior, and senior high schools in the Commonwealth. Because of very high response rates we are confident that the results reported here accurately represent the status of health education in Massachusetts secondary schools.

School health education has an important role to play in ensuring that children and adolescents gain the knowledge and develop the skills they need to lead safe and healthy lives and avoid risk-taking.

Thank you for your continued commitment to improving the health, safety, and achievement of all Massachusetts youth.

Sincerely,

Jeffrey Nellhaus
Acting Commissioner of Education

# *Health Education in Massachusetts Secondary Schools, 2006*

***Abstract:*** *Health education is taught as a required course in approximately four-fifths of Massachusetts secondary schools, representing a decrease since 2002, especially at the middle school level. In schools that do include health education courses, health teachers cover a wide variety of content topics and also teach skills to promote health and reduce risk-taking or unhealthy behavior. Most include activities that ask students to apply health skills in community settings or real-life situations and most use some form of performance-based assessment to gauge their students' mastery of health skills. Finally, most health teachers make efforts to involve parents in health education and to work with other school staff on the development and implementation of health education activities, though some of these efforts have declined in the past five years.*

**Health Education: An Overview**. The primary purpose of classroom health education is to give students the knowledge and skills they need to practice health-enhancing behaviors throughout life[1] and to avoid or reduce health risks. In public health terms, health education is the most basic form of primary prevention. Research has shown that high quality comprehensive health education contributes to improvements not only in students' knowledge, but also in their health skills and practices.[2-4]

Information below concerning health education in Massachusetts schools was drawn from the *2006 School Health Profiles*, developed by the U.S. Centers for Disease Control and Prevention for use by states. In February 2006, the Massachusetts Department of Education mailed two *Profiles* surveys, one questionnaire for principals and another for lead health teachers, to every public middle, junior/senior, and senior high school in the Commonwealth. Usable surveys were obtained from 661 principals and 659 health teachers, an 88% response rate in each case.

**Laws, Regulations, Standards, and Guidelines Related to School Health Education.** Massachusetts state law (MGL Chapter 71, Section 1) stipulates that various topics should be taught in health education and should be considered acceptable use of time in learning. The law does not stipulate that health education be taught as a separate course, but in November 2007 the Board of Education included health education among the list of core courses that could be chosen as electives by high school students wishing to align their program of study with the Board of Education's MassCore recommendations. In Massachusetts, whether or not school districts require courses in health education and what they include in those courses are matters of local control. State law provides an opportunity for parents to exempt their children from health education classes without penalty to the student.

Two documents offer guidance related to school health education. The *Massachusetts Comprehensive Health Curriculum Framework* [5] outlines the topics that should be included in a comprehensive K-12 curriculum and is organized primarily around 14 content/topic

standards: growth and development, physical activity and fitness, nutrition, reproduction/ sexuality, mental health, family life, interpersonal relationships, disease prevention and control, safety and injury prevention, substance use/abuse prevention, violence prevention, consumer health and resource management, ecological health, and community/public health. As a complement to the *Framework*, the revised *National Health Education Standards*[6] focus on skills that can be applied across content areas. These include comprehending concepts related to health promotion and disease prevention; accessing valid health-related information and services; using interpersonal communication skills to enhance health or reduce health risks; using decision-making skills to enhance health; using goal-setting skills to enhance health; practicing health-enhancing behaviors; and advocating for personal, family, and community health. The *National Health Education Standards* also outline characteristics of effective school health education, based on reviews of published research.

