Adolescent Sexuality Education Program

Fiscal Year 2018

Massachusetts Department of Public Health
Office of Sexual Health & Youth Development

Executive Summary

Massachusetts continues to have an unmet need for adolescent sexuality education: 43% of high school students are not taught about condoms at school and 61% report not talking about preventing HIV, STIs, or pregnancy with a parent in the last year (YRBS). While the Massachusetts teen birth rate continues to decline in line with national trends, sexually transmitted infections (STIs), such as chlamydia, gonorrhea, and syphilis, continue to increase among all age groups with some of the highest rates among youth aged 15-24 years. In addition, Massachusetts experiences some of the greatest sexual health inequities in the country by race/ethnicity, geography, and income. Histories of racism, redlining, and maltreatment/neglect from the medical community are all contributing factors to sexual health inequities.

ASE Program FY18 Highlights

- 6,425 youth served in 20 communities
- 85% of youth served attended the majority of program sessions
- 96% of youth served say the program helped them learn about preventing STIs and pregnancy
- 87% say the program helped them feel more confident
- 12% increase in STI screening among sexuality active youth
- 5% increase in youth having a trusted adult to talk to

The Adolescent Sexuality Education (ASE) program funds community-based agencies in 20 high-need communities across the state to serve youth aged 10-21 years with evidence-based/evidence-informed sexual health curricula, positive youth development programming, and youth leadership activities. In FY18, a total of 15 community-based agencies served 6,425 youth with evidence-based sexuality education, nearly 300 youth with positive youth development programming, and 17 youth with youth internships. Eighty-six percent (86%) of youth served in FY18 were part of the ASE priority populations identified at highest need of services based on the best available data.

Key outcomes among youth served in the ASE program in FY18 were:

- 13% increase in youth reporting awareness of youth programs in their neighborhoods
- Statistically significant increases over the course of the ASE program in the percent of youth reporting they talked to an adult one-on-one about how to prevent STIs and pregnancy
- Statistically significant increases in the percent of sexually active youth (defined as sexually active in the 3 months prior to program entry) agreeing or strongly agreeing they can talk to a partner about using a condom

Lessons learned from ASE FY18 programming are used to improve the quality of programming moving forward and include sharing best practices, reaching youth most in need of services, keeping youth engaged and interested in programming, and effectively delivering tools and knowledge to keep youth healthy.

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Adolescent Sexual Health in Massachusetts

Sexual health is "a state of physical, emotional, mental and social well-being in relation to sexuality. Sexual health requires a positive and respectful approach to sexuality and sexual relationships, as well as the possibility of having pleasurable and safe sexual experiences, free of coercion, discrimination and violence. It is not merely the absence of disease."[i]

Adolescents and young adults have unique needs related to developing healthy sexuality. In addition to information on preventing unintended pregnancies and sexually transmitted infections (STIs), adolescents are in a critical developmental period where they are learning how to build healthy relationships, how to interpret sexually explicit media, and forming communication skills both for talking to adults or health care providers about their sexual health and to partners about how to keep each other healthy. Youth who have experienced trauma, such as community or domestic violence, racism, separation from family, or sexual assault, may need additional support via community-based programs to provide them with access to adults they can trust and health education that builds on their strengths.

In Massachusetts, 56% of high school students are sexually active by the time they reach 12th grade. While the vast majority of MA high school students report using a birth control method (90%), 42% report not using a condom and 18% drank alcohol or used drugs at last sexual intercourse. Massachusetts continues to have an unmet need for sexuality education: 43% of high school students were not taught about condoms at school and 61% report not talking about preventing HIV, STIs, or pregnancy with a parent in the last year.[ii]

Figure 1: MA High School Students Reporting Ever Being Sexually Active by Grade, MA YRBS 2017

