

Science-Based Approaches to Preventing Teen Pregnancy

Once a hot topic in the 1990's, teen pregnancy has been supplanted by other pressing public health concerns: welfare reform in '96, bioterrorism in '01, obesity in '04, methamphetamines in '06, to name a few. However, while other issues take precedence, the United States continues to own one of the highest rates of teen pregnancy in the industrialized world. Given this, policymakers, public health professionals and practitioners must ask, "What more *can* we and *should* we be doing to prevent teen pregnancy in local, urban MCH?"

This summer edition of *CityLights* goes beyond the rates, proportions, and numbers of live births to teens. These numbers are well-known and their implications clear (see the *National Center for Health Statistics QuickStats at right and additional data on Page Two*). Instead, the central focus here is that of primary prevention. *CityLights* showcases prevention approaches that engage adolescents and young adults in strategies to avert teen pregnancy and its cascade of negative impacts on teen girls, teen parents, teen families, and the children within these families.

More specifically, this issue showcases current local, state and national efforts and offers promising practices for readers. On a national level, in 2002, the Centers for Disease Control and Prevention (CDC) launched a three-year initiative to prevent teen pregnancy. Read about a state teen pregnancy prevention coalition's experience providing science-based program technical assistance to a local community. Finally, readers can use the information regarding the seventeen characteristics of effective curricula-based sex and HIV education programs in their communities.

And so the question remains, what more *can* and *should* be done to prevent teen pregnancy in local, urban MCH? A first step must include expanding coverage and increasing the efficacy of science-based programs aimed at prevention. Effective tools and strategies to begin this important work can be found inside.

Pregnancy, Birth and Abortion Rates* for Teenagers Aged 15-17 Years – United States, 1976-2003

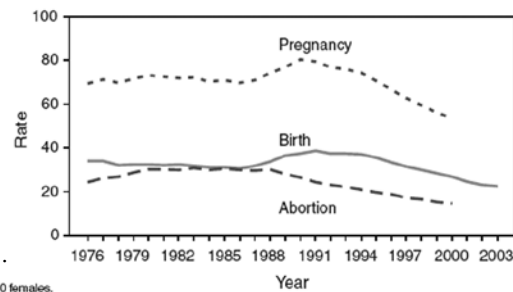


Figure 1.

* Per 1,000 females.

Source: Morbidity and Mortality Weekly Report (MMWR), February 4, 2005/54(04):100. Centers for Disease Control and Prevention (CDC); QuickStats: Pregnancy, Birth, and Abortion Rates* for Teenagers Aged 15-17 Years United States, 1976-2003. <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5404a6.htm>

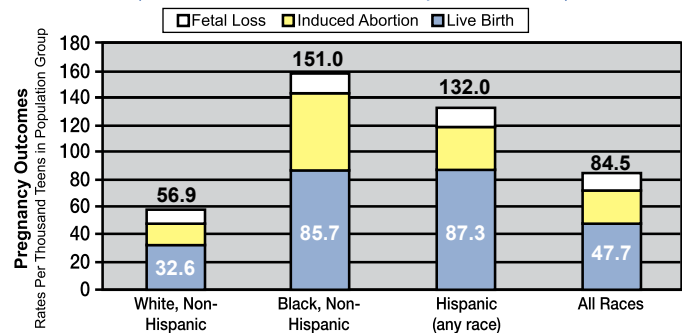
The Good News: Teen pregnancy and birth rates for teens across the country continue to decline (See Figure 1 above) Many states and communities lead the way with innovative programs to promote youth development and prevent teen pregnancy. New research helps to point out possible solutions, building on resiliency, education, support systems, and health care.

The Bad News: Each year in the U.S., approximately one million adolescents, or 8.5 percent of females 15-19 years of age, become pregnant. Racial disparities are dramatic: in the year 2000, the birth rate for Blacks (85.7) and Hispanics (87.3) was more than 2.5 times that of Whites (32.6). Disparities in the fetal loss and induced abortion rates bring the overall pregnancy rate for Blacks (151.0) to nearly triple that for Whites (56.9) (See Figure 2 below).

Figure 2.

Racial Disparities in U.S. Birth Outcomes for Mothers Aged 15-19, Year 2000

(Source: National Vital Statistics Report Vol 52 No 23)



The Good News, the Bad News, and a Challenge for Public Health

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On the day that I'm writing this, a front-page headline of the St. Paul newspaper reads, "Runaway Teen Mother Found; Newborn Missing." The pregnant 15-year-old, nearly ready to deliver, was reported missing by the county social service agency and located by police. However, the girl is no longer pregnant and has not told the police or social services what happened when she gave birth, or where the baby is now. Fear? Denial? Shame? Despite the best efforts of health care organizations, social service agencies, schools and community members, teen parents such as this 15-year-old often face an unintended pregnancy alone.

An estimated 80 percent of teens giving birth are already living in poverty and we know that being a teen parent jeopardizes health, education and self-sufficiency outcomes not only for the teen parents but also for their children. An article in a recent issue of the American Family Physician¹ reports that "compared with nonpregnant adolescents, teenage mothers are less likely to graduate from high school and are more likely to score below average in language and reading skills." Low self-esteem and depression, along with behavior and substance abuse problems, further impede their ability to provide care and nurturing for their children. The article goes on to report that "children of adolescent mothers are at greater risk of preterm birth, low-birth weight, child abuse, neglect, poverty and death." The problems of behavior disorders, substance abuse, and poor school performance plague many children of teen parents into their school-age years, frequently leading to another generation of teen parents.

The profound impact of teen pregnancy and parenting radiates beyond the individual teen mothers and fathers and their children, to their families, communities, and society as a whole. It is reported by the Annie E. Casey Foundation that more than 75 percent of teenage mothers receive public assistance within five years of delivering their first child, for an estimated annual cost of \$7 billion per year. Teen parents who lack adequate education are not prepared to join the work force and their lifetime earnings are significantly lower than those with high school and

post-secondary education.

Why is the issue of teen pregnancy so complex? What is the role of public health in preventing teen pregnancy and addressing teen parenting issues? What can CityMatCH do? Looking to the principles of public health may be helpful as a framework to consider options.