## Findings from the 2006 School Health Profiles

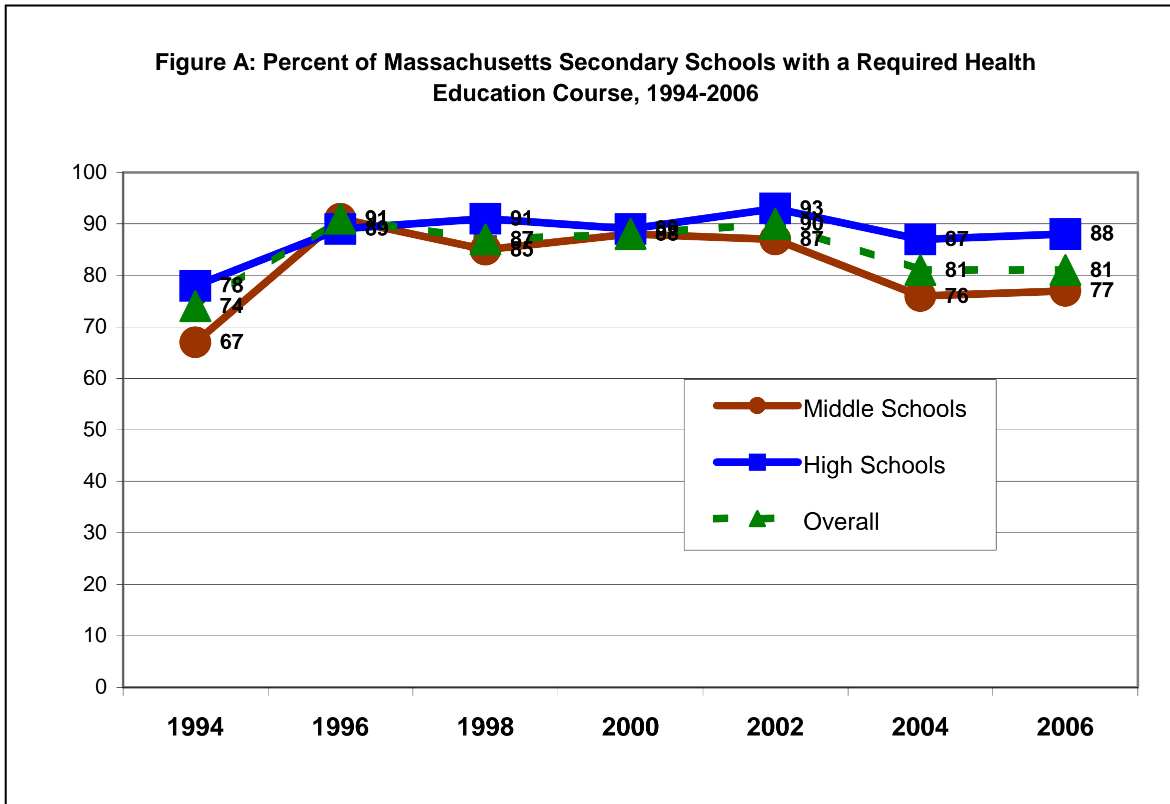
### Course Requirements and Time in Health Education

**In 2006, over four in five Massachusetts secondary schools (86%) required some health education for students, and 81% required students to take at least one health education course**. A health education course was defined as a separate semester-, quarter, or year-long unit of instruction for which the student receives credit. It did not include health education units or lessons integrated into other subjects. (Figure A, next page)

- ✓ A health education course was required more often in high schools (88%) than in middle schools (77%) or combined junior/senior high schools (82%).
- ✓ Requirements for health education rose during the years that state Health Protection Fund grants were provided to districts (1994-2002), but have fallen somewhat since these funds were eliminated in Summer 2002.
- ✓ In 2006, 56% of middle schools and 43% of high schools required two or more health education courses.
- ✓ A health education course is most likely to be required in 7th or 8th grade (65% and 67% of schools with these grades, respectively), and least likely to be required in the final years of high school (20% of 11th grade, 15% of 12th grade).
- ✓ In schools requiring at least one health class, middle school courses averaged 41 class periods of 49 minutes. High school courses averaged 65 class periods, 58 minutes in length.

**Although students can be excused from all or any part of health education at parental request, in actuality exemptions are rare.**

- ✓ 38% of principals reported that <u>no</u> students had been exempted by parental request; 54% reported that 1% or less of students were exempted.




*Note: Combined junior/senior high schools are not shown above, although they are included in the total.*

**Health Education Curriculum, Instruction, and Assessment**. *The quality of health education instruction is tied to not only to the time allocated for the course, but also to the curriculum and quality of instruction. This includes a foundation in standards and skills with a plan for assessment of students. District plans for a strong health education program should include (1) a written scope and sequence outlining skills to be taught at each grade level, and (2) a written curriculum that spells out in greater detail what should be taught in each course. Course content should be aligned with state and national standards, and course content over different grades should be sequenced to ensure that young people develop the knowledge, skills, and dispositions that will lead to healthy behaviors throughout their lives. Curricula should be formally reviewed at least every five years.*

**Most required health courses are aligned with Massachusetts and national standards.** Most health teachers in schools with required health education (95%) say that the main health course in their schools is aligned with the *Massachusetts Comprehensive Health Curriculum Framework,* which outlines standards for 14 major areas of course content.