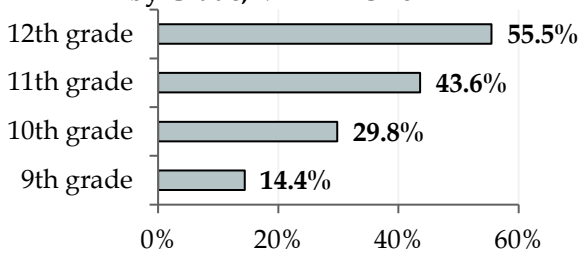
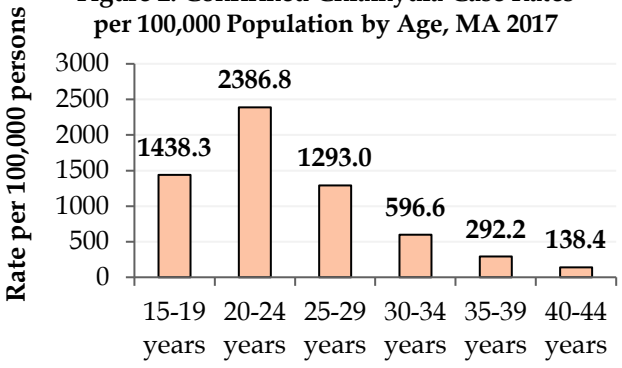


Figure 2: Confirmed Chlamydia Case Rates per 100,000 Population by Age, MA 2017



Source: *MDPH/Bureau of Infectious Disease and Laboratory Sciences/ Division STD Prevention*

Similar to trends across the United States, Massachusetts has seen the teen birth rate significantly decline over the past decade. The MA teen birth rate declined from 21.3 per 1,000 women aged 15-19 years in 2006 to 8.5 per 1,000 women in 2016[iii]. However, sexually transmitted infections (STIs), such as chlamydia and gonorrhea continue to increase among all age groups. Overall in Massachusetts, gonorrhea cases increased 267% and chlamydia cases increased 38% from 2010 to 2017[iv]. The highest chlamydia rates in Massachusetts are among the 15-19 and 20-24 age groups (Figure 2).

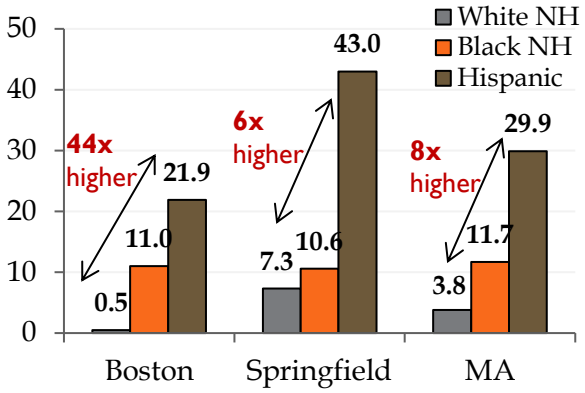
Inequities in Sexual Health in Massachusetts

Although Massachusetts has the lowest teen birth rate in the country and STI rates that are lower than the national rates, Massachusetts experiences some of the greatest sexual health ***inequities*** in the country by race/ethnicity, geography, and income.[v] [vi] [vii] Health behaviors – including sexual behavior - are shaped by a broad range of social, environmental, and economic conditions, which occur in the context of larger societal structures. Histories of racism, redlining, and maltreatment/neglect from the medical community all contribute to sexual health inequities.

Health Inequities vs. Health Disparities

Health disparities are differences in health outcomes between population groups. Health inequities refer to differences in health outcomes between groups that are avoidable and unjust. The term inequity is used in this report to call attention to the unjust nature of the differences sexual health outcomes in Massachusetts.

