THE 1999 KNOWLEDGE, ATTITUDES, BELIEFS & BEHAVIORS SURVEY

prepared for

Delaware Department of Health and Social Services
Division of Public Health

by

Edward C. Ratledge

Center for Applied Demography & Survey Research
College of Human Resources, Education and Public Policy
University of Delaware

Newark, Delaware 19716

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Executive Summary

- Some 2,325 people who received counseling during the time period January 1998 through December 1999 completed the KABB survey. A longer period was used in this report to produce stable sample sizes in the smaller risk groups.

- Sixty three percent of those responding were age 18-34, 53% were male, and 64% were Caucasian. These data are quite representative of the population that came for counseling and testing although the participation rate was approximately 20%. This means the survey is more likely to be representative of the concerned population than if the characteristics were divergent.

- Of those that responded, 54% said they wanted to see if they were infected. The remainder gave a less direct answer such as part of a routine checkup (23.1%).

- Eighty-nine percent had received the results and 74% of those had received counseling of some type.

- About 56% of those responding reported multiple partners during the last 12 months with about 20% having four or more. Twenty seven percent reported having had VD or an STD. Only 17% thought they had a Medium or High probability of getting HIV.

- Almost 40% reported changing their sexual behavior in the last 12 months. The most reported changes were sex with fewer partners and the use of condoms. However, 9% reported that they were less likely to use condoms during the past 12- month period.

- There are clearly divergent attitudes about asking partners about HIV testing. The two most frequent responses were ALWAYS (24.3%) and NEVER (35.9%).

- Thirty eight percent reported using “street drugs” while only 3.5% indicated the use of needles. The most often reported drugs were Marijuana (85.1%), Cocaine (23.7%), and Crack (22.4%). Only 9.5%, however, suggested they had a drug “problem”. Alcohol was reported as a problem by only 9% of those responding. A similar number reported that drugs or alcohol did affect their sexual behavior. Nearly 18% did report receiving some treatment for drug or alcohol abuse.

- The most frequently reported sources for HIV information were Radio/TV (31.8%), Newspapers (27.3%), Pamphlet (24.0%), Public Health Clinic (15.4%), and Friends (24.7%).

KABB Risk Groups

- The KABB respondents were classified into seven groups, namely heterosexual (HET), men having sex with men (MSM), intravenous drugusers (IDU), people under the age of 18 (YTH), Bi-Sexuals (BSX), those celibate for 12 months (CEL), and women having sex with women (WSW). Of those that could be classified, the distribution was respectively 1,332 (64.5%), 253 (12.3%), 66 (3.2%), 163 (7.9%), 90 (4.4%), 134 (6.5%), and 27 (1.3%). Youth and intravenous drug users were assigned to YTH and IDU respectively, independent of any other qualification.

- Overall, 66.5% had been tested before. The highest group was MSM (85.7%). The lowest group was YTH (33.3%). HET was 66.3%.

- HET and YTH had a median of one partner in the last 12 months. The medians for the other two risk groups were MSM (2.75 partners) and IDU (2.5 partners).

- The IDU and MSM both said they had a HIGH chance of getting HIV with greater frequency (12.6% and 17.4% respectively). This contrasts with 5.1% for HET and 4.3% for YTH.

- Forty percent said they had changed their behavior in some way. The highest category was MSM with 47.6%. The balance averaged 40%. Fear of AIDS was by far the most frequent response given as a reason for changing behavior.

- The changes in behavior varied widely. The choice of fewer partners was selected 33.2% of the time. Abstinence was selected by 15% of the sample. Condom use was chosen by 35.7% of the sample while IDU respondents were significantly lower (18.5%) on this item.

- When asked whether they were more or less likely to use a condom than 12 months ago, the results were split. About 31% were more likely and 29% were less likely with the balance about the same. Among the groups both MSM and YTH had a larger proportion responding more likely to use a condom than less likely.

- HET and IDU groups never use a condom for vaginal sex more than 25% of the time. YTH respondents provide that answer half as often. There was considerable variation across the groups with respect to anal sex with only 28% of the HET group engaging in it. MSM used a condom 62% of the time either always or nearly always. In contrast, MSM never used a condom in oral sex more than 62% of the time. These numbers are similar for most of the other groups although YTH and HET engaged in oral sex at lower rates.

- About half of the IDU group (40%) seldom or never shared their “works”. Of those that shared 33% always bleached before use. More than 38% of all respondents used drugs. Apart from IDU, which were almost all users of street drugs, the highest group was with almost 47% use. Marijuana was the choice for over 85% (of those that used drugs) with groups that used cocaine and crack in the vicinity of 23%. It was no surprise that IDU members were most likely to feel that they had a drug problem (63.2%) and they were the most likely group to have exchanged money/sex for drugs (20.6%). HET, MSM, and YTH were all less than 10%.

- IDU was also the most likely to have a problem with alcohol (25%). HET, MSM, and YTH were all less than 10%.

- More than half of all those responding felt their sexual behavior was affected in some way when using alcohol or drugs. The range was from 66.6% (IDU) to 36% (MSM). IDU members were by far the most likely to have received treatment (61.2%).

BRFSS/HIV

- Support for encouraging teenagers to use condoms remained stable at almost 93% from last year.

- Sixty-six percent of adult Delawareans responding think they have no chance of getting HIV. This is an increase of 5% from 1997. Those with a medium to high chance increased from 6.7% to 7.4%. This was significantly less than the 17% reported on the KABB survey.

- The proportion of people who think they have been tested for HIV decreased from 50.3% to 48.4%. The proportion reporting that they were tested specifically to check for the infection decreased from 24.8% to 21.8%. The percentage of adults that think they were tested as a result of a routine checkup increased from 11.4% to 14.7%. In addition, there was a significant increase in those reporting being tested at a community health clinic, 9.8% to 15.9%.

- There was a small but statistically insignificant increase in the percentage reporting changing their sexual behavior (13.0% to 14.5%) in the last 12 months. For those that changed their behavior, 64% report decreasing the number of partners. Approximately 84.8% report having sex with a single partner in 1999 and that is a significant increase from 1997 (63.7%). Fifty percent report that they now always use condoms for protection, which is up from 46% in 1997.

- Seventy-seven percent report having only one partner during the past 12 months and 11.2% report being abstinent for a year. (Note: this means 22% did have multiple partners which contrasts with 56% for the KABB survey). Of those that did have sex, 25% responded that they used a condom the last time. Finally, 21% of those responding had at least one new sex partner in the past 12 months.

- Approximately 5% of those under 50 report having one of four characteristics; IV drug user, treated for STD, tested positive for HIV, or had anal sex without a condom.

INTRODUCTION

The survey of Knowledge, Attitudes, Beliefs, and Behaviors (KABB) was conducted in 1998 and 1999 throughout Delaware. This survey collects information from a subset of Delawareans who are concerned with their HIV status. It examines the participants' knowledge about HIV and where they obtain their information. It measures sexual behavior and assesses an individual's concerns about any associated risk. Substance abuse behavior is also addressed since there is evidence that individuals under the influence of drugs or alcohol may engage in risky behavior.

A total of 2,325 people voluntarily participated in the study. The participants were offered the opportunity to participate when they visited one of the many venues offering HIV testing and counseling in the state. Since the sample is comprised of self-selected volunteers, the results represent only that group. Any attempt by the reader to generalize to another population from these results should be done with great caution and should only be done when these results can be confirmed by other information.

To gain some perspective on these issues as they might affect the entire population of Delaware, this study draws on data from the Behavioral Risk Factor Surveillance System, which currently collects survey data from a random selection of 2,561 adults in Delaware. In 1999, data was collected on both the knowledge of AIDS/HIV and sexual behavior. While the questions are not exactly the same, they correspond sufficiently to provide a broad-based contrast for the KABB results.

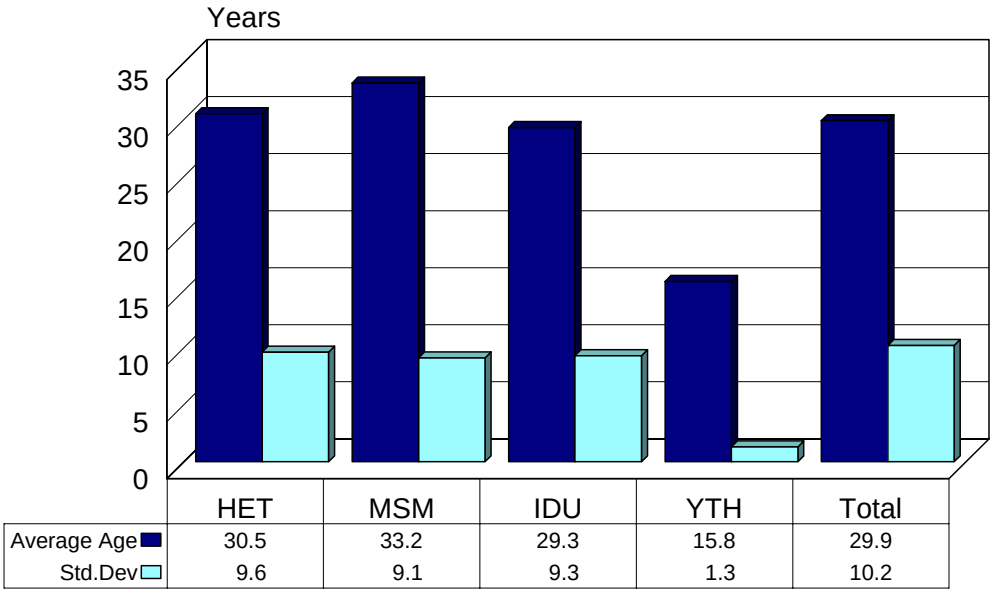
This report is divided topically and by data source. In the first three sections following this introduction, KABB results with reference to knowledge of HIV, sexual behavior, and substance abuse are presented. This presentation is followed by BRFSS results dealing with knowledge of HIV and sexual behavior. No information was available on drug abuse, and the comparability of the alcohol consumption was insufficient. Conclusions are found in the last section.

The presentation of the KABB results are focused around four selected risk groups. The first group labeled HET is comprised of heterosexuals. They comprise 1,332 of the 2,325 participants. The second group (MSM) includes only men having sex with men. There are 253 members of this group. The third group is composed of 66 intravenous drug users (IDU). The final grouping includes 163 youth (YTH) under the age of 18. The three categories not separately reported are those reporting having sex with both men and women (n=90), women having sex with women (n=27), and a group of 134 that were currently not sexually active, for a variety of reasons, and whose behavior could not be classified as anything but celibate. These groups are mutually exclusive; however, youth were placed in the YTH group even if they could be otherwise classified. The same can also be said for IV drug users (IDU). The basic demographic profile for the sample is provided in the next section.

KABB Demographics

In Figure 1.1 below, the average age of the respondents is reported. It was similar across the groups with the understandable exception of the youth group. Members of the MSM group do tend to be slightly older by about 3 years, but the variability is similar for all the adult groups.

Figure 1.1
Average Age
by Risk Group



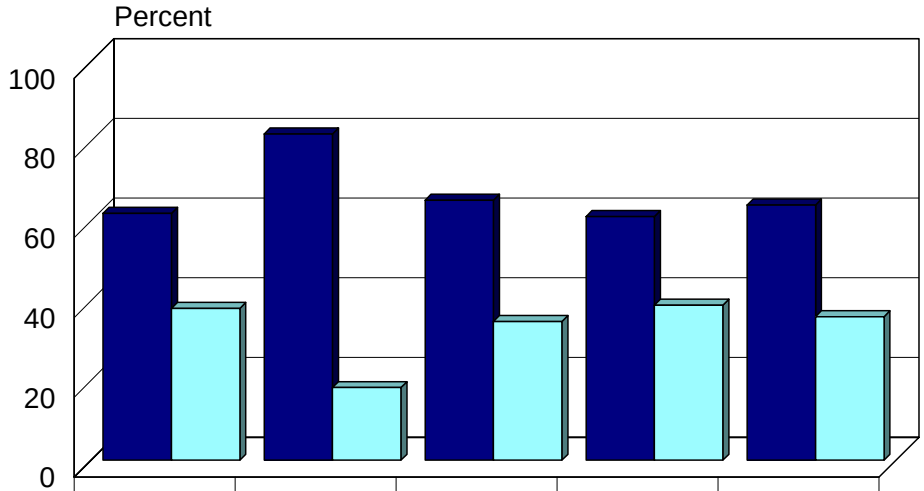
	HET	MSM	IDU	YTH	Total
Average Age	30.5	33.2	29.3	15.8	29.9
Std.Dev	9.6	9.1	9.3	1.3	10.2

Source: Center for Applied Demography & Survey Research, University of Delaware

The column marked "Total" includes the entire population surveyed, not just the groups delineated here. The majority of those responding are between the ages of 20 and 40. Not surprisingly, the adult respondents are generally younger than the adult population of Delaware overall.

Figure 1.2 contains the racial distribution of the respondents. The differences seen here are significant. While the HET, IDU, and YTH groups exhibit very similar compositions, the MSM group is significantly more Caucasian than the others. In fact, MSM racial minority representation is similar to that found in the overall population. Racial minorities are found in much higher proportions in the other three groups than in the general population.

