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Conference - 10/97 - Rutgers/Needle Exchange

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THE STATE UNIVERSITY OF NEW JERSEY
RUTGERS

New Jersey Collegiate Consortium for Health in Education
Rutgers Student Health Center Hurtado Health Center
Rutgers, The State University of New Jersey
11 Bishop Place • New Brunswick • New Jersey 08901-1180
(732) 932-1219 • FAX: (732) 932-1223

October 8, 1997

Mr. Todd Summers
Deputy Director
White House Office of AIDS Policy
808 17th Street NW
Suite 820
Washington, DC 20006

Fax: (202)632-1096

Dear Mr. Summers,

Thank you for agreeing to participate in the Community Forum on HIV/AIDS policy, drug use and needle exchange. The panel is scheduled for:

Tuesday, October 28, 1997
1:00 p.m. - 3:00 p.m.
Multipurpose Room
Busch Campus Center
Rutgers University
Piscataway, NJ

Joining the panel will be Diana McCague, Executive Director, the Chai Project (New Jersey's largest harm reduction project); Reverend Bryant Ali, Broadway House, Newark; and Attorney Joe Grace, Philadelphia, PA. There will also be an evaluation specialist on the panel. In addition, invitations to participate have been extended to New Jersey Governor Christine Todd Whitman, Senator Jim McGreevey (the Democratic challenger for Governor), and several mayors in New Jersey. Each person will have ten to fifteen minutes to present their perspective, after which the moderator will generate discussion by posing several questions to panelists.

I am hoping you will provide us with a national perspective, addressing needle exchange within the context of broader drug treatment and HIV prevention initiatives. Diana McCague will lead the panel with a slide presentation of who is effected by HIV disease in New Jersey. The evaluation specialist will provide a brief overview of the research on needle exchange programs. Joe Grace will discuss routes to legalization and Bryant Ali will discuss why his community supports needle exchange.

As I discussed with Sarah, Amtrack is your best bet for traveling to New Jersey. The train from D.C. stops in New Brunswick (a five minute cab ride to the Busch Student Center) several times a day. The *train stops more frequently at the Metro Park Train Station, which is about a 20 minute cab ride to the Student Center*. We would be able to have a driver (probably one of our students) meet you at the train station or you could arrange for a cab. I'll call next week to confirm travel plans with you.

With over 40,000 injecting drug users (IDUs), New Jersey ranks first in the nation in percentage of AIDS cases related to injection drug use. In fact, 49% of the state's AIDS cases result directly from the sharing of contaminated needles. And, when those who have been indirectly infected with HIV are added to this sum-- primarily the girlfriends and wives of IDUs and their children-- over two-thirds of the state's AIDS cases are directly or indirectly related to injection drug use.

This panel is part of a statewide meeting of the *New Jersey Collegiate Consortium for Health in Education.* Your audience will be comprised of representatives from community organizations as well as college and university administrators, faculty, and staff from all over New Jersey-- about 80 people. We have planned this panel as part of an ongoing effort to create discussion around and draw attention to the current conflicts and tensions surrounding HIV/AIDS treatment, prevention and education.

Please don't hesitate to call with any questions. I look forward to talking with you soon.

Sincerely,

Deborah Lewis
Coordinator,
New Jersey Collegiate Consortium
for Health in Education

P.S. Lunch is at 12:00 and you are very welcome to join us!

Scheduling Itinerary -Todd A. Summers Deborah Lewis@ 732-932-1219

Event: **Community Forum on HIV/AIDS Policy and Needle Exchange**

Date: October 28, 1997

Location: Rutgers University, Busch Campus Center
Pascataway campus

Duties: **Speaker on Panel:** Each presenter will be given about 10-15 minutes to address the audience. Discussion and Q&A will follow.

- provide a national perspective
- put the issues surrounding needle exchange into an overall prevention context
- prevention policy related to drug issues, etc.
- the White House role in dealing with prevention issues overall

Participants: Other speakers on the panel include:

Diana McCague, Executive Director
Chai Project - slide presentation
NJ's largest harm reduction project

Rev. Bryant Ali - supports needle exchange
Broadway House

Joe Grace, Attorney
'Routes to Legalization'
Philadelphia, PA

Invitations to participate have been extended to Governor Whitman, Senator McGreevey, and several NJ Mayors. The general audience will be comprised of representatives from community organizations as well as college and university administrators, faculty, and staff from all over New Jersey -- about 80 people. They have planned this panel as an ongoing effort to create discussion around and draw attention to the current conflicts and tensions surrounding HIV/AIDS treatment, prevention, and education.

Background/briefing: With over 40,000 injecting drug users, New Jersey ranks first in the nation in percentage of AIDS cases related to injection drug use. 49% of the state's AIDS cases result directly from the sharing of contaminated needles. And, when those who have been indirectly infected with HIV are added to this sum -- primarily the girlfriends and wives of IDUs and their children -- over two-thirds of the state's AIDS cases are directly or indirectly related to injection drug use.

Itinerary:

8:15-11:06 AM	Depart Union Station en route to Metro Park *Amtrak Train #184, Conf. #A3254315 - Open seating*
11:06-11:26 AM	Taxi cab to Rutgers Univ., Busch Campus Center, Pascataway
12:00 - 1:00 PM	Lunch with Panel Participants and Guests
1:00 -3:00 PM	Panel - Cab will be waiting for you afterwards
3:50 - 6:55 PM	Depart Metro Park en route to Union Station *Amtrak Train#173, Conf. #A3254315 - Open Seating*

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New Jersey Collegiate Consortium for Health in Education

October 28, 1997

9:00 - 9:30 a.m. Multipurpose Room	***Registration & Continental Breakfast***
9:30 - 10:00 a.m. Multipurpose Room	***Consortium Business***
10:00 - 11:00 a.m. Multipurpose Room	***Leadership Development and Effective Communication with Campus Administrators about HIV and Other Health Concerns*** A talk by David Burns, Association of American Colleges and Universities
11:00 - 12:00 p.m.	***Small Group Workshops***
Room 115	***HIV Education and Service Learning Programs: Model Programs at 2-Year and 4-Year Colleges*** Presenters: Sourri Baetjer, Raritan Valley Community College Sarah McMahon, Rutgers University
Room 117	***Round Table Discussion on Plans for World AIDS Day*** Facilitator: Pat Dingleberry, Jersey City State College
Room 116 A/B	***Grant Writing & Proposal Development: Sharing Tips for Success*** Facilitator: Deborah Lewis, Rutgers University
12:00 - 1:00 p.m. Multipurpose Room	***Lunch***
1:00 - 3:00 p.m. Multipurpose Room	***Community Forum: HIV Policy, Drug Use and Needle Exchange*** A conversation with Todd Summers, Deputy Director, White House Office of AIDS Policy; Diana McCague, Executive Director, The Chai Project; Dr. Robert Heimer, Yale University School of Medicine; Mayor Martin Barnes, Paterson; Reverend Bryant Ali, Broadway House, Newark; and Joe Grace, Attorney, Newark. Panel moderated by: Ronald Johnson, Office of AIDS Policy, City of New York

Results From the 1995 National College Health Risk Behavior Survey

Kathy A. Douglas, PhD; Janet L. Collins, PhD; Charles Warren, PhD; Laura Kann, PhD; Robert Gold, DrPH; Sonia Clayton, BS; James G. Ross, MS; and Lloyd J. Kolbe, PhD

Abstract. Results from the 1995 National College Health Risk Behavior Survey, which monitored health risk behaviors among US college and university undergraduates, suggest that many students' behaviors increase their likelihood of adverse health outcomes. During the 30 days preceding the survey, 34% of the participants had consumed five or more alcoholic drinks on at least one occasion, and 27% had drunk alcohol and driven a car. Thirty-one percent had smoked cigarettes regularly during their lifetimes, 49% had ever used marijuana, 30% had used a condom during their last sexual intercourse, 21% were overweight, and 38% had participated in vigorous physical activity on 3 or more of the 7 days preceding the survey. These data were analyzed by gender, age group, race and ethnicity, and institution type. They can be used by those responsible for the health and education of college students to reduce risks associated with the leading causes of mortality and morbidity.

Key Words: alcohol and other drug use, college students, dietary behaviors, injuries, physical activity, sexual behavior, tobacco use

Approximately 7.1 million 18- to 24-year-olds—a quarter of all 18- to 24-year-olds in the United States—are currently among the more than 12 million students enrolled either full time or part time in the nation's 3,600 colleges and universities.[1,2] Institutions of higher education can provide an important setting for reaching young people and reducing health risk behaviors among them.

Although more than half of all young people aged 20 to 24 years have attended college,[3] little is known about the health of college students nationwide. Rates of death, injury, sexually transmitted diseases (STDs), and pregnancy are not available for this specific population, and most studies examining health risk behaviors among college students have focused on a single college or university and only one or two health risk behaviors.

A few important studies have assessed alcohol, tobacco, other drug use, and sexual aggression among national samples of college students. One is the *Monitoring the Future Study*, which since 1980 has conducted annual follow-up surveys of American high school seniors as they become 19 to 22 years of age and are enrolled full time in 2- or 4-year colleges and universities. Monitoring the Future measures tobacco, alcohol, marijuana, inhalant, stimulant, cocaine, and other illicit drug use.[4] In 1994, 52% of male and 31% of female college students reported consuming five or more drinks of alcohol in a row on at least one occasion during the 2 weeks preceding the survey. Moreover, 24% of male and 23% of female college students reported smoking cigarettes, and 20% of male and 12% of female college students reported using marijuana during the 30 days preceding the survey.

In 1993, Wechsler et al[5] examined the nature and extent of binge drinking among a national sample of students in 4-year colleges and universities. Wechsler and colleagues' findings were consistent with the results of the Monitoring the Future survey: 50% of college men and 39% of college women were binge drinkers (defined as male students who consumed ≥ 5 drinks of alcohol in a row and female stu-

Kathy A. Douglas is a health scientist with the Division of Adult and Community Health; Janet L. Collins is chief of the Surveillance and Evaluation Research Branch, Division of Adolescent and School Health, where Charles Warren is a demographer; and Laura Kann is chief of the Surveillance Research Section; all are with the National Center for Chronic Disease Prevention and Health Promotion, Centers for Disease Control and Prevention, Atlanta. Robert Gold is vice president of Macro International in Calverton, Maryland, where Sonia Clayton is a project coordinator and James G. Ross is vice president. Lloyd J. Kolbe is director of the Division of Adolescent and School Health, National Center for Chronic Disease Prevention and Health Promotion, Centers for Disease Control and Prevention.

dents who consumed ≥ 4 in a row during the 2 weeks preceding the survey).

Another substance-use study, the Core Alcohol and Drug Survey, is used by institutions funded by the US Department of Education's Fund for the Improvement of Postsecondary Education (FIPSE).[6] In 78 FIPSE-funded surveys at 2- and 4-year colleges and universities during 1989 to 1991, 51% of male and 35% of female college students reported binge drinking (≥ 5 drinks of alcohol in one sitting during the 2 weeks preceding the survey). Tobacco use was reported by 46% of male and 36% of female college students, and marijuana use by 30% of men and 24% of women during the 12 months preceding the survey.

Episodic heavy drinking has been shown to be more prevalent among college students than among their same-age peers[7] and is strongly related to serious injuries and injury-related deaths, particularly fatal motor vehicle crashes.[8] Alcohol use among college students also has been shown to be related to unsafe sexual behaviors, violent behaviors, and academic problems.[6,9,10]

The only other national data available on the health risk behaviors of US college students focus on sexual aggression and victimization. The Sexual Experiences Survey[11] conducted in 1984/1985 among a national sample of students in 2- and 4-year colleges and universities indicated that 15% of female college students reported rape and another 12% reported attempted rape since age 14.

To monitor the priority health risk behaviors among young people, the Centers for Disease Control and Prevention (CDC) developed the Youth Risk Behavior Surveillance System (YRBSS).[12] The YRBSS includes national, state, and local school-based surveys of high school students conducted biennially since 1991; a household-based survey among a national sample of 12- to 21-year-old youth in and out of school conducted in 1992; and the 1995 National College Health Risk Behavior Survey (NCHRBS). The 1995 NCHRBS built on previous surveys of health risk behaviors among college students by assessing in one questionnaire a broad range of health risk behaviors that contribute to the leading causes of mortality and morbidity for young people.

Nearly all of the most important health risk behaviors can be categorized in six areas: (1) behaviors that contribute to unintentional and intentional injuries; (2) tobacco use; (3) alcohol and other drug use; (4) sexual behaviors that contribute to unintended pregnancy and STDs, including human immunodeficiency virus (HIV) infection; (5) unhealthy dietary behaviors; and (6) physical inactivity.[12] NCHRBS is the first national survey to measure health risk behaviors among college students in all six areas. In addition, NCHRBS helps measure progress toward 11 national health objectives that target adolescents and young adults; 17 national health objectives that target age groups that include college-aged people; and two national health objectives related to the availability and characteristics of health promotion programs on college campuses, including HIV education.[13]

METHOD

Respondents

The 1995 NCHRBS employed a two-stage cluster sample design to produce a nationally representative sample of undergraduate college students aged 18 years or older. The first-stage sampling frame contained 2,919 2- and 4-year colleges and universities, the primary sampling units (PSUs). From the 2,919 institutions, we selected 148 (74 2-year and 74 4-year institutions) from 16 strata formed on the basis of the relative percentage of Black, non-Hispanic students (hereinafter referred to as Black students) and Hispanic students in the schools. The institutions were selected with a probability proportional to undergraduate enrollment size. Of the 148 institutions selected, 136 (92%) participated in the survey.

