



Call back w/ pre-Nav memo for 2020
DC for 225-6060

back 5-27-20

Developing Health Skills for a Lifetime: CDC's Role in Preventing HIV Infection Among Young Americans

HIV Is the Leading Cause of Death for Americans Ages 25 to 44

It is estimated that half of all new HIV infections in the U.S. are among people under 25, and the majority of them are infected sexually. HIV-related death has the greatest impact on young and middle-aged adults, particularly racial and ethnic minorities. HIV is the leading cause of death for Americans between the ages of 25 and 44. In 1994, 1 in every 3 deaths among African-American men in this age range was due to HIV. And 1 in every 5 deaths among African-American females the same age was HIV-related.

Among all men in the next younger cohort, 13- to 24-year-olds, 55% of reported AIDS cases in 1995 were among young MSM (men who have sex with men); 10% were among injection drug users (IDUs); and 6% were among young men infected heterosexually. Among young women the same age, 51% were infected heterosexually, and 17% were IDUs.

Surveys of HIV infection among young people are limited, but suggest that prevalence may be stabilizing overall. With sustained, targeted prevention for each group entering adolescence and young adulthood, it is possible to further reduce the toll AIDS takes on young Americans. To do that, more information is needed about the range of adolescent sexual behavior to help develop interventions that are targeted to young people, work within the context of adolescent sexual behavior, and focus on individual, social, and community-level change.

Assessing the Diverse Prevention Needs of Young People

To better understand adolescent behaviors and the impact of selected family, social, and cultural factors on those behaviors, CDC researchers conduct broad-based surveys of the extent of risk behaviors among young people, as well as focused studies of the factors contributing to risk and behavioral intent among specific groups of adolescents.

Surveys of risk behavior among young people suggest that prevention programs have helped increase condom use among adolescents who are sexually active, without increasing the level of sexual activity among young people. Five-year trends from the Youth Risk Behavior Survey (YRBS) show both a leveling of sexual risk behavior rates and increased condom use among sexually active young people. From 1990 through 1995 the percentages of high school students who reported ever having had sex, having four or more partners, or having intercourse in the 3 months prior to the survey all

remained steady. In contrast, overall condom use at last intercourse was up significantly, from 46% in 1990 to 53% in 1995. Female and African-American students posted the largest increases in condom use. While increased condom use is encouraging, YRBS findings indicate that more must be done to help young people delay initiation of sexual activity and reduce risky sexual behavior.

Other CDC research also suggests that new approaches to prevention may be needed to build upon success in increasing condom use, and to reduce the level of sexual activity among young people. In a recent survey of a group of 14-16 year old adolescents and their mothers, researchers found that the traditional definitions of "sexually active" and "not sexually active" may mask important behavioral intentions and sexual practices. Even adolescents who might traditionally be defined as not sexually active are actually engaging in or intend to engage in a range of sexual behaviors that could place them at risk for HIV infection. Of the adolescents in the survey, 99% could be classified into one of five categories: delayers (no intention to initiate intercourse); anticipators (intend to initiate in the next year); one-timers (has sex once, and not again); steadies (have intercourse with one partner); and multiples (have intercourse with multiple partners). Vital differences were found among the typology groups. For example, one-timers and steadies were significantly older than multiples when they first had intercourse. One-timers were significantly more likely to use condoms than were steadies or multiples. And only multiples reported having had a sexually transmitted disease.

The researchers also looked more closely at adolescent females in the study group and found that in addition to other risk factors, the age of a young woman's first sexual partner may be related to her level of risk. Young women whose first sexual partner is 3 or more years older may be at greater risk of HIV infection. Older men present a greater risk for HIV transmission because they are more likely to have had multiple partners and to have had more varied sexual and drug use experiences. The young women whose first partners were older were also less likely to use condoms. Power differences are greater between older and young partners, likely contributing to riskier behaviors young women report with older partners. All these differences must be taken into account as HIV prevention programs are developed and implemented.

Reaching Young People through Effective School-Based and Community Programs

The foundation of all CDC's HIV prevention programs is that those closest to the problem are best able to solve it, equipped with needed tools. CDC's role is to provide those tools. In 1987, CDC launched a national program to help schools and other youth-serving agencies deliver effective HIV-prevention health education. CDC provides financial support and translates biomedical and behavioral research into practical interventions, so that schools and other agencies serving youth can implement effective HIV prevention education for youth.

CDC is also working with five communities to design targeted interventions to reach high risk youth in their local area. These programs are putting HIV prevention into action within the framework of social marketing, a discipline that combines communications and behavioral science with community mobilization. CDC is providing communities with financial resources and, more importantly, along with AED, is equipping them with intensive technical assistance that supports their efforts to apply research-driven, consumer-based research to design, develop, deliver, and evaluate HIV prevention marketing programs for youth. The Prevention Marketing Initiative

provides communities with a practical structure for targeted programs and its application has resulted in several key learnings, applied at both the national and local levels.

For example, research in three cities found that among 18-25 year old heterosexuals, gender and ethnic differences seemed to be more directly related to sexual risk behaviors than differences in socioeconomic status or relationship status. Young adults in this study also expressed doubt and confusion about refusing to have sex without a condom when they were in a sexual relationship with either a casual or steady partner. This information has been applied in the design of community-level prevention programs in these 5 communities and in a national public service campaign entitled, "Respect Yourself, Protect Yourself." Radio and television spots feature diverse young people modeling safer sex behaviors, including abstinence, refusing to have sex without a condom, and talking with partners about safer sex.

Through these and other practical applications of communications and behavioral theory, CDC continues to put cutting-edge science into the hands of communities to effect HIV prevention for young adults. For more information on CDC's work in this area, see any of the following presentations in Vancouver.

Youth Presentations in Vancouver

Oral

Five-Year Trends in HIV Risk Behaviors Among Youth, Janet Collins.

The AIDS Community Demonstration Projects(ACDP): A Successful Multi-Site Community-Level Behavioral Intervention, Martin Fishbein.

Adolescent Sexual Experience: A New Typology, Kim S. Miller.

Poster

The Impact of Street Outreach for HIV Prevention in 5 High Risk Populations, John E. Anderson.

Evaluating School-Based HIV/AIDS Education Efforts: A Systematic Approach to Improving Program Quality, Stephen W. Banspach.

A Pilot Study of Risk Behaviors and Condom Use among Incarcerated Adolescents, USA, Juarlyn L. Gaiter.

Setting Priorities for HIV Prevention Programs in School, Pete Hunt.

Focus Group Themes That Will Shape Participatory Social Marketing Interventions in 5 Cities, May Kennedy.

HIV Prevalence, Risk Factors, and Predictors of Unprotected Sex Among Homeless and Runaway Youth in Four U.S. Communities, Duncan MacKellar.

Reaching And Involving Youth: A Prevention Marketing Approach, Chad Martin.

Case Study Methods for Process Evaluation of Participatory Social Marketing, Laretta Pinckney, Martha Hare.

Initiation of Sexual Intercourse: Ages and Trends, Ellen Sogolow.

Research to Classroom: Selecting and Disseminating Educational Programs that Reduce HIV Risk Behaviors Among Adolescents, Susan Wooley.

HHS NEWS

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES

EMBARGOED FOR RELEASE
11:00 a.m. PT, Saturday July 6, 1996

Contact: CDC Press Office Vancouver
(604) 844-2851

HIV/AIDS Trends Point to Progress and Pose Continuing Challenges for Next Era in HIV Prevention

Vancouver, BC-- The United States has made major strides in HIV prevention, but each local community faces unique challenges and will require new tools as we move into the next era in HIV prevention, according to David Satcher, M.D, Ph.D., Director, Centers for Disease Control and Prevention (CDC).

"Fifteen years into the epidemic, we must remember that HIV is still a relatively new disease, and continues to evolve. As a nation, we have made significant progress in slowing the spread of the epidemic. Annual increases in new AIDS cases have slowed from more than 85% in the mid-eighties, to the current rate of less than 5%. That's still about 60,000 new AIDS cases a year. Moreover, we estimate that at least 40,000 Americans are becoming infected with HIV each year--there is clearly more to be done," stresses Satcher.

Helene Gayle, M.D., M.P.H., Director of CDC's National Center for HIV, STD and TB Prevention points to the continued need for targeted, sustained prevention efforts. "We saw evidence in the late 1980's that HIV prevention programs were contributing to behavior change, particularly among gay and bisexual men. Now we are likely seeing the impact of these behavior changes, as the rate of AIDS among some populations has slowed."

Despite signs of success in these areas, troubling trends have emerged in others. Nationwide, AIDS cases are now increasing most rapidly among women and minorities.

-- more --

Furthermore, there has not been a significant decline in new infections among young people, and young and minority gay and bisexual men remain at high risk. In addition, sustaining behavior change over time has proven to be a great challenge among all populations; making it vital that communities continue to target prevention to those populations where the epidemic is stabilizing in addition to the those populations where the epidemic appears to be growing.

