



# Project ARREST

CDC DASH 1308

Final Evaluation Report,  
2013-18

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October 2018

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## Introduction

In 2013, the School District of Philadelphia (SDP) entered into a cooperative agreement with the Division of Adolescent and School Health (DASH) at the Centers for Disease Control (CDC) to receive funding intended to help build the capacity of SDP to develop and implement sustainable program activities that would effectively: (1) reduce human immunodeficiency virus (HIV) infection and other sexually transmitted diseases (STDs) among adolescents; (2) reduce disparities in HIV infection and other STDs experienced by specific adolescent sub-populations; and (3) reinforce efforts to reduce teen pregnancy rates. Program activities were organized around three primary approaches:

- Exemplary sexual health education (ESHE): Provide exemplary sexual health education emphasizing HIV and other STD prevention;
- Sexual health services (SHS): Increase adolescent access to key sexual health services; and
- Safe and supportive environments (SSE): Establish safe and supportive environments for students and staff.

Program activities occurred in 22 high schools (including four alternative high schools), as well as four middle schools, for a total of 26 priority schools. The program manager chose the priority schools.

Throughout the course of the five-year grant cycle, the Office of Research and Evaluation (ORE) collected and analyzed data to assess the extent to which the program, known throughout SDP as the AIDS Risk Reduction through Education and Staff Training (or “Project ARREST”), achieved its intended goals. ORE also assessed the extent to which the program strengthened and expanded SDP policies and supports to enable schools to prevent and reduce risk behaviors of school-age youth that may result in STI/HIV infection and unintended pregnancy.

This report includes a description of our data sources and evaluation activities, a summary of major successes, a summary of progress made toward originally stated goals, including significant results, and plans for publication.

## Data Sources

A variety of data sources were used to conduct the evaluation activities that were part of this grant. First, to identify the population risk factors, assess needs, and conduct a longitudinal analysis over time, we used longitudinal data sources including the Program Evaluation Reporting System (PERS), School Health Profiles (SHP), and the Youth Risk Behavior Survey (YRBS).<sup>1</sup>

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<sup>1</sup> Weighted YRBS and School Profiles data were obtained for all years overall, and for the Priority School subset (2015 for YRBS and 2016 for School Health Profiles). Weighted data for Priority Schools for the 2017 YRBS and School Health Profiles data for 2018 was not available. For more information about the methods used for sampling and weighting, see <https://www.cdc.gov/healthyouth/data/yrbs/methods.htm>

Second, we created satisfaction surveys to evaluate program participants' perceptions of the quality and utility of program activities. Finally, we evaluated implementation using surveys, interviews, and observations.

## Evaluation Activities

Evaluation activities were conducted each year that addressed each of the three major focus areas - Exemplary Sexual Health Education (ESHE), Sexual Health Services (SHS), and Safe and Supportive Environments (SSE). The activities by year included:

Year 1 (2013-14):

- Needs assessment
- Document review
- Policy review

Year 2 (2014-15):

- Rapping About Prevention satisfaction surveys (ESHE)
- Referral data collection (SHS)
- LEAD conference satisfaction surveys (SSE)
- Document review

Year 3 (2015-16):

- Rapping About Prevention satisfaction surveys (ESHE)
- High school textbook lesson feedback survey (ESHE)
- LEAD conference satisfaction surveys (SSE)
- PERS data collection and entry (SHS)

Year 4 (2016-17):

- Rapping About Prevention satisfaction surveys (ESHE)
- High school textbook lesson feedback survey (ESHE)
- LEAD conference satisfaction surveys (SSE)
- Peer mediation program surveys (SSE)
- Professional development satisfaction surveys (SSE)
- PERS data collection and entry (SHS)

Year 5 (2017-18):

- Priority school health teacher interviews on textbook implementation (n=10) (ESHE)
- Observations of AIDS Community Educators (ACE) activities in schools (SSE)
- LEAD conference satisfaction surveys (SSE)

- Professional development satisfaction surveys (SSE)
- Referral data collection, adding referral tracking to the ACE forms, which increased the quality of referral data available (SHS)
- PERS data collection and entry (SHS)

## Summary of Major Successes, Years 1-5

### Exemplary Sexual Health Education (ESHE)

During the five-year grant cycle (2013-18), the program implemented an evidence-based sexual health curriculum. Major successes in the ESHE focus area include:

- A new health education textbook, *Comprehensive Health*, published by Goodheart-Willcox in 2015, was introduced in 19 of the 22 priority high schools, along with lesson guidance and professional development (PD). (Three high schools did not receive the textbooks because they did not have a health teacher in their schools.)
- In the final year of the grant, *Making Proud Choices*, an evidence based curriculum, was implemented in three of the four priority middle schools, along with PD and technical assistance.
- In total, 6,113 high school students and 100 middle school students were taught sexual health curriculum.
- The program manager and ACEs conducted 14 professional development workshops related to ESHE components for priority school staff.
- ACEs reported 630 instances of technical assistance provided to priority school staff related to ESHE.

