

CHAPTER 4

Prevention Interventions and Prioritization



Prevention Interventions and Prioritization

In the last few years HIV programs have witnessed a shift toward an approach that addresses individuals' needs in the context of their own lives, with a focus on a broad set of issues. HIV providers have found ways to create an integrated service delivery system that links those living with HIV and at risk for HIV with services such as substance abuse, mental health, STD and hepatitis screening and treatment. Providers need to use strategies and interventions that are responsive to the daily realities faced by people living with or at risk for HIV.

The HIV Community Planning Group (CPG) elected to merge care and prevention planning in 2002. The Serostatus Approach to Fighting the HIV Epidemic (SAFE) recommended by Gayle (2000) serves as the overarching theme of the chapter. The chapter is divided into three sections. Information is presented with the explicit understanding that it is a guide and a resource for prevention and care planning and program design.

Section 1 – Crosscutting Themes: SAFE, Recommendations, and Behavior Theory

Section 1 begins with a description of the Serostatus Approach to Fighting the HIV Epidemic. Crosscutting themes and general recommendations for the planning, design, and implementation of programs are presented to provide guidance for providers developing programs. Principles that apply to both HIV prevention and care are presented. A discussion of behavior theory and its application to HIV prevention and care efforts is included.

Section 2 – Prevention: Interventions, Cost Effectiveness, Barriers

Interventions for HIV prevention are presented with the understanding that the types of prevention information, messages, and mode of delivery should be dictated by the specific and current prevention and care needs of the target population. Interventions are presented in discrete categories. The CPG recognizes the complementary nature of these strategies and interventions in the development of comprehensive prevention programs. Providers are encouraged to combine theories, strategies, and interventions, or elements of each of these, in the development of their HIV prevention programs.

Formidable barriers to presenting HIV prevention information to at-risk populations in Iowa exist. Providers have used a number of methods to address these barriers. A description of barriers to reaching these populations and possible strategies to overcoming these barriers and cost-effectiveness of implementing prevention programs is discussed.

Section 3 – Intervention Sets for Target Populations

This chapter concludes with the tangible products of the CPG's work in the identification and prioritization of interventions for target populations. Section 3 provides Fact Sheets on the programs and curriculums in the intervention sets.

Section 1 - Crosscutting Themes

SAFE

General Recommendations

Program Components

Organizational Components

Minimum Standards of Service

SPICE Principles

Behavior Theory

Health Belief Model

Social Cognitive Theory

Stages of Behavior Change Model

Theory of Reasoned Action

Diffusion of Innovation Theory

Empowerment Theory

Social Networks and Social Support

SEROSTATUS APPROACH TO FIGHTING THE HIV EPIDEMIC

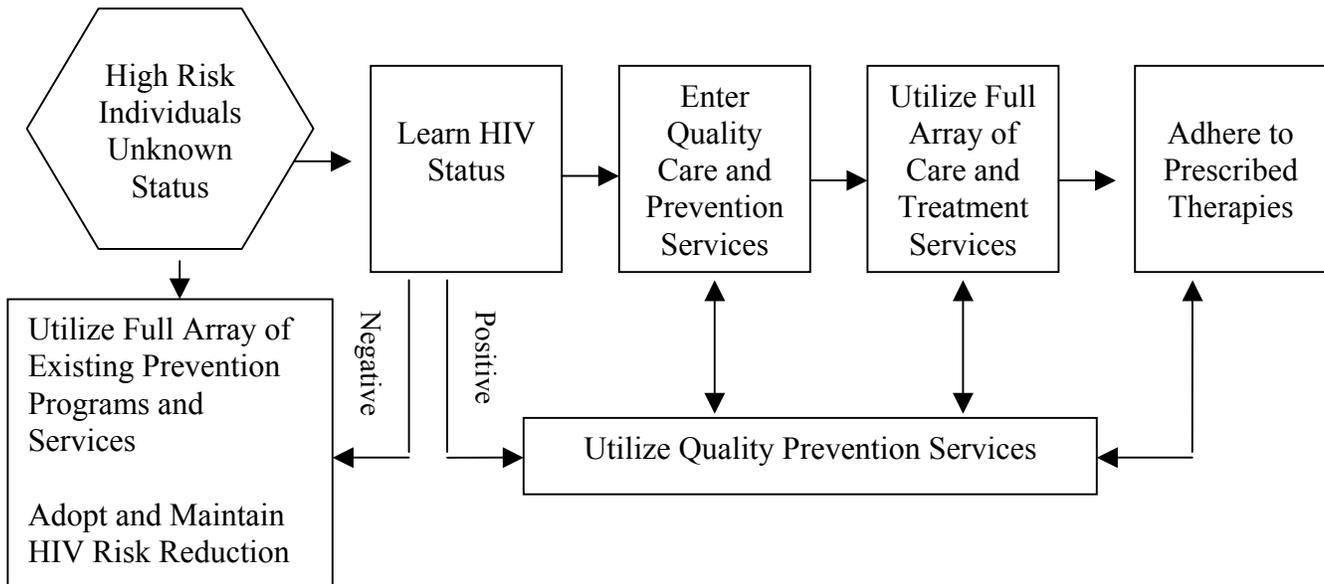
The SAFE approach represents an accessible continuum through which high-risk individuals, both positives and negatives, receive optimal prevention and treatment services (Gayle, 2000).

SEROSTATUS APPROACH	
<i>HIV prevention activities directed towards HIV-positive individuals and high-risk individuals who are either HIV-negative or do not know their serostatus</i>	
Definition/Description	This strategy directs HIV prevention activities toward HIV-positive individuals and high-risk individuals who are either HIV-negative or do not know their serostatus. The goal is to direct people to appropriate interventions based on their serostatus.
Implementation Recommendations	<p><i>Agencies should:</i></p> <ul style="list-style-type: none"> ▪ Encourage clients to learn their serostatus, using safe, confidential, culturally sensitive referrals to counseling and testing. ▪ Develop linkages and partnerships with agencies that provide care services and prevention for positives. <p><i>For high-risk HIV-negative individuals, agencies should:</i></p> <ul style="list-style-type: none"> ▪ Refer clients to appropriate HIV prevention programs that focus on risk reduction. <p><i>For HIV-positive individuals, agencies should:</i></p> <ul style="list-style-type: none"> ▪ Refer clients to appropriate HIV/AIDS health services. ▪ Refer clients to HIV prevention programs for PLWH that focus on risk reduction. ▪ Refer seronegative partners to appropriate HIV prevention programs.
Strengths	<p><i>The serostatus approach can:</i></p> <ul style="list-style-type: none"> ▪ Reach individuals who do not know their serostatus. People who know they are HIV positive are more likely to take action to protect their partners. ▪ Help prevent opportunistic infections for HIV-positive individuals through referrals to treatment, and thus potentially decrease their ability to transmit HIV. ▪ Address the risks of clients' partners. ▪ Provide much-needed links between prevention and care services.
Limitations	<p><i>The serostatus approach may:</i></p> <ul style="list-style-type: none"> ▪ Not reach high-risk individuals who do not know their serostatus who are members of marginalized or hard-to-access populations. ▪ Be difficult to implement given the segmentation of prevention and care funding.

The following diagram illustrates a continuum through which high-risk HIV-negative individuals and those living with HIV receive optimal prevention and treatment services. In this continuum:

- Individuals determine their HIV status through voluntary HIV testing and counseling as early as possible after infection;
- If they are negative, they utilize the full array of existing prevention interventions and care services to adopt and maintain HIV risk reduction;
- If they are HIV positive, they utilize quality prevention services and work to adopt and sustain lifelong protective behaviors to avoid transmission of the virus to others;
- If they are HIV positive, they enter the care system as soon as possible to reap the benefits of primary care and treatment;
- Once in the care system, they benefit from comprehensive quality services, including mental health and substance abuse services, treatment for HIV infection, opportunistic infections, and other infections such as STDs and TB; and

- In conjunction with their providers and support networks, they work to develop strategies to optimize adherence to prescribed therapies.



PERSONS LIVING WITH HIV (PLWH)

An essential component of SAFE is the inclusion of primary prevention programs and care services for persons living with HIV. The following table provides an overview of prevention interventions and care services for persons living with HIV, including a description, implementation recommendations, and strengths and weaknesses.

PREVENTION AND CARE FOR PERSONS LIVING WITH HIV <i>Any intervention whose target population is HIV-positive individuals</i>	
Definition/Description	The content of the intervention is designed to address the specific prevention needs of HIV-positive persons. Prevention for positives encompasses both primary prevention (i.e., prevention of HIV transmission to others), secondary prevention (i.e., health promotion and prevention of HIV disease progression), and STD prevention.
Implementation Recommendations	<ul style="list-style-type: none"> ▪ PLWH utilize prevention services and work to adopt and sustain lifelong protective behaviors to avoid transmission of the virus to others. ▪ PLWH enter the care system to reap the benefits of primary care and treatment. ▪ Once in the care system, PLWH benefit from comprehensive quality services, including mental health and substance abuse services, treatment for HIV infection, opportunistic infections, and other infections such as STDs or TB or Hepatitis. ▪ In conjunction with their providers and support networks, PLWH work to develop strategies to optimize adherence to prescribed therapies.
Strengths	<ul style="list-style-type: none"> ▪ PCM involves HIV-positive individuals in the prevention of HIV transmission, when most efforts to date have focused on HIV-negative persons. ▪ PCM can provide much-needed links between prevention and care services.
Limitations	<ul style="list-style-type: none"> ▪ PCM has not been thoroughly evaluated; little is known about maximizing effectiveness. ▪ PCM may be difficult to implement due to segmentation of prevention and care funding. ▪ PCM faces many barriers to implementation, including legal (e.g., criminalization of non-disclosure of HIV status), policy (e.g., lack of funding for prevention for positives), and environmental barriers (e.g., stigma).

GENERAL RECOMMENDATIONS

In developing guidelines for programs outlined in this chapter, several themes emerged that cut across all prevention and care services. For this reason, a set of general recommendations for program design, implementation, and evaluation was developed that applies to all HIV providers.

PROGRAM COMPONENTS

Defining the Target Population

The more well defined the population the more effective and cost-effective the program. High levels of knowledge and awareness about HIV/AIDS have resulted in interventions that target the general population being less relevant. Behavioral risk, gender, age, sexual orientation, ethnic or cultural identity, HIV serostatus, or a combination of these factors can define target populations. Defining the target population allows providers to better assess the particular prevention or care needs of the group and design responsive programs.

Needs Assessment

Assessing the needs of the target population or community is the first step in designing a program that addresses the relevant HIV-related issues of that group. One purpose of looking into these needs is to identify the degree of risk for HIV faced by a particular community or target population.

- Do they lack knowledge?
- Do they need behavior modification skills?
- What are the barriers to HIV prevention for this population and how can they be overcome?
- What are the barriers to accessing HIV care services and how can they be overcome?

The knowledge gained from the needs assessment is used to define the program by allowing the provider to define its target group and state the problem in behavioral terms. A description of the current services (or gaps in services) targeting this group can also be included. The target population must be allowed an active role in this assessment.

A needs assessment is important to gauge commitment and timing requirements for its audience, and to measure the feasibility of a proposed intervention within political and contextual constraints. In addition, needs assessments should identify the most effective venues and media for prevention work, the conditions of client participation, the levels of need and interest in the community for different intervention types, and the kinds of cultural/linguistic competence and organizational capacity necessary for an intervention to take hold. Services should be provided in the appropriate language(s) and at the appropriate literacy and developmental levels of the target population. The hours that services are provided need to be flexible to accommodate the needs of the target population.

Needs Assessment Resources

CAPS Fact Sheets: <http://www.caps.ucsf.edu/>

Chapter 3: Needs Assessment and Prioritization of Target Populations

Program Design

Program design begins with the needs assessment as described above, first to define the problem and then to define the program to address these needs. The actual plan for the program is outlined in its objectives. A program's objectives describe specific activities to be carried out by staff (process objectives) and expected changes that will result because of the intervention (outcome objectives). Objectives always consist of statements identifying who, what, when, where, and how much. Interventions are selected that are reflective of the needs assessment results and are feasible given the resources available, and a plan to implement the program is designed. The final piece is the design of an evaluation plan.

A strong program design includes the following elements (CDC, 1999a)

- *A target population that is clearly defined (e.g. behavioral risk population, race, ethnicity, gender, age)*
- *Clearly defined goals and specific objectives*
- *Behavioral theory as its foundation*
- *A focus on reducing specific risk behaviors through practicing skills*
- *A realistic timeline for implementing activities and achieving objectives*

Program Planning and Design Resources

Program Planning: <http://hivinsite.ucsf.edu/InSite>

Effective Interventions: <http://www.cdc.gov/hiv/pubs/hivcompendium/hivcompendium.htm>

Program Evaluation

Program evaluation determines whether a program is being delivered as planned (process evaluation) and whether the program's objectives are being met (outcome evaluation). Evaluation tells providers whether and how their interventions and programs are working and may also include assessing client satisfaction with services.

The completion of evaluation tasks allows program directors to document successful programs and to identify areas that need to be modified to better serve the target population. Ongoing evaluation processes determine whether the program's objectives are being met and the expected outcomes of the intervention are being fulfilled. For this reason, organized evaluations are critical to the continuation and development of effective programs. Documentation of work, data collection, data analysis, and regular reports are among the tasks that must be built into program structure to demonstrate that a program is meeting its objectives, to assure quality services are being delivered, and to justify continuation. Appropriate staff time and expertise should be allocated to evaluation activities. The integration of evaluation tools into program structure may save a program that is failing to meet its expected outcomes through early diagnosis of problems. When appropriate, evaluations should incorporate client input.

Prevention Data Collection Requirements

In an effort to better document service delivery, all Iowa Department of Public Health HIV/AIDS prevention funded agencies are required to collect and submit the following data for each health education and risk reduction intervention used in their program. Data is submitted using IDPH's web base reporting system. This information is used to improve the quality and effectiveness of HIV prevention projects in Iowa.

<u>Data</u>	<u>Example</u>
▪ Type of Agency	ASO, Health Department, CBO, etc.
▪ Risk Population	MSM, IDU, Youth, etc.
▪ Client Demographics	Race/ethnicity, age, and sex
▪ Setting	Office, street, bar, bathhouse, etc.
▪ Number of interventions	How many groups or outreach encounters
▪ Staffing	Number of FTE staff used to provide this intervention
▪ Expenditures	Amount of funds expended for this intervention

Care Data Collection Requirements

In an effort to better document service delivery, all Ryan White Title II Care Consortia are required to collect and submit the following data for services provided by their program. Data is submitted to IDPH using a standard data base system. This information is used to improve the quality and effectiveness of HIV care delivery services in Iowa.

<u>Data</u>	<u>Example</u>
▪ Type of Agency	CBO, ASO, Health Department
▪ Provider Type	Hospital, Clinic, Community Health Center, CBO, etc.
▪ Especially Targeted Populations	Migrant or seasonal farm workers, Rural, Women, Race/Ethnic Minorities/Communities of Color, IDUs, etc.
▪ Staffing	Number of FTE staff funded by any Title of the CARE Act
▪ Expenditures	Amount of all Titles funding
▪ Client Demographics	Serostatus, Race/Ethnicity, age, sex, household income, etc.
▪ Services Provided	Case Management, Housing Services, Oral Health Care, etc.
▪ Exposure Category	MSM, IDU, Perinatal, Heterosexual, etc.

Developing Goals and Objectives

A **goal** is defined as a long-range broad general statement, which expresses an expected level of program accomplishment. The goal establishes the relationship between the results of the objectives and activities, and the desired long-term accomplishment.

Goal (example): *To increase awareness about HIV transmission and prevention among youth at the runaway/homeless youth facility in the inner city section of Anytown, Iowa.*

Objectives are designed to assist in attaining the project goal. It is possible to have several objectives for each goal. Each objective must have an ‘Activities’ and ‘Evaluation’ section.

Objectives include the following:

- a time frame for the intervention (when)
- the MSM population of the intervention (to whom)
- the number of participants to be reached (how many)
- the expected measurable result or benefit (what)
- the geographic location or intervention locale (where)

Objectives (examples):

- * *By December 31, 2004 (by when), 270 runaway/homeless youth ages 12-18 (who, how many) will be provided with a six session small group level intervention utilizing the Be Proud, Be Responsible Curriculum (what) in Anytown, Iowa (where).*
- * *By December 31, 2004 (by when), 500 injecting drug users (who, how many) living in Anytown, Iowa (where) will receive one-on-one street outreach HIV prevention counseling, through neighborhood CBO's or drug treatment center staff (what).*
- * *By December 31, 2004 (by when), fifty men who have sex with men at risk in Anytown (who, how many, where) will participate in a twelve session group level HIV risk reduction education skills training (what).*

Activities are the steps essential to achieve the objectives, and are necessary to track progress. Activities should be specific, realistic and time-phased but do not have to be numerically/statistically measurable. They should present what specific actions will occur, when, by whom, and why:

Activities (examples):

- * *By January 2004, employee A will review curriculum with advisory committee to evaluate content.*
- * *By February 28, 2004, notices for the sessions will be posted throughout Anytown by project volunteers to advertise 2nd quarter sessions.*

Evaluation is the ongoing measurement of effort and progress toward achieving objectives. Evaluation documents success (improvements) in program implementation and will determine if the program follows the initial design. Successful evaluation is both quantitative (documenting number of recipients/participants, number of educational sessions, number and nature of materials distributed, demographic characteristics, etc.), and qualitative (documenting the benefits realized, effect on participants, acceptance of the program, etc.).

Evaluation (Examples):

- * *At the conclusion of four group sessions (by when), participants will demonstrate an average pre-post test gain in knowledge (outcome) of at least 20% (how much) on a competency test (how measured) on modes of transmission of HIV infection and risk reduction behaviors.*
- * *Workshop participants will complete questionnaires before and after completion of the workshop session. At least a 25% increase will be shown in the number of respondents indicating that they would feel comfortable bringing up safer sex with a potential sexual partner.*

Example of tools that can be used as an evaluation

- *Knowledge, attitudes, beliefs and behavior survey (KABB)*
- *use or adapt existing KABB's*
- *get baseline data for comparison*

- Youth (or other population specific) risk, behavior surveys (YRBS)
 - use or adapt existing KABBS
 - get baseline data for comparison
- Pre/Post tests
 - use or adapt existing tests
- information from record-keeping systems
 - telephone logs
 - street outreach logs/contact sheets
 - referral sheets
 - time sheets
- scrapbook or news clippings
- satisfaction questionnaires
- intake sheets

If more than one intervention is used, there must be separate objectives, activities and evaluation for each intervention.

Prevention and Care Messages

Prevention and care messages should be concise, relevant, and appropriate to the target population. It is important that messages address the target audience member in a socio-cultural context with recognition of the whole person and the complex realm of interests, needs, and concerns.

Providers need to keep in mind the intent of prevention interventions: to effect changes in behaviors that put people at risk for HIV.

Prevention and care messages should raise awareness that HIV does not exist in a vacuum. Providers must use messages that speak to the whole person and her or his complex realm of interests, needs, and concerns, instead of focusing only on HIV. Some issues that can be productively linked when providing HIV prevention and care services are STDs, substance abuse, racism, sexism, homophobia, biphobia, immigration, poverty, homelessness, unemployment, youth issues, domestic violence, pregnancy and contraception, health care, mental health stressors, survival sex, rape, suicide, and access to social services. Designing prevention and care messages in collaboration with members of the target audience is an effective way to address these kinds of issues with appropriate language and sense of context.

Behavior Change Counseling

Providing information and education is an important step in both HIV prevention and care. All individuals who use HIV services should be offered the opportunity to participate in individualized behavior change counseling, either by a prevention or care provider or through referral. Building skills and creating social norms for adopting healthy behaviors are critical when focusing on behavior change. To effectively promote behavior change, providers need to be aware of and address the behaviors of their target populations. The community needs assessment can inform program planners about where to focus these efforts.

Individual Skills Building

The intent of prevention interventions is to effect changes in behaviors. Case managers work with clients to improve access to services, which may also include behavior change strategies. Providing information and education, building skills, and creating social norms for adopting behaviors are critical when focusing on behavior change. Approaches used should be interactive. For example, activities such as role-plays help individuals develop a sense of self-efficacy in adopting health-promoting behaviors.

Recruitment and Retention

Recruitment and retention of participants in HIV prevention programs and support groups can be challenging. Providing incentives such as food, food vouchers, transportation tokens, or condoms, bleach kits, health kits, and clean works can be useful for some target populations. Attention to recruitment and retention of staff and volunteers is critical for the continuity of programs. This in turn contributes to agency credibility and helps promote community trust.

Risk and Harm Reduction

HIV efforts should aim to reduce people's risk, not necessarily eliminate risk altogether. A harm reduction approach acknowledges that people engage in unhealthy behaviors and seeks to reduce the harm that results from the behavior. Prevention interventions and case management strategies should contain harm reduction options for clients.

HARM REDUCTION	
Definition/Description	This strategy accepts that harmful behavior exists, and the main goal is to reduce the negative effects of the behavior rather than ignore or pass judgment on the person or the behavior. The term "harm reduction" is used most often in the context of drug use, but the approach can be used with sexual risk behavior as well. A harm reduction approach encourages safer drug use or sexual practices among those engaging in high-risk behaviors and acknowledges the social and environmental factors such as poverty and racism that affect drug use and sexual practices.
Implementation Recommendations	<p><i>A harm reduction approach must:</i></p> <ul style="list-style-type: none"> ▪ Attempt to reach clients "where they are" to assist them in making choices toward better health. ▪ Be attentive to the health and well-being of the entire person in considering when to use harm reduction options.
Implementation Requirements	<ul style="list-style-type: none"> ▪ A harm reduction approach should be designed for a specific target audience, taking into consideration the population's norms and behaviors.
Strengths	<p><i>A harm reduction approach can:</i></p> <ul style="list-style-type: none"> ▪ Be used in an institutional (e.g., drug treatment facility) or community (e.g., outreach) setting. ▪ Encourage safe injection practices and condom use. ▪ Encourage positive risk reduction attitudes. ▪ Provide linkages to drug treatment.
Limitations	<p><i>A harm reduction approach:</i></p> <ul style="list-style-type: none"> ▪ Does not eliminate the potential harmful effects of a behavior. ▪ May not be as useful for individuals not ready to change harmful behaviors. ▪ May lead to increased harmful behavior if not implemented well (e.g., a harm reduction message that encourages withdrawal before ejaculation could inadvertently lead to decreased condom use or increased number of sex partners).

Community Involvement and Trust

All HIV programs should strive to stimulate community involvement through cultivation of community trust over time. Staff and volunteers must be nonjudgmental, open, compassionate, trustworthy, dedicated, sensitive, and responsive to community needs. Where appropriate, community members should be invited to participate in the development and implementation of programs.

Multiple Approaches

HIV programs are more likely to reach target populations if a variety of approaches are employed. Therefore, providers need to strive toward implementing a combination of several methods, or to work closely with other programs targeting similar communities, to assure that the multiple needs and issues of the target population are addressed. Providers should use multiple communication methods and design consistent messages that address the issue from more than one perspective.

Cultural Competence

Organizations must adhere to and demonstrate a philosophy of cultural competence and proficiency as characterized by acceptance of and respect for difference, continuing self-assessment regarding culture, careful attention to the dynamics of difference, and continuous expansion of cultural knowledge and resources. This philosophy should not be limited to communities of color. It is incumbent upon organizations providing HIV services to demonstrate competency in addressing the diverse needs of the populations they serve in terms of age, gender, substance use, socioeconomic status, sexual orientation, linguistics, and geographic settings.

Linkages and Coordination

HIV prevention and care programs should share the larger goal of creating a coordinated system of referral to other social services. HIV prevention can be just one component of a set of services addressing multiple issues relevant to the community. Coordination of services enables clients to access information, especially about HIV prevention, that they might not otherwise receive. It can also be an excellent way for providers to provide outreach to clients at risk. Social services that can be coordinated with HIV services include substance abuse treatment; immigration services; legal services; general assistance; mental health and primary health care services; shelters for homeless; shelters for battered women and children; rape crisis counseling; child protective services; suicide prevention; job training and placement; youth and runaway services; family planning; STD care and prevention; services for people with physical, emotional, and/or learning disabilities; and hepatitis testing, care and prevention.

ORGANIZATIONAL COMPONENTS

Service Delivery Training

Training is an essential component of any HIV program and should be incorporated into proposals and contracts. Without adequate training, both clients and staff are at risk for misinformation. Training should be available for and provided to volunteers, peer educators, and paid staff. Scheduling constraints should be respected for volunteers and peer educators, who often have to balance their program work with other jobs or with school. Training may include:

- Cultural competency regarding the target population
- Current issues in HIV/AIDS
- Local HIV/AIDS and other health and social services resources
- Referrals
- Curriculums developed for specific interventions
- Capacity building for evaluation

Policies and Procedures

All HIV providers should develop and write a comprehensive policies and procedures manual. Critical policies include a confidentiality policy, a feedback and grievance procedure, and safety policies for staff and volunteers. It is important to encourage continuous input and feedback from clients and volunteers about their perceptions of the agency's sensitivity to its target populations. Formal grievance procedures outlining how complaints or disputes are resolved should also be developed. Other policies and procedures may include step-by-step instructions for how to deliver an intervention, protocols for reporting unusual incidents such as injuries, and workplace rules and regulations.

Volunteers

Volunteers need to be offered training and support opportunities similar to those available to regular staff. The expectations an agency has for its volunteers should be clearly delineated at the outset of the training. Volunteers should be made aware of the rules and regulations applying to all personnel. Volunteers should be well supervised for consistent quality control within the agency.

Issues to consider when taking on volunteers include:

- *Physical safety*
- *Possible health hazards*
- *Incentives in lieu of pay to improve recruitment and retention.*

The needs of volunteers should be considered and met with appropriate services. For example, volunteer safety in street outreach situations should be protected through the use of outreach pairs or teams, or through some other mechanism for supervision. The possible health hazards of the job should be seriously addressed for volunteers.

Incentives should be considered as a possibility for recruitment and retention of volunteers. Prevention events and care services provided to the community at risk can be considered as possible opportunities for volunteer recruitment.

Confidentiality

HIV-related confidential information that is acquired while rendering HIV services must be safeguarded against disclosure. This includes verbal or written disclosure, maintenance of records, or recording of an activity without appropriate releases of consent. Statute and regulations explicitly govern circumstances under which HIV-related information may be disclosed (Iowa Administrative Code, Chapter 141A). Professional ethics or personal commitment to the preservation of trust may impose even stricter confidentiality guidelines than those reflected in the law.

HIV providers should develop and implement methods by which client confidentiality protections and rights are communicated and consent for services is obtained. Such methods should be appropriate to the intervention provided. Different types of interventions present different requirements for how confidentiality should be handled. For instance, during group sessions participants and facilitators can set ground rules that address issues for disclosure of personal information. In all cases, legal requirements must be followed.

Any and all personal information that is disclosed one-on-one to an outreach worker, peer educator, case manager, or other personnel in the context of an intervention or an intake should be kept strictly confidential by the program representative. The general issues that come up in the course of a counseling session or outreach interaction can be documented and discussed with supervisors or other members of an intervention team. They should not be detailed in a way that allows recognition of the particular client by sight or name without prior approval by the client. Peer educators must be trained and prepared for the transition from the usual social interactions with their peers to the bounded relationship required for successful and ethical prevention work.

MINIMUM STANDARDS OF SERVICE

Prevention

The following standards must be considered when creating a comprehensive HIV/AIDS prevention program. Prevention providers should develop and write a comprehensive policies and procedures manual. Critical policies include a confidentiality policy, a feedback procedure, and safety policies for staff and volunteers. In addition, there are quality assurance criteria specific to each intervention that must be met. These criteria are specific per intervention and are discussed later in this chapter.

Minimum Standards of Service

Services are:

- Offered in as safe of an environment as possible.

Interventions:

- Follow the Strategies for Prevention Interventions and Community Endeavors (SPICE) principles as outlined on the following page.

Agencies have:

- A policy and procedure manual. This manual must contain all intervention protocols, policies, and procedures of the services being delivered.
- Current collaborative linkages within the community and should be aware of Iowa's HIV Community Planning Group.
- Staff that are familiar with available community resources.
- Staff that are trained in the implementation of the program interventions. All trainings must be documented in staff folders or personnel files. The agency should promote and encourage continuing educational trainings.
- Grievance procedures in place and a method for informing clients of this process. Proof of client receipt should be documented in client charts.
- Policies on staff safety, both on-site and off-site.
- A relationship with the local authorities, such that the program is well known in the community.
- Regular assessments of client feedback through client surveys.
- Regular management/supervisors meetings with program staff to discuss project and status progress towards stated outcomes.

(SPICE) Principles

In addition to the general recommendations presented, the CPG has identified central principles to be used for all prevention interventions, care services, evaluation, and planning efforts. The SPICE Principles of Successful Prevention and Care Efforts, which summarize these principles and general recommendations, precedes the discussion of behavior theory models.

STRATEGIES FOR PREVENTION INTERVENTIONS, AND COMMUNITY ENDEAVORS (SPICE): PRINCIPLES OF SUCCESSFUL PREVENTION AND CARE EFFORTS

The Iowa HIV Community Planning Group has identified principles that are central to the successful design and implementation of HIV prevention interventions, care services, evaluation, and planning efforts. These are referred to as the Strategies for Prevention Intervention and Community Endeavors (SPICE). Grantees and applicants for HIV prevention funds must demonstrate how they will address these principles in implementing HIV prevention and care programs.

The successful project is designed to reach the target population. Specifically, it

- ⇒ targets a clearly defined population at risk for or infected with HIV (as defined by the CPG);
- ⇒ addresses a demonstrated need of the target population;
- ⇒ is specific to the target population(s) with regard to gender, age, race and ethnicity, culture, language, sexual orientation and identity, socioeconomic status, and geographic location, and recognizes the diversity within the population;
- ⇒ involves members of the target population(s) in the creation, development, implementation, and evaluation of the project;
- ⇒ is delivered at a site and setting which is acceptable and accessible to the population(s) it intends to reach; and
- ⇒ uses materials that are relevant and appropriate to the target population(s).

The successful project makes sense as an intervention approach. Specifically, it

- ⇒ has clearly defined measurable understandable goals and objectives (process evaluation);
- ⇒ utilizes interventions that are clearly understandable;
- ⇒ utilizes interventions that have been shown to be effective and make sense in terms of behavioral or social science theory;
- ⇒ utilizes intervention strategies at appropriate levels -- such as individual, group, community, and capacity-building;
- ⇒ supports the initiation and maintenance of behavior change;
- ⇒ focuses on long-term, incremental changes in behavior and community norms; and
- ⇒ is cost-effective.

The successful project enhances and is integrated with the larger HIV prevention and human service delivery system. Specifically, it

- ⇒ is designed to be continuing and sustainable, not solely dependent upon continuation funding;
- ⇒ contains flexibility and capacity for change and employs a variety of approaches;
- ⇒ supports ongoing development of staff and volunteers;
- ⇒ includes collaboration to ensure access to the target population and expertise in delivering HIV prevention services;
- ⇒ develops linkages with services reaching the same target populations to enhance the quality of services and avoid duplication;
- ⇒ enhances the capacity of organizations to integrate HIV services throughout their array of services; and
- ⇒ includes an evaluation component to measure success over time in changing or maintaining behaviors or accessing services (outcome evaluation).

BEHAVIOR THEORY AND HIV PREVENTION AND CARE

Evaluations of HIV interventions demonstrate that those based on sound theoretical models are the most effective at affecting behavior change (Fisher & Fisher, 1992; Valdiserri, West, Moore, Darrow, & Hinman, 1992). Formal behavior theories can help service providers understand the various components of behavior and the steps that commonly lead to behavior change. Also, behavior theory can be used to disentangle the complexities behind the behaviors targeted in HIV prevention and care programs. These benefits can facilitate determining the design and goals of an HIV intervention. Furthermore, using theories can improve the overall quality of interventions and conserve limited resources.

Behavior Theory is a model or framework, developed through multiple observations over time that depicts and predicts how people behave and that shows how the different factors that influence behavior are linked together.

While useful, behavior theory is not the sole determinant of a successful HIV intervention program. Rather, behavior theory best enhances HIV program planning when it is a component of a process that involves 1) assessing the risk behaviors and cofactors of the target population, 2) considering the strengths and weaknesses of potential HIV interventions and choosing those that best address the needs of the target population, and 3) working from an awareness of the organizational, community and cultural context in which HIV occurs (McLeroy, 1993).

The health education behavior theories discussed in this chapter include:

- Health Belief Model (Janz & Becker, 1984)
- Social Cognitive Theory (Albert Bandura, 1977; A. Bandura, 1994)
- Stages of Behavior Change (Prochaska & DiClemente, 1983)
- Theory of Reasoned Action (Ajzen & Fishbein, 1980)
- Diffusion of Innovations (Rogers, 1983)
- Empowerment (De La Cancela, Chin, & Jenkins, 1998; Rappaport, 1984)
- Social Networks and Social Support (Israel, 1982)

This section discusses each of these behavior theories. A general outline of each behavior theory is presented in tables consisting of:

- **Components:** The principal tenets of the theory
- **Hypothetical HIV Prevention or Care Example:** An example of how the components of the theory could be applied to understand the HIV prevention or care needs of an individual or group
- **Hypothetical Intervention:** An example of an intervention for the individual or group described in the HIV Program Example, based on the theory

Each table is followed by a discussion of the theory's application to HIV prevention and care and what is known about its effectiveness.

HEALTH BELIEF MODEL

The Health Belief Model (HBM) is one of the most widely accepted theoretical models of behavior change.

HEALTH BELIEF MODEL (Rosenstock, Strecher, & Becker, 1988)	
Components	Hypothetical HIV Example
Perceived Susceptibility: People are motivated to change behavior when they believe that they are susceptible to the disease.	A woman has a low perceived susceptibility because no one in her social circle talks about HIV or to her knowledge has HIV.
Perceived Severity: People are motivated to change behavior when they believe that the disease generally has serious consequences.	She has a high-perceived severity of HIV disease because she reads about HIV-related deaths in the newspaper.
Perceived Benefits: People are motivated to change behavior when they believe that changing the behavior will reduce their risk.	She believes that using condoms will reduce her risk of acquiring HIV.
Perceived Barriers: People are motivated to change behavior when they believe that there are how or no negative consequences (e.g., expensive, dangerous, unpleasant, inconvenient) for changing the behavior.	She is afraid her partner, who has a history of abuse, may accuse her of cheating on him if she asks him to use condoms. Therefore, the benefit of condom use is outweighed by the risk that she may anger her partner.
Cue to Action: A specific stimulus, such as a prevention intervention, is often required to trigger behavior change.	On her way to work every day, she hears an ad on the radio with an HIV prevention message. She also just heard that her uncle died of HIV 10 years ago, when everyone thought he had died of cancer.
Hypothetical Intervention: Engage the woman in individual counseling in which the counselor strives to increase the woman's perception of her own risk and susceptibility. The counselor will refer her to domestic violence services and help her learn and practice condom negotiation skills to help her deal with the perceived barriers.	

Application to HIV Prevention

(Petosa & Jackson, 1991) suggest that safer sex intentions are influenced by "personal beliefs regarding susceptibility to AIDS, the health consequences of AIDS, and the effectiveness of safer sex practices in reducing susceptibility." According to the HBM, people have to believe in the benefits of and have the ability to engage in safer behavior. The HBM calls for providers to increase people's perceptions of their risk, knowledge of the effects of HIV infection, and willingness to protect themselves. Providers should also seek to reduce the barriers to self-protecting behaviors (Becker & Joseph, 1988).

Application to HIV CARE

Adherence to drug therapy is a primary case management goal. Service plans must include goals to reduce barriers to therapeutics and to increase compliance with therapeutic regimens. (Holmes & Pace, 2002) investigated the relationship of disease severity, health beliefs and medication adherence among HIV/AIDS patients. Patients who experienced more medical

complications perceived a stronger relationship between medication non-adherence and AIDS-related complications. These patients were more adherent to their medication regimen when compared to patients with no prior complications. Perceived difficulty in following doctors' instructions was negatively related to patients' medication adherence.

Effectiveness of the Health Belief Model

Evaluation research of HIV intervention programs based on the HBM generally supports its usefulness as a behavior change model. By using the HBM, a service provider can separately target the beliefs necessary for behavior change (e.g., personal susceptibility, self-efficacy, benefits) and barriers to prevention. The HBM can be used to design interventions to change behavior regardless of the target population's demographic characteristics so long as the intervention components are culturally appropriate (C. Abraham & Sheeran, 1994; C. a. S. Abraham, P., 1994).

Deficits of the HBM have also been identified. Its focus on health attitudes and beliefs is useful for providing focus for educational efforts, but does not take into account other aspects of people's lives that determine behavior change (McCusker, Stoddard, Zapka, & Lewis, 1993). HBM does not address the influence of culture, class, economics, environment, gender, maturational issues, and life experience in shaping behavior. It does not take into account the influence of social networks, nor does it provide recommendations for ways to persuade persons to change their behaviors.

The HBM relies heavily on the presence of cues to action in an individual's environment. This necessitates extensive and diverse interventions for targeted communities. Also, since the HBM works to change attitudes and beliefs, it has limited effectiveness in changing habitual behavior or addictions that have more intense bio-psychosocial underpinnings.

SOCIAL COGNITIVE THEORY

Bandura's Social Cognitive Theory (SCT) - formerly known as Social Learning Theory - emphasizes a reciprocal interaction of behavioral, social, and physical factors. The SCT maintains that a change in any one of these three factors influences the others. The two primary forces that affect change in these three factors are what Bandura calls “expectancies” and “incentives.”

SOCIAL COGNITIVE THEORY/SOCIAL LEARNING THEORY (Baranowski, Perry, & Guy, 1997)	
Components	Hypothetical HIV Example
Environment: Factors external to the person may influence behavior.	Two homophobic brothers kicked a gay man out of his house when they learned that he was gay. He moves into a single room occupancy hotel in Coralville. He has no health insurance.
Situation: A person's perception of their environment influences behavior.	He feels that he has no control over his situation – it is the result of how his family has treated him. He sees his peers engaging in commercial sex work for survival and thinks this is his only option.
Behavioral Capability: A person's knowledge and skills to perform a behavior influence whether a person engages in a behavior.	He knows how to use condoms but is not very skilled at talking to his partners/clients about using them.
Outcome Expectations/Expectancies: A person expects certain results from engaging in a particular behavior and places a certain value on the results, and these factors affect their behavior.	He expects that using condoms will prevent him from getting HIV, and this is a highly desirable outcome for him.
Self-efficacy: A person's confidence in performing the behavior affects whether they will engage in the behavior.	He is not very confident that he can get a partner/client to use a condom.
Observational Learning: A person acquires new behaviors from watching the actions of others and observing the results.	Because sex is usually a private act, he does not get to observe how other people negotiate condom use.
Reciprocal Determinism: The interaction of the person, the behavior, and the environment in which the behavior is performed affects a person's behavior.	All the above factors combined affect the man's ability to reduce his risk for HIV. If one of the factors changes, it may result in changes in the other factors.
Hypothetical Intervention: Start a multiple session workshop at a community center in Coralville and enroll the man. The group works on changing their perceptions of the environment and increasing self-efficacy to use condoms in survival sex situations. They will also spend a lot of time on role-playing how to negotiate condom use in different situations. The group leader or someone at the agency will also refer the man to prevention case management for a referral to housing services.	

Application to HIV Prevention

Social cognitive theory (A. Bandura, 1994) states that for individuals to institute behavior change, they must believe they have the skills, and are capable of initiating and sustaining the actions necessary to implement the desired changes (self-efficacy). Self-efficacy is malleable, and skills training in risk reduction behaviors can change perceived self-efficacy (A. Bandura, 1994; Valdiserri et al., 1992) and enhance the adoption of risk-reduction strategies.

The SCT concept of expectancies is very similar to the HBM's focus on one's perception of disease susceptibility, threat, and severity. Our expectancies are what we believe will happen in a given situation or what the relationship is between two events, based on personal experiences, the information we have, and other factors such as cultural norms and beliefs.

Whereas expectancies are individual beliefs and internal factors, incentives are reactions from the external world regarding behavior and behavior change. The SCT suggests that incentives, as external reactions that reinforce healthy behaviors, reflect the community values behind health beliefs and actions. For example, a community that positively values health because it promotes longevity and well-being is more likely to positively reinforce health-promoting and health maintenance behaviors (Rosenstock et al., 1988).

Application to HIV CARE

Support groups provide a safe environment for PLWH to discuss practices, attitudes, and day-to-day issues. Topics can serve to increase the perceived control over the clients' health and the health of those around them. Clients expect to gain information regarding the outcomes of their actions (i.e. medication adherence, sexual practices, addressing physical and mental health.) Role playing exercises can build self-efficacy for practicing safer sex and discussing medication problems with a health care provider. The tenets of SCT, when used in a group setting can affect a person's participation in their own health care.

Effectiveness of the Social Cognitive Theory

Evaluations of many HIV prevention interventions that employ SCT concepts have documented its usefulness as a model for program design (O'Leary, Goodhart, Jemmott, & Boccher-Lattimore, 1992). In particular, perceived self-efficacy to negotiate condom use with partners has proved a strong predictor of sexual behavior change among gay men (Emmons et al., 1986; McKusick, Coates, Morin, Pollack, & Hoff, 1990), adolescents (Hingson, Strunin, Berlin, & Heeren, 1990) and college students (Basen-Engquist, 1994). Social norms, peer pressure, and communication have been found successful in postponing sexual activity in adolescents (Kirby et al., 1994). Influencing social outcome expectancies to heighten positive social norms for safer sex and drug use likewise has been shown to affect HIV risk-taking behavior (O'Leary et al., 1992).

While useful for identifying psychological and environmental factors that may affect behavior change, the SCT remains focused on the individual rather than changing group or community norms. This focus limits the extent to which broad-ranging effects on the HIV epidemic can occur. The complex bio-psychosocial components of addictive and other profound psychological issues, which are known risk factors for HIV infection, are less easily addressed by SCT.

STAGES OF BEHAVIOR CHANGE MODEL

Stages of Behavior Change Model considers the dynamic aspects of human behavior and suggests that different people may be at different stages with respect to changing any particular behavior (Prochaska & DiClemente, 1983). This differentiation is the primary value of the model because service providers and researchers can assess where an individual or group is in relation to making a behavior change and then target an intervention accordingly to move people from one stage to the next. This model proposes that behavior changes occur according to a process of successive stages.