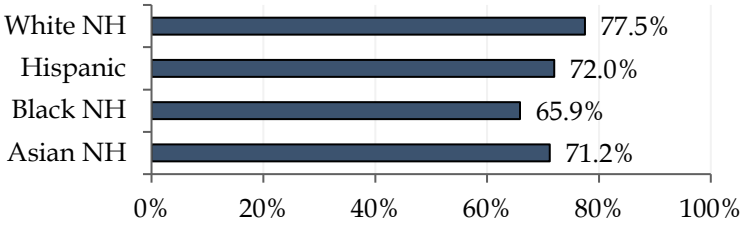
Figure 3: Birth Rate among MA Women Aged 15-19 by Select Community & Race/Ethnicity, 2016



There are inequities by race/ethnicity in the MA teen birth rate: the Hispanic teen birth rate is 8 times higher than the White non-Hispanic (NH) rate and the Black NH rate is 3 times higher than the White NH rate (Figure 3). There are also inequities by and within communities, with some communities having teen birth rates 3 times higher than the state rate (Appendix A) and significant inequities by race/ethnicity within communities (Figure 3). Geographic and racial/ethnic inequities in the teen birth rate in Massachusetts often co-occur with inequities in income and other socio-economic factors: among the 8 communities with the highest teen birth rates in the state (Lawrence, Chelsea, Holyoke, New Bedford, Southbridge, Lynn, Fall River, Springfield, Brockton, and Fitchburg) all have family poverty levels that are more than twice the state level; 7 out of the 8 communities have unemployment rates higher than the state; and all have high school dropout rates higher than the state average (Appendix B).

Protective factors are conditions or attributes in individuals, families, communities, or the larger society that reduce risk in families and communities, thereby increasing the health and well-being of children and families.[viii] Protective factors such as connection to a trusted adult to talk to, feeling safe and welcome at school, and positive peer relationships can promote healthy sexual behavior among youth.[ix] There are inequities in protective factors among Massachusetts youth as well: MA high school students of color (inclusive of Black, Hispanic, and Asian populations) are less likely to report having an adult at school to talk to about a problem compared to White students. Students identifying as lesbian, gay, bisexual, transgender, or queer/questioning (LGBTQ) are less likely to report having an adult family member to talk to compared to straight youth (64.5% for LGBTQ youth vs. 84.4% for straight/cis-gender youth).[x]

Figure 4: MA HS Students Having At Least One Adult at School to Talk to About a Problem by Race/Ethnicity, MA YRBS, 2017



Notes: NH means non-Hispanic.

Adolescent Sexuality Education Program

The Adolescent Sexuality Education (ASE) program funds community-based agencies in 20 communities (see Appendix C) across the state to serve youth aged 10-21 years with evidence-based/evidence-informed sexual health curricula, positive youth development programming, and youth leadership activities. To achieve the highest impact, populations and communities with the highest teen birth and STI rates are prioritized. The ASE program aims to increase life opportunities for youth by:

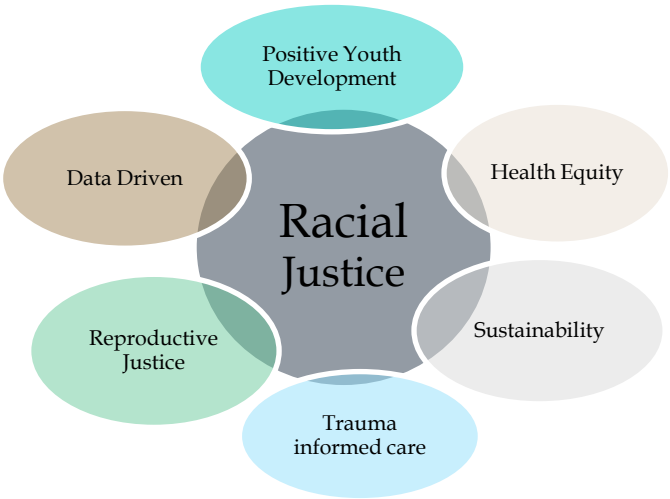
ASE Priority Populations

- Black youth
- Expectant and parenting teens
- Hispanic/Latinx youth
- LGBTQ youth
- Male youth
- Unaccompanied minors
- Youth experiencing homelessness and sex trafficking
- Youth in or aging out of systems of care
- Youth with physical and/or intellectual disabilities

- Decreasing the teen birth rate in priority Massachusetts communities through increased access to evidence-based education;
- Increasing educational attainment through promoting positive youth development and prevention of unintended pregnancies;
- Decreasing STI incidence among priority populations in selected communities through increased access to medically-accurate, age-appropriate programming.

