Overview

On April 17, 2003, the Centers for Disease Control and Prevention (CDC) announced a new initiative, “Advancing HIV Prevention (AHP): New Strategies for a Changing Epidemic.” Its aim is to reduce barriers to early diagnosis of HIV infection and increase access to quality medical care, treatment, and ongoing prevention services for HIV-positive persons and their partners. The AHP initiative represents a multi-agency collaboration within the Department of Health and Human Services (DHHS). As described in the April 18, 2003, issue of the Morbidity and Mortality Weekly Report, the initiative consists of four new strategies for HIV prevention:

- Make HIV testing a routine part of medical care
- Implement new models for diagnosing HIV infections outside medical settings
- Prevent new infections by working with persons diagnosed with HIV and their partners
- Further decrease perinatal HIV transmission

Roll-out

CDC has taken steps to lay the foundation for AHP and to ensure its success. Since announcing the initiative in April 2003, CDC has consulted with various groups on the best ways to implement AHP strategies, including:

- Four community-based organization (CBO) consultations (Miami, San Francisco, New York, and Chicago)
- Full-day consultations with people living with HIV, communities of color, medical provider groups, and experts on stigma prevention
- Four Web conferences with health departments
- Meetings with the Congressional Black Caucus, Federal AIDS Policy Partnership and other policy partners, Presidents Advisory Council for HIV/AIDS, and CDC/HRSA AIDS Advisory Committee
Implementation Activities

AHP was allocated $35 million in fiscal year (FY) 2003. Approximately $153 million was directed toward AHP efforts in FY 2004. These funds make up only a portion (approximately 1/6th) of the total CDC HIV prevention budget. These funds were used to launch a wide range of AHP projects and activities. Implementation activities to date include:

Demonstration Projects

In 2003, nine health departments and 16 CBOs were awarded $23 million over two years to develop models and demonstrate effectiveness for implementing the four AHP strategies. The seven projects funded in 2003 are:

1. Routine HIV testing in medical care settings serving high HIV-prevalence populations.
2. Partner counseling and referral using rapid HIV tests to increase the number of partners who learn their HIV status.
3. HIV prevention in medical care for persons living with HIV.
4. Rapid HIV testing in jails to increase number of inmates receiving test results.
5. Working with persons living with HIV to reach high-risk persons in their social networks.
6. Rapid HIV testing in non-clinical settings, such as homeless shelters, drug treatment programs, and social events.
7. Prevention case management for people living with HIV who have multiple complex problems.

In 2004, CDC awarded an additional $3.6 million to 5 health departments and 20 CBOs for two new two-year AHP demonstration projects.

8. Antiretroviral Treatment Access Study (ARTAS) II
9. Implementation of Rapid HIV Testing In Alternative Venues And Populations, Historically Black Colleges And Universities, And Primary Care Settings

Program Announcements

Two of CDC’s recent large program announcements have been realigned to support the key strategies of AHP. These are:

- Program Announcement 04064—HIV Prevention Projects for Community-Based Organizations—was revised to include an increased emphasis on early diagnosis, entry into care, and prevention with positives. Awards under this program announcement were made in the summer of 2004.
- Program Announcement 04019—Capacity Building Assistance (CBA) to Improve the Delivery and Effectiveness of HIV Prevention Services for Racial/Ethnic Minority Populations—A total of $21 million was awarded across 27 organizations to provide capacity building activities for organizations serving communities disproportionately impacted by the HIV/AIDS epidemic. Awards under this program announcement were made in the spring of 2004.
Monitoring and Evaluation

AHP places increased emphasis on program monitoring and evaluation. The following projects, tools, and guidance are being developed or are already in place:

- Program Evaluation and Monitoring System (PEMS) is a secure internet browser-based application for the collection, management, and reporting of standardized data on AHP-related HIV prevention service activities as required in CDC’s health department and CBO program announcements. PEMS standardized data variables and software are being developed by CDC in close collaboration with representatives from health departments, CBOs, and other national partners. PEMS data will enhance monitoring of the implementation of evidence-based programs, new HIV testing technology, program performance indicators, and AHP strategies.

