

## **Programs That Work Innovative Programs that Reduce STD Rates**

Large US cities have used various resources in developing innovative programs to address high STD rates in their high risk populations. Successful cities have identified key strategies that work:

- School based education and testing for all HS students
- Street outreach and testing in key neighborhoods
- Mobile vans providing testing on the streets
- Treatment follow-up by DIS staff
- Internet access to free test kits for Chlamydia
- Health care provider training
- Triage or express clinic practices for asymptomatic clients.

This paper will discuss key cities in the United States comparable to Milwaukee Wisconsin in their incidence of Sexually Transmitted Disease (STD) rates that have demonstrated through innovative programming, their ability to lower the rates of both Gonorrhea (GC) and Chlamydia. A brief overview of why these cities were selected and how they compare to Milwaukee might be useful. First some facts:

Reported Case rates of Chlamydia in US Cities Comparable to Milwaukee- 2004:

<u>Rank</u>	<u>City</u>	<u>Cases</u>	<u>Rates per 100,000</u>
5	Philadelphia	16,723	1,130
7	Baltimore	6,651	1,057
9	Milwaukee	9,131	978
16	Denver	3,840	688
17	Minneapolis	2,630	682
18	Boston	4,018	680

Other health indicators used to compare Milwaukee to other cities:

<u>City</u>	<u>Milwaukee</u>	<u>Baltimore</u>	<u>Boston</u>	<u>Minneapolis</u>	<u>Philadelphia</u>	<u>Denver</u>
<u>Population</u> <sup>1</sup>	587,941	628,670	581,616	373,188	1,479,339	557,478
<u>Race</u>						
% White	50	31.6	54.5	65.1	45	65.3

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<sup>1</sup> 2003 US Census Bureau

% Black	37.3	64.3	25.3	18	43.2	11.1
% Hispanic	12	1.7	14.4	7.6	8.5	31.7
<u>Persons</u>						
<u>Below Poverty</u>	21.3	22.9	19.5	16.9	22.9	14.3
<u>Median</u>						
<u>Household</u>	\$32,216	\$30,078	\$39,629	\$37,974	\$30,746	\$39,500
<u>Income</u>						

Low graduation rate is also a socioeconomic factor that influences health. Students in some of the countries big-city school districts have less than a 50-50 chance of graduating from high school on time, according to research. Fourteen urban school districts have on-time graduation rates **lower** than 50%. They include Baltimore (38.5), Milwaukee (43.1), Denver (46.8) and Philadelphia at (55.5%).<sup>2</sup>

These cities were selected because of their inclusion in the United Way of Greater Milwaukee Report “Teen Pregnancy, Public Health and the Cycle of Poverty” completed in 2005. The city of Milwaukee demographics were used to compare programs in both Baltimore and Boston. In another report from the Baltimore Partnership to Prevent Teen Pregnancy, Philadelphia demographics were cited in comparison to Baltimore.

## Case Studies:

### I. Philadelphia

**History:** Prior to the implementation of their school testing program, Philadelphia adolescent STD rates were described as “Epidemic”. In the year 2000, in a report card issued by the Philadelphia Coalition for Kids, STD rates were given a failing grade. School based screening was not done at this time. The case rates for reported Chlamydia infections among 15-19 year old females were 8,224 per 100,000 more than 6 times the rate of all ages of females in the city. By 2002 Chlamydia case rates for 15- 19yrs old females were well over 10,000 per 100,000.

**Target Population:** Students ages 14-19 in Philadelphia public schools grades 9-12

**The Program:** In 2001, the Philadelphia Department of Public Health (PDPH) STD Control Program and the School District of Philadelphia implemented a pilot project in which 2 high schools offered voluntary, confidential, free STD screening and treatment. During the 2001-2002 school years they screened 1,219 male and female students and found 138 or 11.3% of students tested positive, 9.3% for Chlamydia. Realizing the high rate of infection among school students, the school district and PDPH expanded this testing program in all Philadelphia public high schools and some middle schools that house 9<sup>th</sup> graders (50-60 total schools) beginning in the fall of the 2002.

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<sup>2</sup> USA Today reports-[6/20/2006](#)

**How it works:** Once a year, staff from the PDPH- STD Control Program meet with school teachers and administrators to set up the program. Groups of 60 students at a time are brought together during an English class period (50-60 minutes) for an information session about STDs, symptoms, testing, treatment, Q & A, etc. Following the program, all students receive a brown paper bag with a urine test kit inside. Small groups of students are then taken to the restrooms accompanied by an STD program staff member. All students must go into restroom stalls and all brown paper bags are collected as students exit the stalls. However, each student makes their own decision on whether or not to submit a specimen. This process is done until all students in grades 9-12 participate in both the educational session and the opportunity to provide a urine sample.