Figure 1.2
Race
by Risk Group

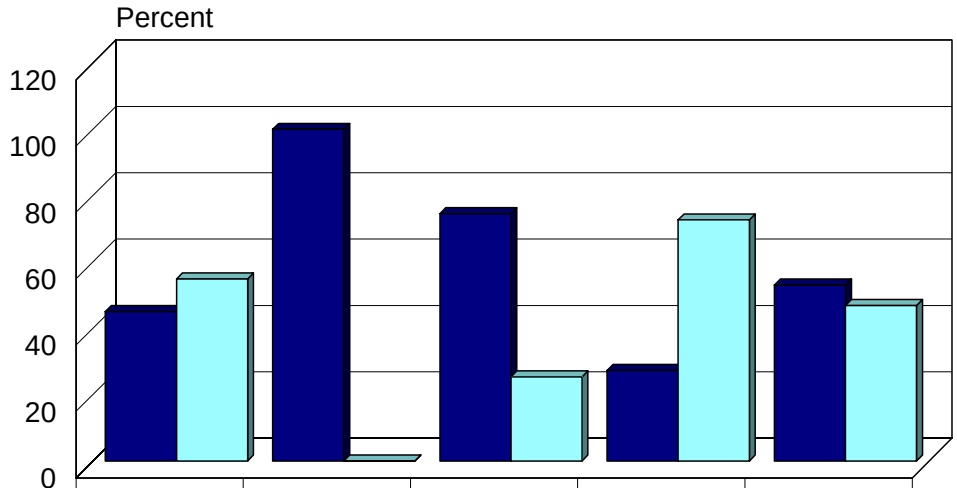


	HET	MSM	IDU	YTH	Total
White	61.9	81.8	65.2	61.1	64
Non-White	38.1	18.2	34.8	38.9	36

Source: Center for Applied Demography & Survey Research, University of Delaware

As expected the gender distributions (Figure 1.3) are quite different. Putting aside MSM -- which is defined by gender-- women were more likely to participate in the survey than men, although the population is only about 5% weighted toward females. The distributions for HET and IDU are exactly opposite, with HET members tending to be more female and IDU tending to be more male. The population in general is split approximately 53% female and 47% male. The members of YTH are overwhelmingly female (72.7%). This result may suggest that either teenage women are more sexually active and are more at risk, or perhaps they are more concerned about HIV infection in general. It also may be a data collection issue.

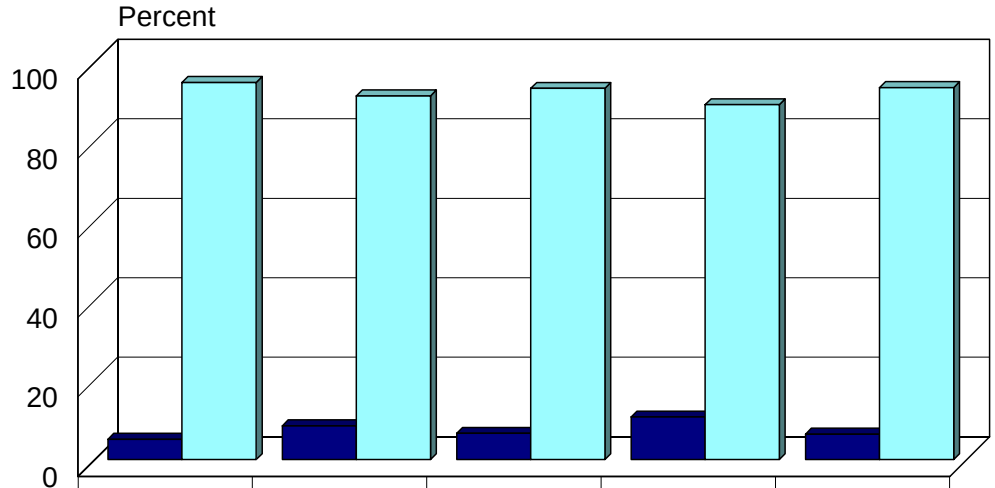
Figure 1.3
Gender
by Risk Group



	HET	MSM	IDU	YTH	Total
Male	45.1	100	74.6	27.3	53.1
Female	54.9	0	25.4	72.7	46.9

Source: Center for Applied Demography & Survey Research, University of Delaware

Figure 1.4
Hispanic Origin
by Risk Group

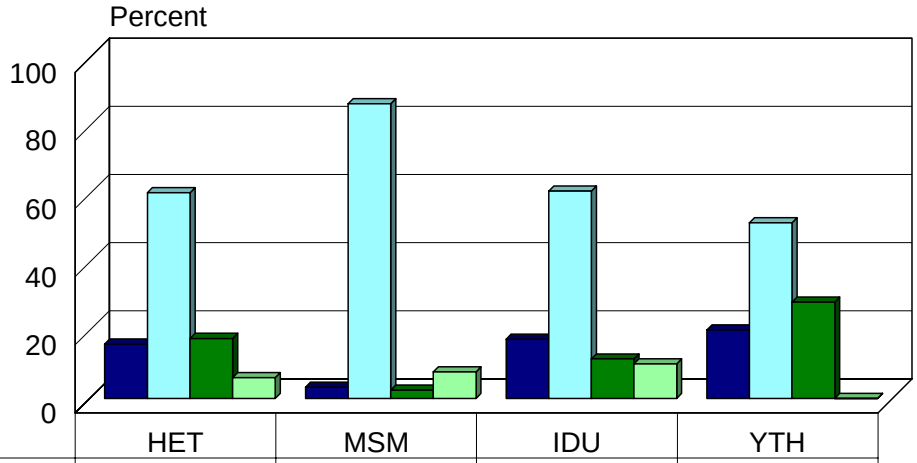


	HET	MSM	IDU	YTH	Total
Yes	5.1	8.5	6.6	10.7	6.4
No	94.9	91.5	93.4	89.3	93.6

Source: Center for Applied Demography & Survey Research, University of Delaware

Respondents of Hispanic origin (Figure 1.4) are less than 7% of the entire sample, which is roughly double their representation in the entire population of Delaware. Hispanics seem to be fairly evenly distributed across the groups than in the last report with only small differences between them. The numbers are relatively small (n=149) so that some of the observed differences are not statistically significant.

Figure 1.5
County of Residence
by Risk Group



	HET	MSM	IDU	YTH
Kent	16	3.3	17.4	20.1
New Castle	60.4	86.5	60.9	51.6
Sussex	17.6	2.4	11.6	28.3
Other	6.1	7.8	10.1	0

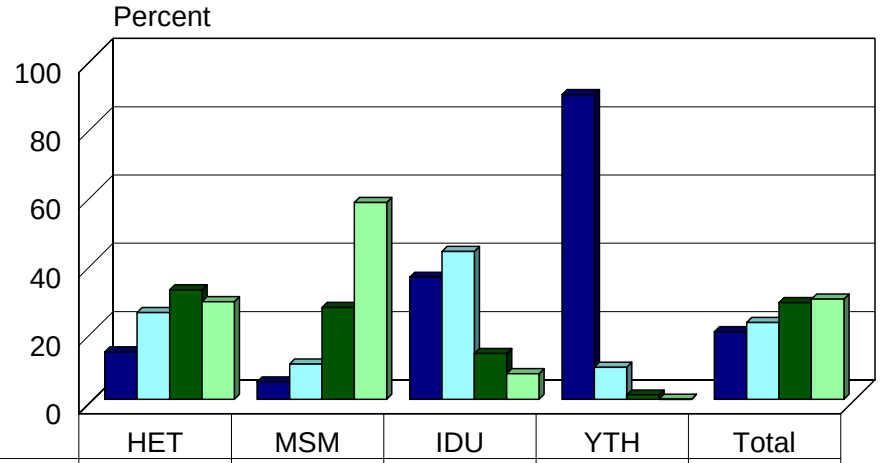
Source: Center for Applied Demography & Survey Research, University of Delaware

In 1999, the adult population of Delaware is distributed with 64% in New Castle County, 17% in Kent County, and 19% in Sussex County. The distribution of the entire sample is significantly over weighted towards Kent and Sussex counties. However, that varies radically between the risk groups. MSM and IDU respondents are much more likely to be found in New Castle County. In contrast, the YTH group respondents were far more likely to be from Sussex County. Heterosexuals nearly mirror the overall population of respondents. Clearly, the participation rates are different between the counties and the opportunities to participate in the KABB survey may have been different as well.

The level of education within the age groups varied considerably. In Delaware, about 23% of the adult population has completed four years or more of college, and a similar proportion has not completed high school. In this sample the college graduate group is over

represented and the less than high school graduates are under represented. Obviously, the presence of the YTH group tends to skew that result but only by a few percentage points. The differences between the groups are significant, both from a substantive and a statistical point of view. MSM members are highly educated with the majority having college degrees. At the same time, only 5% have not completed high school. In stark contrast are respondents from IDU. They are overwhelmingly lacking a high school diploma (35.8%) and rarely have completed college (7.5%). The HET group is similar to the Delaware adult population but is slightly more educated.

Figure 1.6
Level of Education
by Risk Group



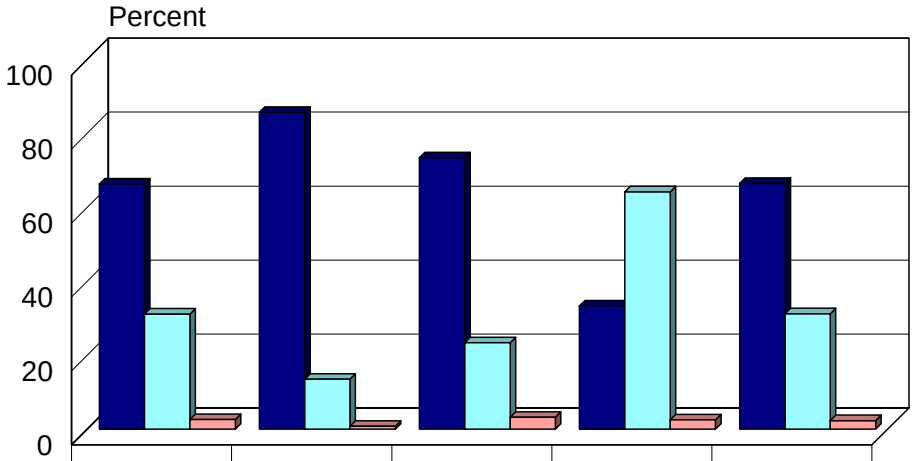
	HET	MSM	IDU	YTH	Total
Less than HS	13.9	5.1	35.8	89.3	19.8
HS/GED	25.4	10.3	43.3	9.4	22.5
Some College	32.1	26.9	13.4	1.3	28.3
College Degree	28.6	57.7	7.5	0	29.4

Source: Center for Applied Demography & Survey Research, University of Delaware

KABB: HIV

All of the participants in the KABB survey are being tested for HIV. For some it may be the first time; for others this may be another in a series designed to detect infection if it occurs following risky behavior. Of interest also is the respondents' assessment of their own risk of becoming infected with HIV. Finally, questions addressed how the respondents learned about HIV and AIDS.

Figure 2.1
Ever Been Tested for HIV
by Risk Group

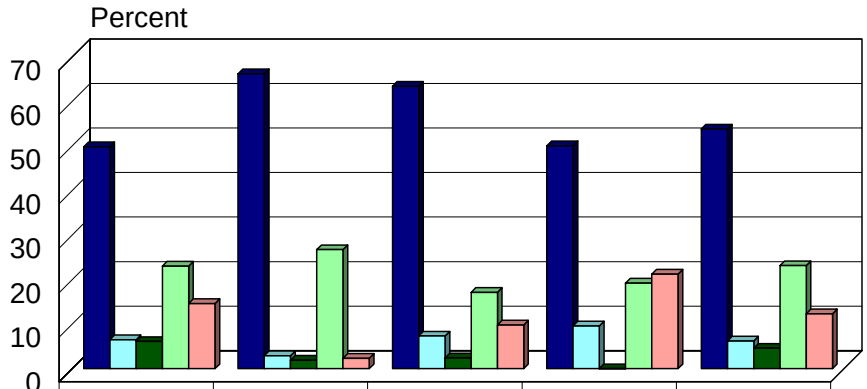


	HET	MSM	IDU	YTH	Total
Yes	66.3	85.7	73.4	33.3	66.5
No	31.1	13.5	23.4	64.2	31.2
Don't Know	2.6	0.8	3.2	2.5	2.3

Source: Center for Applied Demography & Survey Research, University of Delaware

Two thirds of the responding population had been tested before. This implies either the continuation of risky behavior or simply the need for subsequent tests to ensure that infection did not occur from some incidence in the past. There were significant differences between the groups. MSM respondents were most likely to have been tested before with less than 14% seeking their first test. This high level of testing may reflect the more educated population or a higher frequency of certain practices. HET and IDU members reported similar levels of prior testing. The youth group reported the lowest level (64%), which is not at all surprising since they have had less time to engage in risky behavior.