- Post-marketing surveillance is examining implementation and results of rapid HIV testing, including client acceptability. Thirty-one health departments throughout the United States were funded for this work from July 2003 to June 2005.

- Evaluation of demonstration projects will include feasibility and cost-effectiveness assessments. For some of these projects, evaluation will begin in the winter of 2006.

- Development of new performance indicators for funded health departments and CBOs will monitor process and outcomes for HIV prevention activities.

- Perinatal chart review, a project to assess the level of integration of routine prenatal HIV testing into medical practice, was funded in 8 states in 2004 and 7 additional states in 2005.

Rapid HIV Testing

- Developed and disseminated a model protocol for rapid HIV testing during labor and delivery for women of unknown HIV status.


- In 2003, CDC purchased 250,000 OraQuick Rapid HIV-1 Antibody Test kits for distribution to 89 health departments and 19 funded CBOs around the country. In 2004, about 279,000 OraQuick tests were purchased for distribution. For 2005, CDC has purchased over 209,000 OraQuick ADVANCE kits. These can test for both HIV-1 and HIV-2.

Rapid HIV Testing Training for Health Departments and CBOs

CDC is working with health departments and community-based organizations (CBOs) to ensure they have the skills and resources to incorporate rapid HIV testing. Activities include:

- CDC and the OraQuick manufacturer, OraSure Technologies, conducted 20 regional rapid HIV testing training sessions in 2003 for health departments and CBOs that plan to conduct rapid HIV testing. An additional 20 training sessions on rapid HIV testing were conducted in 2004. In 2005, CDC will begin conducting train-the-trainer sessions in order to expand the reach and availability of rapid HIV test training.
Health Marketing

Keeping CDC constituents up to date on AHP developments is a key component of its success. Information is being distributed through multiple channels to a variety of audiences.

- **Publications available online and in print include:**
  - Interim Technical Guidance for Selected Interventions for Health Departments
  - Procedural Guidance for Selected Strategies and Interventions for Community-Based Organizations
  - Advancing HIV Prevention: The Science Behind the New Initiative
  - Incorporating HIV Prevention into the Medical Care of Persons Living with HIV. Recommendations of CDC, the Health Resources and Services Administration, the National Institutes of Health, and the HIV Medicine Association of the Infectious Diseases Society of America. MMWR 2003; 52(RR12):1-24
  - Assessment of Increase in Perinatal Exposure to HIV Among Hispanics --- 20 Counties, Georgia, 1994-2002. MMWR 2004; 53(40):944-946
  - Recommendations for Incorporating Human Immunodeficiency Virus (HIV) Prevention into the Medical Care of Persons Living with HIV. Centers for Disease Control and Prevention, Health Resources and Services Administration, National Institutes of Health, HIV Medicine Association of the Infectious Diseases Society of America, and the HIV Prevention in Clinical Care Working Group. CID 2004:38 (1 January)
• **AHP Internet site** ([http://www.cdc.gov/hiv/partners/ahp.htm](http://www.cdc.gov/hiv/partners/ahp.htm)) provides up-to-date guidelines, program news and announcements, questions and answers, slide presentations, and journal articles.

• **AHP Intranet site** ([http://ahp.nchstp.cdc.gov](http://ahp.nchstp.cdc.gov)) provides additional reference materials for CDC employees.


• **Rapid HIV Testing site** ([http://www.cdc.gov/hiv/rapid_testing/](http://www.cdc.gov/hiv/rapid_testing/)) includes the rapid HIV tests approved by the FDA, how the tests can be implemented in different settings, and research on the effectiveness and possible uses of the tests.