Test results are given by STD Control Program staff by phone directly to students, and treatment is provided at the school by an STD clinic physician. Students who test positive are called to the nurse's office, where the physician provides treatment. They are given the actual medication at the time of their visit, not a prescription. Re-screening of students who tested positive is done in 3-4 months. During the first year of this program, referral cards for partner follow-up were given out to encourage active partner follow-up.

Approximately 30,000 students were provided with STD educational presentations, 60% were actually tested for STDs in the school years of 2002-2003, 2003-2004 and 2004-2005.

Condom distribution is not allowed in Philadelphia public schools even for students who test positive. However, they do direct students to where they can obtain condoms around the city. There is mention of both abstinence and protection (condoms) in the education session.

For the past 7-8 years, ten Philadelphia high schools have had "Health Resource Centers" staffed to provide educational information, referral and follow-up on family planning and STD issues.

**Critical Program Elements:**

- Collaboration and commitment by the administration of the school district and health department at the highest levels;
- Support from parents and school based parent groups or associations
- Financial support for laboratory testing/lab capacity for increased testing
- Staff to implement the educational program
- Specimen acquisition
- Staff for specimen handling and transport
- Support staff- entering lab slip information into the data base
- Treatment staff- MD's and outreach workers for follow-up

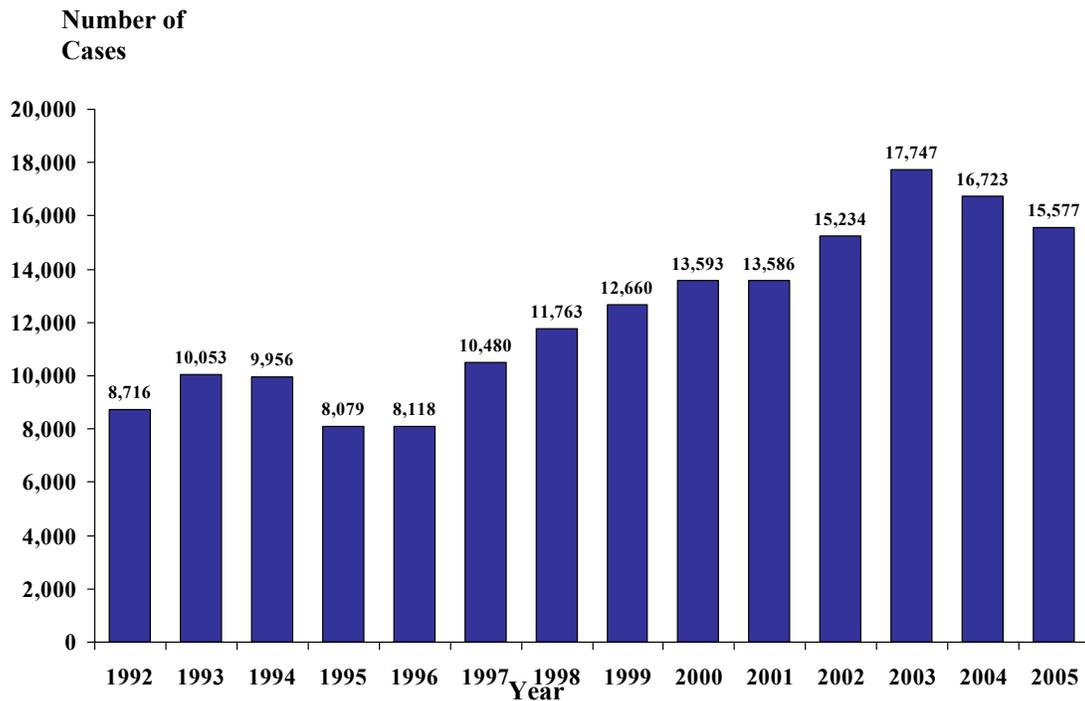
**Key Activities:**

- Health department staff meet with school officials and teachers
- Parents are notified by the school district in writing.
- The education session is mandatory
- Testing is optional

**Program Results:** Early reports indicate that increased educational efforts and availability of anonymous testing has lowered the Chlamydia rates for this age group in the city of Philadelphia. The CT positivity rate among high school students who provided a test sample declined from 4.9% in 2002-2003 to 3.7% in 2004-2005 and a 24% decline in positivity and a 35% decline in the number of positive cases. While the GC rates remained stable, in every year of the program 99% of infected students were treated.

