National Institute for Health Development

# KNOWLEDGE, ATTITUDES AND BEHAVIOUR RELATED TO HIV/AIDS AMONG ESTONIAN YOUTH

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#### Introduction

The summaries of the research Knowledge, Attitudes and Behaviour Related to HIV/AIDS Among Estonian Youth carried out from November 2002 up to September 2003 have been provided in the following publication. The research was performed by the National HIV/AIDS Prevention Program (National Institute for Health Development) together with the Department of Public Health of Tartu University and Estonian Health Promotion Association.

The aim for carrying out the current national research was to get a better overview of Estonian youth's:

- level of knowledge regarding HIV/AIDS topics;
- scope of risk behaviour related to the possibilities of getting infected with HIV;
- attitudes and stigma related to HIV problems;
- information sources, where from data on HIV/AIDS topics are obtained and wished to be obtained.

The collection of data on the topics provided helps to plan the prevention work on HIV/AIDS and drug addiction and make the relevant information more accessible for the young people.

The research involves the Estonian youth and children aged 10-29. According to the statistics on HIV-infection the major risk group today includes the young people aged 15-24 (this age group made 70% of the new registered infection cases in 2002). In addition to the most vulnerable age group the persons aged 10-14 and 25-29 were involved in the research. Getting an overview of the knowledge and attitudes of the schoolchildren aged 10-14 is essential as the aright aimed prevention activities in the given age group help to decrease the risk behaviour in the older age. The ones aged 25-29 have been involved in the research since their share among the people living with HIV/AIDS (PLWHA) has gradually started to increase (the persons aged 25-29 made 18% of the new registered cases in 2000 and 28% in 2002).

The following research report consists of 7 chapters. The first chapter provides an overview of the methodology used in carrying out the research. The latter is followed by the extensive explanations of research results. First, the general socio-demographic background and lifestyle of the questioned children and youth are observed. The overview of the knowledge of the young people in the questions related to HIV/AIDS and of where they receive the relevant information follows. The fifth chapter deals with different misunderstandings, attitudes and beliefs. The sixth chapter sums up the topic regarding the extent of condom use and how available and protective the condoms are considered. In the last chapter the overview of the risk groups of different sexual behaviour among the young people is provided. The report ends with the summary of the main observations resulting from the given research.

The team of the research thanks everyone who has contributed to the completion of the report.

## 1. Overview of the implementation of the research

The following chapter provides an overview of carrying out the questioning and the data, based on which the questioning results are provided.

#### Establishing of a sample

The research was carried out in the group aged 10-29. All young people aged 19-29 living in Estonia and all students of IV-XII classes made up the total set. As at 1 January 2002 210, 542 young people aged 19-29 resided in Estonia (according to the Statistical Office). In 2002/2003 academic year 155,661 students studied in IV-XII classes (according to the Ministry of Education). The separate sample was established for both sets.

Estonia was divided into four districts in preparing the sample regarding the persons aged 10-18: Harju County, Ida-Viru County, East-Estonia (Lääne-Viru-, Jõgeva-, Tartu-, Põlva-, Valga- ja Võru County) and West-Estonia (Hiiu-, Saare-, Lääne-, Järva-, Pärnu-, Rapla- and Viljandi County). The schools were divided into three groups: Estonian-based city schools, Russian-based city schools and county schools. The uniform sequence selection was used for selecting the schools in 12 layers established. The sample involved 41 schools in total; 6 classes from each school. The size of the sample of students was 4,182 students (2.7% of the total set).

The stratified random sample was separately established among the young people aged 19-29 in each county. The generic-age structure of each county was taken into account. The size of the sample in total was 5,982 young people (2.8% of the total set).

## Conducting the questionnaire

The separate questionnaires were prepared for three age groups:

- the persons aged10-13;
- the persons aged14-18;
- the persons aged 19-29.

The more detailed questions about sexual life were excluded from the questionnaire of the children aged 10-13, as according to the earlier researches the number of persons having had sexual intercourse in this age group is very small<sup>1</sup>. The questions about the family differed in the questionnaires of the schoolchildren and the ones aged 19-29. The schoolchildren were also extra asked about the relations at school and among friends and about the ways of spending one's leisure time. Pursuant to the latter the questionnaires included 61, 74 and 86 questions respectively as to age groups. The multiple choice questions were mainly used.

As regards the persons aged 10-18 the questioning was conducted during the visit of the schools and the questionnaires were completed in the classes during one lesson. The questioning was carried out among the persons aged 19-29 by mail.<sup>2</sup> 44 schools in total participated in the questioning, including the additional questioning, conducted among the schoolchildren. 1,716 questionnaires in total were collected in IV-VII classes (children aged 10-13), 1,633 of which suited for the analysis. 2,647 questionnaires in total were collected in VII-XII classes (persons aged 14-18), 2,433 of which suited for the analysis. 2,485 questionnaires, i.e. 42% of the sent questionnaires were returned by the persons aged 19-29. 2,433 questionnaires were suitable for the analysis which makes 41% of the questionnaires sent by mail.

The data of 6,499 children and youth aged 10-29 in total have been used for data analysis. The questioning was carried out from February to May 2003.

<sup>&</sup>lt;sup>1</sup> See KISS 1994 and 1999, researches carried out in the Department of Public Health of Tartu University in 1997-2002

## Data analysis

The respondents have been divided into three main age groups: the persons aged 10-13, 14-18 and 19-29. In case of material differences the division of five has been used, where two older age groups have been divided into two in their turn. The applied age division of five is the following:

- the persons aged 10-13;
- the persons aged 14-15;
- the persons aged 16-18;
- the persons aged 19-24;
- the persons aged 25-29.

As the major risk group based on the statistics of HIV infection includes the young people aged 15-24, the more significant indicators have been separately provided about this age group. Also, the given age group is used in international indicators. The data have been mainly analysed according to gender, age, nationality, district, residence and also as to educational level regarding the ones aged 19-29. If no material differences exist among the respondents regarding the given indicators, it has not been mentioned in the report.

The respondents have been divided into two groups for finding the nationality-based relations: Estonians and non-Estonians. In the given breakdown the group of non-Estonians includes the Russians and representatives of all other nationalities, as only 2.4% of the respondents marked other nationality than Estonian and Russian.

The respondents were divided between three levels for finding the education-based relations among the people aged 19-29:

- 1 level basic education or less, secondary education to be acquired;
- 2 level secondary education, secondary vocational education to be acquired or completed;
- 3 level higher education to be acquired or completed.

The respondents have been divided into two for finding the residence-based relations: city and county district (small town, village). The division of four has been applied for providing the district data:

- Harju County the major county by number of citizens in Estonia and the major share of PLWHA compared to other districts;
- Ida-Viru County the major share of PLWHA compared to other districts;
- East-Estonia the division includes Lääne-Viru-, Jõgeva-, Tartu-, Põlva-, Valga- and Võru County;
- West-Estonia the division includes Hiiu-, Saare-, Lääne-, Järva-, Pärnu-, Rapla- and Viljandi County.

The average indicator (describing the general level of the feature) and the division of features provided with frequency tables have been applied for describing the data. The common divisions of two features have been described with the help of cross-tables. ?<sup>2</sup> (chi square) was used for assessment of differences between different group opinions and t-test for evaluation of average assessments. The difference was considered important when the importance level was a≤0,05. The importance and firmness of the relation between two features were controlled with Spearman astax correlation coefficient p (rho), whereas -1 = ? = 1. The higher (either positive or negative) the Spearman coefficient p, the stronger the relation between the features.

## 2. General socio-demographic data

The chapter describes the generic-age composition of the sample, provides an overview of the nationality, education and social status of the respondents of the questionnaire and division by district. The comparable data with total set have been indicated in Appendix 1.

#### Gender and age

There are more young women than men among the participants of the research -56% and 44% respectively. The group aged 10-13 including the equal number of boys and girls is an exception. The persons aged 16-18 differ within the group aged 14-18 from the general breakdown, which includes considerably less young men than women (see table 1).

Table 1. Respondence by gender and age								
	man		wor	man		unmarked		
Age group	n	%	n	%	n	% in total sample	n	
10-13	815	50,2	807	49,8	1622	100	11	
14-18	1013	41,9	1405	58,1	2418	100	15	
– incl. 14-15	476	45,7	566	54,3	1042			
– incl. 16-18	537	39,0	839	61,0	1376			
19-29	1010	41,6	1417	58,4	2427	100	6	
– incl. 19-24	602	42,3	822	57,7	1424			
- incl. 25-29	408	40,7	595	59,3	1003			
TOTAL	2867	44,3	3600	55,7	6467	100	32	

Table 1: Respondents by gender and age

#### Nationality

In general the Estonians make three quarters of all respondents. The share of Russians – over the quarter - was the highest among the group aged 14-18. The sample included only few respondents of other nationality – in the extent of two percent (see table 2). Therefore the national groups "Estonians" and "non-Estonians" have been applied in the further analysis.

					Other				
	Estonians		Russians		natior	nalities	lities TOTAL		Unmarked
Age group	n	%	n	%	n	%	n	%	п
10-13	1282	78,6	314	19,3	35	2,1	1631	100	2
14-18	1684	69,2	687	28,2	59	2,4	2430	100	3
19-29	1946	80,0	429	17,6	58	2,4	2433	100	0
TOTAL	4912	75,6	1430	22,0	152	2,4	6494	100	5

Table 2: Nationality of respondents in age groups

#### Education

In case of the young people aged 10-13 and 14-18 the educational byels are considered uniform within the age group in the further analysis, all of them attend school. The children aged 10-13 are the schoolchildren of IV-VII classes (or are acquiring basic education) and the ones aged 14-18 are the students of IIV-XII dasses (or acquiring either basic or secondary education). In the older age group of schoolchildren no students acquiring basic and secondary education are separately analysed, as education is closely connected with age and differences between educational levels occur while analysing the data in more detailed age groups: the persons aged 14-15, the persons aged 16-18.