CDC Support for Community Action

The challenge for the future, according to Gayle, is to ensure each community has the tools to address the evolving epidemic. "We have seen AIDS evolve from a period of explosive growth in a few geographic areas, primarily among gay and bisexual men and injection drug users, to the development of diverse local subepidemics, where the dynamics of AIDS vary by community and region," says Gayle. "CDC's role is to provide data, research and support for effective community action. Because each community faces unique challenges, HIV prevention strategies must be locally determined and relevant."

The body of work presented by CDC at the XI International AIDS Conference in Vancouver, July 7 - 12, underscores CDC's commitment to providing data and research for effective community action. In addition to the latest data on AIDS trends, CDC researchers will be presenting new information on effective behavior change programs for injecting drug users, and dramatic new evidence of the success of recent efforts to prevent perinatal (mother-to-infant) HIV transmission. CDC will also present research findings from recent efforts to help communities evaluate what works in HIV prevention, as well as efforts to develop new tools and techniques to reach those at greatest risk.

-- more --

Need for New Tools and Techniques: Focus on Prevention Research

Significant progress has been made in understanding which factors contribute to risk among young people, and this knowledge, especially when combined with new tools, should lead to more effective HIV prevention interventions. One example of a new tool developed through prevention research is a new and unique behavioral typology, which is a profile that identifies and more accurately defines the range of adolescent sexual experiences. This typology can be used to develop more effective HIV prevention interventions, including interventions designed to delay the initiation of sexual intercourse.

Prevention research efforts are also underway to develop new approaches and tools for HIV prevention among women. “Women account for an increasing proportion of newly reported AIDS cases in the United States,” says Gayle. “These trends point to the urgent need to identify female-controlled HIV prevention methods.” CDC researchers are working with researchers worldwide to evaluate factors contributing to the effectiveness of female condoms and to develop effective microbicides that can kill HIV and the pathogens that cause other STDs. As with any new tool for prevention, CDC researchers must also determine what influences people’s willingness and ability to use these methods. Simultaneously, CDC behavioral scientists are working to evaluate factors that will contribute to women’s use of these products and to determine how these new prevention methods, once identified and marketed, can and should be recommended in conjunction with existing prevention options.

Promising new evidence of the impact of STD treatment as a tool for HIV prevention will also be presented. Gayle stresses the need to integrate biomedical and behavioral approaches. “As we develop improved biomedical and behavioral interventions, we must also determine how they work best together. Together, these approaches can have profound impact on HIV prevention, and we are committed to providing communities the best tools from both arenas,” says Gayle.

###



XI International Conference
on AIDS Vancouver
July 7-12, 1996

Official Satellite Symposium

July 6, 1996

HIV Prevention Works

UPDATE

Coordinated by
the Canadian Public
Health Association in
collaboration with:

- National AIDS
Strategy, Health
Canada
- US Centers for
Disease Control
and Prevention
- US National
Institutes of Health
- Joint United Nations
Programme on
HIV/AIDS

International AIDS Prevention Symposium

This one-day HIV/AIDS Prevention Symposium will feature international best practice, including models of successful HIV/AIDS prevention programs and policies.

The Symposium will take place one day prior to the XI International Conference on AIDS in Vancouver, B.C., Canada.

Opening Plenary

Affected Communities: Links between care and prevention: *Noerine Kaleeba*

Community Mobilization Advisor, Joint United Nations Programme on HIV/AIDS, Geneva, Switzerland. Founder and former Executive Director, The AIDS Support Organization (TASO), Kampala, Uganda

Primary Prevention: *Thomas J. Coates*

Professor of Medicine and Director, Center for AIDS Prevention Studies, University of California, San Francisco (UCSF), San Francisco, California, USA

Broader determinants of risk: *Greg Williams*

Social Research Consultant, Montreal, Canada. Former Manager of the Canadian AIDS Society Income Security Program, Montreal, QC, Canada

"It is a unique opportunity to highlight the advances made in HIV prevention worldwide and gives grounds for realistic optimism that we can indeed respond effectively to this epidemic."

Peter Piot, Executive Director, Joint United Nations Programme on HIV/AIDS

WHEN:

Saturday, July 6, 1996,
8:30-17:00

One day before the XI International Conference on AIDS.

WHERE:

Regency Ballroom,
Hyatt Regency Hotel,
655 Burrard Street
Vancouver, Canada
telephone: 604-683-1234
facsimile: 604-689-3707

REGISTRATION:

Media registration is complimentary with demonstration of accreditation by a media organization or a media pass to the XI International Conference on AIDS. Media registration begins Friday, July 5 from 14:00-16:00 and 19:00-21:00 and Saturday, July 6 from 7:30-17:00. Pre-registration is encouraged. Contact the Canadian Public Health Association.

LANGUAGES:

Plenary sessions will be offered through simultaneous interpretation in English, French and Spanish. Concurrent sessions will be in English.

CONTACT:

HIV Prevention Works
Communications
Department
Canadian Public Health
Association
400-1565 Carling Avenue
Ottawa, Ontario, Canada
telephone: 613-725-3769
facsimile: 613-725-9826
email: hivprevention@cpha.ca

Closing Plenary

Future Directions: *The Honourable Justice Michael Kirby*

High Court of Australia, Canberra, Australia and former member of the World Health Organization Global Commission on AIDS.

"In order to stem the spread of HIV globally, we must employ the best tools from behavioural and social science, epidemiology and biomedical research simultaneously in a comprehensive, prevention science agenda. [The HIV Prevention Works] Symposium makes an important contribution to this end."

*William E. Paul, Director, Office of AIDS Research,
US National Institutes of Health*

"The challenge confronting HIV prevention efforts now is how to mobilize the political will, energy and resources to implement and sustain prevention programs over time."

*Nancy Kotani, President,
Canadian Public Health Association*

"We have made great strides worldwide in HIV prevention since the epidemic was first recognized ... Yet, a look at the global picture of HIV/AIDS reminds us all that much remains to be done."

*Helene D. Gayle, Director, National Centre for HIV,
STD and TB Prevention Centers
for Disease Control and Prevention*

HHS NEWS

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES

EMBARGOED FOR RELEASE
11:00 a.m. PT, Tuesday July 9, 1996

Contact: CDC Press Office Vancouver
(604) 844-2851

CDC Presents Evidence of Decline in Perinatal HIV Transmission: Outlines Challenges for Further Reducing Infant Infections

Vancouver, BC--Studies presented by researchers from the Centers for Disease Control and Prevention (CDC) at the XI International AIDS Conference reinforce earlier findings that perinatal HIV transmission can be reduced by treating mother and child with zidovudine (ZDV). "Before 1994, when our ZDV treatment guidelines were published, 21% of the children in our study were infected. Since the guidelines, it's dropped to 10%," says R.J. Simonds, M.D., one of the CDC researchers.

"The best way to prevent perinatal HIV transmission is to prevent HIV infection in women," says Helene Gayle, M.D., M.P.H., Director of CDC's National Center for HIV, STD, and TB Prevention. "That being said, it is clear that we can greatly reduce the risk of HIV transmission from an infected mother to her child. The key is providing pregnant women easy access to prenatal care early in pregnancy and routinely giving them information about the benefits of knowing their HIV serostatus and then offering and encouraging an HIV test. We must also ensure that women have access to ZDV and other needed medical care, for themselves and their infants, and that health care providers are prepared to care for HIV positive pregnant women."

Gayle notes that studies presented by Simonds and another CDC researcher Richard

-- more --

Steketee, M.D., support ZDV's efficacy, but adds that other factors also play a role in reducing transmission. "Preventing mother-to-child HIV transmission may require changes in obstetric practices," she says. "Our studies show an increased risk of infection when the mother's membranes have ruptured more than 4 hours before delivery. With shorter duration of ruptured membranes, we saw a reduction in the rate of transmission." Other characteristics that affect perinatal transmission are mothers' CD+4 counts of less than 500 and stage of the mother's illness. "The bottom line is that the sicker mom is, the more likely the baby will be infected. But even when mothers are very sick, ZDV still helps prevent transmission," Gayle says.

Related studies presented by CDC researchers addressed the role of these and other factors in reducing perinatal transmission. Research by Brenda Seals, Ph.D. demonstrated that the majority of women infected with HIV are interested in ZDV treatment during pregnancy and for their children after birth. But women's interest in and commitment to adhering to the ZDV treatment regimen seems particularly sensitive to physicians' attitudes, underscoring the importance of educating health care providers about the benefits of ZDV during pregnancy. A study presented by Sherry Orloff, M.P.H. showed that ZDV use has increased since the publication of the ZDV treatment guidelines, but is still variable by hospital. Researchers examined rates of ZDV use in hospitals in the New York City area, Atlanta and Baltimore and found that usage ranged from 33% to 90% of enrolled mothers, depending on the hospital and the populations it served. The lowest rates of ZDV use were among women who used cocaine during pregnancy and women with no HIV related symptoms or illnesses.