STAGES OF BEHAVIOR CHANGE MODEL (Prochaska & DiClemente, 1983)	
Components	Hypothetical HIV Example
Precontemplation: A person has no intention of changing a behavior within the near future.	An injection drug user shares needles with her friends and has no plans to stop sharing.
Contemplation: A person intends to change a behavior within the near future.	A few months later, she has thought about not sharing needles with her friends because she just heard about someone who got HIV that way.
Preparation: A person has begun to take a few steps toward changing a behavior.	A few months later, she starts to ask around about how to access clean needles in her community.
Action: A person has made changes in a behavior.	She starts going to her local pharmacy to purchase needles regularly and stops sharing needles with friends.
Maintenance: A person is able to continue the new behavior for an extended period of time.	She hasn't shared needles for 8 months.
Pros and Cons: For people to move from one stage to the next, either the pros of changing the behavior must increase and/or the cons of changing the behavior must decrease.	Her case manager helped to move her along the stages of change by talking with her regularly about the pros and cons of sharing needles.
Hypothetical Intervention: A prevention case manager assesses the woman on intake and finds that she is in the contemplation stage and is thinking about not sharing needles anymore. The case manager works with her to move her toward preparation, action, and finally maintenance by emphasizing the pros of changing the behavior. For example, HIV is highly transmissible via shared needles, so eliminating sharing will reduce her risk greatly. The case manager also works on reducing the cons (e.g., her perception is that it is impossible to find clean needles). The case manager points out that the pharmacy right around the corner is participating in a needle access program. She also teaches her how to clean needles properly and watches her practice this skill. During the maintenance phase, the case manager uses relapse prevention techniques.	

Application to HIV Prevention

An HIV prevention intervention for a person or group in the pre-contemplation stage requires raising awareness or susceptibility and the consequences of HIV risk behaviors. HIV prevention at the contemplation phase includes skills training and self-efficacy building to minimize barriers and strengthen individual's belief in their capabilities. People preparing for a behavior change

need support and encouragement. Given that relapse is common, interventions for individuals at the action and maintenance stages focus on reinforcement of the behavior and other relapse prevention methods (Valdiserri et al., 1992).

Application to HIV CARE

To the maximum extent practical, providers must assure the availability of case management services to all persons with HIV infection. Case managers need to develop, maintain, and implement for each case management client a case management plan. The case management plan must take into account what stage of behavior change the client is at, including the client's readiness to make a behavior change.

Effectiveness of the Stages of Behavior Change Model

Although few HIV prevention projects based on this model have been formally evaluated, preliminary results suggest strong support for its effectiveness. The primary strengths of this model are its basis in an understanding that behavior change is dynamic, the recognition of environmental and social norm influences on behavior, and the acknowledgment of relapse. These components, as well as the individual stages, foster diverse approaches to HIV prevention strategies based on age, gender, race/ethnicity, socioeconomic status, and other factors (Valdiserri et al., 1992). Such specificity calls attention to the importance of assessment, since the current attitudes and circumstances of the individual or group must first be known in order to prescribe the most appropriate intervention.

Because target populations may have members at different stages between precontemplation and maintenance, providers need to target only the members at a particular stage or simultaneously design a program that can work with the different stages. This poses practical issues for its application to HIV prevention work. The different types of interventions that may be required, given differences in the stages of individuals in a community, may necessitate a range of service providers and service settings. Valdiserri asserts that collaborations among multiple service organizations are necessary to implement this model in a community. He further states that because people must follow through various stages, it may be difficult for a single public health agency to track the progression of diverse communities. He concludes that public health departments may do well to assign intervention responsibilities to community-based organizations that are typically geared toward and thus equipped for serving, particular target groups.

THEORY OF REASONED ACTION

Theory of Reasoned Action (TRA) focuses on the translation of beliefs about a behavior and perceptions regarding threat to self into behavior change (C. Abraham & Sheeran, 1994; Ajzen & Fishbein, 1980). While other behavior theories target the individual, components of the TRA incorporate the social and interactional aspects of human behavior. This is particularly useful for intervening with sexual behavior that is inherently social in nature (de Wit, Teunis, van Griensven, & Sandfort, 1994).

The TRA emphasizes attitudes, subjective norms, and intentions. Attitudes are individually determined and reflect beliefs about consequences associated with performing a behavior and evaluations of these consequences. Subjective norms are socially influenced, typically by peers' and role models' perceptions of what one should do with regard to a specific behavior (L. S. Jemmott & Jemmott, 1991). Intentions to change a particular behavior are influenced by one's personal attitude and the subjective norm toward that behavior. Behavior, according to the TRA, is ultimately a result of intentions.

Theory of Reasoned Action (Montano, Kasprzyk, & Taplin, 1997)	
Components	Hypothetical HIV Example
Behavioral Intention: Whether a person intends to perform a behavior is the most important predictor of actual behavior.	Many adolescents in Sioux City do not intend to use condoms with their partners.
Attitude: A person's beliefs and values about the behavior determine his or her attitude about the behavior, and attitude affects behavioral intention.	They don't believe that using condoms will completely prevent them from acquiring or transmitting HIV or other STD's, but they place a high value on this result.
Subjective Norm: A person's perception of whether important individuals (e.g., peers) approve or disapprove of the behavior and whether he or she is motivated to act according to those people's opinions determine his or her subjective norm, and this norm affects behavioral intention.	They think that other people their age don't generally view condom use in a positive light, and so they are hesitant to discuss condoms with their partners.
Hypothetical Intervention: In a group outreach theater intervention, the youth actors play out a scene in which they talk about the effectiveness of condoms (to change attitudes) and emphasize that condoms can be a fun part of sex (to change subjective norms). They hand out colored condoms at the end of the skit.	

Application to HIV Prevention

An HIV prevention program based on the TRA addresses attitudes and subjective norms in order to influence people's intentions to change their behavior. For example, HIV-related attitudes that might be targeted include beliefs about whether condom use will prevent HIV and whether condom use with one's main partner will be perceived as an act of mistrust. Continuing with this example, an HIV prevention program would aim to change the entire group norm if it was

known that a particular community commonly practiced unprotected sex with primary partners because of strong values linking condom use to partner mistrust.

Application to HIV CARE

A support group based on TRA addresses attitudes and subjective norms in order to influence people's intentions to change their behavior. One attitude that might be addressed in a group setting is that of disclosure to sexual partners. While some PLWH may be in the practice of disclosing their HIV status to all sexual partners, other PLWH may disclose their HIV status only to long term partner. If a newcomer to a support group shares that he/she does not tell all sexual partners his/her HIV status, the group's approval or disapproval of this attitude may affect the newcomer's future behavior.

An HIV care program might target an individual's belief that it is not especially important to comply with a medication regimen. In an effort to change the person's attitude, a case manager may seek to change the subjective norm that prevails in the peer group with whom this individual regularly interacts, particularly if this group believes that drug compliance is relatively unimportant. To challenge this norm, the case manager could implement a program that educates members of this group about the problems (e.g., increased drug resistance) that result from failure to abide by a medication regimen, thereby encouraging the group to alter its outlook. The group's change in perspective would promote attitude change in the individual, leading to a shift in behavioral intention and a greater likelihood of compliance with a prescribed regimen.

Effectiveness of the Theory of Reasoned Action

The TRA has been shown to provide an important link between health beliefs and behavior change actions. Its expansion upon other theories to include social and interactional aspects of behavior is an important strength. Components of the TRA have been proven important predictors of safer sex behaviors. Specifically, studies have shown that attitudes towards condoms are predictive of intentions to use them. Perceived norms are predictors of HIV preventive intentions and behaviors and perceived condom use norms are predictive of adolescents' intentions to use condoms (C. Abraham & Sheeran, 1994).

The TRA focus on attitudes and subjective norms suggests HIV interventions on the community level to influence perceptions of target groups. In a study of gay men in Australia, intention to use condoms predicted actual use. Attitudes had little impact on intention, but subjective social norms were important predictors of intentions to use condoms and their actual use. Sexual partners and gays peers were more important than family and community members in influencing intentions to use condoms (McLaws, Irwig, Oldenburg, Mock, & Ross, 1996; Ross & McLaws, 1992).

DIFFUSION OF INNOVATION THEORY

Diffusion theory has been applied to effect widespread change for myriad social problems. Diffusion refers to the process through which any new idea - an innovation - is communicated to the members of a group or population (Rogers, 1983). The four primary components of Diffusion of Innovation Theory are: 1) the innovation: an idea, practice, or commodity which the target group perceives as new; 2) communication channels for dispersing the innovation message; 3) the time or process required for the innovation to reach group members; and 4) the presence of a social network or system that links the members of the target group (Dearing, Meyer, & Meyers, 1994; Dearing et al., 1996).

Diffusion of Innovations (Oldenburg, Hardcastle, & Kok, 1997)	
Components	Hypothetical HIV Example
Diffusion: "The process by which an innovation is communicated through certain channels over time among the members of a social system."	Gay men in Cedar Rapids have generally responded positively to interventions in which community leaders introduce an idea or a practice that is then spread throughout the community.
Innovation: "An idea, practice, or object that is perceived as new by an individual or other unit of adoption."	An agency wants to promote a practice among gay men of 100% condom use among HIV-negative receptive partners and HIV-positive insertive partners to reduce HIV transmission via anal sex.
Innovators, early adopters, early majority adopters, late majority adopters, and laggards: The five categories of "adopters" according to how long it takes them to accept a new idea or implement a new behavior.	Some HIV-negative bottoms and HIV-positive tops already do this (the innovators) but most use condoms only some of the time (the early adopters, early and late majority adopters, and laggards).
Factors that influence the speed and extent of diffusion: Whether the innovation is better than the behavior or condition it will replace; whether it fits with the target audience's existing values, experiences, and needs; and how much commitment it takes to adopt the innovation.	This practice may not be accepted easily because many men may prefer not to use condoms with some partners, especially if they believe they have the same serostatus as their partner; therefore, the practice is not an improvement on what they are already doing. On the other hand, it may be adopted more quickly, for example, among HIV-positive gay men for whom protecting their partner is highly valued.
Hypothetical Intervention: Using natural opinion leaders, an agency designs a program targeted to the early and late majority adopters, focusing on their motivations for changing behavior (e.g., staying HIV-negative or preventing HIV transmission to another). These opinion leaders talk to other gay men (both HIV-negative and HIV-positive) in bars and community settings to promote the practice of 100% condom use and discuss its effectiveness in preventing HIV transmission. The agency maintains this program for two to three years, because changing community norms takes a long time. The agency also uses other strategies to get the message out (e.g., media campaign, street theater).	

Application to HIV Prevention

HIV infection has greatly affected particular unique population groups, such as the gay and injection drug use community. Diffusion theory can be used to develop effective interventions for these groups if the core concepts are appropriately adapted (Dearing et al., 1994). Since communication among members of marginalized groups tends to be frequent and characterized by high levels of trust, diffusion of information is typically rapid and pervasive. A decentralized, dialectic approach should be used for diffusing information among these groups. The change agent within this decentralized approach ought to be indigenous to the group. For example, "the change agent working with intravenous drug users should have been a drug user," (Dearing et al., 1994). Lastly, the extent to which innovative behavior change interventions are compatible with the values, experiences and needs of special populations is particularly important. This emphasizes the necessity of culturally sensitive and appropriate intervention design.

Application to HIV CARE

Peer dialogue is often the most effective method for diffusing information about innovations to unique or marginal groups, such as homeless people living with HIV/AIDS. Thus, in their efforts to educate homeless PLWHA about the benefits of taking new anti-retroviral medications, AIDS service organizations should rely upon peer leaders within this population. Through talking with their homeless peers, these leaders can disseminate the news about the effectiveness of new HIV-related medications. They can also educate others about the importance of taking these medications and complying with prescribed regimens. Often in AIDS campaigns, community-based organizations are used as a proxy for community-based opinion leaders to disseminate messages to their constituencies.

Effectiveness of Diffusion of Innovations

HIV interventions based on diffusion theory are most likely to be successful if the special considerations mentioned are applied. However, the nature of behaviors related to HIV infection present special problems for the successful application of diffusion theory. (Rogers, 1983) explains that the probability of target group members adopting the new idea or behavior depends on certain characteristics of the innovation. Given that HIV prevention interventions require addressing taboo topics such as sexual and substance use behaviors, communication channels may be restricted and other barriers to dispersing prevention messages are presented. Additionally, diffusion theorists explain that the preventive nature of HIV-related innovations makes it more difficult to successfully accomplish behavior change. Preventive innovations are generally less likely to be accepted because people may deny they are at risk, disbelieve that the proposed behavior change will actually protect them, or feel that the cost of changing their behavior is greater than the benefit of avoiding possible infection (Dearing et al., 1994).

Peer opinion leader interventions may face certain problems in their implementation. If hierarchies of influence change rapidly, or if social networks are transient, or if there is serious resistance to change among members of the community, interventions that depend on peer opinion leaders may have less of a behavioral impact. Intervention programs that target changing the larger social environment may be more effective.

EMPOWERMENT THEORY

Empowering Theory is based on Paulo Freire's ideas of Popular Education. According to Freire, bringing groups of people together to discuss problems and jointly propose solutions can engender a sense of empowerment on the individual, community, and population levels (Wallerstein & Bernstein, 1988). Given that research has documented the link between a person's lack of sense of control over their own circumstances and illness, Empowerment Theory employs the ideas of Popular Education and seeks to promote health by enhancing people's feelings of power and sense of control (Bernstein et al., 1994; Wallerstein & Bernstein, 1988, 1994).

Empowerment Education Theory/Popular Education (De La Cancela et al., 1998; Rappaport, 1984; Wallerstein & Bernstein, 1988)	
Components	Hypothetical HIV Example
Popular Education: Interventions based on this theory use a "problem-posing" and participatory methodology of education with a group of individuals from the target community.	A recent needs assessment in Des Moines revealed the presence of high-risk sexual behaviors, such as low rates of condom use with non-primary partners, in the Latino community.
Dialogue: In the dialogue process, everyone participates as "co-learners." People discuss and share their experiences in a group.	An agency familiar with the community facilitates a group discussion about HIV/AIDS and HIV prevention, taking into account what they already know about the community's issues and norms. Individuals in the group discuss the specific HIV-related issues they face and learn from each other's experiences.
Critical Consciousness: Dialogue eventually leads to a process of critical reflection in which people begin to see and understand the social context for their personal problems.	The agency plans regular meetings of the group to continue dialogue about the specific factors that affect the risk behavior in the community. As they talk about events and issues in their personal lives, the facilitator helps them see common themes that contribute to HIV risk in their community, such as poverty and lack of access to health and social services.
Praxis: The ultimate goal is praxis, which is the continual interplay of discussion, critical thinking, problem solving, and action to promote individual and community change.	Over time, both the individuals and the group begin to develop a sense of power and control over their own lives. Based on group discussions, the agency develops a community outreach intervention. Some of the group members decide to train to become outreach workers. Other members of the group, as a result of the personal sense of empowerment they feel begin to be involved in their community in new ways, with the goal of promoting social change.
Hypothetical Intervention: A long-standing agency that knows the norms and values of this community decides to develop a program to decrease risk behaviors and address the behaviors in their social context. The agency convenes a group to outline the problems to discuss and address the issues in a participatory process.	

Application to HIV Prevention

Given that, according to Empowerment Theory, the community's own perspective and desires are central, an HIV prevention program designed from this model must emerge from the community for which it is being developed. Focus groups with key informants are recommended to gather such information from the community. The program planner facilitates this process by assisting community members to develop their own curriculum, providing direction and awareness regarding HIV prevention as necessary while remaining non-judgmental and non-dictatorial. The program planners' primary responsibilities to the community are to listen, participate in dialogue regarding HIV information, and provide support for realizing the community's goals and objectives (Wallerstein & Bernstein, 1988). This may include tangible assistance such as providing community groups with a meeting space, access to clerical support, and funding for the projects and services they determine are needed to realize their goals.

Application to HIV CARE

As a result of new drug therapies, HIV is moving closer to becoming a manageable and chronic, though still incurable, illness. Challenges and complications exist with this new long-term reality. Continuum of care services and funding streams must adapt to and reflect this new reality. Increasing access to treatments and services, educating clients and service providers, and empowering persons living with HIV to advocate for themselves and for changes in the care system can accomplish this.

Effectiveness of Empowerment Theory

Empowerment Theory is applicable to increasing self-esteem and providing support and should be considered as one of several components of an HIV intervention program. HIV test counseling has moved toward client-centered care by emphasizing reduction of client risk while advocating realistic goal setting (Bernstein et al., 1994; Kamb et al., 1998). Empowering promotes participatory education by enabling clients to believe in themselves and "gain mastery over their lives in the context of changing their social and political environment" (Wallerstein & Bernstein, 1988, 1994). Through client centered counseling, the traditional educational model of teacher to student or, in this case, HIV test counselor to client, is avoided in favor of a more symmetrical, supportive, and, therefore, empowering interaction.

SOCIAL NETWORKS AND SOCIAL SUPPORT

Social networks and social support theories are based on the concept that social ties improve health and well being (M. Minkler, 1982, 1984, 1985; M. Minkler, Blackwell, Thompson, & Tamir, 2003; M. A. Minkler, Satariano, & Langhauser, 1983). Social networks and social support meet basic human needs for companionship, intimacy, a sense of belonging, and reassurance of worth as a person. Social ties have been linked to better health and decreased involvement in HIV risk behaviors (N. Brown, Muhlenkamp, Fox, & Osborn, 1983; Hubbard, Muhlenkamp, & Brown, 1984; Muhlenkamp & Broerman, 1988; Muhlenkamp, Brown, & Sands, 1985; Muhlenkamp & Joyner, 1986; Muhlenkamp & Nelson, 1981; Muhlenkamp & Sayles, 1986; Yarcheski & Mahon, 1989). These functions include providing a sense of belonging, opportunities for nurturance, reassurance of worth, assistance with acquiring needed goods or services, guidance and advice in uncertain or adverse circumstances, and access to new and diverse information.

Social Networks/Social Support/Peer Support Theories (Ickovics, Morrill, Beren, Walsh, & Rodin, 1994)	
Components	Hypothetical HIV Example
Social Networks: “Social networks” refers to the density, complexity, size, and other characteristics of a social group, and they are related to health and well being.	In Des Moines, an adult female alcoholic’s social and family networks are unsupportive of her abstinence from drinking, which has been associated with unsafe sexual behavior in her past. She lives with her husband and her sisters, all of whom drink regularly. Her social life revolves around going to bars with her friends. She does not receive strong social support from her family and peers. Her husband is emotionally abusive, and her friends do not support her in her attempts to quit drinking.
Social Support: “Social support” refers to the positive emotional and practical products that people derive from their social networks, and it is related to health and well-being.	
Peer Support: “Peer support” refers to the social support received from peers (people with whom a person identifies because of similar age, race/ethnicity, culture, or other aspects of identity), and it is related to health and well being.	
Hypothetical Intervention: A caseworker conducts an assessment with her client and they agree that her social networks and overall social environment are unhealthy. The caseworker refers her to a multiple session group workshop for female substance users focusing on HIV risk reduction. After going to the workshop, the client decides to participate in Alcoholics Anonymous (AA) to develop, promote, and increase her social networks that are supportive for healthy behavior. AA and the workshop provide her with a sense of belonging, opportunities for nurturance, reassurance of worth, guidance and advice in uncertain and adverse circumstances, and access to new and diverse information. In addition to emotional support and encouragement, the caseworker helps her get access to health care and other practical needs.	

Application to HIV Prevention

The existence of a social network is not sufficient to lower risk of HIV transmission. The social networks of injection drug users, for example, can be composed of other injection drug users who may not encourage safe or healthy behaviors. Social networks may influence the

transmission of HIV in two ways. First, as vectors of disease transmission (Klovdahl, 1985, 2001; Klovdahl et al., 1994), and second, as disseminators of social influence (Rothenberg et al., 1998; Rothenberg et al., 1995). Condom and clean needle use occurs because an individual acts to provide this self-protection. However, partners, friends, and social groups can influence those individual decisions (Woodhouse et al., 1995; Woodhouse et al., 1994).

If a social network's norms and values are inconsistent with AIDS preventative behavior, the network is more likely to engage in processes that inhibit prevention. The strength of this influence depends on the degree of integration and whether members fear sanctions for non-conformity with the network (Junge, Valente, Latkin, Riley, & Vlahov, 2000; Valente, Foreman, Junge, & Vlahov, 1998, 2001; Valente & Vlahov, 2001). For example, sharing needles with close friends decreases the risk of HIV transmission if the social network is dense and well integrated. It does so by preventing outsiders from introducing new pathogens into the network. Whereas sharing with persons in an open, non-integrated network increases the probability of exposure to new pathogens, thus increasing the risk of HIV infection.

Populations who are at increased risk for HIV infection are frequently socially marginalized. These groups need socially supportive systems and programs. Community-based programs such as street outreach, prevention case management, and group level interventions to undeserved and at-risk groups provide this social support. Increasing a person's sense of belonging and self worth through social support not only decreased their general susceptibility to illness but also augments the belief that they are capable of changing behaviors that put them at risk for HIV infection.

Strengthening social networks and enhancing the exchange of social support may increase a community's ability to bring together its resources and problem solve. Health educators who wish to incorporate social network enhancement into their practices may face several difficult decision points regarding *who* should provide *what* to *whom* (and *when*). Social network interventions should enhance the target population's awareness of the health enhancing qualities of social relationships.

Application to HIV CARE

Stigma, shame, and fear of disclosure are barriers to accessing services by clients. In rural areas, the small number of people infected with HIV contributes to sense isolation. The fear of disclosure of one's HIV status, sexual orientation, drug use history, or criminal history may prevent individuals from accessing care.

Group support for couples helped reduce participants feelings of isolation, helps participants identify and share coping strategies, model safe and intimate behaviors, and develop group norms regarding risk (Remien, Carballo-Diequez, & Wagner, 1995). Partners may be able to express sentiments in the groups that they were unable to express directly to each other. PLWH participating in a two-week intervention consisting of interactive group sessions led by community service providers, were more likely to visit a health care provider.

Effectiveness of Social Networks/Social Support Theory

Social networks are linked to feelings of self-worth and self-esteem, which are linked to decreased risk for HIV transmission (*UCSF AIDS Health Project, 1995*). Homeless minority who felt social support were less likely than those who felt socially isolated to engage in HIV risk behaviors (Nyamathi, Flaskerud, & Leake, 1997).

CONCLUSION

In summary, research shows HIV intervention programs, particularly educational and skills building programs, are strongest when firmly grounded in behavior theory. This finding is especially important for community based organizations designing programs that intervene on the individual and community level. Programs that combine theory with an understanding of the context and complex factors of this issue and consider the known effectiveness of previous work are likely to be the most conceptually firm and thus behaviorally successful. This underscores the need for sound evaluation of HIV interventions.

Research shows HIV intervention programs, particularly educational and skills building programs, are strongest when firmly grounded in behavior theory.

A well-designed program will start with the identification of characteristics of the problem it seeks to address and those of the target population or intervention. Behavior theory is intended to provide a backbone for programs; programs should not be designed to support or test behavior theories.

Section 2 - Interventions, Cost Effectiveness, Barriers

Taxonomy

Counseling Testing Referral & Partner Counseling and Referral Services

Counseling, Testing, Referral

Partner Counseling & Referral

Sexually Transmitted Disease (STD)

Hepatitis

Health Education and Risk Reduction

Individual Level Intervention

Prevention Case Management

Group Level Intervention

Outreach

Health Communication/Public Information

Media

Hotlines/Clearinghouses

Presentations/Lectures

Community Level Interventions

Community Organizing

Social Marketing

Public Events

Cost Effectiveness

Barriers to Prevention

TAXONOMY OF INTERVENTION TYPES

An intervention is an organized activity designed to influence knowledge, attitudes, beliefs or behavior related to the prevention of HIV/AIDS. Interventions can vary widely in scope from a single educational material, such as a national mailing on AIDS information, to multifaceted comprehensive programs, such as client-centered counseling and testing activities. The Strategies for Prevention Intervention and Community Endeavors (SPICE) Committee created the following Taxonomy to describe interventions using the model developed by (D. R. Holtgrave, Valdiserri, R.O, West, G.A., 1994) and the (CDC, 2003).

Counseling, Testing, Referral, and Partner Counseling and Referral Services

- I. HIV Counseling and Testing;**
 - a. Voluntary counseling and testing
 - i) Learn one's serostatus (personal risk assessment)
 - a) Clinic setting
 - (1) HIV counseling sites
 - (2) STD clinics
 - (3) Drug treatment centers
 - (4) TB clinics
 - (5) Family planning clinics
 - (6) Private physicians
 - b) Community setting
 - (1) Street outreach
 - (2) Community organizations
 - ii) Voluntary perinatal screening
 - iii) Repeated post-test counseling in any setting
 - iv) Enhanced efforts at increasing rate of return for post-test counseling in any setting
 - b. Alternative methods of testing (e.g., rapid testing)
 - c. Alternative methods of pre- and post-test counseling
- II. Referral**
 - a. Referral verification systems
 - b. Staff assisted referrals
 - c. Case management
 - d. Linking outreach programs to CT services
 - e. HIV infected persons for early intervention
 - f. Referral for drug treatment
 - g. Medical referral of HIV infected pregnant women
- III. Partner Counseling and Referral Services**
 - a. Provider referral
 - b. Patient referral
 - c. Mixed strategies
 - d. Couples counseling
 - e. Special referral systems for partners
- IV. Sexually Transmitted Disease Diagnosis**
 - a. STD treatment as a strategy for HIV prevention
 - b. Condom distribution in STD clinics
- V. Hepatitis C**

Health Education/Risk Reduction

- I. Individual-Level Intervention**
 - a. One-on-one
 - i) Skills training
 - a) Condom use training
 - b) Negotiation of safer sexual behaviors
 - c) Risk reduction strategies for IDUs
 - ii) Other psychosocial issues
- II. Prevention Case Management**
- III. Group-Level Intervention**
 - a. Peer and non-peer mediated
 - i) skills training
 - a) condom use training
 - b) negotiation of safer sexual behaviors
 - c) risk reduction strategies for IDUs
 - ii) Other psychosocial issues
 - b. Institution-based programs
 - i) School-based
 - a) Peer led and non-peer (teacher) led
 - b) Part of comprehensive health education program
 - c) Condom distribution
- IV. Outreach**
 - a. Street outreach
 - b. Popular opinion leaders
 - c. Condom distribution and promotion
 - d. Access to sterile injection equipment

Health Communication/Public Information

- I. Electronic Media**
- II. Print Media**
- III. Hotlines/Clearinghouses**
 - a. Internet
- IV. Presentations/Lectures**
 - a. Speakers Bureaus

Community-level Interventions

- I. Community Organizing**
- II. Social Marketing**
- III. Public Events**
 - a. Drama, Theater, Plays
- IV. Policy Interventions**
- V. Structural Interventions**

The following descriptions of intervention categories listed in the taxonomy on the preceding page will assist in making meaningful distinctions and choices among possible interventions.

Counseling, Testing, Referral Partner Counseling and Referral Services (CTR/PCRS)

The basic assumption of this category is that individuals are able to learn their serostatus. Counseling, referral and partner counseling and referral systems all assume that individuals will be encouraged to determine their serostatus through voluntary client-centered counseling and HIV testing. It includes pre-test counseling, for example, when it is clear that test results are being offered as an option for the individual to consider.

HIV Counseling and Testing refers to the voluntary process of client-centered, interactive information sharing in which an individual is made aware of the basic information about HIV/AIDS. Counseling is tailored to the behavior, circumstances, and special needs of a person. The client is given information about testing procedures and how to prevent the transmission and acquisition of HIV infection, and given tailored support on how to adapt this information to their life. Equally important is the focus on personal risk assessment, development of a personalized action plan and the decision to test.

Referral is the process by which individuals with high risk behaviors and those infected with HIV are guided toward prevention, psychosocial, and medical resources needed to meet their primary and secondary HIV prevention needs. Referral subcategories differentiate between various approaches to referral: (1) sites for referral systems, (2) referral systems linked to outreach programs, and (3) referrals for three

important HIV prevention services - early intervention, drug treatment, and perinatal treatment.

Partner Counseling and Referral Services are a systematic approach for notifying sex and needle-sharing partners of HIV infected persons of their possible exposure to HIV so they can avoid infection or, if already infected, can prevent transmission to others.

The taxonomy describes not only physical settings where testing occurs, but also differentiates between enhanced/repeated post-test counseling and enhanced efforts to reduce post-test returning to high risk behaviors. These two categories emphasize the difficulties many programs have encountered with drop-out. Subcategories under Partner Counseling and Referral differentiate between the source of the referral (provider and patient) and the type of strategy to provide partners with information about their potential risk of infection.

Sexually Transmitted Disease Diagnosis and treatment refers to any intervention in which an individual receives testing or treatment for STDs, including chlamydia, gonorrhea, syphilis, hepatitis, and herpes.

Hepatitis infections and HIV are getting attention as research is conducted on hepatitis and its impact on HIV. Depending on the hepatitis virus, the organisms can be transmitted in similar fashions and many of the same risk populations are involved.

Health Education/Risk Reduction (HE/RR)

HE/RR is a broad category used to describe organized efforts to reach persons at increased risk of becoming HIV infected or, if already infected, of transmitting the virus to others. This category focuses on activities ranging from individual case

management to broad community-based interventions.

Individual-Level Intervention is health education and risk-reduction counseling provided to one individual at a time. Counselors assist clients in making plans for individual behavior change and ongoing appraisals of their behavior.

Prevention Case Management is a client-centered HIV prevention activity with the fundamental goal of promoting the adoption of HIV risk-reduction behaviors by clients with multiple, complex problems, and risk-reduction needs.

Group-Level Intervention shifts the delivery of service from the individual to groups of varying sizes. Group-level counseling uses peer and non-peer models involving a wide range of skills, information, and support.

Institution-based programs are defined by their locus of intervention (school, workplace, etc.). They can be further distinguished by their leadership model (peer vs. non-peer) or by their content. They may be a comprehensive health education program or a separate HIV education program. They may or may not include condom distribution.

Outreach Programs are defined by their locus of activity and by the content of their offerings. Both have important sub-categories of peer and non-peer models.

Health Communication and Public Information

Health Communications and Public Information is the delivery of planned HIV/AIDS prevention messages through one or more channels to target audiences to build general support for safe behavior, support personal risk-reduction efforts, and/or inform persons at risk for infection how to obtain specific services.

Electronic Media uses radio and television to communicate with large groups of people. It includes public service announcements, news broadcasts, infomercials, which reach a large-scale audience.

Print Media refers to the use of print as well as magazines, newspapers, pamphlets, posters, and environmental media such as billboards and transportation signage. Reaches a large-scale or nationwide audience.

Hotlines/Clearinghouses are interactive electronic outreach systems using telephone, mail, and the internet to provide a responsive information service to the general public as well as high-risk populations.

Internet and computer-based HIV prevention strategies include list serves, chat rooms, electronic bulletin boards, informational web sites with links to resources, and computerized surveys and assessments.

Presentations and Lectures are one-time information only activities conducted in group settings. They are often called “one-shot” education interventions.

Speakers Bureaus bring together individuals who have been impacted by the HIV epidemic to speak to groups of people, communities, or organizations.

Community-Level Interventions

Community-level interventions are a distinct class of programs characterized by their scope and objectives. To be classified community level, it has to be clear that the program is designed to reach a defined community (may be geographic or an identified subgroup) with the intention of altering social norms in that community as a way to influence high risk behavior. A community-level intervention may include aspects of other categories (e.g., peers,

media, or counseling) but the combination must be aimed explicitly at community norms to be classified as a community-level intervention. Examples of CLI include community mobilizations, social marketing campaigns, community-wide events, policy interventions, and structural interventions.

Community Organizing is a strategy that involves grassroots outreach and education that takes place within a specified neighborhood or community. Community mobilization can take many forms, ranging from volunteer recruitment to solicitation of participation in public events, to assistance with attaining specific policy ends.

Social Marketing uses techniques adapted from commercial marketing to identify specific audiences called segments, identify their perceived needs, and then construct a program of services, support and communication to meet those perceived

needs. Sometimes specific products such as condoms and condom access are identified as a need, other times the need may be for negotiation skills, social support for delaying sexual initiation, etc.

Public Events include community theater, dramatizations of real-life scenarios, "bar zaps," and interactive performance art.

Policy Interventions includes activities that are designed to reduce or eliminate barriers to HIV prevention. It may include working to change policies that may encourage high-risk patterns and behaviors. Examples include drug paraphernalia laws, policies that limit the distribution of condoms to minors, and laws that prohibit over-the-counter syringe sales.

Structural Interventions include passing laws that promote safer behavior. For example, eliminating paraphernalia laws, legalizing gay marriages.

COUNSELING, TESTING, REFERRAL and PARTNER COUNSELING AND REFERRAL SERVICES

COUNSELING, TESTING, REFERRAL (CTR)

CTR refers to voluntary HIV/AIDS counseling, referral and partner counseling and referral when accompanied by testing to inform individuals of their serostatus. Knowledge of serostatus has been correlated with an individual's willingness to change high-risk behavior, and therefore this category has received significant attention in both programming and research.

The primary goals of HIV CTR are:

- To ensure that HIV-infected persons and persons at risk for HIV
 - have access to HIV testing to promote early knowledge of their HIV status;
 - receive high-quality HIV prevention counseling, reduce their risk for transmitting, or acquiring HIV; and
 - have access to appropriate medical, preventive, and psychosocial support services.
- To promote early knowledge of HIV status through HIV testing and ensure that all persons either recommended or receiving HIV testing are provided information regarding transmission, prevention, and the meaning of HIV test results.

To reach these goals CTR prevention providers must encourage persons to seek testing, either by educating persons at risk about the benefits of testing or by developing a campaign to decrease the stigma associated with HIV testing.

Providers need to assure HIV testing is readily available to at-risk populations. Strategies include utilizing rapid HIV tests and offering outreach testing by community based organizations, offering routine voluntary testing in high prevalence medical settings, such as emergency rooms and offering testing in correctional facilities (Gayle, 2000; Janssen et al., 2001).

Client-Centered HIV Prevention Counseling

Since 1993, CDC has recommended an interactive counseling model, called client-centered HIV prevention counseling, which involves face-to-face sessions with a provider or counselor. This model has traditionally used a two-step HIV testing approach in which clients are physically present at a setting for the HIV test (initial session) and then return for HIV test results (follow-up session). Each session might require 15--20 minutes (including testing and referral) for clients at increased risk for HIV, but could take only a few minutes for those at lower risk.

In the first session, a personalized risk assessment encourages clients to identify, understand, and acknowledge the behaviors and circumstances that put them at increased risk for acquiring HIV. The session explores previous attempts to reduce risk and identifies successes and challenges in these efforts. This in-depth exploration of risk allows the counselor to help the client consider ways to reduce personal risk and commit to a single, explicit step to do so. In the second session, when HIV test results are provided, the counselor discusses the test results, asks the client to

describe the risk-reduction step attempted (and acknowledges positive steps made), helps the client identify and commit to additional behavioral steps, and provides appropriate referrals (e.g., to PCRS).

Observational studies and reviews of programs in various settings have indicated that many counselors are still unfamiliar with the specific goals of the client-centered HIV prevention-counseling model. Because "client-centered" is sometimes misinterpreted as "face-to-face," providers in many HIV test sites deliver face-to-face informational messages in response to a generic checklist risk assessment. This type of counseling provides advice rather than encouraging client participation or discussion of personal risk; it seldom focuses on personal goal setting. "Client-centered" can also be misinterpreted to mean that the counselor should avoid directing the session. Although attentive listening and respect for clients' concerns are important elements of effective counseling, the primary goal of client-centered HIV prevention counseling is risk reduction. HIV prevention counseling usually requires provider training and support and ongoing quality assurance to achieve optimal benefit.

Continuum of Care

A successful CTR program provides an accessible continuum of care through which high-risk individuals, both positives and negatives, receive optimal prevention and treatment services as outlined below (Gayle, 2000; Janssen et al., 2001).

Population	HIV Prevention Services
Unaware of Serostatus	<ul style="list-style-type: none"> ➤ Provide current essential HIV-related information ➤ Encourage HIV CTR (via outreach, media and community-level interventions) ➤ Reduce stigma of HIV disease and services
Recently tested HIV negative No apparent behavioral risk	<ul style="list-style-type: none"> ➤ Equip to be carrier of HIV prevention messages to family, friends, children, partners
Recently test HIV negative Behavioral risk of infection	<ul style="list-style-type: none"> ➤ Intensive individual or small group counseling ➤ Community-level interventions ➤ Linkages to STD, substance abuse, mental health, hepatitis, and social services as needed ➤ Prevention case management ➤ Structural interventions (e.g. sterile syringe access)
Tested HIV Positive	<ul style="list-style-type: none"> ➤ Intensive prevention services ➤ Partner counseling and referral services ➤ Linkages to care, treatment, STD, substance abuse, mental health, hepatitis and social services as needed ➤ Prevention case management ➤ Structural interventions (e.g. avoid discrimination)

COUNSELING, TESTING, REFERRAL (CTR) <i>HIV/AIDS counseling and referral when accompanied by testing</i>	
Definition/Description	Counseling and testing is a series of personalized, client-centered encounters in which an individual can learn her/his serostatus as well as obtain tools to assess her/his own risk. CTR may include helping clients initiate and sustain behavior changes that decrease risk for HIV and giving referrals and information relevant to clients' needs.
Minimum Standards	<p><i>The CTR counselor:</i></p> <ul style="list-style-type: none"> ▪ Helps clients identify their risk(s) for acquiring or transmitting HIV and learn their HIV serostatus. ▪ Negotiates a realistic HIV risk-reduction plan with the client. ▪ Prepares a client to receive, understand, and manage the test result. ▪ Makes referral for additional medical and social services. ▪ Offers STD screening and treatment services. ▪ Offers Partner Counseling & Referral Services (PCRS). ▪ Must be in compliance with Iowa Department of Public Health HIV/AIDS program policies, guidelines, protocols, and performance standards.
Implementation Recommendations	<ul style="list-style-type: none"> ▪ Factors to consider for targeting CTR include timing, venue, staff representation of the community, accessibility of site, mobility of CTR.
Quality Assurance Measures	<ul style="list-style-type: none"> ▪ Staff must have been trained in Fundamentals of HIV Prevention Counseling through Iowa Department of Public Health and have appropriate documentation on file with the employer.
Data Requirements	<p><i>CTR sites must report:</i></p> <ul style="list-style-type: none"> ▪ Client demographics as required by the Iowa Department of Public Health. ▪ HIV risk behavior. ▪ Number of clients receiving HIV test counseling. ▪ Number of clients tested and their test results. ▪ Number of clients who return for their results and receive post-test counseling. ▪ Referrals provided and to whom. ▪ Materials distributed.
Strengths	<p><i>In Iowa, CTR is:</i></p> <ul style="list-style-type: none"> ▪ Universally applicable for all populations, although different groups may be reached through different testing venues. ▪ Inclusive when a provider offers confidential, appointment-based, and drop-in services. ▪ Provided by both HIV/AIDS prevention providers and primary care facilities. ▪ Mobile, and thus can reach large numbers of people. ▪ Confidential, which expands the possibilities for follow-up and case management. ▪ A method of HIV prevention. ▪ Effective for targeting clients with low perception of risk in the venues they frequent. The use of new testing technologies makes this more attractive to clients. <i>Ora-sure</i> (a test of the oral mucosal transudate) and <i>urine testing</i> require no blood or needles. ▪ A means to enhance HIV prevention services for clients. Rapid tests allow the delivery of test results and counseling on the same day of testing.
Limitations	<ul style="list-style-type: none"> ▪ CTR requires referral to additional risk reduction services to maximize its effectiveness. ▪ CTR may have fewer benefits for people in an early stage of recovery from substance abuse (although CTR can become part of the recovery process). ▪ CTR may not be appropriate for communities in which there is stigma attached to HIV if offered at an HIV/AIDS service organization. ▪ CTR may have fewer benefits for people in a situation of total isolation and who lack social support. ▪ Confidentiality issues may exist in a rural environment.

Counseling and testing programs may describe not only physical settings where testing occurs, but may also differentiate between repeated post-test counseling and enhanced efforts to reduce post-test returning to high risk behaviors. These two categories emphasize the difficulties many programs have encountered with dropout. Possible sites for counseling and testing services include counseling, testing, and referral locations, local health departments, community-based organizations, substance abuse treatment centers, sexually transmitted disease clinics, family planning clinics, outreach sites, and public sex environments. Agencies are encouraged to develop a collaborative relationship with agencies that serve individuals engaging in high risk behavior for HIV infection.

Counseling can help clients develop personal methods for behavior change that decrease risk for HIV and help in maintaining a low risk status. Clients can also receive referrals and information relevant to their needs as well as assistance in notifying partners. Prevention providers report that counseling and testing services can motivate individuals to recognize their risk, ask questions about safer sex in a safe environment, and formulate personal risk reduction plans. Counseling and testing programs allow prevention providers to identify new target populations.

Risk Assessment

Risk assessment counseling consists of a meeting between a client and a trained HIV prevention counselor. It includes the assessment of a person's risk for referral purposes and to determine appropriateness of testing. Information is provided to the client based on individual needs. Counseling and testing services are confidential. The client is guaranteed that identity and locating information will not be accessible to anyone outside of the clinic or testing site.

The objectives of HIV prevention counseling sessions are to

- *assess actual and self-perceived HIV/STD risk*
- *help the participant recognize barriers to risk reduction*
- *negotiate an acceptable and achievable risk reduction plan to support patient-initiated behavior change.*

A client's individual HIV risk can be determined through risk screening based on self-reported behavioral risk and clinical signs or symptoms. Behavioral risks include injection-drug use or unprotected intercourse with a person at increased risk for HIV. Clinical signs and symptoms include STDs, which indicate increased risk for HIV infection, or other signs or symptoms (e.g., of acute retroviral or opportunistic infections), which might suggest the presence of HIV infection. Insufficient data exist to support the efficacy of any one risk-screening approach over others (e.g., face-to-face discussion or interviews, self-administered questionnaires, computer-assisted interviews, or simple open-ended questions asked by providers)

Post-test Result Disclosure Session

Post-test disclosure sessions focus on giving clients their HIV test result. They include provision of risk reduction counseling and referrals, and assistance with accessing medical or other care. Primary purposes of post-test counseling are reinforcing a realistic perception of risk; helping those with a negative result initiate and sustain behavior change; arranging access to necessary medical, prevention, and case management services for people with positive test results; and supporting HIV positive clients in referring sexual or needle sharing partners for testing.