• **AHP Speakers Bureau** has fulfilled AHP presentation requests from local, state, and national organizations and CDC staff have given numerous talks relating to each of the four strategies of AHP.

• **Satellite broadcasts** provide updates on critical scientific and policy issues to a wide audience across the country. AHP-related satellite broadcasts have included:
  - Prevention with Positives: HIV Risk Reduction Strategies for Health Care Providers
  - Incorporating HIV Prevention into the Medical Care of Persons Living with HIV
  - Update on Rapid Testing for HIV
  - Rapid Testing: Advances for HIV Prevention
  - Partner Counseling and Referral Services for HIV Prevention

**Research**

In addition to its demonstration projects, AHP is funding research that will inform and guide the initiative as it moves forward. Research projects planned or underway include:

• Development of effective prevention messages for persons living with HIV.

• Validation of the use of oral fluid Western Blot testing to confirm preliminary positive rapid HIV tests.

• Analysis of financial and organizational factors related to integrating HIV prevention into care settings.

• The MIRIAD (Mother Infant Rapid Intervention at Delivery) Rapid Testing Strategy (RTS) substudy began in July 2004 in the labor and delivery units at three hospitals across the southeastern US. The substudy consists of two 3-month components. The first three months is the “Opt-In” option which consists of HIV counseling and testing with a signed local HIV consent. The second three months is the “Opt-Out” option, in which rapid HIV testing is part of the standard of care (although the mother may decline to participate.)

• Development of simplified messages for pre-test counseling in 2 US cities.
Creating Partnerships

Implementing AHP requires cooperation and coordination among CDC, federal partners, the public health community, and the medical care community. CDC is working with its partners on the following AHP-related projects:

Federal Partners

Perinatal HIV Prevention

- **Agency for Healthcare Research and Quality (AHRQ)** and the **U.S. Preventive Services Task Force (USPSTF)**—reviewing evidence for routine HIV screening for asymptomatic adults and pregnant women.
- **Health Resources and Services Administration (HRSA)**—conducted session on AHP perinatal HIV screening strategies for a series of audio-conferences; collaborating with CDC and the University of California at San Francisco on a national perinatal HIV consultation and referral service hotline. Also, see below under Other Partners/ Case Risk Reduction and Counseling Services (CRRCS) for a brief description of a CRRCS workgroup of which HRSA is a part.

Financial, Policy, and Operational Issues

- **Department of Veterans Affairs (VA)**—eliminating barriers to HIV testing and prevention services in its jurisdictions and incorporating prevention services for HIV-infected patients.
- **HRSA**—implementing AHP strategies in HRSA-funded programs; prepared estimates of need for increased care and treatment services for HIV-infected persons identified through AHP; developing an operational guide for community health centers to incorporate routine HIV testing and prevention into medical care of HIV-infected patients.
- **Office of Population Affairs**—working with CDC to incorporate AHP strategies into family planning programs.

Case Risk Reduction and Counseling Services (CRRCS)

- **CMS, Department of Housing and Urban Development (HUD)/Housing Opportunities for Persons with AIDS (HOPWA), HRSA, SAMHSA and CDC/DHAP**—participating in a CRRCS workgroup to develop a set of recommendations on integrated or collaborative CRRCS systems.

HIV Testing

- **Substance Abuse and Mental Health Services Administration (SAMHSA)**—collaborating with CDC to acquire expertise on implementation of a large-scale rapid testing initiative.
Office of Population Affairs—providing technical assistance to family planning clinics to incorporate rapid HIV counseling and testing as part of routine care.

Indian Health Service—working with CDC to (1) implement rapid HIV testing in clinics that serve urban Indians and (2) develop progress indicators for evaluation.

Other Partners

Perinatal HIV Prevention

American College of Obstetricians and Gynecologists—participated in development of clinical guidance for routine rapid HIV testing of women in labor with unknown HIV status, as well as repeat HIV screening during pregnancy in areas of high seroprevalence.