The educational level of the people aged 19-29 has been indicated based on the acquired education. Two major groups among the respondents include the young people with secondary vocational education and the ones acquiring higher education. According to the age group there are least of the ones still acquiring secondary education among the group aged 19-29. The educational levels of young men and women are different. The share of women among the respondents with the highest educational level (level 3) is considerably

higher. The share of young men is higher among the young people with the lowest educational level (level 1) (see table 3).

		man		man	TOTAL	
Education	n	%	n	%	n	%
Level 1	207	53,8	178	46,2	385	100
- incl. basic education acquired or less	169	57,9	123	42,1	292	
- incl. secondary education to be acquired	38	40,9	55	59,1	93	
Level 2	530	45,7	630	54,3	1160	100
<ul> <li>incl. secondary education acquired</li> </ul>	142	41,0	204	59,0	346	
- incl. secondary vocational education to be	83	50,3	82	49,7		
acquired					165	
<ul> <li>incl. secondary vocational education</li> </ul>	305	47,0	344	53,0		
acquired					649	
Level 3	274	31,1	607	68,9	881	100
- incl. higher education to be acquired	182	31,3	400	68,7	582	
- incl. higher education acquired	92	30,7	207	69,2	299	
TOTAL	1011	41,7	1415	58,3	2426	100
unmarked	4		3		7	

Table 3: Education of respondents aged 19-29 by gender

#### Social status

Social status could be indicated in the group aged 19-29. The working persons make up major part - 44% and thereafter students 34% of the respondents (incl. 13% of the students who also work at the same time) (see table 4).

Table 4: Social status of respondents aged 19-29 by gender

	man		woman		TOTAL	
Social status	n	%	n	%	n	%
working	570	56,4	497	35,1	1067	44,0
student, student acquiring a degree	156	15,4	356	25,2	512	21,1
working/student acquiring a degree	137	13,5	179	12,7	316	13,0
unemployed	104	10,3	121	8,5	225	9,3
economically inactive	14	1,4	261	18,4	275	11,3
other	30	3,0	1	0,1	31	1,3
TOTAL	1011	100	1415	100	2426	100
unmarked	4		3		7	

The classification "other" includes conscripts, prisoners and the ones living on invalidity pension. Compared to women there are more working persons among men. Though there are more students and inactive persons among women. The inactive include the ones at pregnancy or maternity leave, as a result the share of women is higher.

#### Residence

The young people living in the city make three quarters of the respondents. The difference occurs in the group aged 10-13, where the share of the young living in the country is higher than in other age groups (see table 5).

	city		COL	ıntry	TO	unmarked		
Age group	n	%	n	%	n	%	n	
10-13	1121	68,9	505	31,1	1626	100	7	
14-18	1754	72,2	676	27,8	2430	100	3	
19-29	1845	75,9	586	24,1	2431	100	2	
TOTAL	4720	72,8	1767	27,2	6487	100	12	

Table 5: Division of respondents by residence in age groups

The generic breakdown by residence does not differ from the general generic division of respondents. The major difference lies in nationality – the share of Estonians is much higher in the country than in the city (see figure 1).



Figure 1: Nationality of respondents by age groups and residence (%)

When analysing the data on residence in different age groups according to nationalities it is reasonable to consider the national structure of the cities, as the share of non-Estonians among the young in the country is very insignificant – less than one tenth.

The educational level of the young people in the city is higher when compared to the educational levels of the young people aged 19-29 in the city and country. The percentage of young people with the lowest educational level is 12% in the city and 27% in the country and the young with the highest educational level in the city make 43%, whereas the relevant percentage among those in the country is 16%. More students could be found among the young people in the city aged 19-29 (39%, incl. 15% working at the same time) compared to the young in the country. More economically active young people – 59% (incl. 13% of unemployed) could be found among the young in the country. The economically active young people make 52% (incl. 8% of unemployed) of the young in the city.

## **Division by districts**

The respondents have been divided into four districts. The description of the districts has been provided in chapter 1. The major group includes the people from Harju County and the smallest group consists of the young people from Ida-Viru County (see table 6).

			Ida	-Viru							
Age	Harju (	County	Co	unty	East-E	Estonia	West-I	Estonia	TO	TAL	unmarked
group	n	%	n	%	n	%	n	%	n	%	п
10-13	645	39,5	200	12,3	469	28,7	319	19,5	1633	100	0
14-18	874	35,9	413	17,0	669	27,5	477	19,6	2433	100	0
19-29	743	30,6	237	9,7	836	34,4	614	25,3	2430	100	3
TOTAL	2262	34,8	850	13,1	1974	30,4	1410	21,7	6496	100	3

Table 6: Breakdown of respondents in age groups by districts

The generic breakdown by districts is not different from the general breakdown of respondents. As in case of residence the major differences in the districts result from nationalities. Differently from other regions the share of non-Estonians among the young people of Ida-Viru County compared to the Estonians is higher (see figure 2). The differences between the national groups could only be provided in the districts of Harju

County and Ida-Viru County, as the share of non-Estonians is very small in East- and West-Estonia.



Figure 2: Nationality of respondents by districts (%)

The differences between districts are also major regarding the residence. There are more young city people in Harju County and Ida-Viru County compared to the districts of East- and West-Estonia. The share of young country people is highest in West-Estonia (see figure 3).



Figure 3: Residence of respondents by districts (%)

As regards the educational level of the people aged 19-29, the most educated young people could be found in Harju County – the young people with the highest level make 53%, the ones with the lowest level 9%. The respondents from West-Estonia possess the lowest educational level – the young with the highest level make 18% and the ones with the lowest level 25%. Harju County and West-Estonia have more working young people than other districts (49% and 48% respectively). Harju County has more young people who study and

work simultaneously (21%). The share of working young people is smallest in East-Estonia, though only the studying people make the major share (27%) in this district. The share of students is smallest among the young people of Ida-Viru County (16%). At the same time the group of young people in the given district has the highest share of the unemployed – 19%.

## 3. Lifestyle

The given chapter provides an overview of the status of the young at home, relations with friends, ways for spending one's leisure time and use of tobacco products, alcohol and drugs.

## 3.1. Family

The questionnaires of the group aged 10-18 included the more detailed questions about family life. The questions involved the social status and education of parents, members of the family and relations within the family. More detailed data on the living together and income per household were collected from the persons aged 19-29.

#### Size and members of the family

The majority of the respondents aged 10-18 lives with two parents, most of them with two biological parents. The eldest age group (16-18) compared to the younger ones includes more young persons living with another grown-up, without grown-up or all alone. As a whole the share of these young persons is very small. The number of the persons living together with one parent or foster parent increases by some percent with ageing (see table 7). 72% of the persons aged 10-13 and 67% of the ones aged 14-18 have a sister and/or brother.

Type of family	10-	-13	14-15		16-18	
Lives	n	%	n	%	n	%
with one parent/foster parent	315	19,3	233	22,3	322	23,3
incl. one biological parent	310		229		316	
incl. one foster parent	5		4		6	
with two parents/foster parents	1293	79,3	783	75,0	963	69,6
incl. both biological parents	1063		643		807	
incl. both foster parents	3		1		4	
incl. one biological parent/one	227		130		152	
foster parent	221		153		152	
with another grown-up	19	1,2	21	2,0	48	3,5
without grown-up (with brother-	2	0.1	7	0.7	38	27
sister, boy-or girlfriend, friends)	Ľ	0,1	ľ	0,7	50	2,1
alone	2	0,1	-	-	12	0,9
TOTAL	1631	100	1044	100	1383	100

Table 7: Type of family in age groups

The persons aged 19-29 were examined regarding their family status, cohabitation and size of household. Slightly more than half of them (52%) are living together with either a parent or life companion. Approximately one fourth of them has a sexual partner, but is not living together with him/her. 12% of the questioned have no sexual partner and 11% mentioned other options. In this case it was more often stated that they live with roommates-friends or family members (children, parents).

The women aged 19-29 include more of those living together with someone as compared to men and there are more persons having sexual partners without living together among men

(see figure 4). By dividing the group aged 19-29 into two one learns that the younger age group includes less of the ones living together with a steady partner.



Figure 4: Cohabitation of the persons aged 19-29 in age groups by gender (%)

According to the analysis of the data by nationalities the significant difference discloses in the types of cohabitation – Estonians prefer more cohabitation and non-Estonians marriage – 16% of the Estonians are married and 37% in cohabitation, 31% of the non-Estonians are married and 19% in cohabitation.

The average size of household of the persons aged 19-29 is 3 persons. The major household has 14 members. 45% of the questioned stated that the children are also the members of household. 34% of the questioned had their own children.

#### Education and social status of parents

48% of the persons aged 10-13 live together with both parents and are aware of the education of both parents. The group aged 14-18 includes 68% of such persons. In case of both age groups the families, where both parents have a secondary or secondary vocational education, are most frequent. 36% of the children aged 10-13 and 43% of the ones aged 14-18 live in such a family. Slightly more than a quarter of the persons aged 10-13 and slightly more than one fifth of the ones aged 14-18 have both parents with higher education.

19% of the younger age group and 5% of the older age group live together with one parent and are aware of the parent's education. In both cases the single parent has most often secondary education.

83% of the persons aged 10-13 lived with both parents and disclosed the social status of their parents. 76% of the respondents in the older group mentioned the social status of both parents. The social status of parents in both younger and older age group is similar – the young persons with both parents working make up the majority (78% in both age groups). The following group consists of the young persons one parent of whom is working and the other is unemployed or staying at home – one fifth in both age groups.

11% of the younger and 17% of the older children lived together with one parent and mentioned the parent's social status. In both cases the young with the working parent made up the majority.

## Financial status of the family

The persons aged 19-29 were asked about the monthly income per household during the questioning. The young persons aged 10-18 provided the relative assessment on the financial situation on a five-point scale (1 - we are poor, ..., 5 - we are rich).

The lower quartile of a monthly income per household of the persons aged 19-29 is 4,000 kroons, the median is 6,000 kroons and the upper quartile 10,000 kroons. The respondents were divided into four groups based on the quartiles:

- 1) the young persons the monthly income of whose household is  $\leq$  4,000 kroons;
- 2) the young persons the monthly income of whose household is 4,001-6,000 kroons;
- 3) the young persons the monthly income of whose household is 6,001-10,000 kroons;
- 4) the young persons the monthly income of whose household is  $10\ 001 \le \text{kroons}$ .

