School-wide Screening in Detroit: A Tale of Two Schools

Amy S. Peterson, MPH and Kathryn Macomber, MPH

Michigan Department of Community Health, Division of Health, Wellness and Disease Control, STD Section; Bureau of Epidemiology, Communicable Disease Division, MI, USA.

Background

•Detroiters age 13-19 make up 46% of the city's chlamydia (CT) cases despite representing only 12% of the population.

•In 2010, school-based screening accounted for 6% of publically funded CT tests in Michigan, but over 9% of positives.

 In early 2011 the Michigan Department of Community Health partnered with St. John Providence Health System to conduct school-wide screenings in two Detroit area public schools.



•The schools serve similar demographic profiles:

> 95% African-American and low income. Additionally, the schools are geographically just three miles apart.

Objective

To assess screening acceptance and CT/GC positivity in two Detroit area schools.

Methods

•Parents received a letter prior to the screening with an option to exclude their child

•Youth were called down from their English classes

•Everyone received education regarding chlamydia and gonorrhea and the screening opportunity

•All youth completed a demographic survey and signed a consent which included an opt-out opportunity

•All youth were escorted to the restroom where they made a personal decision whether to provide a sample or not.

•Urine samples were provided by 665 youth across the two

schools; 420 in School A, 245 in School B. •Testing data was entered into



• Testing data was entered into the Michigan Laboratory Data System, StarLIMS.

Results

The proportion of male/female, and age breakdown was similar across sites A and B.

245 tests
– 143 male (58%)
102 females (42%)
Age Group Breakdown
o 14:22
a 15:46
= 16:79
17:73
18:23
o 19:2
93% African American

Results Con't

Infection patterns in the schools mirrored each other, with females testing positive for CT at levels 60% higher than males; and a precipitous increase among females 16 and over.

•In School A, just 2% declined testing while in School B, 14% declined.

•Overall CT positivity in School A was 10.2%; only 4.9% in School B.

SCHOOL A SCREENING RESULTS 2011-BY SEX



SCHOOL B SCREENING RESULTS 2010-BY SEX



Conclusions

Despite similar populations and close physical proximity, school-wide screening in the sites presented notably different outcomes.

Possible Reasons for Variation in Test Acceptance

- ✓ characteristics of those who declined testing
- ✓ variation in historical access to STD screening (one school had on-site clinic - other did not)
- ✓ content and tone of educational component (different educators were used at each site)
- ✓ impact of peer pressure on screening behavior (School B had "opinion leaders" who thought screening was "stupid" – resulted in one class period with over 60% rate of decline.)

Implications

•Additional data collection and analysis would be required to identify reasons for the difference in observed screening acceptance and positivity.

•Detailed and consistent training of classroom staff at test sites is critical to decrease variables affecting acceptance of screening.

•Established patterns of trust, or distrust between students and screening staff can strengthen or undermine screening opportunities.

•Use of staff who are unknown to students may provide a sense of anonymity which supports screening.

•Behavioral questions may been helpful to further evaluate screening productivity beyond demographics