The second sampling stage consisted of a simple random sample from a list of the full-time and part-time undergraduate students aged 18 years or older enrolled in the 148 selected colleges and universities. We used differential sampling rates to ensure required numbers of minority students in the sample. After allowing for assumed student nonresponse and ineligibility rates, we set initial student samples at 56 for the 4-year and 72 for the 2-year institutions. From the total of 8,810 students selected, we determined that 7,442 were eligible for the study. Of those eligible, 4,838 (65%) completed the questionnaire. The overall NCHRBS response rate was 60% (calculated by multiplying the institutional participation rate of 92% by the eligible student participation rate of 65%). Of the 4,838 students who completed the questionnaire, 229 identified themselves as graduate students, even though they were included in the list of undergraduate students provided by the college or university. We excluded these 229 records from this analysis.

Questionnaire

The NCHRBS questionnaire was developed by CDC in collaboration with representatives from universities, other relevant national organizations, and federal agencies. Focus groups were conducted with Black, White non-Hispanic (herein after referred to as White students), and Hispanic students to pilot test versions of the draft questionnaire. Reliability data on many of the questions included in the NCHRBS questionnaire were reported earlier by Brener et al.[14] Designed for self-administration, the final questionnaire consisted of a computer-scannable booklet with 96 multiple-choice questions. English and Spanish versions were available.

Responses to the questionnaire were both voluntary and confidential. We used identification numbers on the questionnaires to permit follow-up with nonrespondents. When questionnaires were received, corresponding names and addresses were destroyed so that individuals could not be linked to their responses.

Institution Recruitment

A survey information packet, which contained an

TABLE 1
Percentages of Undergraduate College Students Aged ≥ 18 Years, by Age Group, Gender, Race and Ethnicity, Institution Type, Marital Status, Hours Worked per Week, Student Status, and Sorority or Fraternity Membership—United States

Category	Total	Age group	
		18–24 years (63.6%)	≥ 25 years (36.4%)
Gender			
Female	55.5	52.0	61.8
Male	44.5	48.0	38.2
Race and ethnicity			
White, non-Hispanic	72.8	70.9	76.1
Black, non-Hispanic	10.3	10.5	9.6
Hispanic	7.1	6.9	7.4
Other†	9.9	11.7	6.9
Institution type			
2-year	45.6	34.6	63.8
4-year	54.4	65.4	36.2
Marital status			
Never married	69.4	93.2	27.8
Married	22.0	5.8	50.3
Separated	1.7	0.4	3.9
Divorced	6.4	0.5	16.7
Widowed	0.5	0.1	1.3
Hours worked per week			
0	27.3	30.1	22.5
1–39	49.7	58.1	35.1
≥ 40	22.9	11.9	42.4
Student status			
Full time	68.2	85.2	38.5
Part time	31.8	14.8	61.5
Sorority or fraternity membership			
Yes	9.8	12.4	5.1
No	90.2	87.6	94.9

Source: National College Health Risk Behavior Survey, 1995.
Note: Percentages within categories may not total 100.0 because of rounding.
†Includes students who responded to the question on race/ethnicity by selecting Asian or Pacific Islander, American Indian or Alaskan Native, or Other.

overview of the purpose of the survey, a description of the survey process, and the questionnaire, was mailed to the president of each of the selected institutions. Each president was then contacted by telephone to determine whether the institution would participate in the survey. On agreement to participate, the college president was asked to identify a survey contact who could provide a list of undergraduate students from which we would draw the sample of college students.

Student Recruitment

Once the sample of college students within each participating institution was drawn up, we mailed each sampled student an initial questionnaire packet. The packet contained a cover letter explaining the voluntary nature and importance of the survey, a questionnaire booklet, a pencil for completing the questionnaire, and a postage-paid return envelope. In addition, the packet contained a description of an incentive offered—a $100 US Savings Bond for one randomly selected student from each participating institution.

Two weeks after the initial questionnaire packet was mailed to the students, we mailed a second questionnaire packet to those who had not yet returned the questionnaire. Two weeks after the second mailing, those students who still had not returned the questionnaire were sent a third copy of the questionnaire by certified mail and were called by telephone to determine their willingness to participate. A final questionnaire was sent by overnight mail to those students who requested one during the telephone contact. The timing of the initial and follow-up mailings were staggered to accommodate the semester and quarter systems of the participating colleges and universities. Data collection, which began in January 1995, was completed by July 1995.

TABLE 2
Percentages of Undergraduate College Students Aged ≥ 18 Years Who Participated in Selected Behaviors That Contribute to Unintentional Injury, by Gender, Age Group, Race and Ethnicity, and Institution Type

Category	Rarely or never used safety belts when driving a car†		Rarely or never wore motorcycle helmets‡		Drank alcohol and drove a car or other vehicle§		Ever drank alcohol when boating or swimming‖	
	%	CI	%	CI	%	CI	%	CI
Gender								
Female	6.6	1.2	37.0	7.7	22.8	2.4	26.4	3.1
Male	12.3	2.3	31.1	7.4	33.2	2.9	35.2	3.0
Age group								
18–24 years	9.7	1.6	37.1	7.1	27.8	2.4	28.3	2.5
≥ 25 years	7.8	1.6	26.8	9.4	26.7	3.1	34.4	3.4
Race and ethnicity								
White, non-Hispanic	10.1	1.4	32.6	7.3	31.2	2.4	33.4	2.4
Black, non-Hispanic	7.7	2.5	NA		14.7	2.8	11.1	4.5
Hispanic	5.1	2.2	NA		24.8	4.8	22.2	4.9
Institution type								
2-year	9.8	2.1	27.8	9.0	24.6	3.1	30.7	3.9
4-year	8.7	1.6	38.9	9.6	29.8	2.7	30.3	2.7
Total	9.2	1.3	34.0	6.7	27.4	2.1	30.5	2.3

Source: National College Health Risk Behavior Survey, 1995.
Note: Confidence interval, 95%. NA = data not available, insufficient sample size.
†Among the 96.3% of students who drive.
‡Among the 17.6% of students who rode a motorcycle during the 12 months preceding the survey.
§One or more times during the 30 days preceding the survey.
‖Among the 76.8% of students who went boating or swimming during the 12 months preceding the survey.

Data Analysis

We edited data for consistency of responses and applied a weighting factor to each student record to adjust for the school sampling weight, the school nonresponse adjustment factor, the student sampling weight, and the student nonresponse adjustment factor. We used information on the total number of students, listed by race and ethnicity, gender, and institution type (2-year v 4-year institution) to poststratify the sample. For each adjustment class (a particular race or ethnicity, gender, and institution type), the poststratification adjustment factor was the ratio of the known national value to the sample estimate of that value.

We scaled the final overall weights so that the weighted count of students was equal to the number of cases for that year. The scaling factor was the ratio of the number of respondent cases to the sum of the weights for those students. We used SUDAAN to compute 95% confidence intervals.[15] The NCHRBS data are representative of undergraduate college students aged 18 years or older in colleges and universities in the United States.

RESULTS

General Demographic Characteristics.

In the final student sample, 55.5% of the participants were women, 72.8% were White, 10.3% were Black, and 7.1% were Hispanic; 63.6% were 18 to 24 years old; 54.4% attended 4-year institutions (Table 1). Two thirds (68.2%) of the students attended college full time. One out of 10 (9.8%) students belonged to a sorority or fraternity. Nearly one fourth (22.0%) of the students were currently married, whereas 69.4% had never been married. About one fourth (22.9%) of students worked full time, 49.7% worked part time, and the remaining fourth (27.3%) were not employed.

Students aged 25 and older were more likely to attend 2-year institutions (63.8%), whereas students aged 18 to 24 years were more likely to attend 4-year institutions (65.4%). The survey respondents closely reflected the demographic distribution of undergraduate students aged 18 or more years of age who were enrolled in 2- and 4-year colleges and universities in the United States.[1]

Unintentional Injury

Of the 96.3% of students who drove cars, 9.2% rarely or never used a safety belt when driving a car (Table 2). Male students were significantly more likely than female students and White students were significantly more likely than Hispanic students to have rarely or never used a safety belt. Safety belt use did not vary by age group or by institution type.

Of the 17.6% of students who rode a motorcycle during the 12 months preceding the survey, 34.0% rarely or never wore motorcycle helmets (Table 2). Motorcycle helmet use did not vary by gender, age group, race and ethnicity, or institution type.

TABLE 3
Percentages of Undergraduate College Students Aged ≥ 18 Years Who Participated in Selected Behaviors That Contribute to Intentional Injury, or Were Ever Forced to Have Sexual Intercourse, by Gender, Age Group, Race and Ethnicity, and Institution Type

Category	Carried a weapon†		Carried a gun‡		Participated in a physical fight§		Ever been forced to have sexual intercourse	
	%	CI	%	CI	%	CI	%	CI
Gender								
Female	3.4	0.8	1.2	0.5	7.0	1.1	20.4	2.0
Male	13.8	2.0	5.1	1.2	14.2	1.8	3.9	1.0
Age group								
18–24 years	8.5	1.4	2.5	0.7	13.2	1.4	10.6	1.3
≥ 25 years	7.3	1.6	3.8	1.0	4.8	1.4	17.5	2.4
Race and ethnicity								
White, non-Hispanic	8.2	1.5	3.0	0.8	9.2	1.3	12.5	1.5
Black, non-Hispanic	9.5	2.2	3.5	1.5	13.5	3.6	15.8	3.6
Hispanic	7.8	2.3	3.1	2.3	12.4	4.0	13.6	4.4
Institution type								
2-year	8.6	1.5	3.4	0.9	10.0	1.5	15.6	1.9
4-year	7.5	1.7	2.5	0.8	10.4	1.6	11.1	1.6
Total	8.0	1.2	2.9	0.6	10.2	1.1	13.1	1.3

Source: National College Health Risk Behavior Survey, 1995.
Note. Confidence interval, 95%.
†Such as a gun, knife, or club on ≥ 1 of the 30 days preceding the survey, except for job-related reasons.
‡On ≥ 1 of the 30 days preceding the survey, except for job-related reasons.
§One or more times during the 12 months preceding the survey.

More than one fourth of all students (27.4%) reported that they had drunk alcohol and driven a car or other vehicle at least once during the 30 days preceding the survey (Table 2). Male students were significantly more likely than female students, and White and Hispanic students were significantly more likely than Black students to have drunk alcohol and driven a car. Drinking alcohol and driving did not vary by age group or institution type.

Among the three fourths (76.8%) of the students who reported boating or swimming during the 12 months preceding the survey, 30.5% had drunk alcohol while boating or swimming (Table 2). Male students were significantly more likely than female students, students aged 25 years or more were significantly more likely than younger students, White students significantly more likely than either Black or Hispanic students, and Hispanic students significantly more likely than Black students to have drunk alcohol while boating or swimming. Drinking alcohol while boating or swimming did not vary by institution type.

Intentional Injury

Among all students, 8.0% had carried a weapon (for non–job-related reasons), such as a gun, knife, or club, at least 1 day during the 30 days preceding the survey, and 2.9% had carried a gun (for non–job-related reasons, see (Table 3). Male students were significantly more likely than female students to have carried a weapon or gun. Weapon carrying and gun carrying did not vary by age group, race and ethnicity, or institution type.

Among all students, 10.2% had been involved in at least one physical fight during the 12 months preceding the survey (Table 3). Male students were significantly more likely than female students, and students aged 18 to 24 years were significantly more likely than older students to have been in a physical fight. Physical fighting did not vary by race and ethnicity or by institution type.

Among all students, 13.1% had ever been forced to have sexual intercourse against their will (Table 3). Female students were significantly more likely than male students, students aged 25 years or more were significantly more likely than younger students, and students in 2-year institutions were significantly more likely than those in 4-year institutions to have been forced to have sexual intercourse. Forced sexual intercourse did not vary by race and ethnicity.

Students were asked about suicide ideation and attempts during the 12 months preceding the survey (Table 4). Among all students, 10.3% had thought seriously about attempting suicide, 6.7% had made specific plans to attempt suicide, 1.5% had attempted suicide, and 0.4% had made a suicide attempt that resulted in an injury, poisoning, or overdose that required medical treatment by a doctor or nurse. Students aged 18 to 24 years were significantly more likely than older students to have thought seriously about attempting suicide and to have made a specific plan to

TABLE 4
Percentages of Undergraduate College Students Aged ≥ 18 Years Who Reported Having Thought Seriously About Attempting Suicide and Who Reported Suicidal Behavior, by Gender, Age Group, Race and Ethnicity, and Institution Type

Category	Thought seriously about attempting suicide†		Made a suicide plan†		Attempted suicide†,‡		Suicide attempt required medical attention†	
	%	CI	%	CI	%	CI	%	CI
Gender								
Female	10.8	1.3	6.3	1.0	1.3	0.5	0.3	0.2
Male	9.7	1.3	7.2	1.2	1.7	0.7	0.5	0.3
Age group								
18–24 years	11.4	1.3	7.9	1.0	1.7	0.5	0.4	0.3
≥ 25 years	8.3	1.2	4.6	0.9	1.0	0.6	0.2	0.2
Race and ethnicity								
White, non-Hispanic	9.6	1.0	6.3	0.8	1.0	0.4	0.3	0.2
Black, non-Hispanic	10.7	2.8	6.3	2.4	3.4	1.9	0.7	0.7
Hispanic	11.1	2.9	6.3	2.2	1.9	1.6	0.8	1.0
Institution type								
2-year	10.4	1.2	6.2	1.0	1.8	0.8	0.6	0.4
4-year	10.3	1.3	7.0	1.1	1.2	0.4	0.2	0.2
Total	10.3	0.9	6.7	0.7	1.5	0.4	0.4	0.2

Source: National College Health Risk Behavior Survey, 1995.
Note. Confidence interval, 95%.
†During the 12 months preceding the survey.
‡One or more times.

attempt suicide. Black students were significantly more likely than White students to have attempted suicide, but suicide ideation and attempts did not vary by gender or institution type.