Referrals

Referrals provide individuals with resources appropriate to their particular needs at that time. Clients should be referred to services that are responsive to their priority needs and appropriate to their culture, language, sex, sexual orientation, age, and developmental level. Examples of these services include:

- **Prevention case management.** Clients with multiple and complex needs that affect their ability to adopt and sustain behaviors to reduce their risk for transmitting or acquiring HIV should receive or be referred for prevention case management services, including ongoing prevention counseling. Prevention case management can help coordinate diverse referral and follow-up concerns.
- **Medical evaluation, care, and treatment.** HIV-infected clients should receive or be referred to medical services that address their HIV infection (including evaluation of immune system function and screening, treatment, and prevention of opportunistic infections). Screening and prophylaxis for opportunistic infections and related HIV-conditions (e.g., cervical cancer) are important for HIV-infected persons. In addition, co-infection with HIV and communicable diseases (e.g., TB, STDs, and hepatitis) can, if untreated, pose a risk to susceptible community members. Providers must be familiar with appropriate screening tests (e.g., TB), vaccines (e.g., hepatitis A and B), STD and prophylactic TB treatment, and clinical evaluation for active TB disease to ensure that these communicable diseases are identified early and appropriate clinical referrals are made.
- **Partner counseling and referral services.** Persons with HIV-positive test results should receive or be referred to services to help them notify their sex or injection-drug-equipment--sharing partners or spouses regarding their exposure to HIV and how to access CTR.
- **Reproductive health services.** Female clients who are pregnant or of childbearing age should receive or be referred to reproductive health services. HIV-infected pregnant women should be referred to providers who can provide prevention counseling and education, initiate medical therapy to prevent perinatal transmission, and provide appropriate care based on established treatment guidelines.
- **Drug or alcohol prevention and treatment.** Clients who abuse drugs or alcohol should receive or be referred to substance or alcohol abuse prevention and treatment services.
- **Mental health services.** Clients who have mental illness, developmental disability, or difficulty coping with HIV diagnosis or HIV-related conditions should receive or be referred to appropriate mental health services.
- **Legal services.** Clients who test positive should be referred to legal services as soon as possible after learning their test result for counseling on how to prevent discrimination in employment, housing, and public accommodation by only disclosing their status to those who have a legal need to know.
- **STD screening and care.** Clients who are HIV-infected or at increased risk for HIV are at risk for other STDs and should receive or be referred for STD screening and treatment.
- **Screening and treatment for viral hepatitis.** Many clients who are HIV-infected or at increased risk for HIV are at increased risk for acquiring viral hepatitis (A, B, and C). Men who have sex with men and IDUs should be vaccinated for hepatitis A. All clients without a history of hepatitis B infection or vaccination should be tested for hepatitis B, and if not infected, should receive or be referred for hepatitis B vaccination. In addition, clients who inject drugs should be routinely recommended for hepatitis C testing. All clients who are infected with hepatitis viruses should be referred for appropriate treatment.

- **Other services.** Clients might have multiple needs that can be addressed through other HIV prevention and support services (e.g., assistance with housing, food, employment, transportation, childcare, domestic violence, and legal services). Addressing these needs can help clients access and accept medical services and adopt and maintain behaviors to reduce risk for HIV transmission and acquisition. Clients should receive referrals as appropriate for identified needs.

Effectiveness

The effectiveness of HIV counseling and testing on behavior change has been examined for several populations, mainly to inform the debate about the value of public and privately supported wide-scale testing programs. Higgins compiled and compared a group of studies examining the impact of counseling and testing of various populations (Higgins et al., 1991). Her findings support the assertion that while HIV counseling and testing is important, it should not necessarily be the center of HIV prevention efforts.

Most of the studies cited in Higgins's report do not examine the effect of counseling, but rather, examine the effect of HIV testing or knowledge of serostatus. Many of the studies make no reference to whether the individuals received any counseling or to what extent. A more thorough examination of the studies cited reveals that even those studies that did provide counseling vary from viewing a video to a didactic lecture format to extensive counseling. When studies are viewed in this context, it appears that when HIV counseling and testing affects behavior change, it is because it is provided in a manner consistent with the recommendations provided by the Centers for Disease Control and Prevention on "appropriate" counseling.

In a more recent review of the literature on prevention programs, Choi and Coates come to conclusions similar to those of Higgins. They conclude that HIV counseling and testing has a place in HIV risk reduction, but are not sufficient for HIV reduction (Choi & Coates, 1994). HIV counseling and testing does have an impact on certain behaviors in certain populations. For example, HIV counseling and testing is associated with lowering sexual risk behavior among homosexual men, and injecting drug use among IDU. HIV counseling and testing with couples is associated with reductions in transmission among serodiscordant couples. However, HIV counseling and testing has not had an impact on pregnancy decisions among seropositive women, and only modest effects were demonstrated with STD clinic patients.

A study of women at community health clinics in Connecticut found limited effects of HIV counseling and testing on subjects' risk behaviors and psychological functioning related to HIV. While there appeared to be no change in sexual behavior among women who were tested, there was a decrease in intrusive thoughts around HIV (Ehrhardt, 1995; Ickovics et al., 1994). Ehrhardt's review of effectiveness studies of counseling and testing and other individual counseling interventions targeting women, found it difficult to be conclusive about the impact of these interventions on women (Ehrhardt, 1995).

In a study of gay males in bars in small cities, HIV risk behavior was examined as it related to HIV antibody testing practices (Roffman et al., 1995). Researchers found that men who had been tested tended to be more sexually active, more likely to have sex with multiple partners, and engaged in more protected and low-risk sexual activities than men who were not tested. The authors offered two explanations for this: 1) men who have been tested, rather than reducing sexual activity as a means of avoiding risk, choose to adopt protective behaviors when engaging in higher risk activities; and 2) these men may also be "more likely to make distinctions about the contexts for anal intercourse with which condom use is either necessary or unnecessary," (e.g., with a long term partner who is HIV negative). From this, the study authors concluded that increased safer sex practices were associated with HIV antibody testing at both the community and individual level. The implications of these findings, as proposed by the authors, are that HIV testing should be made more available to this population and policies should be established to encourage test seeking.

In one large, randomized, controlled trial, client-centered counseling was reported to be

- effective at reducing high-risk sexual behaviors and new STDs (Kamb et al., 1998);
- feasible to use even in busy publicly funded clinics;
- acceptable to clients, counselors, and health-care providers (Kamb et al., 1998) and
- cost-effective at preventing STDs in persons at risk for HIV (D. R. Holtgrave, Qualls, & Graham, 1996).

The model was reported to be especially effective among adolescents and persons with ongoing sexual risk behaviors (e.g., newly diagnosed STDs) (Kamb et al., 1998). Although the benefits of client-centered HIV prevention counseling in reducing high-risk drug behaviors are unknown, studies have indicated that similar counseling approaches that help clients explore risks and set specific risk-reduction goals reduce risky drug use behaviors.

Suggested Uses

All cognitive and learning based theories have an informational component. People need information on HIV/AIDS transmission and prevention. Counseling provides valuable information to raise awareness for a need to change, and can alter the beliefs, attitudes, and/or intentions that influence behavior (social cognitive theory). According to more complex theories of behavior change and empirical data, information is necessary but insufficient in producing sustained behavior change. Individuals must have the skills and the beliefs (self-efficacy) that they can carry out the preventive behaviors. Referral of both seropositive and seronegative individuals to other sources for continued support, education, counseling, and risk reduction skills training should be emphasized, given that research shows information alone is not enough to sustain behavior change.

There is debate over the most appropriate environment for CTR (e.g., a site created just for HIV CTR or a primary care facility) and the most appropriate kind of provider (e.g., a primary care physician - doctor or nurse - or an HIV testing counselor). The primary care context may be more appropriate for communities in which there stigma attached to HIV or a greater likelihood that people will seek care from a single provider and for general health concerns. It is important, to ensure that doctors or nurses providing test results are fully trained to do the counseling and referral work for their clients. Training of all CTR providers should be ongoing and central to the program.

PARTNER COUNSELING AND REFERRAL SERVICES (PCRS)

The goal of PCRS is to stop the unintentional spread of HIV by providing risk reduction education to persons who are infected and those at risk of infection. It involves a confidential discussion between the infected client and a trained health professional about the patient's risk, the course of the infection, options for health care follow-up, measures to reduce the risk of disease transmission, and at risk sexual and needle sharing partners and how these partners will be notified of exposure. PCRS helps partners gain earlier access to individualized counseling, HIV testing, medical evaluation, treatment, and other prevention services. PCRS services are integrally linked to other HIV prevention interventions that support the movement of index clients and their partners toward the practice of safer behaviors.

PARTNER COUNSELING AND REFERRAL (PCRS)	
<i>The range of services available to HIV-infected persons, their partners, and affected communities</i>	
Definition/Description	Once known as "partner notification," PCRS refers to "the range of services available to HIV-infected persons, their partners, and affected communities" once a person has accessed counseling and testing services. (Centers for Disease Control and Prevention, 1998b) PCRS contains an elicitation component (i.e., asking for partners' names) and a notification component (i.e., notifying partners of their risk).
Minimum Standards	<ul style="list-style-type: none"> ▪ PCRS is always an in-person service, allowing for on the spot counseling, testing, and referrals.
Strengths	<ul style="list-style-type: none"> ▪ PCRS is generally applicable for anyone wishing to inform partners of their positive HIV status and is especially valuable for clients wishing to notify a partner who is not currently in their life or who may have a violent or abusive reaction to hearing the news directly from the client. ▪ PCRS may be the only means by which some people learn of their increased risk. ▪ PCRS is especially valuable for anyone who wishes to notify a partner who is not currently in his or her life or who may have a violent or abusive reaction to hearing the news from the client. ▪ The PCRS intervention can be done by the service provider alone, or can be done jointly by the service provider and the client, depending on what is more comfortable and safe for the client.
Limitations	<ul style="list-style-type: none"> ▪ Can only reach those partners voluntarily mentioned by the testing client who wish to use this service.

Partner counseling and referral to appropriate services is essential for ensuring that sex and needle-sharing partners of HIV-infected persons are notified about their risk and offered HIV prevention counseling, testing, and referrals. Partner counseling and referral is a primary prevention service with the following objectives:

1. To confidentially inform partners of their possible exposure to HIV;
2. To provide partners with client-centered prevention counseling that assists and supports them in their efforts to reduce their risks of acquiring HIV or, if infected, of transmitting HIV infection; and
3. To minimize or delay disease progression by identifying HIV infected partners as early as possible in the course of their HIV infection and assisting them in obtaining appropriate preventive, medical, and other support services.

Demonstrated Effectiveness

Several researchers have conducted evaluations of partner counseling and referral programs. A study of partner counseling and referral in North Carolina found that provider-referred notification was more successful than the patient-referral method. Half of the provider-referral group was notified compared to only seven percent of the patient-referral group. The large number of tested individuals who declined to participate limited the study. The authors also note that the effectiveness of partner notifications may be limited by those who test positive and do not return for their results (Landis et al., 1992).

A retrospective analysis of partner notification services in Colorado found that patients referred only 20 percent of eligible partners compared to 71 percent referred by the provider. Heterosexual men referred a greater proportion of partners through patient referral than did gay men. The proportion of patient referrals among White patients was higher than that of Latino and African-American patients (Spencer, Hoffman, Raevsky, Wolf, & Vernon, 1993).

In a different Colorado study, researchers compared the effectiveness of partner notification services of an anonymous test site with those of confidential test sites (Hoffman, Spencer, & Miller, 1995). The researchers found that confidential test sites were 30 to 50 percent more likely to have notified and counseled the partners of HIV-positive clients. While there was no tracking of the CTR site clients rate of partner notification on their own, the authors cite other research that found that patient-referral partner notification was less effective than provider-referral notification.

Suggested Uses

Partner counseling and referral is generally applicable for anyone wishing to inform partners of their positive HIV status. By design, it targets people who are at risk as partners and it may often be the only means people in this group become informed of their risk.

Evaluation

CTR/PCRS may be composed of up to three encounters; therefore, risk reduction and harm reduction behavior change goals can be established as necessary at the first session and progress toward them assessed with post tests given at the disclosure or post disclosure sessions. For repeat testers, post-tests can measure behavior change since the last test.

STD DIAGNOSIS AND TREATMENT

STD DETECTION AND TREATMENT <i>An individual receives testing and/or treatment for STDs</i>	
Definition/Description	STD detection and treatment refers to any intervention in which an individual receives testing and/or treatment for STDs, including but not limited to chlamydia, gonorrhea, syphilis, and herpes (either vaginally, anally, or orally). This is both a primary prevention strategy for HIV-positive and negative individuals (people are more susceptible to acquiring or transmitting HIV if they have an STD) and a secondary prevention strategy for HIV-positive individuals (HIV-positive people may be more susceptible to HIV reinfection when they have an STD and STDs may have more severe consequences for people with compromised immune systems).
Minimum Standards	<ul style="list-style-type: none"> ▪ Provider includes HIV counseling and testing or referrals to HIV testing. ▪ Provider includes client-centered risk assessment and risk reduction counseling.
Strengths	<p><i>STD detection and treatment can:</i></p> <ul style="list-style-type: none"> ▪ Serve as a bridge to HIV counseling and testing. ▪ Increase a person's perception of their own HIV risk if they have an STD. ▪ Be done in street-based locations. ▪ Use new screening technologies.
Limitations	<p><i>STD detection and treatment will not:</i></p> <ul style="list-style-type: none"> ▪ Ensure that all individuals will get an HIV test. ▪ Reach people who do not get regular STD screening, those who do not have access to regular medical care, or those who do not have any symptoms and therefore do not seek screening.

The intimate inter-relationships between HIV infection and other sexually transmitted diseases are clear. The organisms are transmitted in similar fashions, many of the same populations are involved, other STDs increase the risk of HIV transmission at least two to five fold, STD treatment may reduce HIV incidence. HIV infection alters the natural history and response to standard therapy of several STDs. Behavior modifications to avoid risk-taking (e.g. using condoms correctly and consistently, decreasing the number of one's sex partners, and becoming monogamous) reduce the risk of transmission of HIV and other STDs. Despite these similarities, STDs and HIV infection are often looked upon as distinct and separate problems. Although STD diagnosis and treatment is funded primarily through the STD prevention cooperative agreement, there clearly should be a close programmatic collaboration and linkages between HIV and STD prevention programs, especially when there is a high incidence of both problems. HIV prevention programs need to develop close linkages with STD prevention programs to ensure STDs are diagnosed and referred for treatment. When feasible, applicants should try to offer onsite, at counseling and testing sites, diagnostic services and referrals for treatment of other STDs.

Effectiveness

Studies have shown STD detection and treatment to be an effective tool for HIV prevention in two ways: (1) STD treatment reduces an individual's ability to transmit or acquire HIV and (2) STD treatment reduces the spread of HIV infection in communities. Studies indicate that continuous interventions that focus on increasing access to STD services are likely more effective than intermittent interventions (e.g., periodic waves of community-wide, non-targeted detection and treatment). It is also most effective in reducing HIV transmission in areas where

STD rates are high. Treatment of symptomatic STDs in particular is a critical component of an effective STD detection and treatment program ("HIV prevention through early detection and treatment of other sexually transmitted diseases--United States. Recommendations of the Advisory Committee for HIV and STD prevention," 1998).

Recommendations of the Advisory Committee for HIV and STD Prevention include the following:

- Early detection and treatment of curable STDs should become a major, explicit component of comprehensive HIV prevention programs at national, state, and local levels;
- Screening and treatment programs for STDs that have been shown to facilitate HIV transmission should be expanded in settings where these diseases are prevalent; and
- Implementation of this strategy should be the joint responsibility of HIV and STD prevention programs.

Evaluation

Evaluation of this intervention should focus at a minimum on process objectives, such as how many received STD screening, what percent were found to have a STD, which STDs were detected, and how many referrals to HIV counseling and testing were given.

Closely coordinating or integrating HIV prevention and STD prevention services is necessary and cost-effective and should be accomplished to reduce the transmission of HIV and other STDs, and is recommended ("HIV prevention through early detection and treatment of other sexually transmitted diseases--United States. Recommendations of the Advisory Committee for HIV and STD prevention," 1998).

HEPATITIS DETECTION AND HEPATITIS/HIV CO-INFECTION

HEPATITIS <i>An individual receives testing and/or education on hepatitis</i>	
Definition/Description	Hepatitis C screening refers to antibody testing for hepatitis C. Testing for Hepatitis A and B refer to appropriate test to determine immunity to Hepatitis A and B.
Implementation Recommendations	<ul style="list-style-type: none"> ▪ HIV care services should include HCV counseling and testing for HIV positive individuals. ▪ Prevention counseling should include client-centered risk assessment and risk reduction counseling for all blood-borne infections (HIV, hepatitis B, hepatitis C) based on specific risk behaviors that are presented by the client. ▪ Hepatitis C testing is usually done with the EIA antibody test. Positive results can be followed up with viral load testing. ▪ HIV positive individuals who do not have immunity to hepatitis A or B should be vaccinated for both viruses. ▪ Ideally, MSM should be vaccinated for hepatitis A and IDUs should be vaccinated for both Hepatitis A and B.
Strengths	<ul style="list-style-type: none"> ▪ Hepatitis screening can serve as a bridge to HIV counseling and testing. ▪ Hepatitis diagnosis may increase a person's perception of their HIV risk. ▪ Hepatitis screening of HIV positive patients helps determine appropriate treatments.
Limitations	<ul style="list-style-type: none"> ▪ It is difficult to collect blood samples in street-based locations. ▪ Care providers can not use new screening technologies. ▪ Hepatitis screening will not reach people who do not get regular medical screening, those who do not have access to regular medical care, or those who do not have any symptoms and therefore do not seek screening (unless the intervention is mobile).

The inter-relationships between HIV and hepatitis infections are getting more attention as more research is conducted on hepatitis and its impact on HIV. Depending on the hepatitis virus, the organisms can be transmitted in similar fashions as HIV, and many of the same risk populations are involved. Hepatitis C (HCV) is now classified as an opportunistic disease for people infected with HIV. About one quarter of HIV-infected persons in the United States are also infected with hepatitis C. HIV-HCV coinfection has been associated with higher titers of HCV, more rapid progression to HCV-related liver disease, and an increased risk for HCV-related cirrhosis (scarring) of the liver. Coinfection also complicates medication regimens for both diseases, and can distort antibody test results for hepatitis.

Oftentimes, the effectiveness of hepatitis vaccinations are diminished due to the lowered immune response of HIV-infected individuals. Many of the strong HIV drugs used today are also strongly toxic to the liver, the organ attacked by the hepatitis viruses. More and more frequently, complications of hepatitis disease are the cause of death in HIV-infected individuals. The latest U.S. Public Health Service/Infectious Diseases Society of American (USPHS/IDSA, 2002) guidelines recommend that all HIV-infected persons should be screened for HCV infection. Prevention of HCV infection for those not already infected and reducing chronic liver disease in those who are infected are important concerns for HIV-infected individuals and their health care providers.

There are two main HIV risk behavior populations that are also at high risk for hepatitis infection: MSM or other individuals who engage in high-risk sexual activity and injection drug

users. It is important to consider and address all diseases that these behaviors put the individual at risk for, not just HIV.

Most people who become infected with either hepatitis A or B fully recover and build immunity to the diseases. Roughly six to ten percent of individuals who contract hepatitis B never totally rid the body of the virus, however, and become carriers of the disease capable of transmitting the virus to others and causing deterioration of the liver. Hepatitis C is surfacing as a serious long-term disease. Approximately 85 percent of individuals infected with the hepatitis C virus become chronic carriers, and the majority of infected individuals do not even know they are infected.

Hepatitis A and B can both be transmitted sexually. Hepatitis C is capable of being transmitted sexually, but sexual activity appears to be an ineffective method of transmission. CDC is currently conducting studies to more fully understand sexual transmission of hepatitis C.

Both Hepatitis B and C have a much higher transmission rate through the sharing of contaminated injection drug equipment than does HIV. CDC now estimates that a 50-90 percent co-infection rate exists with HIV and HCV among HIV-infected injection drug users. Many of these individuals additionally show immunity to hepatitis B, which in most cases shows prior infection and recovery from hepatitis B as well.

HEALTH EDUCATION/RISK REDUCTION (HE/RR)

Using the taxonomy originally proposed by (D. R. Holtgrave, Valdiserri, R.O, West, G.A., 1994), the following interventions will be included under the broad category of Health Education and Reduction (HE/RR): individual-level intervention, prevention case management, group-level intervention, and outreach. HE/RR describes organized efforts to reach persons at increased risk of becoming HIV infected or, if already infected, of transmitting the virus to others. The goals of health education and risk reduction activities are to go beyond the provision of information to provide education and counseling that assists individuals in developing the skills, abilities, and self-esteem to carry out behavior change (*Guidelines for Health Education and Risk Reduction.*, 1995). Providers can deliver health education and risk reduction interventions at an individual, group, community, or outreach level. HE/RR activities can include counseling, workshops, educational programs and materials, presentations, and outreach activities.

Rinck and associates (1995) established the need for education and risk reduction strategies. First, counseling and testing services, which include the provision of information, were clearly not sufficient to change and maintain risk reduction strategies among gay, bisexual, and MSM respondents. Next, based on consumer feedback, the authors recommended more and expanded education on HIV transmission, more effective risk counseling, and counseling and workshops on decision making, skill building, communication, alternative methods, and sexuality. Consumers suggested follow-up training and condom and needle distribution in street outreach programs as strategies to improve prevention (Rinck, 1995).

Research by Peterson and colleagues (1992) exemplifies the literature on barriers to condom use. The authors cite condom norms, condom efficacy, and negative expectations about using condoms as reasons for non-use. They conclude that risk reduction interventions should build skills to eroticize condoms and encourage their use (Peterson et al., 1992).

In an outreach intervention in which community health workers provided AIDS education and substance abuse treatment referrals and distributed bleach bottles, Watters and associates (Watters et al., 1990) reported significant increases in needle cleaning and condom use and reductions in needle sharing. (Choi & Coates, 1994), reporting on a study by Weibel and colleagues over a four-year period, noted a substantial reduction in needle sharing among IDUs after a peer-outreach program was conducted.

A multi-city street outreach intervention, the National AIDS Demonstration Research Program, designed to deliver HIV risk reduction messages and promote participation in HIV prevention services, yielded a large reduction of needle sharing and an increase in condom usage (Stephens, 1993).

INDIVIDUAL-LEVEL INTERVENTION (ILI)

ILI programs seek to promote and reinforce safer behaviors among at-risk individuals through one-on-one contact. Interactions are meant to be short-term, but often involve more than one session. These programs assist individuals in assessing their own risk for getting or spreading HIV and in building the skills and abilities necessary to implement behavior change. ILI offers training in interpersonal skills needed to negotiate and sustain appropriate behavior change as well as referrals to appropriate services. This intervention also facilitates linkages to services in both clinic and community settings in support of behaviors and practices that prevent transmission of HIV, and they help clients make plans to obtain these services. According to strict categorization, outreach and prevention case management also are individual-level interventions. However, for the purposes of reporting, ILI does not include outreach or prevention case management, which each constitutes their own intervention categories.

INDIVIDUAL LEVEL INTERVENTION (ILI) <i>Health Education/Risk Reduction (HE/RR) counseling conducted one-to-one</i>	
Definition/Description	A personalized, client-centered encounter between an individual and a trained counselor.
Minimum Standards	<p><i>Individual level interventions must:</i></p> <ul style="list-style-type: none"> ▪ Be of sufficient length to informally assess client needs. ▪ Include (1) HIV/STD/HCV information and dissemination, (2) documentation of discussion of risk behaviors, (3) counseling, (4) skills building, and (5) documented referral (s), if given.
Implementation Recommendations	<p><i>Individual level interventions are:</i></p> <ul style="list-style-type: none"> ▪ A one-time intervention, or the client and counselor can meet multiple times. <p><i>During ILI session, the provider:</i></p> <ul style="list-style-type: none"> ▪ Conducts a needs assessment of the client and responds to client's stated need. ▪ Establishes an opportunity for follow-up. ▪ Assists the individual in making plans for behavior changes, provides ongoing appraisals of behaviors, and supports risk reduction behaviors.
Quality Assurance Measures	<p><i>Providers must assure that:</i></p> <ul style="list-style-type: none"> ▪ Space is private and conducive to private/personal discussions. ▪ A mechanism is in place for documentation of individual educational sessions.
Data Requirements	<p><i>Providers must report:</i></p> <ul style="list-style-type: none"> ▪ Client demographics required by the Iowa HIV Prevention & Evaluation System. ▪ Number of clients receiving 1-2-3-4-5 or more sessions. ▪ Referrals made and materials distributed.
Strengths	<p><i>ILI:</i></p> <ul style="list-style-type: none"> • Is suitable for all populations, especially for people who are ready to deal with health concerns, people receiving outreach services, and health center or hospital patients. • Provides personal attention to individuals for whom confidentiality is important. • Provides opportunities to recruit clients for other prevention activities. • Can be mobile, allowing flexibility to reach many populations. • Provides linkages & referrals social and medical services, especially CTR/PCRS. • Provides opportunity for ongoing follow-up with clients. • Facilitates linkages to services in clinic and community settings in support of behaviors and practices that prevent transmission of HIV and help clients obtain these services.
Limitations	<ul style="list-style-type: none"> • ILI may not be appropriate for people who are not able to keep appointments

Effectiveness

ILI is an effective intervention for many target populations and both drug use and sexual risk behaviors, whether it is a brief single encounter, an extended more intensive encounter, or more than one encounter. Multiple encounters are more likely to result in behavior change. For example, (Des Jarlais, Hagan, Friedman, & Rosenblum, 1995) reported reductions in injection drug use risk behavior as a result of ILI, with a short basic knowledge intervention and an enhanced knowledge plus counseling intervention. (Branson, 1998) showed increased condom use and decreased number of partners among STD clinic patients receiving ILI. A study by (Kamb et al., 1998) demonstrated an increase in those reporting they used condoms 100% of the time and a reduction in repeat STD infections among heterosexual adolescent and adult STD clinic patients with both an enhanced and brief IRRC intervention compared with didactic instruction alone. Although no cost-effectiveness information for this particular intervention was found in the literature, (Kahn, 1995) reports on one study that found an extended counseling intervention for IDUs to be cost-effective.

Evaluation

Expected outcomes for ILI depend on the number of encounters. One-time ILI encounters may affect knowledge, attitudes, and behavioral intention, but do not allow for assessing behavior change over time. Evaluation of effectiveness for these one-time sessions should include at least a post-test. If it is anticipated that the individual might participate in another session at a later date, a pretest should also be given. Individuals who participate in more than one ILI session, depending on frequency of sessions and how far apart they occur, may demonstrate changes in HIV risk behavior over time, such as increased condom use, decreased number of partners, decreased needle sharing, and increased use of sterilized needles. Evaluation of the effectiveness of multiple ILI sessions should include a pre-test given at the beginning of the first session and a post-test given at the end of the final session (or after each session if it is undetermined how many sessions the individual will complete) to monitor behavior change. Ideally, a follow-up post-test should be given one month or longer after completion of the intervention, but this is not always possible. ILI is a one-on-one intervention involving a wide range of skills, information, and support. ILI is an intensive, individualized support intervention designed to assist persons at high risk for or infected with HIV to either remain seronegative or to reduce their risk of transmission to others.

Individuals who need intensive individualized support may be candidates for prevention case management. Prevention case management is an individual-level intervention directed at persons who need highly individualized support, including substantial psychosocial, interpersonal skills training, and other support, to remain seronegative or to reduce the risk of HIV transmission to others. HIV prevention case management services are not intended to be substitutes for medical case management or extended social services.

PREVENTION CASE MANAGEMENT (PCM)

PCM is a hybrid of HIV risk-reduction counseling and traditional case management that provides intensive, ongoing, and individualized prevention counseling, support, and service brokerage. PCM concentrates on primary prevention (preventing HIV transmission) and secondary interventions (advocating for early medical interventions to prevent or delay the onset of symptoms in HIV infected clients). PCM is intended for clients with HIV infection as well as those without HIV infection who engage in unsafe behaviors and who have a poor prognosis for changing behaviors without this intervention. PCM is intended for persons who are having difficulty initiating and sustaining safer sexual and drug use behaviors and to improve client's skills in accessing community resources that support behavior change. PCM is intended for persons at greatest risk of transmitting or acquiring HIV whose needs are not being effectively served and whose behavior is not influenced by less intensive HIV prevention interventions, such as individual-level strategies, group-level strategies, or HIV counseling and testing.

PREVENTION CASE MANAGEMENT (PCM)	
<i>A client centered intervention with the goal of promoting the adoption of HIV risk reduction behaviors</i>	
Definition/Description	PCM is a client-centered HIV prevention activity with the fundamental goal of promoting the adoption and maintenance of HIV risk-reduction behaviors by clients with multiple, complex problems and risk-reduction needs. PCM is used with HIV-negative and HIV-positive individuals and can be provided in a face-to-face or non-face-to-face setting.
Minimum Standards	<p><i>PCM is an intervention that:</i></p> <ul style="list-style-type: none"> ▪ Is intended for persons with multiple, complex problems and risk reduction needs, (substance abuse, financial, medical, psychological) who have difficulty initiating, or sustaining, behaviors that reduce or prevent HIV transmission. ▪ Includes the development of a client developed, written, prevention plan. ▪ Involves ongoing prevention counseling, support, monitoring, service brokerage. ▪ Lasts more than one session.
Implementation Recommendations	<p><i>The CDC Guidance, 1997, states that PCM should include:</i></p> <ul style="list-style-type: none"> ▪ Client recruitment and engagement. ▪ Assessment of HIV and STD risks, medical and psychosocial service needs. ▪ Development of a client-centered prevention plan. ▪ Multiple-session HIV risk-reduction counseling. ▪ Active coordination of services with follow-up. ▪ Monitoring and assessment of clients needs, risks, and progress. ▪ Discharge from PCM upon attainment and maintenance of risk-reduction goals. <p><i>For HIV positive individuals:</i></p> <ul style="list-style-type: none"> ▪ PCM includes primary and secondary prevention in collaboration with CARE case management.
Quality Assurance Measures	<ul style="list-style-type: none"> ▪ PCM files are updated within 24 hours of client contact and agency has an internal review policy for PCM files. ▪ PCM files must contain the following information: <ol style="list-style-type: none"> 1. client contact information 2. client contact notes 3. documentation of receipt by client of client rights and responsibilities 4. confidentiality statement 5. grievance procedures 6. client referrals and follow-ups ▪ Agency must assure that space for counseling is conducive to privacy. ▪ Agencies must assure that all clients have a client developed written service plan.

Data Requirements	<p><i>Agencies are required to have a:</i></p> <ul style="list-style-type: none"> ▪ Pre/Post HIV/AIDS Behavioral Risk Assessment Measurement. ▪ Pre/Post HIV/AIDS Knowledge Assessment Measurement. <p><i>Providers must report:</i></p> <ul style="list-style-type: none"> ▪ Client demographics required by the Iowa HIV Prevention & Evaluation System. ▪ Total number of sessions each client attends. ▪ Number of clients receiving 1-2-3-4-5 or more sessions. ▪ Referrals made and materials distributed.
Strengths	<p><i>PCM is:</i></p> <ul style="list-style-type: none"> ▪ Appropriate for HIV-positive individuals, high-risk HIV-negative individuals, and high-risk individuals who do not know their serostatus. ▪ Suitable for people seeking some stability/regularity in their lives, people who are reaching an action stage in dealing with health concerns, people receiving outreach (if the intervention is mobile), and health center or hospital patients.
Limitations	<p><i>PCM is not:</i></p> <ul style="list-style-type: none"> ▪ Appropriate for people with low perception of their risk for HIV or for individuals who are not able to keep appointments. ▪ Sufficient for forging a relationship with the community unless accompanied by outreach or other interventions.

PCM services are not intended as a substitute for medical case management, extended social services, long-term psychological care nor should PCM duplicate Ryan White CARE Act case management services for people living with HIV.

PCM is intended for persons having or likely to have difficulty initiating or sustaining practices that reduce or prevent HIV acquisition, transmission, or re-infection. As a hybrid of HIV risk-reduction counseling and traditional case management, PCM provides intensive, on-going, individualized prevention counseling, support, and service brokerage. This HIV prevention activity addresses the relationship between HIV risk and other issues such as Hepatitis, substance abuse, STD treatment, mental health, and social and cultural factors.

Priorities for PCM services should be given to HIV seropositive persons having or likely to have difficulty initiating or sustaining practices that reduce or prevent HIV transmission and re-infection. For HIV seropositive persons, PCM involves the coordination of primary and secondary prevention interventions in close collaboration with Ryan White CARE Act case management providers. Further, PCM ensures the provision of other medical and psychosocial services affecting risk behavior, including STD and substance abuse treatment services.

HIV seronegative persons or those of unknown HIV serostatus – either (1) engaging in high-risk behavior within communities with moderate to high seroprevalence rates of HIV infection or (2) otherwise at heightened risk of infection – may also be appropriate for PCM.

Effectiveness

Personal efficacy, one of the strongest predictors of low sexual risk-taking, can be built through prevention case management (R. D. Stall, Coates, & Hoff, 1988). Although there are no formal evaluations of prevention case management as an intervention, there are many reasons to believe that it could act as an effective strategy. Extensive evidence supports, for example, that comprehensive and intensive prevention programs and prevention case management are able to assist an individual to address all of the potential risk factors that can lead to unsafe behavior.

Because prevention case management is a relatively new approach to HIV prevention, no studies to date have evaluated the effectiveness of prevention case management specifically. However, CDC conducted an assessment of PCM programs across the country and discovered that many had attempted to collect outcome data but none had completed an analysis (Purcell, DeGross, & Wolitski, 1998). There are many reasons to believe that it is an effective strategy. It is a comprehensive and intensive approach that assists individuals to address the multiple potential factors that affect HIV risk-taking behavior. In addition, intensive one-on-one interaction can build self-efficacy, which is a strong predictor of low sexual risk-taking (R. D. Stall et al., 1988).

Evaluation

Changes in HIV risk behavior, such as increased condom use, decreased number of partners, decreased needle sharing, and increased use of sterilized needles, are possible outcomes of PCM. Evaluation of this intervention should include a pre-test and one or more post-tests given at a specified interval to each client (e.g., pre-test given at the beginning of the first session and post-tests after each PCM session, after a certain number of PCM sessions, or at regular time intervals such as every 2 months). The time interval chosen should be sufficient to allow behavior change to occur. Ideally, a follow-up post-test should be given one month or longer after completion of PCM, but this is not always possible.

GROUP LEVEL INTERVENTION (GLI)

A group-level intervention is health education and risk-reduction counseling that shifts the delivery of service from the individual to groups of varying size. GLIs use peer and non-peer models involving a wide range of skills, information, education, and support. GLI provides small groups of individuals at high risk of acquiring or transmitting HIV infection with: educational interventions that promote and reinforce safer behaviors; interpersonal skills training and support in negotiation and maintaining safer sexual and needle-sharing behaviors; emphasis on the relationship between substance use and risky behaviors; educational materials; and referrals to appropriate services

GROUP LEVEL INTERVENTION (GLI)	
<i>A planned series of educational experiences targeted to meet the informational, social, behavioral skills building, support or referral needs of the participants</i>	
Definition/Description	A series of groups or meetings that introduce HIV issues and link them to other life issues. The same individuals attend each workshop in the series, which is different from a series of single session groups where different groups of people attend each session. Workshop topics usually build on each other from session to session. Groups may be closed or drop-in, mixed or serostatus-specific, structured, or need/issue-driven for risk reduction and psychosocial support. Groups can be held in vans, run as before/after bar groups, or be held in other community settings.
Minimum Standards	<p><i>Group level interventions:</i></p> <ul style="list-style-type: none"> ▪ Meet over a specific period of time with a scheduled beginning-end point. ▪ Use a written curriculum covering HIV/AIDS; STDs; risk/harm reduction; substance use/abuse; counseling & testing. ▪ Use a curriculum that contains a skill building component such as role-playing, safer injection techniques, negotiation skills, etc. ▪ Have a minimum participation standard (e.g., 75% of scheduled sessions). ▪ Implement a pre/post HIV/AIDS knowledge assessment with participants. ▪ Provide additional support, follow-up groups, and/or "booster" groups.
Implementation Recommendations	<p><i>Group level interventions must:</i></p> <ul style="list-style-type: none"> ▪ Have counselors available for follow-up, especially at six months, to evaluate the adoption and/or maintenance of safer behaviors. ▪ Recruit participants via other (not directly HIV-related) activities. ▪ Include ground rules created and adopted by participants. ▪ Include discussions about multiple issues that the group identifies as priorities (e.g., racism, homophobia). ▪ Have counselors available before or after the intervention to provide confidential, one-on-one referrals to other prevention services within or outside of the agency.
Quality Assurance Measure	<p><i>Group level Interventions must have a:</i></p> <ul style="list-style-type: none"> ▪ Curriculum that incorporates discussion of issues specific to the target population ▪ Group facilitator who debriefs and documents main discussion points of each session
Data Requirements	<p><i>Agencies are required to have a:</i></p> <ul style="list-style-type: none"> ▪ Pre/Post HIV/AIDS Knowledge Assessment Measurement. ▪ Pre/Post HIV/AIDS Behavioral Risk Assessment Measurement. <p><i>Providers must report:</i></p> <ul style="list-style-type: none"> ▪ Client demographics as required by the Iowa HIV Prevention & Evaluation System. ▪ Number of clients participating in 1-2-3-4 or more sessions. ▪ Referrals made materials distributed.

Strengths	<p><i>Group level interventions are:</i></p> <ul style="list-style-type: none"> ▪ Able to go into greater depth about HIV risk reduction issues and strategies than single session groups, have more potential to deal with the underlying causes of unsafe behavior, and thus have a greater possibility of effecting behavior change. ▪ Able to attract MSMs who are seeking social contacts and support outside of the gay bar scene and people who are seeking connection with others who have shared experiences and interests. ▪ Frequently the first opportunity for some people to talk about sexual and drug-related behaviors with their peers. ▪ Most applicable for people with high perception of personal risk. ▪ Useful for people who are already highly motivated to attend groups. ▪ Able to provide a needed/desired structure for some populations (e.g., some homeless and/or jobless people). ▪ Able to attract people who perceive they are a part of a culture, group, or community, and are seeking connection with others who have shared experience and interests. ▪ Most fully by women, who tend to take advantage of discussion and support groups and to work well with relational models. ▪ Especially feasible and easy to integrate when conducted in institutional settings (schools, residential treatment centers, and incarcerated persons). ▪ More helpful to participants if they are interactive rather than didactic.
Limitations	<p><i>Group level interventions may not be:</i></p> <ul style="list-style-type: none"> ▪ Effective or appropriate for mentally ill populations ▪ Able to retain participants for continuing groups; providers may require a "hook" other than HIV prevention alone to motivate regular attendance (note: this is absolutely essential for youth participation). ▪ Feasible for people with limited free time.

Many providers may consider general education activities to be group-level interventions. However, GLI does not include "one-shot" educational presentations or lectures that lack a skill component. Those types of activities are included in the Health Communication/Public Information category.

Multiple session groups have been effective at reducing a variety sexual risk taking behaviors as well as affecting knowledge and attitudes about HIV among several populations. These populations include homeless adolescents (M. J. Rotheram-Borus, Koopman, Haignere, & Davies, 1991), African-American gay and bisexual men (Peterson et al., 1996) gay and bisexual men in general (Roffman et al., 1995), young African-American women (R. J. DiClemente & Wingood, 1995), low-income African-American women incarcerated African-American and White women (Branson, 1998; R. J. DiClemente & Wingood, 1995; Peterson et al., 1996; Roffman et al., 1995; St Lawrence, Jefferson, Alleyne, & Brasfield, 1995), STD clinic patients, immigrant Latina women, and middle school students. One the other hand, a study of the effect of multiple session groups with incarcerated adolescents did not identify any commitment to behavior change among the participants after completion of the intervention.

Demonstrated Effectiveness

There are data suggesting that multi-session groups can be very effective at changing the risk behavior of group participants, and certainly at changing their level of knowledge. Multiple sessions have a greater possibility of effecting consistent behavior changes than one-time interventions. They also have more potential to deal with the underlying causes of unsafe

behavior. Multiple session groups, however, can be only as effective as the facilitator or teacher who leads them. A facilitator or teacher who is not trained in AIDS education, or is not comfortable speaking frankly about sexuality and drug or other needle use, cannot lead an effective HIV prevention program.

A study of a two-session classroom AIDS education program involving seventh and tenth grade classes in Rhode Island showed positive, albeit modest, results. Following instruction, students reported more knowledge, greater tolerance of AIDS patients, and more hesitancy toward high-risk behaviors (L. K. Brown, Fritz, & Barone, 1989). (Siegel, DiClemente, Durbin, Krasnovsky, & Saliba, 1991) reported similar results in a school-based AIDS prevention program presented in an inner-city school serving predominately African-American and Asian students.

A study of an open enrollment, pass/fail course at UCLA in 1988 showed positive impact on students' AIDS-related knowledge, attitudes, and behaviors. Compared to a control group, the students who took the lecture course changed their attitudes about critical public policy issues (e.g., mandatory HIV testing) and increased their appreciation of 'individual rights' (C. Abraham & Sheeran, 1994; Abramson, 1989).

An evaluation of an AIDS intervention program at a shelter for homeless adolescents demonstrated significant increases in condom use and decreases in risky behavior. The intervention had no effect on abstinence. The intervention focused on skills training, behavior self-management, and group and social support from peers (M. J. Rotheram-Borus et al., 1991).

A study of African-American gay and bisexual men in San Francisco demonstrated that men who participated in multiple session groups had higher levels of behavior change, and maintained behavior change over time. This was in contrast to men who attended single-session groups (Peterson, 1995). Gay men, who participated in a small group intervention consisting of 12 weekly group sessions, reduced their frequency of unprotected anal intercourse. These men also increased their use of condoms significantly more than the men in the comparison group (Kelly, St Lawrence, Hood, & Brasfield, 1989). Men who participated in a small group lecture plus skills training educational intervention showed a significant increase in condom use for insertive anal intercourse compared to those who attended only the small group lecture (Valdiserri et al., 1989).

An evaluation of a six-session skill-building intervention conducted with high school students demonstrated that this approach was effective in increasing STD and AIDS knowledge. Participants showed an increase in skills needed to prevent risky sexual behaviors, but not risky drug use behaviors (Shafer & Boyer, 1991).

A review of the National Institute of Mental Health sponsored research on prevention interventions, showed that multiple session group workshops were successful in reducing high-risk behavior in gay men, women of color, and homeless youth. In particular, reported condom use was much higher for workshop participants than for control groups. These workshops included skill building for assertiveness, relationships, and social support. Multi-session interventions that included a cognitive-behavioral component showed more success in increasing condom use among African-American youth than a single session information-only intervention (Office of AIDS, undated manuscript).