- ✓ 78% of teachers also report that their courses are aligned with the *National Health Education Standards*, organized primarily around skills that can be applied to any content topic.

**Most schools include instruction to improve students' health-related skills.** The percent of schools reporting that they taught health skills in a required health course are as follows:

- ✓ Skills for finding valid information or services related to personal health and wellness (76% of schools)
- ✓ Skills for recognizing the influence of media on personal health and wellness (78%)
- ✓ Communication skills, such as how to ask for assistance with a health problem (76%)
- ✓ Decision-making skills, such as deciding to get appropriate health screenings (76%)
- ✓ Goal-setting skills, such as setting a goal for improving personal health habits (78%)
- ✓ Conflict resolution skills, such as ways of resolving interpersonal conflicts without fighting (76%)
- ✓ Skills for resisting peer pressure to engage in unhealthy behavior (82%)

**Middle and high school health education courses cover a wide range of topics.** (See Figure B, next page.)

- ✓ In schools that *do* have a required health course, the most common content areas are alcohol and drug use prevention (98%), nutrition and dietary behavior (98%), physical activity and fitness (98%), tobacco prevention (97%), and emotional and mental health (96%). Because not all schools have required health courses, the percent of all schools covering these topics, shown in Figure B, is much lower.

- ✓ On average, teachers with a health course reported spending:
  - 12 class periods on tobacco, alcohol, and other drug use prevention
  - 13 periods on nutrition, dietary behavior, physical activity, and fitness
  - 9 periods on HIV, STD, pregnancy prevention, and sexuality
  - 6 periods on violence prevention and conflict resolution
  - 6 periods on mental health issues and suicide prevention

**For the most part, health education curricula appear to be "home-grown," developed at the local (district or school) level**.

- ✓ Fewer than half of lead health education teachers (41%) report being required to purchase a commercially developed curriculum and less than one-third (29%) are required to use commercially developed student textbooks.

- ✓ About three quarters of teachers (73%) indicated that their health education curriculum had been formally reviewed within the past five years.