Tobacco Use

Almost one third (31.3%) of students had smoked cigarettes daily (at least one cigarette every day for 30 days) at some time during their lifetimes, 29.0% were current cigarette smokers (had smoked one or more cigarettes during the 30 days preceding the survey), and 16.5% were currently frequent cigarette smokers (had smoked cigarettes on at least 20 of the 30 days preceding the survey; see Table 5). Students aged 25 years of age or older were significantly more likely than younger students to have smoked cigarettes daily during their lifetimes and to be current frequent cigarette smokers.

White students were significantly more likely than either Black or Hispanic students to have smoked cigarettes daily during their lifetimes and to be either current smokers or current frequent cigarette smokers, but Hispanic students were significantly more likely than Black students to be current cigarette smokers. Students in 2-year institutions were significantly more likely than those in 4-year institutions to have smoked cigarettes daily during their lifetimes and to be current frequent cigarette smokers. Cigarette use did not vary by gender.

Among all students, 5.4% had used smokeless tobacco (chewing tobacco or snuff) on 1 or more of the 30 days preceding the survey (Table 5). Male students were significantly more likely than female students, students aged 18 to 24 years were significantly more likely than older students, and White students were significantly more likely than either Black or Hispanic students to have used smokeless tobacco. Smokeless tobacco use did not vary by institution type.

Alcohol and Other Drug Use

Among all students, 4.2% engaged in current frequent alcohol use (alcohol use on at least 20 of the 30 days preceding the survey, see Table 6). Male students were significantly more likely than female students, and White students were significantly more likely than Black or Hispanic students to be current frequent users of alcohol. Current frequent alcohol use did not vary by age group or by type of institution.

About one third (34.5%) of all students reported current episodic heavy drinking (consuming five or more drinks of alcohol on at least one occasion during the 30 days preceding the survey, Table 6). Current episodic heavy drinking occurred significantly more often among male students than among female students, among students aged 18 to 24 years of age than among older students, and among White students than among either Black or Hispanic students. However, the heavy episodic drinking was significantly more frequent among Hispanic students than Black students and among students in 4-year institutions than those in 2-year institutions.

TABLE 5

Percentages of Undergraduate College Students Aged ≥ 18 Years Who Used Tobacco, by Gender, Age Group, Race and Ethnicity, and Institution Type

Category	Cigarette use: Lifetime daily† %	CI	Cigarette use: Current‡ %	CI	Cigarette use: Current frequent§ %	CI	Current smokeless tobacco use‖ %	CI
Gender								
Female	33.4	2.9	28.2	2.3	17.7	2.0	0.3	0.3
Male	28.8	2.7	30.0	2.8	14.9	2.0	11.7	2.2
Age group								
18–24 years	22.6	1.9	28.8	2.3	13.5	1.4	6.8	1.4
≥ 25 years	47.0	3.2	28.7	3.0	21.3	2.8	3.0	0.9
Race and ethnicity								
White, non-Hispanic	35.5	2.5	31.8	2.2	19.0	1.7	6.8	1.3
Black, non-Hispanic	13.6	3.6	14.2	3.6	7.0	2.6	0.7	0.8
Hispanic	21.1	3.9	25.0	4.0	8.0	2.7	1.1	0.9
Institution type								
2-year	38.0	3.0	29.9	2.9	20.2	2.7	3.9	1.1
4-year	25.9	3.1	28.3	2.5	13.4	1.8	6.6	1.6
Total	31.3	2.2	29.0	1.9	16.5	1.6	5.4	1.0

Source: National College Health Risk Behavior Survey, 1995.
Note. Confidence interval, 95%.
†Ever smoked at least one cigarette every day for 30 days.
‡Smoked cigarettes on ≥ 1 of the 30 days preceding the survey.
§Smoked cigarettes on ≥ 20 of the 30 days preceding the survey.
‖Used chewing tobacco or snuff on ≥ 1 of the 30 days preceding the survey.

TABLE 6

Percentages of Undergraduate College Students Aged ≥ 18 Years Who Drank Alcohol or Used Marijuana or Cocaine, by Gender, Age Group, Race and Ethnicity, and Institution Type

Category	Current frequent alcohol use† %	CI	Current episodic heavy drinking‡ %	CI	Lifetime marijuana use§ %	CI	Current marijuana use‖ %	CI	Lifetime cocaine use¶ %	CI
Gender										
Female	2.2	0.6	27.0	2.6	47.7	3.0	11.6	1.7	14.1	2.1
Male	6.6	1.3	43.8	3.4	50.0	3.1	17.1	2.2	14.8	2.0
Age group										
18–24 years	3.4	0.7	41.5	3.0	42.5	2.5	17.3	1.9	6.6	1.1
≥ 25 years	5.4	1.5	22.0	2.7	59.6	3.3	8.3	1.6	28.1	2.7
Race and ethnicity										
White, non-Hispanic	4.7	0.9	39.5	3.2	52.5	3.0	15.5	1.8	16.0	2.0
Black, non-Hispanic	1.6	1.4	12.5	3.0	39.1	4.6	11.8	2.9	7.9	2.7
Hispanic	2.0	1.3	30.2	3.9	43.0	4.8	7.3	2.4	15.9	3.0
Institution type										
2-year	4.2	1.2	26.8	2.9	50.9	2.9	12.2	1.6	19.6	1.7
4-year	4.1	0.8	41.0	4.0	46.8	3.4	15.6	2.3	10.1	2.3
Total	4.2	0.7	34.5	2.5	48.7	2.3	14.0	1.4	14.4	1.5

Source: National College Health Risk Behavior Survey, 1995.
Note. Confidence interval, 95%.
†Drank alcohol on ≥ 20 of the 30 days preceding the survey.
‡Drank five or more drinks of alcohol on at least one occasion on ≥ 1 of the 30 days preceding the survey.
§Ever used marijuana.
‖Used marijuana one or more times during the 30 days preceding the survey.
¶Ever tried any form of cocaine, including powder, crack, or freebase.

TABLE 7
Percentages of Undergraduate College Students Aged ≥ 18 Years Who Engaged in Selected Sexual Behaviors, by Gender, Age Group, Race and Ethnicity, and Institution Type

Category	Ever had sexual intercourse		Six or more sex partners during lifetime		Condom use during last sexual intercourse†		Contraceptive use during last sexual intercourse†‡		Consistent condom use§	
	%	CI	%	CI	%	CI	%	CI	%	CI
Gender										
Female	87.8	1.6	31.8	2.6	25.8	2.4	80.1	2.1	25.1	2.5
Male	84.0	2.1	37.8	3.3	35.2	3.4	79.3	2.7	32.4	3.4
Age group										
18–24 years	79.5	1.7	25.7	2.1	37.7	2.5	86.0	1.8	36.5	2.6
≥ 25 years	97.8	1.0	49.6	3.4	18.5	2.9	71.1	2.5	17.1	2.9
Race and ethnicity										
White, non-Hispanic	86.7	1.7	34.8	2.6	27.5	2.7	81.0	2.0	25.2	2.6
Black, non-Hispanic	92.8	2.1	46.3	4.7	42.8	4.5	79.4	4.2	42.8	4.5
Hispanic	85.2	3.0	30.6	4.3	29.8	5.2	74.7	4.1	32.0	5.3
Institution type										
2-year	89.9	1.7	39.7	3.2	26.2	3.4	74.8	2.6	23.9	3.3
4-year	82.9	2.3	30.2	3.1	32.7	3.1	84.3	2.4	31.7	2.9
Total	86.1	1.5	34.5	2.2	29.6	2.2	79.8	1.8	27.9	2.1

Source: National College Health Risk Behavior Survey, 1995
Note. Confidence interval, 95%.
†Among the 68.2% of students who had sexual intercourse during the 3 months preceding the survey.
‡Birth control pills, condoms, withdrawal, or some other method.
§Among the 62.4% of students who had sexual intercourse during the 30 days preceding the survey, used condoms always or most of the time.

Nearly half of all students (48.7%) had used marijuana during their lifetimes, and 14.0% had used marijuana during the 30 days preceding the survey (Table 6). Lifetime marijuana use occurred significantly more often among students aged 25 years or more than among younger students, and among White students than among either Black or Hispanic students. Current marijuana use occurred significantly more often among male students than among female students, among students aged 18 to 24 years than among older students, and among White than Hispanic students. Lifetime and current marijuana use did not vary by institution type.

Among all students, 14.4% had used cocaine at some time during their lifetimes (Table 6). Lifetime cocaine use occurred significantly more often among students aged 25 years or older than among younger students, among White and Hispanic students than Black students, and among students in 2-year institutions than those in 4-year institutions. Lifetime cocaine use did not vary by gender.

Sexual Behaviors

Among all students, 86.1% reported they had ever had sexual intercourse, and 34.5% reported having six or more sex partners during their lifetimes (Table 7). Female students were significantly more likely than male students to have ever had sexual intercourse, whereas male students were significantly more likely than female students to have had six or more sexual partners during their lives. Students more than 25 years old were significantly more likely than younger students. Black students were significantly more likely than either White or Hispanic students, and students in 2-year institutions were significantly more likely than those in 4-year colleges to have ever had sexual intercourse and to have had six or more sex partners.

Among the 68.2% of students who had engaged in sexual intercourse during the 3 months preceding the survey (current sexual activity), 29.6% reported they used a condom during their last sexual intercourse, and 79.8% reported using some form of contraception on that occasion (Table 7). Male students were significantly more likely than female students, students aged 18 to 24 years were significantly more likely than older students, and Black students were significantly more likely than either White or Hispanic students to report they used a condom during their last sexual intercourse. Use of some form of contraception during the last sexual intercourse was reported significantly more often by students aged 18 to 24 years than by older students, by White students than by Hispanic students, and by students in 4-year institutions than by those in 2-year institutions.

Among the 62.4% of students who reported they engaged in sexual intercourse during the 30 days preceding the survey (recent sexual activity), 27.9% reported using a condom most of the time or always (consistent condom use, Table 7). Consistent condom use was reported significantly more often by male students than by female students, by students

aged 18 to 24 years than by older students, by Black students than by either White or Hispanic students, and by students enrolled in 4-year institutions than those in 2-year institutions.

Dietary Behaviors

One fifth (20.5%) of all students were overweight as determined by their body mass index (BMI). Overweight was defined as a BMI (weight kg/height[m]^2 ≥ 27.8 for men and ≥ 27.3 for women; see Table 8). Students 25 years of age or older were significantly more likely than younger students. Black students were significantly more likely than either White or Hispanic students, and students in 2-year institutions were significantly more likely than those in 4-year institutions to be overweight.

We asked students about how they had lost weight or had kept from gaining weight during the 30 days preceding the survey. Among all students, 30.8% had dieted, 53.6% had exercised, 2.6% had vomited or taken laxatives, and 4.3% had taken diet pills (Table 8). Female students were significantly more likely than male students to diet, exercise, vomit or take laxatives, and take diet pills.

Students 25 years of age or older were significantly more likely than younger students to diet to lose weight, and students in 2-year institutions were significantly more likely than those in 4-year institutions to diet and take diet pills. Methods of losing weight or keeping from gaining weight did not vary by race and ethnicity.

Among all students, 26.3% had met the National Cancer Institute (NCI) guidelines[10] by eating five or more servings of fruits and vegetables during the day preceding the survey (Table 9). Consumption of fruits and vegetables was significantly greater among Hispanic students than among White students. Fruit and vegetable consumption did not vary by gender, age group, or institution type.

Most students (78.2%) reported having eaten two or fewer servings of foods typically high in fat content (hamburgers, hot dogs, sausages, French fries, potato chips, cookies, doughnuts, pies, or cakes) during the day preceding the survey (Table 9). Female students were significantly more likely than male students, students aged 25 years or older were significantly more likely than younger students, and White and Hispanic students were significantly more likely than Black students to have eaten two or fewer servings of foods typically high in fat content. Consumption of the foods typically high in fat content did not vary by institution type.

Physical Activity

Among all students, 37.6% reported they had participated in vigorous physical activity ("that made you sweat and breathe hard") for at least 20 minutes on 3 or more of the 7 days preceding the survey, and 19.5% reported walking or bicycling (moderate physical activity) for at least 30 minutes at a time on 5 or more of the 7 days preceding the survey (Table 10). Participation in vigorous physical activity was significantly higher among male students than among

TABLE 8
Percentages of Undergraduate College Students Aged ≥ 18 Years Reporting Various Dietary Behaviors, by Gender, Age Group, Race and Ethnicity, and Institution Type

Category	Overweight†		Dieted to lose or keep from gaining weight‡		Exercised to lose or keep from gaining weight‡		Vomited or took laxatives to lose or keep from gaining weight‡		Took diet pills to lose or keep from gaining weight‡	
	%	CI	%	CI	%	CI	%	CI	%	CI
Gender										
Female	20.2	1.6	42.1	2.3	62.6	2.3	4.2	0.9	7.0	1.2
Male	20.9	2.0	16.7	1.9	42.3	2.7	0.6	0.5	1.1	0.5
Age group										
18–24 years	15.5	1.3	27.8	1.8	53.4	2.0	2.8	0.8	3.7	0.7
≥ 25 years	28.8	2.3	36.2	2.7	54.0	3.7	2.1	0.8	5.6	1.4
Race and ethnicity										
White, non-Hispanic	19.5	1.5	31.6	2.1	55.5	2.2	2.6	0.7	4.8	0.9
Black, non-Hispanic	33.5	4.1	28.3	4.3	48.5	5.0	2.0	1.5	3.4	1.2
Hispanic	20.8	4.0	30.5	4.4	53.7	4.2	3.7	1.7	4.3	1.6
Institution type										
2-year	24.8	2.0	34.3	2.9	52.1	2.7	2.7	0.8	5.9	1.2
4-year	16.9	1.7	27.9	2.1	54.8	2.6	2.4	0.7	3.1	0.7
Total	20.5	1.3	30.8	1.7	53.6	1.9	2.6	0.6	4.3	0.7

Source: National College Health Risk Behavior Survey, 1995.
Note. Confidence interval, 95%.
†Overweight is defined as a body mass index (BMI = weight [kg]/height [m]2 ≥ 27.8 for men and ≥ 27.3 for women. This classification was based on the 85th percentile value for BMI among persons aged 20–29 years in the Second National Health and Nutrition Examination Survey.
‡During the 30 days preceding the survey.