### Sexual Health Services (SHS)

To achieve its goal of increasing access to youth-friendly sexual health service providers, the program focused its efforts on ensuring consistent referrals to providers from priority school staff.

Major successes in the SHS focus area include:

- The program developed and disseminated a list of youth-friendly providers to **21** priority high schools.
- The program manager and ACEs reported that they provided **468** instances of technical assistance related to SHS to priority schools staff, such as teachers, nurses, and counselors.
- Priority school staff reported making 6,135 sexual health referrals of students to youth-friendly providers over the duration of the grant.
- The program assisted in the continued support and coordination of the work done in the 12 Health Resource Centers across the District.
- 8,882 students received on-site STD testing through the partnership with the Philadelphia Department of Public Health (PDPH).
- ORE incorporated changes to the ACE forms to collect information about the number of sexual health referrals made in priority schools.

### Safe and Supportive Environments (SSE)

During the five-year grant cycle (2013-18), the program manager and ACEs worked with priority school staff, as well as health and physical education teachers across SDP, to create safe and supportive environments. Major successes in the SSE focus area include:

- ACEs connected with students in priority schools to create and maintain peer mediation programs, as well as offered workshops on healthy relationships and the importance of safe sex.
- ACEs reported providing 543 instances of technical support related to SSE components to priority schools.
- The program manager led seven professional development sessions for Health and PE teachers on the topics of mental health, LGBTQ issues, bullying, sexual violence and consent. PD attendees generally rated sessions positively.
- The Mazzoni Center, a non-profit in the community funded in part by this grant, established and/or maintained Gay-Straight Alliances (GSAs) in 26 schools seven of which were priority high schools.
- Mazzoni Center conducted three LEAD conferences over the five year grant period, and high satisfaction rates were reported by students and staff members who attended.

## Statement of Progress

At the onset of the funding cycle, the program set major goals and objectives to help increase students' access to sexual health education, comprehensive sexual health services, and safe and supportive environments with an emphasis on HIV, STD, and pregnancy prevention. In this section, we list the original goal for each of the three approaches and we use multiple data sources to describe the progress that was made toward each goal.

## Exemplary Sexual Health Education (ESHE)

The major goal for ESHE at the onset of the program was to “provide qualified and experienced staff with curricula, strategies, materials and training on various interventions in order to deliver scientifically sound services and programs to school age youth.” During the project period, the program made progress toward this goal in the following ways.

- In 2014, the program and ORE conducted a document review of sexual health education policies across SDP.
- In the spring of 2015, the program manager and team reviewed several health education textbooks and selected *Comprehensive Health*, published by Goodheart-Willcox in 2015 for use in priority high schools.
- The program implemented the new textbook and lesson guidance in 19 of 22 priority high schools. The three priority high schools that did not have a health teacher did not receive textbooks.

According to School Health Profiles data, priority schools consistently reported higher rates in those areas compared to SDP schools as a whole. In 2016, a significantly greater percentage of priority schools reported teaching key HIV, STD, and pregnancy prevention topics (83.9%) compared to the District as a whole (39.9%). Similarly, more priority schools reported assessing

students on their abilities relating to ESHE (67.6%) compared to SDP overall (43.0%), and more priority schools (84.5%) compared to SDP overall (49.1%) report having been provided with key materials for teaching sexual health education.

However, there was a decrease from 2014 to 2016 in the percentage of priority schools that reported teaching key HIV, STD, and pregnancy prevention topics and assessing students on their abilities relating to ESHE (Table 1).

