

Recommendations for HIV Prevention with Adults and Adolescents with HIV in the United States, 2014

Summary for Health Departments and HIV Planning Groups



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Centers for Disease Control and Prevention
Health Resources and Services Administration
National Institutes of Health
American Academy of HIV Medicine
Association of Nurses in AIDS Care
International Association of Providers of AIDS Care
National Minority AIDS Council
Urban Coalition for HIV/AIDS Prevention Services

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Graphic Design: American Institutes for Research, Frederick, Maryland.

Suggested Citation: Centers for Disease Control and Prevention, Health Resources and Services Administration, National Institutes of Health, American Academy of HIV Medicine, Association of Nurses in AIDS Care, International Association of Providers of AIDS Care, National Minority AIDS Council, and Urban Coalition for HIV/AIDS Prevention Services. *Recommendations for HIV Prevention with Adults and Adolescents with HIV in the United States, 2014: Summary for Health Departments and HIV Planning Groups*. 2014. <http://stacks.cdc.gov/view/cdc/26065>.

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What's New in the Recommendations?

The December 11, 2014, version of *Recommendations for HIV Prevention with Adults and Adolescents with HIV in the United States, 2014*, and its companion summaries have been amended in December 2016 to correct errata, outdated or broken hyperlinks, and missing references or footnotes.

Disclaimer: The document describes use of certain drugs for some indications that do not reflect labeling approved by the U.S. Food and Drug Administration.

For Questions or Comments about this Document: Send email to dhapguideline@cdc.gov



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Section 1. Introduction

This *Summary for Health Departments and HIV Planning Groups* contains the subset of recommendations for selected staff of health departments and HIV planning groups from the 2014 guideline, *Recommendations for HIV Prevention with Adults and Adolescents with HIV in the United States, 2014*.^{*} These staff members provide population-level HIV prevention and care services.

The guideline includes new and longstanding federal guidance on biomedical, behavioral, and structural interventions that can decrease HIV transmission from persons with HIV by reducing their infectiousness and their risk of exposing others to HIV. The guideline updates and expands earlier federal guidance for health care providers in the 2003 *Recommendations for Incorporating HIV Prevention into the Medical Care of Persons Living with HIV*.[†]

The 2014 guideline and this *Summary* were developed by the Centers for Disease Control and Prevention, the Health Resources and Services Administration, the National Institutes of Health, the American Academy of HIV Medicine, the Association of Nurses in AIDS Care, the International Association of Providers of AIDS Care, the National Minority AIDS Council, and the Urban Coalition for HIV/AIDS Prevention Services.

A *Summary for Clinical Providers* is directed to professionals who provide HIV prevention and care services in health care facilities.[‡]

A *Summary for Nonclinical Providers* is directed to professionals who provide individual-level services for persons with HIV in community-based organizations or health departments operating outside of health care facilities.[§]

^{*} Centers for Disease Control and Prevention, Health Resources and Services Administration, National Institutes of Health, American Academy of HIV Medicine, Association of Nurses in AIDS Care, International Association of Providers of AIDS Care, National Minority AIDS Council, and Urban Coalition for HIV/AIDS Prevention Services. *Recommendations for HIV Prevention with Adults and Adolescents with HIV in the United States, 2014*. 2014. <http://stacks.cdc.gov/view/cdc/26062>. Accessed December 11, 2014.

[†] Centers for Disease Control and Prevention, Health Resources and Services Administration, the National Institutes of Health, and the HIV Medicine Association of the Infectious Diseases Society of America. *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(RR-12):1-24. Accessed July 6, 2014.

[‡] Centers for Disease Control and Prevention, Health Resources and Services Administration, National Institutes of Health, American Academy of HIV Medicine, Association of Nurses in AIDS Care, International Association of Providers of AIDS Care, National Minority AIDS Council, and Urban Coalition for HIV/AIDS Prevention Services. *Recommendations for HIV Prevention with Adults and Adolescents with HIV in the United States, 2014: Summary for Clinical Providers*. 2014. <http://stacks.cdc.gov/view/cdc/26063>. Accessed December 11, 2014.

[§] Centers for Disease Control and Prevention, Health Resources and Services Administration, National Institutes of Health, American Academy of HIV Medicine, Association of Nurses in AIDS Care, International Association of Providers of AIDS Care, National Minority AIDS Council, and Urban Coalition for HIV/AIDS Prevention Services. *Recommendations for HIV Prevention with Adults and Adolescents with HIV in the United States, 2014: Summary for Nonclinical Providers*. 2014. <http://stacks.cdc.gov/view/cdc/26064>. Accessed December 11, 2014.

Section 2. About the Summary

Who is this Summary for?

This *Summary* is for staff or contractors of health departments and HIV planning groups who provide population-level services for persons with HIV. These services include HIV surveillance; design, execution, and evaluation of HIV prevention and care programs; development, implementation, and evaluation of policies that influence HIV prevention and care; and planning and advocacy for community resources to provide HIV prevention and care services. These services are provided by surveillance specialists, program managers, and experts in health policy and communication.

Some recommendations of this *Summary* are directed to both health departments and HIV planning groups. Other recommendations are directed to health departments only because of their unique legal authority to provide certain community health services.

What does this Summary include?

- Recommendations related to 11 domains of interventions that can decrease HIV transmission by reducing the infectiousness of persons with HIV or by reducing their risk of exposing others to HIV
- Examples of practical strategies to support implementation of these recommendations
- A list of links to federal guidance that supports these recommendations ([Appendix A](#))
- A link to an online Resource Library of practical materials to help implement these recommendations

How to use the Summary?

Staff and contractors of health departments and HIV planning groups can use this *Summary*** to

- Learn how they and their organizations can promote HIV prevention with persons with HIV at the community level
- Select population-level interventions that may be well-suited to their communities
- Train staff on best practices in HIV prevention with persons with HIV

** Some of the federal guidelines cited in the Recommendation boxes may have been updated as of June 2016. Check the following Web site for the most recent version: <http://www.cdc.gov/hiv/guidelines/>.

Additional information about the 2014 Recommendations for HIV Prevention with Adults and Adolescents with HIV in the United States

The complete guideline is available at <http://stacks.cdc.gov/view/cdc/26062>. It is directed to professionals who serve individuals or populations with HIV: clinical providers, nonclinical providers, and staff and contractors of health departments and HIV planning groups. It includes:

- Executive summary
- Rationale for an updated and expanded guideline
- Methods used to develop the recommendations
- List of recommendations for the three different professional audiences
- How the recommendations differ from past federal recommendations on this topic
- Evidence supporting the recommendations drawn from federal guidance, studies, program evaluations, and expert opinion, including citations
- Progress, challenges, and opportunities in implementing these recommendations
- Logic model that illustrates the impact of recommended interventions
- Glossary that defines technical terms (see page 226 of the complete guideline)
- List of contributors

IMPORTANT NOTE: The sequential box and table numbers in the complete guideline (which is directed to *several different audiences*) are not identical to the sequential box and table numbers in this *Summary* that only lists information for *health departments and HIV planning groups*).

Additional materials to help implement these recommendations

An online Resource Library (available at <http://www.cdc.gov/hiv/guidelines/implementationresources.html>) contains dozens of online decision-support tools, training aids, fact sheets, and other materials to help implement the guideline's recommendations. It will be periodically updated as new materials become available.



Section 3. The Context of Prevention with Persons with HIV

Background

Individual, social, structural, ethical, legal and policy issues shape the lives of persons with HIV and their ability to use HIV prevention and care services and adopt HIV prevention strategies. This section makes general recommendations about these contextual issues.

Staff of health departments and HIV planning groups who understand these issues are better prepared to create a sense of shared responsibility and decision making with persons with HIV. This may include

- motivating persons with HIV to adopt prevention strategies and obtain essential services
- endorsing the strategy of “treatment as prevention” to contribute to community well-being
- communicating in a sensitive, respectful, and culturally competent manner
- promoting the development of community resources to support prevention and care services

Other sections of this *Summary* address contextual issues related to specific interventions (Sections 4–12) and quality improvement and program evaluation (Section 13).