Community-based agencies partner with schools, youth opportunity programs, and clinical providers to offer comprehensive sexual health education and linkages to youth programs and clinical services. In addition to providing sexuality education, the ASE program includes positive youth development programming to increase protective factors such as connection to a trusted adult, and school and community connectedness. Positive youth development activities may include college tours, peer youth leader groups, volunteer opportunities, civic education, and more.

Office of Sexual Health & Youth Development Values



The Massachusetts ASE program aligns with the MDPH's Office of Sexual Health and Youth Development's (OSHYD) key principles including use of nationally recognized best practices, comprehensive sexuality education, positive youth development, trauma-informed care, sustainability, and a commitment to health equity and reproductive justice.

ASE Services & Program Reach, FY18

In FY18, a total of fifteen community-based agencies served 6,425 youth in 20 communities with evidence-based sexuality education, nearly 300 youth with positive youth development programming, and 17 youth with youth internships. Eighty-sex percent (86%) of youth served in FY18 fell within the at least one of the ASE priority populations identified at highest need of services (see page 3). Demographics of youth served are presented in Table 1.

Service Delivery

Seventy-four percent (74%) of ASE sexuality education programming was held in a school setting and 26% was held in a community-based setting. Among the 15 agencies providing sexuality education programming, 12 used evidence-based curricula and 3 used evidence-informed curricula. A list of curricula used is included in Appendix C. Of the 12 agencies implementing evidence-based curricula, 7 delivered the curricula with an average of 80% or higher "fidelity" to the curriculum. (Fidelity is defined as covering all curriculum sessions without modifications or with minor modifications.) Several service providers not delivering the curricula to fidelity reported challenges such as staff turnover, scheduling difficulties that made it hard to fit in all of the required sessions when curricula were delivered in partnerships with schools, many of which have competing academic priorities, and weather-related class cancelations. All providers received technical assistance and information on best practices to increase adherence to the evidence-based model.

Youth Program Experience

Youth were highly engaged in ASE programming: 85% of youth receiving evidence-based/informed curricula attended at least 70% of all program sessions. Ninety-four percent (94%) of youth said they would definitely (51%) or maybe (42%) recommend the program to a friend. Youth served across all agencies rated the program 7.9 on a scale of 1 to 10, with 10 being "I loved this program".

Table 1: Demographics of ASE Participants, FY2018 (n=5,517)

Age	
10-14 years	51.9%
15-19 years	45.5%
20+ years	2.6%
Gender Identity*	
Female	55.7%
Male	42.2%
Transgender/Genderqueer	1.6%
Unsure	2.2%
Identifies as LGBTQ	15.8%
Race/Ethnicity	
American Indian/ Alaskan Native NH	2.3%
Asian/Pacific Islander NH	5.3%
Black NH	13.5%
Hispanic / Latinx	46.8%
White NH	26.1%
Other NH	6.0%
Grade Level	
Middle School	33.5%
High School	62.4%
Not in school	2.2%
Ungraded	1.9%
DCF involved	10.7%
Has long-term learning disability	7.0%

Notes: NH means non-Hispanic. DCF involved refers to family involvement with the MA Department of Children and Families, the state's child welfare system. *Gender identity adds up to over 100% because participants may choose multiple categories.

More than 6,425 youth were served in 20 communities by the ASE program in FY18

ASE Program Outcomes, FY18

To measure progress toward reaching ASE program goals, we examined program outcomes related to the following four key areas: 1) youth protective factors; 2) sexual health communication skills; 3) sexual health knowledge; and 4) sexual health behavior, including STI screening and contraceptive use.