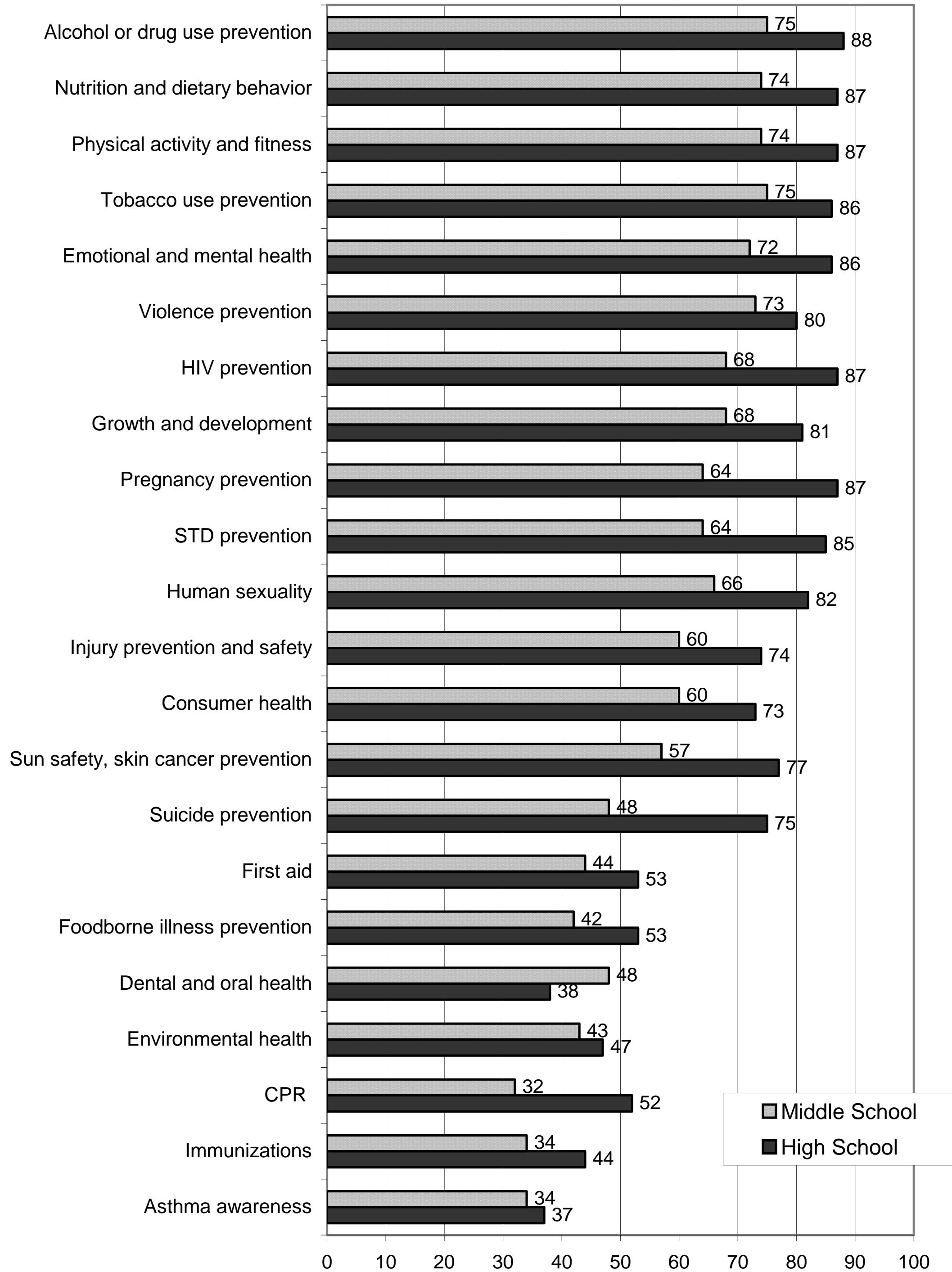


Figure B: Percent of Massachusetts Schools Teaching Selected Topics in a Required Health Class, 2006
Alcohol or drug use prevention
Nutrition and dietary behavior
Physical activity and fitness
Tobacco use prevention
Emotional and mental health
Violence prevention
HIV prevention
Growth and development
Pregnancy prevention
STD prevention
Human sexuality
Injury prevention and safety
Consumer health
Sun safety, skin cancer prevention
Suicide prevention
First aid
Foodborne illness prevention
Dental and oral health
Environmental health
CPR
Immunizations
Asthma awareness
75
88
74
87
74
87
75
86
72
86
73
80
68
87
68
81
64
87
64
85
66
82
60
74
60
73
57
77
48
75
44
53
42
53
48
38
43
47
32
52
34
44
34
37
0
10
20
30
40
50
60
70
80
90
100
Middle School
High School

**Not all schools have a scope and sequence for health education.** Only two-thirds (67%) of teachers indicated that there was a written "scope and sequence" for health education that covered all grades in the district. This suggests that in many instances health education may not be coordinated across grade levels.

**Instruction.** *Effective instruction in health education builds personal and social competence by emphasizing the skills students need to deal with social pressures, avoid or reduce risk-taking, and practice health-enhancing behaviors. Skills need to be explained, modeled, practiced using real-life scenarios, and reinforced. Instructional strategies and learning experiences that are student-centered, interactive, and experiential are more likely than those simply conveying factual information to have a positive effect on healthy behavior.*[6]

**Health education teachers use a variety of teaching methods**. The largest amount of time is spent on lecture or direct instruction, with less time having students engaged in role-play, simulation, or skills practice (e.g., practicing refusal skills). The approximate proportion of time health teachers spend using various methods of instruction in their main health course is listed below:

- ✓ 24% of class time is spent on lecture or direct instruction
- ✓ 22% of time in group discussion
- ✓ 15% of time on cooperative group activities
- ✓ 13% of time is spent on videos, demonstrations, and guest speakers
- ✓ 11% of time is spent on individual projects or work
- ✓ 10% of time is used for role-play, simulation, or skills practice with students, and
- ✓ 8% of class time is spent on tests and other activities

**Most health teachers in schools with a required health course have students engage in activities outside of class that involve the real-life application of health-enhancing behaviors or skills.**