TABLE 9
Percentages of Undergraduate College Students Aged ≥ 18 Years Who Participated in Selected Dietary Behaviors, by Gender, Age Group, Race and Ethnicity, and Institution Type

Category	Ate ≥ 5 servings of fruits and vegetables*		Ate ≤ 2 servings of foods typically high in fat content†	
	%	CI	%	CI
Gender				
Female	25.0	2.0	84.9	1.6
Male	28.1	2.8	69.6	2.5
Age group				
18–24 years	25.0	2.2	75.6	1.7
≥ 25 years	28.5	3.2	82.3	2.7
Race and ethnicity				
White, non-Hispanic	24.6	2.3	79.1	1.9
Black, non-Hispanic	29.8	4.5	69.3	3.7
Hispanic	31.5	4.2	81.2	3.5
Institution type				
2-year	26.5	2.3	79.4	2.7
4-year	26.2	2.9	77.2	2.0
Total	26.3	1.9	78.2	1.6

Source: National College Health Risk Behavior Survey, 1995.
Note. Confidence interval, 95%.
*Ate ≥ 5 servings of fruit, fruit juice, green salad, and cooked vegetables during the day preceding the survey.
†Ate ≤ 2 servings of hamburgers, hot dogs, sausage, french fries, potato chips, cookies, doughnuts, pie, or cake during the day preceding the survey.

female students and for students aged 18 to 24 years than for older students. Participation in vigorous physical activity did not vary by race and ethnicity or institution type. Black students, however, engaged in moderate physical activity significantly more often than did White students. Moderate physical activity did not vary by gender, age group, or institution type.

DISCUSSION

These findings indicated that many college students in the United States engage in behaviors that place them at risk for serious health problems. Certain risks are particularly notable because of the large numbers of students affected. For example, alcohol use is a major public health problem because of the amount consumed and the situations in which it is frequently used.

Approximately one third of those surveyed reported consuming five or more drinks on a single occasion during the past month (34.5%), drinking and driving during this same period (27.4%), or drinking while boating or swimming during the past year (30.5%). Motor vehicle crashes are the leading cause of death among 15- to 24-year-olds,[17] and alcohol use contributes to almost half of all motor vehicle fatalities and all intentional injuries.[18]

Tobacco use, the single most preventable cause of death in the United States,[19] places a huge economic burden on the country.[20] The prevalence of current cigarette use among college students is high (29.0%). Although fewer students reported using tobacco frequently (16.5%), even lower levels of tobacco use may place students at risk for long-term addiction.[21]

College students often fail to protect themselves from exposure to sexually transmitted diseases (STDs), including HIV infection. Only one fourth of the students (27.9%) who reported having sexual intercourse during the 30 days preceding the survey reported consistent condom use. We do not know how many of the students who had engaged in sexual intercourse during the 30 days preceding the survey were involved in monogamous relationships with uninfected partners. However, only 22% of all college students reported that they are currently married, suggesting that many students may be placing themselves at an unnecessary risk of STD infection.

Although 86% of the students aged 18 to 24 years reported using some form of contraceptive during their last sexual intercourse, it is unclear how consistently students use contraceptives over time. The rates of unintended births among adolescent girls and women aged 15 to 24 years are higher than for any other age group. In 1988, nearly two thirds of births to 15- to 24-year-old females were unintended.[22]

This survey showed that one in five college students is overweight. Consistent with this finding are reports that almost three fourths (73.7%) of the responding students failed to meet NCI guidelines for daily fruit and vegetable

TABLE 10
Percentages of Undergraduate College Students Aged ≥ 18 Years Who Participated in Vigorous and Moderate Physical Activity, by Gender, Age Group, Race and Ethnicity, and Institution Type

Category	Participated in vigorous physical activity*		Participated in moderate physical activity†	
	%	CI	%	CI
Gender				
Female	33.0	2.3	19.3	1.9
Male	43.7	3.2	19.7	2.3
Age group				
18–24 years	41.8	2.5	20.2	1.9
≥ 25 years	30.6	2.7	18.1	2.5
Race and ethnicity				
White, non-Hispanic	38.7	2.5	18.2	1.9
Black, non-Hispanic	36.6	5.0	27.6	4.9
Hispanic	35.4	4.2	21.4	3.7
Institution type				
2-year	35.3	3.0	17.9	2.0
4-year	39.6	2.9	20.8	2.4
Total	37.6	2.1	19.5	1.6

Source: National College Health Risk Behavior Survey, 1995.
Note. Confidence interval, 95%.
*Activities that caused sweating and hard breathing for at least 20 minutes on ≥ 3 of the 7 days preceding the survey.
†Walked or bicycled for at least 30 minutes at a time on ≥ 5 of the 7 days preceding the survey.

consumption, 21.8% reported eating three or more high-fat foods during the day preceding the survey, and few students had engaged in adequate levels of vigorous (37.6%) or moderate (19.5%) physical activity. These findings are consistent with trends toward increasing overweight among American adults.[23]

Risk behaviors were more likely to occur among particular subgroups of students. The survey showed that male students are more likely than female students to report rarely or never wearing safety belts when driving a car, drinking alcohol and driving a car or other vehicle, drinking alcohol while boating or swimming, or carrying weapons or guns. Men were also more likely than the women to participate in physical fighting, current use of smokeless tobacco, current frequent alcohol use, current episodic heavy drinking, current marijuana use, having six or more sexual partners during their lifetimes, and eating more than two servings of foods typically high in fat content.

By contrast, female students were more likely than male students to report ever being forced to have sexual intercourse against their will, having ever had sexual intercourse, failing to use a condom at last sexual intercourse, and inconsistent condom use. The women were also more likely than the men to use vomiting or taking laxatives to lose weight or to keep from gaining weight, taking diet pills to lose weight or to keep from gaining weight, and not participating in vigorous physical activity.

Students aged 18 to 24 years were more likely than those aged 25 years or older to report physical fighting, thinking seriously about attempting suicide and making a suicide plan, currently using smokeless tobacco, engaging in current episodic heavy drinking, currently using marijuana, and eating more than two servings of foods typically high in fat content.

Students who were 25 years or older were more likely than those aged 18 to 24 years to report drinking alcohol while boating or swimming, ever being forced to have sexual intercourse against their will, lifetime daily cigarettes and frequent cigarette use, lifetime marijuana or cocaine use, ever having sexual intercourse, having six or more sex partners during their lifetimes, failing to use a condom or some other form of contraception at last sexual intercourse, inconsistently using condoms, being overweight, and not participating in vigorous physical activity.

White students were more likely than both Black and Hispanic students to report drinking alcohol while boating or swimming; lifetime daily, current, and current frequent cigarette use, current smokeless tobacco use, current frequent alcohol use, current episodic heavy drinking, and lifetime marijuana use. White students were also more likely than Black students to report drinking alcohol and driving a car or other vehicle, lifetime cocaine use, failing to use a condom at last sexual intercourse, inconsistent condom use, and not participating in moderate physical activity. White

students were more likely than Hispanic students to report rarely or never wearing safety belts when driving a car, currently using marijuana, and eating fewer than five servings of fruits and vegetables.

Black students were more likely than both White and Hispanic students to report ever having sexual intercourse, having six or more sex partners during their lives, being overweight, and eating more than two servings of typically high-fat foods. Black students were more likely than White students to report they had attempted suicide.

Hispanic students reported no risk behaviors more often than did both White and Black students. However, Hispanic students were more likely than White students to report failing to use some form of contraception at their last sexual intercourse. Hispanic students were more likely than Black students to report drinking alcohol and driving a car or other vehicle, drinking alcohol while boating or swimming, currently using cigarettes and engaging in current episodic heavy drinking, using cocaine during their lifetimes, failing to use a condom at last sexual intercourse, and using condoms inconsistently.

Students in 2-year institutions were more likely than students in 4-year institutions to report ever been forced to have sexual intercourse against their will, lifetime daily and current frequent cigarette use, lifetime cocaine use, ever having had sexual intercourse, having had six or more sex partners during their lives, failing to use some form of contraception at last sexual intercourse, inconsistent condom use, being overweight, and taking diet pills to lose or keep from gaining weight. In contrast, students in 4-year institutions were more likely than students in 2-year institutions to report engaging in current episodic heavy drinking.

Many college students' behaviors jeopardize their current and future health status. Colleges and universities offer an important avenue for providing health-related services and education to large numbers of young adults. Further analysis of NCHRBS data will provide additional insights into the interrelationships of risk behaviors and characteristics of students at risk. In addition, CDC may repeat this study to monitor progress in reducing critical health risk behaviors among youth.

REFERENCES

1. *Digest of Education Statistics, 1994*. Washington, DC: US Dept of Education, Office of Educational Research and Improvement, National Center for Education Statistics; 1994.

2. *Statistical Abstract of the United States, 1996*. 116th ed. Washington, DC: US Dept of Commerce, Bureau of the Census; 1996.

3. Kominski R, Adams A. *Educational Attainment in the United States: March 1993 and 1992*. Washington, DC: US Dept of Commerce, Bureau of the Census, 1994. Current Population Reports, P20n476.

4. Johnston LD, O'Malley PM, Bachman JG. *National Survey Results on Drug Use From the Monitoring the Future Study, 1975–1994*. Rockville, MD: US Dept of Health and Human Services, National Institute on Drug Abuse; 1996. Pub (NIH) 96–4027.

5. Wechsler H, Davenport A, Dowdall G, Moeykens B, Castillo S. Health and behavioral consequences of binge drinking in college. *J Am Med Assoc*. 1994;272(21):1672–1677.

6. Presley CA, Meilman PW, Lyerla R. *Alcohol and Drugs on American College Campuses: Use, Consequence, and Perceptions of the Campus Environment Vol. I: 1989–1991*. Carbondale, IL: Core Institute; 1993.

7. Wechsler H, Dowdall GW, Davenport A, Castillo S. Correlates of college student binge drinking. *Am J Public Health*. 1995;85(7):921–926.

8. Centers for Disease Control and Prevention. Temporal patterns of motor-vehicle-related fatalities associated with young drinking drivers, United States, 1983. *MMWR*. 1984;33(50):699–701.

9. Wechsler H, Isaac N. "Binge" drinkers at Massachusetts colleges: Prevalence, drinking styles, time trends, and associated problems. *JAMA*. 1992;267:2929–2931.

10. Hanson DJ, Engs RC. College students' drinking problems: A national study, 1982–1991. *Psychol Rep*. 1992;71:39–42.

11. Koss MP, Gidycz CA, Wisniewski N. The scope of rape: Incidence and prevalence of sexual aggression and victimization in a national sample of higher education students. *J Consult Clin Psychol*. 1987;55(2):162–170.

12. Kolbe LJ, Kann L, Collins JL. Overview of the Youth Risk Behavior Surveillance System. *Public Health Rep*. 1993;108 (suppl 1):2–10.

13. *Healthy People 2000: National Health Promotion and Disease Prevention Objectives: Mid-Course Review and 1995 Revisions*. Washington, DC: US Dept of Health and Human Services, Public Health Service, 1995. Pub (PHS)91-50212.

14. Brener ND, Collins JL, Kann L, Warren CW, Williams BI. Reliability of the Youth Risk Behavior Surveillance System Questionnaire. *Am J Epidemiol*. 1995;141(6):575–580.

15. Shah BV, Barnwell BC, Bieler GS. *SUDAAN User's Manual, Release 6.40*. Research Triangle Park, NC: Research Triangle Institute; 1995.

16. The Food Guide Pyramid. *Home and Garden Bulletin*. US Department of Agriculture, No 249. Washington, DC: US Govt Print Office; 1992.

17. Gardner P, Hudson BL. *Advance Report of Vital Mortality Statistics, 1993*. Hyattsville, MD: Centers for Disease Control and Prevention; 1992. Vital Stat Rep (7, suppl).

18. Perrine M, Peck R, Fell J. Epidemiologic perspectives on drunk driving. In: *Surgeon General's Workshop on Drunk Driving: Background Papers*. Washington, DC: US Dept of Health and Human Services; 1988:35–76.

19. *Reducing the Health Consequences of Smoking: 25 Years of Progress, a Report of the Surgeon General*. Washington, DC: US Govt Print Office; 1989. US Dept of Health and Human Services, Public Health Service. DHHS Pub (CDC)89-8411.

20. Hodgson TA. Cigarette smoking and lifetime medical expenditures. *Milbank Q*. 1992;70:81–125.

21. *Preventing Tobacco Use Among Young People: A Report of the Surgeon General*. Washington, DC: US Govt Print Office; 1994. US Dept of Health and Human Services. Pub (PHS)017-001-00491-0.

22. Piccinino LJ. Unintended pregnancy and childbearing. In: Wilcox LS, Marks JS, eds. *From Data to Action: CDC's Public Health Surveillance for Women, Infants, and Children*. Atlanta, GA: US Dept of Health and Human Services, Centers for Disease Control and Prevention, 1994:73–82.

23. Kuczmarski RJ, Flegal KM, Campbell SM, Johnson CL. Increasing prevalence of overweight among US adults. *JAMA*. 1994;272(3):205–211.

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Project Summary: Theory to Action: the New Jersey HIV Prevention Institute

The New Jersey Collegiate Consortium for Health in Education (NJCCHE),* in conjunction with the Office of Community Development and the New Jersey AIDS Education and Training Center, is currently developing a two-day training program focusing on applying the theoretical principles of the transtheoretical/stages of change model to HIV health education/risk reduction (HE/RR) and prevention case management.