Population-Based

Successful efforts to stem teen pregnancy focus on improving the health and well-being of all adolescents through programs designed to improve youth social development, reduce youth risk behaviors, and promote healthy communication and relationships. Youth at risk for early sexual activity are also at risk for substance abuse, poor school performance, and unhealthy relationships. At the local level, the health department seeks funding for initiatives that integrate these efforts rather than accessing categorical funding for multiple targeted programs. Parents of young people have a strong influence on the attitudes and behavior of teens; there are promising efforts to provide parents with tools to communicate effectively about sensitive issues with their children.

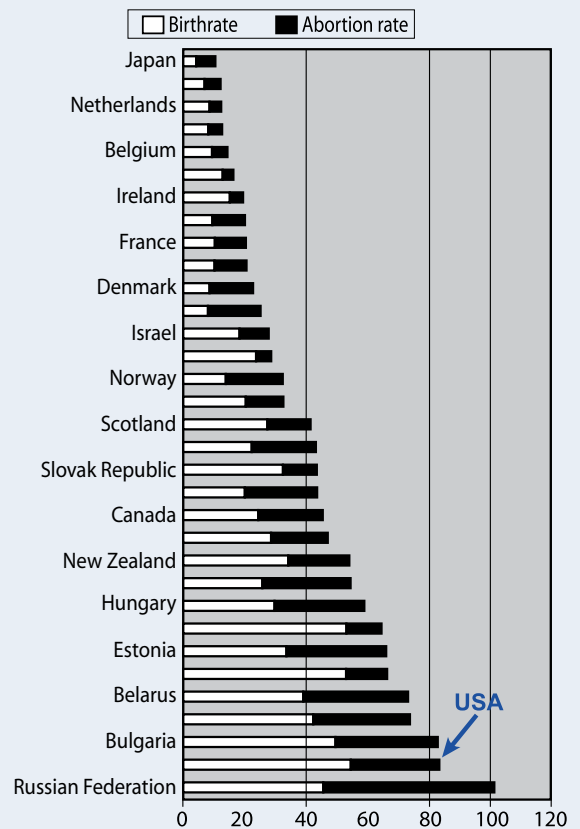
Grounded in Social Justice

It is increasingly clear that disparities of race, class and place have a disproportionate impact on teen pregnancy rates and other health outcomes. With CityMatCH's history of taking on challenging issues, this organization is in a unique position to create a forum for dialogue about teen pregnancy prevention. Explorations in this area would also benefit from being linked with other CityMatCH initiatives (such as undoing racism).

Reliance on the Science of Epidemiology

It is critical to invest in approaches

Pregnancy Rates Among Teen in Developed Countries



Rate per thousand Females Age 15-19.

Source: Adolescent Pregnancy and Childbearing: Levels and Trends in Developed Countries Singh, Susheela; Darroch, Jacqueline E *Family Planning Perspectives* Jan/Feb 2000, Vol. 32 Issue 1, p14-23

The United States ranks near the bottom in teen pregnancy prevention among industrialized nations. Research points to several areas of a teen's life that might help explain the problem and suggest solutions. In general, data suggests that U.S. teens have more sexual partners, and initiate sexual interaction at an earlier age than European countries with lower rates. Additionally, while the U.S. is a wealthy country, it is also a nation of great economic disparities; studies associate early pregnancy with poverty, unemployment, and lack of perceived economic opportunity. Other studies show a correlation between the educational and employment aspirations of girls and their motivation to avoid pregnancy. Some researchers believe that European policies giving teens easy access to birth control and encouraging personal responsibility have reduced pregnancy rates there.

and programs that are research-based and shown to be best practices. At this time, we are challenged by federal and state funding being directed to initiatives that are not grounded in science and are being supported by special interest groups. Remarkably, just two

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Exploring the Meaning of and Solutions to Unintended Pregnancies: *The Role of Natural Community Helpers*

At the 2006 CityMatCH Annual Conference in Providence (RI), participants will have an opportunity to learn more about this promising initiative. CityMatCH invites readers to learn more about how Indianapolis (IN) is working to reduce numbers of unintended pregnancies as a result of "Indiana Access."

Indiana Access, a project of the Indiana Perinatal Network, is a pilot of the National Friendly Access Project and seeks to identify strategies to impact access to health services for low-income children and pregnant women. Indiana Access utilizes a unique combination of community coalition-building, quantitative and qualitative data analysis, and ongoing staff facilitative training to accomplish its goals.

Extensive quantitative surveys conducted with Indianapolis inner city women during their postpartum hospital stay between July, 2003 and February, 2004 revealed that nearly 75 percent of respondents reported a mis-timed or unwanted pregnancy. Unintended pregnancies were reported by 83 percent of African American, 74 percent of Caucasian, 53 percent of other ethnic groups, and 45 percent of Hispanic women. The participatory action research project featured here was undertaken through Indiana Access to help understand root causes and identify potential solutions to the complex issue of unintended pregnancy.

A qualitative study using eight open-ended questions guided discussions with 180 individuals residing in Indianapolis communities with historically high rates of poor birth outcomes. Approximately 80 percent of these



individuals were African American females, 25 years-of-age and older. A series of interactive training sessions emphasizing a participatory action approach were conducted with ten community volunteers affiliated with the Indianapolis Healthy Start Project known as Baby First Advocates. While the majority of these volunteers are single, African American females over 40 years-of-age, African American males were quite active in the project.

Data collection by the Baby First Advocates was accomplished via a series of community canvassing at two inner city housing complexes, community health fairs and faith based events during the summer of 2005. Some areas explored included: unintended pregnancy meaning and common descriptive terms; perceptions of preventing unintended pregnancy and sexuality; impact of unintended pregnancies on individuals, families and communities, and recommended intervention strategies.

Results suggested several areas for further exploration: first, unintended pregnancies were typically described in a negative fashion. Older individuals described the impact in a more negative and permanent manner, while younger individuals used less negative terms and viewed the impact as less permanent. An equal number of individuals

cited increased access to birth control or abstinence, with many respondents identifying both factors as potential preventive strategies. Other preventive strategies included an increased focus on school, future opportunities, increased parental involvement and support, and additional information regarding sexuality. The role of men or male responsibility was rarely mentioned as a primary preventive theme.

In addition to ongoing quantitative and qualitative studies, the Indiana Perinatal Network convened over 20 individuals representing a broad range of organizations and perspectives with first hand knowledge of the causes and consequences of unintended pregnancies, to draft a "Call to Action" plan. This public policy document will identify key recommendations and strategies to increase planned and properly spaced pregnancies in the State of Indiana over the next 10 years. This document should be completed by the end of 2006.