In another study, Anna Shakarishvili, M.D. and fellow researchers studied the association of HIV transmission and no or late prenatal care with demographic, social, and other characteristics of infected women in Texas. "The data show that some women receive very late or no prenatal care and that lack of timely care is associated with having less than 12 years of education and being unmarried," Shakarishvili says. "To reduce perinatal HIV transmission and other adverse pregnancy outcomes, comprehensive interventions to increase early prenatal care

are urgently needed.” Her conclusion was underscored by research presented by Jeanne Bertolli, Ph.D. showing that breastfeeding, a known route of perinatal transmission, was much more common among women whose HIV infection was not known before delivery. In contrast, infected women who received comprehensive prenatal care, including routine counseling and voluntary HIV testing, were less likely to breastfeed their babies.

Finally, an economic analysis by Paul Farnham, Ph.D. and others at CDC shows that prenatal care including HIV counseling and testing and ZDV for infected mothers and their children is cost effective. “Without intervention, a 25% mother-to-infant transmission rate would result in approximately 1,750 HIV-infected infants annually in the U.S., and lifetime medical costs of \$282 million,” Farnham says. “We estimated the cost of intervention at \$67.6 million, preventing 656 infant HIV infections with a savings of \$105.6 million in medical care costs, and a net cost-savings of \$38.1 million. These results strongly support routine counseling, voluntary testing and ZDV use.”

It is possible that these savings could be increased, if research shows a shorter course of ZDV during pregnancy is just as effective. Several clinical trials of short-course ZDV during pregnancy are underway in sub-Saharan Africa. “In developing countries, the extensive ZDV course recommended in the U.S. is not feasible.” Gayle notes. “If we can demonstrate that a short course works, we have a promising advance for addressing the terrible toll perinatal transmission takes internationally.” A model presented by CDC researcher Gordon Mansergh, M.A. indicates that a national perinatal HIV prevention program in sub-Saharan African countries would reduce transmission and could provide significant societal savings, after a substantial initial investment in public health infrastructure and drugs.

“We have made significant gains in the U.S. and worldwide in translating science into life-saving prevention,” Gayle says. “As is always true with HIV prevention, the solutions aren’t simple or easy to implement. But the strides we are making in perinatal prevention clearly document the benefits.”

###

HHS NEWS

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES

EMBARGOED FOR RELEASE
11:00 a.m. PT, Thursday July 11, 1996

Contact: CDC Press Office Vancouver
(604) 844-2851

AIDS IN THE WORKPLACE SURVEY IS A "WAKE-UP CALL" FOR AMERICAN BUSINESSES

CDC National Survey Finds Both Good News and Challenges Ahead for AIDS Response

Vancouver, BC -- Today, during a presentation at the XI International Conference on AIDS, the Centers for Disease Control and Prevention (CDC) will release a national survey of AIDS policies and education programs in the workplace. This survey revealed that nearly half of American worksites have implemented HIV/AIDS workplace policies and one in six worksites offered their employees education programs that address HIV and AIDS. "The results are good news and a challenge to do better," according to Helene Gayle, M.D., M.P.H., director of CDC's National Center for HIV, STD, and TB Prevention. "Although many businesses are establishing AIDS policies, the survey shows that there are employers who have not yet implemented AIDS education programs."

Challenges Remain

The survey included over 2,200 businesses from across the country and, according to the survey, 43% of worksites with more than 50 employees said they have a policy regarding an employee with a disability or life-threatening illness including HIV/AIDS. The survey also found that corporate philanthropy (fundraising and volunteerism) was the most common way large and small businesses were involved with HIV/AIDS. Nearly all worksites offered group health insurance, although 5 percent limited or excluded HIV from at least one of the policies offered to employees.

-- more --

Sixteen percent of firms provided employees education, representing more than 30,000 businesses committing to HIV education programs. Of these, nearly all indicated that the program included a lecture, seminar or discussion group. Almost 3/4 said these programs were mandatory for at least some managers, supervisors, and employees.

A Snapshot of the American Workplace

“The survey gives us important information about HIV education and policies in the American workplace,” says Cynthia Jorgensen, Ph.D., CDC’s principal researcher for the survey. “Never before has anyone taken a snapshot of AIDS workplace programs. The information from the survey will be vital in tracking the progress of their adoption and implementation.”

One of the objectives of the survey was to determine the adoption of the CDC sponsored Business Responds to AIDS (BRTA) workplace program, developed in 1992, which contains 5 core elements. The survey found that 41 percent of large firms have adopted at least two of the HIV/AIDS workplace program elements recommended by CDC.

A Five-Point Prevention Program

The Business Responds to AIDS Program is a public-private partnership of the CDC, the public health sector, business and labor designed to prevent the spread of HIV through a comprehensive workplace education program. The CDC, through this partnership, helps businesses across the country design policies and implement education programs for employees, their families and the community.

The BRTA Program recommends businesses establish comprehensive HIV and AIDS prevention programs comprised of the following five components:

- Development of an HIV/AIDS policy
- Training of supervisors in the policy
- HIV/AIDS education for employees
- HIV/AIDS education for employees' families
- Encouragement of employee volunteerism, community service and corporate philanthropy

Large and Small Businesses Are Responding

Through the Business Responds to AIDS Program, CDC has forged partnerships with many large and small businesses. As a result, many businesses find that because of their HIV/AIDS workplace efforts, their workforce is much more at ease with dealing with HIV-related issues. In addition, many businesses consider AIDS education an investment in their employees and in the long-term health and productivity as a business.

“HIV and AIDS is the leading cause of death for Americans between the ages of 25 and 44-- a group that represents more than half of the nation's workforce,” says Gayle. “Individually and collectively, businesses and the workforce have an impact on nearly every aspect of community life. Because of their commitment to the community, businesses should be valuable allies in the campaign to educate the public about HIV/AIDS.”

Businesses can obtain information and resources for developing workplace HIV/AIDS prevention and education programs by calling the CDC Business and Labor Resource Service toll-free at 1-800-458-5231. The Resource Service offers a Manager's Kit with step-by-step information on how to develop a comprehensive workplace program. Since 1992, the Resource Service has answered more than 25,000 information requests.

###

Joan Steiber 5:30pm
690-6884

Kay Stone
690-8898

HHS

NEWS

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES

HCFA = enthusiastic?

EMBARGOED FOR RELEASE
11:00 a.m. PT, Wednesday July 10, 1996

Contact: CDC Press Office Vancouver
(604) 844-2851

Diabetes
Joan Steiber
Asby - asst. sec. for policy + evaluation

STD Control Plays Important Role in Reducing the Spread of HIV

Vancouver, BC-- In a panel discussion at the International AIDS Conference today, researchers stress the important link between the treatment of other sexually transmitted diseases and reduction in the spread of HIV. Judith Wasserheit, M.D., M.P.H., cites the results of a community-level randomized study in rural Tanzania which documented an approximate 42% reduction in new HIV infections when STDs were aggressively treated. Wasserheit is the Director of the Division of STD Prevention in the Centers for Disease Control and Prevention's (CDC) National Center for HIV, STD, and TB Prevention.

Amy
Nevil
690-7794

The results of the study, which focused exclusively on treatment of symptomatic STDs, show the potential for dramatic reduction in HIV incidence. "Short of vaccines, I know of few preventive interventions in any area of health that deliver this kind of impact," states Wasserheit.

STDs are believed to increase the risk of HIV infection in at least two ways. STDs, such as chancroid, syphilis, and herpes can cause genital ulcers which may provide an easy route of entry for HIV. Even in the absence of ulcers, untreated STDs cause inflammation of the genital tract which may also increase the chances of infection.

"We have certainly known about the interrelationships between HIV infection and other STDs for some time," says Helene Gayle, M.D., M.P.H., Director of CDC's National Center for HIV, STD, and TB Prevention. "But this is the first time we're seeing direct evidence of the impact of STD treatment on the rate at which people become infected with HIV."

-- more --

A challenge in effectively treating STDs is developing interventions that provide easy access to STD screening and treatment and that motivate populations at risk to seek that treatment. On the topic of increasing access to STD screening and treatment, also at the International AIDS Conference, CDC researcher William Levine, M.D. reports on a CDC study that examined a successful intervention resulting in increased STD screening and decreased STD prevalence among a group of brothel-based female sex workers (FSWs) in Bolivia. The challenge was to implement a prevention program in a resource-poor setting with low HIV prevalence and no effective public STD services. The study combined the initiation of STD services in public facilities with an intensive community-level behavioral intervention. Over a three year period, the number of FSWs being screened for STDs increased from 15 to 50 per month and STD prevalence declined more than 50%.

“STD prevention and control is vital to efforts to reduce HIV transmission. We are encouraged by reports of successful interventions that motivate populations at risk to seek STD screening and treatment,” adds Gayle. “We must continue to look for innovative ways to combine effective community level behavioral interventions with STD screening and treatment programs.”