Figure 2.2
Why Were You Tested for HIV
by Risk Group



	HET	MSM	IDU	YTH	Total
Infected?	49.8	66.2	63.4	50	53.8
Hospital	6.5	2.9	7.3	9.6	6.2
Donate Blood	6.1	1.9	2.4	0	4.6
Checkup	23	26.7	17.1	19.2	23.1
Other	14.6	2.3	9.8	21.2	12.3

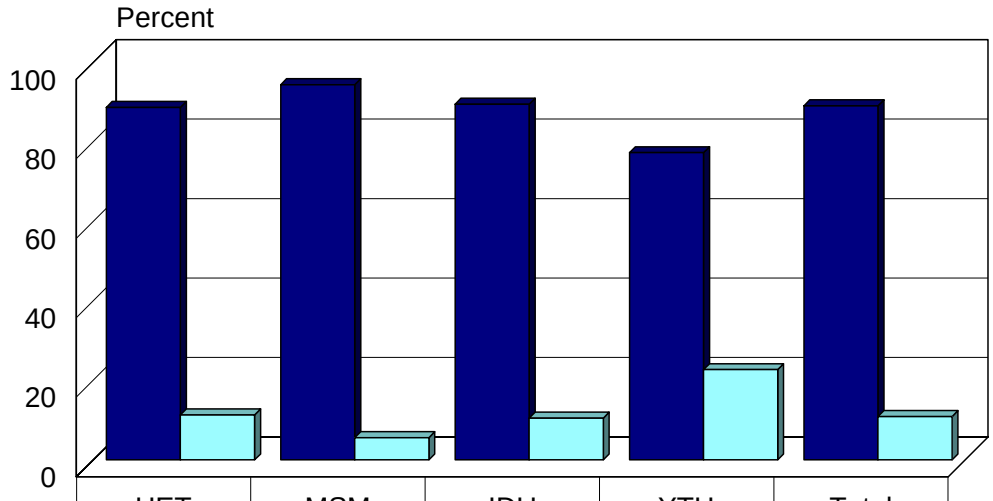
Source: Center for Applied Demography & Survey Research, University of Delaware

Participants were asked why they were tested on that occasion (Figure 2.2). MSM and IDU members were much more likely to say they were being tested for infection. Other respondents were more likely to give less specific reasons such as tested as part of a checkup. These responses also suggest that they may think they have been tested when no test was requested. This is probably less likely for the MSM and IDU groups.

The overwhelming majority of those tested did receive the results (Figure 2.3). There were only modest differences between the groups with a range of between 94.4% (MSM) and 77.3% (YTH). The high levels of positive responses suggest that people who are concerned enough to get tested are also motivated to find out the results.

The assessment of risk of infection by HIV is of particular interest. If those who are truly at risk believe otherwise, then the chances of further spreading the disease are probably enhanced. Those assessments are reported in Figure 2.4. The ***don't know*** response was offered by nearly 26% of the participants and that varied significantly between groups; HET was the highest and MSM was the lowest. Another 16% believed they had no risk of becoming

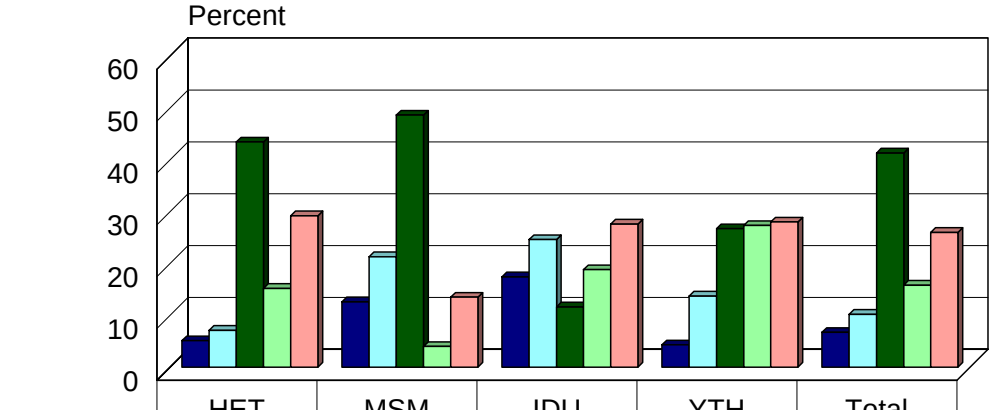
Figure 2.3
Did You Receive the Results
by Risk Group



	HET	MSM	IDU	YTH	Total
Yes	88.7	94.4	89.5	77.3	89.1
No	11.3	5.6	10.5	22.7	10.9

Source: Center for Applied Demography & Survey Research, University of Delaware

Figure 2.4
Chances of Your Getting HIV
by Risk Group

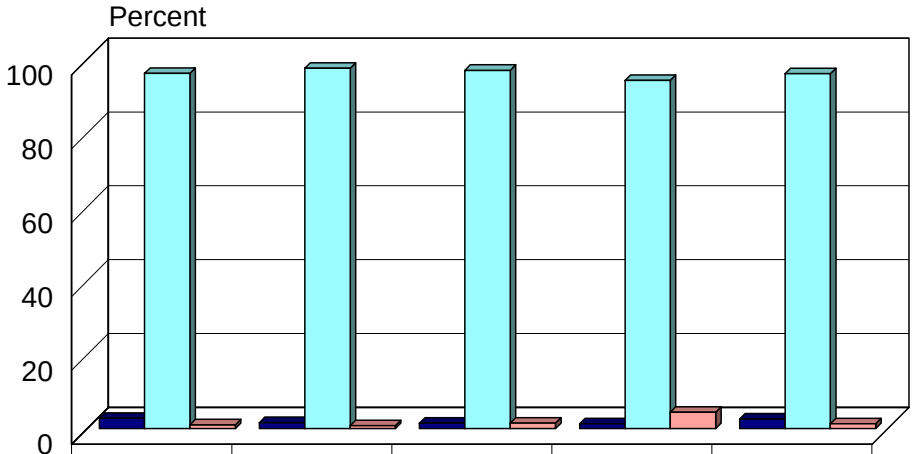


	HET	MSM	IDU	YTH	Total
High	5.1	12.6	17.4	4.3	6.7
Medium	7.1	21.3	24.6	13.7	10.2
Low	43.4	48.6	11.6	26.7	41.3
None	15.2	4	18.8	27.3	15.8
Don't Know	29.2	13.5	27.6	28	26

Source: Center for Applied Demography & Survey Research, University of Delaware

infected. Once again the results varied widely. MSM respondents were much more likely to assess their risk as ***low*** rather than ***none***. MSM participants also responded ***medium*** (21.3%) far more often than did those in any of the other groups. IDU members however were more likely to assess their risk as ***high*** (17.4%).

Figure 2.5
Diagnosed with TB
by Risk Group



	HET	MSM	IDU	YTH	Total
Yes	2.8	1.6	1.5	1.3	2.6
No	96.2	97.6	97	94.3	96.1
Don't Know	1	0.8	1.5	4.4	1.3

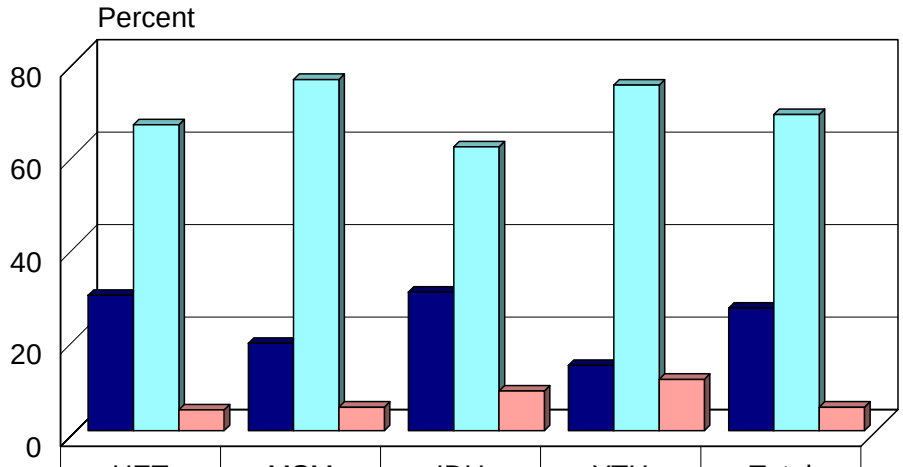
Source: Center for Applied Demography & Survey Research, University of Delaware

Only about 3% of the participants reported being diagnosed with tuberculosis (Figure 2.5). The differences between participant groups were small and were not statistically significant.

Almost 27% of the respondents reported having had a sexually transmitted disease (STD) in the past (Figure 2.6). There were slightly higher probabilities within HET and IDU than were reported for either MSM or YTH.

There were differences in how members of the various groups learned about AIDS and HIV. These are shown in Figures 2.7 and 2.8. The two exhibits show, in order of the proportion that used the method, how these respondents got their information. Over all, ***television and radio*** was the most likely method used, but this varied by group. Youth were much more likely

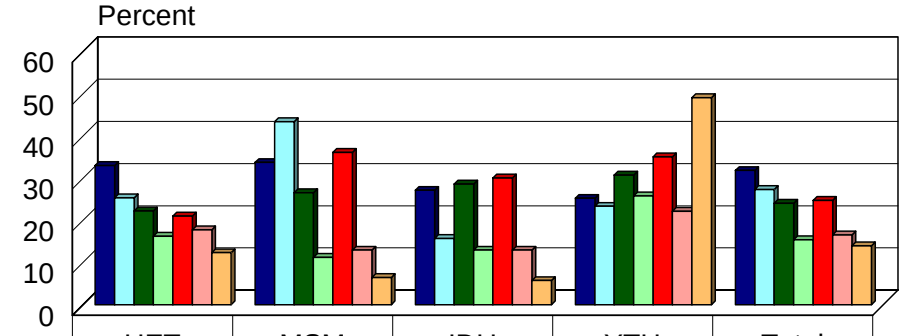
Figure 2.6
Ever Have an STD
by Risk Group



	HET	MSM	IDU	YTH	Total
Yes	29.3	18.9	30	14.1	26.5
No	66.2	76	61.4	74.8	68.4
Don't Know	4.5	5.1	8.6	11.1	5.1

Source: Center for Applied Demography & Survey Research, University of Delaware

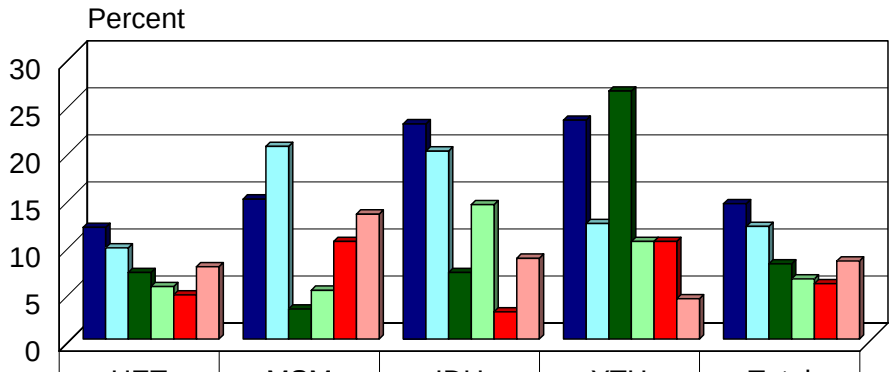
Figure 2.7
Learn About AIDS-1
by Risk Group



	HET	MSM	IDU	YTH	Total
TV/Radio	33	33.7	27.1	25.2	31.8
Newspaper	25.3	43.4	15.7	23.3	27.3
Pamphlet	22.2	26.5	28.6	30.7	24
Clinic	16.2	11.2	12.9	25.8	15.4
Friends	21	36.1	30	35	24.7
Dr/Nurse	17.7	12.9	12.9	22.1	16.5
School	12.3	6.4	5.7	49.1	13.9

Source: Center for Applied Demography & Survey Research, University of Delaware

Figure 2.8
Learn About AIDS-2
by Risk Group



	HET	MSM	IDU	YTH	Total
Workshop	11.9	14.9	22.9	23.3	14.4
Counselor	9.7	20.5	20	12.3	12
Parents	7.1	3.2	7.1	26.4	8
Streets	5.6	5.2	14.3	10.4	6.4
Health Fair	4.7	10.4	2.9	10.4	5.9
Other	7.7	13.3	8.6	4.3	8.3

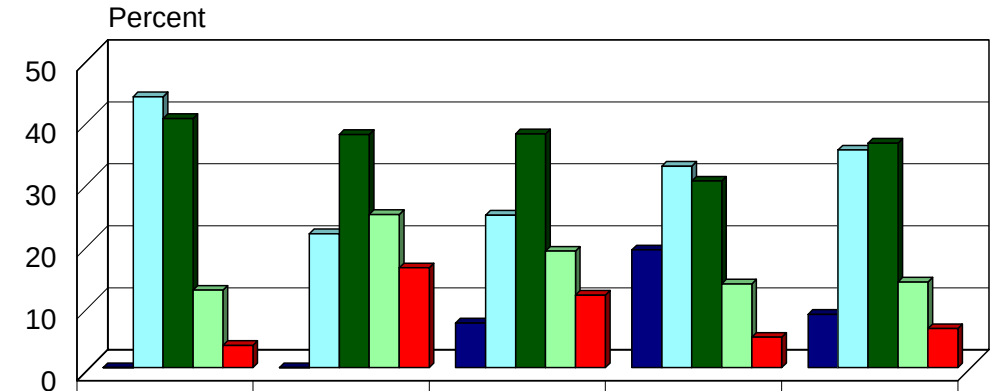
Source: Center for Applied Demography & Survey Research, University of Delaware

to get information at school, from friends, and from their parents. MSM members also received information from friends and were far more likely to have talked with a counselor as are IDU members. This latter response probably relates to the higher rate of testing for AIDS. Given that MSM respondents were also more educated, they were also more likely to read newspapers. In contrast, IDU members were far less likely to get their information from papers probably because they have, by far, the lowest education level.

KABB: Sexual Behavior

One of the primary reasons for conducting the KABB survey is to determine the attitudes and practices that might either contribute to or inhibit the spread of HIV. In this section, some of the variables that are potential targets for educational or informational programs will be explored. Further, the use of well-known tools to help reduce the chances of HIV infection will be examined.