Recommendations

Box 3. Recommendations—The Context of Prevention with Persons with HIV

Become familiar with

- Social and structural determinants of health that influence use of HIV prevention and care services (see [Appendix B](#))
- Federal, state, and local laws and policies that regulate the following issues:
 - ◆ rights, responsibilities, and protections of persons with HIV regarding disclosure of their HIV-infection status and the unintentional or intentional exposure of others to HIV
 - ◆ provider responsibilities regarding HIV case reporting, protecting confidentiality, obtaining informed consent for HIV services, avoiding discrimination, and any requirements to inform persons about possible HIV exposure
- Governmental and nongovernmental agencies that serve persons with HIV with various insurance and income characteristics and coverage and reimbursement policies, including:
 - ◆ Federal programs (e.g., Medicaid, Medicare, Ryan White HIV/AIDS Program, Department of Veterans Affairs, Centers for Disease Control and Prevention, Substance Abuse and Mental Health Services Administration, Federal Bureau of Prisons, Office of Population Affairs, Department of Housing and Urban Development)
 - ◆ State and local programs
 - ◆ Nongovernmental organizations

Support

- Partnerships between persons with HIV and their service providers that foster collaboration, communication, and a spirit of shared responsibility for HIV prevention and care that benefits individuals and the community
- Enrollment of persons with HIV in long-term health care coverage to hasten access to HIV treatment and prevention services and to reduce health disparities
- The development of a skilled workforce and organization infrastructure to deliver, coordinate, and finance HIV prevention and care services (see Box 3-A)
- Strategies that reduce HIV health disparities and improve access to HIV prevention and care services (see Box 3-A)
- Protection of confidential health information (see Box 3-B)

Encourage

- Communication that does not stigmatize or negatively judge persons with HIV or their gender identity, sexual orientation, sexual and drug-use behaviors, and medical or social characteristics
- Provision of information about rights and responsibilities of persons with HIV regarding confidentiality, privacy, protection from discrimination, and partner notification
- Planning by persons with HIV to notify exposed sex and drug-injection partners through partner notification assistance or self-disclosure that reflects an understanding of the benefits and risks of HIV disclosure in the jurisdiction
- Access to services and devices that improve the knowledge, ability, and motivation of persons with HIV to improve their health, protect the health of partners, and reduce transmission of HIV

Box 3-A. Recommended Strategies to Improve Service Delivery Infrastructure

- Make available online directories of organizations and providers in public and private sectors that offer HIV prevention and care services or other medical and social services that influence HIV transmission
- Recruit new providers into HIV service networks and establish agreements that describe their services, reimbursement mechanisms, referral and linkage procedures, exchanging health information, and monitoring prevention outcomes
- Promote HIV training for non-HIV specialists and task sharing as authorized in the jurisdiction (e.g., training physicians, nurses, pharmacists, and health educators to provide adherence support)
- Promote initiatives to expand access to HIV prevention and care, particularly health insurance or medical assistance programs that offer primary care and skilled provider networks
- Monitor population-level data on
 - ◆ access, use, and quality of HIV prevention and care services in the continuum of HIV care, and identify opportunities to improve services and health outcomes
 - ◆ coverage and reimbursement for HIV prevention and care services provided by public and private sectors, and identify opportunities to improve coverage
- Evaluate strategies to coordinate and deliver services across the continuum of care that are provided by health systems, community organizations, and health departments
- Participate in evaluations of how laws about criminalizing HIV exposure, same-sex marriage, possession of drug paraphernalia, and other issues might influence disclosure, transmission, and use of HIV services, and apply findings

Box 3-B. Recommended Strategies to Protect Client Confidentiality and Security of Personal Health Information

- Develop and disseminate state and local HIV surveillance data release policies and practices that define and assure providers and persons with HIV about legitimate uses of surveillance data to monitor HIV prevention and care (e.g., to identify individuals with HIV who warrant being offered assistance with linkage to HIV care)^{a,b}

Notes:

^a The Centers for Disease Control and Prevention (CDC), states, and local jurisdictions issue recommendations and/or regulations about HIV surveillance.

^b The Health Insurance Portability and Accountability Act (HIPAA) allows use of HIV surveillance data for public health purposes.



Section 4. Linkage to and Retention in HIV Medical Care

Background

HIV medical care provides opportunities to offer antiretroviral treatment (ART), ART adherence support, risk-reduction interventions, partner services, sexually transmitted disease services, and other services that can improve health outcomes and reduce the risk of HIV transmission. Helping persons to start HIV medical care shortly after diagnosis (linkage to care), to attend scheduled HIV medical visits (retention in care), and to resume HIV medical care after a lapse (reengagement in care) can speed the delivery of these important services.

Staff and contractors of health departments and HIV planning groups can use proactive methods to support linkage to, retention in, and reengagement in care for persons with HIV. These methods can operate at the client, facility, or system level. They often require coordination and collaboration with nonclinical providers, clinical providers, health systems, and health departments. For example, health departments can make available directories of HIV medical care providers, support data-sharing agreements that allow tracking of HIV care visits, and monitor reports of routinely submitted laboratory tests that indicate the receipt of HIV care.

Other sections of this *Summary* describe other opportunities to link or refer persons with HIV to clinical providers, nonclinical providers or health department services (Sections 5 through 12) and how to evaluate these interventions (Section 13).

Recommendations

Box 4. Recommendations—Linkage to and Retention in HIV Medical Care

- Support efforts to increase assistance with linkage, retention, and reengagement services, and affordable ART through
 - ◆ direct interventions provided by staff, contractors, and programs (see Box 4-A, Box 4-B, Box 4-C)
 - ◆ partnerships with public- and private-sector health systems (see Box 4-A, Box 4-B, Box 4-C)



Box 4-A. Examples of Strategies to Establish Infrastructure that Supports Linkage to, Retention in, and Reengagement in HIV Medical Care

- Make available online directories of HIV testing and health care providers who provide HIV care in the public and private sectors^a
- Develop and implement protocols and data-sharing agreements to use HIV surveillance and other data to monitor linkage to and retention in HIV medical care at the individual, provider, facility, and community level if allowed by the jurisdiction^b
- Promote the use of evidence-based intervention models for linkage to or retention in care that are suited to the jurisdiction
- Encourage and train health department staff to collaborate with HIV testing and health care providers to help persons with HIV start or resume HIV medical care if allowed by the jurisdiction
- Collaborate with corrections facilities to establish policies and procedures that link inmates to health care facilities in the community that provide HIV medical care after their release and provide follow-up until HIV care has resumed

Notes:

^a The American Academy of HIV Medicine

(<http://www.aahivm.org/ReferralLink/exec/frmAdvSearch.aspx>); the HIV Medicine Association (<http://www.hivma.org/directory/>); and the HRSA Ryan White HIV/AIDS Program (http://findhivcare.hrsa.gov/Search_HAB.aspx) maintain national directories of HIV medical care providers that can be searched by name, location, languages, insurance types accepted, and/or services provided.

^b Sources of data that might be used in conjunction with HIV surveillance data vary by jurisdiction. They may include HIV testing sites; laboratories that conduct testing for HIV, CD4 cell counts, and viral load; Medicaid and Medicare benefit programs; AIDS Drug Assistance Programs; clinics funded by the Ryan White HIV/AIDS Program; large HIV clinics; and other health systems.



Box 4-B. Barriers to Linkage to, Retention in, and Reengagement in HIV Medical Care and Components of Multifaceted Interventions that May Overcome Barriers

Linkage to care

Barriers for persons with HIV

- Feeling well
- Feeling stigmatized
- Lack of health insurance and/or misperception that HIV care requires health insurance
- Negative perceptions of the health care system
- Discomfort with clinical providers
- Competing priorities (e.g., job, child care)
- Substance use
- Mental illness
- Limited social support to engage in HIV medical care
- Unstable housing

Barriers related to community infrastructure

- Limited health insurance or medical assistance options
- Few trained HIV health care providers
- Lack of health facilities with convenient locations and/or hours
- Limited transportation or child care services
- Limited sources of affordable, stable housing that enable consistent contact information and proximity to health care facilities

Barriers for health care facilities

- Inability to schedule visits promptly or at convenient times
- Lack of staff or resources to engage new patients

Components of multifaceted interventions that may overcome barriers

- Providing assistance at HIV testing sites
- Linking persons tested in clinical sites to HIV medical care in the same health system
- Multiple case management sessions
- Motivational counseling
- Navigation assistance, specifically
 - ◆ help enrolling in health insurance or medical assistance programs
 - ◆ transportation services to the health care facility
- Providing or linking to other medical or social services (e.g., substance abuse treatment, mental health services, child care)
- Maintaining relationship with a consistent care team



Box 4-B. Barriers to Linkage to, Retention in, and Reengagement in HIV Medical Care and Components of Multifaceted Interventions that May Overcome Barriers (cont)

Retention and reengagement in care

Barriers for persons with HIV

Same as linkage noted previously, plus barriers associated with

- Younger age
- Female gender
- Being a member of a sexual, racial, or ethnic minority group