###

Stender - for Fenster
224-9657
RE: FDA
Preemption
medicaid +
DASH

HHS NEWS

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES

EMBARGOED FOR RELEASE
11:00 a.m. PT, Tuesday July 9, 1996

Contact: CDC Press Office Vancouver
(604) 844-2851

New CDC Data on Youth HIV/AIDS Risk: Wide Range of Prevention Messages Needed

Vancouver, BC-- Researchers from the Centers for Disease Control and Prevention (CDC) present new findings at the XI International AIDS Conference that document the continued need for HIV prevention messages that are targeted to reflect the diverse experiences of young people, including messages to delay sexual intercourse. Researchers found that many sexually active young women may be at increased risk for HIV infection through sex with older men.

"We cannot accept the repeated toll of HIV infection on our youth," stresses Helene Gayle, M.D., M.P.H., Director of CDC's National Center for HIV, STD, and TB Prevention. "There is increasing evidence that a wide range of prevention messages are needed to reduce this toll." A new study conducted by CDC Behavioral Scientist Kim Miller, Ph. D. underscores the importance of understanding the many factors that make young people vulnerable to HIV infection and the need for prevention messages that address the wide-range of adolescent sexual experience, including abstinence and delay of sexual activity. For young women who are sexually active, Miller found that the age of their first sex partner may influence their risk of transmission. Young women whose first sex partner was an older man were less likely to use condoms and possibly at higher risk for HIV infection than young women whose first partner was the same age.

"Prevention messages must address the diversity of experience among young people.

-- more --

Risk behaviors varied widely among the adolescents in this study, and so must prevention messages,” says Miller. “These findings suggest that in addition to other risk factors, sexually active young women need to understand that they may be at greater risk for HIV if they are having sex with older men.”

Risk May Increase with Age of Partner

Miller’s study analyzed risk behaviors among a group of 14 to 17 year-old students from New York, Puerto Rico, and Alabama. One component of the study compared the risk behaviors of young women whose first sex partner was at least three years older with risk behaviors of young women whose first sex partner was the same age. Miller found that 35% of the female students reported having their first voluntary sexual experience with older partners (from 3 to 21 years older). These women were more likely to be younger and less likely to use condoms at first intercourse than those whose first partner was the same age.

Moreover, researchers suspect that, due to more varied sexual and drug use experiences, older male partners may also be more likely to be HIV infected than teens and, therefore, present a greater risk of transmission. The age difference may also make it more difficult for young women to negotiate condom use with their partner.

Surveillance Data Indicate Ongoing Risk

A related CDC study on trends in AIDS incidence (the number of cases diagnosed per year) supports Miller’s findings, adding validation to the hypothesis that older men may be playing a role in the spread of HIV to young women. The study, presented by Pascale Wortley, M.D. examined AIDS incidence among women and found that between 1990 and 1994 AIDS incidence increased most among women infected heterosexually who were born between 1970 and 1974. An analysis of current AIDS case reports suggest that most women infected heterosexually become infected through sex with an injection drug user. The study examined

-- more --

the relationship between AIDS incidence in men infected through injection drug use and women infected heterosexually and found that among people born between 1970 and 1974, women infected heterosexually outnumbered men infected through injection drug use by more than two to one. This pattern is consistent with the hypothesis that young women are being infected by sex partners older than themselves.

New national data on risk behaviors among 14 to 18 year-olds also demonstrate the potential for HIV risk among young people while, at the same time, showing encouraging signs of behavior change. The study by CDC's Janet Collins, Ph.D. reported trends in sexual behaviors among U.S. high school students by examining data from the national Youth Risk Behavior Surveys (1990 to 1995). No significant change was detected in the number of high school students ever having had sexual intercourse (52 %) nor the number reporting sex with four or more partners (18%). However, Collins found significant evidence of increased condom use among sexually active young people--particularly female and African American students.

"The leveling of sexual risk behavior rates and the reported increase in condom use represent important strides in preventing HIV infection among youth," says Collins. "We must continue to promote the delayed initiation of sexual activity and strengthen our efforts in this area as we, at the same time, continue to encourage condom use among those young people who are sexually active."

New Approaches to Prevention

CDC is looking closely at new tools and approaches to improve prevention messages and programs for youth. In her research, Miller also sought to better define the behavioral intentions of young people using a new system that more clearly defines the range of adolescent sexual experiences so that effective prevention messages and programs can be designed. Miller developed a new typology that classifies a wider range of behavior than the traditional categories of "sexually active" and "sexually inactive". Miller used the typology to classify the

adolescents in her study using several new categories. Thirty-seven percent of the young people, ages 14 to 17, fell into the “delayers” category, because they had no intention of initiating sexual intercourse. Twenty-two percent were “anticipators” (those who intended to initiate intercourse in the next year), 5% were “one-timers” (those who had intercourse only one time, but not again), 8% were “steadies” (those with a history of intercourse with one partner), and 28% were “multiples” (those who had a history of intercourse with multiple partners.)

“Clearly, young people have varying levels of sexual experience. This typology recognizes the diversity of behaviors and intentions among young people and is an important first step in reaching them with messages that are relevant to them,” says Miller. “For example, messages promoting delay of sexual activity are important for both ‘anticipators’--those on the verge of sexual activity--and for ‘one-timers’--those who have only had sex once. But the approaches would have to be very different and based on their experience,” says Miller.

CDC hopes that these and other findings will lead to improved HIV prevention programs for young people. “CDC has for many years worked to provide state and local health and education agencies, and community-based organizations assistance in designing effective HIV prevention messages and programs for young people,” says Gayle. “We will continue this collaboration to improve HIV prevention. Our future depends on it.”

###



AIDS IN THE WORKPLACE

HIV and AIDS affect every segment of society: the home, religious institutions, and the workplace. The World Health Organization estimates that a minimum of 40 million people worldwide will be infected with HIV by the year 2000. The potential worldwide economic impact of this infection rate could equal 1.4% of the world gross domestic product annually.

- It is estimated that 650,000 to 900,000 people in the United States are currently infected with HIV, the virus that causes AIDS.
- AIDS is the leading cause of death among adults between the ages of 25 and 44. More than half (53%) of our nation's 126 million workers are in that age group.
- One in 6 large U.S. work sites (more than 50 employees) and 1 in 16 small U.S. work sites (fewer than 50 employees) have experienced an employee with HIV infection or AIDS.
- 75% of working Americans surveyed said their employers should offer a formal workplace AIDS education initiative.
- As with any catastrophic illness, AIDS can affect an employer in many ways.
 - Insurance and health care costs
 - Productivity
 - Work disruption
 - Consumer concerns
 - Employee morale
 - Legal considerations
 - Confidentiality and privacy
 - Discrimination concerns
 - Disability requirements
 - Job accommodation

The Centers for Disease Control and Prevention's (CDC) Business Responds to AIDS (BRTA)/Labor Responds to AIDS (LRTA) Programs are designed to help businesses and unions across the country develop and implement comprehensive workplace-based HIV and AIDS prevention education programs for employees, their families, and the community. The goals of this program are to prevent the spread of HIV, promote HIV education, prevent discrimination, and foster community service and volunteerism both in the workplace and in the community. In order to achieve these goals, BRTA/LRTA have developed materials and technical assistance to assist business and unions in forming comprehensive HIV and AIDS workplace programs.

Workplace Presentations in Vancouver

Oral

Business Responds To AIDS: Results From A National Survey In The U.S., Cynthia Jorgensen.



The Science of Prevention: CDC's Role in Reducing HIV Infection Among Injection Drug Users

To date, more than a third of all reported AIDS cases in the United States are among injection drug users (IDUs), their heterosexual sex partners, and children whose mothers were IDUs or sex partners of IDUs. This disturbing trend continues. In 1995, 35% of reported AIDS cases were IDU-associated. And as a percentage of cases among heterosexuals, IDU-associated AIDS cuts a wide swath, accounting for 66% of AIDS cases among women and 85% of cases among straight men in 1995. In contrast, only 10% of MSM (men who have sex with men) reported a history of injection drug use.

CDC is the lead federal government agency responsible for tracking and preventing HIV/AIDS. In cooperation with other federal agencies and offices responsible for addressing drug use -- for example, the Center for Substance Abuse Prevention (CSAP), the Center for Substance Abuse Treatment (CSAT), the National Institute for Drug Abuse (NIDA), and the White House Office of National Drug Control Policy (ONDCP) -- CDC works to address the HIV/AIDS risks presented by illicit drug use. CDC also works directly with communities to give them the tools they need to address the unique prevention needs of IDUs, their sex partners, and their children.

Translating Science Into Practical Community-Level Prevention

Nationwide, approximately 475,000 drug treatment slots are available at any given time. There is an estimated 1.5 million active drug users. Clearly, Americans' need for drug treatment outstrips capacity to provide it. And, clearly, treating people's addiction reduces and, in many instances, eliminates their risk for HIV infection. What to do, then, to keep people safe from HIV until they can get into treatment?

As communities across America grapple with this question, CDC continues to provide them the science they need to make sound local decisions. Both biomedical and behavioral science information is vital to developing sound prevention programs.

For example, in 1993, CDC, CSAP, CSAT, and NIDA issued a "bleach bulletin" alerting state and community prevention programs to the benefits of IDUs cleaning their syringes with bleach and water. But continuing research into the mechanisms of HIV transmission has shown that syringes are not the sole reservoir for HIV. Water used to rinse syringes, cottons used to filter drugs as they

are drawn into needles, and even the shared drug itself -- not the shared syringe -- can harbor human immunodeficiency virus and serve as pools for transmission.