The statistically significant differences occur as to genders, age groups, nationalities, educational levels and districts. Major differences occur among the young persons with the lowest income and the ones with the highest income.

Compared to other indicators <u>education</u> and income are more closely connected – the lower the educational level, the lower the income (see figure 5).



Figure 5: Educational level of the persons aged 19-29 by monthly income per household (%)

The share of young men with the highest income per household in the group aged 19-24 is considerably higher when compared to the young women -25 % among the men, 16% among the women. The respondents with the lowest income make up the major group within the younger women (38%). The difference between the young men and women previously provided in the group aged 25-29 has disappeared. 25% of the respondents among both men and women are the young persons with the income of more than 10,000 kroons. The group with the lowest income includes 23% of men and 21% of women.

The analysis of income by nationalities indicates that there are more young persons with the highest income among Estonians compared to non-Estonians (24% and 14% respectively). The young persons with the lowest income could be considerably more found among non-Estonians – 34% among the non-Estonians and 27% among the Estonians.

<u>As to districts the young people from Harju County rise into view, among whom the share of respondents possessing the household income of more than 10,000 kroons is considerably higher. The young from Ida-Viru County have the smaller income compared to other districts – the share of the young people with the lowest income in this region is 43%. The</u>

latter reflects the fact that the salaries in Harju County compared to other districts in Estonia are higher. According to the data of Estonian Statistical Office the average monthly net salary in IV quarter of 2002 in Harju County was 6,083 kroons, but 3,817 kroons in Ida-Viru County.<sup>2</sup>

The young people aged 10-18 were asked to provide a relative assessment on the financial status of their family based on a 5-point scale. The table 8 indicates that the people having marked the financial status of their family as "we are not rich, but we cope" make up the major group. This group clearly differentiates among the ones aged 10-13. The young people having stated to be neither rich nor poor and cope somehow make up the same share in the group aged 14-18.

Response	10-13	14-18
We are poor	0,5	0,8
We are not poor, but at the verge of poverty	1,4	2,9
We are neither rich nor poor, but we cope somehow	28,7	44,7
We are not rich, but we cope well	65,0	49,5
We are rich	4,4	2,1
TOTAL	100	100

Table 8: The assessments of the young on the financial status of their family in age groups (%)

The young people having marked their financial status that they are not rich, but cope well are further analysed. The major statistical difference discloses in the assessments of boys and girls in the group aged 14-18 – young men consider the status of their family better (54%) than girls (46%). The significant difference lies in both age groups between the Estonians and non-Estonians. The Estonians consider the financial status of their family better (70% of the Estonians aged 10-13, 54% of the Estonians aged 14-18) compared to the young of other nationality (48% of the non-Estonians aged 10-13, 46% of the non-Estonians aged 14-18). The difference between the districts is present similarly to the group aged 19-29. The young people from Ida-Viru County consider the status of their family worse. 49% of the young people aged 10-13 and 43% of the ones aged 14-18 responded that they are not rich, but cope well. The average share of other districts in case of the given option of response is 68% among the ones aged 10-13 and 51% among the ones aged 14-18.

## Family relationships

The schoolchildren were asked to assess their relations with parents and brothers-sisters. It was also examined which are the relations between the parents and whether the family has any problems related to alcohol. The young people assessed their relations on a 6-point scale (1- excellent, ..., 6 - I am not communicating with them). The average assessment on the given scale is 3.5 and the better the relations, the smaller the average assessment is.

In all three age groups of schoolchildren more than half of them have assessed their relations in the family at least good. The relations with mother are assessed better compared to the father, where statistically significant difference occurs in the group aged 16-18. The children aged 10-13 have the closest relationships with their family members – 87% considers their relations with mother good (incl. 62% excellent) and 78% relations with father (incl. 52% excellent) (see figure 6).

<sup>&</sup>lt;sup>3</sup> Website of Estonian Statistical Office http://www.stat.ee



Figure 6: The estimated good relations in the family by communication partners in age groups (%)

According to the average assessments the relations of girls with mothers are closer; the boys in their turn have better relations with their fathers. The group aged 14-15 is an exception where no significant difference occurred in the assessments of boys and girls of the relations with father and mother. <u>Gender</u> differences could be noted also in the relationships with sisters-brothers. The girls aged 10-13 assess the relations with sisters better than boys; the girls in the group aged 16-18 value the relations with their brothers more than boys.

<u>As to nationalities</u> the differences occur only in the youngest age group in relations with father, where the Estonians value these relations considerably more than the people of other nationalities. <u>As to residence</u> the differences occur only in the assessments of the group aged 10-13 with father – the young people in the country assess their relations with father better.

The analysis of relations between the parents has provided the data of these young people who live together with two parents (about 2/3 of the young people in the sample live together with two parents, see table 7) and who can assess the relations between their parents. The relations between the parents are considered good by more than half of the respondents. 85% of the children aged 10-13 (incl. 57% excellent), 75% among the persons aged 14-15 (incl. 30% excellent) and 69% among the ones aged 16-18 (incl. 24% excellent) marked the relations between the parents as good.

Next it was examined how many respondents have problems with alcohol in the family. The minority of the younger children stated that someone in their family has problems with alcohol. 7% of the families of the children aged 10-13 and 16% of the families of the ones aged 16-18 have problems with alcohol.

The statistically significant relation exists between family relationships and the existing alcohol problems. The relations with parents and between parents themselves are worse in the families having problems with alcohol in the opinion of the young people.

## 3.2. School and friends

The relations of students with friends and getting along at school are further described. Just as in case of parents and sisters-brothers the young people assessed their relations with friends, classmates and teachers on a 6-point scale (1-excellent, ...., 6 - I do not

*communicate with them).* The average assessment on the given scale is 3.5 and the lower the average assessment the better the relations are considered.

Naturally the young assess their relations with friends as best. People get along with their classmates better than with teachers. The schoolchildren aged 10-13 are the exception who assess their relation with the class adviser better than with classmates (see figure 7).





On the basis of the average assessments the girls assess their relations better with both teachers, classmates and friends (see table 9).

	10-13		14	1-15	16-18		
	man	woman	man	woman	man	woman	
class adviser	2,34	1,89	2,68	2,31	2,52	2,25	
other teachers	2,51	2,11	2,73	2,43	2,67	2,41	
friends	1,64	1,44	1,75	1,53	1,68	1,54	
classmates	2,16	2,01	2,24	2,18	2,14	2,13	

 Table 9: Average assessments on the relations at school and with friends in age groups as to gender

 The lower the average assessment, the better the relations

<u>As to nationalities</u> the differences occur in the assessments of the relations with friends and classmates – the Estonians consider their relations with them better than average. No material differences occur in the assessments of the young people in the city and in the country. Just the children aged 10-13 living in the country assess their relations with the class adviser better when compared to the children in the city (the average assessments 2.05 and 2.15 respectively). The young country people aged 14-18 assess their relations with the classmates better (young country people 2.10, young city people 2.19).

In the course of assessing the connections between relations it occurred that the statistically significant relation exists between all relations or the better the relations with some communication partners, the better the relations with the others. The closest connection exists between the relations with class adviser and other teachers (the children aged 10-13 - p = 0.6 and the ones aged 14-18 - p = 0.4). The students getting better along with the class adviser, assess their relations with other teachers also better. The connection between the relations with friends and classmates is also closer (p = 0.4 in both age groups) - the ones getting better along with friends assess their relations with classmates better. It

is essential to add that the students assessing their relations with the close people (motherfather, sisters-brothers) better also give a positive assessment of the relations at school and getting along with friends.

# 3.3. Spending one's leisure time

For learning about the ways the young people spend their leisure time their activities during the last month were observed. The frequency of going in for activities provided was examined (1-not a once, ..., 5 - every day). The frequencies of spending one's leisure time have been summarised in three groups: not a once, once a week or less, several times a week or more frequently.

## Visiting clubs, bars and events

The questions regarding the spending of one's leisure time in pubs-bars were presented to the people aged 14-29. The group aged 19-29 was asked about visiting nightclubs, the schoolchildren about going to discos or dance parties.



The figure 8 indicates that there are considerably many of those who visit pubs or bars.

Figure 8: The frequency of visiting pubs-bars in age groups (%)

The <u>gender difference</u> regarding the pubs-bars discloses only in the group aged 19-24 where the young men visit the relevant institutions more often than the young women – 8% several times a week or more often and 32% not a once (4% and 44% of the girls respectively). The gender difference in attending the dance events occurs in the younger age groups (the ones aged 10-13 and 14-18). The girls are more active as to the group aged 10-13 – 5% visit dance events several times a week or more: 41% not a once (4% and 51% of the boys respectively). The young men visit the dance events more frequently as to the group aged 14-18 – e.g. 58% of the ones aged 16-18 go to dance several times a week (49% of the girls).

<u>As to nationalities</u> the difference regarding the visiting of pubs-bars occurs in the group aged 14-15. The Estonians at this age visit bars more often (7% several times a week; 32% once a week or less) than the young people of other nationality (4% several times a week; 29% once a week or less). No material differences regarding nationalities occur as to going to the dance events.

The young city people visit the pubs-bars more frequently than the dance events. The young in the country attend more actively the dance events regarding the children aged 10-13.

To sum up, it could be stated that the young people visiting more frequently pubs-bars also visit more often nightclubs or dance events.

#### Going in for sport

According to the general overview of the situation the schoolchildren are more active in hobby sport – more than half of them go to training or are involved in hobby sport several times a week or more. These children make about one fourth of the ones aged 19-29. The same age group includes considerably more of the ones who have not gone in for sport within one month (see figure 9).



Figure 9: Frequency of going in for sport in age groups (%)

<u>Young men</u> are generally more active than <u>girls</u> while going in for sport. For example 61% of the young men aged 14-18 go in for hobby sport several times a week or more, at the same time 50% of the girls are as active. The group aged 10-13, which includes more girls who are active in sport, is an exception. 24% of the boys were not involved in sports activities within one month, the relevant proportion of girls was 18%. The <u>young city people</u> are more active in attending trainings and going in for sport on their own than the young country people. The significant difference occurs in all age groups.