Youth Protective Factors

Some youth protective factors associated with increased healthy sexual behavior include connection to a trusted adult, connection to community/school, connection to family, positive self-image/self-confidence, and healthy peer relationships. To assess the impact of ASE programming related to protective factors, we examined connection to a trusted adult, youth confidence in themselves, and awareness of youth community resources.

5% increase in connection to a trusted adult over the course of ASE

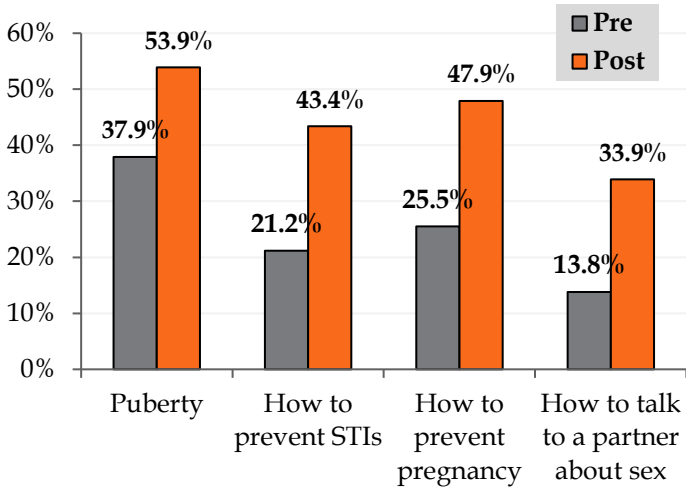
87% of youth reported that the ASE program helped them to feel more confident in themselves

Over the course of the ASE program, there was an absolute 4.6% increase in the percent of youth reporting they had an adult to talk to about a problem (82.5% at program entry compared to 87.1% at program exit). At the end of ASE programming, 87% of youth reported that the ASE program helped them to feel more confident in themselves, 73% reported that ASE helped them learn about youth programs in their community, and 77% reported that ASE helped them to learn about places to go in the community for family planning services. There were also increases over the course of the program of youth awareness of community resources: there was a 13% increase in youth reporting awareness of youth programs in their neighborhoods and a 19% increase in awareness of jobs programs for teenagers.

Sexual Health Communication Skills

Building strong communication skills to talk to partners and trusted adults about sexual health and how to have healthy relationships is critical to improving sexual health among youth. There were significant increases over the course of the ASE program in the percent of youth reporting they talked to an adult one-on-one about several sexual health topics, including puberty, how to prevent STIs and pregnancy, and how to talk to a partner about sex (Figure 5). There was also a significant increase in the percent of youth agreeing or strongly agreeing that they can talk to a partner about condom use before sexual contact (80.5% at entry vs. 86.0% at exit).

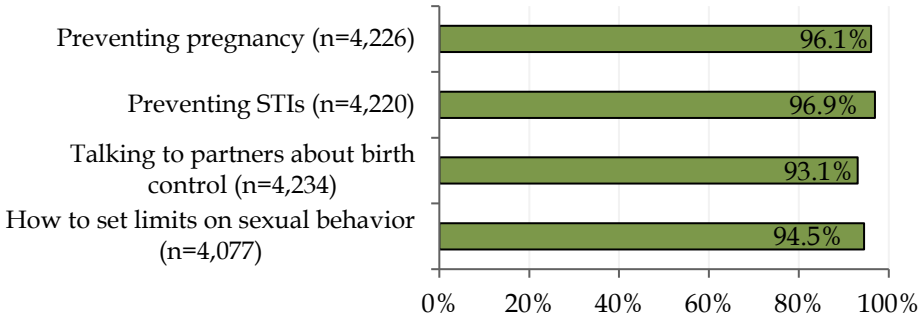
Figure 5: Youth Reporting Talking with an Adult One-on-One About (n=3,393)….