CDC has provided this information to communities, along with behavioral recommendations for users who continue to inject to use a sterile syringe for each injection and not to share water or cottons.

Users in Communities with NEPs Less Likely To Be HIV+

Research presented in Vancouver shows that IDUs want to use sterile syringes, when they're available.

- A study of 543 active users in Atlanta; Baltimore; Long Beach, California; Miami; Philadelphia; and Connecticut shows that IDUs were more likely to have used a reliable source of virus-free needles in cities with a needle-exchange program (NEP) or without paraphernalia laws that put them at risk of arrest and prosecution if they are carrying a syringe. IDUs reported using needles from reliable sources for fewer injections. The majority reported that it was easy to use a syringe only once, but 39% reported that obtaining sterile syringes was difficult.
- Another study of 3,252 IDUs in seven sites across the country shows that they are more likely to participate in needle exchange if they live within 15 minutes of the NEP. Importantly, NEP users are more likely to be those at highest risk for HIV infection -- that is, to have injected with used needles and to get their syringes from varied and unreliable sources such as friends, drug and needle dealers, sex partners, and family. Even where NEPs exist, however, users reported difficulty obtaining sterile syringes.
- A 1990-94 study of 1,353 IDUs in drug treatment in Los Angeles, New York City, Baltimore, and Seattle shows that 84% reported sharing needles less than half the time. And those who got needles from an NEP were less likely to share. In contrast, obtaining new needles from friends was associated with increased sharing. HIV incidence was estimated at 0% per person-year in LA and 1% per person-year in NYC.

Changing Community Laws Is Another Prevention Avenue

In July 1992, Connecticut changed its state laws to permit purchasing up to 10 syringes without a prescription and possessing up to the same number. CDC worked with the state health department to evaluate the effects of the law changes. Highlights of two studies include:

- 83% of pharmacists in Connecticut sold syringes without prescriptions following the law change.
- IDUs used the pharmacies instead of the street for their syringes. In high drug-use areas, the number of non-prescription syringes sold increased dramatically, with little change in sales of prescription syringes. But in low drug-use areas, there was little change in any syringe sales.

- Users reported a substantial decrease in sharing syringes.
- IDUs age, duration of drug use, and frequency of injection did not change. The number of active IDUs did not change.

Many Tools Are Needed To Combat Two Complex Epidemics

Communities use the biomedical and behavioral science CDC provides to design, develop, deliver, and evaluate HIV prevention programming for IDUs. Research shows there are a variety of prevention tools -- drug prevention and treatment, NEPs, removing legal restrictions to sterile syringes -- that could help prevent HIV transmission. CDC will continue to provide communities with the information they need to tailor local solutions to local problems.

IDU Presentations in Vancouver

Oral

The AIDS Community Demonstration Projects(ACDP): A Successful Multi-Site Community-Level Behavioral Intervention, Martin Fishbein.

Needle/Syringe Sources, Reuse, and Opinions Toward "One Set One Shot" Among Active Injection Drug Users (IDUs) in Six U.S. Cities, Alice Gleghorn.

Condom Carrying and its Relationship to Condom Use among High Risk Populations, Carolyn Guenther-Grey.

New Partners in HIV Prevention: The Role of Pharmacists in Increasing Drug Users' Access to Sterile Syringes, Linda Wright-De Agero.

Poster

The Impact of Street Outreach for HIV Prevention in 5 High Risk Populations, John E. Anderson.

Injection and Syringe Sharing among HIV-Infected Injectors: Implications for Prevention of HIV Transmission, Theresa Diaz.

Can Enough Syringes be Provided to Allow Drug Injectors to Use New Syringe for Every Injection? Steve L. Jones.

AIDS among Heterosexual Injection Drug Users in the United States; Regional Diversity in an Ongoing National Epidemic, J. Stan Lehman.

HIV Seroincidence, Needle Acquisition, and Predictors of Needle Sharing Among Injection Drug Users Entering Drug Treatment, Martha S. Miller.

Access to Sterile Needles in the Collaborative Injection Drug Users Studies (CIDUS), Edgar Monterroso.

Trends in AIDS Associated with Injecting Drug Use, United States, 1985-1995, Allyn K. Nakashima.

Trends in AIDS Incidence among Women in the United States: a Birth Cohort Analysis, Pascale Wortley.



CDC's Role in Combating the Interconnected Epidemics of HIV/AIDS and Tuberculosis

CDC is the lead federal agency in controlling HIV, other sexually transmitted diseases, and tuberculosis (or TB). In 1995, recognizing the need to more fully integrate prevention efforts in all three areas, CDC created the National Center for HIV, STD, and TB Prevention.

Screening Is Vital for People At Risk For HIV and TB Infection

CDC works to prevent, control, and eventually eliminate TB from the United States. To accomplish that mission, CDC works with community, state, national, and international partners. TB is particularly dangerous for people infected with HIV and living with AIDS. Because HIV infection so severely weakens the immune system, people with both TB infection and HIV infection are at very high risk of developing TB disease (not everyone infected with the TB bacteria actually does develop disease). An estimated 10-15 million Americans are infected with TB, and this pool of infected people is the source of many future cases. Focused screening and preventive treatment programs for high risk-groups (particularly HIV-infected people) need to be substantially strengthened. All people infected with HIV should be tested for TB, and, if infected, they should have preventive therapy as soon as possible to prevent TB disease.

Global Impact of Tuberculosis

- One third of the world's population is infected with the TB bacillus.
- There are 8 million new cases of TB each year and 3 million people die of the disease (300,000 cases are children).
- **TB is the leading cause of death in people infected with HIV.**

TB in the United States

TB disease was once the leading cause of death in the U.S. But, in the 1940's, scientists discovered the first of several drugs now used to treat TB. As a result, TB slowly began to disappear in the United States, with a 6% decrease per year in TB cases for more than 3 decades. **However, between 1985 and 1992 TB cases increased.**

Reasons for an Increase in TB Cases Between 1985 and 1992

- **Immigration from other countries --** In the United States, TB infection and disease occur often among immigrants born in areas of the world where TB is common, such as Asia,

Africa, and Latin America. TB cases in foreign-born people accounted for 60% of the increase in 1986-1992.

- **HIV Epidemic** -- The risk of developing TB disease is about 8% to 10% each year for people who are infected with both TB and HIV, whereas the risk of developing TB disease is 10% over a lifetime for people infected only with TB.
- **Transmission in congregate settings** -- In certain settings, such as nursing homes, prisons, hospitals, homeless shelters, etc., the risk of being exposed to TB is higher than in other places.
- **Deterioration of the TB public health care infrastructure** -- The historic decline in TB diverted fiscal and human resources to other public health problems.
- **Multi-drug resistant TB** -- Tuberculosis cases resistant to isoniazid and rifampin.

Reasons for a Decrease in TB cases in 1993, 1994, and 1995

- **Revitalized prevention efforts since 1992** -- Following several years of increases in TB infections and cases, the United States recommitted its efforts to control TB. In 1992, a national strategic plan was developed to combat multi-drug resistant TB.
- **Increased funding to communities to combat TB locally** -- With those renewed efforts came renewed funding for local efforts to control TB. Communities nationwide are working to create local solutions to their unique TB problems.
- **Directly observed therapy.**

TB control is an exercise in vigilance; the goal of controlling and eventually eliminating TB requires a targeted and continuous effort to address the prevention and treatment needs for those most at risk and those most likely to develop active TB disease.

Tuberculosis Presentations in Vancouver

Oral

Tuberculosis (TB) Transmission among AIDS Patients in Puerto Rico, Karen A. Hennessey.

Characteristics of HIV Infected Tuberculosis Patients Age 25-44 Years, United States, 1993-1994, Eugene McCray.

Poster

Nosocomial Outbreak of Multi-drug Resistant Tuberculosis, Chicago, Renee Ridzon.

Tuberculosis in Children born to HIV-Infected Mothers in Texas, Joann M. Schulte.



Addressing the Global Epidemic: CDC's International Activities in HIV/AIDS Prevention

Advancing Prevention Research Worldwide and in the U.S.

The Centers for Disease Control and Prevention (CDC) has a research program dedicated to advancing biomedical and behavioral science that promotes HIV/AIDS prevention in the U.S. and worldwide. Research focuses on developing new tools and improving existing techniques to control the spread of HIV/AIDS and minimize consequences.

The World Health Organization's Global Programme on AIDS (WHO/GPA) estimates that, worldwide, as many as 20 million people have been infected with HIV since the pandemic's onset, and each day 6,000 more become infected. Recognizing the urgency of the epidemic, CDC is committed to HIV/AIDS research within as well as outside American borders. To understand AIDS on a global level, research must address issues and conditions unique to different countries and communities within countries. Many developing countries severely affected by the epidemic lack the research capacity, public health infrastructure, and financial and human resources to respond to the epidemic. CDC's international research underscores the importance of developing and implementing diverse interventions to address singular issues among varied populations and to do so quickly and cost-effectively. Lessons learned abroad are applied in the U.S. -- because of global rapture, the techniques developed through CDC's international research program can also address the diverse needs and concerns of our population at home.