The analysis of the relations between the different ways of spending one's leisure time indicated that the young people visiting dance events more often are also more active in sport. The statistically significant relation existed among the ones aged 19-29 between the visiting of pubs-bars and going in for sport – the one who is more active visitor of bars is also more active sportsman.

## 3.4. Use of addictive substances

This subchapter provides an overview of the habits of the young people of using the addictive substances. The young people were asked about the frequency of smoking and drinking alcohol within last month. As to drugs the facts of life so far were mainly examined. Differently from the older groups the schoolchildren were also asked to write down the age they first smoked a cigarette, drank alcohol and were drunk. The question regarding the age for trying drugs for the first time was posed to everyone.

## Smoking

The number of the schoolchildren having tried cigarettes at least once in a lifetime is rapidly increasing together with age – 38% of the children aged 10-13, 69% of the ones aged 14-15 and 81% of the ones aged 16-18. The average age of the youngest respondents in trying their first cigarette was 9.1, the relevant age in the group aged 14-15 was 10.3 and 11.4 in the group aged 16-18.

The analysis of the data of one month preceding the questioning indicates that the share of non-smokers decreases and the share of everyday smokers increases with age. Big majority of the children aged 10-13 are not smoking. The smokers in the group aged 14-18 make up more than one third. This indicator has increased by another eight percent among the people aged 19-29. Approximately one fifth of the respondents aged 14-18 and one third of the ones aged 19-29 smoke every day (see figure 10).



Figure 10: Frequency of smoking during last month in age groups (%)

<u>Young men</u> smoke more often than <u>girls</u>. The major difference occurs among the people aged 19-29 where the share of young men using tobacco every day is twice as high when compared to the young women (45% and 22% respectively). The variabilities are present in the group aged 19-29 also as to <u>educational levels</u>. More than half of the young people with the lowest educational level (basic education, secondary education to be acquired) smoke every day, there are 4.5 times less everyday smokers among the young people with higher education or still acquiring the higher education (see figure 11).



Figure 11: Smoking frequency of the people aged 19-29 within last month as to educational levels (%)

<u>As to residence</u> the remarkable differences could be noted by using the five-group age division. The groups aged 16-18 and 19-24 come into notice. There are slightly more of the young city people aged 16-18 who smoke every day (22% of the young city people, 17% of the young country people) and less of the non-smoking ones (58% of the young city people, 66% of the young country people). In case of the people aged 19-24 the situation is vice versa, there are more everyday smokers among the young country people than among the city people (39% and 30% respectively).

The following conclusions could be drawn from the analysis of <u>district</u> data:

- Regarding the group aged 14-15 there are most non-smokers and least everyday smokers in the district of East-Estonia (76% and 9% respectively). The major difference occurred in the comparison with the young people of Harju County (non-smokers 60%, everyday smokers 20%).
- The major differences between Harju County and Ida-Viru County regard the young people aged 19-24. There are 61% of non-smokers and 23% of everyday smokers in Harju County. The relevant figures in Ida-Viru County are 43% and 46%.
- As to the people aged 25-29 there are one tenth more everyday smokers in Ida-Viru County and West Estonia compared to other districts (40% in both districts). At the same time the share of non-smokers is highest in Harju County (63%) and East-Estonia (62%). There are 49% of non-smokers in Ida-Viru County and 51% in West Estonia.

#### Use of alcohol

In case of contact with alcohol the frequency of having been drunk during the last month was also examined in addition to use. The schoolchildren were also asked about the age when they drank alcohol and were drunk for the first time.

More than half of the children aged 10-13 have at least once tried alcohol and slightly more than one tenth have been drunk. The share of the ones having drunk alcohol is considerably higher in older age groups. Practically all people aged 16-18 have tried alcohol at least once in a lifetime, more than 2/3 of the schoolchildren at the same age have been drunk (see figure 12).



Figure 12: Young people having tried alcohol at least once in a lifetime and got drunk in age groups (%)

The average age in trying alcohol for the first time is 9.2 as to the ones aged 10-13, 10.9 regarding the ones aged 14-15 and 12.0 regarding the ones aged 16-18. The same indicator regarding the first time of being drunk is 10.9 as to the younger respondents, 12.7 as to the ones aged 14-15 and 13.9 as to the ones aged 16-18 respectively.

The share of alcohol users is high among the minors. During last month 13% of the schoolchildren aged 10-13, 52% of the ones aged 14-15 and 69% of the ones aged 16-18 have drunk alcohol. The young people aged 16-18 having drunk alcohol once a week or more often during last month make more than a quarter. No significant differences occur among the group aged 19-29. The ones having drunk alcohol less than once a week make up the major share (see figure 13).



Figure 13: Frequency of using alcohol during the last month in age groups (%)

The intensity of drinking alcohol is high among schoolchildren. During the last month 5% of the schoolchildren aged 10-13, 28% of the ones aged 14-15 and 41% of the ones aged 16-18 have been drunk. It is essential to note that about one tenth of the schoolchildren have been drunk once a week or more often during the month preceding the questioning. The

people having not been drunk during the last month make 7% more among the older ones in the group aged 19-29 (the in-group differences of the given age group have been less noticeable regarding the previous questions) (see figure 14).



Figure 14: Frequency of being drunk during the last month in age groups (%)

The correlation analysis indicated that the young people having used alcohol more often during the month have been also more drunk. The relation was statistically significant as to all age groups and the most remarkable among the ones aged 14-18 (p= 0.69).

The use of alcohol and getting drunk were analysed as to gender, nationalities, residence and districts. No statistically significant differences occurred as to the indicators provided for the children aged 10-13. There are more boys having been drunk only among the country boys (8% of the country boys, 3% of the city boys). Therefore the data regarding the children aged 10-13 have not been included in the following figures.

The habits of using alcohol among the <u>young men and women</u> are different, as the young men drink considerably more alcohol and get more often drunk. The greatest difference lies in the group of young men and women aged 19-24, where the young men drink alcohol more than twice as often and get drunk almost six times more often than the young women. No differences could be only found in the indicators of the young men and women aged 14-15 (see figure 15 and figure 16). The older the women, the less the ones among them who have got drunk at least once a week during the last month.



Figure 15: Use of alcohol once a week or more often in age groups by gender (%)



Figure 16: Getting drunk once a week or more often in age groups by gender (%)

<u>As to nationalities</u> the differences occur among the ones aged 16-18, which included more Estonians having got drunk compared to the young people of other nationalities. The difference lies in the use of alcohol of young men -37% of the non-Estonian young men and 25% of the Estonians had never got drunk.

When comparing the young people with different <u>educational level</u> among the ones aged 19-29 the differences occur mainly among the ones who have not used alcohol within the last month. The group with the lowest educational level include more of those who have not used alcohol within last month – 28% (19% of the young people with the highest educational level). The opposite tendency occurs in case of getting drunk – 52% of the young people with the lowest educational level have not got drunk within one month.

<u>The young city people</u> use alcohol more often than the ones in the country. The main difference occurs again among the ones aged 16-18 - 30% of the young city people use alcohol once a week or more often, the relevant figure as to the young country people is 20%.

The tendencies noted during the analysis of <u>district</u> data are the following:

- The young persons aged 14-15 from Harju County use alcohol and get themselves drunk more often. The major difference lies in the comparison with the district of East-Estonia. 21% of the young people from Harju County used alcohol at least once a week and 13% were drunk, the respective figures among the young people in East-Estonia were 10% and 5%.
- Ida-Viru County rises into view in the group aged 16-18, where the young people use alcohol and get drunk more often. 34% of the young persons in Ida-Viru County used alcoholic drinks once a week or more often. The smallest difference occurs regarding the young from Harju County and the major one with the young ones from West Estonia (the respective figures: 28% and 21%). 21% of the young persons from Ida-Viru County have been drunk once a week or more often, one tenth less in other districts.
- The young persons aged 25-29 in Harju County and Ida-Viru County use alcohol more often than the young people in Ida and West Estonia. The major difference between Harju County and West Estonia – 37% of the young people of Harju County and 21% of the young people of West Estonia use alcohol at least once a week.

## Use of drugs

In addition to the consumption patterns of the young people themselves it was examined whether their acquaintances use narcotic substances and whether drugs have been offered to them.

The contacts of schoolchildren aged 10-13 with drugs are not numerous – slightly more than 2% (n=37) of the respondents had tried some narcotic substance. As the percentage of the people having had contacts with drugs was very low in the given age group, the data have been provided in absolute values. Most of the children aged 10-13 having tried narcotic substances have tried them once (n=25). 19 children have used drugs in tablets, 14 by injecting, 15 by inhaling, 14 by smoking and 19 in mixed drinks. The acquaintances of the children aged 10-13 involve 6% (n=94) of the people injecting drugs and 7% (n=120) of the friends using drugs in some other way. 13 children have been in a situation where they were offered drugs.

The data of the young people aged 14-29 have been more thoroughly analysed. The figure 17 indicates that many young people have acquaintances who use or have tried drugs. The groups aged 16-18 and 19-24 involve most young people with such friends. As to the people aged 14-18 the questioning was carried out by classes and the fact that the classmates know one and the same users is highly probable.



Figure 17: The young people whose acquaintances involve people having tried drugs or using them according to ways of using drugs in age groups (%)

10% of the young persons aged 16-18, 5% of the ones aged 14-15 and 19-24 and 2% of the ones aged 25-29 have been in a situation where they were offered drugs.

The figure 18 indicates the number of young people who have tried drugs themselves. It appears that the number of people having tried drugs among the people aged 25-29 is lower (24%) than in two younger age groups (more than 30%). About one third of the respondents aged 16-18 and 19-24 have tried drugs at least once.



Figure 18: Use of drugs in age groups (%)

The data analysis indicated that the young people having acquaintances who have tried or used drugs, have done it themselves with higher probability. The statistically significant relation occurred in case of all age groups.