In October 2007, a statewide summit will convene statewide and local organizations from a variety of sectors to increase awareness, learn about what Indiana communities are currently doing and identify common ground for solutions and next steps.

Indiana Access offers a promising and effective mechanism to better understand the meaning, descriptive terms, and solutions within a high-risk community to a public health issue associated with poor birth outcomes. The project also demonstrates the potential of participative action research models to empower community volunteers. The Indiana State Department of Health and The Health and Hospital Corporation of Marion County (Indianapolis) provides support for this unique project.

Community volunteers are natural helpers who can utilize their existing skills as community guides and cultural mediators between the larger community and public health research efforts, while enhancing these and other skills. Indiana Access really has set the stage for further expansions in the pool of natural, grass-roots level helpers to assist with timely public health concerns.

For more information, contact: Lawrence Humbert, MSSW, PgDip
Director, Indiana Access
Indiana Perinatal Network
E-mail: lhumbert@indianaperinatal.org

The National Friendly AccessSM Program:

Respect, Dignity and Compassion for Those Who Need It Most

In 2002, The Chiles Center, through a cooperative agreement with the CDC and other collaborating partners, began an initiative to address and evaluate access and utilization of services by Medicaid eligible women and to understand potential barriers they might experience. Friendly AccessSM seeks to change the culture of public MCH delivery systems and communities and hopefully lead to enhanced access, satisfaction, use and outcomes. Initially, three communities (Indianapolis, IN, Jacksonville, FL and East Tennessee) were awarded funds to

operate a demonstration project. The community of Flint/Genesee County, MI – initially a self-funded site – later joined as a demonstration site. In addition to CDC, other organizations have actively participated in and supported Friendly AccessSM, including the Health Resources and Services Administration (HRSA). The National Perinatal Association (NPA), Indiana Perinatal Network, Health and Hospital Corporation of Indianapolis, and the Disney Institute. For more information, visit the website at: <http://www.chilescenter.org/programs4.htm>



In 2002, the Centers for Disease Control and Prevention (CDC) launched

a three-year initiative called *“Coalition Capacity Building to Prevent Teen Pregnancy.”* The program was a cooperative agreement among three national organizations and five state teen pregnancy prevention coalitions. The purpose of the initiative was to build partnerships and increase the capacity of local organizations to use a science-based approach (SBA) to prevent teen pregnancy and promote adolescent reproductive health, including abstinence, and sexually transmitted infections (STIs) and HIV prevention.

The use of an SBA to prevent teen pregnancy helped ensure that the programs implemented had a greater chance of succeeding. An SBA includes the following:

- ◆ Using demographic, epidemiological and social science research to identify populations at risk of early pregnancy and/or sexually transmitted infections, and to identify the risk and protective factors for those populations.
- ◆ Using health behavior or health education theory to guide the selection of risk and protective factors that will be addressed by the program, and to guide the selection of intervention activities.
- ◆ Using a logic model to link risk and protective factors with program strategies and outcomes.
- ◆ Selecting, adapting if necessary and implementing programs that are either science-based or are promising.
- ◆ Conducting process and outcome evaluation of the implemented program, and modifying approach based on results.

Accomplishments

The national organizations provided technical assistance and disseminated information to the state and local coalitions. State organizations assessed local organizations' needs, provided technical assistance and training to increase capacity, and disseminated information to increase awareness and support. Through these combined efforts there was an increase in:

- ◆ The number of science-based presentations at national, state and local conferences

Promoting Science-Based Approaches to Prevent Teen Pregnancy

- ◆ Grantee's ability to influence Request for Applications by foundations, State health departments and others to include science-based strategies to prevent teen pregnancy
- ◆ Grantee's ability to leverage more funds from other sources for their programs
- ◆ The number of science-based products available to the field
- ◆ The number of local organizations using logic models to develop their strategic plans
- ◆ The number of local organizations choosing to implement science-based teen pregnancy prevention programs
- ◆ The number of youth who participate in science-based teen pregnancy prevention programs
- ◆ The number of other state coalitions that were not funded by this cooperative agreement to implement a SBA to prevent teen pregnancy

Building on the lessons learned from the previous three-year cooperative agreement, in 2005 CDC funded two five-year cooperative agreements calling the initiative *“Promoting Science-Based Approaches to Prevent Teen Pregnancy.”* The initiative included the same three national organizations, four returning and five new state organizations, and four regional training centers. In collaboration with the grantees, CDC developed a detailed conceptual framework that identified the capacities that grantees would strengthen in local organizations' and the activities they would implement to increase the capacity of local organizations to select, implement, and evaluate a SBA to prevent teen pregnancy, HIV and STIs in their communities.

Technical Assistance from National Organizations

As in the first cooperative agreement, the three national organizations, Advocates for Youth, Healthy Teen Network, and National Campaign to Prevent Teen Pregnancy (see descriptions on page ten), continue to work closely with the funded state organizations and Regional Training Centers to help the organizations achieve the goals of the cooperative agreement.

More specifically, Advocates For Youth builds the capacity of the state

organizations and RTCs by providing resources, training, technical assistance, and networking opportunities. An organization is most likely to be effective in promoting an SBA when it has solid infrastructure and uses multiple strategies to achieve its mission. Key elements of an effective organization include:

- ◆ Board of directors that strongly supports science-based practices and has broad representation
- ◆ Leaders who understand and can effectively articulate the breadth of antecedents that contribute to unintended pregnancy and the latest research on evidence-based approaches
- ◆ Long-term strategic plan for supporting science-based practices
- ◆ Wide range of methods to promote science-based practices through materials, training to local programs and councils/coalitions, public education, and collaboration with key stakeholders
- ◆ Solid and diverse funding base

Advocates for Youth works with the grantees to strengthen these key elements.

Healthy Teen Network, together with project partner ETR Associates, provides capacity building technical assistance, trainings, presentations, tools and other resources to increase the use of SBAs in adolescent reproductive health with specific focus on program research, design, selection, implementation, adaptation, tailoring and evaluation.

The National Campaign translates research findings into user-friendly materials, resources, and tools on SBAs, disseminates science-based products to grantees and broader audiences, and uses these products to educate, train, and provide technical assistance to grantees and the organizations they work with.

What Does it Take to Implement an SBA to Prevent Teen Pregnancy?