Barriers related to community infrastructure

Same as linkage noted previously, plus

- Fragmented HIV prevention and care services

Barriers for health care facilities

- Inability to schedule visits at appropriate intervals or convenient times
- Lack of routine monitoring of past and future visits
- Visit times too short to build rapport or trust or to answer patients' questions
- Health care providers have limited expertise in HIV medical care
- Health care providers have limited experience with patients with diverse sexual, linguistic, or cultural characteristics

Components of multifaceted interventions that may overcome barriers

- Providing assistance at HIV clinical sites
- Multiple case management sessions
- Motivational counseling
- Navigation assistance, specifically
 - ◆ reminders for follow-up visits
 - ◆ help enrolling in health insurance or medical assistance programs
 - ◆ transportation services to the health care facility
- Providing or linking to other medical or social services (e.g., substance abuse treatment, mental health services, child care)
- Maintaining relationship with a consistent care team
- Experience in serving culturally diverse patients

Box 4-C. Selected Strategies to Support Early Linkage to and Retention and Reengagement in HIV Medical Care for Health Department Staff Who Conduct HIV Surveillance or Offer Disease Intervention Services
Linkage to care

- Use HIV testing, CD4 cell count, and viral load data to identify populations or individuals who may need linkage assistance, if allowed by the jurisdiction
- Engage staff to provide linkage assistance in nonclinical and clinical HIV testing sites, if allowed by the jurisdiction
- Make available online information about HIV medical care sources in the community to HIV testing and service organizations

Retention in care

- Use CD4 cell count and viral load data to identify populations or individuals who lack evidence of retention in care, if allowed by the jurisdiction
- Engage staff to provide retention assistance in nonclinical and clinical settings that provide HIV testing and education, if allowed by the jurisdiction
- Provide information about HIV medical care options in the community to HIV testing sites and organizations that serve persons with HIV

Reengagement in care

- Same as retention in care, except use CD4 cell count and viral load data to identify populations or individuals who have had a lapse in care (e.g., 6 or more months), if allowed by the jurisdiction

Section 5. Antiretroviral Treatment for Care and Prevention

Background

Current U.S. HIV treatment guidelines recommend antiretroviral treatment (ART), for all persons with HIV, regardless of CD4 cell count, to improve their health, prolong their lives, and reduce their risk of transmitting HIV to others.

Health departments and HIV planning groups can facilitate early access to ART through a variety of population-level strategies. These may include supporting state drug assistance programs, collaborating in social marketing campaigns to build awareness of the benefits of early HIV treatment, and building a workforce of health care providers who are trained in HIV prevention and care.

Other sections of this *Summary* address adherence to ART (Section 6); antiretroviral medication use by women using hormonal contraceptives and persons seeking conception (Section 10); use of ART and prophylaxis during pregnancy and the postpartum period (Section 11); and quality improvement and program evaluation (Section 13).

Recommendations

Box 5. Recommendations—Antiretroviral Treatment for Care and Prevention

- Support efforts to increase access to HIV medical care and affordable ART through the following (see Box 5-A):
 - ◆ Direct interventions with staff, contractors, and programs
 - ◆ Partnerships with public and private sector health systems



Box 5-A. Examples of Population-level Strategies to Improve Access to HIV Medical Care and ART

- Make available online information about
 - ◆ private and public sector sources of HIV medical care and drug assistance (e.g., Medicare, Medicaid, Veterans Affairs, Ryan White HIV/AIDS programs, private health insurance, government-sponsored insurance plans, AIDS Drug Assistance Programs, and state medical and pharmacy assistance programs)
 - ◆ HIV medications covered by public sector clinical providers and drug formularies
 - ◆ state laws regarding minors' access and consent to HIV medical care
- Foster collaboration and coordination between HIV service providers in the public and private sectors to
 - ◆ ensure continuity of HIV services for persons who change health care provider, health care insurance, or medical assistance program
 - ◆ establish policies and procedures with correctional facilities (including juvenile detention centers) that enable transition planning and continued HIV services after detainee release
- Support efforts to increase the number of health care providers who are skilled in HIV medical care (e.g., through training, telemedicine, expansion of professional authority, and task sharing)
- Educate clinical and nonclinical HIV prevention providers, including pharmacists and health department partner services specialists, that all persons with HIV should be informed about
 - ◆ the benefits of ART, regardless of CD4 cell count, for their own health and for preventing HIV transmission
 - ◆ options for covering and minimizing the cost of ART
- Develop protocols and data-sharing agreements with public and private sector entities, if allowed by the jurisdiction, to enable tracking of HIV health care delivery, quality, efficiency, and outcomes
- Support social marketing campaigns for populations with high HIV prevalence that promote the benefits of HIV testing and early initiation of ART



Section 6. Antiretroviral Treatment Adherence

Background

Sustained high adherence to antiretroviral therapy (ART) is essential to improve health outcomes and quality of life of patients with HIV and decrease their risk of HIV transmission. The success of ART depends on the extent to which a person takes ART according to the prescribed doses, dosing intervals, and other medication instructions.

Health departments can support high adherence to ART in their communities through a variety of population-level strategies. These include special applications of HIV surveillance data, engaging disease investigation specialists to provide individual level adherence education and support, and ensuring sustained access to recommended ART medications through state drug assistance programs and health plan drug formularies.

Other sections of this *Summary* address linkage and reengagement in HIV (Section 4), initiating or resuming ART (Section 5); and quality improvement and program evaluation (Section 13).

Recommendations

Box 6. Recommendations—Antiretroviral Treatment Adherence

- Use HIV surveillance data to identify populations or individuals who have CD4 cell counts or viral load test results that indicate suboptimal treatment that may be related to low adherence and who may warrant being offered ART adherence support, if allowed by the jurisdiction
- Engage health department disease investigation specialists or other community health workers, if allowed by the jurisdiction, in collaborating with health care providers to offer adherence support to their patients^a
- Support other population-level strategies to promote sustained high adherence (see Box 6-A)

Notes:

^a Community health workers might include community-based HIV prevention specialists contracted by health departments or employees of community-based HIV service organizations.



Box 6-A. Examples of Population-level Strategies to Improve Adherence

- Develop protocols and data-sharing agreements with public- and private-sector entities to enable monitoring of the effectiveness of ART (e.g., longitudinal surveillance data on CD4 cell count or viral load test results that may provide indirect measures of adherence) in populations or individuals with HIV, if allowed by the jurisdiction
- Promote programs that help persons with HIV obtain continuous coverage for ART through public- or private-sector pharmacy benefit programs (e.g., Medicare, Medicaid, Veterans Affairs, private health insurance, government-sponsored insurance plans, AIDS Drug Assistance Program)
- Collaborate with public- and private-sector health systems and ART access programs to support retention in HIV care and sustained access to affordable ART when persons change their health care provider, source of health care coverage, or enter or are released from correctional facilities
- Make available summaries about antiretroviral medications (including their costs) that are covered by public-sector HIV clinical providers and drug formularies for clinical providers and persons with HIV
- Support training of clinical and nonclinical providers to increase awareness of the importance of sustained high adherence and sources of adherence support and affordable ART
- Support social marketing campaigns that promote sustained high adherence



Section 7. Risk Screening and Risk-reduction Interventions

Background

Risk screening is a brief evaluation of behavioral factors that may affect a person's risk of exposing others to HIV (e.g., unprotected sex or sharing drug-injection equipment) and biomedical or biologic factors that influence HIV viral load, viral shedding, and infectiousness (e.g., antiretroviral treatment [ART] use, ART adherence, sexually transmitted disease [STD], and pregnancy). The results of individual risk screenings or community-level assessments can reveal risk-reduction information, materials, and interventions that would benefit the community.

Health departments and HIV planning groups can support routine risk screening and access to risk-reduction resources through various population-level strategies. These include tracking the prevalence of risk behavior through special surveillance projects, disseminating risk-reduction information and intervention resources to persons with HIV and providers, and improving access to condoms and substance use treatment for persons who inject drugs.

Other sections of this *Summary* address behavioral and biomedical strategies to reduce the risk of HIV transmission: linkage to and retention in care (Section 4), antiretroviral treatment (ART) (Section 5), ART adherence (Section 6), partner services (Section 8), STD services (Section 9), reproductive health care (Section 10), pregnancy services (Section 11), and services for other medical conditions and social factors that influence HIV transmission (Section 12). Section 13 describes how to improve and evaluate these interventions.