The people aged 14-18 were asked about the age of having tried narcotic substances for the first time according to different ways of use. In case of the people aged 19-29 the question was asked without differentiating the ways of use (see table 10).

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Way of use	14-15	16-18	19-24**	25-29**			
sniffi ng	13,1*	13,3	-	-			
smoking	13,4	15,0	-	-			
through mouth	13,8	15,3	-	-			
injecting	14,4*	13,9*	-	-			
use of drugs	-	-	17,8	21,1			

Table 10: Average age in using the narcotic substance for the first time by ways of use in age groups

\* number of respondents less than 40

\*\*no differentiation was made regarding the ways of use as to the young people aged 19-29

The statistically significant age difference among <u>young men and women</u> occurs only in the group aged 16-18 in case of smoking drugs and by taking them in through mouth. The young men have started to use narcotic substances earlier – the average age of young men in starting smoking drugs is 14.7 and the age of young women is 15.3; respectively 14.5 and 15.7 by taking in through mouth. There are usually more men than women who have used drugs (the gender difference is not statistically significant in only the group aged 14-15). The major differences occur in two older groups where the difference of young men and women is 20%. The share of the girls having tried or using drugs is highest in the groups aged 16-18 and 19-24 – more than a quarter of the respondents (incl. 14% of the group aged 16-18 and 12% of the group aged 19-24 have repeatedly used drugs). The highest share of the

young men having used drugs – about half – is among the people aged 19-24 (incl. 27% of the ones having used drugs repeatedly) (see figure 19).



Figure 19: The persons having used drugs at least once in age groups by gender (%)

<u>As to nationalities</u> the analysis of data indicates that there are more young persons having tried narcotic substances at least once among the non-Estonians. No statistically significant difference occurs among the group aged 14-15. The non-Estonians in other age groups include about one tenth more of the ones having used drugs compared to the Estonians. There are also more of these people who have done it repeatedly. The variability as to nationalities results from the differences among the Estonian and non-Estonian young men in using drugs (this relation is not present only among the ones aged 14-15). The figure 20 demonstrates the share of young men having used drugs repeatedly by nationalities.



Figure 20: Young men having repeatedly used drugs in age groups by nationalities (%)

According to the <u>educational levels</u> the statistically significant differences could be again noted among the young persons with the lowest and highest educational level on the basis of the data regarding the group aged 19-29. Differences are striking regarding the ones having never tried drugs and the ones having tried them once. There are less of those who have never tried drugs (65% and 73% respectively) and more of those having tried drugs

once (20% and 12% respectively) among the young people with the lowest educational level compared to the ones with the highest level.

The young city people involve significantly more of the ones having had used drugs compared to the young country people. This difference in the groups aged 16-18 and 25-29 exceeds ten percent (see figure 21). The variabilities in <u>residence</u> are mainly due to the differences among young men. The latter is most noticeable among the young men aged 25-29 in the country and the ones in the city who do not use drugs – 60% of the young men living in the city and 80% of the ones living in the country have not used drugs.



Figure 21: The people having tried drugs at least once in age groups by residence (%)

Harju County and Ida-Viru County stand out as regards the <u>districts</u>. The number of young persons having tried and used drugs is higher among the young people in the latter districts. The following tendencies differentiate as to age groups:

- There are considerably less young persons of Harju County aged 14-15 who have not tried drugs compared to East-Estonia (81% and 93% respectively).
- The group aged 16-18 in Harju County and Ida-Viru County include considerably less young persons who have not tried drugs and more of the ones who have used drugs repeatedly compared to the districts of Ida and West Estonia. The percentage of people who have not tried drugs made 61% in Harju County, 64% in Ida-Viru County, 76% in East-Estonia and 77% in West Estonia. The people who have repeatedly used drugs made 24%, 21%, 12% and 10% respectively.
- The same tendency exists among the young persons aged 25-29. There were 68% of the people who have not tried drugs in Harju County, 72% in Ida-Viru County, 83% in East-Estonia and 81% in West Estonia. The ones having repeatedly used drugs made 18%, 14%, 7% and 6% respectively.

Smoking is the most common way of using drugs among the young people. This tendency could be most noted in the group aged 14-18. The drug injectors form the smallest group of respondents -5% in total (see figure 22). No differences occurred among the main age groups, therefore the figure has been provided regarding the two age groups. The younger within the group aged 14-18 (the ones aged 14-15) have used drugs by inhaling -33% of the ones aged 14-15 and 21% of the ones aged 16-18. The difference occurs within the group aged 19-29 regarding the persons having used drugs by smoking -48% of the ones aged 19-24 and 35% of the ones aged 25-29.



Figure 22: Ways of using drugs in age groups (%) The young persons having tried + the ones using drugs have been taken into account

<u>As to gender</u> single differences exist between the ways of using drugs. The share of young women using drugs in tablets is higher than that of the young men (36% and 25% respectively); the share of young men among the persons smoking drugs is higher -57% (38% of the young women).

Some differences occur also in the ways of using drugs regarding nationalities:

- In case of inhaling the drugs the share of the young persons aged 16-18 of other nationalities is higher than that of the Estonians (17%).
- The use of drugs by smoking is more common among the non-Estonians (difference could not be noted only in the group aged 16-18). The main difference lies in the group aged 25-29 54% of the non-Estonians having tried or using drugs have done it by smoking (28% of the Estonians).

No statistically significant differences occurred in the analysis of data by residence and districts.

The results regarding smoking, use of alcohol and drugs were compared. The statistically significant correlation between the use of drugs and alcohol and smoking was discovered during the correlation analysis. There are more smokers and alcohol users among the young people who have tried or repeatedly used drugs. The correlation between smoking and use of drugs is slightly stronger (p=0.44) and slightly weaker between the use of alcohol and drugs (p=0.36).

#### 3.5. Summary of the chapter

The first parts of the third chapter deal with the family background of the young persons, relationships at school and among friends. This is followed by the overview of the matters related to use of addictive substances, as a result the following conclusions could be drawn:

- 1. More than one third of the schoolchildren aged 14-18 have smoked within last month.
- 2. About one third of the everyday smokers belong to the group aged 19-29.
- 3. Over half of the schoolchildren aged 14-18 have drank alcohol within last month and about one third of the latter have been drunk.

- 4. 30% of the persons aged 19-29 drank alcohol at least once a week within last month and about 40% of the same group were drunk.
- 5. The groups aged 16-18 and 19-24 involve about one third of the young persons having used the narcotic substances at least once (incl. approximately one fifth repeatedly). Such young persons exceed one tenth of the persons aged 14-15 and one fourth of the ones aged 25-29.
- 6. The majority of the young persons having used drugs have done it by smoking.

#### 4. Knowledge of HIV and AIDS

The following chapter deals with the knowledge of the young people related to HIV and AIDS. The overview of the assessments of the young of their theoretical knowledge and relation with actual knowledge will be provided. The summary about the information sources where the young people have received the relevant information from and which information channels are most available will be made.

#### 4.1. What is HIV and what is AIDS?

HIV is the human immunodeficiency virus by giving an exact definition. The virus spreads by sexual, parenteral (by injecting, transfer of blood or tissues etc.) or perinatal way (from mother to child during pregnancy or delivery or while breast-feeding). AIDS is an acquired immunodeficiency syndrome caused by HIV. What do the young people think of HIV and AIDS? The given question was answered by asking the respondents whether and how HIV and AIDS differ from each other.

Approximately a quarter of the respondents aged 10-13 find HIV and AIDS different. This viewpoint is shared by more than half of the ones in the older age groups. Less than one fifth of the respondents in each age group do not think HIV and AIDS are different. The considerable number of schoolchildren are not able to answer this question – almost half of the ones aged 10-13 and one fourth of the ones aged 14-18. The youngest age group includes the highest percent of the children who have not heard anything about HIV and AIDS (see table 11).

Answer	10-13	14-18	19-29
yes	23,6	59,3	67,1
no	16,1	15,2	17,7
cannot tell	49,6	24,9	14,7
have not heard anything about them	10,7	0,6	0,5

Table 11: Answers to the question "Are there any differences between HIV and AIDS?" in age groups (%)

In order to view the given result in the age groups with five divisions the significant difference could be noted within the group aged 14-18. 67% of the young people aged 16-18 think that HIV and AIDS are different, the relevant figure among the ones aged 14-15 is lower -49% of the respondents find them different.

In comparing the data <u>by nationalities</u> the children aged 14-15 within the group aged 14-18 clearly differentiates, the non-Estonians include 10% more of the ones finding HIV and AIDS different (46% among the Estonians, 56% among the non-Estonians).

The strong variabilities could be noted among the young people aged 19-29 by observing the <u>educational level</u> of respondents – the higher the educational level, the more convinced the people are that HIV and AIDS are different (see figure 23).



Figure 23: The share of the group aged 19-29 finding HIV and AIDS different by educational levels (%)

## **Differences between HIV and AIDS**

In order the question whether HIV and AIDS are different would not leave an impression of the good level of knowledge in vain, it was also examined what HIV and AIDS are. All schoolchildren were separately asked what is HIV and what is AIDS. The older respondents having noted this difference were asked the additional question on the content of difference between HIV and AIDS.

The considerable number of schoolchildren did not answer these questions where the answer had to be written by themselves. The question "What is HIV in your opinion?" was not commented by 35% of the children aged 10-13 and 19% of the ones aged 14-18. The question "What is AIDS in your opinion?" was not answered by 25% of the children aged 10-13 and 15% of the ones aged 14-18. 14% of the younger respondents stated that they could not tell what is HIV. 5% of the youngest age group stated the same about AIDS (the percent provided in other age groups was not remarkable). The ones having chosen this option of answer have not been further taken into account in calculating the shares. The most common answers have been provided in the tables 12 and 13.