Sexual Health Knowledge

High percentages of ASE program participants reported the program helped them learn about how to prevent pregnancy and STIs, how to talk to partners about birth control, and how to set limits on sexual behavior (Figure 6). In addition, 82% of participants were able to identify the components of a healthy relationship at program completion.

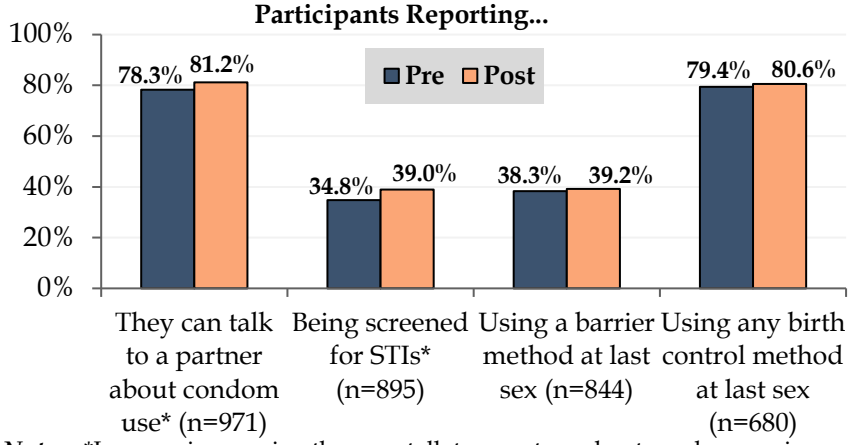
Figure 6: This program helped me to learn about.....



Sexual Health Behavior

At program entry, 29% of ASE participants report ever being sexually active and 21% report being sexually active in the past 3 months. There were small increases in sexual activity over the course of the program: 31% of participants report being ever sexually active and 23% report being sexually active in the past 3 months at program exit. Among sexually active youth (defined as sexually active in the 3 months prior to program entry), there were statistically significant increases in the percent that agreed or strongly agreed that they can talk to a partner about using a condom and reporting being screened for STIs (Figure 7). There were small increases in the percent of sexually active youth reporting using a barrier method and any birth control method over the course of the program, but the increases were not statistically significant.

Figure 7: Percent of Sexually Active FY18 ASE Participants Reporting...



Notes: *Increase in agreeing they can talk to a partner about condom use is statistically significant at α=0.05. Increase in being screened for STIs is statistically significant at α=0.001.

Next Steps

The Adolescent Sexuality Education program continues to provide comprehensive sexuality education and positive youth development activities to youth in Massachusetts communities and populations with disproportionately high teen birth and STI rates. Data collected during FY18 was used to inform quality improvement in FY19 and FY20. Best practices for reaching priority youth populations, keeping youth actively engaged in programming, and effectively delivering program content are shared annually at ASE provider meetings with the goal of increasing program effectiveness and improving outcomes. Data collected in FY19 and FY20 is currently being analyzed to learn more about best practices and high-quality programming. In FY19, the ASE program began funding partnership development among community agencies implementing sexuality education programming to strengthen agency capacity and community networking in order to reach more youth and provide more comprehensive programming.