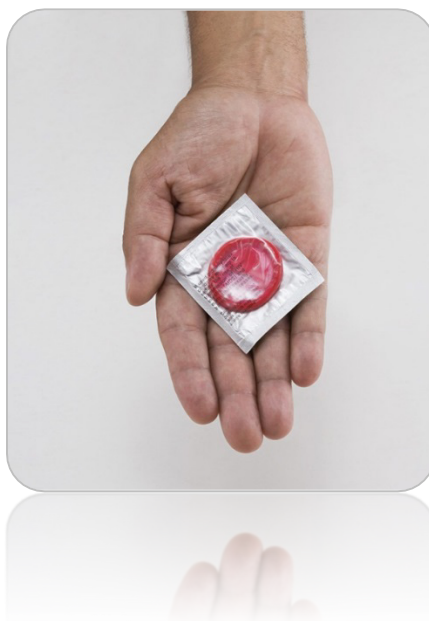
Recommendations

Box 7. Recommendations—Risk Screening and Risk-reduction Interventions

- Support efforts to monitor HIV risk behaviors in community (see Box 7-A)
- Facilitate partnerships between clinical and nonclinical providers that provide services and programs to promote safer behaviors (see Box 7-A)
- Make available online directories of organizations that offer services to promote safer behaviors (see Box 7-A)
- Make available information about minors' access to and consent to risk-reduction services and devices in the jurisdiction

Box 7-A. Examples of Population-level Strategies for Health Departments to Support Risk Screening and Risk-Reduction Services

- Monitor prevalence of HIV risk behaviors in jurisdiction through behavioral surveillance or special projects
- Support programs that increase access to risk-reduction information, condoms, and legal, sterile syringes, if allowed in the jurisdiction
- Make available directories of:
 - ◆ risk-reduction services sites
 - ◆ condom distribution sites
 - ◆ legal sources of sterile syringes
 - ◆ substance abuse treatment programs
- Provide technical assistance to clinical and nonclinical providers about these topics:
 - ◆ how to access and strengthen risk-reduction services networks
 - ◆ financial and reimbursement issues
 - ◆ protecting confidentiality and data
 - ◆ security during the referral process



Section 8. HIV Partner Services

Background

HIV partner services comprise a variety of interventions for persons with HIV and their sex and drug-injection partners that can reduce risk of HIV transmission. One initial step involves interviewing persons with HIV (here “called index patients” even if served outside of health care facilities) about partners who are not aware of possible HIV exposure. This is followed by obtaining information to contact these partners; notifying partners of possible HIV exposure; offering partners testing for HIV, sexually transmitted disease (STD) and other infections; providing condoms, prevention information, and counseling; and helping partners obtain risk-reduction services, HIV medical care, and other medical and social services. Partner services can hasten the diagnosis and treatment of HIV and other infections among partners, prevent HIV transmission, and reduce the burden and cost of HIV in communities.

Health departments play a crucial role in both providing population- and individual-level partner services. Some staff may conduct HIV surveillance that identifies case-patients with HIV who warrant voluntary partner services, train partner services specialists, and or inform HIV testing providers in the community about health department partner services. Other staff may directly provide services to index patients or their partners in the general community, nonclinical settings, or clinical settings.

Other sections of this *Summary* address STD services for index patients and their partners (Section 9); use of nonoccupational postexposure prophylaxis (nPEP) and preexposure prophylaxis (PrEP) by HIV-uninfected partners (Section 5); and quality improvement and program evaluation (Section 13).



Recommendations

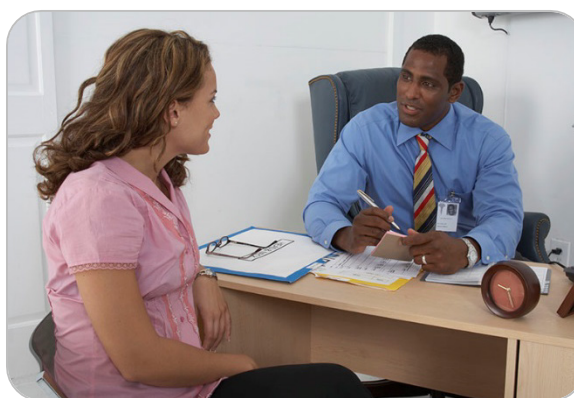
Box 8. Recommendations—HIV Partner Services

Population-level services

- Provide partner services information, resources, advice, and assistance to HIV testing providers in nonclinical and clinical settings as allowed by professional authority and skills (see Box 8-A and Box 8-B-1)
- Establish a partner services program with the following principles: (see Box 8-A and Box 8-B-1)
 - ◆ Adheres to the laws, regulations, and standards of the jurisdiction and protects confidentiality
 - ◆ Promptly identifies index patients who warrant being offered partner services through HIV and STD case surveillance information, referring providers, or other methods allowed in the jurisdiction
 - ◆ Efficiently uses a well-trained workforce that demonstrates culturally appropriate interactions with community members
 - ◆ Expedites services to the highest risk index patients and partners (see Box 8-A)
 - ◆ Considers innovative, evidence-based methods to notify partners (e.g., Internet, social media)
 - ◆ Monitors program effectiveness to guide quality improvement

Individual-level services

- Contact index patients and offer essential services (see Box 8-B-2)
- Notify partners and offer essential partner services (see Box 8-B-3)



Box 8-A. Recommended Strategies to Establish Infrastructure for HIV Partner Services in Health Departments

- Offer information, resources, advice, and assistance to nonclinical and clinical providers who provide HIV, STD, and viral hepatitis services, such as the following^a:
 - ◆ Provider and patient education materials that describe health department partner services and how they can be engaged
 - ◆ Decision-support tools or protocols that describe how to contact the health department regarding index patients who should be offered expedited interviews (e.g., those with acute HIV infection)
 - ◆ Staffing arrangements that expedite partner services at high-volume, high-prevalence HIV testing sites (e.g., assigning health department specialists to work onsite or on an on-call basis)
 - ◆ Information about state or local regulations regarding
 - legal interpretation of any provider responsibilities regarding the duty to inform partners of possible HIV exposure
 - reporting new cases of HIV or STD infection by health care providers and laboratories
- Provide or obtain ongoing training on effective partner services methods that are informed by local epidemiology, jurisdiction requirements, and CDC guidelines on the following topics:
 - ◆ Confidential, respectful, culturally sensitive communication
 - ◆ Assessing the risk of partner violence
 - ◆ Handling of complex or threatening situations in the field
 - ◆ Rights of minors
 - ◆ The effect of changes in health department staffing, HIV testing methods, and HIV surveillance case definitions on partner services priorities
 - ◆ Innovative, effective methods to reach index patients and partners (e.g., Internet and social media sites)
 - ◆ Methods to expedite HIV testing of partners (e.g., rapid, point-of-service tests)
- Establish and use systems to integrate or routinely match HIV and STD surveillance data to identify index patients who are coinfecting with HIV and other STDs
- Establish criteria to expedite interviewing of index patients with the following characteristics:
 - ◆ Acute HIV infection based on laboratory tests (e.g., positive result on HIV p24 antigen test, HIV nucleic acid amplification test, or HIV viral load test; or HIV antibody results indicative of recent seroconversion), or clinical evaluation (i.e., symptoms or signs of acute retroviral syndrome) that is associated with a high risk of HIV transmission
 - ◆ High HIV viral load that is associated with a high risk of HIV transmission
 - ◆ Newly reported or newly diagnosed HIV infection (based on preliminary and/or confirmatory HIV test results as allowed by the jurisdiction)



Box 8-A. Recommended Strategies to Establish Infrastructure for HIV Partner Services in Health Departments (*cont*)

- ◆ Newly diagnosed STDs that indicate recent unprotected sex (i.e., sexual activity without using a physical barrier) and facilitate HIV transmission—primary and secondary syphilis; gonorrhea and chlamydial infection (including rectal infection); herpes simplex virus type 2; and trichomoniasis (in women)
- ◆ Increased risk of HIV transmission due to pregnancy
- ◆ Behaviors that pose a high risk of exposing others to HIV (e.g., multiple, anonymous partners; having unprotected sex with persons with negative or unknown HIV-infection status; sharing drug-injection equipment)
- ◆ A specific request for partner services
- Establish criteria for partners who warrant expedited notification, such as partners with the following characteristics:
 - ◆ Likely to be infected with HIV or STD but unaware of their infection
 - ◆ Had contact with index patients in the 3 months before their HIV diagnoses
 - ◆ Warrant STD testing and presumptive STD treatment because the index patients are coinfecting with STD
 - ◆ Spouses, long-term partners, and other partners who had contact with index patient in the past 12 months
- Establish protocols regarding methods and preferred timeframes to expedite the following partner services:
 - ◆ Communicating with index patients (preferably within 2–3 working days of identifying the index patient) and follow-up communication if the index patient did not provide partner information at the initial encounter (preferably within 2 weeks of the initial encounter)
 - ◆ Notifying partners in person or by phone, letter, email, or other means (preferably within 2–3 working days of obtaining partner locating information)
 - ◆ Providing index patients STD and viral hepatitis screening, reproductive health services, and relevant support services onsite or by linking to another provider (preferably within 2 weeks of initial encounter)^a
 - ◆ Providing partners screening for HIV, STD, and viral hepatitis, evaluation for HIV prophylaxis, and other medical and social services onsite or by linking to another provider
- Periodically evaluate the partner services program to guide quality improvement

Note:

^a Viral hepatitis testing (and treatment of infected persons) has not been shown to influence HIV transmission but is included here because it is often offered in combination with HIV and STD testing for individual and public health benefits.