Figure 3.1
Number of Partners in the Last 12 Months
by Risk Group



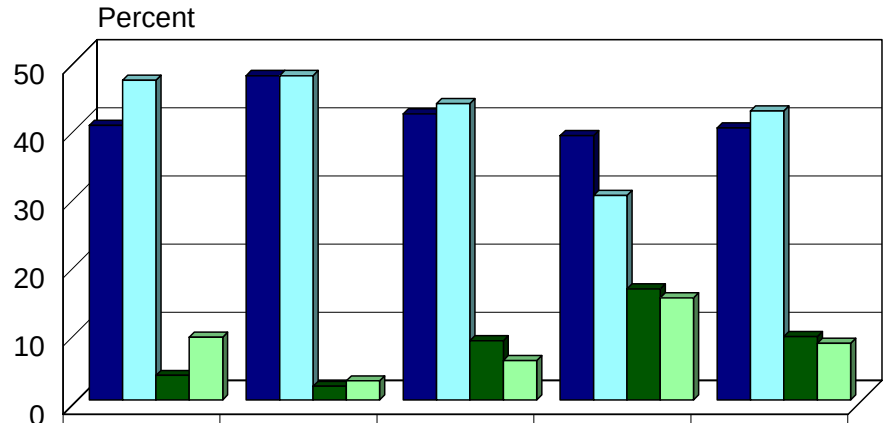
	HET	MSM	IDU	YTH	Total
0	0	0	7.2	19	8.6
1	43.7	21.6	24.6	32.5	35.1
2-3	40.2	37.6	37.7	30.1	36.2
4-9	12.5	24.7	18.8	13.5	13.8
10+	3.6	16.1	11.7	4.9	6.3

Source: Center for Applied Demography & Survey Research, University of Delaware

There are reasons to believe the increasing numbers of different sex partners can increase the risk of HIV infection. Figure 3.1 contains the distribution of partners for each of the risk groups. Overall, about 44% of the respondents had either no or one partner during the last 12 months with about 20% having a relatively large number of partners (4 or more). The distributions for HET and YTH were essentially the same. However MSM and IDU members were 2.5 times more likely to be in the two highest categories and about half as likely to have been monogamous.

Participants were asked if they had changed their sexual behavior in any way during the last 12 months. If they had changed, they were then asked to explain what those changes were.

Figure 3.2
Change Sexual Behavior in Last 12 Months
by Risk Group



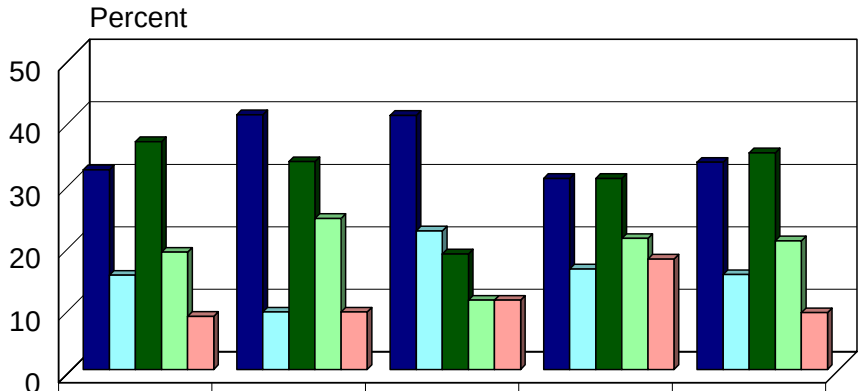
	HET	MSM	IDU	YTH	Total
Yes	40.3	47.6	42	38.8	39.9
No	46.9	47.6	43.5	30	42.4
No Partners	3.6	2	8.7	16.3	9.3
Don't Know	9.2	2.8	5.8	15	8.3

Source: Center for Applied Demography & Survey Research, University of Delaware

Almost 40% of the respondents reported making some kind of change in their sexual behavior. The distributions among the groups were similar but not identical. YTH members, for example, were much more likely to respond ***don't know*** than the others. MSM respondents were more likely to answer ***Yes***, although the differences are marginally significant.

There were, however, major differences between the groups when asked about the types of changes they had made (Figure 3.3). Only those who answered affirmatively to the earlier question responded to this one. In general, greater use of condoms was the most frequent response (34.7%) followed by engaging in sex with fewer partners (33%). The distributions within the risk groups were also quite different. HET and YTH members were less likely to have fewer partners, but then, they were much more likely to be monogamous in the first place. In contrast, having fewer partners was highest among MSM and IDU respondents, which currently have the highest number of partners. Abstinence is much more likely for IDU respondents and is less frequently reported by MSM members. Increasing the use of condoms is reported strongly by all except IDU members. Finally, almost 18% of YTH respondents reported using condoms less.

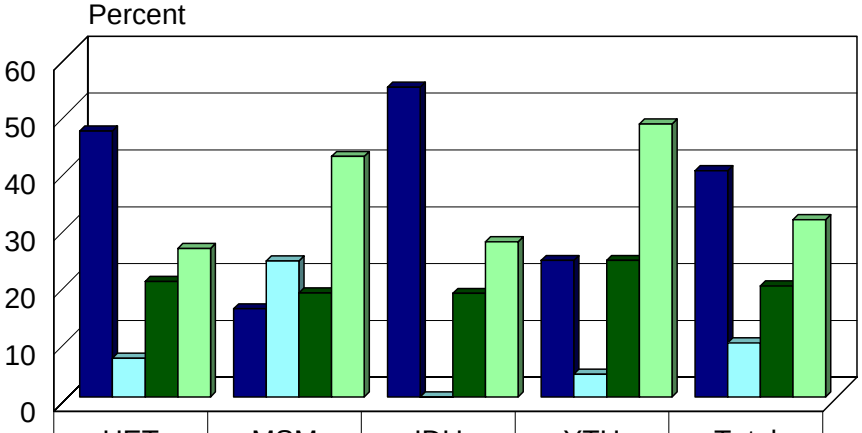
Figure 3.3
Type of Change in Sexual Behavior
by Risk Group



	HET	MSM	IDU	YTH	Total
Fewer Partners	32	40.8	40.7	30.6	33.2
Abstinence	15.1	9.2	22.2	16.1	15.2
Condoms More	36.5	33.3	18.5	30.6	34.7
More Partners	18.8	24.2	11.1	21	20.6
Condoms Less	8.5	9.2	11.1	17.7	9.1

Source: Center for Applied Demography & Survey Research, University of Delaware

Figure 3.4
Why No Change in Sexual Behavior
by Risk Group

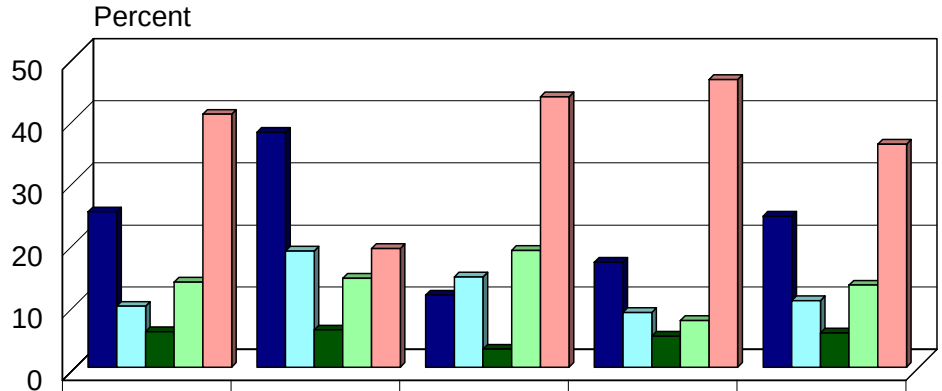


	HET	MSM	IDU	YTH	Total
Monogomous	46.8	15.5	54.5	24	39.8
Felt Safe	6.8	23.9	0	4	9.5
Don't Care	20.3	18.3	18.2	24	19.5
Other	26.1	42.3	27.3	48	31.2

Source: Center for Applied Demography & Survey Research, University of Delaware

Those who had made no change in their sexual behavior in the last 12 months were asked why they had not done so (Figure 3.4). The most frequent reason was that they were ***monogamous*** (39.8%). Almost 20% responded that they just ***didn't care***. The responses across the risk groups were once again different. About 15% of MSM respondents were monogamous and a similar number responded that they did not care (18.3%). They were also far more likely to respond that they ***felt safe***.

Figure 3.5
Ask Partners if Tested
by Risk Group



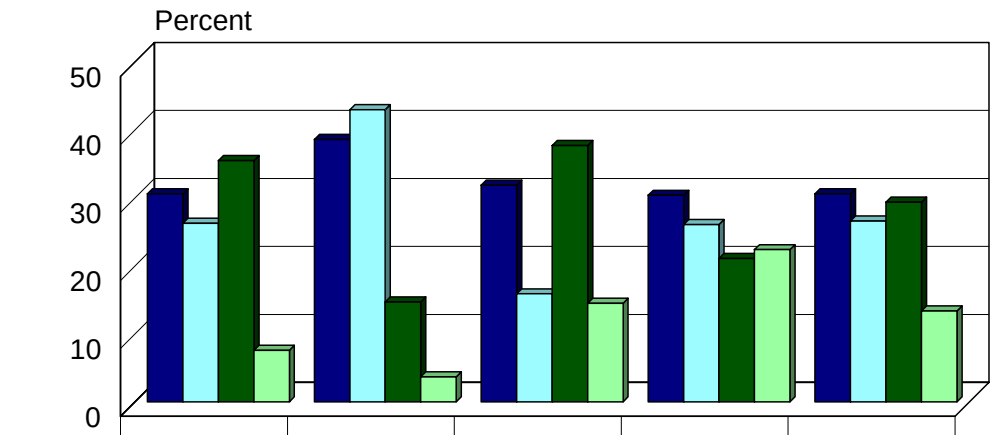
	HET	MSM	IDU	YTH	Total
Always	25	37.8	11.6	16.9	24.3
Usually	9.8	18.7	14.5	8.8	10.7
50/50	5.7	6	2.9	5	5.5
Seldom	13.7	14.3	18.8	7.5	13.2
Never	40.7	19.1	43.5	46.3	35.9

Source: Center for Applied Demography & Survey Research, University of Delaware

Asking your partners if they have been tested for HIV before engaging in sex is another practice that can help reduce the propagation of the infection. This practice is followed by about 35% of the respondents ***usually*** or ***always*** (Figure 3.5). About 36% ***never*** ask their partners if they have been tested. The distributions are quite similar for HET, IDU, and YTH members. MSM respondents are much more aggressive with more than 56% generally following the practice and a significantly lower number never utilizing this strategy.

Condom use is one of the most commonly prescribed strategies for reducing the risk of HIV infection. Respondents were asked how their condom use had changed over the past 12 months (Figure 3.6).

Figure 3.6
More or Less Likely to Use Condoms
by Risk Group



	HET	MSM	IDU	YTH	Total
More	30.6	38.6	31.9	30.4	30.6
As likely	26.3	43	15.9	26.1	26.6
Less	35.5	14.7	37.7	21.1	29.4
Other	7.6	3.7	14.5	22.4	13.4

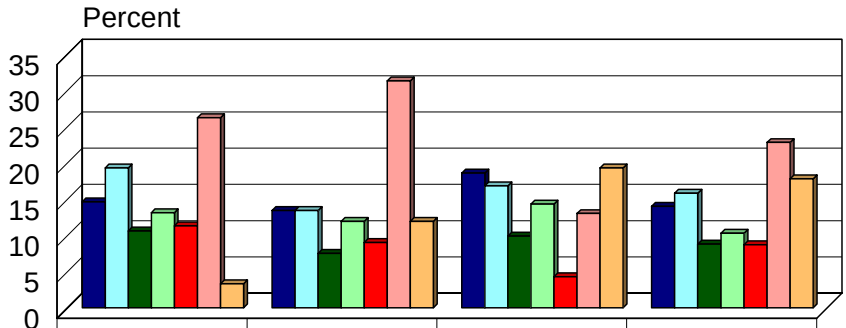
Source: Center for Applied Demography & Survey Research, University of Delaware

Probably the most interesting result is the fact that almost 30% of the respondents are ***less likely*** to use a condom today than 12 months ago. YTH and IDU respondents contributed most to this result. MSM respondents were clearly the most aggressive with nearly 82% using condoms more or about the same amount. (The ***other*** category includes those who responded ***don't know*** or had ***no partners***.)

To get some measure of the frequency of condom use under different sexual situations, respondents were asked how often they used condoms for vaginal sex (Figure 3.7), anal sex (Figure 3.8), and oral sex (Figure 3.9).

Almost 23% of the respondents never used condoms during vaginal sex. Among the risk groups, HET and IDU members were even more likely not to use a condom in that situation. YTH respondents were the most aggressive with 35% using a condom either ***always*** or ***nearly always***.