Answer		10-13	14-18
1. Vir	us, virus causing AIDS	17,6	36,1
2. Init	ial stage of AIDS	6,5	12,0
3. Dis	sease (incl. deadly, incurable disease)	38,2	17,6
4. Dis	sease spreading sexually, through blood or drugs	12,6	
5. Ve	nereal disease		10,1
6. Sa	me as AIDS	7,3	2,1
7. Dru	ug, use of drugs	4,8	
8. Cu	rable virus/disease		2,3
9. Im	munodeficiency virus		3,1
10. Oth	ner answers	13,1	16,7

Table 12: The most common answers to the question "What is HIV?" in age groups (%)

Table 13: The most common answers to the question "What is AIDS?" in age groups (%			
Answer	10-13	14-18	
1. Disease, infectious disease, serious disease	34,9	32,5	
2. Deadly disease/infectious disease	21,2	13,9	
3. Incurable disease		7,9	
4. Disease spreading sexually, through blood or drugs	6,6	4,8	
5. Weakening of immune system, immunodeficiency		6,8	
6. Final stage of HIV		4,6	
7. Venereal disease	13,0	15,0	
8. Disease of drug addicts, use of drugs	3,4		
9. Same as HIV	2,8		
10. Other answers	18,0	14,4	

The given tables clearly indicate that the answers of the previous question ("Are there any differences between HIV and AIDS?") need specification for learning about the extent the respondent has understood the nature of HIV and AIDS. For example the significant number of respondents have considered HIV the disease, not virus (see options of answer 3-5 in table 12) - stated by total of 51% of the children aged 10-13 and 28% of the ones aged 14-18. In most cases it has been simply stated that HIV is a disease without specifying the answer. More than one tenth of the younger age group additionally provides one or several ways of HIV transmission which is already significant information. Slightly less than one fifth of the younger and more than one third of the older schoolchildren are able to consider HIV simply a virus or the virus causing AIDS. Right and wrong answers are still hard to be defined, as for example the small part of the ones considering HIV a virus also think it is curable.

AIDS is considered to be a disease, the well-grounded specifications added, by total of 63% of the children aged 10-13 and 59% of the ones aged 14-18 (see option of answer 1-4 in table 13). More than one tenth of both age groups see AIDS as a venereal disease. In answering the questions about HIV 3% of the older age group can associate this with immunodeficiency, while talking about AIDS 7% of the older age group is aware that it is connected with the human immunodeficiency. Only single respondents could be found among the children aged 10-13 who can mention it.

The tendencies noted in comparing the explanations of the terms HIV and AIDS among the children aged 10-13 are the following:

- The respondents having stated that HIV is a virus/infection include most of the ones having stated that AIDS is a disease/infectious disease.
- The respondents having stated that HIV is a virus/infectious disease (incl. incurable or deadly) include most of the ones having stated that AIDS is also a disease/infectious disease (incl. incurable or deadly).
- The respondents having stated that HIV is a disease spreading sexually, through blood or drugs include most of the ones having stated that AIDS is a venereal disease.

The following tendencies existed among the group aged 14-18:

- The respondents having stated that HIV is a virus/infection or initial stage of AIDS include most of the ones having stated that AIDS is a disease/infectious disease.
- The respondents having stated that HIV is a virus/infectious disease (incl. incurable or deadly) include most of the ones having stated that AIDS is also a disease/infectious disease.

92% of the respondents aged 19-29 having found differences, described the differences of HIV and AIDS. HIV and AIDS were mainly differentiated based on the fact that HIV is a virus and AIDS is a disease. The most common options of answer were the following:

- HIV is a virus, AIDS is a disease 86%;
- HIV is a virus developing/could develop into AIDS -4%;
- HIV carrier is not yet sick with AIDS -2%.

Immunodeficiency was mentioned in their answers by only some of the respondents.

The remaining respondents (8%) offered other differences of any kind.

## 4.2. Knowledge of the ways of HIV transmission

In order to assess the knowledge of the young persons the international knowledge indicator, calculated based on five questions, is used.<sup>3</sup> The indicator is found by dividing the number of respondents having answered five questions correct with the total number of respondents having completed the questionnaire.

On the basis of the answers it could be summed up that the knowledge of the young persons regarding the ways of HIV transmission are scanty. 17.5% of the respondents in the major risk group – among the young people aged 15-24 – have correct knowledge based on the provided indicator. The major impact on the correct knowledge is provided by the question on the fact whether one could get infected with HIV through sting of a gnat. The indicator value of knowledge increases by 30 percent – up to 47% without regarding the question about the sting of a gnat. The table 14 (including the percent of the persons having answered correctly each question) indicates that there are least of the ones who knew that it is impossible to get infected through the sting of a gnat regarding all age groups. The knowledge of the possibility of getting infected with HIV with the earlier used syringe is best – this indicator reaches amost hundred percent in older age groups. In case of each question the number of correct answers increases together with age.

The table below clearly indicates that when to regard the number of correct answers separately per each question the level of knowledge of young people seems not so bad in case of most questions. As mentioned above, the situation considerably worsens when looking at the number of the ones who could not answer all five questions correctly.

Question	10-13	14-18	19-29
Can a person protect himself against getting HIV by always using a condom in each sexual intercourse? (yes answer)	52,2	71,7	75,2
Can a person protect himself against getting HIV by having sex with ounly one faithful uninfected partner? (yes answer)	34,1	58,9	75,5
Can a person get HIV by injecting with the syringe which has been earlier used by someone else? (yes answer)	80,5	94,7	97,8
Can a person get HIV from stings of a gnat? (no answer)	27,9	29,5	37,0
Can a healthy-looking person have HIV (yes answer)	50,2	80,8	88,5
Correct answer to all 5 questions	5,0	12,8	23,1

Table 14: The respondents having answered correctly to the different components of knowledge indicator in age groups (%)

The major difference in the knowledge of the <u>young men and women</u> occurs among the young people of the oldest age group – knowledge of the young women is 5% better than the one of the young men (see figure 24). The knowledge of the young men aged 10-18 compared to the young women does not considerably differ, but the difference could be noted within the group aged 14-18. 17% of the respondents among the young women aged 16-18 and 9% among the ones aged 14-15 have correctly answered the five questions, (the difference is not remarkable among the young men).

<sup>&</sup>lt;sup>3</sup> UNAIDS (2002): Monitoring the Declaration of Commitment on HIV/AIDS. Guidelines on Construction of Core Indicators. Geneva: UNAIDS



Figure 24: Correct knowledge of the ways of HIV transmission in age groups by gender (%)

According to the analysis of data by <u>nationalities</u> it could be stated that the Estonians have better knowledge compared to the young persons of other nationality. The level of knowledge of non-Estonians among the ones aged 10-13 and 16-18 is higher, but this difference is not statistically significant. The major difference by nationalities occurs among the ones aged 19-24 – more than 10% of the Estonians answer correctly to all five questions. The major changes in knowledge between the young persons of other nationality aged 14-15 and 16-18 could be noted within the group aged 14-18 – the value of knowledge indicator in older age group is over 10% higher than in the younger group (see figure 25).



Figure 25: Correct knowledge of the ways of HIV transmission in age groups by nationalities (%)

The young persons with higher <u>educational level</u> have generally better knowledge of the ways of HIV transmission. The major differences by educational levels occur between different nationalities. The difference in knowledge between the Estonians and non-Estonians aged 19-29 by educational levels could be mainly noted among the ones having acquired or are acquiring higher education (level 3) – the knowledge indicator value of the Estonians is 22% higher than the one of non-Estonians. Also in case the educational level among the Estonians increases, the level of knowledge also considerably increases, the

knowledge indicator remains the same by the 2nd and 3rd educational level among the non-Estonians (see figure 26).



Figure 26: Correct knowledge of the people aged 19-29 of the ways of HIV transmission by educational level and nationality (%)

The knowledge of the young country people and young city people of HIV transmission does not materially differ. The exception is the schoolchildren aged 10-13, among whom the knowledge indicator of the young city people is higher (6% among the persons in the city, 3% among the country children). The difference is due to the fact that the knowledge of city boys compared to the country boys of the same age is better (8% among the city boys, 3% among the country boys). The difference by <u>districts</u> occurs only in the oldest group, where the knowledge indicator value of the young persons from Ida-Viru County compared to other Estonian districts is lower (see figure 27).



Figure 27: Correct knowledge of the people aged 19-29 of the ways of HIV transmission by districts (%)

It is worth mentioning that when the level of knowledge abruptly increases together with the increase in educational level of the people aged 19-29 in other districts, the knowledge

indicator is quite at the same level regarding all educational levels in case of the young persons from Ida-Viru County (increasing by only two percent by educational levels) (see figure 28).



Figure 28: Correct knowledge of the people aged 19-29 of the ways of HIV transmission by districts according to educational levels (%)

The best HIV-related knowledge is possessed by the <u>studying youth</u> among the people aged 19-29; especially of those also working simultaneously with studying (knowledge indicator 32%). The <u>unemployed</u> have considerably worse knowledge than the others – knowledge indicator is 14%. The differences occur by taking the <u>income per household</u> into account. The knowledge indicator among the ones aged 19-29 with the highest household income (10  $001 \le \text{kroons}$ ) is 10% higher than the one of the young persons with the lowest income per household ( $\le 4\ 000\ \text{kroons}$ ) – 29% and 19% respectively.

## 4.3. Knowledge of the prevention of HIV transmission from mother to child

HIV might transmit from mother to child in up to 40% cases if no preventive measures are applied.<sup>4</sup> The risk of infection transmission could be decreased up to few percent by timely application of relevant measures. The methods for preventing the HIV transmission from mother to child are applying of preventive treatment for the woman and the newborn, delivery with Caesarean section and giving up the breastfeeding of the child. HIV is not heritable.

The relevant questions were asked from the young people aged 14-29 to find out how wellinformed the young people are. The true knowledge in the given subject is expressed by the indicator including the share of these young people who considered the application of all three preventive methods necessary. In addition to three preventive methods decreasing the risk of getting infected the agreement of the young people was asked regarding the statement that nothing could be done to prevent the transmission of infection from mother to child and that the transmission of infection could not be avoided as HIV is heritable.