Box 8-B-1. General Principles of HIV Partner Services Relevant to Health Department Specialists

- Inform index patients and partners referred by patients that partner services
 - ◆ have potential benefits and risks
 - ◆ are voluntary and confidential
 - ◆ can be provided in several ways, including through health department specialists
- Consider various methods to notify partners based on the preferences of index patients and their partners' characteristics (e.g., found through the Internet, risk of adverse reaction), including self-notification and assistance from health departments and providers
- Protect the confidentiality of the index patient and partners and the privacy of their health information
- Communicate in a nonjudgmental, culturally appropriate, and sensitive manner
- Monitor and adhere to changes in jurisdiction regulations that may affect partner services, especially these issues:
 - ◆ Any duty of index patients and providers to inform spouses or other persons of possible HIV exposure
 - ◆ Intimate partner violence, sexual assault, or child or elder abuse when index patients or partners report abuse or when abuse is suspected
 - ◆ Rights of minors
- Explain the role of health department specialists, the notification process, and confidentiality protections
- If the index patient accepts health department partner notification assistance:
 - ◆ Explain the rationale for notifying partners of possible HIV exposure (i.e., partners who had contact with the index patient in the 12 months before HIV diagnoses), with priority given to partners who had contact during the 3 months before HIV diagnosis or during the previous month if the index patient has acute HIV infection or high viral load
 - ◆ Ask the index patient which sex and drug-injection partners have already been notified of possible HIV exposure
 - ◆ Collect contact and other information, using CDC-recommended methods, about sex and drug-injection partners who have not been notified^a
 - ◆ Collect information about physical venues and Internet sites frequented by the index patient or members of his or her social network if using venue-based or social network HIV testing methods^a
 - ◆ Assess barriers and risks to partner notification for each named partner (e.g., physical or verbal abuse), offer advice and services to reduce this risk (e.g., describe measures to prevent partner violence), and defer notification if a risk is apparent
 - ◆ Notify the index patient's partners using CDC-recommended methods^a
 - ◆ Recognize that some index patients prefer to self-notify some partners but request assistance to notify other partners



Box 8-B-2. Essential Elements of Partner Services for Index Patients Provided by Health Department Specialists

- If the index patient declines health department partner services:
 - ◆ Help the index patient develop a plan to notify partners directly or with a clinical provider's assistance as allowed by the jurisdiction
 - ◆ Offer assistance in testing partners for HIV, STD, and viral hepatitis^b
- If the index patient chooses to self-notify any partner without health department assistance, describe:
 - ◆ Possible challenges of self-notification, such as partner violence, and discourage self-notification if a risk is apparent
 - ◆ Self-notification methods for known partners (e.g., in person) and anonymous partners (e.g., established Internet notification programs)
 - ◆ Methods to improve the effectiveness of self-notification (e.g., focus on partners over the previous 3 months or, if diagnosed with acute HIV infection or high viral load, focus on partners over the previous month; use a private, safe setting; anticipate and respond to negative partner reactions; seek provider assistance if questions arise)
 - ◆ Key messages for partners (e.g., how to obtain HIV, STD, and viral hepatitis testing and evaluation in facilities that link partners with positive tests to health care providers or to home HIV testing if the partners decline other testing options)^b
- If the index patient declines partner services assistance through health department, provider, and self-notification:
 - ◆ Re-offer partner services at the next encounter
 - ◆ Notify the index patient's HIV medical provider that partner services should be offered at the next HIV care visit, when appropriate
- Regardless of the partner notification method, promptly offer index patients these services at health department clinical facilities or through linkage to other clinical providers, if not recently provided:
 - ◆ HIV medical care if the index patient is not engaged in care
 - ◆ STD and viral hepatitis testing, evaluation, treatment, vaccination, and counseling^b
 - ◆ Risk-reduction services and devices (e.g., behavioral information, counseling, risk-reduction interventions, latex or polyurethane condoms)
 - ◆ Information about the availability of preexposure prophylaxis (PrEP) and nonoccupational postexposure prophylaxis (nPEP) for HIV-uninfected partners when clinically indicated to reduce their risk of HIV acquisition
 - ◆ Other medical or social services that influence HIV transmission (e.g., substance use treatment, mental health services)

Notes:

^a The first federal guidance in [Appendix A, Section 8](#), describes CDC-recommended methods.

^b Viral hepatitis testing (and treatment of infected persons) has not been shown to influence HIV transmission but is included here because it is often offered in combination with HIV and STD testing for individual and public health benefits.

^c Use of antiretroviral medication for nPEP does not reflect labeling approved by FDA. FDA has approved a PrEP regimen for reducing risk of sexual acquisition of HIV. HHS recommendations for PrEP use advise this regimen for persons at substantial risk of acquiring HIV through injection drug use.



Box 8-B-3. Essential Elements of Partner Services for Sex and Drug-injection Partners

- Notify the partner about possible HIV exposure (and STD exposure if the index patient is coinfecting with STD) without disclosing the identity of the index patient, using CDC-recommended methods^a
- Provide information about HIV, STD, and viral hepatitis infections^b
- Promptly offer the following services onsite at health department health care facilities or through linkage to other clinical providers:
 - ◆ HIV testing if the partner is not known to be HIV-infected (followed by verification of test results)^c
 - ◆ HIV care, treatment, and partner services if a preliminary or confirmatory HIV test is positive
 - ◆ Screening for STD and viral hepatitis if partner is asymptomatic, using tests recommended by CDC^b
 - ◆ Presumptive STD treatment (while awaiting results of STD testing or clinical evaluation) if the partner was exposed to STD
 - ◆ Testing and clinical evaluation for STD and viral hepatitis if partner has relevant symptoms
 - ◆ STD and viral hepatitis care and treatment if the partner is diagnosed with these conditions
 - ◆ Risk-reduction services and devices (e.g., behavioral information, counseling, risk-reduction interventions, latex or polyurethane condoms)
 - ◆ Information about the availability of PrEP and nPEP for HIV-uninfected persons when clinically indicated to reduce the risk of HIV acquisition and referrals to clinical providers who offer prophylaxis
 - ◆ Other medical and social services that influence HIV transmission (e.g., substance use treatment, mental health services)
- Collect information about members of the partners' social network (including physical and virtual venues frequented), using CDC-recommended methods^a

Notes:

^a The first federal guidance in [Appendix A, Section 8](#), describes CDC-recommended methods.

^b Viral hepatitis testing (and treatment of infected persons) has not been shown to influence HIV transmission but is included here because it is often offered in combination with HIV and STD testing for individual and public health benefits.

^c Partners who are unlikely to obtain prompt HIV testing in clinical settings should be linked to HIV testing at community-based organizations or home.



Section 9. Sexually Transmitted Disease (STD) Preventive Services

Background

Sexually transmitted diseases (STDs) are common in persons with HIV and many do not cause obvious symptoms or signs. Five STDs may increase the risk of transmitting HIV: syphilis, gonorrhea, chlamydial infection, and HSV-2 in men and women and trichomoniasis in women. STD preventive services are an essential component of HIV prevention because the diagnosis of an STD is an objective marker of unprotected sexual activity that may result in HIV transmission; certain STDs may increase plasma HIV viral load and genital HIV shedding; and STD treatment may reduce STD-related morbidity and lower the risk of HIV transmission.

Health departments can play a crucial role in identifying persons who are coinfecting with HIV and STD by integrating or matching HIV and STD surveillance data. Health departments can also support specialized STD clinics or community-based STD screening programs, educate the community about STD outbreaks, and ensure laboratory capacity for accurate STD diagnoses.