The goal of the project is to increase capacity among 23 of New Jersey's community-based organizations (CBOs) to integrate the transtheoretical model of behavior change theory in to HIV prevention health education/risk reduction and prevention case management activities by: (1) introducing CBO staff to the practical application of the transtheoretical/stages of change model; (2) introducing staff to the Partners in Prevention Curriculum and relevant research on changing HIV risk behavior; and (3) providing technical assistance to CBOs applying this theory to their prevention activities.

Funding for this project has been provided by the Division of AIDS Prevention and Control (DOPAC) of the New Jersey State Department of Health and Senior Services. This training is specifically targeted for staff at the 23 CBOs currently funded by DOPAC to provide outreach, HE/RR, and prevention case management to targeted high risk women, youth, and men who have sex with men (MSMs). The Institute will be held at the end of February, 1998.

To assist in the planning, implementation and evaluation of the Institute, we are assembling a Planning Committee comprised of representatives from the targeted CBOs as well as other relevant New Jersey organizations. The Planning Committee will be responsible for working with the consultant to develop an agenda that meets the needs of CBOs in New Jersey, marketing the Institute, developing and implementing the post-evaluation measures, and overseeing the provision of technical assistance. We anticipate that the Planning Committee will communicate through monthly conference calls (no longer than an hour in duration) and two face-to-face meetings. The Planning Committee will meet from October, 1997 through the completion of the project in April, 1998.

For further information, please contact the project assistant, Johanna Malaret at 732/932-1219.

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* Founded in 1990, the New Jersey Collegiate Consortium is a statewide network comprised of almost 300 faculty, staff, and administrators from 56 colleges and universities, state agencies and community-based organizations. Our mission is to disseminate research findings and provide technical assistance for the design and evaluation of effective health education interventions. Consortium offices are located within the Rutgers Student Health Service at Rutgers University.

ASSESSMENT FORM
October 28, 1997

Please take a few minutes to complete and return the following evaluation.
Rate your answers to the following questions on a scale from 1 to 5 (1 = poor; 5 = excellent).

How would you rate the session on both relevance to your community and on the style of the presentation?

	Poor				Excellent	
A. Business Meeting						
relevant information	1	2	3	4	5	N/A
B. Strategies for Working with Administrators						
relevant information	1	2	3	4	5	N/A
style of presentation	1	2	3	4	5	N/A
C. Morning Small-Group Workshops						
Which workshop did you attend? _____						
relevant information	1	2	3	4	5	N/A
style of presentation	1	2	3	4	5	N/A
D. Community Forum: HIV/AIDS Policy & Needle Exchange						
relevant information	1	2	3	4	5	N/A
style of presentation	1	2	3	4	5	N/A

To what extent will you follow-up on suggestions and information provided in the presentations at today's forum:

	Not at all				A Great Deal	
1. Business Meeting	1	2	3	4	5	N/A
2. Strategies for Working with Administrators	1	2	3	4	5	N/A
3. Morning Workshops	1	2	3	4	5	N/A
4. HIV/AIDS Policy & Needle Exchange	1	2	3	4	5	N/A

What did you like most about today's meeting?

_____

What did you like least about today's meeting?

_____

Please return at the end of the meeting
or
fax to: Deborah Lewis
732/932-1223

Thank you.

Project Summary:
The College Sexual Health Program Manual

Founded in 1990 at Rutgers University, the mission of the *New Jersey Collegiate Consortium for Health in Education* is to increase and enhance higher education's response to HIV/AIDS and other important college health problems. A recent survey of Consortium members identified a lack of *tangible* materials and demonstrations of effective prevention programs and *applicable* evaluations measures as a major barrier to their work. Staff and faculty, who have the interest but often not the time to create their own programs, would benefit from seeing and adapting others' work. Many of the current prevention programs were developed for high school students and slightly modified for the college population. Few programs address sub-populations of students, such as athletes, fraternity and sorority students, and adult students who are themselves parents. Even fewer college sexual health programs are adequately evaluated.

In response to this need for diffusion of innovation, the Consortium will be developing a college-specific manual and a series of training sessions devoted to the implementation and evaluation of effective interventions on topics related to sexual health, such as the prevention of pregnancy and sexually transmitted infections and the use of alcohol and drugs in the context of sexual relationships.

We anticipate this project will be completed in three phases:

(1) Development of Advisory Board and Research The role of the Board is to assist in identifying and selecting effective programs and evaluation measures to be included in the manual, planning the training sessions, and identifying appropriate trainers. Research efforts will consist of a national search to identify effective programs and evaluation measures, and will include reviewing published journal materials, culling information available on the Internet, attending local and national conferences, and contacting colleagues through the American College Health Association and other public health and education organizations. We anticipate the research will be complete by November 1997.

(2) Development of Manual and Planning of Training Sessions The actual compilation of the manual and the planning of the training sessions will begin in December 1997. The Consortium coordinator, project director and Advisory Board will determine which programs and evaluation measures to include in the manual. The text and graphics for the manual will be developed with the support of a graphic artist. We anticipate that the manual will be ready for the printer by April, 1998.

(3) Distribution of Manual and Implementation of Training Sessions Beginning in May, the manual will be widely available to colleges and universities and community-based organizations that conduct HIV prevention. Two training programs, to be offered free-of-charge, will be held in New Jersey.

This project is funded by a grant from the Robert Wood Johnson Foundation with additional support from the Department of Health Education, part of the Rutgers Student Health Services at Rutgers University. Further information, please contact the Project Assistant, Natasha Daniel, 732/932-1219 or ndaniel@eden.rutgers.edu.

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Role of Needle Exchange Programs in AIDS Prevention

David Vlahov, Ph.D.

Introduction

Injection drug users (IDUs) are at high risk for human immunodeficiency virus (HIV) and other blood-borne diseases (Esteban, 1993; Levine et al., 1995; Des Jarlais et al., 1992). In the United States, IDUs account for nearly one-third of the cases of AIDS; either directly or indirectly (i.e., heterosexual and perinatal cases of AIDS where the source of infection was an IDU) (Alcabes & Friedland, 1995). IDUs also account for a substantial proportion of cases of hepatitis B (HBV) and C (HCV) virus infections (Levine, Vlahov, & Nelson, 1994). The primary mode of transmission for HIV among IDUs is parenteral, namely through direct "needle sharing" or multiperson use of syringes (Nicolosi et al., 1992; Selwyn et al., 1987).

Despite high levels of knowledge about risk, multiperson use of needles and syringes is due primarily to fear of arrest and incarceration for violation of drug paraphernalia laws and ordinances that prohibit manufacture, sale, distribution, or possession of equipment and materials intended to be used with narcotics (Koester, 1994; Mandel et al., 1994). Under these laws, it is possible to obtain hypodermic syringes and needles with a medical prescription. In 45 states and the District Columbia, such laws are in effect and severely limit the availability of drug paraphernalia. In 1986, the Federal Government enacted a statute to further limit the availability of drug-related equipment.

Needle exchange programs were originally set up to reduce blood-borne infections among IDUs. These programs have become an integral component of comprehensive HIV prevention programs in many countries (e.g., Amsterdam). More than 100 needle exchange programs have been established in the United Kingdom and Australia (Stimson et al., 1988).

Needle exchange programs in the United States date back to 1986, and it is estimated that in 1996 there are approximately 100 needle exchange programs in North America (David Purchase, North American Syringe Exchange Network, personal communication). In part, because of the ban on the use of Federal funds for the operation of needle exchange, it has been difficult to evaluate the efficacy of these programs. This review will present data from the studies that have evaluated the role of needle exchange programs in AIDS prevention.

Conclusions

The aggregated results support the positive benefit of needle exchange programs and do not support negative outcomes from needle exchange programs.

- When legal restrictions on both purchase and possession of syringes are removed, IDUs will change their syringe-sharing behaviors in ways that can reduce HIV transmission.

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NIH Consensus Development Conference, 1997

- Needle exchange programs do not result in increased drug use among participants or the recruitment of first-time drug users.

Overview of Needle Exchange Studies

Evidence for the efficacy of needle exchange programs comes from three sources: (1) studies originally focused on the effectiveness of needle exchange programs in non-HIV blood-borne infections; (2) mathematical modeling of data on needle exchange on HIV seroincidence; and (3) studies that examine the positive and negative impact of needle exchange programs on HIV/AIDS.

Needle Exchange Programs with Blood-Borne Diseases

In 1984, Amsterdam established a needle exchange program that was originally designed to limit transmission of the HBV (Bunning, 1991). Case-control studies have provided powerful data on the positive effect of needle exchange programs on reduction of two blood-borne viral infections (HBV and HCV). For example, a case-control study in Tacoma, Washington, showed that a sixfold increase in HBV and a sevenfold increase in HCV infections in IDUs were associated with nonuse of the needle exchange program (Hagan et al., 1994).

Mathematical Modeling of Needle Exchange on HIV Seroincidence

The first federally funded study of needle exchange was an evaluation of the New Haven needle exchange program, which is legally operated by the New Haven Health Department. Rather than relying on self-report of reduced risky injection drug use, this study utilized mathematical and statistical modeling, using data from a syringe tracking and testing system. Incidence of HIV infection among needle exchange participants was estimated to have decreased by 33 percent as a result of the needle exchange program (Kaplan & Heimer, 1995). Because demographic and behavioral data were collected at the time of recruitment, it was possible to relate individual client characteristics (e.g., age, injection frequency, frequency of needle sharing) to spread of HIV. For example, the mean age (approximately 33–34 years old) and duration of infection (men = 10 years; women = 5–10 years) did not change during this study. Women tended to remain stable at 20 percent of participants, but the percentage of whites participating increased. In the beginning, 83 percent of the participants were nonwhite, and the infection rate in the syringes was 67.5 percent; after 7 months those figures had changed to 67 percent nonwhite and the infection rate in the syringes to 43 percent.

Positive and Negative Impact of Needle Exchange Programs

Needle exchange programs have been established to increase the availability of sterile injection equipment and to remove any contaminated needles from circulation. The following positive outcomes have been used to evaluate the efficacy of needle exchange programs: (1) reduction in high-risk behavior, (2) reduction in HIV infection rates, and (3) increased referral to drug treatment programs.

Needle exchange programs are not universally praised because of concern about negative outcomes. There is a concern that publicly supported needle exchange programs will condone drug abuse and undercut efforts to get IDUs into drug treatment programs and off drugs. The following are possible

negative outcomes: (1) possible increase in drug use: (2) increase in first-time drug users; and (3) increase in inappropriate disposal of contaminated syringes.

A series of Government-commissioned reports have reviewed the data on positive and negative outcomes of needle exchange programs. The major reports are from the National Commission on AIDS (National Commission on Acquired Immune Deficiency Syndrome, 1991); U.S. Government Accounting Office (U. S. General Accounting Office, 1993); the Centers for Disease Control/University of California (Lurie et al., 1993); and the National Academy of Sciences (Normand, Vlahov, & Moses, 1995). The latter two reports will be used in this review.

Reduction in High-Risk Behavior

Although none of the studies on needle exchange have been randomized, controlled trials, research results from evaluations have shown favorable reductions in risky drug-using behavior. Lurie and colleagues (1993) reviewed the 16 studies that have been conducted: 14 evaluated the impact of needle exchange programs on the sharing of syringes—10 demonstrated decreases in sharing and 4 showed no change.

Watters and colleagues (1994) examined risk behaviors in IDUs over a 6½-year period in 13 cross-sectional surveys between 1986 and 1992. Among IDUs who reported sharing needles, the proportion of those reporting ever having used bleach increased from 3 percent in 1986 to 89 percent by 1988 and remained stable through 1992. Sexually active heterosexual male injectors also reported significant changes in condom use (i.e., IDUs reported using a condom 4.5 percent of the time in 1986, compared with 31 percent of the time in 1992).

In 1984, Des Jarlais and colleagues determined that 65 percent of IDUs reported having used shooting galleries in the preceding 2 years; in the 1990–1992 period, only 3 percent reported injecting in shooting galleries in the preceding 6 months.

Reduction in HIV Infection Rates

Data on long-term impact of needle exchange programs are sparse and have limited power. In five cities (Glasgow, Lund, Sydney, Tacoma, and Toronto), aggressive multicomponent AIDS prevention programs, including needle exchange, were vigorously implemented. There is well-documented evidence that the seroprevalence remained less than 5 percent for at least 6 years (Des Jarlais et al., 1992).

An analysis from a New York City needle exchange program concluded that there is a protective effect of needle exchange programs on HIV seroincidence (Des Jarlais et al., 1996). Watters and colleagues (1994) conducted a study to evaluate the effects of an all-volunteer syringe exchange program on risky injection drug use. Both studies reported a stabilization of HIV seroprevalence rates that coincided with increased reporting of risk-reduction activities.

Hagan and colleagues (1994) used a cross-sectional study of needle exchange participants that had a 2-percent HIV prevalence rate, which compared favorably with the 8-percent HIV prevalence rate among nonparticipants in the needle exchange program.

There is a discrepancy in seroincidence studies between needle exchange programs in the United States and Canada (Bruneau et al., 1996). In the U.S. studies, the comparison groups tend to be IDUs without access to sterile needles, whereas in the Canadian studies the comparison groups tend to include IDUs with access to needles from pharmacies. If the subset that is denied access are indeed riskier IDUs, and these individuals go to needle exchange programs, the result is a selection bias for U.S. research.

Increased Referral to Drug Treatment

Lurie and colleagues (1993) noted that 17 of 18 U.S. and Canadian programs provide referrals to drug treatment programs. Only six programs collect data on whether those referred actually enter treatment. Twenty-five percent of the participants in the New Haven needle exchange program requested drug treatment (Normand et al., 1995). It should be noted, however, that the effectiveness of referral to drug treatment programs is severely limited in the United States because of the few treatment placements available (Normand et al., 1995).

Increase in Drug Use

Lurie and colleagues (1993) identified eight studies that presented data on reported injection frequency. Three studies found reductions in injection drug use associated with needle exchange programs, four found mixed or no effects, and only one found an increase in injection compared with controls. This last one also found reduced needle sharing reported among needle exchange participants.