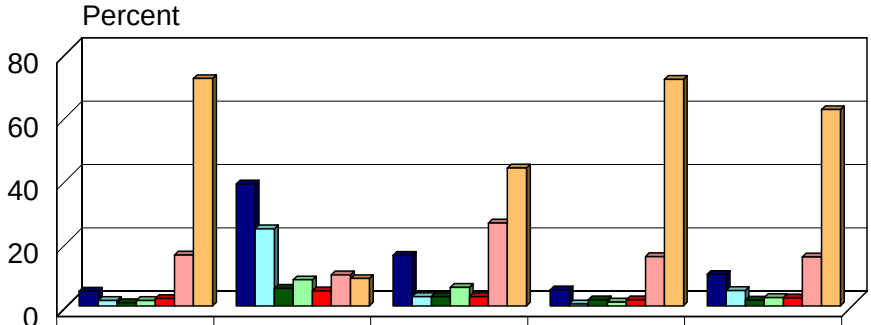
Figure 3.7
Use Condoms for Vaginal Sex
by Risk Group



	HET	IDU	YTH	Total
Always	14.6	13.4	18.6	14
Nearly Always	19.3	13.4	16.8	15.8
50/50	10.6	7.5	9.9	8.8
Sometimes	13.1	11.9	14.3	10.3
Seldom	11.3	9	4.3	8.7
Never	26.2	31.3	13	22.8
No Vaginal Sex	3.3	11.9	19.3	17.8

Source: Center for Applied Demography & Survey Research, University of Delaware

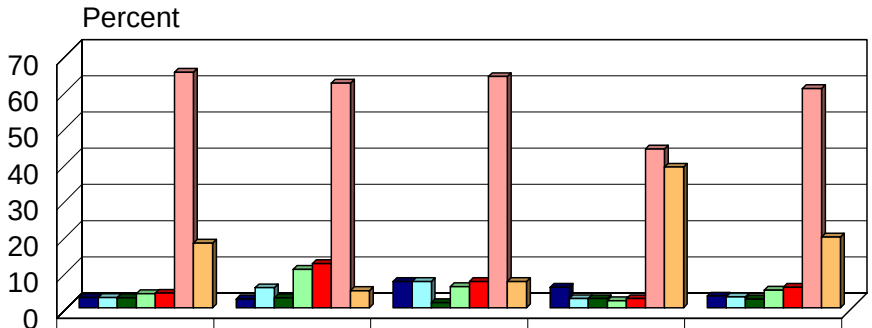
Figure 3.8
Use Condoms for Anal Sex
by Risk Group



	HET	MSM	IDU	YTH	Total
Always	4.6	38.4	15.9	5	9.9
Nearly Always	1.7	24.3	2.9	0.6	4.8
50/50	1	5.5	2.9	1.9	1.8
Sometimes	1.7	8.2	5.8	1.2	2.6
Seldom	2.3	4.7	2.9	1.9	2.5
Never	16	9.8	26.1	15.5	15.4
No Anal Sex	71.7	8.6	43.5	71.4	61.9

Source: Center for Applied Demography & Survey Research, University of Delaware

Figure 3.9
Use Barrier for Oral Sex
by Risk Group



	HET	MSM	IDU	YTH	Total
Always	2.8	2.4	7.2	5.6	3.2
Nearly Always	2.8	5.5	7.2	2.5	3
50/50	2.7	2.7	1.4	2.5	2.4
Sometimes	3.9	10.6	5.8	1.9	4.8
Seldom	4	12.2	7.2	2.5	5.6
Never	65	62	63.8	43.8	60.5
No Oral Sex	17.8	4.7	7.2	38.8	19.5

Source: Center for Applied Demography & Survey Research, University of Delaware

Almost 15% of the respondents never used a condom during anal sex. Considering only those who engaged in anal sex, more than 50% did not use a condom. This result stands in stark contrast to MSM members who use a condom 90% of the time. The most risk averse group in this set are IDU respondents who are much more likely to engage in anal sex (57%) than either HET or YTH, yet still do not use a condom about 45% of the time.

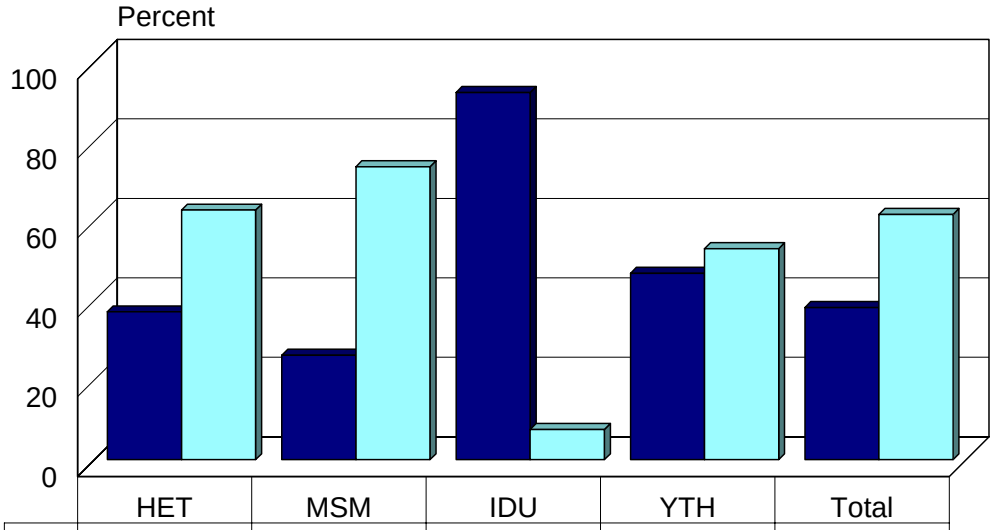
Finally, about 80% of the respondents engage in oral sex. Of those that do, 75% of the time they do not use a condom or other barrier. While the rate of use of oral sex differs between the groups (95% for MSM to 61% for YTH), the frequency of condom/barrier use is relatively low for all. MSM members and IDU respondents engage in oral sex most frequently and are equally likely not to use a condom.

KABB: Substance Abuse

The use of alcohol and drugs has the potential to radically affect judgment. Under those circumstances risks can be taken that might not otherwise have been taken. The result could be an increase in the risk of HIV infection. That risk is in addition to the well-known problems faced by intravenous drug users.

To address this issue, respondents to the 1997 KABB survey were asked about their use of drugs and alcohol and any associated problems. Figure 4.1 contains the rates of drug use measured within each risk group.

Figure 4.1
Use Drugs
by Risk Group

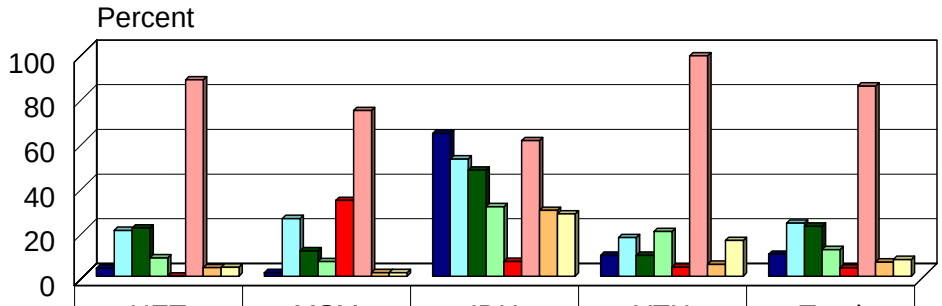


	HET	MSM	IDU	YTH	Total
Yes	37.2	26.3	92.4	46.9	38.3
No	62.8	73.7	7.6	53.1	61.7

Source: Center for Applied Demography & Survey Research, University of Delaware

Just more than 38% of the respondents reported using street drugs as opposed to injecting drugs. That rate is about seven times higher than typically found in the adult population of Delaware. Except for IDU whose members are all drug users, the pattern is similar for the other three groups. The difference between YTH respondents and HET members is significant but only marginally so.

Figure 4.2
Type of Drugs
by Risk Group



	HET	MSM	IDU	YTH	Total
Heroin	3.6	1.6	63.9	9.3	9.8
Cocaine	20.5	25.8	52.5	17.3	23.7
Crack	21.6	11.3	47.5	9.3	22.4
Acid	8.2	6.5	31.1	20	11.9
Poppers	0	33.9	6.6	4	3.7
Pot	87.9	74.2	60.7	98.7	85.1
Downers	3.8	1.6	29.5	5.3	6.3
Uppers	4	1.6	27.9	16	7.5

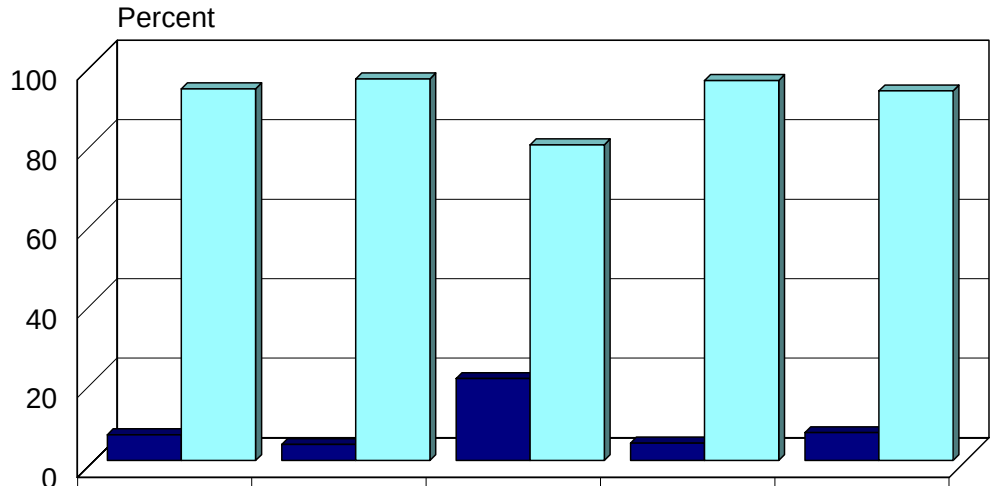
Source: Center for Applied Demography & Survey Research, University of Delaware

In addition to asking if they used drugs, they were also asked what drug they used (Figure 4.2). ***Marijuana*** is the overwhelming drug of choice for the entire sample as well as for each of the risk groups. ***Cocaine*** and ***Crack*** are at the next level of popularity but there are now differences between the groups. First, YTH members are much less likely to use either but do use ***Acid*** (LSD) much more than either HET or MSM respondents. Second, MSM members are users of ***cocaine*** but less so ***crack***. They also are attracted to ***Poppers*** (amyl nitrate) at a much higher rate than other groups. IDU participants use almost anything.

About 7% of the participants admitted exchanging sex for either drugs or money (Figure 4.3). The rate was low for three of four risk groups but was four times more prevalent among IV drug users (IDU). This practice has a high potential for spreading HIV since IDU members have higher risks of contracting HIV in the first place.

Risk of HIV infection among intravenous drug users can be reduced by not sharing needles with others and by sterilizing the needle before use. Both of these strategies were addressed in the survey instrument (Figure 4.4).

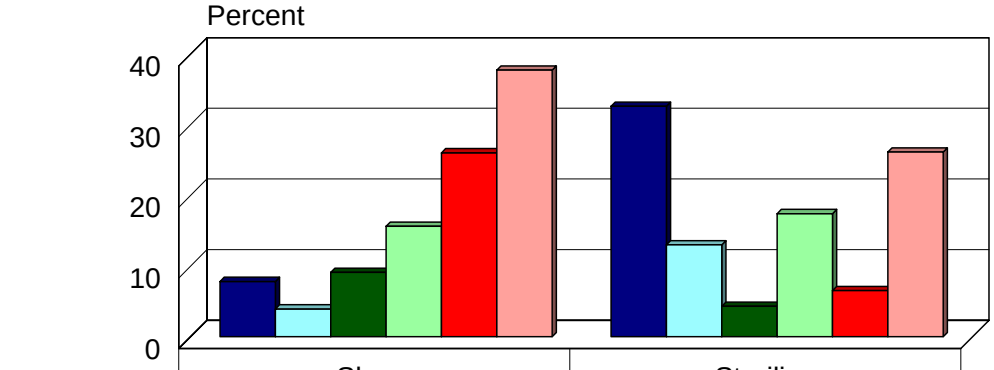
Figure 4.3
Exchange Sex for Drugs or Money
by Risk Group



	HET	MSM	IDU	YTH	Total
Yes	6.5	4	20.6	4.4	7
No	93.5	96	79.4	95.6	93

Source: Center for Applied Demography & Survey Research, University of Delaware

Figure 4.4
Share and Sterilize Needles



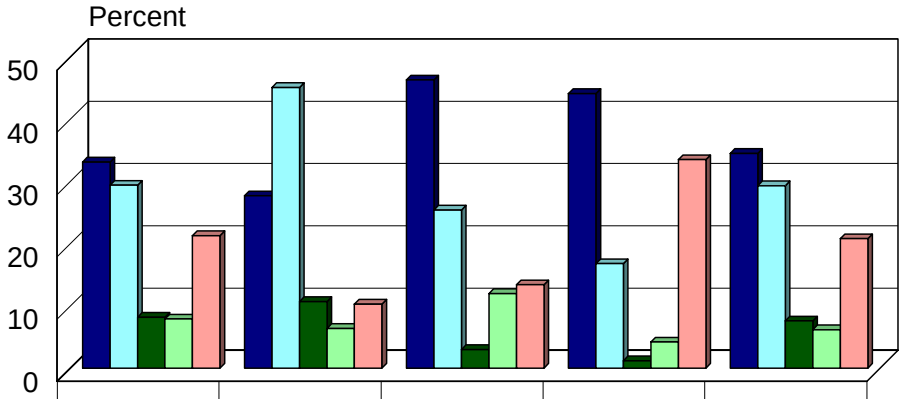
	Share	Sterilize
Always	7.8	32.6
Nearly Always	3.9	13
50/50	9.1	4.3
Sometimes	15.6	17.4
Seldom	26	6.5
Never	37.7	26.1

Source: Center for Applied Demography & Survey Research, University of Delaware

Approximately 62% of IDU members share their needles to some extent. (The totals may not add to 100% if some did not answer.) However, of those who share, about two thirds share infrequently. About 36% of IDU respondents are putting themselves at risk regularly.

Under the best circumstances needles would be sterilized before use. These data suggest that IDU members need to be even more aggressive. More than 26% never sterilize which can be a problem even if the needles are not shared. An additional 28% sterilize their needles relatively infrequently. Thus, nearly half of the population of intravenous drug users is risking infection by HIV and other maladies.