Other sections of this *Summary* address confidentiality and reporting of HIV and STD information and the duty to warn partners of possible HIV and STD exposure (Section 3); services for sex partners of persons with HIV and STDs (Section 8); and quality improvement and program evaluation (Section 13).

Recommendations

Box 9. Recommendations—STD Preventive Services

- Develop methods to integrate or routinely match HIV and STD surveillance case reports and use these surveillance data to routinely identify populations or individuals with HIV who have new STD infections and may warrant being offered HIV and STD preventive services, including voluntary partner services
- Support efforts to promote STD and HIV prevention for persons with HIV in the community (see Box 9-A)

Box 9-A. Examples of Health Department Strategies to Promote STD Preventive Services that May Prevent HIV Transmission

- Educate providers and laboratories about the following:
 - ◆ The role of STD preventive services in HIV prevention
 - ◆ The latest CDC recommendations for STD screening and treatment
 - ◆ The benefits of screening MSM with syphilis serologic tests and gonorrhea and chlamydial infection in nongenital sites
 - ◆ *N. gonorrhoeae* antimicrobial drug resistance and the need for laboratory capacity for culture and antimicrobial susceptibility testing to evaluate treatment failures
 - ◆ Voluntary health department partner services
 - ◆ Case reporting and surveillance case definitions for STD
- Educate the community about
 - ◆ the local burden of STDs
 - ◆ characteristics of persons with HIV at greatest risk for STD infection and HIV-uninfected partners at risk for HIV (e.g., MSM diagnosed with STD, especially infectious syphilis and rectal gonorrhea or chlamydial infection; young men of color; transgender persons)
 - ◆ the role of STD preventive services in clinical and nonclinical settings for HIV prevention to increase access to routine behavioral risk-reduction services, STD screening services, and latex or polyurethane condoms in clinical and nonclinical settings
- Increase the capacity of laboratories to screen rectal and oropharyngeal specimens for *N. gonorrhoeae* and *C. trachomatis* using NAATs and to monitor gonococcal antimicrobial drug resistance trends using culture tests



Section 10. Reproductive Health Care for Women and Men

Background

Reproductive health care involves several essential services for adolescents and adults with HIV who are of reproductive age and wish to prevent unplanned pregnancies or reduce the risk of sexual HIV transmission when attempting conception.

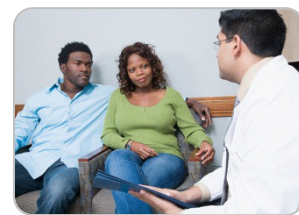
Health departments can take various steps to support access to these services in their communities. These include informing clinical and nonclinical providers about community resources for family planning and preconception counseling and promoting access and coverage of these services through state health plans and medical assistance programs.

Other sections of this *Summary* address methods—including use of ART—to prevent sexual or perinatal transmission of HIV during recognized pregnancies of HIV-infected women or of HIV-uninfected women who have partners with HIV (Section 11); linkage to HIV medical care (Section 4); general aspects of use of ART and antiretroviral prophylaxis (Section 5); methods to reduce sexual transmission of HIV (Section 7); services for sex partners of persons with HIV (Section 8); and quality improvement and program evaluation (Section 13).

Recommendations

Box 10. Recommendations—Reproductive Health Care for Women and Men

- Make available online directories of health care providers and professional advice hotlines that offer reproductive health services to adults and adolescents with HIV
- Provide information to clinical providers about state and local laws regarding minors' access to and consent for reproductive health services
- Prioritize health department partner services for persons with HIV or partners who may be at risk for unintended pregnancy (e.g., adolescents)
- Support efforts and partnerships that increase access to reproductive health services for persons with HIV, including enrollment in private or public sector health plans and use of public sector clinics that serve uninsured persons (e.g., federally funded clinics)



Section 11. HIV Prevention Related to Pregnancy

Background

Pregnant women with HIV can transmit HIV to their fetuses and newborns if they do not use effective prevention strategies. The physiologic state of pregnancy can also increase the risk of sexual HIV transmission from HIV-infected pregnant women to uninfected male partners as well as from HIV-infected male partners to uninfected pregnant women.

Health departments can offer a variety of population-level prevention services for HIV-infected women with recognized pregnancies and pregnant HIV-uninfected women who have HIV-infected sex or drug injection partners. These include informing health care providers about local resources to care for pregnant women with HIV and establishing policies that expedite access to HIV medical care for pregnant women with HIV.

Other sections of this *Summary* address behavioral risk-reduction interventions suited to HIV-infected partners of pregnant women (Section 7); notification of sex and drug-injection partners of pregnant women with HIV or of pregnant sex and drug-injection partners of persons with HIV (Section 8); sexually transmitted disease (STD) services (Section 9); contraception services and reproductive health counseling that can be offered after delivery (Section 10); linking pregnant women to HIV medical care (Section 4); general aspects of use of ART and antiretroviral prophylaxis (section 5) and quality improvement and program evaluation (Section 13).

Recommendations

Box 11. Recommendations—HIV Prevention Related to Pregnancy

These recommendations apply to

- HIV-infected pregnant women (see Box 11-A)
- HIV-infected women who have delivered live-born infants (see Box 11-B)
- HIV-uninfected pregnant women with HIV-infected partners (see Box 11-C)



Box 11-A. Recommended Prenatal Services for HIV-infected Pregnant Women

- Make available online directories of health care providers and professional advice hotlines that offer pregnancy services to women with HIV
- Provide information to clinical providers about state laws regarding consent for HIV testing during the perinatal period and minors' access to and consent for pregnancy services^a
- Prioritize health department partner services for pregnant women with HIV
- Support efforts and partnerships that increase access to pregnancy and perinatal services for persons with HIV, including enrollment in private insurance or medical assistance programs and use of public sector clinics (e.g., federally funded clinics)

Note:

^a For a summary of state HIV testing laws, see "Compendium of state HIV testing laws" (http://nccc.ucsf.edu/wp-content/uploads/2014/03/State_HIV_Testing_Laws_Perinatal_Quick_Reference.pdf). For a summary of minors' access to reproductive health services, see "An overview of minors' consent law" (http://www.guttmacher.org/statecenter/spibs/spib_OMCL.pdf).

Box 11-B. Recommended Postnatal Services for Women with HIV and Their Infants

- Conduct surveillance for HIV-exposed infants
- If allowed in jurisdiction, use surveillance data for public health purposes (e.g., contacting health care providers who report cases of HIV-exposed infants) to ensure that
 - ◆ the infant's infection status is later ascertained and, if infected, ensure that the infant receives clinical care (including the offer of treatment) and the confirmed case is reported to the health department
 - ◆ the mother's HIV infection status is documented and the mother is offered help with starting HIV medical care^a

Note:

^a Authorized uses of perinatal surveillance data vary by jurisdiction.



Box 11-C. Recommended Prenatal Services for Pregnant Women Who Are HIV-uninfected or Have Unknown Infection Status and Have HIV-infected Sex or Drug-injection Partners

- Make available online directories of health care providers and professional advice hotlines in jurisdictions that offer pregnancy services, including PrEP to HIV-uninfected, pregnant women at substantial risk of HIV infection
- Make available information on state laws regarding consent for HIV testing during the perinatal period and minors' access to and consent for pregnancy services^a
- Prioritize health department partner services for HIV-uninfected pregnant women who have HIV-infected partners
- Support efforts and partnerships that increase access to pregnancy and perinatal services for persons with HIV and their partners, including enrollment in public or private-sector health plans and use of public sector clinics (e.g., federally funded clinics)

Note:

^a For a summary of state HIV testing laws, see "Compendium of state HIV testing laws" (http://nccc.ucsf.edu/wp-content/uploads/2014/03/State_HIV_Testing_Laws_Perinatal_Quick_Reference.pdf). For a summary of minors' access to reproductive health services, see "An overview of minors' consent law" (http://www.guttmacher.org/statecenter/spibs/spib_OMCL.pdf).



Section 12. Services for Other Medical Conditions and Social Factors that Influence HIV Transmission

Background

A variety of special medical and social services can support persons with HIV who experience significant personal, social, and structural challenges, such as poverty, mental illness, substance use, and unstable housing. These specialty services can improve health outcomes and quality of life, reduce the risk of HIV transmission, and enable the use of HIV prevention and care services (see [Appendix B](#)). Specialty services can hasten initiation of antiretroviral treatment (ART); support retention in HIV care and adherence to ART; and encourage persons with HIV to engage in risk-reduction interventions, partner services, sexually transmitted disease services, and reproductive health services that prevent HIV transmission.