Increase in First-Time Injection Drug Users

Lurie and colleagues (1993) reviewed studies to determine when needle exchange programs would lead non-IDUs to become IDUs. The report indicated that the median age of participants in the programs was 33–41 years and the median duration of substance abuse was 7–20 years; this suggests that substance abuse predates participation in the needle exchange programs. A review of the experience in Amsterdam supported the fact that the programs did not lead to recruitment of drug abusers; the average age of drug users increased over time and the number of drug users under age 22 decreased from 14 percent in 1983 to 3 percent in 1988 (Normand et al., 1995).

Increase in Inappropriate Disposal of Contaminated Syringes

The report by Lurie and colleagues (1993) concluded that needle exchange programs do not increase the total number of improperly discarded syringes, and a surveillance project in Portland, Oregon, actually noted a decrease in the prevalence of discarded syringes near the program.

Future Directions

Future research in needle exchange should be focused in the following areas:

- Studies to clarify the impact of needle exchange programs on HIV seroincidence, especially when needles are available through pharmacies, should be conducted.
- Studies should be supported to identify the specific components of needle exchange programs that optimize the effectiveness of these programs.
- Research is needed to examine the interaction between needle exchange programs and risky sexual behavior, especially among hard-to-reach populations (e.g., youth and women).
- Because social networks are central to AIDS prevention efforts with IDUs, their role in the effectiveness of needle exchange programs needs to be studied.
- Epidemiological studies that monitor the long-term impact of needle exchange programs are needed.
- Methodological issues in needle exchange programs need to be carefully assessed. Although a randomized controlled trial might provide a definitive answer about the positive and negative outcomes of needle exchange programs, true random assignment may never be achieved. Therefore, sophisticated observational epidemiological designs urgently need to be supported on such a scale to answer important research questions about the efficacy of needle exchange programs (e.g., prospective and case-control methods).

References

Alcabes, P., & Friedland, G. (1995). Injection drug use and human immunodeficiency virus infection. *Clin Infect Dis, 20*. 1467-1479.

Alter, M. (1993). The detection, transmission, and outcome of hepatitis C virus infection. *Infect Agents Dis. 2*, 155-166.

Bruneau, J., Lamothe, F. E., Lachance, N., et al. (1996). Increased HIV seroprevalence and seroincidence associated with participation in needle exchange program: Unexpected findings from Saint-Luc Cohort Study in Montreal. Presented at the XI International Conference on AIDS, Vancouver, Canada, July 9, 1996.

Bunning, B. C. (1991). Effects of Amsterdam needle and syringe exchange. *Int J Addict. 26*, 1303-1311.

Des Jarlais, D. C. (1996). HIV incidence among injecting drug users in New York City Syringe-Exchange Programmes. *Lancet, 348*, 987-991.

Des Jarlais, D. C., Friedman, S. R., Choopanya, K., Vanichseni, S., Ward, T. P. (1992). International epidemiology of HIV and AIDS among injecting drug users. *AIDS, 6*, 1053-1068.

Esteban, R. (1993). Epidemiology of hepatitis C virus infection. *J Hepatol, 17*(S-3), S67-S71.

¶1512 Legal Strategies Used in Operating Syringe Exchange Programs

The following article appeared at pages 1161-1166 of the August 1996 issue (Vol. 86, No. 8) of the American Journal of Public Health, *which is published by the American Public Health Association (APHA). It is reprinted here with APHA permission. For further information, contact the author, Scott Burris, J.D., Temple Law School, 1719 N. Broad Street, Philadelphia, PA 19122.*

The Legal Strategies Used in Operating Syringe Exchange Programs in the United States

Scott Burris, JD, David Finucane, JD, Heather Gallagher, JD, and Joseph Grace, JD

Introduction

The evidence that syringe exchange can reduce the rate of human immunodeficiency virus (HIV) transmission among intravenous drug users continues to grow.[1-5] However, the effective use of this strategy has been hindered by uncertainty about its legal status under laws that prohibit the distribution of drug paraphernalia or that require a prescription for the sale of a needle.[6] Such uncertainty may deter government health agencies and private parties from conducting syringe exchange, can deter government agencies and foundations from funding syringe exchange, and can prevent publicly funded syringe exchanges from getting liability insurance, charitable tax status, and other items necessary for effective operation. Consequently, developing a workable legal foundation for a syringe exchange is an important step in establishing an effective program.

We investigated the legal basis for syringe exchange programs operating in the United States. Our data consisted of statutes, court decisions, published studies of such programs, news stories, and interviews with program personnel.

The Legal Environment

Forty-six states and the District of Columbia have laws restricting the possession or delivery of drug paraphernalia.[5] Only four states—Alaska, Iowa, North Dakota, and South Carolina—are without a form of paraphernalia law.[5] Most of these laws are based on the Model Drug Paraphernalia Act, which was promulgated by the US Drug Enforcement Administration in 1979.[7,8] The laws criminalize the manufacture, possession, or distribution of drug paraphernalia. The phrase *drug paraphernalia* is broadly defined in the statutes to cover any equipment, product, or material of any sort, including hypodermic needles and syringes, intended to be used to introduce illicit or controlled substances into the body.[5] As a consequence of this broad definition, even items such as bleach and cotton swabs could be deemed drug paraphernalia, depending entirely on the intent of the user or distributor. As one judge put it, "Criminal intent is what distinguishes the paper clip which holds the pages of this memorandum of opinion from an identical clip which is used to hold a marijuana cigarette."[9]

A parallel federal statute prohibits the importation of drug paraphernalia or their transportation in interstate commerce.[10] Many syringe exchange programs purchase syringes and bleach kits by mail order and so could, at least in theory, be subject to prosecution by federal authorities.[11] Although this act has not been used to prosecute anyone involved with syringe exchange and is not likely to be, it exemplifies the potential of broadly written drug laws to chill the expansion of syringe exchange.[12]

In several of the highest areas of HIV prevalence, syringe exchange programs are also subject to state prescription laws. A prescription is required for the purchase or possession of a hypodermic needle or syringe in the District of Columbia, California, Delaware, Illinois, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, and

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Editor's Note. See related annotation by Glantz and Mariner (p 1077) in this issue.

TABLE 1—Legal Bases for Operating Syringe Exchange Programs

No Clear Legal Basis	Formal Legal Authorization under State Drug Law	Authorization under Local Interpretation of State Drug or Public Health Law
9 syringe exchange programs	Fairbanks, Alaska	Alameda Co, Calif (2)
	Bridgeport, Conn	Los Angeles, Calif
	Hartford, Conn	Marin Co, Calif
	New Haven, Conn	Salinas, Calif
	Storrs, Conn	San Francisco, Calif
	Willimantic, Conn	Santa Clara Co, Calif
	District of Columbia	West Hollywood, Calif
	Honolulu, Hawaii (3)	Boulder, Colo
	Baltimore, Md	Chicago, Ill
	Boston, Mass	Hennepin Co, Minn
	Cambridge, Mass	Cleveland, Ohio
	Buffalo, NY (2)	Philadelphia, Pa
	New York, NY (6)	
	Portland, Ore	
	Rhode Island	
	Seattle-King Co., Wash	
	Spokane, Wash	
	Tacoma, Wash	
	Yakima, Wash	

TABLE 2—Completed Prosecutions of Syringe Exchange Workers

Acquittals	Convictions
Commonwealth v Parker, Mass (1990)	*Commonwealth v Parker*, Mass (1990)
People v Tranchina, Calif (1991)	*Commonwealth v Lano*, Mass (1991)
People v Bordowitz, NY (1991)	
People v Cezar, NY (1991)	
State v Sorge, NJ (1991)	
Commonwealth v Luger, Mass (1991)	
People v Halem, Calif (1993)	
People v Stuen-Parker, Ill (1994)	
People v Halem, Calif (1995)	

Rhode Island.[5] Connecticut's law forbids the distribution or sale of more than 10 needles and syringes without a prescription.[13] Prescription laws do not require proof of criminal intent; mere possession of a hypodermic needle or syringe without a prescription is enough for a conviction. Furthermore, the prescription usually must be written by a physician for a "legitimate medical purpose."[6] In a few other states, more general laws limit the possession or dispensing of needles without requiring prescriptions.[14–16]

All states have laws, framed in more or less broad terms, empowering health officials at the state and local level to take necessary action to prevent the transmission of disease; such authority includes extraordinary powers to respond to emergencies.[17] For example, California state law empowers municipalities to declare a public health emergency and "promulgate orders and regulations necessary to provide for the protection of life and property."[18] The exercise of these powers has traditionally been reviewed with considerable deference by courts, and health measures aimed at controlling communicable disease are rarely overturned.[19] In contrast to the limitations imposed by paraphernalia laws, public health statutes are a reservoir of broad authority to develop programs, including syringe exchange, to control HIV.

Findings

We collected all legislation, regulations, and court decisions concerning syringe exchange programs. These programs were identified from published lists,[5,12] newspaper stories, legal materials, and references from other such programs. Programs whose claim to legality was not discernible from the legal materials or other published sources were surveyed by telephone and, if unavailable, by letter. Fifty-two programs were included in the study. The legal status of three could not be determined.

Proponents of syringe exchange have followed three principal avenues in relation to the law (Table 1). Nine programs in our study operate without a clear legal basis, their members being subject, in theory, to prosecution under paraphernalia or prescription laws. Twenty-seven syringe exchanges have been directly or indirectly authorized by amendments to or judicial interpretations of drug laws, have been exempted from those laws by state administrative action, or operate in one of the states that does not have such drug laws. Thirteen programs operate under claims of legality based on local interpretations of state public health and/or drug law that have not been reviewed by a court. In all cases, these different approaches have evolved in response to local political, regulatory, and community dynamics.

No Claim to Legality

The question of "legality" of syringe exchange is complicated, not least in the case of syringe exchanges operating without a clear legal basis. Programs with no claim to legality are able to operate because local law enforcement officials exercise their discretion not to arrest or prosecute program personnel. While the motivations of these officials are beyond the scope of our study, several factors alone or in combination may provide some explanation. First, law enforcement officials or political leaders with control over law enforcement activities may tacitly support syringe exchange despite an unwillingness to act openly to develop a legal basis. Several programs in our survey provided anecdotal support for this view. Second, law enforcement officials may not regard syringe exchange as a sufficiently important activity to justify the diversion of resources required for prosecution. Finally, prosecutors may doubt their ability to secure convictions. We identified 11 cases in which exchangers were tried for drug paraphernalia or needle prescription violations between 1990 and March 1995 (Table 2). In all but two cases, defendants escaped conviction through either jury

nullification or the successful use of the necessity defense. "Jury nullification" refers to the ability of a jury to vote for acquittal even though the formal elements of the crime would appear to have been proven and no recognized defense was offered. The necessity defense allows a judge or jury to acquit a syringe exchanger who shows that his or her illegal act was reasonably intended to avert a greater harm—in this instance, the transmission of HIV through contaminated injection equipment.[12,20-22]

The cases that have gone to trial involved activists who were at least partially motivated by a desire to challenge the law. We did not attempt to document every instance in which syringe exchangers were arrested. Other studies suggest that the number of such cases is not substantially greater than the number of completed prosecutions and that many of the same defendants are involved, notably Jon Parker.[12] Being arrested and booked can deter program workers from engaging in syringe exchange even if no charges are filed, or if charges are dismissed prior to trial or disposed of with a plea bargain. Nevertheless, to the extent that program workers are not actually subject to arrest in a community or, even if arrested, cannot be convicted, the "illegality" of their behavior is largely a formality, although one with certain negative consequences for the growth of syringe exchange programs.

State Legislative, Judicial, or Administrative Action

Twenty-seven syringe exchange programs have established a legal basis through formal action to clarify their status under state drug law. Syringe exchange has been statutorily authorized in Hawaii,[23] Connecticut,[24] Massachusetts,[25] the District of Columbia,[26] Maryland,[27] and Rhode Island.[28] Two other states have removed drug law barriers to syringe exchange without formally authorizing exchange programs: Oregon amended its drug law to exempt needles and syringes, thereby eliminating the barriers to exchange without specifically mentioning syringe exchange programs,[29] and Maine repealed its needle prescription law.[30] Legislation is currently pending in 6 additional states (Table 3).