(Ehrhardt, 1995) found that interventions that involved three or more sessions and whose skill-based content was targeted specifically to women (as opposed to men and women) were more successful in reducing high-risk sexual practices than information-only interventions. Positive results were found for IDU women or sex partners of IDUs and at-risk, inner city or low income women.

For injecting drug users in treatment, participants in an enhanced, six session intervention on HIV education showed better ability to make decisions about risky behavior immediately following the intervention than participants receiving a single session information intervention. However, follow-up data did not reflect significant differences in behavior among the two groups (McCusker et al., 1992).

(O. A. Grinstead, Zack, & Faigeles, 1999) reported in a recent study that pre-release HIV prevention programs reduced sexual and injection drug using risks and increased the use of community services by HIV-infected inmates. In this study, HIV positive men participated in a two-week intervention consisting of interactive group sessions led by community service providers. Session topics included sex, drug use, recovery, nutrition, and HIV-related legal issues. Those receiving the intervention that engaged in sex following their release were more likely than those not receiving the intervention to have used a condom during their first intercourse after release. They were also more likely to have seen a health care provider since their release.

(Kelly et al., 1994) was able to demonstrate behavior changes in female patients at an urban clinic who received a five-session workshop on HIV/AIDS risk reduction. Participants showed significant changes in condom use and sexual communication and negotiation skills at a three-month follow-up. A comparison group receiving health education on other topics showed no change after three months.

Gay and bisexual adolescents participating in an HIV prevention intervention showed changes in their practices of unprotected anal and oral sex. These changes were pronounced for African-American youth (M. J. Rotheram-Borus et al., 1991).

In addition to the research on HIV prevention interventions, studies on health education interventions for other health concerns also show the effectiveness of a multi-session approach. For example, patients participating in a six session educational program on cardiovascular health demonstrated greater improvements in their lifestyle and diet than did patients receiving the "usual advice" from a health care provider (Lindholm et al., 1995).

School Based Programs

When the four curricula identified by CDC as being effective are compared with curricula without positive behavioral results, the effective curricula share several characteristics. This may be linked to their success, while the ineffective curricula lack one or more of these characteristics. These characteristics were first published by a panel of experts selected by CDC

(Kirby et al., 1994) and subsequently updated by (Kirby, 1997). These characteristics reflect different aspects of effective instructional methods.

The nine characteristics that effective programs share include the following.

- 1) Effective programs focused on reducing one or more sexual behaviors that lead to unintended pregnancy or HIV/STD infection.
 - a) These programs focused narrowly upon a small number of specific behavioral goals, such as delaying the initiation of intercourse or using contraception. Relatively little time was spent addressing other sexuality issues, such as gender roles, dating, or parenthood. It is unclear whether programs covering a more comprehensive array of topics are effective, as few of them have been well evaluated.
 - b) These programs gave a clear message by continually reinforcing a clear stance on these behaviors. They did not simply lay out the pros and cons of different sexual choices, and implicitly let the students decide which was right for them. Rather, most of the facts, activities, values, and skills were directed toward convincing the students that abstaining from sex, using condoms, or using other forms of contraception was the right choice.
- 2) The behavioral goals, teaching methods, and materials were appropriate to the age, sexual experience, and culture of the students.
 - a) Programs for younger youth, few of whom had engaged in intercourse, focused upon delaying the onset of intercourse.
 - b) Programs designed for high school students, some of whom had engaged in intercourse, emphasized that students should avoid unprotected intercourse, either by not having sex or by using contraception if they did have sex.
 - c) Programs for higher-risk youth, most of whom were already sexually active, emphasized the importance of using condoms and avoiding high-risk situations.
 - d) Some curricula, such as *Becoming a Responsible Teen (BART)* and *Be Proud! Be Responsible!* were designed for specific racial groups and emphasized statistics, values, and approaches that were tailored to those groups.
- 3) Effective programs were based upon theoretical approaches that have been demonstrated to be effective in influencing other health-related risky behaviors.
 - a) When applied to sexual behavior, social learning theories posit that behavior such as delaying the initiation of intercourse, will be affected by:
 - i) an understanding of what must be done to avoid sex;
 - ii) a belief in the anticipated benefit of delaying sex (motivation);
 - iii) a belief that particular skills will be effective (outcome expectancy); and
 - iv) a belief that one can effectively use these skills (self-efficacy).
 - b) Social learning theories recognize that youths gain these understandings and beliefs directly through education and indirectly by observing the behavior of others.
 - c) Social influence theories address the societal pressures upon youths and the importance of helping youths understand and resist those pressures.
 - d) Effective programs strive to go beyond the cognitive level; they focus on recognizing social influences, changing values, changing group norms, and building social skills.

- 4) Effective programs lasted a sufficient length of time to complete important activities adequately.
 - a) Shorter programs appeared to have less effect, while longer programs provided the opportunity to complete many of the important educational activities.
 - b) Effective programs tended to fall into two categories: those that lasted 14 or more hours and those that lasted a smaller number of hours, but were implemented in small group settings with a leader for each group. The latter type may have been able to involve the youth more completely, to tailor the material to each group, and to cover more material and concerns more quickly in each group.
- 5) Effective programs employed a variety of teaching methods designed to involve the participants and have them personalize the information.
 - a) Instructors reached students through active learning methods of instruction, not didactic instruction.
 - b) Students were involved in numerous experiential classroom and homework activities: small group discussions, games or simulations, brainstorming, role-playing, written rehearsal, verbal feedback and coaching, locating contraception in local drugstores, visiting or telephoning family planning clinics, and interviewing parents.
 - c) A few effective curricula used peer educators or videos with characters who resembled the students and with whom the students could identify.
 - d) All activities helped the students personalize the information.
- 6) Effective programs provided basic, accurate information about the risks of unprotected intercourse and methods of avoiding unprotected intercourse.
 - a) Although increasing knowledge was not the primary goal of these programs, effective programs provided basic information that students needed to assess the risks and avoid unprotected sex.
 - b) This information was not unnecessarily detailed or comprehensive. Instead, the curricula emphasized the basic facts needed to make behaviorally relevant decisions.
- 7) Effective programs included activities that address social pressures on sexual behaviors. These activities took a variety of forms, for example, one curriculum addressed media influences.
 - a) Several curricula discussed situations that lead to sex.
 - b) Most of the curricula discussed "lines" that are typically used to get someone to have sex; some discussed how to overcome social barriers to using contraception and some also addressed peer norms.
- 8) Effective programs provided modeling and practice of communication, negotiation, and refusal skills.
 - a) The programs provided information about skills, modeled effective use of skills, and then provided some type of skill rehearsal and practice.
 - b) There were significant variations in the quality and time devoted to practicing the skills.
- 9) Effective programs selected teachers or peers who believed in the program they were implementing and then provided training for those individuals.
 - a) The training ranged from approximately six hours to three days.
 - b) Training was designed to give teachers and peers information on the program as well as practice using the teaching strategies included in the curricula (e.g., conducting role-playing exercises and leading group discussions).

Despite the commonalities, there is very little evidence regarding which of these factors or combinations of factors contributes to the overall success of the programs. For example, simply increasing knowledge is not likely to change behavior. Similarly, to assume that the positive behavioral effects resulted from just skills practice or instruction on social influences would be premature (Kirby, 1997).

Ineffective curricula covered a broader array of topics, but failed to emphasize those particular facts, values, norms, and skills needed to postpone sex or avoid unprotected sex. Ineffective curricula also taught decision-making skills, but did not explicitly guide students to make health-enhancing decisions.

Schools can help reduce HIV, STDs, and unintended pregnancy. To ensure success, however, schools should implement programs that have been proven effective or that incorporate the key features of effective programs.

Out-of-School Based Programs

The term “out-of-school” refers to adolescents not participating in a traditional secondary school educational setting, but regularly participating in an organized treatment or alternative educational setting. This includes incarcerated youth, youth in mental health facilities, and youth in alternative high school programs.

Effective curricula for “out-of-school” youth are based on the following philosophy (Buckingham, 1995):

- Adolescents are the richest source of information for one another on HIV risk and prevention behavior.
- Traditional learning strategies are ineffective with youth in out-of-home placement.
- Learning is more likely to occur when youth are able to integrate what they have learned into their own experience.
- Learning is more likely to occur when youth are able to learn using real life situations.
- Virtually all programs shown to impact adolescent behavior are skills-based. The acquisition of skills and the development of self-efficacy for use of the skills lie at the heart of skills-based programs.
- Health education programs should be theoretically based and adhere to sound instructional strategies.

Given the importance of peers, learning should be geared toward using peers as models and reinforcers of desired behaviors.

Evaluation

Multiple session groups can be expected to result in behavior change over time, in areas such as condom use or needle sharing. Providers should give participants a pre-test at the start of the first workshop and a post-test at the end of the final workshop. Ideally, an additional post-test would also be given during a follow-up encounter with each client, one or more months after the end of the intervention; however, this is not always possible.

OUTREACH

Outreach programs seek to change individual behavior by providing motivation, knowledge, risk reduction materials, linkage to testing, and referrals to services that support behavior change. Such programs access at-risk individuals on the street, or in malls, parks, bars, or other community settings. Outreach is directed towards a clearly defined target population of individuals at high risk for getting or spreading HIV. Such populations are further characterized by gender, age, race, ethnicity, risk behavior, physical or mental disability, and/or geographic locations. Outreach usually includes distribution of condoms, bleach, sexual responsibility kits, and educational materials. Peer opinion leader models are included in this category. Street and community outreach programs are defined by their location of activity and by the content of their offerings. Both have important subcategories of peer and non-peer models.

STREET AND COMMUNITY OUTREACH	
<i>A face-to-face interaction with a high-risk individual in their neighborhood or area (s) where they congregate</i>	
Definition/ Description	A face-to-face interaction between an outreach worker (or a team of outreach workers) and a client or a small group of clients. Takes place on the street or in venues where the target population may congregate at appropriate times of the day, night, week, and year. The outreach activities may occur in existing settings or settings specially created for the purpose of HIV prevention. Can take a variety of forms, including community theater, dramatizations of real-life scenarios, "bar zaps," and interactive performance art, that are designed to promote HIV risk reduction behaviors among audience members. The distribution of appropriate prevention materials may also be a component of these activities. The outreach worker may establish a one-time intervention or a long-term relationship with clients in a particular community.
Minimum Standards	<i>Street and community outreach must:</i> <ul style="list-style-type: none"> ▪ Include (1) distribution and demonstration of prevention materials, such as latex barriers and bleach kits, (2) assessment of a client's needs, (3) provision of health education/risk reduction information and referrals, and (4) dialogue about a client's issues regarding HIV ▪ Be coupled with one or more of the other approved interventions. It cannot be funded as a stand-alone intervention, (i.e. as the only intervention in a program). ▪ Have a one-on-one component
Implementation Recommendations	<i>Street and community outreach must:</i> <ul style="list-style-type: none"> ▪ Address continued risk behaviors in the face of HIV knowledge. ▪ Be consistent and continuous and involve client follow-up when possible. ▪ Respect the operating conditions at, and contribute to the spirit of the venue/event. ▪ Be interactive and engaging and emphasize community unity, creating a positive environment in which participants can socialize and mingle. ▪ Encourage networking among members of different communities, through sharing of information and resources. ▪ Be held in a safe environment for both the target audience and outreach workers.
Quality Assurance Measures	<i>Street and community outreach agencies must have:</i> <ul style="list-style-type: none"> ▪ Signed Memorandums of Agreements (MOAs) with local bars, bookstores, bath houses etc. where they perform outreach activities ▪ Written field safety protocols ▪ Written outreach schedule
Data Requirements	<i>Providers must report:</i> <ul style="list-style-type: none"> ▪ Contact demographics as required by Iowa HIV Prevention & Evaluation System ▪ Referrals made and materials distributed.

Strengths	<p><i>Street and community outreach can:</i></p> <ul style="list-style-type: none"> ▪ Reach large numbers of people. ▪ Be implemented using media, video, and other interactive technology. ▪ For youth (Givertz, 1993), out-of-treatment IDUs (Rahimian and Pach, 1999), populations who have a low perception of personal risk for HIV, those with lack of access to health and social services, and those in need of basic information. ▪ Serve as an opportunity to recruit clients targeted for other prevention activities. ▪ Reach people who identify with some community or a group scene/social group. ▪ Be suitable for groups with multiple issues and barriers to change, groups with a lack of access to services, people with a low perception of personal or communal risk, people needing basic information and referrals, and people that have never experienced another intervention. ▪ Provide a forum for dialogue between friends and family (community building). ▪ Encourage individuals and communities to participate in other prevention activities. ▪ Address people at various stages of behavior change. ▪ Reach people who may be in a venue less purposefully and may not be seeking HIV prevention services.
Limitations	<p><i>Street and community outreach may not be:</i></p> <ul style="list-style-type: none"> ▪ Suitable for individuals with serious mental health stressors. ▪ Appropriate or allowed in certain venues. ▪ Impactful if it is over-concentrated in a venue. ▪ Able to meet clients' needs for services due to lack of available referral resources. ▪ Appropriate for populations that are well informed but continue to show high rates of infection. ▪ As effective for reaching people who are closeted, not identified with a group/community, or not already in an institutional setting.

*Examples of venues are homes, raves, schools, churches, temples, synagogues, mosques, hospitals, sport leagues, gyms, the general assistance office, halfway houses, public housing, laundromats, crack houses, fairs and other community events, massage parlors, porn theaters, bars, night clubs, community centers, gambling parlors, and businesses.

Street outreach refers to HIV prevention education and counseling that is delivered at informal sites where persons engaged in high-risk activities congregate, such as streets, bars, parks, shooting galleries, bathhouses, beauty parlors, etc. The strategy involves a broad range of models, from occasional condom drops to the long-term placement of highly skilled workers in the community. Street outreach programs may be highly interactive and engaging, or they may involve only a cursory risk message and delivery of referral information. Some outreach programs strive to develop long-term relationships with individuals on the street, thus the service is repeatedly delivered to an individual over time.

Street outreach involves more than the distribution of condoms and bleach. The more difficult task of the outreach worker is encouraging lifestyle changes by developing relationships through repeated outreach and a continuous presence. Not surprisingly, studies have found that increased exposure over time results in more significant behavioral changes (Stephens, 1993). However, the same studies have also indicated that there were not significant differences in behavioral changes based on the level of intensity of the intervention. Other studies of outreach projects, however, including a report by the Centers for Disease Control and Prevention on the AIDS community development project, indicate that the presence of outreach workers needs to be consistent and continuous, not just sporadic visits (Dorfman, Derish, & Cohen, 1992; Johnson, 1990; Stephens, 1993).

A study of enhanced versus standard interventions indicates that there is some, but not major, difference between the responses to the enhanced and standard interventions offered. Their recommendation is that more enhanced intervention would make an outreach program more successful. The CDC study confirms this analysis: "Counseling oriented interventions may need to address other issues or behaviors in an individual's life (such as childbearing plans among female sex partners of IDUs; crack use among IDUs; addiction to injectable illegal drugs; and alcohol abuse among gay/bisexual men) before HIV prevention can be effectively addressed," (*AIDS Community Demonstration Projects: What We have Learned, 1985-1990.*, 1992).

Street outreach workers may become trusted health care professionals. Lack of transportation and an intimidating appointment system can be a barrier to historically under served risk groups receiving HIV counseling and testing as well as STD and other health care services. Street outreach workers bring the services to the streets instead of asking people to go to a clinic. Information that is presented in pamphlets kept at health clinics or broadcast through other media sources such as newsprint and television are less likely to impact historically underserved individuals engaging in high-risk behaviors on the streets. The street outreach workers make it easy to get information by being accessible and available instantly (Watters et al., 1990).

In a study of community-based outreach to urban sex workers conducted by (Dorfman et al., 1992), it is noted that the dedication of street outreach workers was noticed and appreciated by the community. (Johnson, 1990), in their analysis of 28 street outreach programs around the country, concluded that the success or failure of community-based HIV prevention programs is dependent on the skills and dedication of the outreach workers.

Field staff should be indigenous to the community. It is important that outreach workers relate to their contacts. It is important for street outreach workers to know when people are approachable. It is well documented from the earliest studies involving outreach that it is important for outreach workers to speak the same language (including the slang/jive of the community) and come from the same ethnic and socioeconomic background as their contacts. Reports indicate that street outreach workers are more readily trusted if they have at some point in their lives experienced the activities that they are talking about (Dorfman et al., 1992).

Different types of outreach strategies work in different types of communities. One study compared proactive and reactive strategies of street outreach. Proactive outreach consists of cold calls, walking up to people and making an introduction, and actively initiating contact and interacting with individuals. Reactive outreach is a more passive form of outreach. This type of street outreach involves a constant community presence. Outreach workers "hang out" and are available for people to approach with questions. With this technique, the contacts have control over when outreach happens. The conclusion of the study indicated that different strategies worked for different risk groups. Black outreach workers used the proactive style most frequently within African-American/Black communities. The reactive strategy "emerged as a calculated response to the idiosyncrasies of particular communities. The Black, Hispanic, and gay multi-ethnic neighborhoods differ in their general willingness to openly acknowledge and discuss drug abuse, illness, and HIV-related diseases. The emergence of a proactive style of outreach in the Black community was appropriate to the setting. On the other hand, the Hispanic

community generally views drug abuse and HIV related diseases as taboo subjects." (Johnson, 1990).

Effectiveness

This strategy is effective in changing various risk behaviors among different populations. It has been successful for decreasing injection drug use related risk behavior as well as sexual risk behavior. Having contact with an outreach worker has been associated with getting an HIV test and carrying condoms among homeless youth (Watters et al., 1990).

Research data, focus group participants, key informants, and providers all emphasize that outreach services must be appropriate to the target population and its norms. Clients should be able to identify with outreach workers. For example, research shows that using outreach workers from the community contributes to the positive impact of outreach programs targeting IDUs (T. J. Coates & Stryker, 1994).

Several studies discuss the effectiveness of outreach programs and the core elements that influence that effectiveness. Researchers state that the most critical factor to effectiveness is the outreach staff themselves. For an outreach program to be effective, the staff delivering the intervention needs to be respected, trusted, credible, open, friendly, dedicated, non-threatening, and non-judgmental. Once trust is established, the results can be impressive. In one study of 554 IDUs in San Francisco, almost one quarter (24%) reported learning about bleach use from a community health outreach worker (Watters et al., 1990).

Research and other data show street outreach is successful in communicating prevention messages to many populations and is associated with behavior changes, especially when it involves peer leaders, targets particular communities, and reaches them near the location of risky behavior (Givertz, 1993; Watters et al., 1990). It is notable that street and community-based outreach services are the only intervention proven in published research to be somewhat successful with youths, one of the most difficult groups to reach with prevention messages (Givertz, 1993; Watters et al., 1990). Additional research has shown that staff who were from the targeted community and population were more likely to gain access to sex workers and became role models for behavior change (Dorfman et al., 1992). Building trust with members of the target population has been found to be an important factor for continued participation of the target population (Dorfman et al., 1992).

(Ehrhardt, 1995) review of interventions for at-risk women found increased condom use among female sex partners of IDUs living in housing projects who were the target of outreach efforts. A review of HIV prevention interventions by (Choi & Coates, 1994) found only three studies reporting on the effectiveness of community outreach to commercial sex workers; all showed increased condom use. In addition, the authors found two studies looking at street outreach to out of treatment IDUs that found the intervention to be effective in reducing needle sharing and, to a lesser extent, increasing condom use.

Venue based outreach has been found to be an effective intervention for reaching certain target populations that might not otherwise have access to HIV prevention, and it may have effects on knowledge, attitudes, or behavioral intention. (Stephens, 1993) found that group presentations

provided to lesbian and bisexual women in bars and clubs in San Francisco were effective in prompting interest in HIV prevention information and intent to change behavior. (S. M. Kegeles, Hays, & Coates, 1996) found that venue based outreach was more effective than small group workshops at reaching high-risk young gay men.

Evaluation

It may be difficult to measure behavioral or other outcomes resulting from outreach because outreach encounters do not always allow for individual follow-up to track behavior change over time. Evaluation can take place at the community level. This is especially appropriate given that the goal of outreach is to change community norms. Providers may also use process objectives. These may include the number of contacts made, percent of contacts who are repeat/follow-up contacts, number and type of prevention materials distributed, number and type of referrals given, and demographics and current risk behaviors of clients.

Peer Education

Peer education involves services provided by individuals who are recruited from a target population. These individuals are trained in HIV/AIDS (epidemiology, prevention, resources, etc.), peer counseling, outreach, and the issues of population groups which are difficult to reach with HIV information alone. The peer model can draw on established social networks to disseminate information. Peer providers are a direct link to members of the target population who do not normally present at primary channels such as counseling and testing sites (Edelstein & Gonyer, 1993). Peer education can be used in individual, group, and community level interventions.

The importance of peers as educators is based on Diffusion of Innovation Theory and the subjective norms of the Theory of Reasoned Action. Diffusion theory suggests that information and learning flows through natural social networks; people are more likely to adopt new behaviors if they are introduced by someone who is similar to them and is perceived to be a role model (T. Coates & Greenblatt, 1990; Dorfman et al., 1992). Peer educators may be similar to the target population by behavior, culture, race, age, ethnicity, gender, or other factors salient to the target population.

The Theory of Reasoned Action postulates that the intention to perform self-protective behavior is a function of the individual's attitudes toward that behavior or outcome and the perceived beliefs of the normative peer group (Fishbein, 1994). To promote adoption of positive behavior change, interventions should be directed at the attitudes of the individual toward the behavior and also at the attitudes of the normative group. In other words, individual behavior is dependent in part upon the extent to which the person is influenced by the norms of the peer group.

Participants in focus groups sponsored by the CPG in 1996 emphasized the importance of receiving information from peers. Peer education plays an important role in helping people perceive their own personal HIV-related risks. Perception of personal risk is an important factor in ultimately changing personal risk behavior.

PEER EDUCATION	
Definition/Description	Services are provided to a target population by individuals recruited from that target population, which may be defined by behavior, culture, race, age, ethnicity, gender identification, or other salient factors.
Implementation Recommendations	<p><i>Agencies should:</i></p> <ul style="list-style-type: none"> ▪ Provide counseling, supervision, safety and support structures, and adequate wages or incentives for their peer educators. ▪ Establish a contract with peer educator detailing responsibilities and compensation. ▪ Incorporate comments and experiences of peer educators into program development. ▪ Ensure diversity among peer educators. ▪ Train staff on the issues of their peer educators. <p><i>Peer educators should:</i></p> <ul style="list-style-type: none"> ▪ Be perceived as credible and as true peers by the target population. ▪ Address behavior change as well as provide information.
Strengths	<p><i>Peer education strategies:</i></p> <ul style="list-style-type: none"> ▪ Have a theoretical foundation in diffusion of innovation theory. ▪ Draw on established social networks to disseminate information. ▪ Can be used in conjunction with individual, group, and community-level interventions. ▪ Can assist in changing the perception of norms regarding HIV and risk behaviors. ▪ Can assist in creating social networks that support self-protective behaviors. ▪ Are especially suited for populations who do not perceive themselves to be at risk. ▪ Can lead to behavior change for the peer educators themselves. ▪ Are generally applicable to all populations.
Limitations	<p><i>Peer educators:</i></p> <ul style="list-style-type: none"> ▪ May not engage in HIV preventive behaviors themselves, and thus may not always be good role models. ▪ May experience a high burnout rate. <p><i>A peer approach:</i></p> <ul style="list-style-type: none"> ▪ May not appeal as much to members of small/close communities where information travels fast and stigma may still be attached to HIV concerns. ▪ Will not be appropriate for persons that prefer to receive HIV prevention services from people they view as outside of their immediate community so that they can talk more freely. ▪ Is not appropriate for individuals desiring anonymity or fear leakage of information.

Since peer norms appear to be important influences on adolescent behavior, peer education can assist in changing the perception of norms with respect to HIV and risk behaviors (R.J. DiClemente, 1993). Research has shown that successful adolescent peer educators are able to evaluate AIDS information, reconstruct it, and use their own personal experiences to filter through information. They then pass along this information and advice. Positive peer role models have been successful in helping to bring about risk-reduction changes in individual and group behavioral norms, and in serving as influential models to help young people's attitudes toward themselves and their health. Peer-based education can also be effective in helping the young person to understand his or her own risk and to translate the significance of this realization into his or her own life and behaviors. This personalization should, however, take place only in a safe setting where self-disclosure is met with acceptance, support, and confidentiality.

Effectiveness

Ideally, research evaluating peer programs would measure behavioral outcome in addition to changes in knowledge and attitudes. Additionally, investigations should make direct comparisons between the same interventions using peers and those using non peers. Very few studies have done this. After reviewing a number of evaluation studies on peer education in academic settings, (Fennell, 1993) concluded that the literature offers little in judging the effectiveness of peer education programs in producing positive behavioral change in students.

Peer education programs have been used extensively in academic settings. They have been shown to be uniquely effective in providing a service with an economy of cost and person power (Zapka & Mazur, 1977). More recently they have been recommended and utilized in HIV prevention programs as a method for outreach, counseling, and changing norms. Peers can act as valuable change agents because they can communicate in ways that professionals cannot, and act as trustworthy role models (Perry, 1989). Persons are better able to accept communications that may influence attitudes, norms, and behaviors if they perceive the communicator is someone with whom they can identify and who may share similar problems (Sloane & Zimmer, 1993).

AIDS research has produced good evidence for conducting peer-led interventions. Rickert and colleagues compared a peer-led versus an adult-led AIDS education intervention with adolescents and found that participants asked more questions of peer leaders than of adult presenters. They concluded that perceptions of personal risk may be affected more by peer presenters than by adult presenters(Sloane & Zimmer, 1993).

Kelly and associates (Kelly et al., 1991) found that a peer-led intervention reduced the number of participants who engaged in unprotected anal intercourse. They concluded that interventions that employ peer leaders to endorse change may produce or accelerate population behavior changes to lessen risk for HIV infection. In a later study, researchers (Kelly et al., 1991; Kelly et al., 1992) produced similar findings. They reported that a peer led outreach intervention targeting gay men frequenting bars resulted in a marked decrease in the proportion of men engaging in unprotected anal intercourse. (L. S. Jemmott & Jemmott, 1991) found a significant relationship between future intentions to use condoms when participants had support from parents or sexual partners for condom use.

Groups led by peers may be more effective at motivating behavior change than those led by non-peers. (Catania et al., 1991) found that positive support from friends, family, and lovers is related to changes in sexual behavior and increased condom use whereas helpful support from more formal sources (e.g., physicians, psychologists) was not associated with changes in condom use.

Using peers as educators may be useful for helping the target population more accurately perceive their personal level of HIV-related risk. Peer educators can positively effect group norms, and peer educators are better able to talk frankly about sensitive issues around sex and drug use. Eroticizing condom use and emphasizing the erotic appeal of safer sex are components of interventions designed to change sexual behavior (Catania et al., 1991). Peer educators may be better equipped to understand what a particular group may or may not find erotic.

An additional benefit of peer-led programs is the positive effect they have on the peer educators themselves. Because they undergo training which involves increasing HIV risk knowledge, sensitivity and skills training, studies report increased prevention behaviors in the peer leaders in addition to the target populations (McLean, 1994; Sloane & Zimmer, 1993; Stevens, 1994).

The effectiveness of peer programs is dependent upon the quality of the support and training of peer-leaders and the implementation and delivery of the program and its messages. Efforts should be made to control and maintain quality throughout the life of the program with ongoing evaluations of service delivery and of outcomes. Only ongoing monitoring and outcome evaluation can help identify training needs in delivery, sensitivity of peer leaders, and assess the impact of the interventions that are implemented (Croll, Jurs, & Kennedy, 1993).

Evaluation

In the case of outreach, it may be difficult to measure behavioral or other outcomes resulting from the intervention because outreach encounters do not always allow for follow-up to track behavior change over time. Therefore, outreach may be best evaluated through process objectives. Such objectives may focus on number of contacts made, percent of contacts who are repeat or follow-up contacts, number and type of prevention materials distributed, number and type of referrals given and demographics and current risk behaviors of clients.

Endorsements/Testimonials by Opinion Leaders

Opinion leaders are key people who are recognized as influential and charismatic members of a community. These individuals are seen as models whose opinions and behaviors are likely to influence the opinions and behaviors of a target population. An opinion leader is a member of the community who is particularly popular or respected by other members of the community. An opinion leader may be viewed as representing her/his community in the entertainment field, sports, government/politics, academia, business, popular culture, community work, etc.

NATURAL OPINION LEADERS	
Definition/ Description	Key people who are recognized as influential and charismatic members of a community or communities are identified as models of opinions and behaviors with the goal of influencing the opinions and behaviors of a target population.
Implementation Recommendations	<i>Opinion leaders should:</i> <ul style="list-style-type: none"> ▪ Be identified and determined by the target population. ▪ Be individuals who have the capacity to influence social norms.
Strengths	<i>Opinion leader strategies are useful for:</i> <ul style="list-style-type: none"> ▪ Persons with group identification and who recognize community leaders. ▪ Groups such as youth, who value sports stars, movie stars, and other media heroes. ▪ Persons with perceptions of low risk either personally or for the community. ▪ Groups in which social stigma is attached to homosexuality or injection drug use.
Limitations	<i>Delivering prevention messages via natural opinion leaders may not:</i> <ul style="list-style-type: none"> ▪ Be appropriate for individuals or groups that lack community identification, it relies on the relationship between the chosen opinion leader and the group targeted. ▪ Result in behavior change, especially when they are high-profile individuals. <i>Opinion leaders:</i> <ul style="list-style-type: none"> ▪ Must engage in HIV preventive behaviors themselves to be good role models.

Effectiveness

There are several studies demonstrating effectiveness of the "Social Diffusion Theory" to change behavioral norms through natural opinion leaders as relayers of peer messages. (Kelly et al., 1991) found that interventions that employ peer leaders to endorse change may produce or accelerate population behavior changes to lessen the risk for HIV infection. Gay men who were identified as popular opinion leaders were trained to educate friends and acquaintances about HIV prevention. The study found that the percent of men engaging in unprotected anal intercourse declined, a 16 percent increase in condom use was reported, and there was a decrease in the proportion of men with multiple sex partners.

There is substantial evidence that after specific announcements of personal HIV status by public figures such as Rock Hudson or Magic Johnson, hotlines and informational outlets become deluged with questions from concerned individuals, usually relating to their own HIV risk behaviors. Certain celebrities clearly have a powerful ability to draw attention to an issue such as HIV, and to prompt people to consider their own personal levels of HIV risk.

As a strategy for preventing HIV infections, however, the usefulness of high profile natural opinion leaders, such as Magic Johnson, may be limited. Natural opinion leaders, due to their widespread visibility, can be instrumental in increasing awareness and knowledge of HIV/AIDS and related prevention services, but not necessarily effecting behavior change.

Condoms, Latex Barriers, Bleach Distribution

Through this strategy, health workers distribute bleach, condoms, and latex barriers, demonstrate their use, and provide referrals in areas where people at risk for HIV congregate. Limited opportunities for one-on-one health education or risk reduction are offered by this strategy that, by definition, focuses on behavioral change.

CONDOM DISTRIBUTION	
Definition/Description	Providers distribute female and male condoms to members of the target population.
Implementation Recommendations	<i>Condom distribution as a strategy:</i> <ul style="list-style-type: none"> ▪ Must be used in combination with other strategies or interventions. ▪ Be accompanied by instructions for proper use, verbal or written.
Strengths	<i>Condom distribution may:</i> <ul style="list-style-type: none"> ▪ Reduce barriers to safer sex for some populations (e.g., for those who cannot afford condoms, those who are embarrassed to buy condoms such as teens).
Limitations	<i>Condom distribution:</i> <ul style="list-style-type: none"> ▪ Has limited effectiveness unless accompanied by other interventions or strategies. ▪ May be controversial in school settings.

Access to Sterile Injection Equipment

Needle exchange programs provide sterile needles to injecting drug users. Needle exchange programs are community or street-based. Within this intervention framework, prevention workers distribute clean needles (syringes) and other supplies to individuals who use needles to inject drugs, usually in exchange for used needles. They also provide referrals to HIV-related services in areas where persons involved in high-risk behaviors congregate. A limited opportunity for one-on-one health education and/or risk reduction intervention may occur in this context, as may a chance to help link an infected person to HIV care services. Needle exchange programs focus specifically on behavior change related to needle usage and less on sexual behaviors. Needle exchange programs are designed to reach individuals on a repeated basis.

A variety of factors may limit the effectiveness of needle exchange programs, including a lack of resources and of information in target communities about existing services. Providers note that overall, only fractions of IDUs use needle exchanges. Furthermore, IDUs who would be willing to utilize needle exchange programs do not always know how to access them. Providers say IDUs fear that law enforcement officials or social service authorities will intercept them at needle exchange sites. Providers also say that some women IDUs fear their children will be taken from them if they participate in needle exchange programs.

STERILE INJECTION EQUIPMENT ACCESS AND DISPOSAL	
Definition/Description	Needle access programs are community or street-based programs that provide sterile needles to IDUs and hormone, steroid, vitamin, and insulin users. Needle exchange can be primary (i.e., individuals exchange their own needles) or secondary (i.e., individuals exchange needles for friends or a group of people).
Implementation Recommendations	<p><i>Access to sterile injection equipment and disposal strategies must:</i></p> <ul style="list-style-type: none"> ▪ Have a designated health education and referral and resource person. ▪ Offer passes that reserve spots in drug treatment program (i.e., drug treatment vouchers) to interested clients, when possible. ▪ Have available condoms, dental dams, and information on safer sexual behavior. ▪ Meet the safety needs of clients (e.g., minimizing police presence, having a protective and vigilant staff). ▪ Consider collaborating with other HIV prevention education agencies to provide services at the needle access or disposal site.
Strengths	<p><i>Access to sterile injection equipment and disposal strategies can:</i></p> <ul style="list-style-type: none"> ▪ Be developed for a particular neighborhood. ▪ Provide a bridge to drug treatment, CTR/PCRS, hepatitis B & C screening, Hepatitis A & B vaccination, and other social and medical services. ▪ Useful for the transgender community, and for other people who inject steroids or vitamins, as well as for IDUs. ▪ Use Pharmacies to serve as supply outlets for higher-risk populations. ▪ Reduce transmission of hepatitis B and C as well as HIV.
Limitations	<p><i>Injecting drug users:</i></p> <ul style="list-style-type: none"> ▪ Do not always know how to access needle or disposal sites because they do not know the schedule or where to go. ▪ May not always consider needle or disposal sites to be safe because they fear that law enforcement officials or social service authorities will intercept them there. ▪ Fear that their children will be taken if they participate in needle access programs. ▪ Cannot be funded with federal funds at the present time.

Effectiveness

Needle exchange is clearly an effective intervention. Several studies have found use of needle exchange to be associated with reduced needle sharing and other injection-related risk reduction behaviors as well as reduced HIV transmission. A review of the literature, including government reports, overwhelmingly supports the effectiveness of needle exchange. Studies indicate that it is a cost-effective approach in terms of infections averted (D. R. Holtgrave et al., 1996; P. Lurie & Reingold, 1993; Vlahov et al., 1998; Watters, 1996; Watters et al., 1990).

The majority of studies demonstrate decreased rates of HIV drug risk behavior through needle exchange, but not sex risk behavior. Available data do not provide evidence that needle exchange programs change overall community levels of drug use (P. Lurie & Reingold, 1993). There is also evidence to suggest that laws restricting access to syringes can potentially increase HIV infection rates.

Evaluation

In the case of needle exchange, it may be difficult to measure behavioral or other outcomes resulting from the intervention because needle exchange encounters do not always allow for follow-up to track behavior change over time. Therefore, needle exchange may be best evaluated through process objectives. Such objectives may focus on number of contacts made, percent of contacts who are repeat users of needle exchange, number of needles/bleach kits distributed, or number of referrals to drug treatment given.

HEALTH COMMUNICATIONS/PUBLIC INFORMATION

Health Communications and Public Information (HC/PI) is the delivery of planned HIV/AIDS prevention messages through one or more channels to target audiences to build general support for safe behavior, support personal risk-reduction efforts, and/or inform persons at risk for infection how to obtain specific services. HC/PI programs target the general public as well as specific populations and seek to dispel myths about HIV transmission, support volunteerism for HIV prevention programs, reduce discrimination toward persons with HIV/AIDS or persons perceived to be at risk for HIV infection, promote support for strategies and interventions that contribute to HIV prevention in the community, and increase access to available services. Through the use of promotional tactics, such as hotlines and the Internet, public information programs, and one-session information programs can lead to increased knowledge of HIV/AIDS facts, offer support and referrals, and may lead to behavior change.

MINIMUM STANDARDS: HEALTH COMMUNICATIONS/PUBLIC INFORMATION

The delivery of planned HIV/AIDS messages to target audiences through electronic media, print media, hotlines, clearinghouses, and presentations/lectures, for the purpose of building support for safe behavior, support personal risk-reduction efforts, or inform persons at risk for infection how to obtain specific services.

Minimum Criteria

- Single session presentations and lectures, that do not contain a skills component, belong in this category.
- Health Communication/Public Information (HC/PI) cannot be funded as a stand-alone intervention but must be coupled with one or more of the other approved interventions.

Quality Assurance Measures

- Agency has demonstrated the ability to access non-traditional communication networking, such as word of mouth through specific groups.
- Agency has demonstrated the ability to disseminate public information in the electronic, print, or other media.

Data Requirements

- The Iowa HIV Prevention & Evaluation System do not require client demographics for this intervention.
- Type of HC/PI Intervention (e.g., presentation, hotline, print media, etc.).

Electronic Media: Means by which information is electronically conveyed to large groups of people; includes radio, television, public service announcements, news broadcasts, and infomercials which target a large-scale (city-, region-, statewide) audience.

Print Media: These formats reach a large-scale or nationwide audience. They include any printed materials, such as newspapers, magazines, pamphlets, and "environmental media" such as billboards and transportation signage.

Hotline: Telephone service offering up-to-date information and referral to local services, such as counseling, testing, and support groups.

Clearinghouse: Interactive electronic outreach systems using telephones, mail, and Internet/Worldwide Web to provide a responsive information service to the general public as well as high-risk populations.

MEDIA

MEDIA	
Definition/ Description	Media is a form of communication that attempts to reach a wide audience with motivational and educational messages. These messages can be designed to reach large geographically dispersed audiences, small and location-specific audiences, or audiences defined by a common cultural or community identity. Examples of types of media are television (e.g., documentaries, talk shows, commercials, public service announcements [PSAs]), radio (e.g., PSAs, public talk shows), print (e.g., newspapers, magazines, newsletters), billboard advertising, computer services (e.g., Internet, bulletin boards), telephone services (e.g., hotlines, talk lines), brochures, pamphlets, fact sheets, posters, palm cards, videos, and audio tapes.
Implementation Recommendations	<p><i>Providers using media to disseminate prevention messages must:</i></p> <ul style="list-style-type: none"> ▪ Involve community members in the design, planning, and implementation of a media campaign to ensure that the effort is relevant to the target populations. ▪ Integrate HIV messages with other issues and activities of the target group. ▪ Use the social marketing theory/strategy as the foundation for media efforts. ▪ Consider the stages of change appropriate to its target audiences, and meet the readiness of the audience to receive prevention messages. <p><i>Prevention messages must:</i></p> <ul style="list-style-type: none"> ▪ Be emotionally or intellectually engaging. ▪ Be designed to target a specific group and not the general population, the messages may need to be disseminated widely to ensure that it reaches the target population. ▪ Communicate strong messages without causing desensitization. <p><i>Media campaigns must:</i></p> <ul style="list-style-type: none"> ▪ Be based on a thorough needs assessment of the target audience in order to pitch its message at the appropriate stage of change. ▪ Be appropriate for groups which are less likely to seek out or have easy access to HIV-related information (e.g., people who are homeless, IDUs, or lower literacy). ▪ Offer prevention messages without any economic investment on the part of the audience ▪ Reach persons who are unable to afford a TV or radio.
Strengths	<p><i>Media campaigns:</i></p> <ul style="list-style-type: none"> ▪ Can reach people with clearly identifiable “turf” or regular venues for hanging out. ▪ Can increase the realistic perception of personal or communal risk among people who, due to denial or demographic factors, have not seen themselves as being at risk. ▪ Are generally appropriate for all audiences and can be tailored for the target audience. ▪ Are suitable for reaching groups with little to no previous awareness or concern about HIV, groups that are less likely to seek out or have easy access to HIV related information, and people who do not perceive themselves to be at risk. ▪ Can be very affordable when they are small-scale and targeted. ▪ Can motivate people on a group/community level.
Limitations	<p><i>Media campaigns:</i></p> <ul style="list-style-type: none"> ▪ Can cause confusion when the messages are changing or inconsistent (e.g., regarding the safety of oral sex). ▪ Are more useful when combined with interpersonal interventions. ▪ May not be effective for groups facing multiple issues and barriers. ▪ Can be expensive. ▪ Mostly provide a backdrop or stage for prevention activities, and are not as useful if they are the only source of prevention information available to someone. In order for media to have an impact, personal interactions should take place in addition to media messages.

Effectiveness

Media efforts, both general and those directed at specific subgroups in the communities, are influential in teaching about the health risks associated with specific behaviors (T. Coates & Greenblatt, 1990). According to published research, media campaigns with culturally appropriate messages effectively convey prevention information and change behavior when funding exists to sustain them over time (T. J. Coates & Stryker, 1994). An analysis of injection drug users' use of media and source of HIV information in Baltimore concluded that media could reach IDUs with AIDS prevention messages, particularly through television (Jason, Solomon, Celentano, & Vlahov, 1993).

In their paper on HIV prevention and mass media campaigns, Schechtel et al. (1995) discuss how evaluations of effectiveness of campaigns about HIV make it difficult to assess an impact of a program. It is unclear what should be influenced: behavior, knowledge and awareness, or use of services. The authors discuss evaluations of health related campaigns other than HIV (seatbelt use, substance abuse) where the impact due to the intervention was minimal, but apparent. The authors do conclude, however, that although it is difficult to measure behavior change due to media campaigns, there are some data on effectiveness for HIV prevention, such as changes in knowledge and awareness. They also cite several studies that found media campaigns led to increased HIV testing and condom use.

(Choi & Coates, 1994), in their review article on media and HIV, state that HIV campaigns have most likely had little effect on behavior in the United States. Although, experience in other countries such as Mexico, France, and Switzerland had demonstrated the positive impact of the media campaigns on behavior change at the population level.