Health departments can support access to these specialty services using various population-level strategies. They include informing clinical providers and nonclinical providers about sources of specialty services in the community, promoting referral networks that offer these services, and facilitating access to and coverage of these services in state health plans and medical assistance programs.

Section 3 of this *Summary* describes factors that influence the delivery of HIV prevention and care services for special populations with HIV. Section 13 describes methods to improve or evaluate specialty services for persons with HIV.



Recommendations

Box 12. Recommendations—Services for Other Medical Conditions and Social Factors that Influence HIV Transmission

- Support the infrastructure to facilitate delivery of specialty services in the jurisdiction (see Box 12-A)
- Provide information to nonclinical and clinical providers about protecting confidentiality and data security when referring persons with HIV to specialty services (see Box 12-A)
- Support programs and partnerships that increase access to and use of specialty services, including enrollment in health insurance, medical assistance programs, and social services (e.g., housing programs) (see Box 12-A)

Box 12-A. Examples of Strategies to Improve Infrastructure for Specialty Services for Persons with HIV

- Identify gaps in available specialty services, recruit agencies and providers to fill these gaps, and support expansion of specialty services, if needed
- Make available online directories of agencies that provide specialty services to persons with HIV, including minors, rural residents, incarcerated persons, and immigrants
- Provide technical assistance to clinical and nonclinical providers about these topics:
 - ◆ How to access and strengthen specialty services and referral networks
 - ◆ Financial and reimbursement issues
 - ◆ Protecting confidentiality and data security during the referral process



Section 13. Quality Improvement and Program Monitoring and Evaluation

Background

Quality improvement (QI) and program monitoring and evaluation (M&E) methods can be used to determine if interventions are implemented as intended, yield the expected outcomes, or warrant changes in delivery methods. QI usually involves small, incremental changes in practice and rapid feedback of results. It is often an iterative process of repeated cycles of change and feedback that can be integrated into practices and programs as a continuous, routine performance improvement strategy and can be led by internal staff (see Table 13-1).

Program monitoring involves the ongoing, repeated collection and review of information about the activities and operation of a program. Program evaluation involves periodic collection of information about program activities, characteristics, and outcomes in order to assess causal attribution, improve effectiveness, or identify lessons learned. M&E efforts usually address questions of program design, implementation, effectiveness, acceptability, coverage, and cost. Recent federal M&E efforts have focused on monitoring linkage to (and retention in) HIV medical care, antiretroviral treatment (ART) use, and viral suppression, and the collected data and performance measurements are now used by several federal agencies (see Table 13-2).

Health departments can apply these methods to achieve higher standards of HIV prevention and care in health department clinics, more effective community-based programs, and more efficient HIV surveillance programs.

QI and M&E methods can be applied to interventions described in Sections 3 through 12 of this *Summary*.

Recommendations

Box 13. Recommendations—Quality Improvement and Program Monitoring and Evaluation

- Regularly monitor program implementation and periodically evaluate program outcomes according to best practices

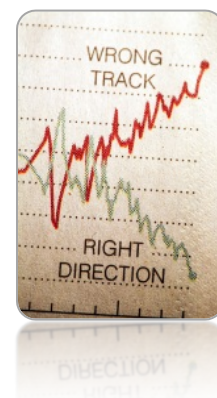


Table 13-1. Example of Quality Improvement (QI) Activities in Health Departments to Improve HIV Partner Services Using the Plan-Do-Study-Act Model)

Step in QI Model	Activities to increase the proportion of persons with acute HIV infection who are offered HIV partner services
Plan	<p>Planned the change and collected baseline data.</p> <p>Conducted review of HIV surveillance and partner services program data that revealed only 60% of case-patients with acute HIV infection were offered HIV partner services by the health department within 3 working days of receipt of case report</p> <p>Set goal to increase the proportion of case-patients with acute HIV infection who are offered HIV partner services within 3 working days of receipt of case report from 60% to 90%</p>
Do	<p>Initiated system changes:</p> <ul style="list-style-type: none"> ■ Informed HIV surveillance and partner services staff about quality improvement plan ■ Developed standard procedures and decision-support tool to rapidly identify acute HIV infection case-patients, alert partner services specialists, and speed offering HIV partner services to case-patients ■ Introduced several small tests of change over 6 months; after each change, measured execution of plans
Study	<p>After 6 months, 85% of case-patients with acute HIV infection case-patients were offered interviews by health department within 3 working days of receipt of case report</p>
Act	<p>Added automatic prompts in partner services database to speed offering interviews to reported case-patients with acute HIV infection</p>

Source:

Adapted from Agins BD. "Quality Improvement." In Guide for HIV/AIDS Clinical Care—2014 Edition. U.S. Department of Health and Human Services; 2014.

<http://hab.hrsa.gov/sites/default/files/hab/clinical-quality-management/2014guide.pdf>.



Table 13-2. Selected Common Core Indicators for Monitoring HIV Prevention, Treatment, and Care Services for Programs Supported by the U.S. Department of Health and Human Services (HHS)

Measure	Numerator	Denominator
Linkage to HIV medical care	Number of persons who attended a routine HIV medical care visit within 3 months of HIV diagnosis	Number of persons with an HIV diagnosis in the 12-month measurement period
Retention in HIV medical care	Number of persons with an HIV diagnosis who had at least one HIV medical care visit in each 6-month period of the 24-month measurement period, with a minimum of 60 days between the first medical visit in the prior 6-month period and the last medical visit in the subsequent 6-month period	Number of persons with an HIV diagnosis with at least one HIV medical care visit in the first 6 months of the 24-month measurement period
Antiretroviral treatment (ART) among persons in HIV medical care	Number of persons with an HIV diagnosis who are prescribed ART in the 12-month measurement period	Number of persons with an HIV diagnosis who had at least one HIV medical care visit in the 12-month measurement period
Viral load suppression among persons in HIV medical care	Number of persons with an HIV diagnosis with a viral load <200 copies/mL at last test in the 12-month measurement period	Number of persons with an HIV diagnosis who had at least one HIV medical care visit in the 12-month measurement period
Housing status	Number of persons with an HIV diagnosis who were homeless or unstably housed in the 12-month measurement period	Number of persons with an HIV diagnosis receiving HIV services in the 12-month measurement period

Source:

Adapted from Forsyth A, et al. *Secretary Sebelius approves indicators for monitoring HHS-funded HIV services*. <http://blog.aids.gov/2012/08/secretary-sebelius-approves-indicators-for-monitoring-hhs-funded-hiv-services.html>. August 3, 2012.

Note: Many programs use additional, program-specific indicators.



Appendix A. Federal Guidance that Served as the Basis for These Recommendations

Section 3: The Context of Prevention with Persons with HIV

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Section 4. Linkage to and Retention in HIV Medical Care

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Appendix B. Factors that Influence Health, HIV Transmission, and Use of Services

Factors that Can Influence Health, Quality of Life, Risk of HIV Transmission, and Use of HIV Prevention, Medical, and Social Services among Persons with HIV; and Specialty Services that Address These Factors

Factor(s)	Possible effect on health, quality of life, HIV transmission, and use of services	Examples of specialty services
Real or perceived alienation, discrimination, or stigma due to HIV infection, sexual orientation, sexual practices, drug use, race, ethnicity, age, gender, or other factors	<p>Factors may</p> <ul style="list-style-type: none"> ■ impair access to medical care, housing, or employment that can promote use of HIV prevention and care services ■ cause physical and mental health problems, which can increase risk behaviors, substance use, or immunosuppression ■ limit social support that can foster retention in HIV medical care, adherence to ART, transportation, housing, and use of other medical and social services that influence HIV transmission ■ cause gay, lesbian, or transgender persons to defer HIV testing, prevention, or care services 	<ul style="list-style-type: none"> ■ Legal services ■ Psychosocial services ■ Mental health services ■ Substance abuse treatment and counseling ■ Supportive housing services
Poverty, unemployment, food insecurity, and unstable housing	<p>Factors may</p> <ul style="list-style-type: none"> ■ lead to behaviors that can increase the risk of HIV transmission (e.g., exchanging sex for housing and money, sharing drug-injection equipment) ■ hinder access to health insurance, medical care, ART, support for adherence to ART, risk-reduction interventions (e.g., condoms and sterile drug-injection equipment), and other medical and social services <p>Malnutrition and inconsistent access to food may also</p> <ul style="list-style-type: none"> ■ weaken immune function and impair adherence to and absorption of ART, which may influence viral load and infectiousness <p>Unstable housing or reliance on temporary shelter may also</p> <ul style="list-style-type: none"> ■ hinder the security and storage of ART and prevention devices (e.g., sterile drug-injection equipment and condoms) ■ complicate adherence to ART 	<ul style="list-style-type: none"> ■ Public income assistance ■ Job training and employment support ■ Nutrition services, counseling, food stamps, food banks, and soup kitchens ■ Housing services: rental assistance, community shelters, supportive housing ■ Case management and navigation services to assist with enrollment in services