Association of Maternal and Child Health Programs—conducting a Perinatal HIV Action Learning Lab with states to foster MCH-HIV collaborations to develop and implement local action plans to eliminate perinatal HIV transmission.

CityMatch—working with high-HIV prevalence cities to develop and implement local action plans to eliminate perinatal HIV transmission.

American Hospital Association (AHA) (Health Research and Education Trust)—conducted a survey of U.S. birth hospitals to assess perinatal HIV prevention policies and practices, especially rapid HIV testing in labor and delivery. Developing operational guidance and communication tools for hospitals.

Francois-Xavier Bagnoud Center of the University of Medicine & Dentistry of New Jersey—developed and has conducted 8 regional strategic planning workshops with more than 70 hospitals throughout the U.S. to implement perinatal HIV prevention activities in labor and delivery—in particular rapid HIV testing and timely ARV prophylaxis. The rapid testing model is being adapted for emergency departments.

Financial, Policy, and Operational Issues

AHA—developing operational guidance and providing technical assistance on HIV testing in hospitals; invited CDC to review and comment on member survey to gather comprehensive, up-to-date information on HIV testing policies and practices in hospitals.

American Academy of Emergency Medicine, American College of Emergency Physicians and Society for Academic Emergency Medicine—advising CDC on the policy, legal, and financial challenges associated with implementation of HIV screening and testing in emergency department settings.

Health Plans and Managed Care Representatives—advising CDC on a study of the cost effectiveness of early HIV diagnosis.

Infectious Diseases Society of America—through its HIV Medicine Association, partnered with CDC, HRSA, and the National Institutes of Health (NIH) to develop “Incorporating HIV Prevention into the Medical Care of Persons Living with HIV” recommendations.
- **National Business Group on Health (formerly Washington Business Group on Health)**—translating HIV prevention strategies into actionable information for employers and developing a business case to support reimbursement of HIV prevention services. Also, assessing HIV prevention services employers support and additional resources needed.

- **National Association of Community Health Centers (NACHC), Migrant Clinicians Network, and National Coalition for the Homeless**—creating model protocols and policies for community health centers on prevention for persons living with HIV and encouraging testing for persons with unknown HIV status. Also, in fiscal year 2004, CDC funded NACHC to conduct an analysis of existing information and data to assess current community health center policies and practices around HIV screening, HIV prevention services, and linkage of HIV-infected persons to primary care. This analysis is facilitating development of an operational guide with policies and procedures on incorporating HIV testing and other HIV prevention services into primary care services. Using the operational guide, NACHC will provide on-site training and technical assistance to help community health centers and primary care clinics develop programs that address routine HIV screening and prevention services in primary care settings for HIV-positive and high risk HIV-negative persons.

**Health Marketing / Training**

- **American Academy of HIV Medicine (AAHIVM)**—assessing HIV prevention practices, knowledge, and attitudes to inform health marketing efforts. AAHIVM will conduct a campaign to encourage its members to incorporate prevention into the care of HIV-infected persons. AAHIVM also invited CDC to review its training materials to ensure adequate coverage of HIV prevention and asked CDC to peer review its *HIV Medicine Self-Directed Study Guide*.

- **National Association of State and Territorial AIDS Directors**—included two articles on AHP in communications to their members and assisted in coordinating consultations with stakeholders.


- **National Laboratory Training Network**—assisted with implementation of rapid HIV test training.

**Case Risk Reduction and Counseling Services (CRRCS)**

- **American Academy of Pediatrics**—will assess HIV prevention practices of adolescent specialists and develop training to assist providers in incorporating rapid HIV testing in their practices.

- **HIV Medicine Association**—will assess HIV prevention practices, knowledge, and attitudes of members to inform health marketing efforts and will conduct a campaign to encourage members to incorporate prevention into the care of HIV-infected persons.
- National Association of Social Workers—collaborating with CDC, CMS, HRSA, HUD/HOPWA, and SAMHSA on the CRRCS workgroup. The goal of the workgroup is to develop a set of guidelines on integrated or collaborative CRRCS systems.