The media influences peoples' perceptions, attitudes, and beliefs. Use of media can be an effective method for increasing knowledge and awareness of HIV/AIDS (Schechtel, Crosby, Davis, & Whirry, 1995) and for influencing community norms related to HIV risk behavior. It may also play a role in changing individuals' behavior, such as increasing HIV testing and condom use (Schechtel et al., 1995). Other studies have identified specific channels and populations for whom media interventions can be effective. Television is an effective means to reach IDUS (Jason et al., 1993). The use of local mass media can be effective at decreasing risk behavior among poor, urban African-American and Latino/Latina youth.

Holtgrave and colleagues, after reviewing the literature on information dissemination programs, concluded that this method was effective in increasing basic HIV knowledge in the general public. Research support for the effectiveness of information dissemination on behavioral change suggests that information alone is not sufficient in changing long-term behavior. However, the applicable social science theories acknowledge that information is a necessary component of effective prevention efforts (D. R. Holtgrave et al., 1995).

Electronic and Print Media

Media is a form of communication that can reach large numbers of people with motivational and educational messages. These messages can be designed to reach mass audiences, small and location-specific audiences, or culturally and communally specific audiences. Different types of media are listed:

- Large media can include television (documentaries, talk shows, commercials, PSAs, etc.), radio (PSAs, public talk shows, etc.), and print (newspapers, magazines, etc.).
- Small media can include materials development (brochures, pamphlets, fact sheets, posters, palm cards, videos, audiotapes, etc.).
- Internet-based HIV prevention strategies include list serves, chat rooms, electronic bulletin boards, informational web sites with links to resources, and computerized surveys and assessments.
- Other media can include billboard advertising, computer services (internet, bulletin boards, etc.), and telephone services (hotlines, talk lines, etc.).

Large media campaigns often require a substantial amount of funds and many grassroots movement-type organizations cannot afford to sponsor them. Small media, however, can be very cost-effective and affordable.

Media providers note that media messages must be strong to compete for the public's attention. Desensitization of the public from exposure to many strong messages, however, is a counterbalancing concern. Providers note that messages are most effective when they are emotionally or intellectually engaging.

HOTLINES AND CLEARINGHOUSES

Toll-free HIV hotlines provide education, risk assessment, and referral information to callers, related either to general HIV prevention, referral, and support, or for specialized AIDS-related referrals or counseling. The anonymity of hotline services fits the preferences of those who are too embarrassed, closeted, or frightened to receive services elsewhere. In most cases, hotlines serve as convenient access points to obtain needed information and referrals related to all aspects of HIV and AIDS. Hotlines can serve both as a crucial first link to other services, and as an information source for individuals who are geographically or physically isolated.

HOTLINE	
Definition/Description	A confidential telephone service functioning as an education/referral/help line for anonymous callers. Hotlines offer up-to-the-minute information on HIV and related issues, crisis intervention and counseling, and direction to other social services.
Implementation Recommendations	<p><i>Providers must:</i></p> <ul style="list-style-type: none"> ▪ Develop consistent prevention messages for hotline operators and that are consistent with messages disseminated by other organizations. ▪ Promote and reinforce help-seeking behaviors. ▪ Provide brief call documentation (content and demographics).
Strengths	<p><i>Hotlines:</i></p> <ul style="list-style-type: none"> ▪ Are widely applicable to all groups at risk for HIV and are particularly appropriate for people desiring anonymity, people in crisis, people needing basic information, and people whose needs are not addressed by mass media HIV education efforts. ▪ Target a wider geographical area than most interventions. ▪ Are often first links to prevention and care services. ▪ Serve preventive as well as destigmatizing functions.
Limitations	<p><i>Hotlines:</i></p> <ul style="list-style-type: none"> ▪ May have limited usefulness in directly promoting behavior change. ▪ Can be expensive to operate. ▪ Are not appropriate for people without access to telephones. ▪ Cannot reach people who do not comfortably speak the language(s) offered.

Effectiveness

Hotlines are an effective method for disseminating accurate information about HIV, a critical component of HIV prevention, but it is unclear to what extent they are linked to behavior change. One survey of repeat callers to the Southern California AIDS Hotline found that 50% percent of callers reported that they had increased their practice of safer sex, and for 72% of all callers the hotline had been the only source of HIV/AIDS information since their last call (AIDS Project Los Angeles, 1993). One study looking at reasons people called a hotline indicated that many people called because of fears related to actual risk behaviors they had engaged in, indicating that this may be a good source of prevention information (S. Kalichman, 1998).

Evaluation

It would be extremely difficult to evaluate the impact of a hotline on people's knowledge, attitudes, or behavior without conducting an expensive well-controlled study. Therefore, hotline providers may best focus their evaluation efforts on process evaluation. Process objectives may focus on number and content of calls.

Internet/Computer

INTERNET/COMPUTER	
Definition/Description	There are many different kinds of Internet- and computer-based HIV prevention strategies, including list serves, chat rooms, electronic bulletin boards, informational web sites with links to resources, and computerized surveys and assessments. These can be used in the context of individual interventions (e.g., email exchanges between client and provider regarding risk reduction), small group interventions (e.g., single session group workshops done in a chat room), or community-level interventions (e.g., an Internet media campaign).
Implementation Recommendations	<p><i>Agencies should:</i></p> <ul style="list-style-type: none"> ▪ Develop user-friendly, interactive approaches. ▪ Provide training (and advocate for training in schools) on how to use computers and the Internet to access HIV-related information and resources.
Strengths	<p><i>Internet strategies:</i></p> <ul style="list-style-type: none"> ▪ Can reach large numbers of people over a wide geographic area. ▪ Present opportunities for prevention using channels that people use to solicit sex partners (e.g., chat rooms). ▪ May be perceived as more anonymous and thus may be more useful for populations desiring anonymity. <p><i>Computerized surveys and assessments:</i></p> <ul style="list-style-type: none"> ▪ May be useful for groups such as adolescents who may be embarrassed or uncomfortable talking to a provider about their sexual or drug use risk behaviors.
Limitations	<p><i>Internet and computer strategies:</i></p> <ul style="list-style-type: none"> ▪ Will not reach those without Internet access or computer skills, who may be low income or marginalized groups and at high risk for HIV ▪ May compromise anonymity/confidentiality if identifying information is requested or given over the Internet.

PRESENTATIONS/LECTURES

Presentations and lectures include single session group workshops. Single session workshops consist of a one-time, intensive session or gathering focusing on information about HIV (e.g., transmission and behavior change), motivational activities, and skills building. It may also touch on other relevant issues. This intervention can take a variety of forms, such as involving impromptu groups, using vans as session sites, and before/after bar groups. The specific intervention is planned or requested, usually based on advertising or promotion of the availability of the service.

PRESENTATIONS/LECTURES	
Definition/ Description	One-time sessions that focus on information about HIV (e.g., transmission and behavior change), motivational activities, and skills building. It may also touch on other relevant issues specific to the target population. This intervention may be implemented as planned groups, impromptu groups, or before/after bar groups.
Implementation Recommendations	<p><i>Presentations and lectures:</i></p> <ul style="list-style-type: none"> ▪ Advertise or promote the availability of prevention or care services. ▪ Recruit participants to HIV programs during other (not directly HIV-related) activities. ▪ Provide additional support, follow-up groups, and/or "booster" groups. <p><i>Providers must:</i></p> <ul style="list-style-type: none"> ▪ Include ground rules created and adopted by participants. ▪ Include discussions about multiple issues (e.g., racism, homophobia). ▪ Be available before or after the intervention to provide confidential, one-on-one referrals to other prevention services within or outside of the agency.
Strengths	<p><i>Presentations and lectures can be:</i></p> <ul style="list-style-type: none"> ▪ An initial exposure for other HIV programs. ▪ Designed specifically to educate people who might become educators or advocates themselves. ▪ Run as one-time skills-building workshops, especially for those people who have been assessed as having knowledge, attitudes, and beliefs favoring risk reduction, but have not changed behavior. ▪ Beneficial for groups that cannot commit to multiple sessions (agencies should indicate why their clients cannot commit to multiple sessions). ▪ Serve as a first step or launching pad for clients' other prevention-oriented activities, if they focus on creating linkages. ▪ Good for populations at lesser risk that have information, but want to build awareness and sensitivity (e.g., friends, family, or employers of people with HIV). ▪ Used to reduce the demands made on testing centers by people who are just worried about HIV in an unspecified way, by clarifying they do not have any actual risk.
Limitations	<p><i>Presentations and lectures are:</i></p> <ul style="list-style-type: none"> ▪ Not as effective as multiple session groups at changing HIV risk behavior. ▪ Not as helpful for people with serious mental health issues and for those most in denial about their risk. ▪ Beneficial and less feasible for the highest risk populations (agencies should demonstrate the acceptability/ feasibility of the single session group intervention to their target population).

Effectiveness

A number of studies have shown that presentations can be effective at reducing sexual risk behavior in many different populations. African-American male adolescents in Philadelphia reported engaging in less risky sexual behavior in the three months following a presentation (J. B. Jemmott, 3rd, Jemmott, & Fong, 1992). Two one-day peer-led interventions for gay and bisexual men in Philadelphia increased condom use for insertive anal sex, although neither had an effect on receptive anal sex (Valdiserri et al., 1989). One-time group counseling sessions among gay Asian/Pacific Islander men in San Francisco were effective at reducing number of sexual partners, and Chinese and Filipino men reported reduced unprotected anal sex (Choi & Coates, 1994). Finally, reduced likelihood of unprotected sex was documented for adolescents participating in a single session group (Kennedy, Mizuno, Hoffman, Baume, & Strand, 2000).

According to service providers, multi-session group interventions have a greater impact on participants than single-session interventions. Providers note, however, that single-session interventions are also effective and give access to members of target populations who would not attend multi-session programs. Group interventions are more effective when they address other social or personal issues such as racism, domestic violence, or poverty.

There are many studies evaluating the effectiveness of group presentations as an HIV prevention strategy. Presentations that emphasize skills for behavior change and are more interactive are more effective than those that simply rely on the didactic transfer of information. The effectiveness of the didactic transfer method for information is still uncertain. Some studies say it does affect behavior, while others claim that it does not. It is safe to say, however, that basic information on HIV transmission and prevention is an essential element for changing behavior.

A study of African-American male adolescents from Philadelphia found that a one-time, five-hour intervention designed to increase AIDS-related knowledge and weaken problematic attitudes toward risky sexual behavior was effective. Compared to a control group, at a three-month follow-up assessment, the intervention group had higher AIDS knowledge and weaker intentions to engage in unsafe sexual activity. Participants in the control group reported engaging in less risky sexual behavior in the three months following the intervention (J. B. Jemmott, 3rd et al., 1992).

Conversely, (R. D. Stall et al., 1988), found that neither attendance at a safe sex lecture, reading a safe sex brochure, receiving advice from a physician about AIDS, testing for HIV antibodies, nor counseling at an alternative test site were associated with participation in safe sex.

Two one-day, peer-led interventions for gay and bisexual men in Philadelphia were evaluated. Intervention I, a small group “AIDS 101”-type lecture was less effective in increasing condom use than intervention II, which included skills training utilizing role play and group process. Although intervention II was more effective, both interventions increased condom use for insertive anal sex, but neither had an effect on receptive anal sex (Valdiserri et al., 1989).

A project in Los Angeles that used peer leaders for four to fifteen gay and bisexual men, in groups lasting several hours found that subjects “improved in terms of knowledge, attitudes, and behavioral intentions.” (Institute for Policy Studies, 1993).

Effectiveness of one-time condom skills training sessions for women at risk was difficult to assess based on several studies reviewed by (Ehrhardt, 1995). Fewer women were found to have multiple partners, but the effect on condom use was inconclusive. These authors also reviewed two studies of single session relational skills interventions for STD clinic patients, neither of which found impacts on STD reinfection rates.

In a Seattle study of injection drug users, researchers found that a 90-minute educational intervention did not appear to impact the participants' involvement in high-risk behaviors. There were no significant differences between those who had received the intervention and those who did not at the four month follow-up (Calsyn, Saxon, Freeman, & Whittaker, 1992).

Evaluation

Because single session groups are often one-time encounters, it is not usually feasible to measure behavior change over time. However, the effects of a single session group on behavioral intentions may be measured. A post-test should be administered at the end of a workshop. Ideally, a follow-up post-test should be given one or more months after the workshop to measure behavior change, but this is not always possible.

Speakers Bureaus

SPEAKER BUREAUS	
Definition/Description	Speaker bureaus bring together individuals who have been impacted by the HIV epidemic to speak to groups of people, communities, or organizations.
Implementation Recommendations	<p><i>Speaker bureaus:</i></p> <ul style="list-style-type: none"> ▪ Presentations can be interactive and can be in single or multiple session formats. ▪ Could include, but are not limited to, PLWH, their family members, their friends, their significant others, health educators and service providers.
Strengths	<p><i>Speaker bureaus:</i></p> <ul style="list-style-type: none"> ▪ Are accessible to people at a low literacy level. ▪ Can be helpful for people needing basic information about HIV. ▪ Can have an impact on people who don't know anyone with HIV. ▪ Can serve as a denial-breaker for people with low perception of personal or communal risk. ▪ Can work well with people in institutional settings such as school, jail, etc.
Limitations	<p><i>Speaker bureaus:</i></p> <ul style="list-style-type: none"> ▪ Are not as appropriate for people with multiple issues or mental health stressors. ▪ Are generally not sufficient as the only intervention provided to a group. ▪ Should not be done in isolation from other prevention activities.

COMMUNITY-LEVEL INTERVENTIONS (CLI)

Community-level interventions are interventions that seek to improve the risk conditions and behaviors in a community through a focus on the community as a whole, rather than by intervening with individuals or small groups. CLI seeks to change the attitudes, norms, and values as well as the social and environmental context of risk behaviors of an entire community, not simply individual members of the community. CLI are based upon research among community members and incorporate community input and involvement in program design, implementation, and evaluation. Ideally, CLI programs utilize peer networks within a community as a means of increasing the effectiveness of CLI and sustaining intervention efforts after professional and service providers are gone.

Community-based approaches to behavior change provide information and skills on the community level to change behavior and encourage a supportive social environment through channels and methods that are indigenous to the community. Community-level efforts create structures and systems that assist in the maintenance of healthy behaviors. These interventions are based on several theories including Social Learning Theory, the Health Belief Model, and Diffusion Theory (T. Coates & Greenblatt, 1990).

CLI takes a system approach, by addressing the social networks and social norms that influence people's knowledge, attitudes, beliefs, skills, and behaviors. Changing social environments takes time; therefore the results of community-level interventions may not be immediately visible.

MINIMUM STANDARDS: COMMUNITY-LEVEL INTERVENTIONS

A systems approach that seeks to influence specific behaviors using social networks (e.g., sex-workers, IDUs, MSMs, transgender, etc.) to consistently deliver HIV risk-reduction interventions.

Minimum Criteria

- A focus on the community as a whole, rather than by intervening with individuals or small groups.
- Cannot be funded as a stand-alone intervention, must be coupled with other approved interventions.

Quality Assurance Measures

- Staff providing interventions should be recruited from the targeted population.
- Agency demonstrates the ability to access target population.
- Agency demonstrates the ability to work with the target population.

Data Requirements

- The Iowa HIV Prevention & Evaluation System does not require demographics for this intervention.

Evaluation

Providers can evaluate media campaigns through a one-time community based survey administered to the target population. Survey questions should assess if the target population has seen the advertisement or other media, where they saw it, how many times they saw it, and what effect it had on their knowledge, attitudes, beliefs, or behavior. The Behavior Risk Factor Surveillance System (BRFSS) and Youth Risk Behavior Survey (YRBS) can be used to evaluate some media campaigns may be evaluated by looking at HIV prevention indicators and how they change over the period of the campaign.

COMMUNITY ORGANIZING

Community mobilization is a strategy that involves grassroots outreach and education that takes place within a specified neighborhood or community. The goal is to increase awareness of HIV/AIDS issues. Mobilization provides a foundation for increasing participation of residents in HIV prevention and service activities. Community mobilization can take many forms, ranging from volunteer recruitment to solicitation of participation in public events or forums, to assistance with attaining specific policy ends. It generally strives to work within a community's specific value systems and norm set. Depending upon the form community mobilization takes, it may or may not focus on HIV-related behavior change, involve interactive discussions, or be repeated over time.

Community mobilization and organizing involves community-wide efforts that bring together members of the target community to address the issue of HIV and/or other related issues (drug use, homophobia, racism, etc.). Methods used to bring members of the community together vary according to the needs and characteristics of the target population. The theoretical underpinning of community organizing for health behavior change is based in several theories including Social Cognitive Theory, the Health Belief Model, and Diffusion Theory (T. Coates & Greenblatt, 1990). Community organizing involves defining a community by understanding how the target population defines its community. This could be geographical, cultural, gender-related, environmental, behavior, issue-related, and many other ways. Community organizing addresses the population characteristics that create obstacles to HIV risk reduction, creates networks that can be utilized for conducting other interventions, and provides a means for creating health promoting social norms.

Community-level interventions seek to reduce risk behaviors by changing attitudes, norms, and behaviors through health communications, social (prevention) marketing, community mobilization, and community-wide events. The common denominator of these strategies is their focus on community and social group identity.

COMMUNITY ORGANIZING	
<i>A systems approach that seeks to influence specific behaviors using social networks (e.g., sex-workers, IDUs, MSMs, transgender, etc.) to consistently deliver HIV risk-reduction interventions.</i>	
Definition/Description	Community organizing involves community-wide efforts that bring together members of the targeted community to discuss problems and jointly propose solutions for HIV and/or other related issues (drug use, homophobia, racism, etc.). Community organizing strategies often have a basis in empowerment theory.
Implementation Recommendations	<p><i>Agencies should:</i></p> <ul style="list-style-type: none"> ▪ Allow the problem, the solution, and the course of action to be defined by the community. ▪ Facilitate the process, participate in dialogue regarding HIV information, and secure resources to promote community involvement and assist the community in attaining its goals. ▪ Address multiple needs of communities or collaborate with other agencies that can address those issues. <p><i>Community organizing/empowerment strategies should:</i></p> <ul style="list-style-type: none"> ▪ Seek to improve the risk conditions and behaviors in a community through a focus on the community as a whole, rather than by intervening with

	<p>individuals or small groups</p> <ul style="list-style-type: none"> ▪ Cannot be funded as a stand-alone intervention but must be coupled with other approved interventions ▪ Develop and strengthen social norms for HIV prevention. ▪ Increase communication channels for HIV prevention norms. ▪ Increase participants' self-advocacy skills and sense of personal control. ▪ Identify barriers to HIV prevention in the community. ▪ Increase community participation around issues affecting the community. ▪ Acknowledge and consider existing strategies that are working in a community.
Quality Assurance Measures	<p><i>Agencies must demonstrate an ability to:</i></p> <ul style="list-style-type: none"> ▪ Recruit staff or volunteers the targeted population ▪ Access target population ▪ Work with the target population
Data Requirements	<p><i>For community organizing:</i></p> <ul style="list-style-type: none"> ▪ The Iowa HIV Prevention & Evaluation System does not require client demographics. ▪ Providers must identify the type of community level or social marketing intervention.
Strengths	<p><i>Community organizing:</i></p> <ul style="list-style-type: none"> ▪ Has a strong theoretical foundation. ▪ Makes the community's own perspective and desires central. ▪ Addresses community-level obstacles to HIV risk reduction. ▪ Creates networks that can be used to conduct other interventions. ▪ Can contribute to health-promoting social norms. ▪ Is most likely to be successful in communities that have a strong identification (geographical, psychosocial, psychocultural, political, economic) ▪ Is suitable for isolated populations whose members need connection, although this is challenging. ▪ Is particularly appropriate for groups with multiple issues.
Limitations	<p><i>Community organizing:</i></p> <ul style="list-style-type: none"> ▪ Is more difficult to implement with isolated populations than with groups with a strong identity. ▪ May not be appropriate for populations that fear lack of confidentiality or those for which identification could endanger the community, such as undocumented immigrants or commercial sex workers. ▪ May not be appropriate for populations that fear lack of confidentiality and refuse to come together, such as small populations where privacy is an issue. ▪ Could be difficult with populations where organizing resulting in identification of its members could endanger the community, such as undocumented immigrants or commercial sex workers.

Demonstrated Effectiveness

Community organization, by involving the entire community in its efforts and by addressing the root causes of HIV-related risk behavior, can potentially have a dramatic effect on community norms, and can effect a reduction in risky behavior. An exploratory study in San Francisco of Latinos and of non-Latino Whites, for example, found that community and family members revealed a high willingness to provide AIDS prevention advice to drug-using friends and family members (Marin, 1992). Such an approach may be particularly effective among Latinos since there is a high degree of importance placed on the family. The literature indicates that effective

HIV/AIDS prevention strategies should originate from community members themselves, as a way to assure both accessibility and applicability.

The inter-community environments in which community mobilization messages are presented must vary to reach as many at-risk individuals as possible. In the case of a community organizing to reach young people engaged in high-risk behavior, an effective mobilization model can be visualized as three interlocking circles, involving, in the case of adolescents, home, school, and the community. Health education projects have been most successful in this model when parents have been involved as an integral component (Marin, 1992).

Other research demonstrates the effectiveness of community mobilization. A community-level approach developed and implemented by peers of the target population was effective in decreasing unprotected anal intercourse relative to those in a control community (S. M. Kegeles, Hays, R.B., Coates, T.J., 1993). Effective organizing of the gay and bisexual community in San Francisco in the mid to late 1980s contributed to the dramatic decrease in unprotected anal intercourse that decreased HIV transmission during that period (T. Coates & Greenblatt, 1990).

Sexual behavior change is needed for both the primary and secondary prevention of HIV disease. Remarkable progress has been made in modifying high-risk behaviors in selected populations (e.g., gay men living in the epicenters of the epidemic). However, many at-risk populations (e.g., gay men living outside these epicenters, homosexual men who are young or Black, ethnic minorities--especially women of childbearing age, and persons over age 50) have received relatively little research attention and may be at risk for further infection. A community-level approach to behavior change represents one kind of comprehensive strategy to achieve significant reduction in the spread of HIV. Effective approaches at this level require component interventions that are effective in changing behavior and acceptable to target populations (T. Coates & Greenblatt, 1990).

SOCIAL MARKETING

Social marketing is the concept of using additional marketing tools traditionally used to sell consumer products, to "sell" healthy behaviors to target audiences. The goal is to promote behavior that is socially desirable and that contains clearly defined value for the individual (and community), such as smoking cessation, HIV prevention, or childhood immunization. A particular behavior (such as condom use) is made socially desirable by linking it to something that is valued by the targeted community (such as family values or erotic sex).

Social marketing involves the production of a message disseminated through a mode that is appropriate and effective for the target population. It includes development of a marketing plan, design of a message, use of mass media, consensus building, and packaging (T. Coates & Greenblatt, 1990). Social marketing is successful when it involves active participation of both the providers and the recipients of information and or services at each stage of the process. In this way, the target group will recognize the benefit(s) of the program and can adopt (or buy) the changes advocated. Social marketing in its ideal form requires thorough program planning and integration. In addition, market research, testing, and evaluation are critical components to effective social marketing.

SOCIAL MARKETING	
Definition/ Description	Using traditional consumer marketing tools to promote healthy behaviors, change social norms, or recruit target audiences for participation in health promotion activities.
Implementation Recommendations	<p><i>Agencies should:</i></p> <ul style="list-style-type: none"> ▪ Conduct market research, field testing, and evaluation for their campaigns. ▪ Conduct formative evaluation to ensure the cultural and linguistic appropriateness of the campaign, the salience of the issues, the stage of behavior change, the social norms, and appropriate message channels for the target population. ▪ Involve the recipients of information or services (the "product") in planning. <p><i>Social marketing campaigns should:</i></p> <ul style="list-style-type: none"> ▪ Change behavior by demonstrating the desired behavior in a real-life context. ▪ Promote the idea that adoption of this behavior will result in lower HIV risk. ▪ Link the target population to available resources. ▪ Affirm health-promoting social norms of the target population. ▪ Be designed to increase knowledge and change attitudes about HIV/AIDS.
Strengths	<p><i>Social marketing campaigns can:</i></p> <ul style="list-style-type: none"> ▪ Be effective with those who need new information to change behavior. ▪ Motivate people to act. ▪ Reach large and diverse segments of the population. ▪ Be effective with those who want to change their behavior but have not. ▪ Be accessible to those who are difficult to reach through traditional prevention channels.
Limitations	<p><i>Social marketing campaigns may not be:</i></p> <ul style="list-style-type: none"> ▪ Appropriate for those engaging in the highest risk behavior. ▪ Successful with those who are isolated and do not see themselves in relation to the campaign. ▪ Able to pinpoint as the cause of behavior change. ▪ Cost effective.

Social marketing strategies require attention to the four "Ps": product (the behavior or idea you are trying to promote), price (the monetary or other costs/disadvantages associated with adopting the behavior or idea), promotion (which media channels you will use), and place (how and where you will disseminate the message so that it reaches the target population).

Demonstrated Effectiveness

Social marketing has been widely regarded as being instrumental in helping to change community norms regarding safe sex among gay men in San Francisco in the 1980s. Evaluations of the Swiss and French media campaigns have shown that media programs, effectively designed and executed, can change behavior (T. J. Coates & Stryker, 1994).

Research exists that evaluates social marketing as an approach to promote other health behaviors. (Rabin, 1995) discuss two prevention programs aimed at smoking cessation and cardio-vascular health that employed social marketing tactics and tools. This strategy was found to lead to improvements in these areas. It was noted that while this was the most effective way to reach a large group of hard-to-reach people, a campaign needs to be augmented with personal and community contacts as a follow-up. The support of additional partners in the community is also critical.

PUBLIC EVENTS

Community-level venue-based outreach involves a group of individuals who present HIV prevention activities in community settings (e.g., street corners or public forums), commercial settings (e.g., bars, sex clubs, concert houses, and theaters), or public events (e.g., street fairs and parades). The outreach activities may occur in existing settings or settings especially created for the purpose of HIV prevention. Venue-based group outreach can take a variety of forms including community theater, dramatizations of real-life scenarios, "bar zaps," and interactive performance art. This type of outreach is designed to promote HIV risk reductive behaviors among audience members. The distribution of appropriate prevention materials may also be a component of these activities.

DRAMA, THEATER, AND ROLE-PLAY	
Definition/Description	Encompasses any activities that use acting, theater, music, story telling, puppetry, role-play, or other dramatization techniques to deliver HIV prevention interventions. It may be used in individual (e.g., role-play), small group (e.g., skits) or community-level interventions (e.g., street theater). Professional or amateur actors may perform the drama as an intervention for the audience (e.g., a formal theatrical presentation). Members of the target may perform the drama population as an intervention for themselves (e.g., participants in a group workshop doing role-plays with each other).
Implementation Recommendations	<p><i>Providers using drama and theater should:</i></p> <ul style="list-style-type: none"> ▪ Assure that actors are available to answer questions and give referrals after the presentation. ▪ Assure dramatizations depict realistic scenarios. ▪ Integrate communication of accurate HIV/AIDS information into the performance. ▪ Address the target population's attitudes and beliefs about HIV transmission. <p><i>Role plays must:</i></p> <ul style="list-style-type: none"> ▪ Be grounded in realistic scenarios. ▪ Incorporate practice of skills (e.g., condom negotiation). ▪ Be followed by discussion.
Strengths	<p><i>Drama and theater can:</i></p> <ul style="list-style-type: none"> ▪ Encourage positive attitudes toward people living with HIV/AIDS. ▪ Model and encourage condom use. ▪ Be useful for individuals who do not speak or read English. ▪ Address the multiple issues people face in their lives that affect HIV risk behavior.
Limitations	Theater when used alone may be limited in its ability to affect behavior.

COST EFFECTIVENESS

CDC scientists have developed tools for estimating the economic impact of HIV prevention programs, taking into consideration the effective combination drug therapies now available. The economic model estimates lifetime treatment costs (based on the newest treatment scenarios) and balances these costs against the current national investment in HIV prevention to determine what level of success is needed to save the nation money.

The lifetime costs of health care associated with HIV, in light of recent advances in HIV diagnostics and therapeutics, have grown from \$55,000 to \$155,000 or more per person. This amount represents the money saved per infection averted through prevention. HIV prevention efforts can be cost-effective and even cost saving to society. Cost-effective means that the costs of the intervention compare favorably to life-saving interventions associated with other diseases, usually costing less than \$50,000 per quality-adjusted life year saved. Cost-saving means that the intervention averts health care costs in excess of the cost of the intervention. These efforts include (1) counseling, testing, referral, and partner notification services for clients at high risk for HIV infection; (2) needle and syringe exchange programs; and (3) information, education, and counseling for injecting drug users.

The cost effectiveness of interventions is an important issue in decisions about resource allocation. According to (Kelly et al., 1994), for an HIV prevention intervention to be cost effective it must also be effective in producing behavior change. The prioritized interventions that have been approved by the CPG are based on behavior theory and have shown demonstrated effectiveness. Although the number of investigations that report cost-effectiveness is minimal, various methods have been discussed in the literature for evaluating cost-effectiveness.

Holtgrave (1994) discusses the use of cost analysis, cost-benefit analysis, and cost-effectiveness to inform policy makers. Cost-analysis can assist decision-makers in deciding whether financial resources are adequate. Cost-benefit analysis can direct decisions if the question is whether the social benefits surpass the costs. Cost-effectiveness analyses can guide the questions of whether allocating funds to HIV prevention is a better investment than allocating to other health programs. According to Holtgrave (1994), health interventions can be gauged or estimated using standard methods such as bottom-up or top-down approaches. In the former method, direct (intervention factors that utilize resources) and indirect (overhead) costs are summed. The top-down approach uses a budget approach to estimate the actual cost of a program. Both types can be useful to prevention planners when evaluating the cost-effectiveness of interventions (D. R. Holtgrave, Valdiserri, R.O, West, G.A., 1994).

In a later article, the authors refer to the additional cost analytic methods of cost-benefit analysis and cost-utility analysis. To be considered cost saving, the number of HIV cases that were averted by the intervention multiplied by the dollar cost of treatment must be greater than the costs of the HIV prevention program. The cost effectiveness of several HIV prevention programs led to the conclusion that behavioral interventions can be cost-effective and even cost saving (D. R. Holtgrave et al., 1995).

In a 1993 study, Holtgrave and colleagues estimated the costs of the national Counseling, Testing, Referral and Partner Counseling and Referral programs and found them to be cost saving in terms of HIV cases averted. They concluded that the economic benefits outweigh the costs even if only one HIV infection was averted for every 100 persons tested (D. R. Holtgrave, Valdiserri, Gerber, & Hinman, 1993). The evaluation of a skills training program when compared with a lecture-only intervention found that the addition of skills training was cost-effective in terms of the number of HIV infections avoided (Pinkerton, Holtgrave, DiFranceisco, Stevenson, & Kelly, 1998). Pinkerton et al. concluded that HIV interventions are the most cost-effective when targeted to high-risk communities and high-risk individuals. The following are examples of applying cost effectiveness to specific interventions (Pinkerton, Holtgrave, Willingham, & Goldstein, 1998).

Peer Leaders/Mobilization

Peer health programs are cost effective in terms of training peers to carry out health prevention programs without the expense of additional health care professionals (Sloane & Zimmer, 1993). Peers are more likely to gain access to target populations by meeting with them where they live, work, and socialize. Peer educators also extend the life of intervention efforts in the community because they may remain after professionals have departed (*Guidelines for Health Education and Risk Reduction.*, 1995).

Pinkerton et al. (1998), evaluated the cost effectiveness of a community level HIV prevention intervention that used peer leaders to endorse risk reduction among gay men. The intervention cost \$17,150, or about \$65,000 per infection averted. Assuming the lifetime medical care costs associated with HIV and AIDS range from \$71,000 to \$119,000, this was considered to be cost saving, even under very conservative modeling assumptions. In a summary of analyses of cost-effectiveness, (Kahn, 1995) cites several studies that found training leaders in the gay community was a cost-effective approach to averting new HIV infections. Similarly, in an analysis of a community level peer mobilization effort among young gay men, the cost per HIV infection averted was reported to be \$11,500, a figure much lower than the medical costs associated with treating a case of HIV/AIDS.

Multiple Session HIV Prevention Intervention

One study examined the cost-effectiveness of a behavioral HIV prevention intervention for at-risk women attending urban primary health care centers. The intervention consisted of five sessions covering basic HIV related information, condom-use skills training, peer support, self-management, and assertiveness, communications, and negotiation in sexual situations. Clients receiving this intervention used condoms significantly more often than clients not receiving the intervention. Although the intervention cost approximately \$260 per client, careful analysis shows that the increases in condom use likely led to a reduction in HIV transmission and when HIV infections are avoided, medical costs of care and treatment are saved.

A paper was presented at the XI International Conference on AIDS, showing the cost-effectiveness of a 12-session behavioral HIV intervention for gay men that included HIV education, condom skills training, and self-management and communications techniques. This intervention cost approximately \$470 per client. However, the intervention led to a significant increase in condom use. Such an increase is very likely to have significantly reduced HIV

transmission among intervention clients and their partners (*HIV Prevention Saves Lives: Cost Effectiveness of HIV Prevention Programs*, 1998). Therefore, cost-effectiveness analysis shows that multiple session interventions appear to be a cost-effective use of resources.

Perinatal Transmission

Scientific findings on the effectiveness of using prenatal, perinatal, and postnatal zidovudine therapy to prevent perinatal HIV transmission led the Public Health Service to recommend routine HIV counseling and voluntary testing for all pregnant women. In 1996 CDC research directly analyzed the cost-effectiveness of those recommendations. HIV counseling, voluntary testing, and zidovudine therapy for those infected with HIV, is a cost-savings to society ("Guidelines for the use of antiretroviral agents in pediatric HIV infection. Center for Disease Control and Prevention," 1998).

BARRIERS TO IMPLEMENTING INTERVENTIONS

Complacency

In the United States, complacency about the need for HIV prevention may be among the strongest barriers communities face as they plan to meet the next century's prevention needs. The success that many people have had with new Highly Active Antiretroviral Therapies (HAART) and the resulting decline in the number of newly reported AIDS cases and deaths are good news. The underlying reality, however, is that the HIV epidemic is far from over. The success of HAART is good news for the people living longer, better lives because of it, but the availability of treatment may lull people into believing that preventing HIV infection is no longer important. This complacency about the need for prevention adds a new dimension of complexity for both program planners and individuals at risk.

- While the number of AIDS cases is declining, the number of people living with HIV infection is growing. This increased prevalence of HIV in the population means that even more prevention efforts are needed. For individuals at risk, increased prevalence means that each risk behavior carries an increased risk for infection.
- Past prevention efforts have resulted in behavior change for many individuals and helped slow the epidemic overall. However, many studies find that high-risk behaviors, especially unprotected sex, are continuing at a high rate. This is true even for some people who have been counseled and tested for HIV, including those found to be infected.
- The long-term effectiveness of HAART is unknown. Further, HIV may develop resistance to these drugs. The powerful treatments are complicated and involve taking large numbers of pills. Even the most motivated patient may forget to take all their medications or skip doses. Some patients may completely stop taking their medications for a number of days or weeks. Drug treatments are less effective when treatment schedules are not followed. Diversions from the prescribed treatment regimen increase the possibility of drug resistance developing. If the development of drug-resistance is coupled with a relaxation in preventive behaviors, resistant strains could be transmitted to others and spread widely.
- Research among gay and bisexual men suggests that some individuals are less concerned about becoming infected than in the past and may be inclined to take more risks. This may be equally true in other groups at risk who might believe they no longer need to use condoms because protease inhibitors are so effective in treating HIV disease.

PERSONS LIVING WITH HIV

Men Who Have Sex With Men

Barriers to HIV Prevention within the Population

Seropositive people for whom treatment is successful have begun to live longer and healthier lives. This means that the overall number of people living with HIV is increasing. In addition, many people with HIV are experiencing improved quality of life, which can include regaining or improving their sex life. With more HIV-positive people being sexually active, the possibility of HIV transmission increases. In response, programs are needed to address HIV-positive people as the audience for prevention messages (DeCarlo & Grinstead, 2000).

Until recently, MSM living with HIV received little visible support for practicing safer sex. As primary prevention campaigns are developed for MSM living with HIV, their messages must not promote stigma or discrimination against HIV-infected people, nor make people feel shamed for their desires to be sexual. Sexuality is a part of a normal, healthy life -- for positives and negatives. Sexuality is tied to complex human needs, including the need for intimacy and love. HIV-infected MSM wrestle with competing emotions, including altruistic concern for their communities; burn-out from years of thinking about their infection; uncertainty about the expectations of their partners; loss of control in sexual situations due to coercion, economics, power imbalances, or drugs and alcohol. HIV prevention providers must be prepared to adopt harm reduction strategies that do not simplistically demonize "bare backers" but instead utilize behavioral interventions with MSM who are diagnosed with other STDs and deal competently with drug use, mental illness, and other deep seated factors.

Avoidance of developing programs for HIV-positive persons can be attributed to justifiable concern about stigmatizing people living with HIV or splitting communities between positive and negative individuals. In the first 18 years of the epidemic, HIV prevention interventions have been designed in an environment where people with the disease are at grave risk for discrimination and stigma, in addition to a deadly virus. In the AIDS service community, diverging care systems grew up seeking to provide prevention interventions for those who were negative, and health care and support services to those with HIV disease – with little interconnection between them.

Lessons learned from earlier prevention work can inform design of prevention interventions for HIV positive persons. There are issues of special concern to this population and they must be considered in the design of interventions (P. H. Collins, 1991). Challenges include:

- Communicating responsibility to not infect others without promoting shame or stigma;
- Acknowledging the need for intimacy through sex;
- Improving communication between partners;
- Considering diverse opinions on disclosure as a prevention approach;
- Understanding the diversity of the epidemic and the need for multiple interventions;
- Addressing the multiple contextual factors that contribute to risk (including substance abuse); and

- Communicating clear messages in the absence of absolute answers to important biomedical questions.

Strategies to Overcome Barriers

The following are examples of innovative interventions for prevention programs for people with HIV in the United States:

- A social marketing campaign for gay men and a five-session group intervention for women living with HIV in Massachusetts;
- A chat line for positives and a group session program for Latinas/Latinos in Los Angeles,
- Internet chat room interventions in Atlanta;
- A group session for gay Asian American-Pacific Islander Americans living with HIV in San Francisco;
- Prevention Case Management programs newly funded by the Centers for Disease Control; and
- Partner notification has been effective in controlling the spread of some sexually transmitted diseases such as gonorrhea and chlamydia.

MSM who are living with HIV are an underutilized resource in HIV prevention. As these men experience improving health status due to HAART, many are returning to the workforce. Their experience has given them insights into the social, cultural, and personal factors that contribute to HIV risk. They are knowledgeable about the complexities of living with HIV and remaining adherent to medications. Such skill and insight could expand and improve HIV prevention and care efforts.

Men Who Have Sex With Men Who Have HIV Positive Partners

Barriers to HIV Prevention within the Population

There are many interrelated factors that determine sexual risk behaviors in serodiscordant relationships, including age and ethnicity, length of the relationship, previously established behaviors, communication patterns, and substance use. Psychological factors include feelings of depression and hopelessness, personal preferences in sexual behavior, personal perceptions of risk, and motivations for change (Remien et al., 1995).

Serodiscordant couples may attempt to protect their partners by avoiding discussions of HIV-related concerns and HIV progression. Condoms may be perceived as a reminder of the seropositive status of one of the partners. The desire to suppress awareness can result in a cycle of unsafe sex, remorse, wish to change, and denial of risk. As relationships progress over time and emotional intimacy deepens, the perception that one partner may be harmed by the other diminishes (Remien et al., 1995).

(C. Collins, Morin, Shriver, & Coates, 2000) report on a study of a group intervention for gay male serodiscordant couples. Participants in the groups identified the desire to be physically close to their partner as the primary reason for sexual risk. He found that when partners practiced risky behavior, it was often at the request of the HIV-negative partner. He also found that the avoidance of communication contributes to taking behavioral risks.

Strategies to Overcome Barriers

Remien et al. (1995) reported that group support for couples helped reduce participants feelings of isolation, identify and share coping strategies, model safe and intimate behaviors, and develop group norms regarding risk. Partners were able to express sentiments in the groups that they were unable to express directly to each other.

HIV prevention for MSM who have sex with HIV+ partners is logically dependent upon knowledge of HIV status. Successful prevention programs need to include easy access to HIV testing and screening, individual and couples counseling, and promoting structural changes that alter norms and behaviors in different risk contacts.

- Extend the outreach of counseling and testing services to community settings using new testing technologies.
- Conduct targeted programs to promote the idea and benefits of learning HIV serostatus using a marketing and communication model.
- Use partner counseling and referral services to assist individuals at high risk in learning their serostatus.
- Develop programs for HIV-infected individuals, with priority for those most likely to transmit the virus to others.
- Adopt a client-centered approach based on an assessment of each individual's transmission risk profile - including sexual and drug use behavior.

Injecting Drug Users Who are HIV Positive

Barriers to HIV Prevention within the Population

Addressing the multiple difficulties in seeking appropriate, accessible treatment for a substance use problem can be overwhelming, as it can also be for HIV infection. Attempting to do this when both conditions are present, and particularly if other issues such as mental illness are also present can seem insurmountable. Individuals with these conditions may have to confront discriminatory and uninformed attitudes on the part of treatment providers, and availability of appropriate treatment spots is frequently limited. Decision-making regarding the best treatment is often taken out of the hands of the individual for fear, on the part of the health care providers, that an injection drug user will not comply with treatment regimes.

A survey of 135 HIV-positive injection drug users found that among participants with a main sexual partner, 44 percent had HIV-negative partners and 8 percent had partners whose HIV status they did not know. Almost two-thirds of participants of unknown status reported engaging in some sexual risk behavior. This study highlights the need for interventions for HIV-positive injection drug users that focus as much on sexual behaviors as they do on drug-using behaviors (DeCarlo & Grinstead, 2000).

Sex and injection drug use, and hence decision making around safer sex and needle use, take place within a myriad of contexts. It is important to understand these to better design prevention programming, conduct meaningful research, and enact rational policy. The following is a list of multiple contexts that can affect risk behavior (C. Collins et al., 2000).

- Personal - current health status, time since HIV infection, success of HIV treatments
- Partner - attractiveness, power dynamics within the couple, desire to please
- Race - power dynamics, assumptions about roles and HIV status
- Community - urban vs. rural setting with less chance of anonymity, presence or absence of HIV-positive peers, communal myths about the origins of HIV including the perception that HIV was created to eliminate certain groups, the degree to which HIV infection stigmatizes or lionizes an individual, ability to feel accepted in the community and discuss challenges with practicing safer sex
- Substances - physical or emotional dependence on drugs and alcohol
- Economic situations - homelessness, economic crisis, dependence on sex for money exchanges
- History - memory of Tuskegee syphilis study in which treatment for syphilis was denied for African-American men
- Availability of health care and prevention - supportive education campaigns, condoms

Strategies to Overcome Barriers

- Outreach programs should emphasize that using a sterile syringe for every injection is the optimal HIV prevention practice for IDUs who cannot or will not stop injecting,
- Pharmacy-based syringe sale or distribution has the potential to augment current efforts to prevent HIV infection in IDUs, their sex partners, and their children. Increased accessibility to clean injection paraphernalia,
- Instituting HIV prevention programs in jails and prisons, and
- Providing health care for HIV-infected IDUs, and making HIV risk-reduction counseling and testing for IDUs and their sex partners available.