It's important to realize this program was specifically designed to address the high rates of Chlamydia and GC in ages 15-19. A sustained high-school based screening program has provided significant declines in positivity rates over time. There is also rationale that supports this program contributing to a citywide decline in Chlamydia infection rates.

### Reported Cases of Chlamydia: Philadelphia, 1992–2005



The Philadelphia program demonstrates that comprehensive high school STD screening can be implemented successfully, without major issues, as long as there is the commitment of both the school and city administration. These programs are successful at detecting and treating STDs, and along with the education program, contribute to a yearly decline in the rate of infection. Conversely, there is a need to further evaluate an increase in positivity rates in year 4 of the project.

**Costs and Expenditures:** The health department provided the programmatic elements of the project, while the school district coordinated the scheduling of students for testing,

provided space within each school and allowed access to students for treatment and re-testing if necessary. During 2004, the Medicaid Managed Care Providers in Philadelphia agreed to reimburse DPH for the tests of students who were enrolled in their plans. Medicaid Managed Care has provided over \$100,000 in reimbursements for this program. Currently, Medicaid Managed Care reimbursement for tests covers the cost of two staff positions at the entry level for the high school educational sessions and testing. In 2001, initial funding was secured from a CDC grant in the amount of \$200,000.

**Resources:**

- Melinda Salmon, Assistant Program Manager, STD Control. Program, Philadelphia Department of Public Health. [Melinda.e.salmon@phila.gov](mailto:Melinda.e.salmon@phila.gov); 215-685-6731
- Process Evaluation of the Public High School STD Screening Program in Philadelphia  
<http://cdc.confex.com/cdc/std2006/techprogram/P11252.HTM>
- Declining Disease Prevalence in Philadelphia's Public High Schools after Four Years of a Citywide Screening and Educational Program for Chlamydia trachomatis and Neisseria gonorrhoeae  
<http://cdc.confex.com/cdc/std2006/techprogram/P11079.HTM>
- Philadelphia High School STD Screening Program- Declining Disease Prevalence after 4 Years of Screening  
<http://cdc.confex.com/cdc/viewHandout.cgi?uploadid=1090>

**II. Minneapolis**

**History:** By the end of 1997, Minneapolis, Minnesota had the highest rates of both Gonorrhea and Chlamydia among African Americans among 50 of the largest cities in the United States. Even in the year 2000, the reported rates of these diseases are 40 and 28 times higher respectively, than national rates. Not surprising, the rates for African American young men ages 15-24, were highest among all age and ethnic/racial subgroups in Minneapolis.

**Target Population:** This collaborative project, which began in October 2003, reaches young men in their own communities and teaches them about smart sexual health choices. The goal is to educate African American men, ages 15-24, about how to protect themselves and their partners from STDs and unplanned pregnancies and to utilize local STD testing and treatment. Five Minneapolis communities were chosen where STD rates are highest among this population. Not surprising, two of these communities also had the highest teen birth rates in Minneapolis.

**The Program:** The “Seen on da Streets” project is actually a combination of interventions and research activities. It’s a collaborative effort with the City of Minneapolis Department of Health and Family Support (Health Department) and two

local clinic sites- Fremont Clinic, located on the North side and the Teen Age Medical Service of Children's Hospital (TAMS) in the South side community. Critical program components include "on da streets" health education discussions, risk assessments and urine screening or specimen collection.

**How it works:** Each of the two local health clinics employs a full time administrator, health educator and four part-time (10 hrs/week) peer advocate positions. The health educator and all peer advocates spend most of their time providing education and outreach in the community. An important first step in this program was to find out what young men entering the clinic sites experience. Secret site visits were made to these clinics to address ways this population would feel welcome and comfortable while visiting the clinic for services. Four focus groups were held during the first year to uncover myths and attitudes about sexual health, knowledge, and practices among this population. Many of the young men reported a history of negative experiences with both clinical and administrative staff at clinics, and also divulged a wide range of attitudes about safe sex practices. Feedback from both the focus groups and the clinic visits were then used to develop health messages for community outreach.