**Plans for 2005**

As the initiative moves through its second year, CDC is providing funds for a wide range of programs and activities to increase the adoption of the four AHP strategies. These include:

**Projects**

- Evaluate how the approved interventions in the Procedural Guidance for Selected Interventions can be adapted and tailored to other populations.
- Support development and evaluation of simplified procedures and materials for routine HIV screening in acute care settings. Such procedures are necessary to promote screening of large numbers of patients in busy clinical settings.

**Prevention Programs**

- Require all health departments receiving CDC funds to make people living with HIV the highest priority population targeted for HIV prevention services.
- Fund CBOs to implement interventions for prevention with positives and their HIV-infected partners, testing in community settings, working with high-risk seronegative persons, outreach, and health education and risk reduction.
- Maintain CBO support for health education and risk reduction activities targeting populations at high risk for HIV.

**Technical Assistance and Guidance**

- Guide CBOs on how to adapt, tailor, and implement procedures and protocols for their target populations and communities.
- Train clinicians and outreach workers to implement rapid HIV testing in clinical care and outreach settings and prevention with positive persons in care settings.
- Create materials and guidelines for conducting rapid HIV testing during routine prenatal screening and labor and delivery.
- Continue collaboration with HRSA’s Bureau of Primary Health Care and NACHC on an analysis of community health centers’ HIV screening, HIV prevention services, and linkage of HIV-infected persons to primary care. This will facilitate development of policies and procedures on primary care services related to HIV testing and other HIV prevention services.
- Work with federal partners to develop guidelines for CRRCS and patient referral.
- Collaborate with the AHA to provide technical assistance and develop an operational guide on HIV testing in hospital settings. This technical assistance will focus on hospitals located in areas with a high prevalence of HIV throughout the United States. Lessons learned in these hospitals will be used to revise and refine the operational guide.
- Revise guidelines for HIV counseling, testing, and referral.
- Revise guidelines for HIV partner counseling, testing, and referral services.

**Evaluation**

- Conduct post-marketing surveillance to assess the extent to which rapid HIV testing has been used in health department and other CDC-funded programs. In FY 2005, $1.1 million has been awarded across 18 sites for this activity.
- Review medical records of pregnant women to determine progress toward the goal of universal screening to prevent mother-to-child HIV transmission.
- Continue to implement PEMS in more than 200 CDC-funded organizations.
- Provide PEMS training on data collection, evaluation, and software use.
- Offer PEMS-related technical assistance and support to CDC grantees funded to deliver HIV prevention services.
- Each year, CDC-funded health departments and CBOs report performance indicators on HIV prevention planning, services, and evaluation including measures of AHP-related prevention service activities. Grantees will use PEMS data to monitor their progress in achieving their performance indicator targets and goals.
- Continue evaluation of demonstration projects.
- Work with the HIV Medicine Association, the American Academy of HIV Medicine, and the American Academy of Pediatrics to distribute a CDC-developed tool kit, *Incorporating Prevention into the Medical Care of Persons Living with HIV*, to assist providers and to encourage the adoption of HIV testing as part of routine medical care.
- Initiate work of the Prevention Economics Team (PET) to address economic issues related to HIV/AIDS prevention. Initially, PET will focus on issues related to cost-effectiveness, health economics, economic modeling, and the optimal allocation of prevention resources.

**Conclusion**

Much has been accomplished since the announcement of AHP in mid-2003. CDC is poised to accomplish even more during 2005. Many new policies and plans have been put in place and many new partners have been enlisted. The next few years are critical to demonstrating the effect this enhanced HIV prevention approach has on curbing the epidemic and helping us make new strides in reducing the number of annual new infections and improving the lives of those persons who are HIV positive.