**Table 1. School Health Profiles Results: School-Level Impact Measures (2014 and 2016)**

	<b>SDP Overall (2014)</b>	<b>Priority Schools (2014)</b>	<b>SDP Overall (2016)</b>	<b>Priority Schools (2016)</b>
<b>School-Level Metric</b>	<b>%</b>	<b>%</b>	<b>%</b>	<b>%</b>
Percent of schools that teach 11 key HIV, STD, and pregnancy prevention topics in a required course during grades 6, 7, or 8 and during grades 9, 10, 11 or 12.	49.9 (N = 117)	<b>87.5*</b> (N = 16)	39.9 (N = 117)	<b>83.9*</b> (N = 19)
Percent of schools that assess the ability of students to do 7 skills in a required course taught during grades 6, 7, or 8 and during grades 9, 10, 11 or 12.	54.8 (N = 112)	<b>86.7*</b> (N = 15)	43.0 (N = 117)	<b>67.6*</b> (N = 20)
Percent of schools in which those who teach sexual health education are provided with key materials for teaching sexual health education.	59.5 (N = 105)	75.0 (N = 16)	49.1 (N = 117)	<b>84.5*</b> (N = 18)

*Note: Numbers in this table represent weighted results.*

*\*Statistically significant difference ( $p < 0.05$ ) on this measure between SDP and ARREST priority schools.*

While priority school rates were higher compared to SDP overall for both 2014 and 2016, two performance measures for priority schools decreased from 2014 to 2016. The percent of priority schools that teach 11 key HIV, STD, and pregnancy prevention topics in a required course decreased from 87.5% in 2014 to 83.9% in 2016, and the percent of priority schools that assess the ability of students to do 7 skills in a required course decreased from 86.7% in 2014 to 67.6% in 2016. On the other hand, the percent of priority schools in which those who teach sexual health are provided key materials increased from 75% in 2014 to 84.5% in 2016.

Similarly, results from the YRBS related to EHSE indicate that there was no significant change in the percentage of students who reported ever having been taught in school about AIDS or HIV infection over the five-year grant period (Table 2). These results indicate that the program did not make as much progress toward the ESHE goal as they had hoped in SDP overall or in priority schools.

*Table 2. YRBS Results Related to the ESHE Focus Area in 2013, 2015, and 2017\**

	<b>SDP Overall (2013)</b>	<b>SDP Overall (2015)</b>	<b>Priority Schools (2015)</b>	<b>SDP Overall (2017)</b>
<b>School-Level Metric</b>	<b>%</b>	<b>%</b>	<b>%</b>	<b>%</b>
Percentage of students who had ever been taught in school about AIDS or HIV infection	82.1	80.6	79.3	80.0

*Note: Numbers in this table represent weighted results.*

*\* Data for priority schools can only be compared to SDP in 2015 due to the lack of data in 2013 and 2017. In 2015, the percentage of students in priority schools who reported receiving HIV/AIDS education was 79%, compared to 81% across all SDP schools. It is important to note that implementation of the curriculum did not start until 2015.*

## **Sexual Health Services (SHS)**

The major goal for SHS at the onset of the program was to “help schools increase adolescents’ access to youth friendly, community-based health care providers, including HIV/STD counseling, testing and treatment, use of condoms and other interventions to reduce risk behaviors, provide support groups, and other services.” During the project period, the program made progress toward the goal in the following ways.

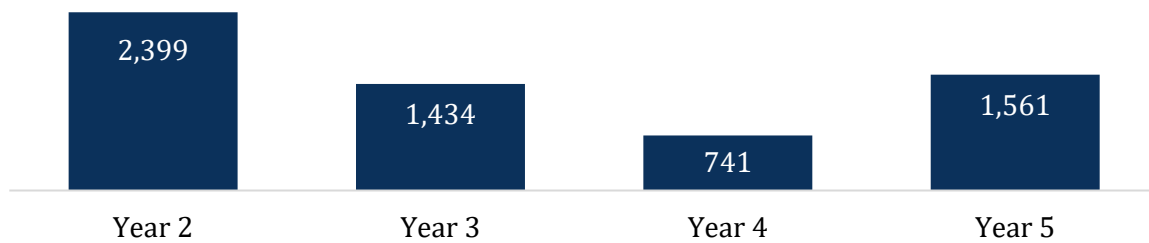
- Established and maintained partnerships with off-site sexual health service providers to address gaps in SHS services, provide resources, and deliver technical assistance to priority schools.
- Partners included Access Matters, the American Red Cross, The Mazzone Center, Answer (Rutgers University), and Philadelphia Department of Public Health (PDPH).
- Assessed priority schools’ SHS policies and identified student needs, and used this information to establish, strengthen, and guide the partnerships.
- Implemented special resources in a number of priority schools, with the help of these partners, such as condom dispensaries and designated staff to distribute condoms, on-site STI testing, and sexual health fairs.
- Assessed sexual health service providers for youth-friendliness of services and created lists of these providers for use by nurses, counselors, teachers, and other school staff.
- Distributed other resources, such as informational posters and magnets, to nurses, counselors, and health and physical education (PE) teachers in their priority schools.
- Worked with ORE to improve tracking of SHS referrals made by priority school staff. ORE was able to establish and implement a referral form that was utilized by ACEs on a monthly basis to capture SHS referrals from school staff in year five of the grant.