Factor(s)	Possible effect on health, quality of life, HIV transmission, and use of services	Examples of specialty services
Inadequate health insurance or access to affordable health care services	<p>Factors may</p> <ul style="list-style-type: none"> ■ impair access to HIV medical care, ART, support for adherence to ART, risk-reduction interventions, condoms, sterile drug-injection equipment, and other medical and social services 	<ul style="list-style-type: none"> ■ Private health insurance and medical assistance programs ■ Case management and navigation services to assist with enrollment and managing copayments and coinsurance
Limited education and health literacy	<p>Factors may</p> <ul style="list-style-type: none"> ■ impair understanding of the biologic or social basis for HIV transmission, prevention, and care ■ impair understanding of educational materials about HIV prevention, care, and medications ■ impair navigation of complex health systems and social service providers 	<ul style="list-style-type: none"> ■ Health literacy and peer education services ■ Job training and employment support services ■ Case management and navigation services to assist with understanding information about medical and social services
Recreational substance and alcohol use and dependence, including drug injection	<p>Substance use may</p> <ul style="list-style-type: none"> ■ impair judgment, cause disinhibition, and increase sexual and drug-injection risk behaviors ■ contribute to unstable and unstructured lifestyles, which can complicate regular HIV care and adherence to ART ■ lead to social isolation, which can hinder recruiting of family and friends to support safe behaviors and adherence to ART ■ cause mental illness and immunosuppression <p>Sharing nonsterile drug-injection equipment may</p> <ul style="list-style-type: none"> ■ transmit HIV and other bloodborne infections 	<ul style="list-style-type: none"> ■ Substance abuse treatment and counseling, including opioid replacement programs ■ Legal syringe services programs ■ Legal physician and pharmacist syringe prescriptions or distribution ■ Risk-reduction interventions for substance abusers and persons who inject drugs
Fear or risk of physical or verbal abuse, including domestic and intimate partner violence	<p>Factors may</p> <ul style="list-style-type: none"> ■ impair ability to negotiate safer sexual and drug-use behaviors ■ impair ability to retain stable housing and financial resources that foster retention in HIV care and adherence to ART 	<ul style="list-style-type: none"> ■ Domestic violence/abuse counseling ■ Mental health services that address abuse ■ Legal services, including child protection ■ Housing services: rental assistance, community shelters, supportive housing ■ Job training and employment support

Factor(s)	Possible effect on health, quality of life, HIV transmission, and use of services	Examples of specialty services
Commercial sex work, sexual coercion, and sexual assault	<p>Factors may</p> <ul style="list-style-type: none"> ■ result in inability to negotiate consistent condom use ■ result in trauma that may result in bloodborne HIV exposure 	<ul style="list-style-type: none"> ■ Sexual assault services ■ Mental health services ■ Behavioral risk-reduction interventions ■ Psychosocial support services (e.g., group or peer support) ■ Condom provision ■ Sex worker unions or advocacy organizations ■ Legal services if charged with sex-related violence or offense
Mental illness and psychological conditions, including depression, emotional distress, anxiety, and social isolation	<p>Factors may</p> <ul style="list-style-type: none"> ■ coexist with substance use ■ impede willingness or ability to seek prevention services or use prevention strategies ■ impair judgment and increase sexual and drug-injection risk behaviors that can expose others to HIV ■ lead to unstable and unstructured lifestyles, which can hinder regular HIV care and adherence to ART ■ lead to social isolation, which can hinder recruitment of family and friends to support safe behaviors and adherence to ART 	<ul style="list-style-type: none"> ■ Mental health services ■ Substance abuse treatment and counseling ■ Psychosocial support services (e.g., group or peer support) ■ Specialized support for ART adherence (e.g., directly observed therapy) ■ Risk-reduction interventions for substance users
Legal issues, including incarceration and laws criminalizing sex work, drug possession, and intentional HIV exposure	<p>Criminalization laws may</p> <ul style="list-style-type: none"> ■ deter possession or use of condoms and sterile syringes ■ deter voluntary HIV disclosure and use of HIV care and other services that promote ART use and safe behaviors <p>Incarceration may</p> <ul style="list-style-type: none"> ■ result in exposure to sexual violence ■ lead to sharing of drug-injection equipment ■ interrupt HIV care, ART use, substance use treatment, and other HIV-related services during incarceration or after release 	<ul style="list-style-type: none"> ■ Legal services ■ Sex worker unions or advocacy organizations ■ Mental health services ■ Substance abuse treatment and counseling in correctional facilities and the community ■ Case management and navigation services to assist with service linkage and coordination before and after detention
Immigration status	<p>Factor may</p> <ul style="list-style-type: none"> ■ deter HIV disclosure or prompt fear of arrest, detainment, or deportation that may deter or delay HIV services ■ prohibit HIV care, ART use, and prevention services if person cannot provide documentation to confirm eligibility for services 	<ul style="list-style-type: none"> ■ Clinics and community-based organizations that serve immigrants ■ Translation services ■ Legal services

Factor(s)	Possible effect on health, quality of life, HIV transmission, and use of services	Examples of specialty services
Cultural and linguistic background, gender identification, and sexual orientation	<p>Factors may</p> <ul style="list-style-type: none"> ■ cause stigma or discrimination ■ impair ability to find service providers who have common language skills, understand cultural norms about HIV prevention and care, or have experience in health care for gay, lesbian, and transgender persons ■ hinder ability to access and understand HIV prevention information or to communicate with some service providers ■ reduce willingness to consider unfamiliar HIV treatment or prevention strategies, including ART 	<ul style="list-style-type: none"> ■ Clinics and community-based organizations that serve relevant populations ■ Translation services ■ Psychosocial counseling and support services (e.g., group counseling, peer support) ■ Legal services that address discrimination
Lack of transportation or childcare	<p>Factors may</p> <ul style="list-style-type: none"> ■ hinder access to regular HIV medical care that enables use of ART and reinforces safer behaviors ■ caused missed appointments for HIV prevention and care services 	<ul style="list-style-type: none"> ■ Transportation assistance ■ Public transit vouchers ■ Onsite childcare ■ Vouchers for childcare
Residence in rural or urban areas with limited medical and social services	<p>Factors may</p> <ul style="list-style-type: none"> ■ require traveling long distances to skilled service providers ■ cause reliance on local providers who may not have experience in HIV prevention and care ■ increase risk for confidentiality violations and may hinder HIV disclosure to supportive providers, partners, family, and friends 	<ul style="list-style-type: none"> ■ Transportation services ■ Telemedicine services ■ Case management and navigation assistance to assist with service linkage and coordination
Adolescence and legal minor status	<p>Factors may</p> <ul style="list-style-type: none"> ■ hinder access to HIV services because of lack of awareness about ability to access services without parental consent and concern about confidentiality of medical records ■ preclude having an established health care provider, having experience navigating HIV services, or having documents to confirm eligibility for HIV services (e.g., family income records needed for medical assistance programs) ■ hinder access to age-appropriate specialty services (youth-friendly services) ■ hinder HIV disclosure because of fear of parental abuse, loss of financial support or housing, or stigma about sexual or drug activity 	<ul style="list-style-type: none"> ■ Youth-friendly services ■ Health literacy and peer education services ■ Psychosocial counseling and support services (e.g., group counseling, peer support) ■ Housing services for homeless youth ■ Case management and navigation assistance to assist with care coordination

Factor(s)	Possible effect on health, quality of life, HIV transmission, and use of services	Examples of specialty services
Advanced age	<p>Factor may lead to</p> <ul style="list-style-type: none"> ■ cognitive decline, comorbid health conditions, and social isolation that may impair adherence to ART ■ loss of longstanding sex partners or sexual function that may lead to new or casual partners ■ use of sexual performance devices that may cause genital trauma ■ use of erectile dysfunction medication that may increase sexual behavior that may increase the risk of HIV transmission 	<ul style="list-style-type: none"> ■ Mental health services ■ Health literacy and peer education services ■ Psychosocial counseling and support services (e.g., group counseling, peer support) ■ Case management and navigation assistance to assist with care coordination