Appendices

Appendix A: MA Birth Rate Among Women Aged 15-19 Years by 25 MA Communities with the Highest Teen Birth Rates and Select Race/Ethnicity, 2016				
Community	All Teen Births Rate (N)	White NH Rate (N)	Black NH Rate (N)	Hispanic Rate (N)
Lawrence**	34.5 (117)	16.0 (6)	---* (<5)	37.0 (106)
Chelsea**	32.6 (39)	---* (<5)	0.0 (0)	39.6 (35)
Holyoke**	31.9 (48)	---* (<5)	---* (<5)	38.8 (41)
New Bedford**	31.6 (96)	13.3 (27)	28.8 (7)	72.2 (52)
Southbridge**	29.8 (17)	---* (<5)	0.0 (0)	63.9 (14)
Lynn**	29.2 (94)	8.0 (9)	11.1 (5)	53.0 (71)
Fall River**	25.2 (70)	15.5 (34)	58.1 (9)	74.9 (23)
Springfield**	25.2 (172)	7.3 (14)	10.6 (16)	43.0 (138)
Brockton	24.4 (82)	10.2 (14)	29.3 (43)	56.4 (23)
Fitchburg**	19.0 (42)	6.0 (7)	---* (<5)	62.1 (29)
Marlborough	22.4 (23)	6.3 (5)	0.0 (0)	92.9 (17)
Everett**	19.0 (25)	9.0 (6)	---* (<5)	42.8 (14)
Haverhill	17.3 (31)	10.6 (14)	---* (<5)	38.8 (15)
Pittsfield**	17.2 (23)	14.4 (16)	---* (<5)	---* (<5)
Revere**	13.9 (20)	---* (<5)	---* (<5)	26.8 (14)
Chicopee**	13.8 (26)	6.1 (8)	0.0 (0)	38.8 (17)
Worcester**	13.2 (102)	7.8 (35)	10.4 (8)	29.2 (58)
Taunton	13.2 (23)	5.4 (8)	49.0 (5)	44.8 (6)
Lowell	13.1 (54)	5.8 (11)	0.0 (0)	31.4 (31)
Attleboro	12.6 (17)	6.3 (7)	---* (<5)	54.5 (6)
Leominster**	12.2 (16)	5.4 (5)	0.0 (0)	38.9 (11)
Somerville**	9.4 (16)	---* (<5)	0.0 (0)	42.1 (12)
Methuen	9.2 (15)	---* (<5)	0.0 (0)	29.1 (13)
Framingham	8.1 (19)	---* (<5)	---* (<5)	30.4 (13)
Boston**	7.6 (198)	0.5 (6)	11.0 (72)	21.9 (114)
Massachusetts	8.5 (1,931)	3.8 (599)	11.7 (235)	29.9 (1,000)

Source: Massachusetts Births 2016 Boston, MA: Registry of Vital Records and Statistics, Massachusetts Department of Public Health. May 2018. Retrieved from: https://www.mass.gov/doc/2016-birth-report/download

*The number of births was between 1 and 4. Rates based on counts of 1-4 are not presented. Rates based on counts of less than 20 are considered unstable and should be interpreted with caution.

**Highlighted communities have funded ASE programs.

Appendix B: Select Economic, Health, & Education Indicators Among the 10 MA Communities with the Highest Teen Birth Rates in the State				
Community	Teen Birth Rate (2016)	Family poverty level (2017)	Unemployment level (2017)	High school dropout rate (2017-18)
Lawrence**	34.5	22.1%	7.2%	5.1%
Chelsea**	32.6	16.6%	5.5%	6.7%
Holyoke**	31.9	24.7%	10.2%	4.9%
New Bedford**	31.6	19.3%	9.1%	3.8%
Southbridge**	29.8	15.2%	8.3%	4.6%
Lynn**	29.2	15.0%	6.3%	4.5%
Fall River**	25.2	17.5%	10.2%	4.8%
Springfield**	25.2	24.7%	11.1%	5.1%
Brockton	24.4	13.9%	9.7%	4.4%
Fitchburg**	19.0	14.0%	10.1%	4.6%
Massachusetts	8.5	7.8%	6.0%	1.9%

Sources

Birth rates: Massachusetts Births 2016 Boston, MA: Registry of Vital Records and Statistics, Massachusetts Department of Public Health. May 2018. Retrieved from: https://www.mass.gov/doc/2016-birth-report/download

Unemployment and Poverty data: American Community Survey, 2017. Retrieved from: https://factfinder.census.gov/faces/nav/jsf/pages/community_facts.xhtml

High school data: Massachusetts Department of Elementary and Secondary Education, 2017-2018. Retrieved from: http://www.doe.mass.edu/infoservices/reports/dropout/2017-2018/