The adoption of an SBA by local organizations takes time. Increasing the knowledge, awareness, and support is critical to begin the process of increasing the use of an SBA to prevent teen pregnancy. Local organizations need training and funds to be able to begin

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Promoting SBAs to Prevent Teen Pregnancy

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to implement and maintain an SBA. Organizations need to understand and believe that an SBA to prevent teen pregnancy is a better use of funds and more effective than how they currently approach teen pregnancy prevention. Strengthening organizational capacity including leadership, board support, financial stability as well as knowledge, motivation, and skills related to science-based practices will aid an organization to choose an SBA. State funding affects the successful adoption of science-based programs.

City and local health departments can play a key role in increasing the adoption of SBAs to prevent teen pregnancy, HIV and STDs by:

- ♦ Developing strategies to overcome barriers to adopt effective programs
- ♦ Providing forums such as roundtables, conferences, workshops, newsletters, e-grams to increase knowledge of SBAs and create an environment that allows professionals to discuss the advantages of adopting an SBA
- ♦ Providing funding to purchase curricula, receive training and implement the programs
- ♦ Including requirements for science-based programs into funding mechanisms and policy recommendations

By doing so, health departments can make a significant impact on the adoption of effective teen pregnancy prevention efforts in their community.

To learn more about SBAs to prevent teen pregnancy, visit the website: www.cdc.gov/reproductivehealth/UnintendedPregnancy/index.htm

CityMatCH Partners to Promote SBA's

CityMatCH has entered into a new partnership with AMCHP, CDC, and CDC-grantee Healthy Teen Network to advance the dissemination of science-based programs and approaches to state and local public health.

This issue of *CityLights* represents a first step in the dissemination process. Stay tuned for more opportunities (including a teen pregnancy prevention query - see box at right) for your city to participate in this effort.

Advocates for Youth is a national, nonprofit organization dedicated to creating programs that help young people ages 13- to 24-years-old make informed, responsible decisions about their reproductive and sexual health. Advocates provides information, training, and strategic technical assistance to state and local health departments, schools, health clinics, youth-serving providers, and community- and faith-based organizations about best practices in adolescent sexual and reproductive health, including promoting abstinence, and preventing teen pregnancy, and HIV and STIs.

To learn more, contact Advocates at 2000 M Street, NW, Suite 750 ♦ Washington, DC 20036 ♦ Phone: 202-419-3420 ♦ Fax: 202-419-1448, or visit the website at: <http://www.advocatesforyouth.org/>

Healthy Teen Network (HTN) is a national membership organization with a mission to provide leadership, education, training, information, advocacy, resources and support to adolescent reproductive health professionals and organizations, with an emphasis on teen pregnancy, prevention and teen parenting. They accomplish their mission through four strategic approaches: Membership Network, Research and Program Evaluation, Policy and Advocacy, and Training and Education. HTN communicates with a database of over 25,000 people in the field.

To learn more, contact HTN at 509 2nd Street NE ♦ Washington, DC 20002 ♦ Phone: 202-547-8814 ♦ Fax: 202-547-8815, or visit the website at: <http://www.healthyteennetwork.org/>

The National Campaign to Prevent Teen Pregnancy is a leading national organization devoted to improving the well-being of children, youth, and families by preventing teen pregnancy. They work directly with states and communities to increase their capacity to work effectively on reducing teen pregnancy, and influencing cultural values and messages by working with the entertainment media and other influential sectors, including parents, faith communities, and educators. Solid research and a commitment to SBAs to prevent teen pregnancy underlie all of the National Campaign's work.

To learn more, contact the National Campaign at 1776 Massachusetts Ave. NW, Suite 200 ♦ Washington, DC 20036 ♦ Phone: 202-478-8500 ♦ Fax: 202-478-8588. E-mail: campaign@teenpregnancy.org or visit the website at: <http://www.teenpregnancy.org/>

Teen Pregnancy Query Set for Fall

Watch your in-box and respond! This fall, CityMatCH and AMCHP will release a "Teen Pregnancy Prevention Query" to be completed by CityMatCH and AMCHP Member Representatives.



The purpose of the query is to assess the knowledge, capacity, use and barriers to using Science-Based Approaches and Science-Based Programs to prevent teen pregnancy at the state and local public health level. We look forward to your participation. For more information, contact Kathleen (Kock) Brandert at 402-561-7500.

2006-2007 DaTA Institute Teams Forming Now

Applications are now being accepted for the 2006-2007 CityMatCH DaTA Institute!

Apply on-line at www.citymatch.org/DaTA/. Applications are due September 1, 2006.

Be a part of the over 70 teams of DaTA Institute alumni... apply now!

For more information, contact Kathleen (Kock) Brandert at 402- 561-7500.



Sex and HIV Education Programs for Youth: Their Impact and Important Characteristics

Editor's Note: In 2005, Douglas Kirby, Ph.D., Senior Research Scientist at ETR Associates, and his colleagues, B.A. Laris, M.P.H., and Lori Roller, M.S.W., M.P.H., published a report entitled, "Sex and HIV Education Programs for Youth: Their Impact and Important Characteristics." This article is adapted from that report.

The study that led to the writing of this report was funded by Family Health International and United States Agency for International Development and aimed to answer two primary research questions: 1) What are the effects, if any, of curriculum-based sex and HIV education programs on sexual risk behaviors, STI and pregnancy rates, and on mediating factors such as knowledge and attitudes that affect those behaviors? and 2) What are the common characteristics of the curricula-based programs that were effective in changing sexual risk behaviors?

Prior to writing the report, Kirby and his colleagues conducted a systematic review of 83 studies of such programs from both the developed and developing world. All 83 studies met a set of programmatic criteria (e.g., they had to focus on programs for groups of young adults in school or after-school settings) and a set of research criteria (e.g., they had to have a sound experimental or quasi-experimental design.) Of the 83 studies that were reviewed, about two-thirds of them demonstrated positive sexual behavior change (i.e., delayed sexual onset/increased abstinence, increased condom and/or contraceptive use, decreased number of partners, or decreased frequency of sex).

Kirby and his team conducted a more in-depth analysis of the studies and corresponding curricula to identify distinguishing characteristics of effective programs. To identify the important characteristics of the process of developing the curricula and the important characteristics of implementing the curricula, they carefully reviewed the original studies and any other materials describing the development or implementation of the curricula that were effective. To identify the important characteristics of the contents of effective curricula, Kirby and his colleagues conducted a rigorous in-depth content analysis of a sample of the effective curricula,

especially those with the strongest evidence of positive impact. At the conclusion of their study, 17 common characteristics emerged that fell logically into three categories: program development, contents and implementation. A description of each of these characteristics follows.