- ✓ 82% ask students to complete homework or projects that involve family members
- ✓ 72% ask students to identify advertising designed to influence health behaviors
- ✓ 54% ask students to advocate for health-related issues
- ✓ 48% ask students to identify potential injury sites at school, home, or in the community
- ✓ 44% ask students to gather information about health services available in the community
- ✓ 26% ask students to visit a store to compare prices of health products
- ✓ 20% ask students to participate in or attend a community health fair

**Assessment.** Although health education is not included as a tested subject in the Massachusetts Comprehensive Assessment System (MCAS) required of all students, the Department of Education has directed districts to develop their own assessment system for health education. A strong assessment system in health education, as in any subject, demonstrates to the school community, to parents, and to students themselves that young people are achieving important standards.

**Fewer than half (47%) of schools require teachers to use performance assessments (that is, assessment of student skills) in the health education classroom.**

**Even so, most teachers (83%) report assessing students for both knowledge and skills.**

- ✓ Approximately two-thirds (64%) of health education teachers report that students are assessed on health-related skills via constructed response items that are scored using rubrics that are based on national or Massachusetts standards.

- ✓ 83% of teachers report that they assess health-related skills using their own classroom standards.

- ✓ Four in five (83%) of health teachers assess content knowledge through multiple choice or other selected response methods.

- ✓ Almost all (90%) of teachers use performance tasks or events to assess their students.

**Professional Preparation and Development of Health Education Teachers**. *In health education, as in any discipline, instruction should be delivered by a certified teacher with a strong background in the subject and in appropriate instructional methods. Regular participation in professional development is essential for helping teachers stay up-to-date with current information in the field and helping them hone teaching skills and instructional approaches.*

**Most, but far from all, health teachers report being licensed in health education and have received professional preparation in health education.**

- ✓ Approximately three-quarters (77%) of lead health education teachers in Massachusetts are certified to teach health education.

- ✓ Approximately two-thirds (62%) of lead health education teachers report having their major professional preparation in health education or health and physical education combined.

- ✓ Approximately one-tenth (11%) of lead health education teachers report having their major professional training in physical education only and 8% report having a their major professional preparation in nursing.

- ✓ The majority of health teachers (57%) indicate that they have 10 or more years of experience teaching health education, 16% have 6 to 9 years, and 28% have five years or less experience.

**Almost all teachers report that they have received some training or professional development within the past two years, but even more would like additional training**.

- ✓ The most common topics on which health teachers have received recent training are cardiopulmonary resuscitation (CPR)(64%), violence prevention (61%), alcohol and drug use prevention (48%), first aid (46%), nutrition (44%), and physical activity and fitness (45%).

- ✓ The majority of teachers want more training on health related topics such as suicide prevention (82%), violence prevention (81%), alcohol and drug prevention (79%), emotional and mental health (79%), nutrition and dietary behavior (76%), human sexuality (75%), and STD and HIV prevention (74% and 71%, respectively).

- ✓ Teachers also asked for additional training on teaching skills for behavior change (82%), assessing or evaluating students in health education (81%), using interactive teaching methods such as role plays or cooperative group activities (72%), and encouraging family and community involvement (71%). Fewer than half had received recent training on any of these topics.

- ✓ Teachers were also interested in receiving staff development on how to teach students with physical, mental, or cognitive disabilities (69%) and those of various cultural backgrounds (65%).

**Coordination and Family/Community Involvement.** *Health education is most effective when it is coordinated with other school health-related programs and when families and community members are informed and involved.*