Key to the success of this project is the outreach activities. Outreach was implemented places where young men "hang out". Urban parks, city parking lots, neighborhood barber shops and night clubs were visited. Outreach workers were trained to be familiar with street mentality and over time became trusted resources in these communities. The use of peer advocate outreach methods served several purposes. One was to provide accurate information about the program and associated clinic services. Another was to provide education about the prevention of STDs and unwanted pregnancy. A brief health practice risk assessment was done, and in many cases a urine specimen was collected, on the spot. Contact information for the client was collected in case test results were found to be positive. Treatment was provided free of charge at Fremont Clinic and TAMS.

**Critical Program Elements:**

- 1) The importance of building community awareness about the incidence of STDs in the city and project initiatives.
- 2) Support and commitment from 49 key Minneapolis agencies, schools, service organizations, colleges, business, parks, etc.
- 3) Outreach activities that involve the knowledge and "street" skills of peer advocates to sell health information messages and risk assessments.
- 4) Urine based testing –on the streets.

**Program Results:** Outreach efforts by both the health educator and peer advocates have proven to be highly effective in providing targeted health information and risk assessments to this population. Out of all of the outreach contacts made the first year, almost all (94%) reported being sexually active, and 71% reported having multiple partners in the past six months.

Off-site testing accounted for 41% of the overall project testing in the first year. Considering the increased testing done at both the clinics and off-site, 747 men were tested at the 2 project sites.

In talking with project staff at the Minnesota Department of Health and Family Support, they indicate results from this and other citywide projects have demonstrated lower rates of STDs in the city. A more in depth evaluation of the “Seen on da Streets” project will be done in 2007.

**Costs and Expenditures:** The “Seen on da Street” project was funded by a five-year grant from the US Department of Health and Human Services (Office of Population Affairs) or Title X for the amount of \$1.33 million. Approximately, \$250,000 per year was allocated to support the staff, increased testing and treatment. The cost of staff time is one of the projects highest expenses.

**School Based Health Clinics:** Since the mid 1980’s, the City of Minneapolis Health Department has funded school based clinics. Currently, there are full time clinics in 8 city high schools; 6 directed by the health department, 2 funded and staffed by local clinics and hospital staff. The health department sites have reporting seeing approximately 2,000 students, with 8,000-10,000 clinic visits per year. All school clinics offer students full medical and acute care, STD screening, and treatment as well as contraceptive care (EC and EC-in-advance is part of that care) for the duration of the students high school years. Condoms are also available on a walk- in basis. Although they report great success with individual students, the research arm of the Minneapolis Health Department has yet to link SBHC services with lower STD rates in the city.

**Resources:**

Dave Johnson, Co- Investigator/Project Coordinator, Minneapolis Department of Health and Family Support. 612-673-3948

Donna Amidon-Manager School Health Program, Minneapolis Department of Health and Family Support 612-673-5305

Seen on da Streets- First year report:

<http://www.ci.minneapolis.mn.us/dhfs/seenondastreet.asp#TopOfPage>

**III. Baltimore**

**History:** In 1995, the GC rate for the city of Baltimore was over 1,000 reported cases per 100,000 population. In 2005, rates decreased 45% to 547.5 per 100,000. Although Baltimore’s GC rate is still above the national average, the rate of decrease over the past decade was greater than the national average. Syphilis rates also declined in 1997 to over 100 per 100,000 and likewise declined over the last decade.

**Program Initiatives:** Mobile van testing in high morbidity areas of the city was one initiative that is being attributed to the lower rates of Syphilis. The main objective was to

get into high risk areas of Baltimore and provide testing and screening for both HIV and Syphilis, therefore increasing outreach testing goals from previous years. Unmarked designed for street outreach included specific areas for tasks associated with serology testing, and were equipped with a bathroom, waiting areas and lab space. Outreach workers were trained to be assertive in their approach to people on the street. They used coupons for money and offered other incentives to get people to the van for testing. Test results were given to patients by returning to the site or referring clients to the STD clinics. However, due to the major problem of re-locating positive clients, a call back system was implemented to allow clients to phone in for test results, where positive tests were referred to DIS. During the first 12 months of “Mobile Van” screening- 7,930 individuals were screened for Syphilis, with an overall positivity rate of 2.9%.

**Other Initiatives:** In conversations with staff at the City of Baltimore Health Department, Chlamydia treatment follow-up by DIS staff was a contributing factor to lowering rates of Chlamydia. Adequate treatment and follow-up of patients are essential to the success of a screening program for Chlamydia. There has been a lack of data on follow-up, confirmation of taking medications, and re-infection rates in general practice. Increased staffing in the DIS department to include 1.5 FTE’s specific to follow-up was implemented within the City of Baltimore Health Department.