- Reported that 6,135 referrals were made by school staff to both youth- friendly off-site and on-site providers (Figure 1).

At the start of year two (2014-15), the program reported 2,399 SHS referrals. Over years three and four, SDP saw a steady decline in SHS referrals being made by school staff, to 741 in 2016-17. We believe one reason for this decline was inaccurate reporting. In year five (2017-18), we changed the way we collected referral data, adding questions to the ACE tracking forms, and saw a substantial increase in the number of SHS referrals reported.

**Figure 1. Number of Referrals Made by School Staff to Youth-Friendly Off-Site Providers or School-Based Health Centers for Key Sexual Health Services in the Four Years of Reporting.**



On-site services and referrals was the only impact measure evaluated for SHS on the School Health Profiles. In 2014, priority schools reported a significantly higher percentage of on-site services or referrals (58.8%) than other SDP schools (34.3%) (Table 3). Similarly, in 2016 priority schools maintained a higher percentage of on-site services and referrals (45.8%) than SDP overall (26.1%).

**Table 3. There Was a Decline in the Percentage of Schools Offering Sexual Health Services (School Health Profiles, 2104 and 2016)**

	SDP Overall (2014)	Priority Schools (2014)	SDP Overall (2016)	Priority Schools (2016)
School-Level Metric	%	%	%	%
Percentage of schools that provide students with on-site services or referrals to healthcare providers for 7 key sexual health services.	34.3 (N = 136)	<b>58.8*</b> (N = 17)	26.1 (N = 123)	45.8 (N = 23)

Note: Numbers in this table represent weighted results.

\*Statistically significant difference ( $p < 0.05$ ) on this measure between SDP and ARREST priority schools.

However, priority schools and SDP schools overall saw a decline in schools reporting that they offered on-site SHS services or referrals to off-site healthcare providers, which is consistent with trends in the PERS referral data for the same time period.

Encouragingly, Philadelphia students reported a decrease in the rate of five sexual risk behaviors. According to YRBS data, there was a statistically significant decrease from 2013 to 2017, in five sexual risk behaviors: the overall rate of students who ever had sex, the rate of students who had sex before age 13, the rate of students who had sex with four or more partners, the rate of students who were currently sexually active, and the rate of students who drank alcohol or used drugs before sexual intercourse (Table 4).

*Table 4. YRBS Results Related to Sexual Health Services (SHS) Focus Areas (2013, 2016, and 2017)*

	SDP 2013	SDP 2015	Priority Schools 2015	SDP 2017
Student-Level Metric	% of students	% of students	% of students	% of students
Ever had sexual intercourse	-	52.4	59.3	<b>40.4*</b>
Had sexual intercourse before age 13 years (for the first time)	11.1	9.7	11.3	<b>5.5*</b>
Had sexual intercourse with four or more persons (during their life)	21.8	19.4	25.3	<b>13.2*</b>
Were currently sexually active (sexual intercourse with at least one person during the 3 months before the survey)	37.7	37.2	40.8	<b>28.2*</b>
Did not use a condom during last sexual intercourse*	42.2	44.1	46.8	44.8
Did not use any method to prevent pregnancy during last sexual intercourse*	20.8	17.1	17.3	18.6
Drank alcohol or used drugs before last sexual intercourse*	21.7	13.2	15.0	<b>11.6*</b>

*Note: Numbers in this table represent weighted results.*

*\*Statistically significant difference ( $p < 0.05$ ) on this measure between SDP 2015 and SDP 2017 results.*

However, there was no statistically significant change in the rate of students who did not use a condom during last sexual intercourse. So, while the rate of sexual risk behaviors has decreased in SDP over the grant cycle, the results here indicate that it would be beneficial to have increased student access to key sexual health services, both on-site and off-site, particularly around condom distribution.

## Safe and Supportive Environments (SSE)

The major goal for SSE at the onset of the program was to “assist schools to implement policies, procedures, and other interventions in order to make for safe space that is free from bullying, harassment, intimidation and discrimination.” During the project period, the program made progress toward the goal in the following ways.

- Implemented strategies to help priority schools prevent bullying, sexual harassment, and electronic aggression among students, through the ACEs’ work in priority schools.
- Focused on assessing SSE policies in priority schools and reported aiding school leaders, such as counselors, health and PE teachers, and nurses, in the delivery of materials and resources.
- Worked with SDP’s Elect program, which offers case management and supportive services to teenage parents in the District.