Figure 4.5
How Many Drinks Last Week
by Risk Group

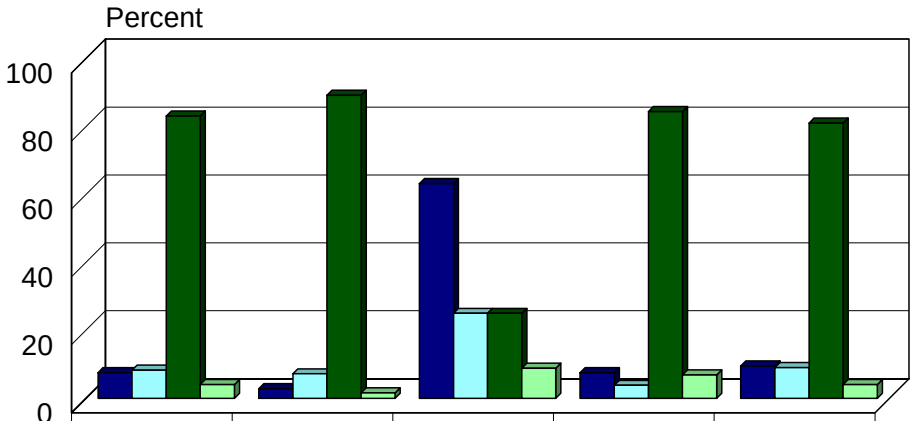


	HET	MSM	IDU	YTH	Total
0	33.1	27.7	46.3	44.1	34.5
1-4	29.4	45.1	25.4	16.8	29.3
5-9	8.2	10.7	3	1.2	7.6
10+	7.9	6.4	12	4.2	6.2
Don't Drink	21.3	10.3	13.4	33.5	20.8

Source: Center for Applied Demography & Survey Research, University of Delaware

Figure 4.5 contains the distribution of alcohol consumption for one week by risk group. This information is insufficient to detect binge drinking or otherwise classify individuals as having a problem. However, there are a few differences that are worth noting. First, IDU members are more likely to drink than any of the others. Second, the overall incidence of alcohol use is roughly three times what is reported here for drug use. Third, about 43% of the respondents are regular drinkers and only 6% might be classified as moderate to heavy drinkers.

Figure 4.6
Problems with Drugs and Alcohol
by Risk Group



	HET	MSM	IDU	YTH	Total
Drugs	7.5	2.8	63.2	7.5	9.5
Alcohol	8.3	7.2	25	3.8	9
Neither	83.1	89.2	25	84.4	81
Don't Know	4	1.6	8.8	6.9	4

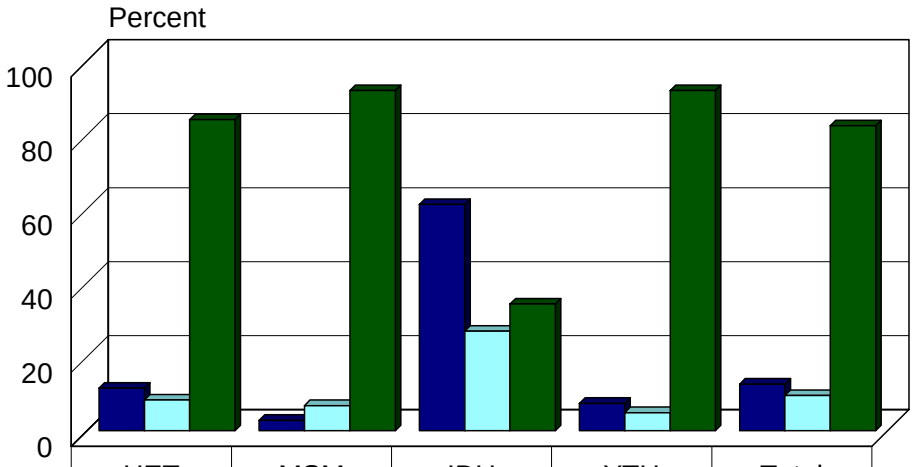
Source: Center for Applied Demography & Survey Research, University of Delaware

The fact that someone uses drugs or alcohol may not seem to be a problem to the user (Figure 4.5). For example, only 63% of IDU members feel that they have a problem with drugs. Among HET members, the 7.5% that feel they have a drug problem represent about 20% of the HET user population. Similarly, 26% of MSM respondents are drug users but only 3% think they might have a problem. In all likelihood this differential assessment of use versus problem incorporates intensity of use, which is not measured here.

Another measure of seriousness is the fact that an individual has sought treatment (Figure 4.7). Those figures correlate well with those found in Figure 4.6 that indicate the person thinks he/she has a problem. In all probability, the respondent is defining a problem as something serious enough to have sought treatment.

Finally, in Figure 4.8, the responses are summarized as to whether alcohol or drug abuse has affected the respondent's sexual behavior. About 10% respond affirmatively in each category, but there are differences between the groups. In general, alcohol causes a bigger problem than drugs. HET and YTH members have similar patterns. In contrast, alcohol is a much bigger problem for MSM respondents and drugs are for the IDU group.

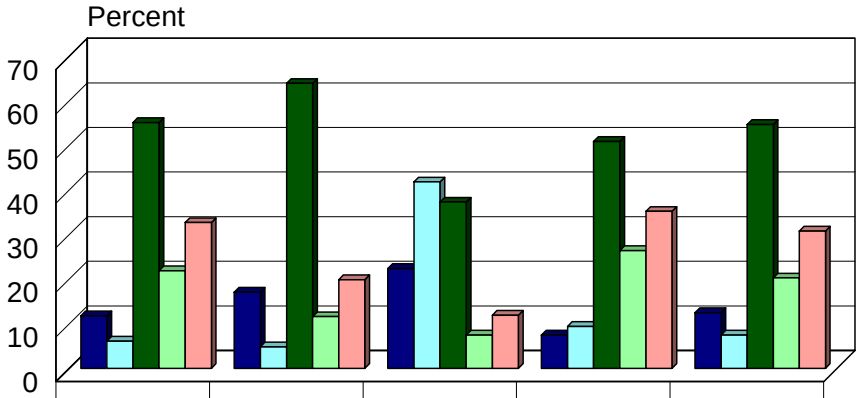
Figure 4.7
Have You Been in Treatment
by Risk Group



	HET	MSM	IDU	YTH	Total
For Drugs	11.5	2.8	61.2	7.4	12.6
For Alcohol	8.3	6.8	26.9	4.9	9.5
Neither	84.1	92	34.3	92	82.5

Source: Center for Applied Demography & Survey Research, University of Delaware

Figure 4.8
Substance Affected Sexual Behavior
by Risk Group



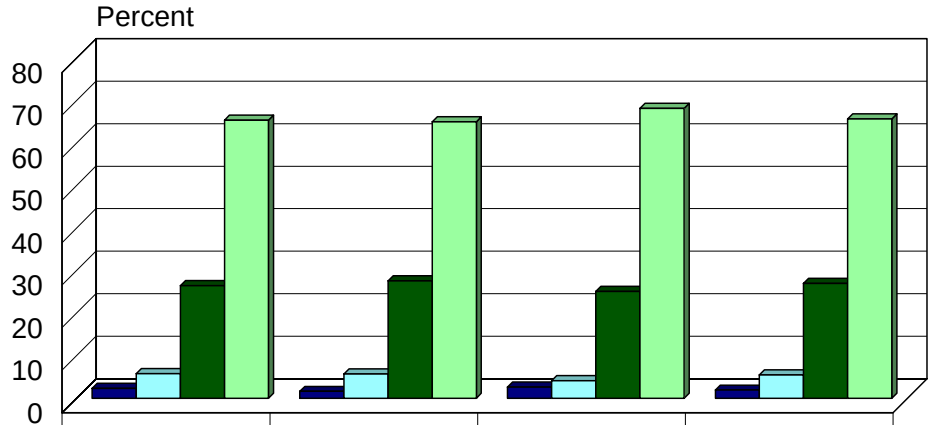
	HET	MSM	IDU	YTH	Total
Alcohol	11.8	17.1	22.4	7.5	12.5
Drugs	6.1	4.8	41.8	9.4	7.5
Neither	55.1	63.9	37.3	50.9	54.7
Don't Drink	21.9	11.6	7.5	26.4	20.3
Don't Do Drugs	32.7	19.9	11.9	35.2	30.8

Source: Center for Applied Demography & Survey Research, University of Delaware

BRFSS: HIV

The Behavioral Risk Factor Surveillance System uses a continuous telephone survey model where 213 adult Delawareans are interviewed monthly throughout the year. This survey has run continuously since 1990 and addresses many areas of health behavior. Not all questions are asked every year. The survey consists of a core set of questions and then optional, rotating modules of questions. In addition, the State of Delaware adds a few "local" questions to the questionnaire. Periodically, modules are completed for AIDS/HIV and for Sexual Behavior. Both were included in 1999, and the results are provided in this report. Since this is a random sample of the population of adults in Delaware, these results provide a good contrast to the KABB which is not a random sample.

Figure 5.1
Chances of Getting Infected with HIV
by County

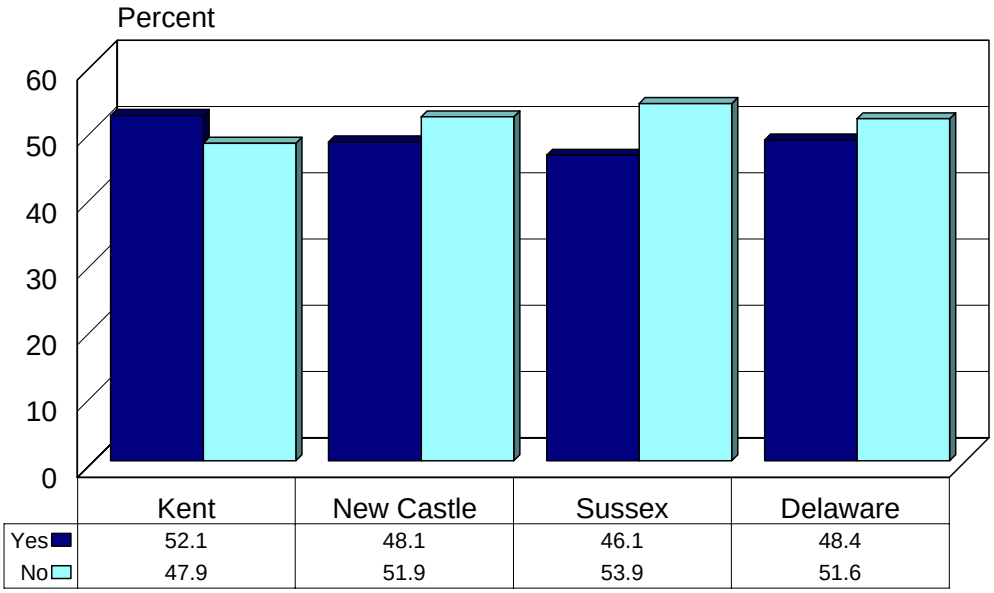


	Kent	New Castle	Sussex	Delaware
High	2.3	1.6	2.6	1.9
Medium	5.8	5.7	4.1	5.5
Low	26.5	27.6	25.1	27
None	65.4	65	68.2	65.7

Source: Center for Applied Demography & Survey Research, University of Delaware

Both the KABB sample and the BRFSS sample were asked about their chances of contracting HIV. In the KABB sample, 16.9% thought their chances were either medium or high. That is roughly double what the assessments are from BRFSS (Figure 5.1). Probably the more telling statistic was that 26% of the KABB sample said they didn't know in comparison to 0% for the BRFSS sample. The difference between the two samples is the degree of risk taking.

Figure 5.2
Ever Been Tested for HIV
by County



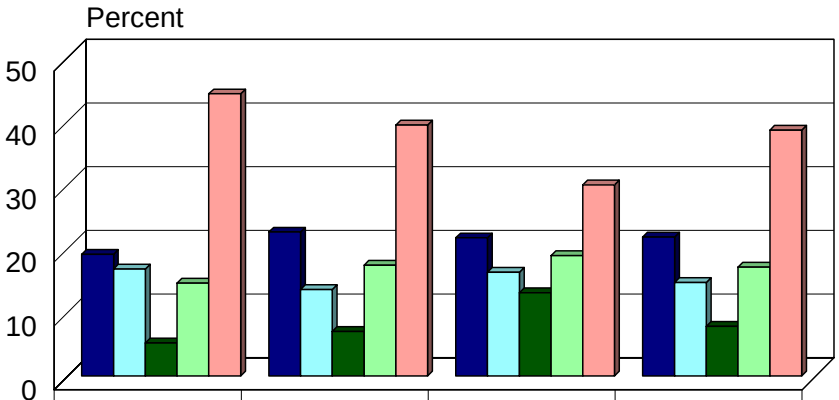
Source: Center for Applied Demography & Survey Research, University of Delaware

In the KABB sample, 67% had been tested for HIV, which is significantly higher than the 48.4% measured by BRFSS (Figure 5.2). This result correlates well with the assessment of risk, in that those taking more risks would be more likely to get tested.

Both surveys collected information on the reason for being tested. In Figure 2.2, 53.8% of the KABB population was checking to see if they were infected. In contrast, only 21.8% of the BRFSS sample was tested to see if they had HIV. Most BRFSS respondents were tested (or at least thought they were) during a variety of routine checkups, hospital admissions, and blood donations (Figure 5.3).

Both surveys reported that the respondents who were tested received the results in excess of 85% of the time (Figure 2.3 and Figure 5.4). This suggests that even in the case of a routine checkup physicians were ordering the test and reporting the results. The other 15% were either not tested or were tested under circumstances where only positive results are reported.