Cooperative Efforts Yield Prevention Benefits

Through collaborative agreements with governments of Cote d'Ivoire (Project RETRO-CI) and Thailand (HIV/AIDS Collaboration), CDC participates in studies designed to increase our understanding of the epidemiology of HIV-1 and HIV-2 infections and to facilitate prevention and care efforts in the host country and the United States. Specific research areas include:

- Addressing mother-to-child (perinatal) HIV transmission by evaluating the immunologic and virologic characteristics of HIV-infected pregnant women and conducting a clinical intervention trial designed to demonstrate if short-course oral AZT administration can prevent perinatal HIV transmission. The results of

these investigations will have implications for preventing perinatal transmission worldwide, particularly in developing countries, where AZT administration during pregnancy and labor and delivery, as well as for 6 weeks after birth, is not feasible.

- Examining cohorts of injection drug users (Thailand) to conduct efficacy trials of a candidate HIV vaccine and female sex workers (Abidjan) to evaluate the efficacy of interventions such as a microbicide-containing vaginal preparation in preventing sexual HIV transmission.
- Conducting genetic analyses and collecting surveillance data on the genetic variations of HIV strains in host countries. Due to the increasing spread of AIDS virus subtypes across international boundaries, these data may have strong research implications for developing vaccines to prevent HIV infection and other techniques to promptly detect and treat different strains of the AIDS virus worldwide.
- Gathering surveillance data on HIV/AIDS trends among sentinel groups such as, prostitutes, pregnant women, STD patients, injecting drug users, and children to develop effective techniques of prevention and diagnosis.
- Monitoring the natural progression of HIV infection to shed light on how to improve survival and quality of care for HIV-infected persons, thus diminishing the personal and societal costs of the epidemic.
- Investigating risk factors and other diseases (such as other sexually transmitted diseases and tuberculosis) associated with HIV infection in order to identify links between these illnesses and to develop effective treatment strategies that can be globally applied. For example, research conducted in Cote d'Ivoire, Thailand, and Bolivia shows that aggressively treating and working to prevent and treat STDs other than HIV has a strong preventive effect for HIV.
- Investigating factors associated with heterosexual transmission of the AIDS virus. Worldwide, though not in America, more people have been infected through heterosexual contact than any other exposure. And in the U.S., heterosexual transmission accounts for a growing percentage of both HIV infections and AIDS cases. Understanding the biomedical and behavioral aspects of heterosexual transmission is key to containing HIV in the U.S. and across the globe.

The researchers of these international projects will present their findings in Vancouver. There are 13 abstracts from Cote d'Ivoire and 13 from Thailand. A list follows.

International Presentations in Vancouver

INTERNATIONAL ACTIVITY

Oral

Do HIV Strain Differences have a Significant Effect on HIV Transmission and Epidemiology, Dale Hu.

COTE D'IVOIRE

Oral

Safety of and Adherence to Oral Zidovudine Administered in Late Pregnancy to HIV-1 Infected Pregnant Women in Abidjan, Cote d'Ivoire, Ehounou Ekpini.

HIV Seroincidence and STD Prevalence During an Intervention Study Among Female Sex Workers in Abidjan, Cote d'Ivoire: Preliminary Findings, Virginie Ettiegne-Traore.

Acceptability and Feasibility of a Clinical Trial to Assess the Efficacy of a Microbicide-Containing Vaginal Gel to Prevent HIV Infection Among Female Sex Workers in Abidjan, Cote d'Ivoire, Peter D. Ghys.

The Associations Between Cervico-Vaginal HIV-1 Shedding and Sexually Transmitted Diseases, Immunosuppression, and Serum HIV-1 Viral Load in Female Sex Workers in Abidjan, Cote d'Ivoire, Peter D. Gays.

Prospective Cohort Study to Assess the Response to Therapy and Risk Factors for Tuberculosis in HIV-Infected and Uninfected Children in Abidjan, Cote d'Ivoire, Ya Diul Mukadi.

The Effectiveness of Oral Zidovudine Administered in Late Pregnancy in Lowering Plasma and Cervovaginal HIV-1 Viral Load in HIV-Infected Pregnant Women in Abidjan, Cote d'Ivoire, Stephan Wiktor.

Poster

Evaluation of an HIV Counseling and Testing Program for Pregnant Women in an Antenatal Clinic in Abidjan, Cote d'Ivoire, Lacina Diaby.

**Diversity of HIV-1 in Cote d'Ivoire Using Analysis of Genetic Length Polymorphism (RFLP) Analyses Restriction Fragment, D Ellenberger.
Analysis of Genetic Diversity of HIV-1 in Cote d'Ivoire Using Restriction Fragment Length Polymorphism (RFLP) Analyses, D. Ellenberger.**

Spectrum of Disease and Risk Factors for Death Among HIV-Infected Patients Admitted to an Infectious Disease Unit in Abidjan, Cote d'Ivoire, Alison Grant.

Declining High-Risk Sexual Behavior Among HIV-Infected and Uninfected Men with Tuberculosis in Abidjan, Cote d'Ivoire, Alan E. Greenberg.

Respiratory Manifestations of HIV-Disease in Adults Admitted to a Pulmonary Medicine Service in Abidjan, Cote d'Ivoire, Sidibe Kassim.

Patient Eligibility and Acceptability of a Clinical Trial to Evaluate the Effectiveness of Cotrimaxozole Prophylaxis to Reduce Mortality Among HIV-Infected Tuberculosis Patients in Abidjan, Cote d'Ivoire, Madeleine Sassan-Morokr.

THAILAND

Oral

HIV-1 Positivity and Willingness to Participate in a Prospective Cohort of Injecting Drug Users (IDUs) in Bangkok, Thailand, Dwip Kitayaporn.

The Evolution of HIV-1 Subtypes B and E in Heterosexuals and Injecting Drug Users (IDUs) in Thailand, 1992-1995, Timothy Mastro.

Declining Prevalence of Gonorrhoea and Chlamydia in Female Sex Workers (FSW), Chiang Rai, Thailand, Peter Kilmarx.

Clinical Presentations, Risk Category, and HIV-1 Subtypes B and E in 1,241 HIV/AIDS Patients in Thailand, Khanchit Limpakarianarat.

High Viral Load Predicts Perinatal HIV-1 Subtype E Transmission, Bangkok, Thailand, Nathan Shaffer.

Genetic Diversity of HIV-1 in Thailand, 1994-1995, Shambayi Subbarao.

HIV-1 Incidence and Follow-Up in a Prospective Cohort of Injecting Drug Users (IDUs) in Bangkok, Thailand, Suphak Vanichseni.

Poster

Natural History and Mortality of Perinatal HIV-1 Infection, Bangkok, Thailand, Wanda Suteewarn.

Perinatal HIV-1 Transmission Among Women Seroconverting During Pregnancy, Bangkok, Thailand, Anuyat Roongpisuthipong.

Modified Roche Amplicor HIV-1 PCR for Perinatal Diagnosis, Thailand, Nathan Shaffer.

Feasibility of an HIV-1 Efficacy Trial among Injecting Drug Users (IDUs) in Bangkok, Thailand, Thammnoon Vaniyapongs.

UGANDA

Oral

Couple Counseling and HIV Testing in Uganda: Four Years Experience at the AIDS Information Centre, Fulgentius Baryarama.

Response of Young People 15-19 to HIV Counseling and Testing in Uganda, Edmund Gumisiriza.

HIV Counseling and Testing: Resolved that Government/Public Resources for HIV Prevention in the Developing World Should not be Directed Toward the Provision of HIV Counseling and Testing Services, Mary Grace Alwano-Edyegy.

PROGRESS in PREVENTION

*Research and Support
for Community Action*

Determining What Puts People At Risk for HIV Infection: CDC's Role in Prevention Research

Giving Communities the Tools They Need To Fight HIV

Knowing the who, what, when, where, why, and how of HIV infection risks is a prerequisite to developing effective prevention programs. (For information on CDC's surveillance systems, see "How Does CDC Track HIV Infection and AIDS?," at the CDC press office and through the National AIDS Clearinghouse database.) CDC conducts and sponsors surveillance, epidemiology and behavioral research to answer those questions and then gets the answers to communities, so they can develop and deliver effective local HIV prevention programming.

CDC's behavioral research activities range from large-scale, population-based tracking studies of sexual risk behaviors to targeted research investigating the internal and external determinants of risk behaviors among specific high-risk groups. Activities also include intervention evaluation to learn more about what works and how programs can be improved.

Biomedical research, including natural history research is also vital to evaluate promising prevention methods such as microbicides, the effect of STD treatment on HIV acquisition, and other biologic prevention tools. And CDC examines the integration of behavioral and biomedical solutions, conducting research into people's willingness and ability to adopt new prevention methods and how to increase their adoption.