The knowledge of how to prevent the infecting of the newborn with HIV among the young people aged 14-29 is scanty. The least was known about the fact that one of the necessary preventive methods is delivery with Caesarean section – the respondents e.g. among the

<sup>&</sup>lt;sup>4</sup> See WHO (2000): Fact Sheets on HIV/AIDS for Nurses and Midwives.

ones aged 14-18 who answered this question correctly made about 20% less than the respondents having answered the other two questions correctly (see table 15). In the age group under special attention – among the young persons aged 15-24 - 7% of the respondents have correct knowledge of all the preventive methods of mother to child transmission (MTCT).

Table 13: Concer knowledge of the prevention of whom age groups (78)				
Statement	14-18	19-29		
timely medicine taking (yes answer)	35,6	31,3		
delivery with Caesarean section (yes answer)	15,5	24,6		
not feeding with breast milk (yes answer)	36,1	32,5		
Correct answer to all 3 statements	6,0	9,0		

Table 15: Correct knowledge of the prevention of MTCT in age groups (%)

The respondents aged 14-29 have been followingly provided in four age groups. The consent with statement that nothing could be done for preventing the MTCT as HIV is heritable is interesting to observe separately. Less than fourth of the respondents agrees with the statement provided. There are considerably more young people who disagree with this statement and their share increases with age. Thus about half of the people aged 19-29 are representing this opinion. The given statement indicates that a considerable share of young people could not tell whether HIV is heritable or not. Such answers are more frequent in the younger age groups where the contact with this aspect of the topic has obviously been smaller (see figure 29).



Figure 29: Statement "nothing could be done as HIV is heritable" by age groups (%)

The differences <u>by gender</u> could be noted in two older age groups (19-24 and 25-29) – the knowledge of young men is about 5% worse than that of the young women. In addition it is essential to note that the level of knowledge of young men is at the same level in all four age groups, whereas the knowledge of young women of the preventive methods of MTCT increases with age. Though the knowledge of young women in this question is very scanty in general (see figure 30).


Figure 30: Correct knowledge of the prevention of MTCT in age groups by gender (%)

The <u>knowledge of the non-Estonians</u> regarding the questions related to the ways of HIV transmission was 4% better than the one of <u>Estonians</u> in one age group – the ones aged 16-18 – (see chapter 4.2), the knowledge of the Estonians regarding the child infecting possibility was better in each age group. Such difference is very small in case of the people aged 14-18 (see figure 31).



Figure 31: Correct knowledge of the prevention of MTCT in age groups by nationalities (%)

As in case of other knowledge regarding HIV/AIDS the knowledge in the given topic is better in case of the young persons aged 19-29 with the highest <u>educational level</u>. Though, as the general level of knowledge of the preventive methods of MTCT is very low, only 11% of the young persons with high education or the ones acquiring it have true knowledge. There is a tendency while talking about <u>district</u> differences that the knowledge of the young persons of lda-Viru County regarding the MTCT is poorer than in other districts. District differences occur when observing the level of knowledge of the young city people aged 19-29. The number of correct answers in any district could not be considered high, as the maximum of the summary indicator value of correct answers is 11% among the young city people of Harju County aged 19-29 (see figure 32).



Figure 32: Correct knowledge of the young city people aged 19-29 of the prevention of MTCT by districts (%)

### 4.4. Knowledge of the preventive methods of sexually transmitted diseases

During the questioning attention was paid to the knowledge of the young people of the preventive methods of sexually transmitted diseases (STD). Three options out of potential preventive methods of STD were provided for the respondents aged 10-13: birth control pills, condom and avoiding sex. The older ones were offered five methods (which are also different birth control methods): birth control pills, condom, disrupted intercourse, pessary and intrauterine spiral. From the choises provided condom and avoiding sex protect from STD.

Most of the young persons are aware of the fact that condom is a protective device against venereal diseases – the percentage of the respondents in older age groups reaches up to hundred. There are least of the young people who know that by using the pessary the potential infection with STD could not be avoided. The respondents having answered this statement correctly made up only one fifth of the persons aged 14-18 and less than half in the older age group. The number of the respondents aged 14-18 having answered correctly will be less than half regarding the question about intrauterine spiral (see table 16).

			3
Statement	10-13	14-18	19-29
condom (yes answer)	71,7	93,1	97,3
not having sex (yes answer)	45,7	-	-
birth control pills (no answer)	31,9	62,1	86,7
disrupted intercourse (no answer)	-	50,3	82,2
pessary (no answer)	-	19,6	43,4
intrauterine spiral (no answer)	-	40,7	80,6
Correct answer to all statements	17,0	12,0	37,2

Table 16: Correct knowledge of the preventive methods of STD in age groups (%)

For expressing the correct knowledge of the preventive methods of STD the indicator is used which represents these young people who answered correctly to all statements provided. Just as in case of correct knowledge of the ways of HIV transmission, the number of correct answers is not at all low by regarding the different questions separately. The summary indicator is low due to the fact that the indicator includes only these respondents who are able to mark a correct answer regarding all the methods provided.

17% of the respondents aged 10-13 possess correct information according to the indicator provided (they were asked only about three options). The data <u>by nationality</u> differ by eight percent – 19% of the Estonians and 11% of the non-Estonians have correct knowledge. The poorest knowledge is present in Harju County and Ida-Viru County <u>as to districts</u> – 14% in both districts. The best knowledge of the preventive methods of STD occurs among the young people aged 10-13 in East-Estonia district – 22%. To sum up, the good result in the youngest age group could be that about three quarters of the respondents are aware that condom could be used as a protective device from venereal diseases. The analysis of data by gender and residence indicated no material differences between different groups.

No data of the children aged 10-13 are provided for comparison in the following analysis, as various components have been used in calculating the indicator in this age group.

According to the correct knowledge indicator 23.5% of the people aged 15-24 – the group under special attention - have true information on the preventive methods of STD. This indicator will remain below ten percent in case of the people aged 14-15, less than one fifth of the ones aged 16-18 and slightly more than one third in older age groups. The significant increase in knowledge occurs after 18 years of age. The knowledge of young women of the preventive methods of venereal diseases is somewhat better compared to the young men (see figure 33).



Figure 33: Correct knowledge of the preventive methods of STD in age groups by gender (%)

<u>As to nationality</u> the considerable difference in knowledge of young people could be noted among the summary group aged 19-29. 39% of the Estonians at the given age and 29% of the non-Estonians possess correct information on the preventive methods of STD. The knowledge level of young men and women of both nationalities is different. The major difference discloses in the answers of young men -42% of the young men aged 19-29 of Estonian nationality, but 29% of the young men of other nationality have correct knowledge.

<u>As to education</u> the same tendency could be noted as in two previous subchapters – the higher the education of the young people aged 19-29, the better their knowledge of the prevention of venereal diseases. The level of knowledge of young men and women at the same educational level does not differ considerably, though difference could be noted between the Estonians and non-Estonians of the same educational level. As to all educational levels the Estonians have somewhat better knowledge; the major difference occurs in case of the lowest educational level (see figure 34). It could be mentioned retrospectively that in case of correct knowledge summary indicator regarding the ways of

HIV transmission the major difference in knowledge occurred between two national groups in case of the highest educational level (see chapter 4.2).



Figure 34: Correct knowledge of the persons aged 19-29 of the preventive methods of STD by educational level and nationality (%)

<u>As to residence</u> the variability in case of the young persons aged 19-29 is worth mentioning – the knowledge of young city people compared to the young country people is eight percent better (39% and 31% of correct answers respectively). In the summary <u>by districts</u> it could be seen that the knowledge level of the young people in Ida-Viru County is somewhat worse than in other districts – the summary indicators of Harju County, Lääne and East-Estonia differ from each other by two percent, whereas the indicator of Ida-Viru County is lower than that of others by five up to seven percent. In closer observation of the age groups within the breakdown of districts, the poorest knowledge among the people aged 16-18 is possessed by the young people in Harju County (especially compared to the young people of West Estonia). The young of Harju County among the ones aged 19-29 have better knowledge than the representatives of other districts – especially when compared to the indicators of Ida-Viru County. Thus the most abrupt increase in knowledge of STD prevention between two age groups among the young in Harju County has been provided (see figure 35).



Figure 35: Correct knowledge of STD preventive methods in age groups by districts (%)

The <u>students</u> have the best knowledge and the <u>unemployed</u> the worst knowledge (23%). 50% of the studying and simultaneously working young persons have correct knowledge of the preventive methods of venereal diseases. As to the income per household the young persons with the highest income (44%) differ from the young with the lowest income per household (33%).

The fact that the young persons having had sexual intercourse have better knowledge of STD preventive methods could be also mentioned. The statistically significant difference occurs in the age group aged 16-18 and 19-29 (see figure 36).



Figure 36: Correct knowledge of STD preventive methods in age groups according to the existence of sexual experience (%)

In comparing the knowledge related to STD prevention and HIV preventive methods in general it could be noted that the knowledge of STD and HIV prevention among the young people aged 14-18 is quite at the same level, whereas the knowledge of the preventive methods of venereal diseases among the ones aged 19-29 is more than ten percent better that the knowledge of the ways of HIV transmission.

### Suspicion of being infected with venereal disease

In addition to the knowledge regarding the prevention of venereal diseases the young persons aged 14-29 were also asked whether they suspect of being infected with STD within the last year and how they have acted in this case. 6% of the young people aged 14-18 and 14% of the respondents aged 19-29 have suspected of being infected with some venereal disease. The representatives of the younger age group who have had a suspicion of being infected with venereal disease have somewhat better knowledge of the STD preventive methods. 28% of all young persons having a suspicion have correct knowledge of the STD prevention. 12% of the remaining ones possess correct information.

In case of suspicion most people have consulted a doctor – more often either the gynaecologist or andrologist. The seekers for doctor's help could be found more in the older group. There are also more of the ones aged 19-29 who share suspicions with their sex partner. The younger age group involves more of those young persons who did nothing in case of suspicion of being infected with venereal disease (see figure 37).



Figure 37: Behaviour in case of STD suspicion in age groups (%)

# 4.5. Knowledge of the opportunities of taking a HIV test

The young persons could turn to the anonymous AIDS cabinets, Youth Counselling Centre, family or specialist doctor (gynaecologist, doctor of skin and venereal diseases) for taking a HIV-test. There are total of 5 anonymous AIDS cabinets and 14 Youth Counselling Centres in various districts of Estonia. Related to the latter the young persons were asked whether they know where the HIV-test could be taken. They were asked whether they have heard where their closest AIDS anonymous cabinet and Youth Counselling Centre are located.