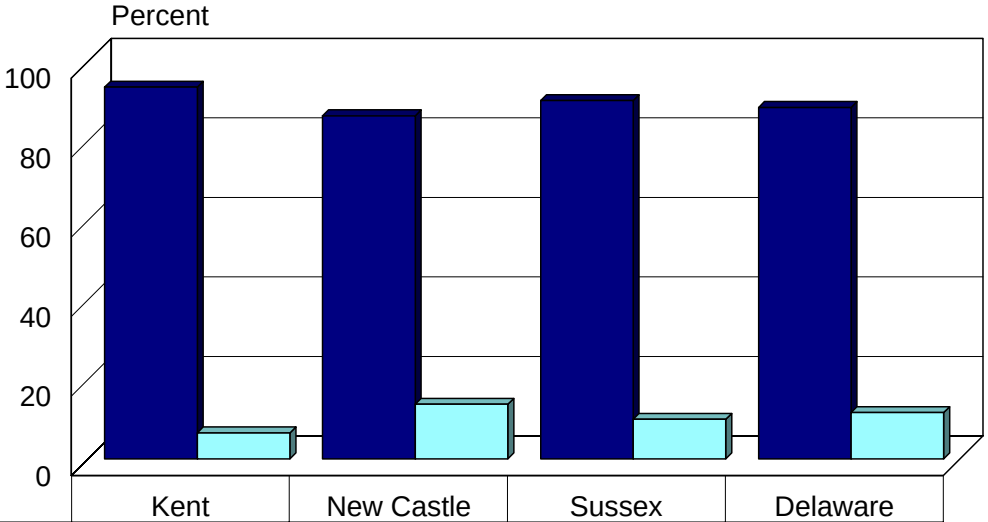
Figure 5.3
If Tested, What Was the Reason
by County



	Kent	New Castle	Sussex	Delaware
Infected?	19.1	22.6	21.7	21.8
Routine Checkup	16.8	13.6	16.3	14.7
Hospital	5.2	7	13.1	7.8
Pregnancy	14.6	17.4	18.9	17.1
Other	44.3	39.4	30	38.6

Source: Center for Applied Demography & Survey Research, University of Delaware

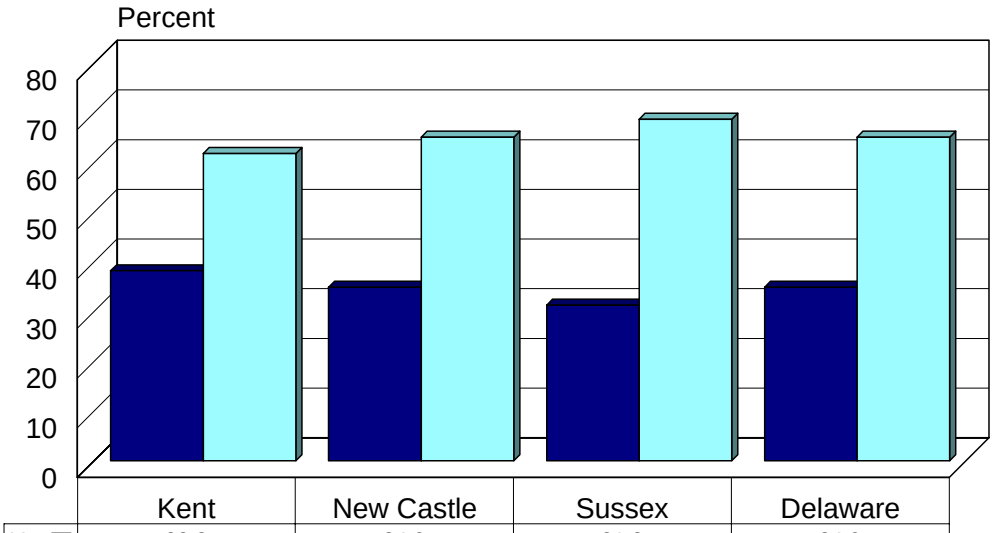
Figure 5.4
If Tested, Did You Receive the Results
by County



	Kent	New Castle	Sussex	Delaware
Yes	93.5	86.3	90.1	88.4
No	6.5	13.7	9.9	11.6

Source: Center for Applied Demography & Survey Research, University of Delaware

Figure 5.5
If Results Received, Were You Counseled
by County



	Kent	New Castle	Sussex	Delaware
Yes	38.2	34.9	31.3	34.9
No	61.8	65.1	68.7	65.1

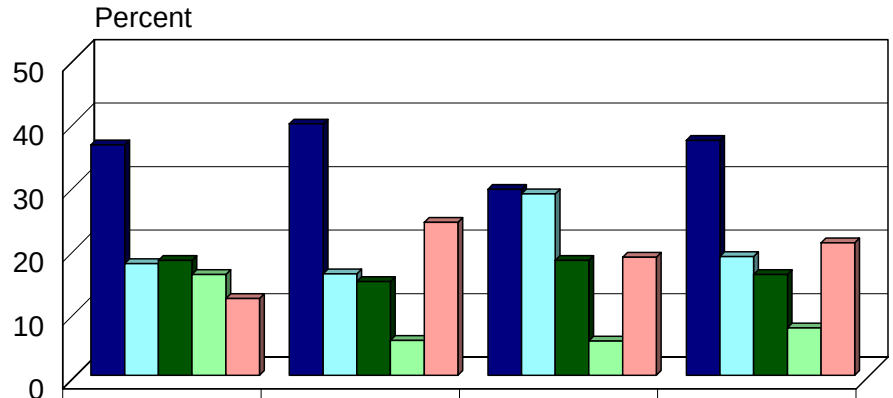
Source: Center for Applied Demography & Survey Research, University of Delaware

In general, those that received the results should receive counseling independent of the test result. In the KABB survey, almost 75% of the participants did receive counseling. In the BRFSS survey (Figure 5.5), the proportion was much lower (35%). The difference probably relates to the type of test, the circumstances, and the organization that administered the test.

In BRFSS, respondents were asked where they were tested (Figure 5.6). The most frequent response was by their physician. There were very few differences between the counties in 1999 compared with 1997. None of those differences was statistically significant.

The final question in the BRFSS sequence asked a question with great public policy significance. Respondents were asked if they would encourage a teenager to use a condom. Over 92% of adult Delawareans responded affirmatively and those results were similar across all three counties (Figure 5.7).

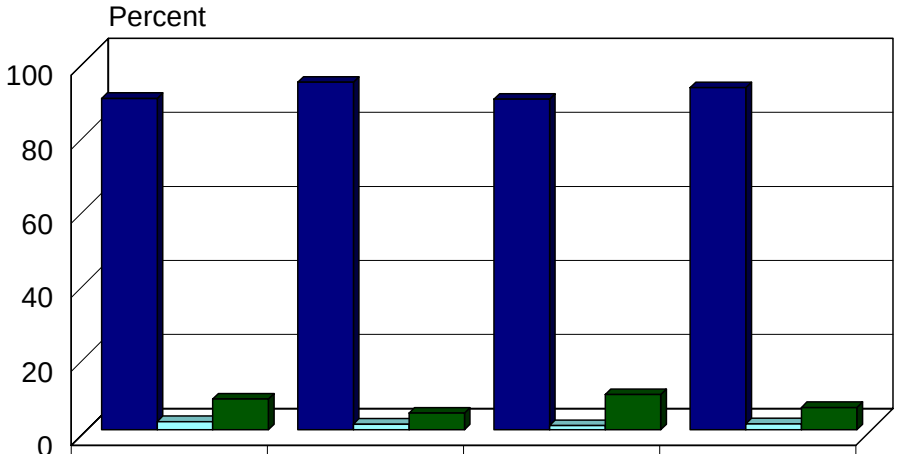
Figure 5.6
If Tested, Where Were You Tested
by County



	Kent	New Castle	Sussex	Delaware
Physician	36.3	39.6	29.3	37
Hospital	17.6	16	28.6	18.7
Health Clinic	18.1	14.8	18.1	15.9
Military	15.9	5.5	5.4	7.5
Other	12.1	24.1	18.6	20.9

Source: Center for Applied Demography & Survey Research, University of Delaware

Figure 5.7
Encourage a Teenager to Use a Condom
by County



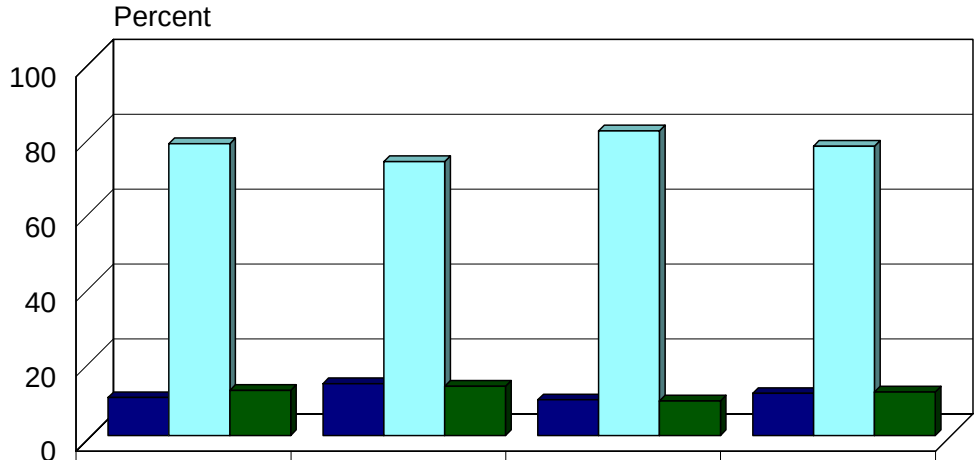
	Kent	New Castle	Sussex	Delaware
Yes	89.5	93.9	89.3	92.4
No	2.2	1.5	1.1	1.6
Other Advice	8.3	4.5	9.5	6

Source: Center for Applied Demography & Survey Research, University of Delaware

BRFSS: Sexual Behavior

In the presentation of the KABB results, the number of sexual partners was discussed as a potential risk factor. A similar question was asked to the BRFSS respondents (Figure 6.1). There are several aspects of this information that should be noted. First, a similar proportion of both samples (BRFSS and KABB) had no partners in the last 12 months. Second, in KABB, 35% had only a single partner while in BRFSS almost 77% were monogamous. (It should be noted that these questions were not posed to those age 65 and over in BRFSS, so the entire difference is not the elderly.) However, the KABB sample is younger and is more sexually active than the average adult Delawarean under the age of 65.

Figure 6.1
Number of Sexual Partners in the Last 12 Months
by County

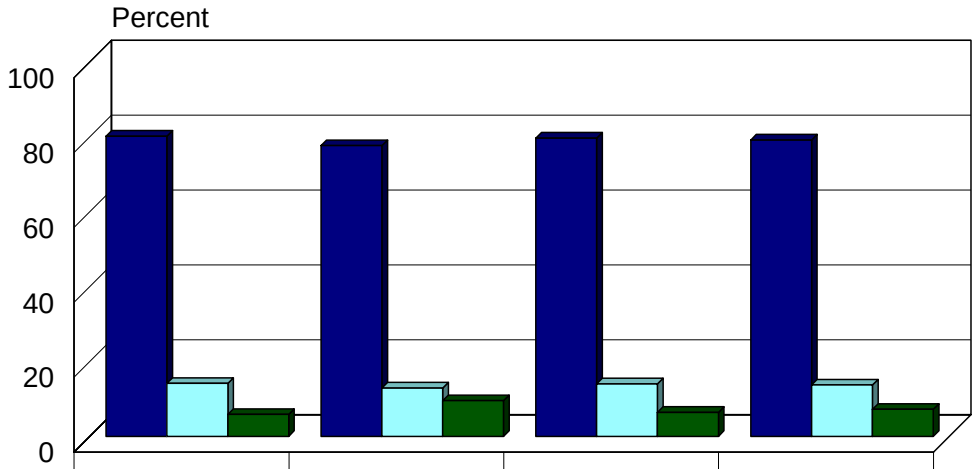


	Kent	New Castle	Sussex	Delaware
None	10.1	13.8	9.5	11.2
One	77.9	73.1	81.3	77.2
2-24	12	13.1	9.2	11.6

Source: Center for Applied Demography & Survey Research, University of Delaware

A second question was added to BRFSS, which asked how many new partners the respondent had during the last 12 months. About 93% of the respondents replied either ***none*** or ***one***. This leaves an estimated 7% of the population studied that had multiple new partners during the year.

Figure 6.2
Number of New Sexual Partners in the Last 12 Months
by County



	Kent	New Castle	Sussex	Delaware
None	80.1	77.6	79.6	79.1
One	14.1	12.9	14	13.7
2-13	5.8	9.5	6.4	7.2

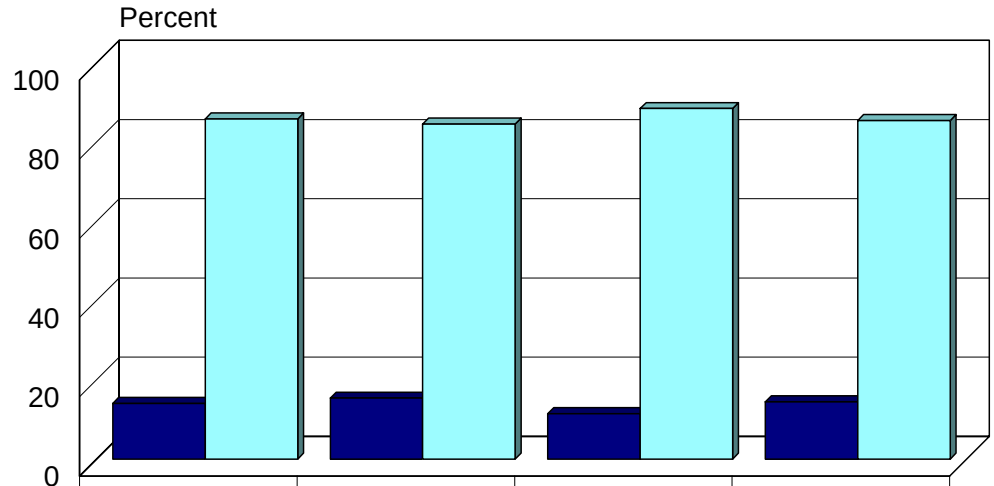
Source: Center for Applied Demography & Survey Research, University of Delaware

Change in sexual behavior is one of the goals promoted to reduce HIV infection. This was examined in Figure 3.2 earlier. The same question was asked during the 1997 BRFSS. Those results are found in Figure 6.3.