Characteristics of How Programs were Developed

1. Included multiple individuals (and sometimes groups) with expertise in different areas in the design of the curriculum. People with different backgrounds and expertise were included, particularly in the areas of theory of health behavior, research on adolescent sexual behavior and risk and protective factors affecting that behavior, theory of instructional design (how to change each risk and protective factor), elements of good curriculum design, specific activities used to teach youth about sexual topics, cultural knowledge, and evaluation.



2. Assessed the relevant needs and assets of the young people they were targeting. The curriculum developers typically reviewed quantitative data on HIV, other STD or pregnancy rates as well as any survey data on young adult sexual behavior. To the extent feasible, they reviewed these data relevant to their targeted population.

3. Used a logic model approach to develop the curriculum. In public health, a logic model may specify how interventions can affect behavior and achieve a

health goal. Curriculum developers may or may not have consciously developed a formal logic model. However, discussions about the development of the curriculum, use of theory, and measurement of both sexual and contraceptive behaviors and the mediating factors affecting those behaviors suggest that they completed the following four steps although not necessarily in the following order and not necessarily so logically 1) Curriculum developers specified the health goal(s) they were trying to achieve; 2) Curriculum developers identified the particularly important behaviors that lead to HIV/STD transmission or pregnancy or their prevention; 3) They used personal knowledge of the theory and research, focus groups and/or interviews with youth and professionals working with youth, and personal experience to identify some psychosocial sexual risk and protective factors affecting those behaviors; 4) Finally, they developed particular activities to address many or all of these risk and protective factors that they identified.

4. Designed activities consistent with community values and available resources (staff time, staff skills, facility space and supplies). For example, in communities that greatly valued abstinence among young people, abstinence was emphasized as the safest or best approach for young people. In schools with teachers who were inexperienced in using role play activities, less or no emphasis was placed on students practicing role-play. In communities lacking video equipment, videos and films were not likely to be incorporated. Similarly, in schools lacking paper and pencils, individual worksheets were not used.

5. Pilot-tested the program. Many of the curriculum developers pilot-tested some or all of the activities and then made modifications in the activities before implementing the version that was actually evaluated. This allowed them to assess informally what did or did not work.

Characteristics of Program Contents

6. Focused on at least one of three health goals: Prevention of HIV, other STDs and/or unintended pregnancy. Effective curricula typically focused on young people's susceptibility to HIV, other STDs and/or pregnancy and the negative consequences of contracting HIV and other STDs or becoming pregnant. They gave clear messages about these health goals, namely that if young people have unprotected sex, they would be more likely to contract HIV or another STD or to become pregnant (or cause a pregnancy) and that there were negative consequences associated with these outcomes.

7. Focused narrowly on specific behaviors leading to these health goals, gave clear messages about these behaviors, and addressed situations that might lead to them and how to avoid them. Curricula were designed to prevent HIV and other STDs focused on abstinence and frequency of sex, number of sexual partners (less commonly), and condom use. Additionally, curricula designed to prevent pregnancy focused on abstinence, frequency of sex (less commonly) and contraceptive use.

Effective curricula focused on these behaviors in a variety of ways: First, they explicitly discussed sex, condom use and contraceptive use. Second, effective curricula gave a clear and consistent behavioral message about these sexual and protective behaviors. The messages in these effective programs were appropriate to the age, sexual experience, gender and culture of the youth.

8. Focused on specific sexual psychosocial factors that affect the specified behaviors, and changed some of those factors. Programs designed to reduce sexual activity either by delaying the initiation of sex, reducing the frequency of sex (or increasing the return to abstinence), or reducing the number of sexual partners addressed multiple psychosocial risk and protective factors affecting sexual

behaviors (e.g. knowledge, perceived risks, values, attitudes, perceived norms, self-efficacy, parent-child communication, etc.)

9. Attempted to create a safe environment for youth to participate. Virtually all of the effective programs began with the creation of a set of ground rules for class involvement. Consistent with this characteristic, which was designed to help make youth more comfortable talking about sexual topics, some curricula encouraged educators to give positive recognition and positive reinforcement. In addition to establishing ground rules, some programs tried to create a safe environment by separating the class into same-sex groups for certain topics, or occasionally limiting the entire course to only one sex.

10. Included multiple instructionally sound activities designed to change each of the targeted risk and protective factors. In order to meet the needs of the targeted young people and to change the selected risk and protective factors, effective programs incorporated multiple activities to change these factors



11. Employed instructionally sound teaching methods that actively involved the participants, helped participants

personalize the information, and were designed to change each group of risk and protective factors. The following teaching methods were most commonly implemented: short lectures, class discussions, small group work, video presentations, stories, live skits, role plays, simulations of risk, competitive games, forced choice activities, surveys of attitudes and intentions with anonymous presentation of results, problem solving activities, worksheets, homework assignments (including assignments to talk with parents or other adults), drug store visits, clinic visits, question boxes, hotlines, condom demonstrations, quizzes, and a variety of other interactive activities. Nearly all of these instructional methods were interactive and engaged youth; some directly encouraged youth to apply

the concepts to their own lives. The interactive quality of many of these teaching methods helped them change some of the risk and protective factors above that include much more than knowledge.

12. Employed activities, instructional methods and behavioral messages that were appropriate to the youths' culture, developmental age, and sexual experience. Some curricula were designed for specific racial or ethnic groups and emphasized high rates of HIV, other STDs or pregnancy among those groups. Other curricula were designed specifically for young women and emphasized that young women can be powerful and in control of sexual situations. Most curricula were consistent with the developmental age and sexual experience of the students.

13. Covered topics in a logical sequence. In many, but not all, of the curricula, the risk and protective factors and the activities addressing them were presented in an internally logical sequence. Often the curricula first enhanced the motivation to avoid HIV, other STDs and pregnancy by emphasizing susceptibility and severity of these events and then addressed the knowledge, attitudes and skills needed to avoid them. For example, one sequence of activities included: 1) Providing basic information about HIV, other STDs or pregnancy, including susceptibility and severity of HIV, other STDs and pregnancy; 2) Discussing behaviors needed to reduce vulnerability; 3) Sharing the knowledge, values, attitudes and barriers related to these behaviors; and, 4) Training on the skills needed to perform these behaviors.