**Highlighted communities have funded ASE programs.

Appendix C – Agencies Implementing ASE and Curricula Used, FY18

Community	Agencies Implementing ASE	Curricula Used
Boston	Action for Boston Community Development (ABCD), Planned Parenthood League of Massachusetts	Sisters Saving Sisters
Chelsea	Roca Inc.	¡Cuídate!
Chicopee	River Valley Counseling Center (RVCC)	Making Proud Choices!
Everett	Cambridge Health Alliance	Get Real – High School, Teen Outreach Program, Get Real – High School, Get Real – Middle School
Fall River	Citizens for Citizens (CFC)	Focus on Youth, Making Proud Choices!
Fitchburg	Montachusett Opportunity Council (MOC)	¡Cuídate!, Get Real – High School, Making Proud Choices!
Holyoke	The CARE Center, Girls Inc. of the Valley, River Valley Counseling Center (RVCC)	¡Cuídate!, Informed and In Charge, Making Proud Choices!
Lawrence	Family Services of the Merrimack Valley (FSMV)	Making Proud Choices!
Leominster		
Lowell	Lowell Community Health Center	Making Proud Choices!
Lynn	Girl's Inc. – Lynn	Informed and In Charge
New Bedford	Responsible Attitudes toward Pregnancy, Parenting, & Prevention (RAPPP)	Teen Outreach Program, Making Proud Choices!
Pittsfield	Berkshire United Way/Gladys Allen Brigham Community Center	Get Real – High School, Get Real – Middle School
Springfield	Planned Parenthood League of Massachusetts	Get Real – High School
Somerville	Cambridge Health Alliance (CHA)	Get Real – High School, Teen Outreach Program, Get Real – High School, Get Real – Middle School
Southbridge	You Inc.	¡Cuídate!, FLASH, Get Real – High School, Get Real – Middle School, Making Proud Choices!
Taunton	Citizens for Citizens	Focus on Youth, Making Proud Choices!

Methods Notes

ASE program data presented is from process logs completed by ASE program facilitators and pre/post-surveys completed by youth who participate in evidence-based / evidence-informed ASE programming. Process logs document curricula offered, fidelity to curricula (i.e. if any changes were made to the curricula activities or sequence), and program attendance. Pre/post surveys rely on self-reporting by ASE youth participants to determine demographic information, program experience, and changes in knowledge and behavior. Self-reported data has limitations due to different biases, including recall bias, social desirability bias, and nonresponse bias among others. The average time elapsed between pre and post survey was 2-3 months, but can range from 1 week to 9 months. All pre to post changes were measured using McNemar's paired chi-square test using only matched pre and post surveys; surveys are matched using a unique code.

Endnotes

[i] Sexual health and its linkages to reproductive health: An operational approach. Geneva: World Health Organization; 2017. License: CC BY-NC-SA 3.0 IGO. Retrieved from: https:// https://www.who.int/reproductivehealth/publications/sexual_health/sh-linkages-rh/en/

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[iii] Massachusetts Births 2016 Boston, MA: Registry of Vital Records and Statistics, Massachusetts Department of Public Health. May 2018. Retrieved from: https://www.mass.gov/doc/2016-birth-report

[iv] Massachusetts Department of Public Health/Bureau of Infectious Disease and Laboratory Sciences/ Division STD Prevention. Retrieved from: https://www.mass.gov/lists/std-data-and-reports

[v] Kost K., Maddow-Zimet I., & Kochar S. Pregnancy Desires and Pregnancies at the State Level: Estimates for 2014. New York, Guttmacher Institute, 2018. Retrieved from: https://www.guttmacher.org/report/pregnancy-desires-and-pregnancies-state-level-estimates-2014

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[viii] Protective Factors to Promote Well-Being. US Department of Health & Human Services, Administration for Children and Families. Child Welfare Information Gate. Retrieved from: https://www.childwelfare.gov/topics/preventing/promoting/protectfactors/

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