In the KABB survey, 40% of those respondents reported changing their behavior. Given that they are clearly a more “at risk population”, this result would be expected. In Figure 6.3, only 15% have changed their behavior. Further, the differences between the counties are not significant. Given the nature of the relationships (fewer and stable partners), this result is also expected.

For those few that did report changing their behavior, the usual strategies are reported (Figure 6.4). The distributions are somewhat different among the counties. While the number of partners (fewer or one) topped the list for the BRFSS, use of condoms was mentioned more often in the KABB survey (Figure 3.3), but not by much. This is undoubtedly because several of the KABB risk groups have a significant number of partners as a matter of practice.

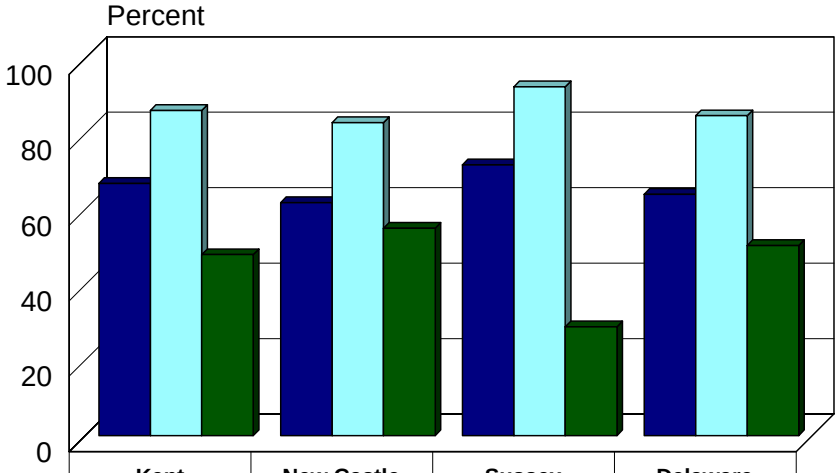
Figure 6.3
Changed Sexual Behavior in Last 12 Months
by County



	Kent	New Castle	Sussex	Delaware
Yes	14.1	15.4	11.5	14.5
No	85.9	84.6	88.5	85.5

Source: Center for Applied Demography & Survey Research, University of Delaware

Figure 6.4
How Have You Changed Sexual Behavior
by County

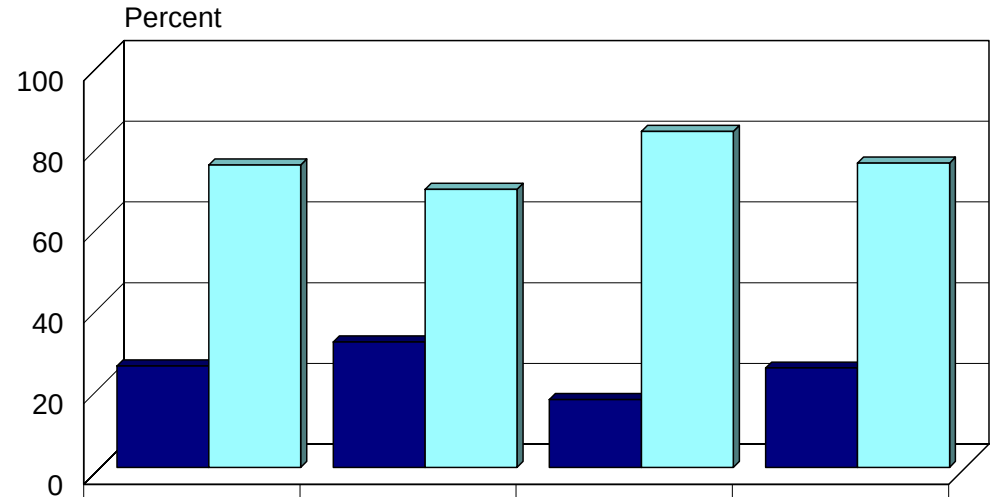


	Kent	New Castle	Sussex	Delaware
Decrease Partners	66.9	61.8	71.8	64
One Partner	86.2	83	92.5	84.8
Condoms Always	48	55	28.9	50.4

Source: Center for Applied Demography & Survey Research, University of Delaware

Condom usage is a key part of the strategy for reducing the transmission of HIV and other sexually transmitted diseases. Several questions were asked about condom use on the BRFSS and one of them offers a comparison for the KABB survey. In Figure 3.7, KABB respondents were asked about their use of condoms during vaginal sex. The response was that condoms were ***never*** used 23% of the time. If an index is constructed that weights all of the responses by the probability of being used (e.g. always=1, almost always=.95,…), then for the KABB heterosexual, the probability of using a condom at any given time was approximately 40%. In the BRFSS, respondents were asked if they used a condom during their last sexual intercourse (Figure 6.5). Only 25% responded that they had not used one. Condom use is much more prevalent in the KABB risk groups.

Figure 6.5
Use a Condom During Last Sexual Intercourse
by County

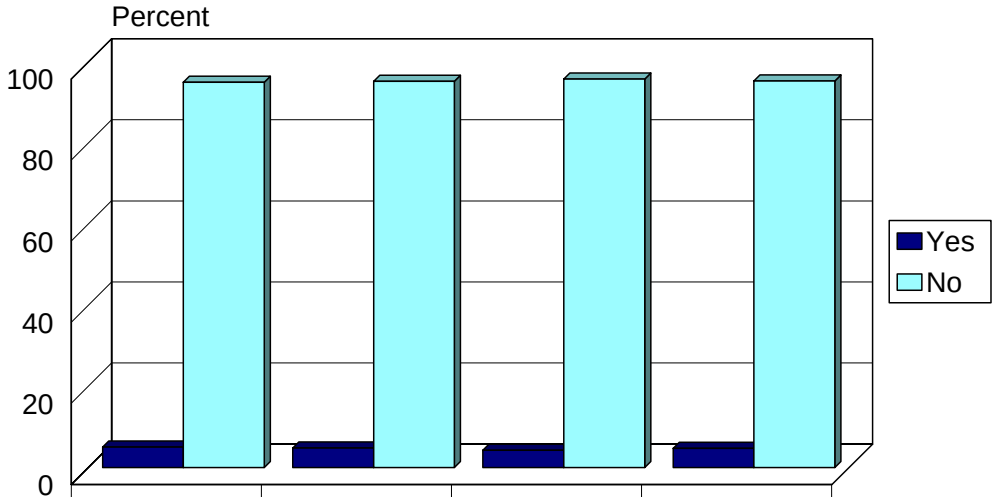


	Kent	New Castle	Sussex	Delaware
Yes	25.1	31.1	16.8	24.6
No	74.9	68.9	83.2	75.4

Source: Center for Applied Demography & Survey Research, University of Delaware

Finally, BRFSS respondents were asked if they had a series of risk factors: intravenous drug use (IDU), sexually transmitted disease (STD), HIV, and anal sex without a condom (Figure 6.6). Overall, 4.7% of Delawareans had one or more of these qualifying conditions.

Figure 6.6
Any Listed Condition:
(IDU, STD, HIV, and Anal Sex/No Condom)
by County



	Kent	New Castle	Sussex	Delaware
Yes	5	4.8	4.2	4.7
No	95	95.2	95.8	95.3

Source: Center for Applied Demography & Survey Research, University of Delaware

APPENDIX

KABB Survey

1. Have you ever been tested for HIV before? (circle one):

(1) Yes (2) No (9) Maybe

2. In the past 12 months, with about how many men have you had sexual contact? (circle one):

(1) Don't have sex with men
(2) None
(3) 1 man
(4) 2-3 men
(5) 4-9 men
(6) 10-14 men
(7) 15-19 men
(8) 20 or more men
(9) Don't know how many men

3. In the past 12 months, with about how many women have you had sexual contact? (circle one):

(1) Don't have sex with women
(2) None
(3) 1 woman
(4) 2-3 women
(5) 4-9 women
(6) 10-14 women
(7) 15-19 women
(8) 20 or more women
(9) Don't know how many women

4. Have you ever had VD or any other sexually transmitted disease (STD)? (circle one):

(1) Yes (2) No (9) Don't Know

5. Have you ever been diagnosed as having tuberculosis (TB)? (circle one):

(1) Yes (2) No (9) Don't Know

6. What are your chances of getting HIV, the virus that causes AIDS? (circle one):

(1) High
(2) Medium
(3) Low
(4) None
(5) Already Have HIV
(9) Don't Know

7. During the past 12 months, have you changed your sexual behavior? (circle one):

(1) Yes
(2) No, taking same risks
(3) No sexual partners
(9) Don't Know

8. In the past 12 months -- *before* having sex -- how often did you ask your sexual partner(s) if they had been tested for HIV? (circle one):

(1) Always
(2) Usually
(3) Half of the Time
(4) Seldom
(5) Never
(6) No sexual partners
(9) Don't Know

9. In the past 12 months, were you more likely or less likely to use condoms? (circle one):

(1) More Likely - Why? specify):_____
(2) As Likely
(3) Less Likely - Why? specify):_____
(4) No Sexual Partners
(9) Don't Know

10. During the past 12 months, how often have you used a condom while having vaginal sex? (circle one):

(1) Never have vaginal sex
(2) Always
(3) Nearly Always
(4) Half of the Time
(5) Sometimes
(6) Seldom
(7) Never
(9) Don't Know

11. During the past 12 months, how often have you used a condom while having anal sex? (circle one):

(1) Never have anal sex
(2) Always
(3) Nearly Always
(4) Half of the Time
(5) Sometimes
(6) Seldom
(7) Never
(9) Don't Know

12. During the past 12 months, how often have you used a condom or any other barrier while having oral sex? (circle one):

(1) Never have oral sex
(2) Always
(3) Nearly Always
(4) Half of the Time
(5) Sometimes
(6) Seldom
(7) Never
(9) Don't Know

13. During the past 12 months, have you injected drugs or steroids? (circle one):

(1) Yes (2) No

14. During the past 12 months, have you used any of the following street drugs? (circle all that apply):

(01) Don't take drugs
(02) Heroin (Smack, P-Funk, Horse)
(03) Cocaine (Lady)
(04) Crack
(05) PCP, LSD-Hallucinogens (Acid)
(06) Amyl Nitrate (Poppers, Aromas, RUSH)
(07) Marijuana
(08) Barbiturates (Downers)
(09) Stimulants/Amphetamines (Meth, Speed)
(10) Other (specify)_____
(99) Unknown

15. Have you ever exchanged sex for money or drugs? (circle one):

(1) Yes (2) No

16. Do you think you may have either a drug or alcohol problem? (circle all that apply):

(1) Have a drug problem
(2) Have an alcohol problem
(3) No drug or alcohol problem
(9) Don't Know

17. In the past month, have drugs or alcohol affected your sexual behavior? (circle all that apply):

(1) Alcohol affected sexual behavior
(2) Drugs affected sexual behavior
(3) No, Neither drugs nor alcohol affected behavior
(5) Don't Drink
(6) Don't Do Drugs

18. Have you ever been in a drug or alcohol treatment program? (circle all that apply):

(1) Yes, drug treatment (2) Yes, alcohol treatment (4) No, neither drug nor alcohol treatment

19. During the past week, how many alcoholic beverages have you consumed? (circle one):

(1) Not Applicable - don't drink
(2) None
(3) 1-4 drinks
(4) 5-9 drinks
(5) 10-14 drinks
(6) 15-19 drinks
(7) 20-30 drinks
(8) 30 or more drinks
(9) Don't Know

20. During the past 12 months, from what sources have you received HIV/AIDS information? (circle all that apply):

(01) HIV/AIDS education workshops/classes
(02) Health Fair/Festival with AIDS booth
(03) Radio or Television
(04) Pamphlet
(05) School
(06) Friends
(07) Parents
(08) Doctor or Nurse
(09) Newspapers or Magazines
(10) AIDS Counselor
(11) Public Health Clinic
(12) Streets
(13) Other (specify)_____
(99) Not Sure Where Learned about HIV/AIDS

21. What is your age: _____

22. What is your gender? (circle one):
(1) Male (2) Female

23. Are you of Hispanic/Latino origin? (circle one): (1) Yes (2) No

24. What is your race? (circle one):

(1) White/Caucasian
(2) African American/Caribbean
(3) Native American
(4) Asian American/Pacific Islander
(5) Multi-Racial
(6) Other

_____

25. Where do you live?

City: _____
Zip Code: _____

26. What is the highest grade or year or school you completed? (circle one):

(1) None
(2) Kindergarten Only
(3) Grades 1-8
(4) Grades 9-11
(5) High School Graduate/GED
(6) Some College or Technical School
(7) College Degree