In New York, drug statutes authorize the state commissioner of health to waive needle prescription laws.[31] Using this power, the commissioner has promulgated regulations granting a waiver for state-approved syringe exchanges.[32] Administrative agencies in many states have similar authority.[33-35]

Finally, in two instances, local officials went to court seeking "declaratory judgments" that they had the authority to conduct syringe exchange. Through this device, a party seeking a clarification of law for a specific purpose may obtain a ruling without waiting to be prosecuted for a violation. In Washington State, Spokane County health officials, disputing an opinion of the state attorney general challenging their authority,[36] had their interpretation validated by the state supreme court.[37] In Sacramento, Calif, however, a trial court held in early 1995 that syringe exchange was prohibited by the state's drug paraphernalia law and

TABLE 3—Active Pending Legislation Regarding Syringe Exchange Programs (SEPs), May 1996

Citation	Subject Matter	Status
California Senate Bill 1976	Authorizes one or more local pilot SEPs	In committee April 24, 1996
Hawaii House Bill 2924	Abolishes SEP	In committee January 29, 1996
Illinois Senate Bill 1366	Requires health dept to establish demonstration SEPs in 3 counties with highest total AIDS cases among intravenous drug users	In committee February 6, 1996
Illinois Senate Bill 1368	Amends prescription law to allow sale and possession of ≤10 syringes without a prescription	In committee February 6, 1996
Illinois House Bill 2873	Requires SEPs in counties with a rate of AIDS greater than 32/100 000 and provides immunity from paraphernalia laws for participants and staff	In committee February 6, 1996
Illinois House Bill 3266	Same as Senate Bill 1368	In committee February 8, 1996
New Jersey Senate Bill 92	Amends prescription law to allow sale of syringes at pharmacies in quantities of ≤10 and paraphernalia law to allow possession of ≤10 syringes not contaminated with illegal drugs	Introduced January 11, 1996
New Jersey Senate Bill 417	Requires Dept of Motor Vehicles be notified of licensed drivers participating in any SEP	In committee January 18, 1996
New Jersey Senate Bill 463	Establishes 3-year demonstration SEP, with immunity from paraphernalia laws for staff and participants	In committee January 18, 1996
New Mexico Senate Bill 214	Appropriates $168 000 to fund an SEP	Reported favorably with amendments from committee February 16, 1996
New York Senate Bill 1998	Decriminalizes sale, possession, and use of syringes in SEPs, health care facilities, and pharmacies	In committee January 3, 1996
New York Assembly Bill 2810	Same as Senate Bill 1998	In committee January 3, 1996

that the county supervisors lacked the authority to override the law.[38]

Local Authority

Our study found that 11 local governments had rejected the common assumption that drug laws govern the legal analysis of syringe exchange programs, choosing instead to analyze these programs under the rubric of public health law. Philadelphia,[39] Cleveland,[40] Los Angeles,[41] San Francisco,[42] and six other counties or cities in California conduct syringe exchange based on their public health powers under state and local law.[43–46] Government officials and their attorneys in these municipalities have taken the position that drug laws were not intended to apply to bona fide disease control measures and so do not prohibit syringe exchange programs established pursuant to emergency health powers.

The procedure for authorizing needle exchange in these localities has been similar. Nearly all counties and major municipalities in the United States have been given the authority under state health codes, local government law, or home rule charters to respond to health emergencies. The power may be vested in a city or county council or board of health.[18,47,48] The local authorization of a syringe exchange program begins with a formal resolution declaring a health emergency, describing the local spread of HIV through drug use, and providing evidence in support of syringe exchange as an effective preventive measure. The declaration of emergency vests the local health department, mayor, or other executive authority with extraordinary power to respond as the necessity requires. This power is used to approve, operate, and/or fund a syringe exchange program. The emergency is periodically redeclared, as health statutes ordinarily limit the emergency to a period of weeks.[49] (In Colorado, the Boulder County health department has proceeded on its own authority without a declaration of emergency or other special step.)

In two cities, local authorities have operated syringe exchanges in reliance on their attorneys' interpretation of general language in state drug laws that arguably creates an exception for syringe exchange programs. The Chicago syringe exchange relies on an exemption in state needle-prescription law for "chemical, clinical, pharmaceutical or other scientific research,"[50] a term the local states' attorney has opined includes syringe exchanges. Similarly, Hennepin County, Minnesota, funds a syringe exchange program under an interpretation of an exemption in the state's needle possession law for "persons engaged in bona fide research or education."[16,51] Under the county's interpretation, the exemption also applies to the state's drug paraphernalia law because conduct that is legal under a more specific rule cannot be illegal under a general one.

The data presented here are subject to an important limitation. The number of syringe exchange programs increased rapidly during the research period; the North American Syringe Exchange Network now has at least 68 member programs.[52] For this reason, the number of programs operating without a legal basis is certainly larger than that reported here. Our findings on programs operating under local authorization, which are based on media reports as well as on survey data, are less subject to this limitation. Our findings on state-level legal authorization are current as of October 1995. Table 3 was compiled in May 1996 and includes only bills active in 1996.

Discussion

The literature on syringe exchange has generally assumed that programs not explicitly approved under prescription or paraphernalia laws, or located in jurisdictions where no such laws apply, are illegal.[5,52,53] Yet apart from those states that have enacted new legislation addressing syringe exchange, most places have no statutory or decisional law explicitly discussing the legality of the practice. While most states have drug paraphernalia or prescription laws that may reasonably be interpreted to prohibit syringe exchange, these laws have rarely been enforced, and most people charged under them have escaped conviction. Moreover, evidence of the efficacy of syringe exchange has continued to grow. Under these circumstances, local officials and their legal advisors in 13 cities and counties have found it equally reasonable to conclude that syringe exchange, conducted under public health auspices, is authorized under public health law and not prohibited by drug law.

It is appropriate, indeed inevitable, for elected officials and their legal counsel to act on reasonable interpretations of unsettled law. Competing claims of the law governing syringe exchange programs can ultimately be resolved only by judicial or legislative action. On two occasions identified in our study, local officials sought immediate judicial review of their legal claims. In most cases, however, local officials have simply proceeded in the absence of a ruling contrary to their position. No arrests have been made, suits filed, or legislation enacted to challenge their legal position. The experience of locally authorized syringe exchanges thus shows that amending drug paraphernalia and prescription laws is not the only viable option for program proponents and may in some cases be a poorer approach than either of the alternatives, each of which has its own advantages and disadvantages.

Simply operating an exchange certainly requires at least some political work in the site community to gain acquiescence, if not support, from neighbors. To avoid police intrusion, it also requires some negotiation with local law enforcement officials. Yet it remains the cheapest alternative for the start-up syringe exchange. It entails no effort to lobby an indifferent or hostile legislator in an often remote state capital; it requires no statewide consensus but only an immediate and local one; and it affords local authorities the option of providing tacit, but politically deniable, support for syringe exchange. It may also allow a program to operate while long-term efforts to change state law proceed.

The disadvantages of operating without a clear legal basis are significant. Arrest and conviction on criminal charges cannot be ruled out. The defense of necessity is not always accepted. For example, a Massachusetts court reasoned that defendants charged with violating statutes that restrict possession and distribution of hypodermic needles were not entitled to a necessity defense because the prevention of possible future harm did not excuse a current systematic violation of the law in anticipation of an eventual overall benefit to the public.[22] Similarly, the claim of urgent necessity may be less convincing when raised by repeat players.[54] In addition to legal jeopardy, programs without a claim of legality may not be allowed to incorporate or claim tax exempt status, both of which advantages are theoretically unavailable to criminal enterprises. Finally, although the American Foundation for AIDS Research and other philanthropies have funded syringe exchanges that lack a clear legal basis, concerns about the issue presumably may make fundraising over the long term more difficult in many instances.

The advantages of explicit authorization under state drug laws are plain. It utterly puts to rest any questions about the legality of syringe exchange and

constitutes an endorsement of the intervention. The negative aspects, however, are also significant. Getting a bill passed by the state legislature is difficult, requiring what may be the considerable energy and determination of a cohesive group of legislators, state health administrators, and others in the executive branch, as well as of advocates.[55] Even a small band of determined opponents may have the power to frustrate the legislation.

Even if legislation passes, its form may create problems for exchanges. All of the exchange programs approved in this manner have been subject to more or less strict regulations. Several have been denominated as experimental[25,27,28] and have been limited in the number or location of exchange sites.[26,27] Connecticut, the District of Columbia, Hawaii, Maryland, and Massachusetts require the programs to maintain data on the number of needles exchanged as well as on the program's success in reducing HIV transmission among intravenous drug users. These requirements, while generally consistent with the proper running of an exchange program, may not be appropriate in every case and may significantly raise the cost of operating an exchange. Certainly, inflexible restrictions such as a limited number of needles[24] or a one-for-one exchange[27] can undermine the effective operation of a particular exchange. Thus, in several places where some legal exchange is authorized, such as Baltimore and Washington State, we found that other syringe exchanges continued to operate without claims of legal basis.

The alternative of relying on an executive agency to amend regulations under drug laws, assuming it has the authority to do so, may not be more viable. It is difficult for a state health commissioner to act unilaterally in a state where the legislature or governor does not support syringe exchange, and, in fact, this route has been followed only in New York. Seeking court approval of syringe exchange through a declaratory judgment action is legally conservative in that the agency can get a formal ruling on the law without risking a criminal prosecution. It is also time-consuming and may, as in Sacramento, precipitate a ruling that syringe exchange is illegal. Once an agency has been party to a case deciding that needle exchange violates drug law, it will no longer be able to reasonably argue a contrary interpretation of the law.

Proceeding on the basis of a local authorization, without prior judicial or legislative approval, has a number of distinct advantages. It has often proven easier to get a local consensus in favor of an exchange program than to convince legislators from throughout a state. On the tactical level, this approach has the substantial benefit of shifting the burden of legal action to opponents of syringe exchange. The experience of programs to date suggests that not every public official who would refuse to support syringe exchange would undertake to act affirmatively against it, particularly given the distinct possibility that local health authorities would have their legal position upheld. Armed with a reasonable interpretation of state public health law, locally authorized programs can operate under color of law, with the ability to receive public funding, incorporate as nonprofits, seek grant funding, and so on. The terms and services can be tailored to meet local needs with less pressure to require specific services or validation. This is a strategy whose chief advantage is its sensitivity to and reliance on local political conditions. Like proceeding without any claim of legal right, it depends on establishing, by discussion and negotiation, a modus vivendi between exchangers and law enforcement authorities.

Local authorization under public health law, however, does have its drawbacks. Local officials may have to defend their position in court if opponents secure an arrest, file a suit, or cut off funding. Even if local law enforcement authorities have agreed not to make arrests, the existence of drug laws remains a weapon for other opponents. In one instance, for example, individuals who opposed the location of a Los Angeles syringe exchange forced the police's hand by making "citizen's arrests" at a locally authorized syringe exchange.[56] Local authorization for the program may not effectively protect syringe exchange consumers from subsequent arrest or prosecution for possessing drug paraphernalia.

Conclusion

Syringe exchange demonstrates the importance of a complex understanding of the law as it applies to public health work. The law, as Wing observes, is not just a set of rules but a process and a culture in which rules are developed, interpreted, and enforced.[57] Despite the widespread assumption in the legal and public health literature that syringe exchange generally violates drug laws, this study shows that many syringe exchange programs are successfully operating on a contrary view. In the long term, the efficacy of syringe exchange in reducing HIV transmission will probably lead to legislation throughout the nation clarifying its legal status. In the meantime, however, public officials and syringe exchange advocates who are able to develop a local consensus may consider using public health law to legally justify the public operation or funding of a syringe exchange program. □

References

1. Normand J, Vlahov D, Moses L, eds. *Preventing HIV Transmission: The Role of Sterile Needles and Bleach.* Washington, DC: National Academy Press; 1995.
2. Watters JK, Estilo MJ, Clark GL, Lorvick J. Syringe and needle exchange as HIV/AIDS prevention for injection drug users. *JAMA.* 1994;271:115–120.
3. *Needle Exchange Programs: Research Suggests Promise as an AIDS Prevention Strategy.* Washington, DC: US General Accounting Office; 1993.
4. Des Jarlais DC, Friedman SR. AIDS and the Use of Injected Drugs. *Sci Am.* February 1994;270:82–88.
5. *The Public Health Impact of Needle Exchange Programs in the United States and Abroad.* University of California-Berkeley, Institute for Health Policy Studies, School of Public Health; 1993.
6. Gostin L. Drug dependency and HIV. In: Burris S, Dalton HL, Miller JL, eds. *AIDS Law Today: A New Guide for the Public.* New Haven, Conn: Yale University Press; 1993:150–183.
7. Model Drug Paraphernalia Act (US Drug Enforcement Administration 1979). Reprinted in: *Drug Paraphernalia: Hearing Before the Select Committee on Narcotics Abuse and Control of the House of Representatives,* 96th Cong, 1st Sess, 38–95 (1979).
8. Gostin L. Law and policy. In: Stryker J, Smith MD, eds. *Dimensions of HIV Infection: Needle Exchange.* Menlo Park, Calif: Henry J. Kaiser Family Foundation; 1993: 35–61.
9. *Record Revolution No. 6 v City of Parma, Ohio,* 492 F Suppl 1157 (ND Ohio 1980).
10. Anti-Drug Abuse Act of 1986, 21 USC 863 (Use of Postal Service for Sale of Drug Paraphernalia).
11. *United States v. Dyer,* 750 F Supp 1278 (ED Va 1990).
12. Harlow R, Sorge R, eds. *Needle Exchange, Harm Reduction and HIV Prevention in the Second Decade.* New York, NY: American Civil Liberties Union; 1994.
13. Conn Gen Stat Ann § 21a-65 (West 1994).
14. Ind Code Ann § 16-42-19-18 (Burns 1994).
15. Ky Rev Stat Ann § 217.177 (Michie/Bobbs-Merrill 1994).
16. Minn Stat Ann § 151.40 (West 1994).
17. Miller CA, Gilbert B, Warren DG, et al. Statutory authority for the work of local health departments. *Am J Public Health.* 1977;67:940–945.
18. Cal Gov't Code §§ 8630–8634 (West 1992).
19. Burris S. Fear itself: AIDS, herpes and public health decisions. *Yale L & Pol'y Rev.* 1985;3:479–518.