CDC disseminates prevention research results to the scientific and academic communities; federal, state, and local public health infrastructure; and directly to community-based nongovernmental organizations (NGOs) serving populations at risk. CDC uses prevention research results to develop guidelines and public health policy. Additionally, HIV Prevention Community Planning groups are both a major recipient and a major distributor of prevention research findings and an integral part of the diffusion of innovative and effective prevention techniques across the U.S. (For more information on HIV Prevention Community Planning, see the companion fact sheet.) CDC also provides technical assistance to all these groups in applying research findings to HIV prevention programs.

CDC scientists will be presenting findings from CDC-sponsored prevention research in Vancouver. Following are highlights of research focused on specific populations:

Youth

Family Adolescent Risk Behavior and Communications Study

Half of all new HIV infections in the U.S. are thought to be among people under 25, and the majority of them are infected sexually. More information is needed about the range of adolescent sexual behavior to help develop interventions that are targeted to young people, work within the context of adolescent sexual behavior, and focus on individual, social, and community-level change.

- To better understand adolescent sexual behaviors and the impact of selected family, social, and cultural factors on those behaviors, CDC researchers collected information from approximately 1,000 mothers and their adolescents 14 to 16 years old recruited from public high schools in San Juan, Puerto Rico; Montgomery, Alabama; and Bronx, New York.
- The researchers learned that the traditional dichotomy between "sexually active" and "not sexually active" masks important behavioral intentions and sexual practices. Even adolescents who might traditionally be defined as not sexually active are engaging in or intend to engage in a range of sexual behaviors that could place them at risk for HIV infection, and these differences must be taken into account as HIV prevention programs are developed and implemented.
- The researchers also looked more closely at adolescent females in the study group and gathered information about age of first sexual partner, pregnancy history, and HIV risk behaviors. They found that girls whose first-time voluntary sexual partner was older (ranging from 3 to 21 years older) were significantly different than those whose first partner was the same age. Girls whose first partners were older had sex at an earlier age, were significantly less likely to use condoms, and were far more likely to report a history of pregnancy. Research has shown older sex partners present a greater risk for HIV transmission because they are more likely to have had multiple partners and to have had more varied sexual and drug use experiences. Power differences are greater between older and young partners, likely contributing to riskier behaviors young women report with older partners.

Women

The Prevention of HIV in Women and Infants Project

The Prevention of HIV in Women and Infants Demonstration Project (WIDP) is a community-level behavioral intervention research project underway in five sites across the United States to better understand the social and individual factors that influence women's behaviors regarding condom and contraceptive use, and thus understand how to best design and deliver community-wide interventions that advance women along the continuum of behavior change. The target population for this research is young women (age 15 to 34) at high risk for STD/HIV infection and unintended pregnancy.

- The project has shown that community mobilization can be fostered by using a consistent model for implementation, monitoring, and evaluation and that community involvement varies in time, intensity, and commitment throughout the life of an intervention. Additionally, community-level intervention efforts can be maximized by the use of “gatekeepers” and “stakeholders” as intervention change agents.

Women in Group Support

- The WINGS project is a three-site study funded through the Association of Schools of Public Health (ASPH) to evaluate the effectiveness of small-group interventions for women at high risk for acquiring HIV or other STDs. The six-session intervention focuses on skills-building to reduce risk behavior within the context of ongoing relationships. Structured groups are followed by drop-in sessions that serve as boosters to the behavioral change initiated in the first six sessions.
- The sites are recruiting women who are 18 years of age and older (or emancipated 17-year-olds) who are currently sexually active and have at least one risk factor for STD/HIV, but are HIV negative. Women will be recruited from a variety of sources including STD clinics, teen clinics, and correctional settings, and through projects targeting injecting drug users.

Research on Female-Controlled Prevention Methods

- The alarming rise in HIV infections and AIDS cases among women lends urgency to the search for female-controlled barrier methods -- both mechanical and chemical -- to prevent infections with HIV and other STDs, as well as unplanned pregnancy. CDC has a broad array of behavioral and biomedical research on female HIV/STD prevention methods. For example, behavioral researchers are examining the determinants of female condom use; the effectiveness of hierarchical prevention messages that place women within a framework of prevention choices, from safest (abstinence) to safer (using a condom with nonmain partners) to less safe (using spermicide); and how women communicate about sex and sexual risk reduction. Among the biomedical research being conducted are studies of HIV in cervicovaginal secretions; HIV infectivity by contraceptive method; clinical trials of microbicide-containing vaginal gel; and the efficacy of the female condom.

Gay and Bisexual Men

Young Men's Survey

- The Young Men's Survey (YMS) is multi-stage probability survey of the prevalence and determinants of HIV and related risk behaviors among 15- to 22-year-old men who have sex with men (MSM) in six urban counties across the United States. Preliminary YMS data indicate that HIV prevalence is very high among these young MSM compared with

general populations of U.S. youth. This high HIV prevalence and the co-existing prevalence of unprotected anal sex is alarming, and shows that prevention programs must intensify efforts to target and reach young MSM and to change their risk behavior.

The Young African-American Men's Study

- This 2-year formative study seeks to describe the social contexts in which young African-American men have sex with other men; to define social, cultural, and psychological influences on participation in risky sex; and to identify community partners and resources for the subsequent planning, delivery, and evaluation of a community-based HIV intervention for this population.
- Preliminary findings suggest several common themes: (1) the relevance of low self-esteem to risky sexual behavior; (2) the profound stigmatization of homosexuality in the black community; (3) the importance of the church in black communities and, by implication, in interventions designed with and for black communities; and (4) the prevalence of HIV/AIDS-specific myths among young MSM.

Injection Drug Users (IDUs)

Epidemiologic Studies of HIV Infection Among Drug Users

- Two studies are examining the prevalence, incidence, and risk factors for HIV infection among drug users: the Collaborative Injection Drug Users Study (CIDUS) and the Multicenter Study of Crack Cocaine and HIV Infection. CIDUS has enrolled more than 3,000 injection drug users in seven cities who were not in substance abuse treatment and is re-enrolling a majority in follow-up studies. The Crack Cocaine Study enrolled more than 2,000 street-recruited crack smokers and nonsmokers from the streets of inner-city communities and recruited about half of them for a follow-up study.

The Work Ahead

Prevention research will continue to play an integral role in the planning, implementing, and evaluating HIV prevention programs. CDC must continue to carry out behavioral research to better understand complex issues related to risk behaviors in diverse populations as a basis for developing behavioral interventions. As new biomedical HIV prevention tools are developed, innovative approaches will be necessary to evaluate the safety and efficacy of these tools and practical ways of utilizing them in diverse populations and circumstances. As HIV treatment options are refined, early knowledge of HIV status will become more and more important, and CDC will work to promote widespread testing and access to treatment. CDC will continue to provide technical assistance, facilitate partnerships at the local level and involve representatives of affected communities in all areas of HIV prevention research..

Prevention Research Presentations in Vancouver

Oral

Case-Control Study of HIV Seroconversion in Health Care Workers after Percutaneous Exposure to HIV-infected Blood, Implications for Postexposure Management, David Bell.

Five-Year Trends in HIV Risk Behaviors Among Youth, Janet L. Collins (oral)

The AIDS Community Demonstration Projects: A Successful Multi-Site Community-Level Behavioral Intervention, Martin Fishbein.

Condom Carrying and its Relationship to Condom Use Among High-Risk Populations, Carolyn Guenther-Gray.

Tuberculosis (TB) Transmission among AIDS Patients in Puerto Rico, Karen A. Hennessey.

Rapid Decline In Sexually Transmitted Disease Prevalence Among Brothel-based Sex Workers In La Paz, Bolivia: The Experience Of Proyecto Contra Sida, 1992-1995, William C. Levine.

Adolescent Sexual Experience: A New Typology, Kim S. Miller.

Depressive Symptoms and Coping Strategies Among HIV-infected and HIV-Uninfected Women in Four Urban Centers, Jan Moore.

Genetic Diversity of HIV-1 in Thailand, 1994-5, Shambavi Subbarao.

Heterogeneity of Heterosexual Transmission: The Role of Other STDs, Judith Wasserheit.
Poster

The Impact of Street Outreach for HIV Prevention in Five High Risk Populations, John Anderson.

Evaluating School-Based HIV/AIDS Education Efforts: A Systematic Approach to Improving Program Quality, Stephen W. Banspach.

Randomized Controlled Trial of Intensive Group Counseling to Reduce Risk Behaviors in High-Risk STD Clinic Patients, Bernard Branson.

Is Prevention Research Reaching Front Line Prevention Programs?: A Descriptive Study from San Francisco, Amy DeGroff.

A Pilot Study of Risk Behaviors and Condom Use among Incarcerated Adolescents, USA, Juarlyn Gaiter.

Association of Penicillin Mass Treatment Program with Sexually Transmitted Diseases among Female Sex Workers in Indonesia, M. Riduan Joesoef.

Incidence Trends in AIDS-related Opportunistic Illnesses in Men Who Have Sex with Men and Injecting Drug Users, Jeffrey L. Jones.