A recent study done by researchers at John Hopkins indicated that providing on-line access to home test kits for Chlamydia to young women under age 25 was an effective way to address detection and treatment of Chlamydia in this age group. In this study, free kits funded by the City of Baltimore Health Department were made available to women in Maryland for 6 months starting in August 2004. Test kits could be ordered via the internet or picked up at one of the 250 participating pharmacies or recreation centers. Pre-paid return mailing envelopes were part of the test kits. Of the 1,100 kits distributed during this 6 months, 400 samples were returned for testing, 10% tested positive for Chlamydia. Results were made available via a secure telephone answering service. Women who tested positive were referred to a local health care clinic in their areas for treatment. Ninety-five percent of women who tested positive, sought treatment, which demonstrates a high motivation for these patients. Of those requesting test kits, 87% used the internet to request test kits and half were women under the age of 25.

**School Based Initiatives:** School based screening and testing has been done in Baltimore schools for the past 5 years. Urine based testing is done within the context of any type of exam or visit to the school based health center. Testing is recommended for all asymptomatic sexually active students. Last year (2004-2005 school year) 3,500 tests were done in 8 Baltimore high schools. Rates of positivity for Chlamydia range from 8-11% for girls, much lower for boys, and 1-2% for GC in both boys and girls. The internet web site for free tests (see above) is also available and promoted in area high schools.

**Resources:**

- Glen Olthoff, Communicable Disease & Epidemiology, Baltimore City Health Department. [glen.olthoff@baltimorecity.gov](mailto:glen.olthoff@baltimorecity.gov) 410-396-4448

- Gerry Waterfield. Baltimore City Health Department. 410-396-8615
- From John Hopkins University: Order free Chlamydia test kits on-line or via the phone available in Baltimore and Washington DC. <http://iwantthekit.org/>
- Effectiveness of a Highly Mobile, Incidence-Based, Community Outreach Screening Program  
<http://cdc.confex.com/cdc/viewHandout.cgi?uploadid=1055>
- Baltimore City Health Department Reports Declines in Sexually Transmitted Diseases  
<http://www.ci.baltimore.md.us/government/health/press/060522.pdf>
- Baltimore Experiences Lowest Teen Birth Rate in City History  
<http://www.ci.baltimore.md.us/government/health/press/031021.html>
- Sexually Transmitted Infections in the City of Baltimore- 2005  
<http://www.ci.baltimore.md.us/government/health/std/STDsnapshot.pdf>

#### **IV. Boston**

The city of Boston reports their Chlamydia rates have been climbing similar to the rest of the country, especially in the age groups 15-19 and 20-24, while GC rates have remained stable. Over the past few years, the City of Boston and the Massachusetts Division of Public Health have focused their efforts on lowering Chlamydia rates by concentrating on health care provider based screening and testing programs versus education/behavior change initiatives. Provider screening and testing programs include extensive physician training on criteria for increased testing, and accompanying educational materials geared for private practice providers.

City STD clinics and school based health clinics (2) have also increased their screening and testing numbers due to changes in the type of testing currently available. However, the increased testing done by both providers and schools doesn't address the issue of access for this high-risk population. The lack of financial resources limits Boston's ability to develop and fund new programs for all populations.

Resources:

- Tom Bertrand, STD Program Director- Massachusetts Division of Public Health  
[Thomas.Bertrand@state.ma.us](mailto:Thomas.Bertrand@state.ma.us)

#### **V. Denver**

The City of Denver is also looking for programs and ways to lower their increased STD rates especially for African American women ages 20-24 years old. In 2005, Denver County reported Chlamydia rates for both men and women of 758 per 100,000 and GC

rates of 239 per 100,000. But in this specific age and ethnicity, the reported cases were 14,000 per 100,000.

**Initiatives:** In June of 2005, the Denver STD clinics initiated a new triage or express system for patients at their clinics who were asymptomatic. Instead of the routine full exam performed on patients, only urine and blood testing was performed on this group of patients. This allowed an increase in screening, and a better use of limited resources (staff time) within the STD clinics. The new triage system increased their screening numbers by 20%. The results of this program initiative are still being evaluated.

**Resources:**

- **Kess Rictmeijer- Medical Director, Denver Public Health Department  
303-436-7222**

By Ann Kronser, Health Care Education & Training, Inc.  
And William Borzon, City of Milwaukee Health Department