HIV-positive individuals come from diverse backgrounds, racial/ethnic groups, have different and multiple risk factors and live in cities and rural areas. They face multiple challenges, including drug and alcohol abuse, poverty and care-taking responsibility for children. Different kinds of interventions are needed to reach these diverse populations. Social marketing, one-on-one and group interventions should play a role in prevention (Collins et al., 2000).

Heterosexuals With HIV Positive Partners

Barriers to HIV Prevention within the Population

(Van der Straten, Vernon, Knight, Gomez, & Padian, 1998) conducted a qualitative study of men and women in HIV-serodiscordant couples to explore the management of HIV in their relationship. Content analysis of the interviews revealed the role of serostatus and stigma in shaping partners' experience of HIV, sex and risk. Partners' differing serostatus often created feelings of alienation within the relationship. Compounding this interpersonal dynamic, the HIV service community was viewed as segregating because they were not funded or prepared to work with seronegative partners. Thus many, particularly seronegative women, felt invisible both within and outside of the relationship. Yet, the uninfected partners shared the burden of a stigmatizing illness because of the serodiscordant relationship. Social stigma hindered communication about HIV and sex, disclosure to others and access to services. Many experienced HIV as a loss of their sexuality. Seronegative partners reported having to push to

continue having sex. Couples used multiple strategies to manage HIV, including developing strict behavioral guidelines, connecting with other couples, accessing scientific information and becoming educators and activists. These altruistic activities, which also included participation in research, helped to transcend external and internalized stigma.

Women may not want or be able to negotiate condom use because they may think it would interfere with physical and emotional intimacy, imply infidelity by themselves or their partner or result in physical abuse (Wingood & DiClemente, 1997, 1998).

Strategies to Overcome Barriers

Couple counseling in combination with social support appears to be an effective means to promote and sustain behavior change among HIV-infected individuals with their heterosexual partners (Padian, O'Brien, Chang, Glass, & Francis, 1993). Successful prevention programs need to include easy access to HIV testing and screening, individual and couples counseling, and promoting structural changes that alter norms and behaviors in different risk contexts.

- Extend the outreach of counseling and testing services to community settings using new testing technologies.
- Conduct targeted programs to promote the idea and benefits of learning HIV serostatus using a marketing and communication model.
- Use partner counseling and referral services to assist individuals at high risk in learning their serostatus.
- Develop programs for HIV-infected individuals, with priority for those most likely to transmit the virus to others.
- Adopt a client-centered approach based on an assessment of each individual's transmission risk profile - including sexual and drug use behavior.

Heterosexuals Who Are HIV Positive

Barriers to HIV Prevention within the Population

As our nation's significant investment in research and treatment has reduced morbidity and mortality associated with AIDS, complacency about HIV prevention has set in. Evidence suggests that treatment successes have led to resurgent unsafe behaviors in some communities. Changing the behaviors that put individuals at risk for contracting HIV continues to be critical in controlling the epidemic, and interventions targeting high-risk individuals who test negative for HIV must be sustained and must be science-based. In addition, interventions for seronegative partners of individuals living with HIV are crucial. Therefore, sustaining prevention programs targeting high-risk individuals is as important today as ever before.

Strategies to Overcome Barriers

A serostatus approach to fighting the HIV/AIDS epidemic necessitates directing HIV prevention activities to individuals who are living with HIV, as well as high-risk individuals who are seronegative or do not know their serostatus. As with all effective health promotion activities, prevention interventions must be directly targeted to the needs of the individuals or communities for whom they are intended, meaning that approaches that are effective for seronegative individuals may not be equally effective for those living with HIV. Therefore, distinct approaches and interventions should be planned and implemented that target each group.

MEN WHO HAVE SEX WITH MEN

Barriers to HIV Prevention within the Population

The research literature on interventions for this population suggests that counseling and testing activities have not been sufficient interventions in maintaining long term behavior change ((D. R. Holtgrave et al., 1993). Current recommendations emphasize behavioral skills training focusing on condom use, sexual assertion, and negotiation of sexual relationships (D. R. Holtgrave et al., 1995; Peterson et al., 1992), and changing group norms regarding condom use and safe sex (Peterson et al., 1992).

Recent studies are beginning to indicate that longer-term abstinence from unsafe sexual activity is proving to be more difficult for gay and bisexual men to sustain over the long term, and that new approaches may be needed to sustain safer behaviors. (R. Stall, Ekstrand, Pollack, McKusick, & Coates, 1990) report that 69 per-cent of the high-risk sex that occurred during a 1988 measurement could be characterized as a relapse from a safer behavior pattern.

Part of what is difficult about preventing HIV transmission among gay and bisexual men is the complex patterns of attitudes and individual responses that lead to engagement in unprotected anal intercourse. (Hayes, 1990) found that gay men having unprotected anal intercourse reported greater enjoyment of intercourse. These same men labeled themselves as being more at risk for AIDS and reported poorer communication skills with sexual partners. They were more likely to have boyfriends or lovers than were men who have not engaged in high-risk sex.

(R. Stall et al., 1990) found that men in monogamous relationships often reported having unprotected intercourse because they were “in love.” Men without primary sexual relationships, reported having unprotected sex because they “became sexually aroused,” used drugs and alcohol in conjunction with sex, or did not have condoms available at the time of the encounter.

The recruitment and maintenance of at-risk participants in HIV prevention trials can be enhanced by understanding motivations, barriers, and other variables that influence participation and by taking these factors into account when developing and implementing intervention models. The decision of whether or not to participate in a risk reduction intervention may be influenced by a variety of factors, including race/ethnicity, age, sexual orientation, and individual characteristics or attitudes (DiFranceisco et al., 1998).

Race/ethnicity

While race and ethnicity alone are not risk factors for HIV infection, underlying social and economic conditions such as language, cultural diversity, higher rates of poverty and substance abuse, or limited access to health care, may increase the risk for infection in some communities of color.

Many members of the African-American community have held an underlying distrust of the white public health world, especially since the Tuskegee Syphilis Study (Thomas & Curran, 1999). Some groups, including some African-Americans, believe that the effects of AIDS on the community are the results of deliberate efforts of the United States Government. Adding to this distrust are persistent inadequacies in social benefits, health care, education, and opportunities for African-Americans (Dalton, 1989).

Among gay and bisexual African-American men, fear of homophobia and strong attachment to the minority community may be primary reasons why they do not respond to AIDS as a primarily gay issue. At the beginning of the epidemic, the absence of national gay leaders in the African-American population offered few opportunities to mobilize community support for HIV prevention activities (Peterson, 1995).

In Latino men, a strong relationship exists between cultural and societal homophobia and HIV risk. A study of Mexican gay/bisexual men, found that unsafe sex was significantly higher among older men, factory workers, men who preferred anonymous partners, and men with a history of at least one STD. These men may be unwilling to confront societal attitudes and prejudice around homosexuality (Ramirez, Suarez, de la Rosa, Castro, & Zimmerman, 1994).

Closeted gay and bisexual men

Issues of community identification can complicate the design and provision of effective prevention interventions. Prevention interventions targeting self-identified members of the gay and bisexual communities may not reach others who engage in same-sex behavior but do not identify with these communities. This issue may affect proportionately higher numbers of men of color who identify primarily with their racial or ethnic community rather than the gay and bisexual community. Prevention strategies that do not reflect the values, culture and beliefs of the target population are unlikely to affect behavior change.

Apart from the difficulty in preventing long-term relapse from safer behaviors, significant barriers exist in reaching and affecting the behavior of closeted gay and bisexual men. These men may avoid education targeting gay men out of fear of being identified as homosexual, or may ignore or dismiss such messages because of a need or desire to deny that they are in some way similar to gays or at risk. Barriers to reaching closeted members of these groups include the lack of developed networks and information sharing among members of these groups. Other barriers include the fact that they may or may not access traditional routes of information common to self-identified gay men; and the fact that adopting new, safer behaviors with a significant other, such as a spouse, might reveal the individual's hidden same-sex behavior patterns.

Incarceration

Sexual activities, whether coerced or not, and access to drugs are generally, if not officially, recognized to be realities of prison life. The corrections system, however, has traditionally been reluctant to address issues related to drug use and sex in prison (Smith, 1994). This attitude has presented obstacles in the struggle to stem the tide of HIV infection in the prison system. It also extends the continuum of risk from the outside world through the prison walls, jailhouse bars, and youth detention cells (Duffield, 1996).

Presenting a program in prisons requires balancing the perceived needs of the inmates with the concerns of the administration and staff. Any program for inmates will fail without the full cooperation and authorization of prison administrators and that of security guards, medical and support staff, and inmates themselves. Experience in the prison system has demonstrated that HIV/AIDS education must be more than the dissemination of information (Duffield, 1996).

Strategies to Overcome Barriers

- Draw in prospective clients via social events, art exhibits, and musical performances.
- Avoid calling prevention programs “AIDS Prevention.”
- Do not resort to scare tactics to boost attendance.
- Avoid calling groups programs “support groups.” Use alternative labels for programs such as “discussion groups.”
- Recruit volunteers or paid staff that are peer leaders and opinion makers in the gay community.
- Confront homophobia on a national, societal, and community level.
- Apply lessons learned in designing culturally appropriate prevention efforts in developing effective programs for communities not yet effectively reached.
- Identify community leaders and peer educators. Recruit educators that mirror the targeted groups in terms of age and ethnicity.
- Service providers need to understand the role of cultural and socioeconomic factors in the transmission of HIV.
- Providers need to be familiar with the effect of racial inequality on public health.
- Use materials, including videos, that depict black men and address issues related to the men’s same-sex attitudes and behaviors addressed in their own words.
- Providers need to have an understanding of and respect for Latino cultures.
- Use peer educators, stress empowerment and self-esteem building, and expand beyond issues of HIV to incorporate broader issues of relationships, family, and culture.
- Appeal to brotherhood and the family of gay men to attract program participants.
- Be diplomatic in proposing educational programs in prisons.
- Develop programs with the cooperation of prison administration and staff.
- Recruit peer educators that speak the same language and are aware of the types of risk behavior that take place in prison.
- Public health officials and corrections officers need to work with substance abuse agencies to ensure drug treatment continues to be available beyond the correctional setting.
- Develop linkages between the correction system and community services.

Strategies Suggested by Iowa's Focus Groups (Chapter 3)

- There needs to be continued HIV/AIDS education.
- Efforts to test more gay men should be encouraged aggressively.
- Encourage increased condom use.
- Alcohol and drug education should be encouraged because of the correlation between substance abuse and risky sex behaviors.
- There needs to be some kind of messenger who can carry that message beyond the current strategies we have already employed.
- Existing HIV/AIDS prevention services in Iowa are limited and need to be culturally specific.
- HIV/AIDS education needs to begin as early as possible in schools, churches, and elsewhere.

Substance Users

Barriers to HIV Prevention within the Population

The relationships between substance use and sex is complicated and many variables need to be considered. Substance use affects judgement and obscures a sense of consequences when engaging in activities that put one at risk for getting or spreading HIV. A more complex understanding of the interrelationship between substance use and sex-related risk is key to the development of appropriate and effective HIV prevention and substance abuse treatment programming for men who have sex with men. Sensation-seeking, state-dependent learning, expectations about drug use, and specific coping skill deficits make men vulnerable to sexual behavior relapse in the context of drug use. Individual or small group interventions that assist men in restructuring their ways of dealing with stress may play an important role (Ostrow, 1996; Ostrow, DiFranceisco, Chmiel, Wagstaff, & Wesch, 1995; Ostrow et al., 1990).

In a study of HIV positive MSMs, (Purcell et al., 1998), found that substance use before or during sex was common. They reported a relationship between drinking alcohol before or during sex and the likelihood to engage in insertive anal intercourse without a condom with HIV negative partners or partners with unknown HIV status. Substance abusers in San Francisco focus groups identified a number of factors that made it difficult to reduce their sexual risk behavior. The factors included the perceived disinhibiting effects of alcohol and other drugs, learned patterns of association between substance use and sex (especially methamphetamine use and anal sex), low self-esteem, lack of assertiveness and negotiating skills, and perceived powerlessness (Paul, Stall, & Davis, 1993).

Strategies to Overcome Barriers

- Offer counseling and treatment for those who abuse drugs, including alcohol.
- Prevention interventions must address the sexual risks that are common among people who use drugs, including “crack” cocaine, marijuana, and alcohol.
- Develop support and encouragement from family, friends, care providers, and the community.
- Develop interventions that decouple substance use and sexual activities.

- Develop programs that assist MSM in restructuring their ways of dealing with stress.
- Programs need to be multidimensional and flexible.
- One-on-one interventions that help MSM sort out issues surrounding substance use and risk.
- The use of role models, including men who have dealt with their substance abuse and HIV issues in a positive way.
- Provide substantive referrals to related services.
- Establish safe places to gather outside of bars
- Develop more effective public information campaigns.
- Develop program evaluation guidelines for grantees on the measurement of the impact of alcohol and other drugs on sexual behavior and high-risk sexual behavior among MSM.

Trade Sex for Money, Drugs, or Favors

Barriers to HIV Prevention within the Population

The illegality of prostitution in the U.S. drives the industry underground and engenders a strong distrust of both police and public health authorities among sex workers. This makes effective HIV prevention outreach difficult (Cohen & Coyle, 1990).

Desperation and lack of resources can override prevention concerns. Drug-addicted people may turn to prostitution to earn money to pay for the high cost of illegal drugs. Many homeless youth have no training or means of support, and rely on prostitution for survival. Attention to the more immediate concerns of food, housing and addiction often takes priority over future concerns of HIV infection.

HIV prevention that targets gay men seldom meets the needs of young MSM. Some young MSM do not relate to gay-specific messages because they do not self-identify as gay. Many fear the social stigma and violence, sometimes intensified by culture and religion, directed at those identified as homosexual. Others identify themselves as bisexual and do not internalize gay-specific messages. Some young men, unsure of their sexual orientation, view same-sex behavior as experimental and temporary. Since they seldom identify as gay, these young MSM may not recognize unsafe behaviors that put them at risk for HIV.

On the other hand, prevention efforts that target youth, particularly school-based programs, too often assume the heterosexuality of their audience. Most school based prevention efforts attempt to convince all adolescents that they are susceptible to HIV/STD, and in so doing, they often inadvertently exclude messages specifically targeting young MSM. These programs are unlikely to address the complex psychological and developmental issues facing young men who have sex with men. These issues include self-esteem, social isolation, relationship skills, and internalized homophobia. Younger gay men may feel that they have little in common with older gay men. Similarly, prevention efforts that target older gay men may not appropriately address the special concerns of younger men. These shortcomings in prevention messages underscore the need for programs that focus on young MSM, regardless of self-identification, and that incorporate a message which recognizes and reflects the diversity among young MSM.

Strategies to Overcome Barriers

- Address the context in which sex work is transacted, as well as specific practices of the sex workers.
- Drug treatment, housing, childcare and skills training for prostitutes are essential.
- Develop a comprehensive HIV prevention strategy using a variety of elements.
- Develop programs staffed and managed by peers.
- Approach people known to be supportive within an agency/institution who work with at risk youth.
- Develop collaborative relationships with school personnel; approach individual teachers regarding program issues and referrals.
- In rural communities, talk to county and school nurses about program issues and set up a referral network.
- Recruit and train peer educators. Recruit educators that mirror the targeted groups in terms of age and ethnicity.
- Be prepared with a set curriculum in hand, ready to use.

Strategies Suggested by Iowa's Focus Groups (Chapter 3)

- Gay youth need a safe place to meet and gather. This includes offering a safe place to talk and study, offering a place for support groups and counseling, and having hours of operation which meet youth needs (afternoons, evenings, and late night).
- Having a place for dances and other social activities to help develop and create a sense of community among gay youth and provide an opportunity to learn more social skills.
- More HIV/AIDS resources including HIV seropositive peers to talk to, as well as a hotline for gay youth staffed by youth peer counselors.
- Need to have supportive teachers and staff to whom youth can be directed in their school for help.
- Need positive adult role models in the community and support groups and resources for families involved in the coming out process.
- HIV prevention materials and programs must be available in places where young MSM may spend time, such as community centers, malls, and public sex environments.
- Programs need to adopt a "holistic" approach to HIV prevention, including "mainstreaming" HIV prevention programs targeting young MSM into existing youth programs, incorporating information on relationships (significant others, familial, interpersonal), issues around coming out and self-acceptance, and substance use/abuse.
- Prevention messages need to be direct to catch their attention.
- Information should be presented in a creative manner, but not so direct that it could only be of benefit to MSM.
- Messages should encourage pride in self and community.
- Public schools need to be more involved in the process of reaching gay youth.

INJECTING DRUG USERS SHARING CONTAMINATED INJECTION EQUIPMENT

General Information

To date, more than a third of all reported AIDS cases in the United States occur among injecting drug users, their heterosexual sex partners, and children whose mothers were injecting drug users or sex partners of injecting drug users. Drug treatment services and risk reduction programs should offer and promote HIV counseling and voluntary testing of injecting drug users.

Injecting drug users may continue to use drugs and engage in high-risk sexual behavior that places them at risk of HIV infection. Treatment approaches must include persistent efforts to counsel injecting drug users about both high-risk behaviors and the risk of HIV infection. Many children with AIDS who were infected with HIV perinatally come from families where one or both parents are injecting drug users. A disproportionate number of the babies affected are African-American and Hispanic. Drug treatment services should encourage education, counseling, and testing to reduce risk and to prevent HIV transmission. Drug treatment models targeting this population should be culturally appropriate, gender specific, and include HIV prevention and intervention strategies to reverse the trends of the HIV epidemic.

HIV infection among women and infants in the United States primarily can be traced to contaminated injecting drug "works" and to sexual relations with infected drug users. Pediatric AIDS is particularly a problem among the children of African-American and Hispanic women involved in drug-related lifestyles. To address these problems, substance abuse treatment must be provided for injecting drug users. Such treatment will be most effective against HIV if it includes information, counseling, and other help on how to prevent both HIV and unintended pregnancy.

Prevention efforts with IDUs, especially those not in treatment, have been difficult to implement because of attributes specific to this group: they are not easily accessible because they often do not work, do not attend school, may be homeless, and may conceal their drug use (House & Walker, 1993). In order to effectively reach this population, peer interventions are often recommended (Power, Jones, Kearns, Ward, & Perera, 1995; Reitmeijer et al., 1996). However, ethnographic analysis of social networks is critical in order to understand the social climate, coping skills, and positive resources of this subculture to develop effective interventions (Power et al., 1995).

Barriers to HIV Prevention within the Population

Given the illegal nature of most drug use, drug users are frequently mistrusting of AIDS educators, are wary of law enforcement, and may not self-identify as drug users. Therefore, they may not seek out the education and support they need to effect long-term behavior change to reduce HIV risk. AIDS educators may have difficulty in contacting and identifying drug using populations because of community norms which prohibit outreach that could be viewed as tacit approval or encouragement of substance abusing behaviors, with populations on needle exchange programs being the most obvious historical example.

Barriers exist for HIV prevention when HIV outreach workers are not sensitive to the particular cultural and social milieus of the particular substance abuse community with which they are working. Or they may not understand that HIV and AIDS risk is only one factor in a complex range of problems facing IDUs. Lack of employment, education, housing, and other social necessities are most often at the root of drug addiction, with many substance abusers responding to the traumatic hopelessness of their environments through the release provided by drug use (P. Lurie & Reingold, 1993). Within this perspective, HIV/AIDS becomes only one of the many consequences of injection drug use with this community, one that must be addressed within a global perspective of the community's needs and conditions in order for HIV education to be both appropriate and successful.

Strategies to Overcome Barriers

People with HIV risk behaviors need an array of prevention messages, skills, and support to help them reduce sexual and drug-related risk. Drug injectors not only need strategies to help them stop using drugs or sharing needles, but also need to learn ways to protect themselves from sexual transmission if their partner has ever injected drugs and may have shared needles.

The CDC recommends that HIV prevention programs for injection drug users (IDUs) be comprehensive in nature, and include multiple interventions to increase the chance of reaching large numbers of IDUs with multiple, reinforcing messages. CDC believes that this approach has the greatest likelihood of reducing the transmission of HIV among IDUs, their sex partners, and children.

Program elements include the following:

1. Timely access to substance abuse treatment;
 - a. Programs are needed to help persons with addictions to alcohol and drugs reduce and, ideally, eliminate their drug use.
 - b. Substance abuse treatment programs in jails and prisons are particularly important.
2. Community outreach programs;

Programs are needed that place motivated peer outreach workers in communities with large numbers of IDUs to advocate and promote HIV and STD prevention.
3. Access to sterile syringes for drug injectors who continue to inject;
 - a. IDUs who continue to inject drugs should use sterile syringes to reduce the risk of transmission of HIV. The following approaches can help increase the availability of sterile syringes.
 - b. Syringe laws and regulations

Programs should determine what types of laws and regulations exist that restrict the sale or criminalize the possession of syringes.
 - c. Syringe exchange program

Where permitted, such programs can help provide sterile syringes to IDUs who continue to inject and increase their access to important public health services.

- d. Pharmacists and police
Pharmacists and police can be important allies on the issue of availability of sterile syringes. Programs should consider developing partnerships among public health communities, pharmacists, and the police.
4. HIV counseling and testing designed to reach IDUs;
HIV counseling and testing programs should be tailored to IDUs or offered in settings with large numbers of IDUs.
 - (1) Substance abuse treatment programs
 - (2) Correctional facilities
5. Coordinated services for HIV-infected IDUs;
 - a. Programs should be developed that improve services for all IDUs who are living with HIV.
 - b. Participation in ongoing health care and counseling should reduce the chance that HIV infected IDUs will transmit HIV to others.
 - c. Services should include counseling, substance abuse treatment, access to highly active HIV therapies and primary care.
 - d. For HIV infected IDUs in prison or jail it is important to assure the continuity of medical services after release back into the community.
6. Prevention services for "special populations";
 - a. Programs should include outreach/treatment/syringe access plans for specific populations in need.
 - b. An assessment should be conducted to determine which populations are being served by interventions within the IDU community.
 - c. Programs for specific racial and ethnic minorities, sexual minorities, incarcerated drug users, and drug users with severe mental health problems may be needed.
7. Substance abuse, corrections, and HIV/AIDS collaboration;
 - a. Close collaboration between these different programs is essential.
 - b. Cross training programs around HIV prevention and substance abuse issues are often helpful for persons working in these fields.
8. Criminal justice system;
 - a. Reaching IDUs in jails and prisons is extremely important.
 - b. Programs should determine what HIV prevention programs are in place for IDUs who are in jail, prison, on probation or parole.
9. Prevention of sexual transmission among IDUs;
Counseling and risk reduction programs for IDUs must include the provision of condoms and other efforts to reduce the risk of sexual transmission of HIV.

10. Prevention of drug use;

- a. Prevention of the initiation of drug use and injection drug use is important.
- b. Parent movements, public education campaigns, and other organized efforts to help adolescents and adults resist pressure to start drug and alcohol use can make important contributions to preventing drug use and addiction.

Other recommendations for working with IDUs in the state of Iowa include the following.

- Develop relationships or collaborations with treatment centers and twelve step program sponsors. Approach people you know to be supportive within drug treatment agency/institution.
- Develop relationships with correctional facility staff and individual probation officers.
- Local governments and public health officials should work with community groups to develop comprehensive approaches to HIV prevention among IDUs and their sexual partners.
- Improve access to devices necessary for safer practices, such as clean needles and condoms.
- Use incentives to attract and retain participants in prevention activities. Ideas include free meals, gift certificates, and cash. Give participants certificates of attendance for completing multiple session discussion groups.
- Having access to sterile drug equipment is important, but it is not enough. Preventing the spread of HIV through injection drug use requires a wide range of approaches, including:
 - * preventing initiation of drug injection,
 - * using community outreach programs,
 - * improving access to high quality substance abuse treatment programs,
 - * instituting HIV prevention programs in jails and prisons,
 - * providing health care for HIV-infected IDUs, and
 - * making HIV risk-reduction counseling and testing for IDUs and their sex partners available.

Not in Treatment

Barriers to HIV Prevention within the Population

Lurie et al. (1998) estimated the number of injections by injection drug users (IDUs) in the United States to be between 920 million and 1.7 billion annually. A similar number of syringes would be needed to satisfy the goal of a sterile syringe for every injection. Pharmacy-based strategies, including the sale of kits for injection drug use, have provided sterile syringes to IDUs in Europe, Australia, and New Zealand. Modification of laws restricting syringe purchase and possession has led to marked increases in purchase of syringes from pharmacies and reductions in needle-sharing. Large numbers of syringes would be required to provide a sterile syringe for every injection, but significant numbers of pharmacists seem to be willing to play a central role in syringe sale and distribution (P. Lurie, Miller, Hecht, Chesney, & Lo, 1998).

(Freeman, Rodriguez, & French, 1994) in a study comparing male and female IDUs, found that gender was unrelated to HIV serostatus, injection frequency and injected drug of choice, and to knowledge about AIDS and HIV transmission. Female IDUs appear to be at greater risk for HIV infection as a result of involvement with a drug-using sex partner than because of risky needle practices. Women in Freeman's study were more likely than men to report injecting with a sex partner. Women with one sex partner were more than twice as likely as men with one partner to report that their partner was an IDU. Condom use was rare among those with one partner. Women were more likely to be daily users of crack cocaine and more likely to be in poor health .

Strategies to Overcome Barriers

A study of five cities where HIV was introduced in the local population of IDUs, but where the seroprevalence has nevertheless remained low showed three common prevention components present in all five cities: (1) implementation of prevention activities when HIV seroprevalence was still low, (2) provision of sterile injection equipment, and (3) community outreach to IDUs. Therefore, in low seroprevalence areas, it appears possible to limit transmission of HIV among populations of IDUs, despite continuing risk behavior among a substantial proportion of the population (Des Jarlais et al., 1995).

Providers need to reach out to network members and enlist them in HIV prevention activities. By using network members as advocates, change agents, and role models, prevention providers can capitalize on strong ties and close relationships within the injector's social network to exert pressure on the individual user. HIV-positive women who are injecting drug users are more likely to be networked with other HIV-positive women (El-Bassel et al, 1998). Prevention and care providers should encourage these women to develop self-help groups and peer exchanges. As a safe environment, self-help groups can enable HIV-positive women to deal with HIV disease. Self-help groups reduce the spread of HIV by advocating safer sex and non-sharing of injection equipment amongst group members.

Network structure has consequences for individual members and for the network as a whole. These consequences go beyond the effects of characteristics and behavior of the individuals involved (Klovdahl, 1985, 2001; Klovdahl et al., 2001; Klovdahl et al., 1994). Drug use, sexual practices, dependence on partners, and social norms all interact to influence HIV risk behavior (Sherman and Latkin, 2000). These same dynamics can be used to introduce norms that support risk reduction. Social networks provide a context for understanding drug use and HIV transmission. They also provide a context in which to develop prevention efforts.

(Remien et al., 1995) reported that group support for couples helped reduce participants feelings of isolation, helped participants identify and share coping strategies, model safe and intimate behaviors, and develop group norms regarding risk. Partners were able to express sentiments in the groups that they were unable to express directly to each other. PLWH participating in a two-week intervention consisting of interactive group sessions led by community service providers, were more likely to use a condom following the sessions and were more likely to visit a health care provider (O. Grinstead, Zack, B., Faigeles, B., Grossman, N., Blea, L., 1999). Session topics included sex, drug use, recovery, nutrition, and HIV-related legal issues.

Communication among members of marginalized groups, such as injecting drug users, tends to be frequent. The diffusion of information within the group or network is typically rapid and pervasive (Dearing et al., 1994). A successful risk reduction strategy will incorporate members of drug using networks, including active drug users, into the planning process. Armed with the knowledge provided by network members, providers and policy makers can develop prevention interventions that are tailored to the needs of specific groups of injection drug users.

- Outreach programs should emphasize that using a sterile syringe for every injection is the optimal HIV prevention practice for IDUs who cannot or will not stop injecting.
- Pharmacy-based syringe sale or distribution has the potential to augment current efforts to prevent HIV infection in IDUs, their sex partners, and their children.

Communities of Color

Barriers to HIV Prevention within the Population

Injection drug use has played a major role in HIV infection among African-Americans. Although the majority of IDUs in the United States are White, HIV infection is higher for African-American IDUs than White IDUs (Substance Abuse and Mental Health Services Administration, 1997). Unemployment and poverty are significant co-factors that may lead to high rates of addiction and high rates of risk behaviors such as sharing needles (Fullilove & Fullilove, 1999).

Studies of HIV prevalence among patients in drug treatment centers and STD clinics find the rates of HIV among African-Americans to be significantly higher than those among Whites. Sharing needles and trading sex for drugs are two ways that substance abuse can lead to HIV and other STD transmission, putting sex partners and children of drug users at risk as well (CDC, 1999b). Recent studies show that female inmates, inmates age 25 or younger, and African-American and Hispanic inmates are at greatest risk for HIV infection (Polonsky et al., 1994).

Communities of color in this country have experienced persistent inequalities in social benefits, health care, education and job opportunities. Economic disparities continue to exacerbate the health status of African-Americans and other communities of color in the United States. Many African-Americans hold a distrust of government programs and health institutions. Some believe that the effects of AIDS on the community are the results of deliberate efforts and omission of responsibility by the United States government. Effective community-based prevention programs must address these concerns (Dalton, 1989; Thomas & Quinn, 1991).

Strategies to Overcome Barriers

Researchers and service providers need a better understanding of the role of cultural and socioeconomic factors in the transmission of HIV, as well as the effect of racial inequality on public health. Social and cultural factors need to influence the design of HIV prevention messages, services and programs. HIV prevention for communities of color must occur at the community level.

Comprehensive programs for drug users must provide the information, skills, and support necessary to reduce both injection related and sexual risks. HIV prevention and treatment,

substance abuse prevention, and sexually transmitted disease treatment and prevention services must be integrated to take advantage of the multiple opportunities for intervention.

In Treatment

Barriers to HIV Prevention within the Population

America is confronting a massive shortage of substance abuse services. The National Institute for Drug Abuse estimates that for every addict in drug treatment, seven remain locked out (National Institute on Drug Abuse, 1991). Relapse into drug use is common for addicts who finish residential treatment and return home to find little support for their efforts to stay drug-free. Most AIDS education efforts discuss the general need for safer injection practices but fail to address the details of those practices.

Strategies to Overcome Barriers

Drug treatment services should encourage education, counseling, and testing to reduce risk and to prevent HIV transmission. Drug treatment models targeting this population should be culturally appropriate, gender specific, and include HIV prevention and intervention strategies to reverse the trends of the HIV epidemic.

Close collaboration between substance abuse, corrections, and HIV/AIDS programs is essential. Cross training programs around HIV prevention and substance abuse issues are helpful for persons working in these fields.

(Corrigan, Thompson, Malow, & Sorenson, 1992) describe an educational approach to AIDS risk reduction for injection drug users. This strategy not only provides information, but also focuses on psychological principles useful in the promotion of behavior change. The intervention is divided into 3 sessions covering (1) injection equipment sterilization and risk reduction in relation to drug use, (2) condom use and risk reduction for sexual activities, and (3) discussion of HIV antibody testing and a review. This program was designed as a small-group intervention for injection drug users within the context of an ongoing drug rehabilitation program. The content was customized to a target population of primarily African-American men who abuse cocaine.

Sexual Partners of Injecting Drug Users

Barriers to HIV Prevention within the Population

Many partners of IDUs may not be aware of their partner's injection practices or may be unwilling or unable to acknowledge this behavior. Women may fear the confrontation that might occur if drug use practices are openly addressed. Without recognition or acknowledgment of their partners' risky practices, these women may perceive their risks as unrealistically low and have little reason or opportunity to use condoms.

Strategies to Overcome Barriers

- Extend the outreach of counseling and testing services to community settings using new testing technologies.
- Conduct targeted programs to promote the idea and benefits of learning HIV serostatus using a marketing and communication model.

- Use partner counseling and referral services to assist individuals at high risk in learning their serostatus.
- Develop programs for HIV-infected individuals, with priority for those most likely to transmit the virus to others.

INCARCERATED INDIVIDUALS

Barriers to HIV Prevention within the Population

A prisoner's stay in a correctional facility is often brief. This temporal constraint complicates all rehabilitation efforts, including those focusing on drug problems. Corrections officials, already challenged by the task of limiting HIV transmission within their facilities, cannot afford to ignore the consequences of interrupted drug treatment. Lacking continued support, former inmates quickly relapse into drug use (Polonsky et al., 1994).

Jail and prison populations have doubled in the past ten years. Overcrowding and understaffing is occurring in correctional systems. Inmates are admitted and released more frequently, making them active participants in the general population. As more people pass in and out of jail and prison, so too do problems and diseases associated with incarceration, like HIV.

Drug offenses account for the single largest number of Federal crimes for which people are incarcerated (Burriss, 1992). In 1991, 79% of State prison inmates reported using illicit drugs at some time. It is not surprising then, that high rates of HIV infection occur in this population. Injection drug users are at special risk, as clean needles are almost impossible to find both in and out of the prison system.

Many jail and prison officials do not wish to acknowledge that drug use and sexual activity is prevalent in their institutions. Prisoners also may not wish to acknowledge activities that could subject them to further sanctions.

Prisons and jails would seem to be an ideal venue for drug treatment and education. There are more IDUs in correctional facilities in the US than in drug treatment centers, hospitals, or social services. However, in 1991 only 1% of federal inmates who had moderate to severe drug abuse problems had received appropriate treatment. Also, for inmates who did complete treatment, there were no aftercare services in place to help them remain drug-free (US General Accounting Office 1991). Lack of outreach and program information to prison staff may have contributed to limited participation.

Men at a large state prison in California can take part in a comprehensive intervention program that includes HIV-positive inmate peer education, pre-HIV test counseling, health promotion for HIV-positive inmates, pre-release educational booster session, discharge planning and community follow-up. The success of these programs involves ongoing support and input from inmates, guards and correctional officers, prison counselors, educators, administrators and the prison medical team.

Overcrowding, high turnover, and escalating rates of HIV and other diseases, combined with restricted rights of inmates, create a dangerous public health situation in correctional institutions in the U.S. Some claim that "the prison population needs access to means of reducing harm more than the general population does (Riley, 1993)."

The pandemic of HIV has paralleled the pandemic of incarceration. Correctional institutions could be an ideal setting for HIV education, prevention, and treatment since inmates are a captive audience.

Strategies to Overcome Barriers

A comprehensive HIV prevention strategy uses many elements to protect as many people at risk for HIV as possible.

- Education and treatment in prison or jail.
- Discharge planning to help inmates develop links with their community.
- Ongoing training and education for prison staff (guards, nurses, doctors) is key for ensuring that programs are consistent and sustainable within institutions (National Commission on AIDS, 1991).
- Access and institutional barriers to HIV intervention research in prisons can be overcome through the development of collaborative research partnerships.

HETEROSEXUAL SEX

General Information

Barriers to HIV Prevention within the Population

Community-based HIV prevention and research programs that do not focus on altering social norms regarding safer behavior within communities will have significantly lower success rates than programs that do stress these aspects (National Institute of Mental Health, 1994). Programs must instill personal motivations for making attitudinal and behavioral changes in both female and male partners. Partner resistance, or need for partner control, can act as a significant barrier to the maintenance of safe sexual behaviors for women, especially within communities in which female assertiveness regarding sexual activities is regarded as a threat. Furthermore, woman-focused prevention education emphasizing condom usage and skills is continually complicated by the fact that women usually do not wear condoms.

Women

Women face barriers to adequate and appropriate HIV prevention education. These barriers are due in large part to the fact that women are often presented with prevention messages that are slanted in terms of women's membership in a specific targeted HIV-related subgroup such as IDUs or prostitutes, rather than as members of a larger-scale risk group of their own. Many women are unaware of any potential risk of HIV infection they may face. If they are aware of risk, their personal feelings of susceptibility are often expressed in terms of fatalism that can serve as a barrier to taking adequate precautions against infection on a personal level.

Prevention messages that place the responsibility for assuring condom usage on women can have the effect of creating conditions that lead to the physical and emotional abuse of women by male partners. Therefore, condom education campaigns must continually take account of, and present supportive referrals, in the case of abusive situations. In addition, HIV prevention efforts for women must also consider the risk of HIV infection as a direct result of non-consensual sex.

As with other target populations, the lack of peer-based support and prevention assistance is a barrier that must be overcome if prevention outreach and services to women are to address the growing crisis of HIV infection within this diverse population.

Substance Users

Drug users are unlikely to meet with sympathy or support in the communities where they live and use drugs. The behaviors most closely linked with the transmission of HIV are also linked to deeply rooted stigma and embarrassment. In the case of drug use, those behaviors are also illegal, compulsive, and likely to be embedded in a criminal style of life.

Many communities look at the dangers of drug use and see behavior that exacerbates the other social problems they are facing: chronic unemployment, homelessness, and crime.

Outreach workers working with a destitute drug-using population need to remember that abstinence from drug use or protection from HIV may be the farthest thing from a substance user's mind. A bath, a chance to brush their teeth, a meal, or something to wear may be what matters most to many clients.

Strategies to Overcome Barriers

HIV prevention and treatment, substance abuse prevention, and sexually transmitted disease treatment and prevention services must be better integrated to take advantage of the multiple opportunities for intervention. First, to help the uninfected stay that way; second, to help infected people stay healthy; and third, to help infected individuals initiate and sustain behaviors that will keep them safe and prevent transmission to others.

- Set up a referral system with STD clinics in the service area.
- Use STD/Hepatitis B as surrogate markers to identify and enroll people who practice high-risk sexual behaviors.
- Set up prevention case management programs for individual and couple counseling.
- Work with community agencies that work with women at risk for HIV and STD infection.
- Emphasize skills building and setting limits in prevention programs.
- Train peer educators and develop peer-based support systems.
- Use peer educators, stress empowerment and self-esteem building, and expand beyond issues of HIV to incorporate broader issues of relationships, family, and culture.
- Extend the outreach of counseling and testing services to community settings using new testing technologies.

- Conduct targeted programs to promote the idea and benefits of learning HIV serostatus using a marketing and communication model.
- Use partner counseling and referral services to assist individuals at high risk in learning their serostatus.

Substance use is a major problem in this country and the intersection of substance use and sexual HIV transmission cannot be overlooked. Persons who abuse drugs, including alcohol, should be offered counseling and treatment to help them stop using drugs and prevent HIV infection. HIV prevention interventions for the vast majority of substance users who are not in treatment also must address the sexual risks that are common among people who use drugs.

- Give away “daily living kits” in the streets or provide snacks or coffee as a first step in establishing rapport between an outreach worker and drug user.
- Outreach workers need to present themselves in ways that drug users can relate, or stay on the client’s level.
- Dress to blend in with the neighborhood.
- Do not preach. Be attentive to the possibility that addicts may be able to teach something or suggest some project that would not have occurred to the outreach worker.
- Let drug users know they are not as helpless or hopeless as they think they are.
- Use people in recovery as outreach workers in order to establish the sense of personal identification with active drug users and to serve as a role model.
- Listen to clients.

Heterosexual Sex For Money, Drugs, Favors

Barriers to HIV Prevention within the Population

The illegality of prostitution in the U.S. drives the industry underground and engenders a strong distrust of both police and public health authorities among sex workers. This makes effective HIV prevention outreach difficult (Cohen & Coyle, 1990). Economic dependence and gender power imbalances can make it difficult for sex workers to demand safer sex.

Like many people in committed relationships, sex workers may find it difficult to discuss condoms or safer sex practices with their partner at home. In one study, although 94% of sex workers used condoms at some point with their clients, only 25% had used condoms with their partners at home (Dorfman et al., 1992).

The people who are most vulnerable to HIV infection are street workers, most of whom are poor or homeless, and many whom are young, have a history of childhood abuse and are likely to be drug or alcohol dependent. Street prostitutes are extremely vulnerable to violence from clients, police, and sometimes their lovers. Male and female sex workers who work off the street (in brothels, massage parlors, their own apartments, or escort services) are much less likely to become infected, largely because they are less likely to depend on drugs or alcohol and more likely to be able to control the sexual transaction and insist on condoms (Alexander, 1992).

Strategies to Overcome Barriers

A study comparing two types of community-level HIV prevention campaigns for women found that print media reached a larger number of people, but community outreach was more effective in reaching women at highest risk for HIV infection, including those who exchanged sex for money or drugs (Walls, Lauby, & Lavelle, 1998).

- Address the context in which sex work is transacted, as well as specific practices of the sex workers.
- Public health officials need to view sex workers as an important at-risk population.
- Prevention programs need to address the full range of problems sex workers face both on and off the streets.
- Develop programs staffed and managed by peers.
- Drug treatment, housing, childcare, and skills training for prostitutes are essential.
- Develop a comprehensive HIV prevention strategy using a variety of elements.

Strategies Suggested by Iowa's Focus Groups (Chapter 3)

- HIV/AIDS educators need to continue to work at dispelling the myths surrounding HIV transmission and to focus on the “facts.”
- Continue to tell people how important it is to use condoms and to make sure that you never share unclean straws or needles with anyone.
- Greater availability of clean rigs as a prevention service
- Have people, preferably women who were previously commercial sex workers, develop a relationship with women on the street. It would be helpful for these women to see a familiar face on the street or in the bars that they could relate to and not fear.
- Outreach workers should know the areas where the commercial sex workers work including the corner of a street, another location in town, a bar, a convenience store, etc.
- Target women within the commercial sex worker population that are well known by others and use them as gatekeepers into this population of women at risk.
- Need for a good community support system.
- Implement a women-specific outreach program.

Prevention programs need to address the full range of problems sex workers face, both on and off the streets, especially programs staffed and managed by peers. Drug treatment, housing, childcare and skills training for prostitutes are essential. Better health care services are needed for prostitutes, including diagnosis and treatment for STD/HIV, care for injuries due to violence, and mental health care. A comprehensive HIV prevention strategy uses a variety of elements to protect as many people at risk as possible. Sex workers require a broad range of protective services, including HIV prevention.