Focus Group Themes that will Shape Participatory Social Marketing Interventions in Five Cities, May Kennedy.

Additional Sources of Care for STD Clinic Patients: Implications for HIV/STD Prevention Efforts, Jean M. Lawrence.

HIV Prevalence, Risk Factors, and Predictors of Unprotected Sex Among Homeless and Runaway Youth in Four U.S. Communities, Duncan MacKellar.

Access to Sterile Needles in the Collaborative Injection Drug Users Studies (CIDUS), Edgar Monterroso.

Initiation of Sexual Intercourse: Ages and Trends, Ellen Sogolow.

HIV Prevention Programs for Gay and Bisexual Men of Color: A National Initiative, Laurence Tate.

HIV and Risk Behavior Prevalence Among Young Men who Have Sex with Men Sampled in Six Urban Counties in the U.S.A., Linda Valleroy.

HIV Prevention Programs: A Decade of American Experience, Gary West.

High Prevalence of Abnormal Vaginal Flora And Bacterial Vaginosis in Women With or at Risk For HIV Infection, Dora Warren.

Research to Classroom: Selecting and Disseminating Educational Programs that Reduce HIV Risk Behaviors Among Adolescents, Susan Wooley.



Research Offers Best Promise for Female-Controlled HIV Prevention

Women account for an increasing proportion of newly reported AIDS cases in the United States. The proportion of female adult and adolescent AIDS cases increased from 7% of the annual total in 1985 to 19% in 1995. Overall, estimated AIDS incidence is increasing most rapidly among people infected heterosexually. Between 1993 and 1994, heterosexually-acquired AIDS incidence increased 17%. During that time, the annual rate of increase among men actually slowed to 5%. But the annual rate of increase among women was 10%.

Trends like this point to the ongoing importance of female-controlled HIV protection. CDC researchers are working with scientists worldwide to evaluate the effectiveness of female condoms and to develop effective topical microbicides that can kill HIV and the pathogens that cause other STDs. As with any new tool for prevention, scientists must also determine what influences people's willingness and ability to use these methods. CDC behavioral scientists are simultaneously working to evaluate the factors that will contribute to women's use of these products and how these new prevention methods can and should be balanced with existing prevention options.

Biomedical and Behavioral Research: Prevention Building Blocks

CDC has a broad array of behavioral and biomedical research on determinants of transmission of HIV and STD in women and prevention methods. Among the biomedical research being conducted are studies that examine:

- HIV in cell-free and cell-associated cervicovaginal secretions
- HIV infectivity by contraceptive method
- Clinical trials of microbicide-containing gel
- Risk factors for cervicovaginal HIV shedding and the effect of STD treatment on shedding
- The efficacy of the female condom
- Natural history of HIV disease in women

Behavioral researchers are seeking to better understand the social and individual factors that influence women's sexual risk behaviors, and thus how to best design and deliver community-wide interventions that advance women along the continuum of behavior change. Research topics include:

- Determinants of female condom use
- The effectiveness of hierarchical prevention messages for women of color (African-Americans and Latinas) within a framework of prevention choices; from safest (abstinence) to safer (using a condom with sexual partners) to less safe (using spermicide only)
- How socially disadvantaged women communicate about sex and sexual risk reduction, and how that affects their acceptance, short-term use, and personal and partner reactions to the female condom
- Acceptability of nonoxynol-9 to women
- Women's preferences among spermicide formulations (film, foam, suppositories, tablets, jelly)

A Closer Look at Topical Microbicide Research

Microbicides are chemical compounds that can kill HIV and other sexually transmitted pathogens, such as herpes, chlamydia, syphilis, gonorrhea, and human papilloma virus. Microbicides are most often talked about in the context of female-controlled prevention methods, but they may also be able to be used by men who have sex with men.

Several steps are involved in putting any new product into people's hands. The U.S. Food and Drug Administration (FDA) is the licensing and regulatory agency, and works with CDC to share information and develop policies related to new technologies. Product development and testing can take many years, as each of the following steps is completed:

- *Pre-clinical Testing* -- New products are typically tested on animals for safety and biologic activity. To gauge effectiveness, a consistent set of laboratory standards is needed; in the case of microbicides, HIV infectivity assays may be more useful than other measures. If the product is shown to be safe for animals and effective, human studies are conducted.
- *Phase I* -- In addition to examining human safety, dosage and toxicity are often determined by having a few healthy people use the product. These trials are limited, and may not include participants who share characteristics of the product's target population -- for example, sexually active women who have a history of STDs.
- *Phase II* -- The product is used by a larger number of subjects to study dosage, toxicity, possible side effects, and other factors.
- *Phase III* -- Tests on large numbers of volunteers, usually thousands, to verify Phase II results and monitor long-term side effects. To measure the disease reduction effect, volunteers are usually people at higher risk for disease than those who took part in Phase I or II testing.

Even with *expedited review*, in which the second and third phases are combined, microbicide development and testing could take as long as 5-10 years.

In the interim, continued research into existing microbicide products, other biomedical options and behavioral research on women's knowledge, attitudes, beliefs, and actions related to HIV/AIDS, sexual activity, substance use, and related factors will be vital to developing a constellation of effective prevention choices. As research sheds light on prevention, CDC will continue to provide

communities with the information they need to create, deliver, and evaluate programming for women and others.

For more information on women and HIV, see these companion documents: **HIV and AIDS Trends; CDC's Role in HIV Prevention: Research and Support for Community Action; Mother-to-Child HIV Transmission Decreases in the U.S. But Challenges Remain To Perinatal Prevention; The Control of Sexually Transmitted Diseases as an HIV Prevention Strategy; and Developing Health Skills for a Lifetime: CDC's Role in Preventing HIV Infection Among Young Americans.**

Women/Microbicide Presentations in Vancouver

Oral

Heterosexual Risk for HIV among Puerto Rican Women: Does Power Influence Self-protective Behavior? Janet S. Harrison.

HIV Prevalence among U.S. Childbearing Women, 1989-1994, Susan Fischer Davis.

Declining Prevalence of Gonorrhea (GC) and Chlamydia (CT) in Female Sex Workers (FSW), Chiang Rai, Thailand, 1991-94, Peter H. Kilmarx.

Risk of HIV Transmission During The Seroconversion Period, Ann Duerr.

Poster

Methodologic Issues in Microbicide Development, Margaret Scarlett, Ann Duerr.

Predicting Contraceptive Use among Women at Risk for or Infected with HIV, Christine Galavotti.

Breastfeeding Among HIV-Infected Women, Los Angeles and Massachusetts, 1988-1993, Jeanne Bertolli.

Who Uses HIV Prevention Counseling for Women? Bobby Milstein

Involving the Community: A Model for Community-level HIV Prevention Activities, Bobbie Person.

Prevalence of High-Risk Sexual Behavior among HIV-Infected Women, Tedd V. Ellerbrock.

Risk Factors for HIV Seroconversion among Young Women in a Rural Community in the Southeastern United States, Kenneth L. Dominguez.

High Prevalence of Abnormal Vaginal Flora And Bacterial Vaginosis in Women With or at Risk For HIV Infection, Dora Warren.

Direct Assessment of Physical Barrier Method Failure Using A Self-Sampling Technique, Amy S. Bloom.

Estimating Factors Influencing Acceptance and Adherence to Zidovudine Treatment to Prevent Vertical Transmission of HIV, Brenda F. Seals.

Geographical Variation of AIDS Associated Kaposi's Sarcoma (KS) in Europe, Shahul H. Ebrahim.

Lack Of Timely Prenatal Care Among Women Infected With HIV: Implications for Prevention of Perinatal HIV Transmission In The United States, Anna Shakarishvili.

Perinatal Zidovudine Use after Perinatal ZDV Recommendations in the United States, Sherry L. Orloff.

Trends in HIV Seropositivity Among Clients Attending Publicly Funded HIV Counseling and Testing Sites Across the U.S.A., 1990--1994, Ronald Valdiserri.

HIV Seroincidence Among Persons Attending Sexually Transmitted Disease Clinics In The United States, 1988-1995, Hillard Weinstock.

Association of Penicillin Mass Treatment Program with Sexually Transmitted Diseases among Female Sex Workers in Indonesia, M. Riduan Joesoef.

Preventing Perinatal HIV Infection: Costs And Effects Of A Recommended Intervention In The U.S., Paul G. Farnham.

Sexual Involvement with Older Men: HIV-Related Risk Factors for Adolescent Women, Bonita Westover.

Risk Factors for Pneumocystis Carinii Pneumonia: Delayed Diagnosis of HIV-infection and Failure to Receive Prophylactic Therapy, Jeffrey S. Duchin.

The HIV Outpatient Study (HOPS) Description and Initial Findings, Scott D. Holmberg.

Detection of Phylogenetically Linked HIV Strains Among a Population of Epidemiologically Unrelated Women, Marcia L. Kalish.

Analysis of Genetic Diversity of HIV-1 in Cote D'Ivoire Using Restriction Fragment Length Polymorphism (Rflp) Analyses, John Nkengasong.