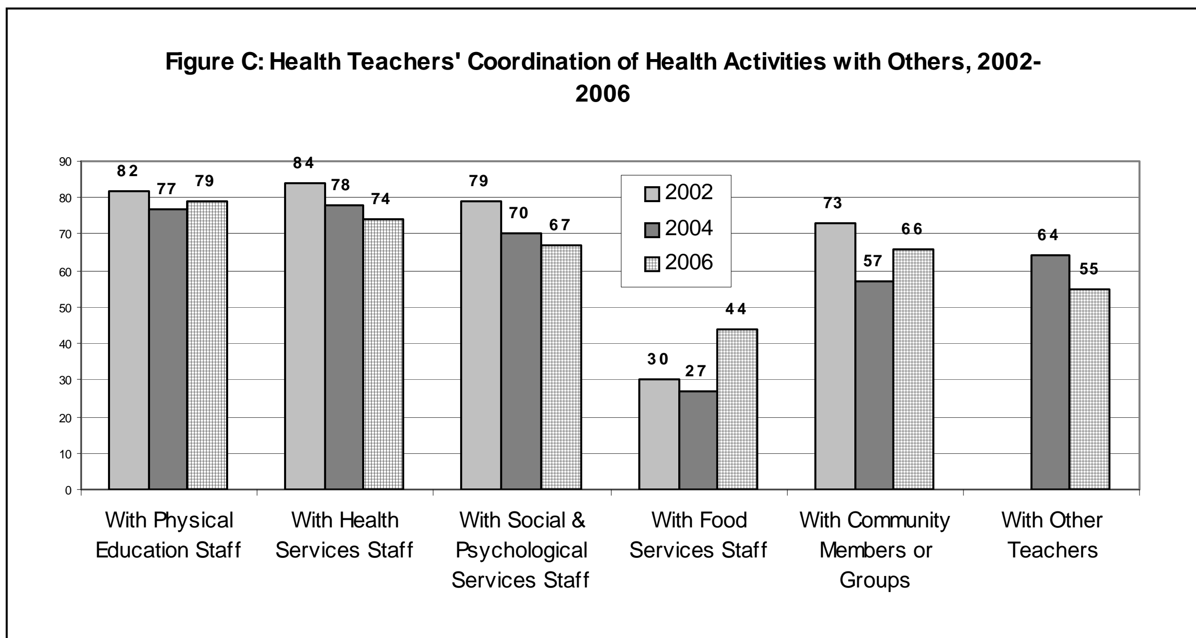
**Almost all teachers attempt to involve parents and families in health education, although these efforts have decreased somewhat since 2002.**

- ✓ Four in five teachers (80%) provide families with information about school health education, down from 87% in 2002.

- ✓ One third of health teachers (33%) have met with the PTA/PTO or other parent organizations to discuss school health education, down from 43% in 2002.

- ✓ Over one quarter (27%) have invited family members to attend health education classes, down from 35% in 2002.

**Health teachers work with other school staff and community groups to coordinate health education activities**. (Figure C, below)




- ✓ The majority of health teachers (79%) reported working with physical education teachers on health education activities.
- ✓ Most health teachers reported working with school health services, social services, and counseling/mental health staff, but less so than in previous years.
- ✓ Coordination of health education activities with food services staff rose significantly, to 44%. This increase may be due to participation of both food services and health teachers on committees to develop their district's school wellness policy, as required by Section 204 of the federal *Child Nutrition and WIC Reauthorization Act* of 2004.

## Recommendations

This report highlights several areas of concern. Most importantly, the decrease in schools with a required health education course is troubling, especially since these declines have been sharpest at the middle school level when young adolescents may be experimenting with behaviors that put their health and futures at risk. Many young people are not learning the skills and information that they need to stay healthy.

- School districts should have a minimum of one course in health education at both the middle and high school levels.

Second, the significant minority of teachers reporting no health education scope and sequence or no recent review of the health curriculum is a problem.

- Districts should develop a system-wide health education scope and sequence, based on state and national standards, that is reviewed periodically to ensure that content being taught is consistent with data and the needs of students in the district.

Third, although health-related skills are included in most health education courses, they are not always assessed nor are appropriate effective, interactive teaching methods usually emphasized.

- Teaching and assessment of skills in the health education classroom should be promoted and supported as much as possible.

Fourth, health teachers indicate a strong desire for more professional development than they are receiving, especially in the areas of assessment, skills teaching, and parent involvement.

- Continuing professional development for health education teachers should be supported by districts to ensure a quality educational experience for all students.

Finally, school health education is most likely to be effective when it is supported by families and communities.

- Schools and districts should encourage increased outreach to parents and increased coordination of school and community efforts to strengthen school health programs and foster the healthy development of all students.

**Contacts**

For questions about Massachusetts health education requirements or information about professional development opportunities and materials related to school health education, contact:

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The Massachusetts Coordinated School Health listserv (MCSH listserv) distributes information about professional development offerings, materials, and other resources related to health education and other school health programs. To subscribe, contact Holly Alperin at halperin@doe.mass.edu.

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