School Health Profiles data show that in 2014, priority schools were already implementing more school connectedness strategies compared to SDP overall. However, by 2016, priority schools had similar rates as the rest of the District. There was no statistically significant difference between SDP overall and priority schools in either 2014 or 2016 in implementing parent engagement strategies.

*Table 5. School Health Profiles Results Related to Safe and Supportive Environments (SSE) Focus Area (2014 and 2016)*

	<b>SDP Overall (2014)</b>	<b>Priority Schools (2014)</b>	<b>SDP Overall (2016)</b>	<b>Priority Schools (2016)</b>
<b>School-Level Performance Measure</b>	<b>%</b>	<b>%</b>	<b>%</b>	<b>%</b>
Percentage of schools that implement parent engagement strategies for all students	45.5 (N = 137)	35.3 (N = 17)	43.7 (N = 119)	30.6 (N = 23)
Percentage of schools that implement school connectedness strategies	82.3 (N = 131)	<b>100.0*</b> (N = 16)	77.6 (N = 125)	72.9 (N = 19)
Percentage of schools that prevent bullying and sexual harassment, including electronic aggression, among all students	39.1 (N = 130)	35.3 (N = 17)	41.7 (N = 119)	<b>23.8*</b> (N = 20)

*Note: Numbers in this table represent weighted results.*

*\*Statistically significant difference ( $p < 0.05$ ) on this measure between SDP and ARREST priority schools.*

Finally, in 2016, the data show that priority schools were less likely than the district average to say they prevent bullying and sexual harassment, including electronic aggression, among all students (Table 5). On the same topic, the percentage of students who reported being bullied on school property remained consistent in SDP over the grant cycle, with a slight, but statistically insignificant, decrease in 2017 (Table 6).

**Table 6. YRBS Results Related to the Safe and Supportive Environments (SSE) Focus Area (2013, 2015, and 2017)**

	<b>SDP Overall (2013)</b>	<b>SDP Overall (2015)</b>	<b>Priority Schools (2015)</b>	<b>SDP Overall (2017)</b>
<b>Student-Level Performance Measure</b>	<b>% of students</b>	<b>% of students</b>	<b>% of students</b>	<b>% of students</b>
Percentage of students who were bullied on school property (ever during the 12 months before the survey)	13.3	13.9	12.4	11.7
Percentage of students who were electronically bullied (counting being bullied through texting, Instagram, Facebook, or other social media, ever during the 12 months before the survey)	8.1	9.6	8.6	10.3
Implement HIV, other STD, and pregnancy prevention strategies that meet the needs of lesbian, gay, bisexual, transgender, and questioning youth	15.4	13.9	31.6	19

*Note: Numbers in this table represent weighted results.*

These results indicate that the program did not make progress in meeting its goal of making priority schools safe from bullying and harassment, and should work with schools to improve school connectedness, parent engagement, and other SSE strategies in the next grant cycle.

## Conclusion and Next Steps

Overall, during the time that Project ARREST was implemented in SDP, there was no significant change in the percentage of students that reported being taught about AIDS or HIV infection. However, a higher proportion of priority schools, which received the most resources from Project ARREST, reported teaching key HIV, STD, and pregnancy prevention topics compared to SDP overall. There are three key sets of findings and recommended next steps.

First, the evaluation found that there was increase in schools that reported receiving key sexual health materials between 2014 and 2016, but a decrease in priority schools teaching key topics. These results may indicate that the program had mixed results in the early years of implementation; however, the 2018 School Profiles data, when available, will shed more light on the final two years. In the next grant cycle, ORE will collect additional qualitative and quantitative data to examine implementation barriers and successes to sexual health education, as well as how it “fits” into the health curriculum and scope and sequence across SDP.

Secondly, the rate of sexual risk behaviors decreased across SDP over the five-year grant period. However, there was no statistically significant change in the rate of students who did not use a

condom during last sexual intercourse. In the next grant cycle, ORE recommends that the program office focus on increasing access to condoms in schools, education about the importance of using condoms, as well as implementing a stronger referral system across the District.

Finally, the rate of schools that reported parent engagement strategies, school connectedness strategies, and strategies to reduce bullying was comparable between district and priority schools. In some cases, the rate decreased in priority schools, with the exception of prevention strategies for LGBTQ youth, which were higher in priority schools. In the next grant cycle, ORE recommends that the program office coordinate with other offices in Student Support Services to implement these strategies more fully.