Characteristics of How Programs were Implemented

14. Secured at least minimal support from appropriate authorities. Virtually all effective programs obtained approval from authorities such as ministries of health or education, school principals, clinic directors or directors of local youth-based organizations. This approval may have provided needed support or

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Sex and HIV Education Programs for Youth

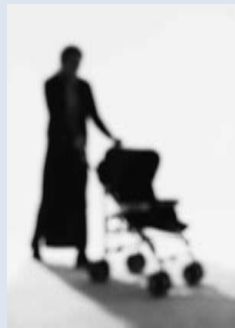
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sanction for educators who would be covering topics that were controversial in some cultures.

15. Selected educators with desired characteristics (whenever possible), trained them, and provided monitoring, supervision and support.

While some programs were implemented by classroom teachers in whatever classes were appropriate, other programs hired their own educators and had more control over whom they hired. Commonly they hired people whom they believed could relate to youth and who had a background in health education and especially sex or HIV education. Virtually all programs trained educators in the implementation of the curriculum. This training varied considerably in length and approach. Some trainings were skills-based and provided practice teaching some of the activities; others did not.

16. Implemented needed activities to recruit and retain youth. When needed, effective



programs implemented activities necessary to recruit and retain youth and avoided or overcame obstacles to their attendance. For example, if appropriate,

parental notification was obtained, transportation was provided, activities were implemented at convenient times, and safety was assured.

17. Implemented curricula with reasonable fidelity. Most effective programs implemented all or nearly all activities in the curriculum as designed. These programs tended to be more formally controlled research projects, hence the need to adhere more closely to program design.

Because some studies provided relatively little information about implementation and still other studies provided different types of process information (e.g., percentage of activities implemented or distributions

of numbers of sessions received by intervention participants), it is not possible to make a more definitive statement about implementation across these studies. Then again, the results of the replication studies do provide some information about the importance of fidelity for those few curricula that were evaluated multiple times. As noted above, those studies suggested that interventions may be less effective if 1) the length is shortened considerably, 2) activities that focus on increasing condom use are omitted, or 3) curricula are designed for and evaluated in community settings, yet implemented in classroom settings.

Information Update: ETR Associates and Healthy Teen Network are currently working to complete a Characteristics Assessment Tool (CAT) designed to guide practitioners as they select, adapt and develop effective sex and HIV education programs.

For more information about the original Characteristics study or the CAT, please contact Lori Roller at lorir@etr.org. The full report can be downloaded at <http://www.etr.org/recapp/programs/SexHIVedProgs.pdf>

Good News, Bad News and a Challenge for Public Health

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years ago, one state health department bowed to political pressure by posting medically inaccurate information about abortion on its website, removing it only after a concerted effort by that state's public health association and other health and academic institutions. Surely this is not the only lapse in recent years. Increased funding is being directed toward abstinence-only programs, despite a lack of strong evidence to support the idea that these programs delay initiation of sex or reduce teen pregnancy², while effective comprehensive sex-education programs are derailed. Both CityMatCH and local health departments have a role in reinforcing the importance of science-based interventions to policymakers and the public.

Focused on Health Promotion/Prevention:

Opportunities abound for creative approaches to the complex issues of teen pregnancy prevention. An Urban Health Teen Pregnancy Workgroup³ with representatives from St. Paul and Minneapolis is exploring the association between sexual violence and teen

pregnancy. As a result, recommendations centered on prevention and early identification of sexual violence are being forwarded to policymakers and public health agency administrators. In addition, the group has identified groups of teen at particular risk of sexual violence and teen pregnancy.

Long-term Commitment to Community

Finally, one of the strengths of public health is its ability to work collaboratively across populations, convening groups in the community and developing partnerships to address complicated problems. In its commitment to the community, the Minnesota Organization of Adolescent Pregnancy, Prevention and Parenting designed a *Teen Pregnancy Puzzle*,⁴ which demonstrates the complexity of teen pregnancy prevention and the need for comprehensive solutions. The puzzle includes twelve components, which are key to reducing teen pregnancy, involving parents, schools, health care providers, community members and the media.

Clearly there is much work to be done in teen pregnancy prevention in



our communities and across the country. And here in St. Paul, the baby of a 15-year-old is still missing. The lives of these two children, and many more, hang in the balance.

¹ "Pregnancy Prevention in Adolescents," Sawzan As-Sanie, MD, MPH, Angela Gantt, MD, MPH and Marjorie Rosenthal, MD. *American Family Physician*; October 15, 2004.

² Do Abstinence-Only Programs Delay the Initiation of Sex among Young People and Reduce Teen Pregnancy? Douglas Kirby, PhD, The National Campaign to Prevent Teen Pregnancy, Washington, D.C., October 2002.

³ Report and Policy Recommendations to the TransRiver Public Health Directors, May 2006

⁴ Minnesota Organization on Adolescent Pregnancy, Prevention and Parenting. MOAPPP Teen Pregnancy Puzzle. www.moappp.org



Promoting Science-Based Approaches to Teen Pregnancy Prevention in Massachusetts



Erica Fletcher, Prevention Program Manager, Massachusetts Alliance on Teen Pregnancy

In 2002, the Massachusetts Alliance on Teen Pregnancy was awarded a three-year grant from the Centers for Disease Control and Prevention to build the capacity of teen pregnancy prevention programs and community coalitions to select, implement and evaluate science-based approaches (SBAs) to teen pregnancy prevention. (See related article on Page Eight) The Alliance's goal was to increase the number of the teens reached by science-based practices, defined as:

- ♦ Replicating programs that have been rigorously evaluated and shown to be effective.
- ♦ Designing programs based on specific *risk and protective factors* shown to affect teen pregnancy.
- ♦ Using a *logic model* to guide activities rather than choosing activities that seem to make sense or meet funder's needs.
- ♦ Recognizing an *empirical basis* for prevention work and using evidence to challenge unfounded assertions.
- ♦ Listening to the *evaluation evidence*, especially when it challenges one's own beliefs, and changing one's approach based on evidence.