20. *People v Bordowitz*, 155 Misc 2d 128, 588 NYS2d 507 (1991).
21. *People v Cezar*, 149 Misc 2d 620, 573 NYS2d 352 (1991).
22. See *Commonwealth v Leno*, 616 NE2d 453, 457 (Mass 1993).
23. Haw Rev Stat § 325-112 (1994).
24. Conn Gen Stat Ann § 19a-124 (West 1994).
25. Mass Gen Laws Ann ch 111, § 215, & ch 94C, § 27 (West 1994).
26. DC Code Ann § 33-603.1 (1994).
27. Md Health-Gen Code Ann § 24-801 to -810 (1994).
28. RI Gen Laws § 23-11-19 (1994).
29. Or Rev Stat § 475.525 (1994).
30. Me Rev Stat Ann tit 32, § 13787-A (West 1994).
31. NY Pub Health Law § 3381 (4) (McKinney 1994).
32. NY Comp Codes R & Regs tit 10, § 80.135 (1994).
33. See, eg, 35 Pa Cons Stat Ann § 780-105 (1994).
34. See, eg, NJ Stat Ann § 26:1A-7 (West 1994).
35. See, eg, Del Code Ann tit 16, § 122 (1994).
36. Office of the Attorney General of the State of Washington. 13 Op Att'y Gen (1989), 1989 Wash (AG LEXIS 14).
37. *Spokane Co Health Dep't v Brockett*, 120 Wash2d 140, 839 P2d 324 (1992).
38. Hoge P. Needle exchange illegal, judge rules. *Fresno Bee*. February 26, 1995: E31.
39. Exec Order No. 4-92 *issued pursuant to* Phila Home Rule Charter § 6-205 (July 27, 1992).
40. Emergency Public Health Order *issued pursuant to* Ohio Rev Code § 3709.20 (Jan. 27, 1995).
41. Resolution of Local Emergency *issued pursuant to* Los Angeles Administrative Code § 8.21 et seq. (Oct. 21, 1994).
42. Local Emergency *issued pursuant to* § 3.100 of the Charter of the City and County of San Francisco, and San Francisco Administrative Code § 7.6 (March 15, 1993).
43. Marin County Board of Supervisors, Res No. 93-293 (Nov. 23, 1993).
44. City of Salinas, Res No. 15356 (Oct. 11, 1994).
45. Santa Clara County Board of Supervisors, *Resolution Declaring State of Local Emergency in Santa Clara County and Adopting Implementation of Needle Exchange Program* (September 13, 1994).
46. Alameda County Board of Supervisors, *Resolution in Support of Needle Exchange and Local Emergency Declaration* (February 27, 1995).
47. Phila Home Rule Charter § 6-205.
48. Ohio Rev Code § 3709.20.
49. See, eg, Cal Gov't Code § 8630 (West 1992).
50. Ill Ann Stat ch 720, para 635/2 (Smith-Hurd 1994).
51. The Legality of Needle Exchange, Op Minneapolis City Att'y, Oct 7, 1994.
52. Centers for Disease Control and Prevention. Syringe exchange programs—United States, 1994–1995. *MMWR* 1995;44:684–685, 691.
53. Gostin L. The Interconnected Epidemics of Drug Dependency and AIDS. *Harv CR-CL L Rev*. 1991;26:113–184.
54. Like father like son, in Chicago no less; battling the spread of HIV, Abbie Hoffman's son stands trial for participating in an illicit needle swap. *Nat'l LJ*. December 19, 1994: A12.
55. O'Keefe E. Altering public policy on needle exchange: The Connecticut experience. *AIDS Public Policy J*. 1991;6:159–164.
56. Daunt T. Citizen's arrests halt distribution of syringes. *Los Angeles Times*. September 16, 1994: B3.
57. Wing KR. *The Law and the Public's Health*. 4th ed. Ann Arbor, Mich: Health Administration Press; 1995:1–3.

COMMENTARY

Trial highlights AIDS fight

Whitman prefers needle-exchange issue not be publicized

SUSAN K. LIVIO

[redacted]

t costs about $100,000 over a patient's lifetime to provide medical care — often at government expense — for every person infected with AIDS. More than half of the 33,355 people diagnosed with AIDS in New Jersey were infected because they or their sex partners injected drugs with dirty needles.

Those details were revealed at a municipal court trial that began in New Brunswick Monday — a case that should concern anyone who wonders what the state is doing to prevent AIDS, or for anyone who worries about how tax dollars are spent.

Caught in the turmoil are two city residents, Diana McCague and Thomas Scozzare, charged with a disorderly conduct offense — possessing a hypodermic syringe. What they were doing was distributing clean needles to addicts.

It's not just that McCague and Scozzare broke the law. What sparked McCague's and Scozzare's arrests appears to be Gov. Christie Whitman's negative reaction to the heightened publicity over their activities.

Now it seems Whitman's efforts to quash needle exchange in New Jersey only has given the issue a new life in court.

McCague and a band of volunteers have been handing out clean needles to injection drug users on the streets, unimpeded by police, since January 1994. The group is called the Chai Project (Chai means "life" in Hebrew), and believes its activism saves lives by preventing the spread of AIDS.

But for For Whitman, it's clear: "My concern is that IV drug use is against the law," she said on World AIDS Day last year. She flatly rejected her own Advisory Council on AIDS' recommendation last year to support a needle exchange program.

On April 18, 1996, two weeks after the recommendation, authorities arrested the Chai volunteers.

But it wasn't the local police who charged them.

Middlesex County Prosecutor Robert W. Gluck sent in his narcotics drug task force to make the arrests after consulting with then-Attorney General Deborah Poritz. Chai members were arrested because they had become too brazen, Gluck said.

Perhaps, but putting Chai on trial succeeds in giving its volunteers a larger forum to advocate for its cause.

Chai's attorneys, Alan Silber and Ronald Busch, called a dream team of expert witnesses. They testified that about 75 cities and 28 states have made needle exchange legal.

Ernest Drucker, a clinical psychologist and professor of epidemiology and social medicine at Albert Einstein College of Medicine, New York, testified that not only do studies say needle availability does not entice new users, such programs "offer a bridge to treatment."

Donald Des Jarlais of Beth Israel Medical Center in New York and an AIDS consultant for the World Health Organization and the U.S. Centers for Disease Control, said 40 studies on the subject all conclude that needle exchange decreases HIV transmissions and does not increase drug use.

And so on. But an impressive array of witnesses might not spare the Chai volunteers from conviction. McCague testified she knew she was breaking the law.

Silber, her attorney, argued McCague is innocent because she had no criminal intent or purpose when she circulated the needles. She did so out of medical necessity, he said.

The "medical necessity" defense won the acquittal for four men distributing needles on the streets of Jersey City in 1991, said Brian Neary of Hackensack, the defense attorney in that case. "This is really a political debate being played out in a criminal court," said Neary, the president of the Association of Criminal Defense Lawyers of New Jersey.

If Municipal Court Judge Terrill Brenner follows Jersey City's lead, another showdown with authorities is inevitable, given the state's unwaivering position.

The likelier scenario is that Chai loses and appeals — to the Superior Court, the Appellate Division and the state Supreme Court, if the high court is willing. All the while, the case will be followed by a wealth of newspaper and television coverage. And at each and every opportunity, Chai and its supporters will hammer on the state's inability to control the spread of AIDS

Either way, it could get costly — in terms of dollars, and in lives.

The trial resumes Aug. 11. A verdict is expected then, although it's doubtful that Brenner's ruling would be the last word.

So much for making a headache go away.

Susan K. Livio is a member of the Statehouse staff.

Unresolved HIV Debate: Should Addicts Get Free Needles?

By KIT R. ROANE

NEWARK

Diana McCague recalls many scenes from her days passing out needles on the streets of New Jersey, the laughs she received when first setting up on a corner, the sudden press for her services that followed with each passing day.

But one scene sticks in her mind. A boy rode up on a bicycle with a story about his mother, a former heroin addict who was wasting away in an AIDS ward. "I guess you weren't out here then," she recalls him saying before riding off. "I guess you weren't out here to save her life."

Ms. McCague, who began handing out needles in 1994, has not been to that corner in a long time, not since her arrest last year on a disorderly persons charge for handing out clean needles. The only needles she now feels comfortable providing are those laid out as a prop on her lawyer's mahogany conference table as she readies for the trial.

In New Jersey, where unclean hypodermic needles are the single largest cause of HIV, the virus that causes AIDS, the issue of whether addicts should be provided clean ones remains unresolved, as it is in many other states. And the case of Ms. McCague and another volunteer who was arrested, has further fueled the debate, which pits a wealth of public health data supporting such exchanges against the political resistance of Governor Whitman.

AIDS advocates, health professionals and some legislators have lobbied for much of the past decade for a more aggressive stance against the spread of the disease, advocating sometimes unpopular measures — like needle exchanges — that seem to show results on the street but that fail in the political arena.

A strong majority of the Governor's Advisory Council on AIDS voted last year to recommend that the state amend its laws to allow needle exchanges and the sale of syringes without a prescription. State Senator Wynona M. Lipman, whose district includes the hard-hit Newark area, has sponsored two bills that would do just that. But for nearly a year they have remained in the Senate Health committee, she said, adding that there was little political will to push them forward.

"All the experts have come to the conclusion that needles are the biggest cause of AIDS and that to stop the virus we need to give addicts access to clean needles," Senator Lipman said. "But politicians don't want to go out on a limb and I doubt my bills will ever get out of committee. If they do, I expect them to be soundly voted down."

Political timidity is not the only thing holding back change. From the Governor on down, many legislators, members of the clergy and law enforcement officials counter that the state cannot get into the practice of appearing to permit or abet illegal drug activity, no matter the health benefits.

"We are aware of the data supporting these measures," said Dr. Leah Ziskin, the deputy commissioner of the state's Department of Health and Senior Services, who cast one of the five dissenting votes on the 29-member Advisory Council on AIDS. "However, we view this not purely as a health issue.

"There are law enforcement issues at stake, perception issue and messages that the government gives out by condoning something like giving out needles and syringes," she said.

New Jersey is not alone in defending its ban. Only eight states — Hawaii, Maryland, Massachusetts, Rhode Island, New York, Alaska, South Carolina and Iowa, as well as the District of Columbia — either exempt syringe exchanges from drug paraphernalia laws or do not have such statutes.

Massachusetts, Rhode Island and Connecticut go one step further, allowing pharmacists to sell syringes without a prescription, but such states are the exceptions. Throughout the country, a tangle of local and state regulations as well as a Federal prohibition on the transport of drug paraphernalia across state lines prevent needle exchanges from operating legally.

There is also a ban on Federal funding of needle exchanges, even though studies by the National Institutes for Health and the Centers for Disease Control, the General Accounting Office and many other organizations found that providing addicts with clean needles did not increase drug use and could drastically reduce the spread of the virus, not only among addicts, but also their sex partners and children.

Driven by these facts, AIDS activists like Ms. McCague have increasingly flouted the law and opened needle exchanges in states that do not permit them, buying syringes with donations and using volunteers to pass them out. While there are 46 needle exchanges operating legally in the United States, counts done last year found 65 more operating illegally.

Some, like Ms. McCague's organization, the Chai Project (from the Hebrew word for life), have done so publicly and have been tolerated to a point. But it is a tenuous existence.

Though her organization had been handing out needles on the same corners for two and a half years and several news accounts have been published about their activities, Ms. McCague and a colleague, Thomas Scozzare, were not arrested until April 18, two weeks after Governor Whitman disregarded her AIDS advisory committee's recommendation to legalize such establishments.

Their case appears to be only the second in the state. Although the charge, a disorderly persons offense, is in Municipal Court, the defendants' lawyers are trying to maneuver it into a higher court to challenge the law. They argue that needle exchanges do not "actually cause or threaten the harm or evil sought to be prevented by the law."

Legal experts say this is unlikely to work because these laws leave little room for interpretation. But with little chance that the Legislature will redraw the statute itself, Ms. McCague has little choice. Win or lose — the penalty is six months in jail or a $1,000 fine or both — she is likely to be back on the street handing out needles.

"My philosophy is that if something needs to be done and you can do it, you do," said Ms. McCague, who estimates that she and other volunteers passed out more than 35,000 syringes during the two and a half years that preceded her arrest. "I perceive what I have done as a moral obligation."

Julio A. Ibarra Jr. for The New York Times

Diana McCague, who is being prosecuted for distributing hypodermic needles to addicts in an attempt to combat the AIDS virus.

Making the Case for Clean Needles

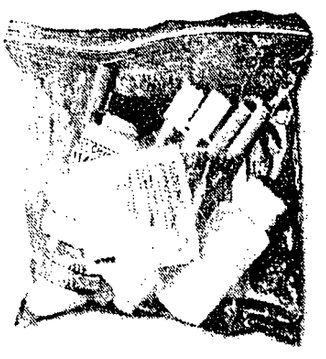
In New Jersey, more than 40,000 residents are living with HIV, the fifth-highest percentage in the country. Of those, two-thirds have contracted the disease through some connection with intravenous drug use — either because they are users themselves, or the children or sex partners of users, according to the State Department of Health.

Nationally, as well as in New Jersey, the infection rate is rising fastest among the poor, non-whites and females, health experts say, adding that the trend could largely be curtailed by more liberal state and Federal policies allowing addicts easy access to clean needles.

Studies done after changes in such laws in New York and Connecticut have bolstered these arguments, as have studies of HIV rates in Australia, which allow easy access to needle exchanges. (In that country, where drug laws were liberalized in 1985, intravenous drug use accounted for only 2.5 percent of all new AIDS cases in 1994.)

A similar lessening of infection rates is being found among participants in New York City's needle exchange programs, which were legalized in 1992. Saliva tests for the virus have shown infection rates among participants to be 2 percent a year, compared with about 6 percent for those not using the exchanges, according to the American Foundation for AIDS Research.

Overall, researchers reported a two-thirds drop in the number of HIV infections among participants. As in New Jersey, health officials have estimated that up to 50 percent of the city's intravenous drug users are already infected with the virus because of dirty needles.



A kit, like one given to addicts, containing needles, cleaning equipment and instructions for use.

Connecticut, which began letting pharmacists hand out packets of up to 10 syringes without a prescription and legalized needle exchanges in 1992, has reported that needle sharing and other high risk activities fell 40 percent after changes in the law.

Noting that nationally only 12 percent of all AIDS cases were attributable to intravenous drug use in 1981, Lawrence O. Gostin, a professor of law and public health at Georgetown University, said that states like New Jersey may already have missed a significant opportunity to combat the disease.

"The sad part is that we can say with certainty that if New Jersey had a more liberal policy on making syringes legal even five years ago, there would have been thousands of fewer deaths there," said Professor Gostin, who is also a member of the Centers for Disease Control AIDS advisory committee. "Dirty needles are the fuel driving this epidemic, particularly among blacks and women. But now, even though they should change the law, thousands more will continue to die."

KIT R. ROANE