YOUTH (13-24) WHO ENGAGE IN HIGH RISK ACTIVITIES

General Information

Barriers to HIV Prevention within the Population

Out-of-school youth and adolescents are extremely difficult to reach with prevention and education messages, and must generally be accessed within the context of specific health or social service interventions, such as street outreach programs related to substance use or general health. Ongoing support for young people to maintain behavior change is essential, particularly for young people in high-risk situations such as substance abusers and gang members. However, for all young people, HIV prevention education must stress the fact that young people can develop a clear sense of personal control over the conditions and decisions within their lives, and must teach communication and assertiveness skills that give young people experience and confidence in maintaining self-directed behavior choices.

Scientific data about the effectiveness of latex condoms in preventing HIV transmission are very clear. Latex condoms are highly effective barriers to HIV when used consistently and correctly. Carefully designed studies among heterosexual couples in which one partner is HIV positive and the other is not, demonstrate that latex condoms provide a high level of protection against HIV. Increased condom use is essential for slowing the spread of HIV infection (National Survey of Family Growth).

Individuals in some populations, especially sexually active young people, may experience problems accessing condoms because of several factors, including cost, convenience, and embarrassment. For these individuals, the fact that condoms are not readily accessible may be a significant barrier to consistent use. To eliminate this barrier, many local communities actively support programs that make condoms available to populations most vulnerable to HIV infection, including sexually active young people. Research shows that providing access to condoms can increase their use among sexually active young people. Despite fears to the contrary, research clearly demonstrates that young people who participate in comprehensive HIV prevention programs that include approaches to ensure access to condoms are no more likely to initiate or increase sexual activity than other young people.

In addition to access, the issue for many young women, some of whom are having intercourse with older men, is the correct and consistent use of condoms. Intimidation or threats of mistrust by their partners if they suggest condom use often limit young women; knowledge of effective negotiating skills is another critical element of increased condom use.

Strategies to Overcome Barriers

It is estimated that nationally one in every five adolescents suffers at least one serious health problem, and that as many as one in four are at high risk for school failure, delinquency, early unprotected sexual intercourse, and/or substance abuse (Society for Adolescent Medicine, 1992). Such statistics highlight the fact that adolescence and young adulthood are times of complex change and development, in which no single issue such as HIV risk can be addressed singly. Proper attention to the complex range of developmental conditions and health and social needs

of young people requires an integrated, multi-disciplinary focus on health maintenance. This would encompass all risk factors and behaviors that affect adolescent health. This approach must be integrated with an understanding of the special complexities of adolescent health issues. HIV infection and AIDS is only one component in a complex set of issues and risk behaviors to which young people -- and in particular young people from low income backgrounds, certain ethnic cultural groups, and dysfunctional family situations -- are particularly susceptible. Proper attention to HIV treatment and care for young people must encompass both a thorough understanding of youth development needs in regard to care, and a more integrated approach to youth wellness within which HIV/AIDS is a factor.

- Use incentives to attract and retain participants in prevention activities. Ideas include free meals, gift certificates, and cash. One hospital offers to remove tattoos at no cost in exchange for performing community service or participating in an HIV prevention program.
- Provide training and capacity building activities for agency staff that work with at-risk youth.
- Programs should be peer-based and include street outreach.
- Programs should focus on building positive self-esteem and stress healthy sexuality.

Strategies Suggested by Iowa's Focus Groups (Chapter 3)

- Speakers who actually have the disease would be more effective in their presentations and make a stronger impact.
- Peer education
- Condom distribution
- Earlier education in the home, school and community.

Comprehensive school-based HIV and sex education programs have been shown to delay the initiation of sexual intercourse, reduce the frequency of intercourse, reduce the number of sex partners, or increase the use of condoms or other contraceptives.

Each and every generation of young people needs comprehensive, sustained health information and interventions that help them develop life-long skills for avoiding behaviors that could lead to HIV infection. Such comprehensive programs should include the involvement of parents as well as educators. The most effective programs start at an early age and are designed to encourage the adoption of healthy behaviors and to prevent the initiation of unhealthy ones.

In Shelters and Residential Care

Barriers to HIV Prevention within the Population

Interventions that provide only information do not bring about risk-reducing changes in behavior. Given the chronic nature of HIV infection and data that show that students do not consistently use condoms and practice safer sex, peer education programs dealing with sexually transmitted diseases need to focus on strategies that have demonstrated success in encouraging behavioral changes. A one-on-one program in New York has shown how students' understanding of risk reduction can help bring their behavior into accord with their knowledge (Bauman, 1993).

Strategies to Overcome Barriers

Youth who are in shelters benefit from programs in which they are actively engaged as participants, their immediate needs are met, and services are far-reaching in scope. This includes outreach, crisis intervention, stabilization, and long-term support and aftercare. Effective programs are characterized by: flexibility, comprehensiveness, responsiveness, front-line discretion, high standards of quality, good management, a family focus, and a respectful, trusting relationships (Schorr, 1997).

In Alternative School Settings

Barriers to HIV Prevention within the Population

Adolescence is a time of exploration of self and risk-taking. Sexual behavior is a natural part of this exploratory pattern. Sexual mixing and sexual networking patterns in youth promote the spread of HIV because of rapid partner transitions. Young people often do not perceive their risks and are resistant to practicing risk-reducing behavior.

Studies have demonstrated that young people do not carry out AIDS-prevention behaviors based on their knowledge levels alone. Adolescents have not changed their sexual practices nor their methods of contraception as a result of the AIDS epidemic (R.J. DiClemente, 1990). Fear and anxiety of HIV, attitudes about other STDs, and other safe behavioral intentions are not significantly related to consistent condom use among youth.

Strategies to Overcome Barriers

Effective interventions need to last over an extended period of time to cover important educational activities. In classroom settings, multiple class sessions are needed for effective behavioral change. Increasing the number of class sessions will increase the effectiveness of instruction and increase the commitment with which efficacious interventions are delivered.

A peer-led STD/HIV intervention for students in a dropout prevention program in Florida used trained peer counselor/educators to lead school-wide activities and classroom instruction. Sessions covered STD/HIV information, community health resources, communication and negotiation skills, and safer sex strategies. This intervention resulted in an increase in AIDS awareness and discussion among students as well as an increase in condom use. Based on this social influences approach, peer education appears to be an effective strategy for students in alternative school settings (O'Hara, Messick, Fichtner, & Parries, 1996).

Comprehensive school-based HIV and sex education programs have been shown to delay the initiation of sexual intercourse, reduce the frequency of intercourse, reduce the number of sex partners, or increase the use of condoms or other contraceptives.

Since multiple factors contribute to risk behavior among youth, prevention programs must address both individual and societal issues. To meet individual needs, programs must address self-esteem, health attitudes, substance use, and interpersonal and social competencies (Youth, 1998).

In Substance Abuse Treatment Facilities

Barriers to HIV Prevention within the Population

Many students report using alcohol or drugs when they have sex, and 1 in 50 high school students reports having injected an illegal drug.

Strategies to Overcome Barriers

Proper attention to substance abuse treatment and prevention for young people must include an integrated approach to youth wellness within which HIV/AIDS, Hepatitis, or STDs are a factor.

- Use incentives to attract and retain participants in prevention activities. Ideas include free meals, gift certificates, and cash. One hospital offers to remove tattoos at no cost in exchange for performing community service or participating in an HIV prevention program.
- Provide training and capacity building activities for agency staff that work with at-risk youth.
- Programs should focus on building positive self-esteem and stress healthy sexuality.

In Juvenile and Detention Facilities

Barriers to HIV Prevention within the Population

Addressing the needs of adolescents who are most vulnerable to HIV infection, such as homeless or runaway youth, juvenile offenders, or school dropouts, is critically important. A 1993 serosurveillance survey of females in four juvenile detention centers found that between 1% and 5% were HIV infected.

Incarcerated adolescents are at increased risk for infection by sexually transmitted diseases, including human immunodeficiency virus. Moreover, condom use by this population is extremely low (Rickman et al., 1994). Despite high numbers of lifetime sexual partners, a majority of youths report that they never used condoms during sexual intercourse. Respondents who communicated with their sex partner(s) about each other's sexual history were significantly more likely to use condoms during sexual intercourse. Adolescents who reported that they knew someone with AIDS were also more likely to use condoms.

Strategies to Overcome Barriers

Interventions designed to increase condom use among sexually active incarcerated adolescents should include a component addressing sexual communication practices. Programs need to address ways in which adolescents learn to communicate about sex.

Any program for adolescents should be interesting, fun, interactive, and involve youth in the planning and implementation. This is especially true for out-of-the-mainstream youth and youth from diverse cultures. Programs for hard-to-reach youth who are most at risk for HIV infection should be implemented in venues outside of schools, such as youth shelters, shopping malls, detention facilities, and recreation centers. Adolescents not only need correct information and practice in self-improvement skills, but also easy access to condoms in order to keep themselves risk-free.

Section 3: Intervention Sets for Target Populations

Prevention Interventions

Priority Sets

Evidence Based Interventions Fact Sheets

PRIORITIZED INTERVENTIONS FOR IOWA'S TARGET POPULATIONS

In 2003 the Strategies for Prevention Interventions and Community Endeavors Committee presented the new categorization scheme to the CPG. The committee described each intervention as specifically as possible to assure that CPG members were comfortable with how interventions or curriculums are defined. Examples of each intervention derived from Iowa's current prevention projects were given.

A set of interventions for each target population was presented and the CPG voted unanimously to accept the lists. The following criteria were used to set priorities.

- Are there indicators that the intervention is effective or might be effective in averting or reducing high-risk behavior?
- Is the intervention based on behavioral and/or social science theory?
- Is the intervention specifically designed to reach the target population?
- Does the intervention target specific behaviors, attitudes, beliefs, norms, or barriers that place people at risk for HIV infection?
- How feasible is the intervention?
- Is the intervention legal?
- Is the intervention practical given available expertise, funding, and implementation time?
- Are there resources available to assist in the delivery of the intervention?
- Is the intervention sustainable over time?
- Is the intervention acceptable to the target population?
- Is there evidence that the intervention is cost-effective?
- How accessible is the intervention to the target population?
- Can the intervention be adapted for rural communities?

The interventions recommended most frequently were group-level interventions, individual interventions, outreach, and counseling and testing. These interventions reflect the findings contained in the discussion of interventions in this chapter. The interventions most often cited tend to be those that are highly interactive, approach people where they congregate, are emphasized over time, and focus on behavior/change or changes in group/social norms. Iowa's CPG is cognizant that providers of HIV prevention programs must be aware of cultural norms and develop culturally competent programs.

Outreach

Outreach must be coupled with one or more of the other approved interventions. It cannot be funded as a stand-alone intervention, (i.e. as the only intervention in a program). Additionally, providers must incorporate an outreach component into all interventions.

Implementation

Once an intervention is adopted, its actual impact will depend on how it is implemented. It is important to achieve a balance between adapting the intervention to suit local needs and maintaining the core elements and key characteristics that made the original intervention successful. The agency that implements the intervention will require organizational support, adequate staffing, and sufficient resources for implementation.

Fact Sheets

The chapter concludes with descriptive fact sheets for each of the interventions chosen for the target populations as identified by the CPG. The fact sheets, list the type of intervention, risk behaviors addressed, behavior theory, a summary of each intervention, and core elements. Core elements are those features responsible for the effectiveness of the intervention and should not be changed without prior approval from funding agencies, e.g. IDPH. Intended outcomes, evidence of effectiveness, staffing requirements, duration and frequencies are also provided. Reference information and curriculum source are provided for those interested in further information.

Evidence Based Interventions

Evidence Based Interventions are those interventions that have been approved by the CDC for implementation. These interventions have been evaluated and replicated. The attention given to Evidence Based Interventions is not intended to minimize the role of providers' experience with their communities, their constituents, and their services. It is intended to highlight the importance of increasing the extent to which prevention funds are used for interventions with known or strongly supported effectiveness (CDC, 1999)

Emerging Interventions

Emerging interventions are those that have been developed and implemented by providers in Iowa that do not use a CDC approved curriculum. To be listed as an emerging intervention, an intervention must be based on a plan that contains elements specified by CDC's Evaluation Guidance (CDC, 1999). Providers that use non-CDC approved curriculums are required to submit intervention plans that include these elements and a Fact Sheet for each intervention. Intervention plans will be evaluated based on two broad criteria, relevance and scientific soundness.

Relevance refers to the extent to which an intervention plan addresses the needs of the affected population. The target population's needs, as defined in chapter 3, should be reflected in the intervention plan. Providers must provide assurance that the intervention design and implementation address other needs such as culturally competence, accessibility, and specificity.

Scientific soundness considers the scientific foundation of each element covered in the intervention plan. This criterion emphasizes the need for clear and logical evidence to support the inclusion of a specific characteristic, strategy, or approach in the design and implementation of the intervention. Such an approach assumes that systematized knowledge is applied in the conception, development, and choice of intervention components. Scientific soundness also refers to the application of behavioral and social science theories developed or adapted by the provider. A theory describes the projected relationships between a problem or need, an intervention, the hypothesized effects of the intervention, and desired outcomes.

Relevance and scientific soundness are integral parts of an intervention plan. An intervention plan without relevance may lead to inappropriate allocation of resources. A relevant intervention that is not carefully specified and based on scientific evidence will not be as likely to yield positive benefits for the population it is intended to serve.

The following table provides a framework for developing an Intervention Plan.

Category	
Target population specification	<ol style="list-style-type: none"> 1) Correspondence to a priority population (chapter 3) 2) Demographics (age, race, ethnicity, sex) 3) Risk factors 4) Audience coverage (how much of the target population will be reached)
Choosing interventions	<ol style="list-style-type: none"> 1) Efficacy of the intervention 2) Behavioral or social science basis 3) Cost effectiveness 4) Scientific evidence <ol style="list-style-type: none"> a) Prior evaluation data b) Previously evaluated intervention model with a similar population c) Previously evaluated intervention model with a different population d) Applied formal theory in program development <ol style="list-style-type: none"> i) Behavioral ii) Social science iii) Logic models iv) Means by which intervention will affect outcomes 5) Intensity – dose effect
Establishing intervention goals and outcome objectives	<ol style="list-style-type: none"> 1) Process objectives <ol style="list-style-type: none"> a) Amount, frequency, duration of activities, number and characteristics of people to be served 2) Outcome objectives <ol style="list-style-type: none"> a) Intended effects of the intervention (increasing knowledge, changing behavior, affecting norms, reducing transmission)
Developing an implementation strategy and process objectives	<ol style="list-style-type: none"> 1) Where the intervention will take place 2) How the provider will serve the target population
Assessing characteristics of the implementing organization	Resources (human, financial, institutional) Organization's experience Linkages Staffing (including quality assurance) Budget and resources
Describing the data system	Progress documentation Assessment Process evaluation Data collection Decision making

Intervention Sets

Persons Living With HIV

Evidence Based Interventions to Be Used in Iowa

Name of Intervention	Type of Intervention
Community Promises	Multiple Intervention Program <ul style="list-style-type: none"> • Individual Level Intervention • Group Level Intervention • Community Level Intervention • Outreach • Structural Level
Healthy Relationships	Group Level Intervention
Learning Immune Function Enhancement (LIFE)	Prevention Counseling
Partner Counseling Referral Services	Partner Counseling Referral Services (IDPH)
Prevention Case Management	Prevention Case Management

Emerging Interventions That Have Been Used in Iowa

Name of Intervention	Type of Intervention	Comments
Phone-Eze (Iowa)	Group Level Intervention	
Retreats – Conference	Health Communications/Public Information	Multiple topics offered over consecutive days
Retreats - Curriculum	Group Level Intervention	Curriculum based activity offered over 1-2 days
Internet	Health Communications/Public Information	Need to assure participants have access to internet Need to assess whether useable as information sharing or for 'hooking up'

Men Who Have Sex With Men

Evidence Based Interventions to Be Used in Iowa

Name of Intervention	Type of Intervention
Brother to Brother	Group Level Intervention
Community Promises	Multiple Intervention Program <ul style="list-style-type: none"> • Individual Level Intervention • Group Level Intervention • Community Level Intervention • Outreach • Structural Level
MPowerment	Multiple Intervention Program <ul style="list-style-type: none"> • Group Level Intervention • Counseling Testing Referral
Partners in Prevention, Men's Edition	Group Level Intervention
Popular Opinion Leader	Multiple Intervention Programs <ul style="list-style-type: none"> • Group Level Intervention • Community Level Intervention • Outreach
Real AIDS Prevention Project (RAPP)	Group Level Intervention

Emerging Interventions That Have Been Used in Iowa

Name of Intervention	Type of Intervention	Comments
Retreats – Conference	Health Communications/Public Information	Multiple topics offered over consecutive days
Retreats - Curriculum	Group Level Intervention	Curriculum based activity offered over 1-2 days
Internet	Health Communications/Public Information	Need to assure participants have access to internet Need to assess whether useable as information sharing or for 'hooking up'

Injecting Drug Users

Evidence Based Interventions to Be Used in Iowa

Name of Intervention	Type of Intervention
AIDS Education for Male Adolescents Drug Users in Jail	Group Level Intervention
Community Promises	Multiple Intervention Program <ul style="list-style-type: none"> • Individual Level Intervention • Group Level Intervention • Community Level Intervention • Outreach • Structural Level
Point for Point: Syringe and Needle Exchange	Structural
Project Smart - Enhanced	Group Level Intervention
Prevention Case Management	Prevention Case Management
Real AIDS Prevention Project (RAPP)	Group Level Intervention
Safety Counts (Safety Point)	Multiple Intervention Program <ul style="list-style-type: none"> • Individual Level Intervention • Group Level Intervention • Health Communication/Public Information • Outreach • Counseling Testing Referral
Sniffer	Group Level Intervention
Turning Point	Multiple Intervention Program <ul style="list-style-type: none"> • Group Level Intervention • Counseling Testing Referral

Emerging Interventions That Have Been Used in Iowa

Name of Intervention	Type of Intervention
Healthy Choices, Healthy Lives	Group Level Intervention
Needle Disposal	Structural

Heterosexuals

Evidence Based Interventions to Be Used in Iowa

Name of Intervention	Type of Intervention
Community Promises	Multiple Intervention Program <ul style="list-style-type: none"> • Individual Level Intervention • Group Level Intervention • Community Level Intervention • Outreach • Structural Level
Enhancing Motivation to Reduce the Risk of HIV Infection for Economically Disadvantaged Urban Women	Group Level Intervention
Nosotras Viviremos	Group Level Intervention
Partners in Prevention: Women's Edition	Group Level Intervention
Project S.A.F.E.	Group Level Intervention
Real AIDS Prevention Project (RAPP)	Multiple Intervention Program Outreach Community Mobilization Small Groups
SISTA	Group Level Intervention
Voices/Voces	Individual Level Intervention

Emerging Interventions That Have Been Used in Iowa

Name of Intervention	Type of Intervention	Comments
Retreats – Conference	Health Communications/Public Information	Multiple topics offered over consecutive days
Retreats - Curriculum	Group Level Intervention	Curriculum based activity offered over 1-2 days

Incarcerated Individuals

Evidence Based Interventions to Be Used in Iowa

Name of Intervention	Type of Intervention
HIV Prevention for Women With Incarcerated Partners	Health Communication/Public Information
Intensive AIDS Education in Jail	Group Level Intervention
Peer-Lead Health Orientation Class for Incoming Information	Health Communication/Public Information
Pre-Release HIV Risk Reduction Program	Individual Level Intervention
Prevention Case Management	Prevention Case Management
Reach One Teach One	Multiple Intervention Program <ul style="list-style-type: none"> • Outreach • Group Level Intervention

High Risk Youth

Evidence Based Interventions to Be Used in Iowa

Name of Intervention	Type of Intervention
ACT Smart	Group Level Intervention
Becoming a Responsible Teen	Group Level Intervention
Be Proud Be Responsible	Group Level Intervention
Community Promises	Group Level Intervention
Focus on Kids	Group Level Intervention
Get Real About AIDS	Group Level Intervention
Intensive AIDS Education in Jail	Group Level Intervention
Making a Difference	Group Level Intervention
Making Proud Choices	Group Level Intervention
Power Moves	Group Level Intervention
Reducing the Risk	Group Level Intervention
SISTA	Group Level Intervention
Street Smart	Group Level Intervention
Survive Outside	Group Level Intervention

INTERVENTION FACT SHEETS

BART: Becoming a Responsible Teen

Target Population(s)	African American Adolescents
Type of Intervention:	Group Level Intervention
Risk Behaviors:	<ul style="list-style-type: none"> • Unprotected sex • Multiple partners • Substance abuse
Behavioral Theory:	<ul style="list-style-type: none"> • Social Learning Theory • Theory of Reasoned Action
Summary of Intervention:	<p>This is a cognitive-behavioral intervention designed to equip youth with the interpersonal and technical skills necessary to lower their risk. The intervention includes HIV education, training and rehearsal in correct condom use, problem solving and self-management strategies.</p> <p><i>Session 1:</i> AIDS education <i>Session 2:</i> Sexual decisions and values <i>Session 3:</i> Technical competency skills <i>Session 4-6:</i> Social competency skills <i>Session 7:</i> Cognitive competency skills <i>Session 8:</i> Social support and empowerment</p>
Intended Outcomes:	<p>To lower risk of HIV infection and transmission</p> <ul style="list-style-type: none"> • To increase self-efficacy skills • To increase interpersonal skills
Setting:	Non-school settings that serve African American adolescents
Core Elements: (features responsible for the effectiveness of the intervention and should not be changed)	<ul style="list-style-type: none"> • HIV-risk education using an interactive game format • Role plays of situations involving coercion • Skills training in correct condom use • Training in assertion, partner negotiation, and communication skills • Problem solving and self-management skills training, including public commitment to change affirmations
Duration:	Eight 90-minute sessions over 8 weeks
Staffing:	Two co-facilitators – a male and a female
Rationale for Prevention Intervention:	Youth who participated in the intervention reported significantly greater condom use and significantly lower frequency of unprotected intercourse than youths in the comparison condition. Abstinent youth who participated in the intervention significantly delayed sexual onset to a greater extent than abstinent youth in the comparison condition.
Curriculum Available:	ETR
Reference:	(St Lawrence, Brasfield et al., 1995)

Be Proud! Be Responsible!

Target Population(s)	Adolescents
Type of Intervention:	Group Level Intervention
Risk Behaviors:	<ul style="list-style-type: none"> • Unprotected sex • Multiple partners
Behavioral Theory:	<ul style="list-style-type: none"> • Social Cognitive Theory • Theory of Reasoned Action • Theory of Planned Behavior
Summary of Intervention:	<p>Addresses sexual risk-taking behavior for HIV and pregnancy prevention</p> <p><i>Session 1:</i> AIDS education <i>Session 2:</i> Building knowledge <i>Session 3:</i> Understanding vulnerability to HIV infection <i>Session 4:</i> Attitudes and beliefs about HIV,AID, safer sex <i>Session 5:</i> Condom use skill building <i>Session 6:</i> Building negotiation and refusal skills</p>
Intended Outcomes:	<p>To lower risk of HIV infection and transmission</p> <ul style="list-style-type: none"> • Increase knowledge about HIV,AIDS, STDs • Increase belief in value of safer sex, including abstinence • Increase confidence in their ability to negotiate safer sex and to use condoms correctly • Increase ability to use condoms and negotiate safer sex • Increase intention to practice safer sex • Reduction in sexual risk behaviors • Increase pride in choosing responsible sexual behaviors
Setting:	Schools, community settings, youth-serving agencies
Core Elements: (features responsible for the effectiveness of the intervention and should not be changed)	<ul style="list-style-type: none"> • Inner-city and sense of community approach • Focus on participants needs to adopt responsible and safer sexual behaviors
Duration:	Six 50-minute sessions over 6 weeks
Staffing:	Two co-facilitators – a male and a female
Rationale for Prevention Intervention:	Youth who participated in the intervention scored higher on a test of AIDS and STD knowledge, expressed less favorable attitudes toward risky sexual behavior, reported weaker intentions to engage in risky sexual behavior
Curriculum Available:	ETR Associates
Reference:	(J. B. Jemmott, 3rd et al., 1992)

Brother to Brother

Target Population(s)	Men Who Have Sex With Men - African American
Type of Intervention:	Group Level Intervention
Risk Behaviors:	Unprotected anal sex
Behavioral Theory:	AIDS Risk Reduction Model
Summary of Intervention:	Two trained African-American homosexual male facilitators lead this culturally specific intervention. Components: <ul style="list-style-type: none"> ✧ Self-identify and development of social support <ul style="list-style-type: none"> ▪ Video: Tongues United ✧ AIDS risk education <ul style="list-style-type: none"> ▪ AIDS Jeopardy Game & Condom Game ✧ Assertiveness training <ul style="list-style-type: none"> ▪ role plays, refusal skills ✧ Behavioral commitment <ul style="list-style-type: none"> ▪ share strategies, make verbal commitment
Intended Outcomes:	To reduce high risk sexual behaviors in African-American homosexuals and bisexual men <ul style="list-style-type: none"> • Reinforce self identity and social support • Improve knowledge of risk reduction information and effective use of condoms • Teach assertiveness for negotiating low-risk sexual behaviors • Strengthen commitment to risk reduction
Setting:	STD clinics and other community organizations that serve African-American gay and bisexual men.
Core Elements: (features responsible for the effectiveness of the intervention and should not be changed)	<ul style="list-style-type: none"> • African-American homosexual males (peer educators) facilitate the intervention • Viewing segments of the video “Tongues Untied” about African-American homosexual men and then discuss their experiences • Play the ‘AIDS Jeopardy Game’ and ‘Condom Game’ • Doing role-plays designed to practice initiating low-risk sexual behaviors or refusing high-risk activities • Making a verbal commitment before the group to change their risk behaviors
Duration:	Three 3-hour sessions, one week apart
Staffing:	Two African-American homosexual men (peer educators)
Evidence of Effectiveness:	This intervention significantly reduced the frequency of unprotected anal intercourse and participants were more likely to test for HIV
Curriculum Available	HAPPA / Sociometrics
Reference:	(Peterson et al., 1996)

Comments

Negotiating safe sex: Providers should substitute segments of the core video, “Tongues Untied”, in place of the video “Black Wishes”.

Community Promises

Target Population(s)	Persons Living With HIV Men Who Have Sex With Men Injecting Drug Users	Heterosexuals at Risk High Risk Youth
Type of Intervention:	Multiple Intervention Program <ul style="list-style-type: none"> • Individual Level Intervention • Group Level Intervention • Community Level Intervention • Outreach • Structural Level 	
Risk Behaviors:	Sex without condoms	Sharing injection equipment
Behavioral Theory:	Social Learning Theory	Stages of Change Theory
Summary of Intervention:	Presents models of successful risk reduction strategies adopted by members of the target population. The intervention features role model stories developed from the real-life experiences of local community members. These stories depict members of the target population moving from earlier to later stages of change. Role model stories are featured in flyers distributed with condoms by peer volunteers.	
Intended Outcomes:	To increase condom use with main and non-main partners	
Setting:	Street settings Other community venues	Public sex environments
Core Elements: (features responsible for the effectiveness of the intervention and should not be changed)	<ul style="list-style-type: none"> • Assessing community needs before implementation • Recruiting and training persons from the targeted at-risk communities to become community advocates to their peers • Creating printed role model stories tailored to the target group's stage of change • Distributing role model stories and risk reduction supplies by community advocates • Evaluating and monitoring implementation activities 	
Frequency:	Repeated community contacts	
Duration:	Brief--<30 minutes	
Staffing:	HIV educator/coordinator	Peer volunteers
Evidence of Effectiveness:	Participants demonstrated significantly greater achievement of consistent condom use and maintenance of consistent condom use with non-main partners than individuals in the comparison communities.	
Curriculum Available:	CDC / Replicating Effective Programs (REP)	
Reference:	("Community-level HIV intervention in 5 cities: final outcome data from the CDC AIDS Community Demonstration Projects," 1999)	

Comments

Infrastructure: The infrastructure needed to implement Community Promises may limit its use in rural settings.

Community Assessment: The first step in Community Promises is completion of a community assessment. The community assessment is tied to a core element (role model stories), all providers must conduct a community assessment.

Training: All staff must attend the training on Community Promises and community assessment.

Counseling Testing and Referral

Target Population(s)	Men Who Have Sex With Men Injecting Drug Users Partners of Persons Living With HIV Foreign Born Heterosexuals Incarcerated At-Risk Youth
Type of Intervention:	Counseling Testing and Referral
<p>HIV counseling seeks to reduce HIV acquisition and transmission through the following:</p> <ul style="list-style-type: none"> • Information. Clients should receive information regarding HIV transmission and prevention and the meaning of HIV test results. Provision of information is different from informed consent. • HIV prevention counseling. Clients should receive help to identify the specific behaviors putting them at risk for acquiring or transmitting HIV and commit to steps to reduce this risk. Prevention counseling can involve ≥ 1 sessions. <p>Information</p> <p>All clients who are recommended or who request HIV testing should receive the following information, even if the test is declined:</p> <ul style="list-style-type: none"> • Information regarding the HIV test and its benefits and consequences. • Risks for transmission and how HIV can be prevented. • The importance of obtaining test results and explicit procedures for doing so. • The meaning of the test results in explicit, understandable language.*** • Where to obtain further information or, if applicable, HIV prevention counseling. • Where to obtain other services (see Typical Referral Needs). <p>HIV Prevention Counseling</p> <p>HIV prevention counseling should focus on the client's own unique circumstances and risk and should help the client set and reach an explicit behavior-change goal to reduce the chance of acquiring or transmitting HIV. HIV prevention counseling is usually, but not always, conducted in the context of HIV testing. The client-centered HIV prevention counseling model involves two brief sessions, whereas other effective models are longer or involve more sessions. Regardless of the model used, in HIV prevention counseling, the counselor or provider focuses on assessing the client's personal risk or circumstances and helping the client set and reach a specific, realistic, risk-reduction goal. These guidelines avoid using the terms "pretest" and "posttest" counseling to underscore that prevention counseling is a risk-reduction process that might involve only one or >1 session.</p> <p>Personnel</p> <p>In any setting where HIV testing is provided, existing personnel can be effective counselors if they have the desire and appropriate training and employ the essential counseling elements. Advanced degrees or extensive experience are not necessary for effective HIV prevention counseling, though training is.</p>	

Enhancing Motivation to Reduce the Risk of HIV Infection for Economically Disadvantaged Urban Women

Target Population(s)	Low-income African-American (76%), urban women
Type of Intervention:	Group Level Intervention
Risk Behaviors:	Unprotected sex Multiple sex partners Substance use
Behavioral Theory:	Information-Motivation-Behavioral Skills Model (IMB) Social Learning Theory
Summary of Intervention:	A risk reduction intervention designed to reduce HIV-related risk behaviors by enhancing motivation for behavior change. 1 - development of motivational statements and risk sensitization. 2 - perceptions of community problems, HIV knowledge and personal risk situations, and preparation of risk-reduction action plans. Videotape is used in each of the first two sessions. 3 - pros and cons of behavior change, the development of risk-reduction plans, skills training related to condom usage and eroticizing safer sex. 4 - enhances communication and interpersonal skills, using extensive role-play rehearsal and feedback.
Intended Outcomes:	To reduce HIV-related risk behavior <ul style="list-style-type: none"> • To increase HIV-related knowledge • To increase awareness of personal risk perception • To combine motivational enhancement strategies with behavioral skills training
Core Elements: (features responsible for the effectiveness of the intervention and should not be changed)	<ul style="list-style-type: none"> • Ethnicity-matched, trained therapists • An educational component that pertains to knowledge about HIV transmission, prevention, and the consequences of infection; state-of-the-science materials (including a video) provided by the CDC and other public health resources • Behavioral-skills training includes self-management skills and sexual assertiveness training; participants are encouraged to buy and use condoms and to negotiate use with their partners; women develop action plans to reduce risk of infection; women enhance their communication and interpersonal skills; skills training also includes eroticizing safer sex • Extensive role playing and personal feedback are integral
Setting:	Community-based organization
Duration:	Four 90-minute sessions
Staffing:	Trained minority therapists
Evidence of Effectiveness:	Results indicate that women who participated in the intervention: <ul style="list-style-type: none"> • Increased their knowledge and risk awareness, • Strengthened their intentions to adopt safer sexual practices • Communicated their intentions with their partners • Reduced substance use just prior to sexual activities • Engaged in fewer acts of unprotected sex.
Curriculum Available:	None
Developed by:	Michael P. Carey, Syracuse University

Comment

Video: Providers may substitute “My Sister’s Keeper” for core video.

Focus on Kids

Target Population(s)	Adolescents: African American
Type of Intervention:	Group Level Intervention
Risk Behaviors:	Unprotected sex
Behavioral Theory:	Protection Motivation Theory
Summary of Intervention:	Each session focuses on one or more PMT concepts and also reviews concepts from the prior session. Beginning in the first session and integrated through, a family genogram was used to illustrate the application of concepts to real-life situations. Sessions emphasize value clarification and goal setting, facts about AIDS, STDs, and Human development. Uses videos, games, role-playing, acting, and arts and crafts.
Intended Outcomes:	Increase condom use among sexually active youth
Setting:	Junior high school classroom
Core Elements: (features responsible for the effectiveness of the intervention and should not be changed)	<ul style="list-style-type: none"> • Values clarification • Goal setting • Multiple delivery formats • Community projects
Duration:	8 sessions: seven 1.5 hour weekly meetings and one day-long
Staffing:	Gender matched interventionists
Rationale for Prevention Intervention:	Sexually active youth who participated in the intervention reported significantly greater condom use
Curriculum Available:	None
Reference:	(Stanton et al., 1996)

Get Real about AIDS

Target Population(s)	Adolescents
Type of Intervention:	Group Level Intervention
Risk Behaviors:	<ul style="list-style-type: none"> • Unprotected sex • Multiple partners
Behavioral Theory:	<ul style="list-style-type: none"> • Social Cognitive Theory • Theory of Reasoned Action
Summary of Intervention:	<p>15 session curriculum that provides teens with the knowledge, confidence, and skills necessary to reduce their risk of sexually transmitted diseases, HIV, and pregnancy by abstaining from sex or using condoms if they choose to have sex.</p> <p>Curriculum covers: HIV functional knowledge, teen vulnerability, normative determinants of risky behavior, condom use, skills designed to help students recognize, manage, avoid, or leave risky situations.</p>
Intended Outcomes:	Empower young adolescents to change their behavior in ways that will reduce their risk of becoming infected with HIV and other STDs and pregnancy.
Setting:	High school classroom
Core Elements: (features responsible for the effectiveness of the intervention and should not be changed)	<ul style="list-style-type: none"> • Skills building • Recognition of risky situations
Duration:	Fifteen 60-minute sessions
Staffing:	High school teachers attend a 5-day training program
Rationale for Prevention Intervention:	Students who participated in the intervention reported fewer sex partners and greater frequency of condom use than students in the comparison schools.
Curriculum Available:	Get Real About AIDS
Reference:	(Main et al., 1994)

Healthy Relationships

Target Population(s)	HIV Positive Men and Woman
Type of Intervention:	Group Level Intervention
Risk Behaviors:	Unsafe sexual practices
Behavioral Theory:	Social Cognitive Theory
Summary of Intervention:	Intervention content is framed within the context of managing stress related to HIV disclosure and practicing safer sexual behavior. Emphasizes the importance of building behavioral skills, enhancing self-efficacy for practicing risk-reduction behaviors, promoting intentions to change risk behaviors, and developing strategies for behavior change.
Intended Outcomes:	Successful reduction of HIV transmission risk behaviors in HIV-positive people
Setting:	Community based organization, or at some other safe and accessible place
Core Elements: (features responsible for the effectiveness of the intervention and should not be changed)	<ul style="list-style-type: none"> • Groups, structured similarly in style to support groups • Education group plus skills-training • Men and women participate in separate groups • Small group format of 6-12 individuals • 1-2 skilled counselors lead groups, 1 who must match the gender and ethnicity of the majority of group members.
Duration:	Five 90-minute sessions
Staffing:	Combination of a mental health professional and a peer counselor
Evidence of Effectiveness:	HIV-positive people significantly decreased their incidence of unprotected intercourse and increased their use of condoms. Transmission-risk behaviors with non-HIV-positive sexual partners and estimated HIV transmission rates over a 1-year horizon were also significantly reduced over the control group.
Curriculum Available:	University of Connecticut
Reference:	(S. C. Kalichman et al., 2001)

Comments

Format: Healthy Relationships uses a support group format.

Recruitment: An effective promotion or marketing campaign is needed to recruit participants to the groups.

HIV Prevention for Women with Incarcerated Partners

Target Population(s)	Women
Type of Intervention:	Health Education/Public Information
Risk Behaviors:	Unprotected sex
Behavioral Theory:	
Summary of Intervention:	Peer-led educational program Supportive relationships between visitors Provision of referrals
Intended Outcomes:	To reduce high risk sexual behaviors in women with incarcerated partners
Setting:	Prison
Core Elements: (features responsible for the effectiveness of the intervention and should not be changed)	<ul style="list-style-type: none"> • Relationships • Condom skills • Trigger management • Self-statements • Negotiation • Video: INSIDE/OUT
Duration:	
Staffing:	Peer educators
Evidence of Effectiveness:	
Curriculum Available	
Reference:	(Comfort, Grinstead, Faigeles, & Zack, 2000)

Intensive AIDS Education in Jail

Target Population(s)	Adolescents & adult male heterosexuals
Type of Intervention:	Group Level Intervention
Risk Behaviors:	<ul style="list-style-type: none"> • Sharing syringes and works • Drug use • Unprotected sex
Behavioral Theory:	<ul style="list-style-type: none"> • Problem-Solving Therapy Model • Social Cognitive Theory • Theory of Reasoned Action
Summary of Intervention:	Four sessions covering general health, HIV/AIDS, factors associated with drug abuse, types of sexual behavior, the relationship between drug use and sexual behavior, strategies to access services and drug abuse treatment.
Intended Outcomes:	Reduce adolescents' risk for HIV infection by using peer role models to advocate for responsible decision making, healthy values, and norms, and improved communication skills.
Setting:	Detention Center and Jail
Core Elements: (features responsible for the effectiveness of the intervention and should not be changed)	<ul style="list-style-type: none"> • Problem orientation – share and discuss facts and beliefs about HIV/AIDS • Problem definition and formulation – members define specific high-risk attitudes and behaviors that must be modified to protect themselves and others against HIV/AIDS • Generation of alternative solutions – members suggest and compile possible courses of action for risky behaviors • Decision-making – members critiqued and evaluated the alternative • Solution implementation – participants used role play and rehearsal techniques to practice alternative solutions
Duration:	Four 60-minute sessions
Staffing:	Male counselor
Rationale for Prevention Intervention:	After release from jail, youth that participated in the intervention were significantly more likely to use condoms during vaginal, oral, and anal sex and had fewer high-risk sex partners than youth in the comparison condition.
Curriculum Available:	None
Reference:	(Magura, Kang, & Shapiro, 1994)

Learning Immune Function Enhancement (L.I.F.E.)

Target Population(s)	Persons Living with HIV
Type of Intervention:	Group Level Intervention
Risk Behaviors:	<ul style="list-style-type: none"> • Sharing syringes and works • Drug use • Unprotected sex
Behavioral Theory:	<ul style="list-style-type: none"> • Social Cognitive Theory • Theory of Reasoned Action
Summary of Intervention:	<p>A structured risk-reduction prevention counseling program that attracts, retains, and motivates HIV+ clients through its emphasis on health enhancement. Risk-reduction interventions are embedded into the health-counseling curriculum. For the HIV+ individual, their own health and survival becomes a powerful motivation for risk reduction.</p> <p>Studies in psychology, immunology and the specialty field of psychoneuro-immunology (PNI) have shown that for people living with HIV disease and other life-threatening illnesses, certain psychological and social factors can either help or hinder the effectiveness of the immune system. By understanding these psychosocial "cofactors," and improving performance on them, people with HIV may gain significant control over their survival with HIV disease. For example, research studies show that long-term survivors of an AIDS diagnosis typically are self-assertive, a characteristic known to enhance immunity</p>
Intended Outcomes:	<p>Risk reduction</p> <p>Adherence to health routines</p>
Setting:	Health care settings, community-based organizations, hospitals, local health clinics
Core Elements: (features responsible for the effectiveness of the intervention and should not be changed)	<ul style="list-style-type: none"> • Structured, topic-driven group counseling intervention • Standardized health education and counseling curriculum • Meetings focus on a different psycho-social issue • Topics include: relationship with medical provider, adherence to health routines, self-assertiveness, sustained survival stress, crisis coping skills, social support, self-disclosure, beliefs about disease progress, grief, depression, altruism, spirituality, and other cofactors. • Includes health and risk-reduction counseling sessions • Peer counselors
Duration:	Sixteen 60-minute sessions
Staffing:	Mental health professional – psychologists, social workers, nurses, and counselors – working with and supervising trained (volunteer) peer counselors.
Rationale for Prevention Intervention:	LIFE participants, after completing the 16 week program, show reduced risk behavior, reduced alcohol/drug use, enhanced adherence to medication protocols, increased physical health functioning, and increased psychological functioning.
Curriculum Available:	LIFE Institute Shanti
Reference:	www.shanti.org

Making Proud Choices!