The Alliance successfully advocated with the state Department of Public Health (DPH) to shift all state funding for teen pregnancy prevention programming towards SBAs.*** The

Alliance then provided training and technical assistance to the teen pregnancy prevention programs funded by the Massachusetts DPH and to communities aspiring to adopt SBAs. One such community, the North Quabbin region of the state, was the recipient of intensive technical assistance from the Alliance as they investigated how

to choose an intervention grounded in science to implement with teens in their community.

In the fall of 2003, a community coalition called the North Quabbin Teen

Pregnancy Prevention Task Force (the Task Force) contacted the Alliance for assistance in directing \$100,000 in state funding for teen pregnancy prevention toward SBAs. Over the next eight months, the Alliance worked with the Task Force on a five-step process to select a science-based program that is still being implemented in North Quabbin schools today.

Step 1: Identifying the Goal

The Alliance first helped the Task Force articulate their goal: to select a comprehensive, research-based approach to teen pregnancy prevention for the North Quabbin community with funding from the Massachusetts Department of Public Health.

Step 2: Selecting Risk and Protective Factors

Research suggests that there are certain risk and protective factors that are most closely related to adolescent sexual behavior. Additionally, research suggests that effective programs concentrate on impacting *specific* risk and protective factors, rather than attempting to address *all* risk and protective factors in teens' lives. Therefore, the first step was to select specific risk and protective factors to impact through programming.

The Alliance helped the Task Force to identify the prevalent risk and protective factors among teens in North Quabbin, which factors would be most amendable to change by an intervention, and which factors the Task Force had the greatest capacity to change. Over the course of several meetings, the Alliance presented research on risk and protective factors, and led members in a brainstorming session to describe the real experiences of teens with whom they worked.

The Task Force reviewed local data and reflected on their own experiences, leading to agreement upon the following four factors to target through their teen pregnancy prevention intervention:

- ♦ Increasing educational aspirations and plans for the future;
- ♦ Encouraging positive and honest peer norms for contraception;
- ♦ Providing greater access to information and education on contraceptive

use; and

- ♦ Reducing alcohol and drug use.

The process resulted in consensus on which factors to address.

Step 3: Learning About Science-Based Approaches

After the Task Force chose risk and protective factors, the Alliance trained Task Force members in selecting an SBA. There are three basic selection methods: choose a program that has been effective in other settings with similar populations of youth; incorporate into an existing program elements that have shown to be effective; and use a BDI (Behavior Determinant Intervention) logic model to design a program from scratch.

Given these three options, the Task Force debated the pros and cons of applying each strategy to their community. It was crucial that the intervention be a good fit for local teens, be funded, and be supported by the greater community.

Step 4: Selecting an Intervention

Discussing the benefits and disadvantages of various SBAs helped the Task Force arrive at consensus about implementing the Teen Outreach Program (TOP), a service learning program shown to reduce teen pregnancy. The Alliance then led the Task Force through a BDI logic model development process to make sure TOP would address the specific risk and protective factors identified early on as a priority in North Quabbin.

Step 5: Introducing the Program to the Larger Community

Following selection of TOP to address teen pregnancy prevention, the Alliance assisted the Task Force to develop a presentation to the greater community, including anticipated audience questions and potential responses.

The Alliance also provided packets of information to meeting attendees showcasing the process the Task Force had engaged in to select the program, including data on local birth rates, a press release, a letter to the editor by a local teen, an overview of TOP, and

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***Learn more about the Alliance by reading the full abstract in the 2006 CityMatCH Compendium of Promising Practices. Contact CityMatCH for more information.

Teen Pregnancy Prevention in Massachusetts

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information on SBAs.

TOP has since been integrated into two regional high schools in North Quabbin. Community support has ensured the program's sustainability and expansion to serve all ninth graders in one school's health education curriculum.

As the trend toward science-based practices extends its reach further into teen pregnancy prevention, communities like North Quabbin are increasingly searching for ways to incorporate research into practice.

Through this project, the Alliance was in a unique position to translate research for the field. This work required the Alliance to balance the expertise of researchers with the expertise of communities. While researchers bring valuable data to the field, communities have knowledge of their own resources, youth population, past interventions, and politics.

The goal of the Task Force was to create a research-based approach to teen pregnancy prevention in the North Quabbin region. The adoption of TOP marks the achievement of this goal. An unanticipated, yet equally important, outcome was the opportunity for community members to become engaged in teen pregnancy prevention, build connections with each other, and contribute to the community in a meaningful way.

The Alliance's experience in North Quabbin suggests that a possible next step for researchers would be to investigate whether science-based practices impact teen behavior, risk and protective factors, and ultimately teen pregnancy rates in communities like North Quabbin.

This requires collaboration between researchers, who offer technical expertise, and community members who bring an understanding of their



needs and resources. In seeking to address unanswered questions about the long-term impact of science-based practices, researchers and practitioners should work together to uncover effective ways to support all teens, from all communities, to make healthy decisions and build positive futures.

For more information on the Massachusetts Alliance on Teen Pregnancy, including the full report on the North Quabbin project, please visit www.massteenpregnancy.org.

NACCHO Introduces National Identity for Local Public Health

The National Association of County & City Health Officials (NACCHO) unveiled a new national identity for local public health in July, 2006 at its annual conference in San Antonio (TX).

The identity consists of an icon and tagline accompanied by a user guide. These represent components of a previously-developed communications toolkit for local health departments. Use of the identity is voluntary and limited (without explicit permission from NACCHO) to governmental public health departments.

The origin of this product was based in one of NACCHO's six Strategic Directions (or goals) established by their Board of Directors. The goal addressed by the development of a national identity is to promote universal recognition of and support for the critical importance of local health departments.

NACCHO's Committee to Promote Public Health, provides oversight of the project. The committee identified a need to create a consistent image and message for local public health nationwide to complement the images and messages of diverse local public health departments.

The national identity for local public health comprises words and a

symbol that NACCHO hopes ultimately will immediately and consistently identify the people and the work of local public health throughout the United States.



The logo is intended to be used side-by-side local public health department identities to visibly assure communities that public health is working for their health and safety. Over time, it is hoped that the national identity will provide the field with universal recognition, in the same way that certain identities are recognized for police, fire, EMS and other agencies that protect and respond.

The symbol of a three-pointed shield and stylized plus-sign combines

images associated with health, protection and growth. The three-point symmetry reinforces the three core functions of public health. The words "Prevent. Promote. Protect." have been previously been used in many variations and comprise a simple, clear statement about public health.