Target Population(s)	Adolescents
Type of Intervention:	Group Level Intervention
Risk Behaviors:	<ul style="list-style-type: none"> • Unprotected sex • Multiple partners
Behavioral Theory:	<ul style="list-style-type: none"> • Social Cognitive Theory • Theory of Reasoned Action • Theory of Planned Behavior
Summary of Intervention:	<p>Eight module curriculum that provides teens with the knowledge, confidence, and skills necessary to reduce their risk of sexually transmitted diseases, HIV, and pregnancy by abstaining from sex or using condoms if they choose to have sex.</p> <p>Module 1: Getting to know you and making dreams come true Module 2: Consequences of sex: HIV infection Module 3: Attitudes and beliefs about HIV/AIDS and condom use Module 4: Strategies for preventing HIV infection Module 5: Consequences of sex: STDs and correct condom use Module 6: Consequences of sex: pregnancy Module 7: Developing condom use skills and negotiation skills Module 8: Role-plays: refusal and negotiation skills</p>
Intended Outcomes:	Empower young adolescents to change their behavior in ways that will reduce their risk of becoming infected with HIV and other STDs and pregnancy.
Setting:	Schools, community settings, youth-serving agencies
Core Elements: (features responsible for the effectiveness of the intervention and should not be changed)	<ul style="list-style-type: none"> • Inner-city and sense of community approach • Focus on participants needs to adopt responsible and safer sexual behaviors
Duration:	Eight 60-minute sessions
Staffing:	Two co-facilitators trained (6-8 hours)
Rationale for Prevention Intervention:	Youth who participated in the intervention scored higher on a test of AIDS and STD knowledge, expressed less favorable attitudes toward risky sexual behavior, reported weaker intentions to engage in risky sexual behavior.
Curriculum Available:	ETR Associates
Reference:	(J. B. Jemmott, 3rd, Jemmott, Fong, & McCaffree, 1999)

Mpowerment

Target Population(s)	Men Who Have Sex With Men - Youth
Type of Intervention:	Multiple Intervention Program <ul style="list-style-type: none"> • Individual Level Intervention • Outreach • Group Level Intervention • Community Level Intervention
Risk Behaviors:	Unprotected anal sex
Behavioral Theory:	Empowerment Model Diffusion of Innovation Social Learning Theory
Summary of Intervention:	<ol style="list-style-type: none"> 1. Formal outreach at venues where young gay men hang out 2. Costumes worn & condoms distributed 3. Mpowerment Center 4. Safer sex promotional events & social activities 5. Informal outreach 6. Peer initiated communications among friends 7. Groups 8. M Groups: 3-hours/peer-led 9. Publicity campaign 10. Reinforce norms & increase awareness
Intended Outcomes:	To reduce HIV risk behaviors
Setting:	Mpowerment Center Community venues where young gay men congregate
Core Elements: (features responsible for the effectiveness of the intervention and should not be changed)	<ul style="list-style-type: none"> • Core group of young gay men design and carry out project activities • Establishing a space where the project activities are held • Conducting entertaining, venue-based outreach in bars and at community events by teams of young gay men • Sponsoring social events to promote community building among young gay men • Convening peer-led, one-time discussion groups • Conducting a community publicity campaign about project
Frequency:	Repeated community contacts
Duration:	M group: 3 hours
Staffing:	A core group of young gay men designs and runs the intervention with input from a Community Advisory Group (“elders”) (PLWH, public health, gay/lesbian community, university community)
Evidence of Effectiveness:	Men who participated in the Mpowerment Project reduced their frequency of unprotected anal intercourse significantly more than the men in the comparison community
Curriculum Available	CDC / Replicating Effective Programs (REP)
Reference:	(S. M. Kegeles et al., 1996)

Comments

Expense: Mpowerment is expensive to implement.

Location: While the core element specifies a safe space (away from substance use) for activities to take place, it is not necessarily a fixed place. Instead of a stationary house for implementing intervention, organizations may create a schedule designating when and where different events occur.

Nosotras Viviremos

Target Population(s)	Women: Latina Farmworkers
Type of Intervention:	Group Level Intervention
Risk Behaviors:	Unprotected sex
Behavioral Theory:	Social Learning Theory Diffusion of Innovation Social Network Theory
Summary of Intervention:	<i>Session 1:</i> Discuss reproductive health issues <i>Session 2:</i> Communication skills <i>Session 3:</i> Consciousness raising discussion focusing upon HIV/AIDS risk among farm working women, followed by a unit on understanding the facts about HIV/AIDS and other STDs <i>Session 4:</i> Skill development with an emphasis on young women
Intended Outcomes:	Increase cognitive and behavioral skills related to STDs, HIV, and the female reproductive health system <ul style="list-style-type: none"> • To increase knowledge of HIV/STD transmission and prevention • To improve communication skills • To increase condom use among sexually active participants
Setting:	Varies
Core Elements: (features responsible for the effectiveness of the intervention and should not be changed)	Culture and gender specific, bilingual curriculum designed to address the following needs of Latina farm working women: <ul style="list-style-type: none"> • Information on HIV/STDs and how to prevent them with discussion of reproductive health, sex, sexuality, and culture • Information, stories, and role playing exercises designed to build participants sense of self-esteem and self-efficacy re: communication, negotiation and refusal skills • Opportunities to acknowledge and discuss how sexual abuse and domestic violence impact participants' ability to effectively and consistently take risk reduction steps • Opportunities to develop social support networks and identify environmental barriers and facilitators
Duration	4 sessions, 2-3 hours each
Staffing:	Facilitator who can help women discuss issues comfortably
Evidence of Effectiveness:	
Curriculum Available:	
Reference:	Munoz-Lopez, R

Partner Counseling and Referral Services (PCRS)

Target Population(s)	Persons Living With HIV
Type of Intervention:	Prevention Case Management
<p>Evidence suggests that most new HIV infections originate from HIV-infected persons not yet aware of their infection. This emphasizes the need to identify HIV-infected persons and link them to medical, prevention and other services as soon as possible after they become infected. One strategy for accomplishing this is voluntary partner counseling and referral services (PCRS), including partner notification (PN).</p> <p>PCRS assists HIV-infected persons with notifying their partners of their exposure to HIV. Notified partners, who may not have suspected their risk, can then choose whether to be tested for HIV, enabling those who test HIV positive to receive early medical evaluation, treatment, and prevention services, including risk-reduction counseling. A key element of PCRS is informing current and past partners that a person who is HIV-infected has identified them as a sex or injection-drug-paraphernalia-sharing partner and advising them to have HIV counseling and testing. Among sex partners, close partners and those with whom contact has been recent, frequent, or of longer duration are more likely to be notified; however, PCRS should include casual partners (or contacts), as well. Informing partners of their exposure to HIV is <i>confidential</i>, in that partners are not told who reported their name or when the reported exposure occurred, nor is information about the partners reported back to the original HIV-infected person. It is <i>voluntary</i> in that the infected person decides which names to reveal to the interviewer.</p> <p>PCRS can be an effective tool for reaching persons at very high risk for HIV infection: in studies of HIV PCRS, 8%-39 % of partners tested were found to have previously undiagnosed HIV infection. However, a recent survey of health department staff in U.S. areas with high reported rates of HIV found that, in areas with mandatory HIV reporting, only 52% of persons infected with HIV were interviewed for PCRS. PCRS has been found to be cost-effective. Acceptability of PCRS has been indicated in surveys of individuals seeking HIV testing, HIV-infected persons, and notified partners, in which the majority of respondents have indicated support for PN.</p> <p>HIV PCRS includes several elements: identifying, locating, and interviewing HIV-infected persons (index patients) to offer PCRS and elicit names of partners; locating partners and notifying them of their exposure to HIV; and providing HIV counseling, testing, and referral services to the partners. PCRS is done by health departments (state and local). State or local laws and regulations limit or prohibit PCRS being done outside the health department.</p>	

Comment

Medical Providers: All HIV-infected patients can benefit from brief prevention messages emphasizing the need for safer behaviors to protect both their own health and the health of their sex or needle-sharing partners. Clinicians, nurses, social workers, case managers, or health educators can deliver these messages. They include discussion of the patient's responsibility for appropriate disclosure of HIV serostatus to sex and needle-sharing partners.

Partners in Prevention, Men's Edition

Target Population(s)	Men Who Have Sex With Men
Type of Intervention:	Group Level Intervention
Risk Behaviors:	Unprotected anal sex
Behavioral Theory:	
Summary of Intervention:	<p>Uses group process, lecture, and role-playing methods to deliver information and skills. 12 weekly group sessions, each 75 to 90 minutes long.</p> <ul style="list-style-type: none"> • Session 1-2: AIDS Risk Reduction • Session 3-5: Behavioral self-management • Sessions 6-8: Assertion skills training • Sessions 9-11: Relationship skills and social support • Session 12: Risk-reduction review <p>Program can be modified into a single day session (6 hours), 4 sessions, or 7 sessions</p>
Intended Outcomes:	<p>To reduce high risk sexual behaviors in homosexual and bisexual men</p> <ul style="list-style-type: none"> • Reduce frequency of high-risk sexual practices • Increase behavioral skills for refusing sexual coercion <p>Relapse prevention for MSM</p>
Setting:	Clinical
Core Elements: (features responsible for the effectiveness of the intervention and should not be changed)	<ul style="list-style-type: none"> • Relationships • Condom skills • Trigger management • Self-statements • Negotiation
Duration:	12 weekly group sessions, each about 75 to 90 minutes
Staffing:	Two HIV educators
Evidence of Effectiveness:	Gay men who participated in the intervention reduced their frequency of unprotected anal intercourse and increased their use of condoms significantly more than the men in the comparison condition.
Curriculum Available	Center for AIDS Intervention Research (CAIR)
Reference:	(Kelly et al., 1989)

Comments

Rural Settings: Can be modified for rural settings

Retreats: Can be modified for retreats

Partners in Prevention, Women's Edition

Target Population(s)	Women
Type of Intervention:	Group Level Intervention
Risk Behaviors:	Unprotected sex
Behavioral Theory:	
Summary of Intervention:	<p>Uses group process, lecture, and role-playing methods to deliver information and skills. 6 weekly group sessions, each 90 minutes long.</p> <ul style="list-style-type: none"> • Session 1: AIDS Risk Relationships • Session 2: HIV Knowledge • Session 3: Triggers/Problem-Solve • Session 4: Condom Skills • Session 5: Negotiation • Session 6: Maintenance Behavioral
Intended Outcomes:	<p>To reduce high risk sexual behaviors in women</p> <ul style="list-style-type: none"> • Reduce frequency of high-risk sexual practices • Increase behavioral skills for refusing sexual coercion
Setting:	Inner-city health clinic
Core Elements: (features responsible for the effectiveness of the intervention and should not be changed)	<ul style="list-style-type: none"> • Relationships • Condom skills • Trigger management • Self-statements • Negotiation
Duration:	6 weekly group sessions, each about 90 minutes
Staffing:	Two HIV educators
Evidence of Effectiveness:	Women who participated in the intervention reported a significantly greater increase in condom use with their partners and a significantly greater decrease in their frequency of engaging in unprotected sex than women in the comparison condition.
Curriculum Available	Center for AIDS Intervention Research (CAIR)
Reference:	(Kelly et al., 1989)

Comments

Rural Settings: Can be modified for rural settings

Retreats: Can be modified for retreats

Modifications: Program can be modified into 3 half-day sessions, 4 sessions, and 7 sessions.

Peer-led Health Orientation Class for Incoming Inmates

Target Population(s)	Incarcerated
Type of Intervention:	Health Communication/ Public Information
Risk Behaviors:	<ul style="list-style-type: none"> • Unprotected sex • Multiple sex partners • Injecting drug use • Substance use
Behavioral Theory:	
Summary of Intervention:	<p>Inmate Peer Educators (trained using Reach One Teach One) deliver the educational presentation, document the attendance and maintain the classroom and materials.</p> <ol style="list-style-type: none"> 1. Introduction and peer educators' personal stories about the impact of HIV 2. Modes of transmission 3. Review safer sex and injecting practices 4. The role of alcohol and drugs in HIV transmission and prevention 5. Testing for HIV in prison and in the community 6. Other health concerns: STDs, hepatitis, tuberculosis 7. Voluntary HIV testing is offered
Intended Outcomes:	Increase awareness of risk factors among new inmates, personalize HIV, increase risk perception, and reduce the risk of HIV, STDs, hepatitis and tuberculosis in prison and after release.
Setting:	Correctional facilities
Core Elements: (features responsible for the effectiveness of the intervention and should not be changed)	<ul style="list-style-type: none"> • Training of peer educators
Duration:	<ul style="list-style-type: none"> • Peer training (5-day) • Health education – ongoing
Staffing:	<ul style="list-style-type: none"> • Prison staff (training) • Inmate peer educators
Evidence of Effectiveness:	
Curriculum Available:	Glaxo-Wellcome / Centerforce
Reference:	(O. Grinstead, Faigeles, & Zack, 1997)

Comments

Non-Peer: Can be offered as a non-peer intervention .

Phone-Eze

Target Population(s)	HIV Positive Men and Woman
Type of Intervention:	Group Level Intervention
Risk Behaviors:	Unsafe sexual practices
Behavioral Theory:	Social Cognitive Theory
Summary of Intervention:	Intervention content is framed within the context of managing stress related to HIV disclosure and practicing safer sexual behavior. Emphasizes the importance of building behavioral skills, developing support networks, enhancing self-efficacy for practicing risk-reduction behaviors, promoting intentions to change risk behaviors, and developing strategies for behavior change.
Intended Outcomes:	Reduction of HIV transmission risk behaviors in HIV-positive people
Setting:	Telephone Conference Call
Core Elements: (features responsible for the effectiveness of the intervention and should not be changed)	<ul style="list-style-type: none"> • Groups, structured similarly in style to support groups • Education group plus skills-training • Men and women participate in separate groups • Small group format of 4-6 individuals • 1-2 skilled counselors lead groups, who must match the gender and ethnicity of the majority of group members • Training of peer (PLWH) co-facilitators
Duration:	Five 60-minute sessions
Staffing:	Combination of a mental health professional and a peer counselor
Evidence of Effectiveness:	To be evaluated in 2004
Curriculum Available:	Johnson County Public Health, Iowa City
Reference:	Contact Johnson County Public Health

Comment

Format: Phone-Eze uses a support group format.

Recruitment: An effective promotion or marketing campaign is needed to recruit participants to the groups.

Curriculum: Was developed by Johnson County Public Health, contains an evaluation component.

Point for Point: Syringe and Needle Exchange

Target Population(s)	Injecting Drug Users – Not in Treatment
Type of Intervention:	Outreach
Risk Behaviors:	Sharing injection equipment
Behavioral Theory:	Harm Reduction Model
Summary of Intervention:	Trained volunteers operate exchange sites at which sterile hypodermic syringes are exchanged for used syringes on a one-for-one basis. Volunteers also distribute condoms and provide exchangers with bleach, alcohol swabs, sterile cotton, and other materials associated with safer drug-injection techniques.
Intended Outcomes:	<ul style="list-style-type: none"> • To decrease needle sharing • Provide a source for clean syringes • Reduce the number of previously used, potentially contaminated syringes in the community.
Setting:	Street settings
Special Caveat:	Requires cooperation of law enforcement and other community agencies
Core Elements: (features responsible for the effectiveness of the intervention and should not be changed)	<ul style="list-style-type: none"> • Assessing what an agency needs to know about the community before implementing • Recruiting and training persons from the targeted at-risk communities to become community advocates to their peers • Creating role model stories based on personal accounts from individuals in the target populations who already have some risk-reduction behavior change • Distributing role model stories and risk reduction supplies by community advocates
Frequency:	Repeated community contacts
Volunteer Training:	One full-day classroom training session On-site apprenticeship over a six-week period May take a year to implement
Staffing:	HIV educator/coordinator Peer volunteers
Evidence of Effectiveness:	IDUs who reported regular use of the needle exchange were significantly less likely to engage in needle sharing than those who did not.
Curriculum Available:	HAPPA / Sociometrics
Reference:	(Watters, 1996)

Comments

Federal Dollars: Not fundable with federal dollars.

Popular Opinion Leader

Target Population(s)	Men Who Have Sex With Men
Type of Intervention:	Multiple Intervention Program: <ul style="list-style-type: none"> • Group Level Intervention • Outreach
Risk Behaviors:	Unprotected anal sex
Behavioral Theory:	Social Network Theory Diffusion of Innovation Social Learning Theory
Summary of Intervention:	Bartenders at gay clubs are enlisted to nominate opinion leaders, (persons who are popular with other members of the community). Two-part intervention: <ul style="list-style-type: none"> • Popular opinion leaders receive four sessions, 90 minutes each, of HIV education and communication strategies: <ol style="list-style-type: none"> 1. Epidemiology of HIV, risk and protective behaviors, misconceptions 2. Characteristics of effective health promotion messages 3. Conversational examples. Role-plays. 4. Real-life conversations and problem solving. • Each opinion leader agrees to have at least 14 conversations with peers in the bars about AIDS risk reduction. Opinion leaders wear buttons with a logo that promote the project and trigger conversations.
Intended Outcomes:	To reduce high risk behaviors
Setting:	Gay bars in small towns (<75,000)
Core Elements: (features responsible for the effectiveness of the intervention and should not be changed)	<ul style="list-style-type: none"> • Identify and enlist the support of popular opinion leaders to advocate risk reduction • Training cadres of opinion leaders to endorse risk reduction in conversations within their own natural social networks • Supporting and reinforcing waves of opinion leaders to help reshape social norms to encourage safer sex
Frequency:	Repeated community contacts
Duration:	Part I: four 90-minute sessions Part II: at least 14 contacts per opinion leader
Staffing:	HIV educator/coordinator Bartenders at gay clubs Peer opinion leaders
Evidence of Effectiveness:	Men from communities that received the intervention reported a significantly greater reduction in unprotected anal intercourse than the men from the comparison communities.
Curriculum Available	CDC / Replicating Effective Programs (REP)
Reference:	(Kelly et al., 1991)

Pre-Release HIV Risk Reduction Program

Target Population(s)	Male prison inmates
Type of Intervention:	Individual Level Intervention
Risk Behaviors:	Sex without condoms Sharing needle
Behavioral Theory:	Unknown
Summary of Intervention:	Male prison inmates participate in an HIV prevention intervention within 2 weeks prior to their release <ul style="list-style-type: none"> • Participants attend a 30-minute session with an HIV positive peer educator to assess their risk and to develop a risk-reduction plan. • Peer educators have experience in delivering HIV prevention programs and conducting HIV education classes in prison. • Participants receive referrals for HIV testing, needle exchange, substance treatment, and other services in their community.
Intended Outcomes:	To reduce post-release risk to acquire or transmit HIV <ul style="list-style-type: none"> • Increase awareness of personal risk • Offer a post-release reduction plan
Setting:	Correctional Facilities
Core Elements: (features responsible for the effectiveness of the intervention and should not be changed)	<ul style="list-style-type: none"> • HIV positive peer educators in prison • Risk assessment and a risk-reduction plan • Referral to HIV testing, needle exchange, substance treatment, and other services
Duration:	1 30-minute session
Staffing:	HIV positive peer educators
Evidence of Effectiveness:	Follow-up interviews by telephone conducted 2-3 weeks after release showed participants were twice as likely to use a condom the first time they had sex after release from prison as their counterparts who did not receive the intervention. Participants were also less likely to have used drugs, injected drugs, or shared a needle.
Curriculum Available	Centerforce
Developed by:	(O. Grinstead, Zack, B., Faigeles, B., Grossman, N., Blea, L., 1999)

Prevention Case Management

Target Population(s)	Persons Living With HIV, Injecting Drug Users, Incarcerated
Type of Intervention:	Prevention Case Management
Risk Behaviors:	Sex without condoms Sharing injection equipment
Behavioral Theory:	Stages of Change
Summary of Intervention:	A hybrid of HIV risk-reduction counseling and traditional case management, PCM provides intensive, ongoing, individualized prevention counseling, support, and service brokerage.
Intended Outcomes:	Promoting the adoption of HIV risk reduction behaviors to decrease HIV transmission or reinfection: <ul style="list-style-type: none"> • Provide specialized assistance to persons with complex HIV risk-reduction needs • Provide individualized multiple-session risk reduction counseling • Assess risks of sexually transmitted diseases • Facilitate referral services for client's' medical and psychosocial needs • Provide information and referrals for HIV secondary prevention needs of persons living with HIV
Setting:	Agencies that provide a spectrum of services and have strong relationships with outside providers in the community.
Core Elements: (features responsible for the effectiveness of the intervention and should not be changed)	<ul style="list-style-type: none"> • Client recruitment and engagement • Screening and Assessment • Development of a client-centered prevention plan • Multiple session HIV risk reduction counseling • Active coordination of services with follow-up • Monitoring and reassessment of clients needs, risks, progress • Discharge from PCM upon attainment and maintenance of risk-reduction goals
Duration:	Multiple-session risk reduction counseling
Staffing:	Requires an array of sophisticated skills including assessment, prevention service planning, risk-reduction counseling, crisis intervention
Evidence of Effectiveness:	Evidence supports that comprehensive and intensive prevention program and prevention case management is able to assist an individual to address all of the potential risk factors that can lead to unsafe behavior.
Curriculum Available:	CDC / HIV Prevention Case Management Guidance
Reference:	<i>(HIV Prevention Case Management Guidance, 1997)</i>

Comment

Client Profile: Prevention Case Management is only for clients who are continuing high-risk activities.

Barrier: It may be difficult for clients to disclose risk behavior to providers, therefore developing a trusting relationship with the client is essential for program success.

Intensity: Prevention case management is an intensive intervention that may be difficult to implement.

CDC Mandate: Advancing HIV Prevention – CDC encourages providers to provide personalized attention to clients with high risk.

Project Respect – Enhanced Counseling

Target Population(s)	Heterosexuals
Type of Intervention:	Group Level Intervention
Risk Behaviors:	Sex without condoms
Behavioral Theory:	Theory of Reasoned Action Social Learning Theory
Summary of Intervention:	Sessions are interactive and designed to change factors that could facilitate condom use, such as self-efficacy, attitudes, and perceived norms. 4 sessions, 200 minutes, completed in 3-4 weeks. <i>Session 1:</i> Assesses personal risk, identifies barriers <i>Session 2:</i> Explores condom use attitudes <i>Session 3:</i> Builds condom use self-efficacy and devises a strategy for taking another risk-reduction step. <i>Session 4:</i> Explores social norms and support for condom use and devises a long-term strategy for consistent condom use.
Intended Outcomes:	To reduce high risk behaviors and prevent new STDs
Setting	STD clinics
Core Elements: (features responsible for the effectiveness of the intervention and should not be changed)	Perceived susceptibility, attitudes and norms: <ul style="list-style-type: none"> ◆ Assess personal risk ◆ Explore participants attitudes and subjective norms about risk behaviors and risk reduction Intentions and self efficacy: <ul style="list-style-type: none"> ◆ Explore participants' sense of self-efficacy and intentions about risk reduction steps. ◆ Help participants strategize about specific risk reduction steps ◆ Participants identify long-term intentions for risk reduction ◆ Devise long-term strategies for consistent condom use.
Duration:	Enhanced counseling intervention - 4 sessions First session - 20 minutes Next 3 sessions - 60 minutes each
Staffing:	Staff, trained to conduct HIV counseling, delivers the intervention.
Evidence of Effectiveness:	Participants reported significantly higher condom usage. 30% fewer had new STDs compared with participants in the didactic message condition. Benefits accrued equally to men and women, and STD reduction was higher among adolescents than older participants.
Curriculum Available:	
Developed by:	(Kamb et al., 1998)

Comment

Funding Stream: Project Respect is a structured approach to prevention counseling and is funded under Partner Counseling and Referral Services, Counseling Testing and Referral, and Prevention Case Management, rather than Evidence Based Interventions.

Project S.A.F.E. (Sexual Awareness for Everyone)

Target Population(s)	Women: African-American and Hispanic Women
Type of Intervention:	Group Level Intervention
Risk Behaviors:	<ul style="list-style-type: none"> • Unprotected sex • Multiple partners
Behavioral Theory:	AIDS Risk Reduction Model Heath Belief Model Diffusion of Innovation
Summary of Intervention:	Three small groups, multi-component sessions, each lasting three to four hours. Graphic materials designed for low-literacy populations communicate difficult concepts such as the disproportion in the distribution of sexually acquired disease and the role of a sex partner's other partners in disease transmission. Facilitators encourage realistic risk-reduction strategies within the constraints of their clients' own lives and values. Preventive strategies discussed included abstinence, mutual monogamy, correct and consistent use of condoms, full compliance with medical treatment, and reduction in the number of partners. Sessions are standardized with scripts and flip charts.
Intended Outcomes:	To reduce rates of STD infection by reducing high risk behaviors
Setting:	Public health clinics
Core Elements: (features responsible for the effectiveness of the intervention and should not be changed)	<p>Multi-component sessions led by a trained female facilitator from the same race/ethnic group as the participants.</p> <p><i>Session 1:</i> Recognition of risk with culture and sex specific</p> <p><i>Session 2:</i> Commitment to change using culture and sex specific information and interactive discussion designed to educate participants about prevention of STDs; enhance communication skill; develop skills for condom use, including low self-esteem, cultural norms, and interpersonal power dynamics, and strategies for overcoming these barriers.</p> <p><i>Session 3:</i> Acquisition of skills using culture and sex specific information and interactive discussion and role playing designed to enhance skills in eroticizing condom use; increase self-efficacy in communication about condom use; identify triggers for unsafe sex; set goals; and develop social support networks for risk reduction.</p>
Duration:	Three sessions lasting 3-4 hours each
Staffing:	Trained female facilitator of the same race or ethnic group
Evidence of Effectiveness	This intervention decreases the rates of chlamydial and gonorrheal infection among Mexican-American and African-American women at high risk for sexually transmitted diseases.
Curriculum Available	HAPPE / Sociometrics
Reference	(Shain et al., 1999)

Project Smart – Enhanced

Target Population(s)	Injecting Drug Users in Treatment
Type of Intervention:	<ul style="list-style-type: none"> • Group Level Intervention
Risk Behaviors:	<ul style="list-style-type: none"> • Sharing syringes and works • Unprotected Sex (anal & vaginal)
Behavioral Theory:	<ul style="list-style-type: none"> • Health Belief Model • Theory of Reasoned Action • Social Cognitive Theory • Relapse Prevention Theory
Summary of Intervention:	<p>Uses a behavioral approach to prepare participants to reduce the harm/risk from AIDS by practicing with real-life situations. Special emphasis is given to the psychosocial aspects of behavioral change.</p> <p>Overview of AIDS Information / AIDS and Communication Dealing with Difficult and Harmful Situations / Questions About AIDS Prevention Skills / Coping Skills Skills for Change / Using Skills for Change Using Survival Skills / Personal Plan to Reduce Harm Prevention Skills Review / Individual Session with Health Educator</p>
Intended Outcomes:	<p>Reduction in risky drug-related behaviors</p> <ul style="list-style-type: none"> • Decrease works sharing in general and shooting galleries • Increase correct cleaning of works • Decrease high-risk practices
Setting:	Adult in-patient and residential drug/alcohol treatment facilities
Core Elements: (features responsible for the effectiveness of the intervention and should not be changed)	<ul style="list-style-type: none"> • Overview about AIDS • Participants required to complete homework • Condom-use and works-cleaning demonstrations • Role-plays • Video presentations • Practice condom-use • Works-cleaning session
Duration:	<p>Six one-hour sessions</p> <p>30 minute individual consultation</p>
Staffing:	Trained health educator
Evidence of Effectiveness:	Participants reported significant reductions in drug- and sex-related risk behaviors compared with their baseline level of risk.
Curriculum Available:	HAPPA / Sociometrics
Reference:	(McCusker et al., 1992)

Comment

Sessions: If sessions 1 & 2 are combined, session 1 - homework is incorporated into discussion.

Cleaning Works: To maintain core element, practice cleaning works, providers should use monoject or children's oral medicine syringes over other objects.

Videos: Providers may substitute "The Best Defense" or "Stopping the Spread of HIV/AIDS" for the outdated video "AIDS, Addicts, and Recovery".

Individual session: Project staff, not venue staff, must do the individual session (a core element).

Enhanced: Projects must implement the enhanced (6-session) version of the curriculum.

Reach One Teach One

Target Population(s)	Incarcerated
Type of Intervention:	Multiple Intervention Program <ul style="list-style-type: none"> • Group Level Intervention • Outreach
Risk Behaviors:	<ul style="list-style-type: none"> • Unprotected sex • Multiple sex partners • Injecting drug use • Substance use
Behavioral Theory:	Diffusion of Innovation
Summary of Intervention:	Inmates are recruited to serve as peer educators. Peer educators are trained (5-day training) to conduct a variety of services within the prison including teaching the HIV prevention orientation class for incoming inmates, providing individual counseling for newly diagnosed inmates and providing prevention case management for releasing inmates. Peer educator training includes HIV/AIDS basics, substance use, STDs, sexuality and HIV, public speaking introduction and practices, and diversity training.
Intended Outcomes:	Create a pool of inmate peer educators to conduct the various HIV prevention programs in the prison.
Setting:	Correctional facilities
Core Elements: (features responsible for the effectiveness of the intervention and should not be changed)	<ul style="list-style-type: none"> • Training of peer educators
Duration:	<ul style="list-style-type: none"> • Peer training (5-day) • Outreach - ongoing
Staffing:	<ul style="list-style-type: none"> • Prison staff • Inmate peer educators
Evidence of Effectiveness:	Implemented by Iowa Department of Corrections
Curriculum Available:	Glaxo-Wellcome / Centerforce
Reference:	(O. Grinstead et al., 1997)

Comments

Reach One Teach One has been successfully implemented in Iowa Department of Corrections .

Real AIDS Prevention Project (RAPP)

Target Population(s)	Heterosexuals; Injecting Drug Users; Men Who Have Sex With Men
Type of Intervention:	Multiple Intervention Program <ul style="list-style-type: none"> • Outreach • Community Mobilization • Small Groups
Risk Behaviors:	Sex without condoms
Behavioral Theory:	Stages of Change Social Learning Theory
Summary of Intervention:	Media campaign <ul style="list-style-type: none"> • Frequent distribution of flyers, brochures, posters, and newsletters that tell “role model” stories based on the lives of women in the local community with HIV prevention material. • Role model stories present accounts of women in different degrees of readiness to use condoms • Media pieces are distributed or are left at drop sites Outreach (one-on-one or groups). <ul style="list-style-type: none"> • Interpersonal contacts present HIV information and referrals, encourage and reinforce behavior change, and distribute condoms and role model stories. Community mobilization <ul style="list-style-type: none"> • Recruitment of small businesses, neighborhood organizations, and agencies to donate services or products and to function as sites for distributing role-model stories and displaying posters and other visual materials.
Intended Outcomes:	To increase condom use with main and non-main partners
Setting:	Street settings, community agencies, businesses, residential complexes, and other community settings
Core Elements: (features responsible for the effectiveness of the intervention and should not be changed)	<ul style="list-style-type: none"> • Community outreach using peer volunteers • Peers having one-on-one discussions about safer sex, based on client’s stage of readiness to change • Printed role model stories about community members decisions about safer sex • Soliciting program support from community organizations and businesses • Sponsoring small-group activities, such as safer-sex parties and presentations
Frequency:	Repeated community contacts
Evidence of Effectiveness:	Women in the intervention communities reported a greater increase in consistent condom use with non-main partners than women in the comparison communities.
Staffing:	Agency staff and volunteers
Curriculum:	CDC / Replicating Effective Interventions
Reference:	(Lauby, Smith, Stark, Person, & Adams, 2000)

Reducing the Risk

Target Population(s)	Adolescents
Type of Intervention:	Group Level Intervention
Risk Behaviors:	<ul style="list-style-type: none"> • Unprotected sex
Behavioral Theory:	<ul style="list-style-type: none"> • Social Cognitive Theory • Social Learning Theory • Social Inoculation
Summary of Intervention:	15 session curriculum that includes instruction on developing social skills to reduce sexual risk-taking behavior and uses role play as a means of practicing and modeling those skills. Curriculum also emphasizes decision making and assertive communication skills, encourages students to go to stores and clinics to obtain information, and ask their parents about their views on abstinence and birth control.
Intended Outcomes:	Postpone initiation of sexual intercourse For those sexually experienced – reduce unprotected sex
Setting:	High school classroom
Core Elements: (features responsible for the effectiveness of the intervention and should not be changed)	<ul style="list-style-type: none"> • Skills building • Recognition of risky situations
Duration:	Fifteen 60-minute sessions
Staffing:	High school teachers attend a 5-day training program
Rationale for Prevention Intervention:	Students receiving the intervention were significantly less likely to initiate sexual intercourse than those in the comparison condition; intervention students who were already sexually experienced were significantly less likely to engage in unprotected intercourse.
Curriculum Available:	
Reference:	(Kirby, Barth, Leland, & Fetro, 1991)

Safety Counts (also known as Safety Point)

Target Population(s)	Injecting Drug Users - Not in Treatment Crack Cocaine Users – Not in Treatment
Type of Intervention:	Multiple Intervention Program <ul style="list-style-type: none"> • Group Level Intervention • HIV Counseling and Testing • Individual Level Intervention • Health Communication/Public Information • Outreach
Risk Behaviors:	Sharing injection equipment Unprotected sex (anal, oral, vaginal)
Behavioral Theory:	Cognitive Behavior
Summary of Intervention:	Program aims to prevent the spread of HIV among injection drug and crack cocaine users through structured and unstructured psychoeducational activities in both group and individual settings.
Intended Outcomes:	Prevent the spread of HIV
Setting:	<ul style="list-style-type: none"> • Community based • Clinic based
Core Elements: (features responsible for the effectiveness of the intervention and should not be changed)	<p>Participants must attend at least:</p> <ul style="list-style-type: none"> • Two HIV counseling & testing sessions • Two behavioral work groups • One individual counseling session • Two monthly risk reduction social events • Two supportive follow-up contacts <p>For a total of nine sessions.</p>
Duration:	Nine sessions over four to six months (see core elements)
Staffing:	Trained HIV prevention staff Indigenous outreach workers
Evidence of Effectiveness:	<ul style="list-style-type: none"> • Participants were significantly more likely to increase their self-reported condom use, reduce or cease drug use, seek drug-abuse treatment, or have a negative urine test for cocaine or opiates at follow-up.
Curriculum Available:	HAPPA / Sociometrics
Reference	(Rhodes & Wood, 1999)

SISTA

Target Population(s)	Low-income African-American urban women; 18-29 years of age
Type of Intervention:	Group Level Intervention
Risk Behaviors:	Unprotected sex
Behavioral Theory:	Social Cognitive Theory (Social Learning Theory) Theory of Gender and Power
Summary of Intervention:	Five weekly 2-hour group sessions. Each session has a specific topic and planned activities for modeling and assessing skills. <i>Session 1</i> - addresses the topic of gender and ethnic pride. Participants discuss the positive attributes of being an African-American woman. <i>Session 2</i> - young women consider their personal responsibility for sexual decision-making. They watch an HIV-prevention video and then discuss it. <i>Session 3</i> - provides sexual assertiveness and communication training. Role-playing exercise are used to practice managing risky sexual situations. <i>Session 4</i> - Women learn and practice the proper use of condoms and concentrate on building skills and changing social norms for proper condom use. <i>Session 5</i> - deals with cognitive coping skills, and participants develop skills such as sexual self-control.
Intended Outcomes:	To increase consistent condom use <ul style="list-style-type: none"> • To emphasize ethnic and gender pride • To provide the social skills necessary to negotiate condom use
Setting:	Community center
Core Elements: (features responsible for the effectiveness of the intervention and should not be changed)	<ul style="list-style-type: none"> • Gender and culture specific role-playing and skills building exercises that aim to enhance communication skills, condom use skills, and self-efficacy • Weighing pros and cons • Addressing cultural norms (attitudes and beliefs within the culture) • Power dynamics between men and women
Duration:	Five weekly 2-hour sessions
Staffing:	African American peer educators.
Evidence of Effectiveness:	Women who participated in this intervention were significantly more likely than women in the comparison group to report consistent condom use with their partners, negotiating condoms use, and not having sex when a condom was not available.
Curriculum Available:	HAPPA / Sociometrics
Developed by:	(R. J. DiClemente & Wingood, 1995)

Comments

Modifiable: In Iowa, a provider has modified the SISTA Project for Caucasian women.

Sniffer

Target Population(s)	Injecting Drug Users in Treatment
Type of Intervention:	Group Level Intervention
Risk Behaviors:	<ul style="list-style-type: none"> • Sharing syringes and works • Unprotected Sex (anal & vaginal)
Behavioral Theory:	<ul style="list-style-type: none"> • Social Learning Theory • Harm Reduction
Summary of Intervention:	Provision of HIV/AIDS risk reduction education, coping mechanisms for dealing with the potential for HIV/AIDS infection, and behavioral skills necessary to keep oneself safe from injection.
Intended Outcomes:	<ul style="list-style-type: none"> • Prevent intranasal heroin users from making the transition to injection drug use • Prevent those who have used injection drugs in the past from returning to that mode of use • Decrease non-injection use of drugs
Setting:	Community storefront Community based settings
Core Elements: (features responsible for the effectiveness of the intervention and should not be changed)	<ul style="list-style-type: none"> • Overview about AIDS • HIV antibody test counseling • Behavioral skills practice • Role play • Safer sex communication • Video • Group discussion
Duration:	Four 60-90 minute sessions delivered over two weeks
Staffing:	Trained health educator with background in substance abuse issues, HIV/AIDS, therapeutic groups
Evidence of Effectiveness:	Men and women who participated in the intervention were significantly less likely to inject drugs than those in the comparison condition and more likely to use condoms during the follow-up period.
Curriculum Available:	HAPPA / Sociometrics
Reference:	(Des Jarlais, Casriel, Friedman, & Rosenblum, 1992)

Comments

Appropriateness: Not appropriate for heterosexual African American population.

Street Smart: Reducing HIV Risk Among Runaway and Homeless Youth

Target Population(s)	Runaway youth (ages 11 to 18)
Type of Intervention:	Group Level Intervention
Risk Behaviors:	<ul style="list-style-type: none"> • Unprotected sex (sex without male or female condoms) • Substance use
Behavioral Theory:	Social Learning Theory
Summary of Intervention:	<p>Uses small groups (a) as practice and role-play opportunities, (b) to mobilize and reinforce positive behaviors, and (c) to maintain support networks. The intervention consists of 10 group sessions on a rotating basis, 3 times per week, repeated every 4 to 6 weeks, and one individual counseling session.</p> <ol style="list-style-type: none"> 1. <i>HIV-related knowledge.</i> Activities include video and art workshops where youth develop soap opera dramatizations, public service announcements, commercials, and raps about HIV prevention, and they review and discuss commercial HIV/AIDS prevention videos. 2. <i>Social skills.</i> Training on assertiveness and coping skills, include use of a “feeling thermometer,” are employed to develop skills for use in HIV-risk situations. 3. <i>Access to resources.</i> Participants visit a community-based comprehensive health and mental health center. 4. <i>Personalized beliefs, attitudes and norms.</i> Participants have a private counseling session during which they can assess individual barriers to practicing safer sex and discuss their own attitudes and behavior patterns. Dysfunctional attitudes and behavior patterns are targeted. Incentives include food and \$1 for carrying condoms and arriving to the program on time.
Intended Outcomes:	To reduce sexual and drug-related high risk behaviors
Setting:	Shelters for runaway youth
Core Elements: (features responsible for the effectiveness of the intervention and should not be changed)	<ul style="list-style-type: none"> • Teaching HIV/AIDS risk hierarchy and its application to oneself • Building skills in problem solving, personal assertiveness, and HIV/AIDS harm reduction • Enhancing affective and cognitive awareness, expression, and control • Using peer support to train in recognizing triggers for personal risk
Duration:	<ul style="list-style-type: none"> • Eight 2-hour group sessions • One individual session • One group visit to a community health center
Staffing:	Trained counselors in shelters for runaway youth.
Rationale for Prevention Intervention:	Adolescents who participated in the intervention reduced both the number of unprotected sexual acts and their substance use significantly more than adolescents in the comparison shelters.
Curriculum Available:	CDC / Replicating Effective Programs (REP)
Reference:	(M. J. Rotheram-Borus, Van Rossem, R., Gwadz, M., Koopman, C. and Lee, M., 1999)

Turning Point

Target Population(s)	Injecting Drug Users
Type of Intervention:	Multiple Intervention Program <ul style="list-style-type: none"> • Group Level Intervention • Counseling Testing Referral (primarily for risk assessment)
Risk Behaviors:	Sharing injection equipment
Behavioral Theory:	Health Belief Model AIDS Risk Reduction Model
Summary of Intervention:	The enhanced intervention consists of attending the basic intervention and three additional sessions that address HIV/AIDS pathology, drug addiction, and safer sex practices.
Intended Outcomes:	Increase the number and proportion of IDU using safer injecting habits <ul style="list-style-type: none"> • Increase understanding of behaviors that put IDUs at risk to HIV • Increase understanding of the severity of HIV • Identification of barriers and education around risk reduction methods to overcome those barriers • Identification and education around methods to overcome relationship issues related to safer injection practices
Setting:	Medical clinics Public health settings Medically-oriented agencies and organizations
Core Elements: (features responsible for the intervention effectiveness and should not be changed)	<ul style="list-style-type: none"> • Individual prevention counseling and testing session • Video on risk reduction, condom uses, injection cleaning skills • Groups on HIV, addiction issues, safer sex and relationship issues
Duration:	1 one-hour counseling session + 3 x 1.5 hour group session
Staffing:	HIV educator/counselor
Evidence of Effectiveness:	<ul style="list-style-type: none"> • Both interventions increased safer needle use behaviors • Participants in the enhanced intervention were more likely to report safer needle practices at follow-up than similar participants in the standard intervention.
Curriculum Available:	HAPPA / Sociometrics
Reference:	(Siegal, Falck, Carlson, & Wang, 1995)

Comments

CTR/PCM: Agencies funded for Turning Point must provide the HIV counseling and prevention case management specified in the intervention.

Session 2: Can be offered as a group session or as an individual level session.

Enhanced: Agencies must implement the enhanced version of this intervention.

Video: “Changing the Rules” is out of date – providers are advised to substitute another video.

Sequence: Sessions 1-3 occurs before sessions 4-6. The order may be changed within groups.

Gender Specific Session: The curriculum calls for last session (6) to separate men and women.

As there are different goals for the separate gender sessions, projects must follow the curriculum and require gender separation for session 6.

Testing: If client does not need or want testing, client should still be given 2 individual sessions.

VOICES/VOCES: Video Opportunities for Innovative Condom Education and Safer Sex

Target Population(s)	Heterosexual: Men in Communities of Color
Type of Intervention:	Individual Level Intervention
Risk Behaviors:	
Behavioral Theory:	Social Learning Theory Theory of Reasoned Action
Summary of Intervention:	All participants receive STD prevention information, individual counseling, free condoms, and a coupon for condoms as part of their clinic visit for diagnostic and treatment services. The video-based intervention consists of a 60-minute session in which participants view a 20-minute culturally sensitive video and engage in a facilitated interactive group discussion. The intervention is delivered to small groups of 3 to 8 men in STD clinics. <i>“Let’s Do Something Different,”</i> is designed for African Americans. <i>“Porque Si,”</i> is developed for Hispanics/Latinos. Interactive discussions follow the videos aiming to reinforce the STD and HIV prevention messages.
Intended Outcomes:	To reduce STD infections by increasing condom use
Setting:	STD Clinic
Core Elements: (features responsible for the effectiveness of the intervention and should not be changed)	<ul style="list-style-type: none"> • Viewing culturally specific videos portraying condom negotiation • Conducting skills building to overcome barriers to condom use • Educating about types of condoms and their features • Distributing samples of condoms specified by participants as best meeting their needs
Duration:	Single session
Staffing:	A trained STD counselor leads the discussions
Evidence of Effectiveness	Men who participated in the intervention had a significantly lower rate of new STD infection than men did in the comparison condition.
Curriculum Available	None
Reference	(O'Donnell, O'Donnell, San Doval, Duran, & Labes, 1998)