NACCHO engaged a social marketing firm to assist in identity development. The symbol and tag line were selected from a range of alternatives, based upon the following criteria -- Is it recognizable? Is it memorable? Is it enduring? Does it follow the research results? Will it stand for public health? Will it be easy to use?

NACCHO's immediate past president, Rex Archer, MD, MPH shepherded this project and said, "It is our sincere hope that all public health departments will frequently and prominently use the image and messages to show pride in the people, the power, and the purpose of public health. Like other public services that quietly ensure safety and respond in times of crisis, it is time for public health to be visible and understood by all."

More information about the identity can be found at www.naccho.org/LocalPublicHealthBrand

Decision 2006: New CityMatCH Board Members

A hearty "thank you" to all candidates who ran for the 2006 CityMatCH Board of Directors. An extraordinary pool of talented and qualified nominees led to an excellent voter response rate, with over 50 percent of members participating. Because some races were hotly contested, the ultimate decisions remained unclear until the final ballots were tallied. This represents the first election held under the new regional structure approved by the membership in March, 2006. Voting took place in June, with the newly elected Board members set to assume their responsibilities on August 19, 2006. The term of service is three years and will conclude in August, 2009. Congratulations to the following CityMatCH members elected to the Board:

◆ **Northeast: Marjorie Angert (Philadelphia, PA) *(see box at right)**

This region represents Delaware, West Virginia, Maryland, Maine, Vermont, New Hampshire, New York, Pennsylvania, Massachusetts, Rhode Island, Connecticut, New Jersey, The District of Columbia, and Ohio.

◆ **South-Central: Ann Salyer-Caldwell (Fort Worth, TX)**

This region represents Arizona, New Mexico, Kansas, Oklahoma, Texas, Missouri, Arkansas, and Louisiana.

◆ **West: Kathy Carson (Seattle, WA)**

This region represents Hawaii, California, Nevada, Utah, Washington, Oregon, Idaho, Montana, and Alaska.

◆ **At-Large: Kimberlee Wyche-Etheridge (Nashville, TN)**

Designated MCH representatives from all CityMatCH member health departments are eligible for election to the At-Large seat on the Board of Directors.

◆ **Nominating Committee: Marjorie Angert (Philadelphia, PA) and Pamela Stuver (Eugene, OR)**

The Nominating Committee is elected by the membership to serve a three-year term, and is primarily responsible for assisting the Central Office with annual Board elections.

For more information on the Board, contact any current Board Member (a complete roster is located on the CityMatCH website) or contact Mark Law, Coordinator of Membership Services, at 402-561-7500.

*Because Marilyn Seabrooks recently left the D.C. Health Department, Dr. Marjorie Angert has been appointed by the current Board to fill the position left vacant. CityMatCH offers Ms. Seabrooks best wishes in her future endeavors.

CityMatCH Welcomes Additions to Central Office Workforce

Changes are on the horizon in 2006. Recently, it was learned that CityMatCH has been assigned a Senior Prevention Fellow by the CDC's Public Health Prevention Service (PHPS) Office of Workforce and Career Development. Brenda Thompson, MPH, a graduate of the Rollins School of Public Health at Emory University in Atlanta (GA) with specialization in Global Health and Community Health and Development, has accepted a two-year assignment to Omaha (NE).

The PHPS Office was initiated in 1997 to address gaps in the public health workforce and offers participants a unique three-year service and training program, gaining practical experience in program planning, implementation, and evaluation through specialized hands-on training, such as this placement with CityMatCH, and through mentorship at CDC. The program provides formal instruction in program management, epidemiology, surveillance, emergency response, and project evaluation. Selection into PHPS is highly competitive; candidates are aggressively recruited and highly qualified.

Look forward to information

regarding opportunities to interact and work with Ms. Thompson.

CityMatCH recently welcomed a new addition to the central office. Lingyun Zhu came on board in early August as a web designer and to provide graphics support to the organization. Zhu received her Bachelor's degree in Management of Information Systems from the University of Nebraska at Omaha in 2004 and also holds a degree in Economics from the Nanjing (China) University of Economics. Her expertise is expected to lend a new and updated look to the website and other

CityMatCH materials. The position was previously held by Kelly McIntosh, who transitioned to a new position in the Omaha area in June, 2006.

Additionally, Jennifer Skala, MEd, Managing Coordinator of Education and Training, left CityMatCH in late June to pursue her passion for children's health and well-being with a state-level foundation. CityMatCH wishes her well and is assured that she will continue to champion MCH issues and concerns within Nebraska. For more information, contact CityMatCH at 402-561-7500.

ResourceInfo Spotlights Teen and Unintended Pregnancy

Want to know more about issues associated with teen pregnancy addressed in this *CityLights*? Are you looking for examples of science-based approaches to pregnancy prevention? You can continue to build and enhance essential knowledge, skills and abilities by accessing the parallel edition of *ResourceInfo*.

Readers of the on-line publication, *ResourceInfo*, will find a "one-stop-shop" of links to publications, resources, and tools, with a special focus on those from key *CityLights* funder: the Health Resources and Services Administration's Maternal and Child Bureau. Links to the national organizations mentioned in this issue connect you to the full details of their history, mission, goals and activities.

To access the August 2006 edition, visit the website at: www.citymatch.org and click on Publications: *ResourceInfo*.

Providence 2006: Where Obstacles Become Opportunities *Online!*

Thanks to all of our sponsors, exhibitors, speakers and attendees for their roles in the success of the 16th Annual CityMatCH Urban and Maternal and Child Health (MCH) Leadership Conference in Providence, Rhode Island, August 20-22.



With the Conference theme identified as, "Where Obstacles Become Opportunities," plenaries, workshops, and skills-building sessions were thoughtfully developed to enhance the toolbox of relevant knowledge, skills and abilities of key decision makers and stakeholders in urban maternal and child health. The target audience included: local health officers and public health leaders responsible for health outcomes of women, children and families, academic and research staff; Federal agencies concerned with maternal, child and adolescent health; national public health organizations, and other nongovernmental health professionals, consultants and students. CityMatCH assured learning opportunities at many levels of MCH engagement.

If you were unable to attend this conference, or were there but want to pick up a copy of a key presentation, we can help. In late September, key conference presentations and materials (photographs, Powerpoints, etc.) will be archived to the CityMatCH website for your convenience. Visit the website at www.citymatch.org or contact the central office at 402-561-7500.



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