### Places for taking a HIV test

The answers to the question "Where the HIV test could be taken?" have been provided in five age groups. The persons are most aware of the fact that the HIV test could be taken in the anonymous AIDS cabinet and by the specialist doctor – more than half of the

respondents answered affirmatively to the given statements.<sup>5</sup> Less than one fourth of all respondents had heard that the test could be taken by the family doctor and in Youth Counselling Centre. It is interesting to note that as the knowledge of the opportunity to test oneself in the anonymous AIDS cabinet considerably increases with age, but the knowledge of other testing possibilities remain at a quite similar level within the age groups (see figure 38).



Figure 38: Knowledge of the places for taking a HIV test in age groups (%)

The young women are somewhat better informed of the different places for taking a test than the young men. The major differences occur in the group aged 19-24 and in part of anonymous AIDS cabinet and Youth Counselling Centre, where the knowledge of young women is 10% better (e.g. 88% of the young women and 77% of the young men are aware of the testing opportunities in the anonymous AIDS cabinet). The data analysis by nationality indicated the variability of knowledge regarding different places for taking a test. The Estonians aged 10-13 are more aware of the HIV testing opportunities in anonymous testing sites of AIDS – 38% (33% of the non-Estonians) and the young people aged 14-18 of other nationality – 72% (63% of the Estonians). The non-Estonians know the Youth Counselling Centres as the places for taking a test 13% better - e.g. 34% of the young persons of other nationality aged 14-18 and 21% of the Estonians. The young persons of other nationality aged 10-13 knew somewhat better that the family doctor was also one of the possibilities – 31% (22% of the Estonians). The possibility of specialist doctor was more marked by the Estonians. The major difference in this part occurs among the ones aged 19-29 (71% of the Estonians, 59% of non-Estonians).

The differences <u>by residence</u> occur related to the anonymous testing sites and counselling centres – the young city people know better that it is possible to get HIV tested in such places. In general it could be stated <u>as to districts</u> that the anonymous testing site and counselling centre are better known as the possibilities to take a test in Harju County and Ida-Viru County.

About the above – the young people are quite aware that the HIV test could be taken in anonymous AIDS cabinet and are considerably less aware that this could be carried out in Youth Counselling Centres. If a real need for HIV testing occurs, the relatively few young people could tell where the closest anonymous testing site and counselling centre are located (this indicator will be in each age group less than one third). The location of Youth

<sup>&</sup>lt;sup>5</sup> No special question on whether the HIV test could be taken by the specialist doctor was asked in the youngest age group.

Counselling Centre is better known of – especially in the group aged 14-18 (see figure 39). The latter is obviously connected with the fact that counselling testing sites provide other services in addition to testing (both medical and sociopsychological counselling is provided<sup>6</sup>).



Figure 39: Awareness of the anonymous AIDS cabinet and Youth Counselling Centre closest to the residence in age groups (%)

### Taking a HIV-test

The young persons aged 14-29 were asked whether they have taken a HIV test. One fourth of the respondents aged 19-29 have taken a HIV test; 11% of them have taken it within last year. 3% of the respondents aged 14-18 have HIV-tested themselves.

The young persons have found themselves in a situation when they wished to take a test, but the wish never realised. 11% of the young people aged 19-29 and 7% of the ones aged 14-18 have been in such a situation. The most frequent cause for not taking the test is the fact that no time was found for that purpose – more than half of the respondents stated that. The most often mentioned causes are also unawareness about the possibilities of taking a HIV-test and the location of the establishments where the test could be taken. The fear before the procedure of having the venous blood taken and too far distance from the testing site were least mentioned as the causes for not taking a test (see figure 40).



Figure 40: Causes of not taking the HIV-test in age groups (%)

### 4.6. Subjective assessment of theoretical knowledge

During the questioning the young persons were asked to assess their theoretical knowledge regarding the various topics related to sexuality and infection prevention. The assessment was asked on a 4-point scale (1-very poor, ..., 4-very good). According to the given scale the average assessment was 2.5 and the higher the average value, the better the knowledge is assessed.

Different age groups had to assess somewhat different topics, therefore the results were provided in three separate age groups. Three out of the topics asked were similar in all age groups: preventing venereal diseases, preventing HIV infection by sexual contact and preventing HIV infection by injecting.

# The children aged 10-13

The youngest age group assessed their theoretical knowledge best among the relationships between boys and girls. The knowledge on the topics of puberty and prevention of venereal diseases were assessed slightly higher than the average level (see table 17).

I he higher the average assessment, the	e better the knowle
Topic	average
	assessment
puberty and changes in puberty	2,70
relations between boys an girls	3,06
sexuality	2,37
preventing venereal diseases	2,59
preventing HIV infection by sexual contact	2,40
preventing HIV infection by injecting	2,43

Table 17: Average assessment of the children aged 10-13 of their theoretical knowledge The higher the average assessment, the better the knowledge is considered

The girls assess their knowledge compared to boys considerably better in the topics of puberty and preventing venereal diseases. In general the Estonians assess their knowledge better compared to the children of other nationality (excl. the topic related to puberty). In case of all topics the young city people consider their knowledge compared to the young country people considerably better.

### The young people aged 14-18

The young persons of the given age group assess their knowledge in the given topics better than average. In dividing the age group into two we see that the assessment of the persons aged 14-15 and 16-18 considerably differ from each other and the older group assesses their knowledge better in the topic of using the condom during the sexual intercourse and the worst in the topic of preventing the venereal diseases (see table 18).

 Table 18: Average assessment of the persons aged 14-18 of their theoretical knowledge in age groups

 The higher the average assessment, the better the knowledge is considered

Topic	14-15	16-18
preventing venereal diseases	2,52	2,66
preventing HIV infection by sexual contact	2,74	2,95
preventing HIV infection by injecting	2,84	3,06
using a condom during sexual intercourse	3,18	3,29
making the proposal to the partner to use a	2,99	3,15
condom during the sexual intercourse		
puberty and changes in puberty	3,14	3,19
relations between men and women	3,11	3,12
sexuality	2,95	3,06

The gender differences in assessments occur in four topics – young girls assess their knowledge better in the topics of prevention of venereal diseases, preventing HIV infection by sexual contact, puberty and topics of relations between men and women. No differences occur by nationalities on the topics of HIV infection prevention, using condom during sexual intercourse and sexuality. The Estonians assess their knowledge better regarding the rest of the topics.

### The young people aged 19-29

In the oldest age group the knowledge in all topics provided has been assessed higher than average. The assessments do not differ while dividing the group aged 19-29 into two; the exception is the topic of using a condom, where the younger ones assess their knowledge considerably better (see table 19).

 Table 19: Average assessment of the young people aged 19-29 of their theoretical knowledge in age groups

 The higher the average assessment, the better the knowledge is considered

Topic	19-24	25-29
preventing venereal diseases	2,80	2,86
preventing HIV infection by sexual contact	3,13	3,11
preventing HIV infection by injecting	3,28	3,24
using a condom during sexual intercourse	3,46	3,38
making the proposal to the partner to use a	3,38	3,33
condom during the sexual intercourse		

The women in the given age group assess their knowledge considerably better in the questions of venereal diseases and HIV prevention compared to the young men. The Estonians consider their knowledge in all topics better compared to other nationalities.

All age groups (10-13, 14-18, 19-29) also involve some district differences. In the light of data provided in the earlier chapters it is more interesting to mention that the young persons aged 19-29 from Ida-Viru County assess their knowledge in the topics of preventing venereal diseases and HIV infection by injecting worse compared to all other districts.

The assessments of the young persons of their knowledge of preventing HIV infection by sexual contact or by injecting were compared with the correct knowledge of the HIV preventive methods. It occurred that the young people who assess their knowledge excellent include more of the ones who actually possess correct knowledge on the HIV preventive methods compared to others. Though here one could not boast with the specifically high level of knowledge. For example, 29% of the young persons aged 19-29 who assess their knowledge of preventing HIV infection by sexual contact best, actually possess correct knowledge of the HIV preventive methods. 26% of the young persons of the same age who assess their knowledge on the topic of preventing HIV infection by injecting the best, actually possess correct knowledge.

The assessments related to the prevention of venereal diseases were similarly compared with the correct information on the preventive methods of STD. About half of the young people aged 19-29 (48%) who assess their knowledge of preventing venereal diseases the best, actually possess correct knowledge on the given subject. The number of such young persons is considerably lower among the ones aged 14-18 and 10-13 – less than 20%.

To sum up, the results indicate that many young people assess their knowledge better than it actually is.

### 4.7. Topics handled in school lessons

The following topic under observation was how thoroughly the topics provided in the questionnaire were talked about to the schoolchildren in the lessons of human study or other lessons. The thoroughness of handling different subjects was assessed by the young persons on a four-point scale (1-thoroughly, ..., 4 not at all).

Followingly the topics thoroughly handled at school have been provided.

In the opinion of the persons aged 10-13 the more thoroughly handled topics are related to use of drugs – more than half of the respondents believed that. The questions related to sexuality, need of condom use, venereal diseases and HIV/AIDS have been least handled in school lessons - less than one fifth of the respondents stated that these topics were thoroughly handled at school. More than half of the respondents stated that the handling of two remaining topics – puberty and relations between men and women – was not thorough.

The young persons aged 14-18 have stated that the topics related to use of drugs, and also the questions of puberty and need for condom use have been more thoroughly handled. More than half of the respondents state on the three topics provided that these have been thoroughly handled. The less handled topics are venereal diseases, HIV/AIDS, sexuality and relations between men and women – more than half of the respondents have stated that the given topics were not thoroughly handled in lessons.

Significant difference in the assessments between the <u>genders</u> in case of the children aged 10-13 did not occur, but the young women aged 14-18 assess the handling of most topics at school considerably differently from the young men. In case of topic on puberty the girls find that the question has been more thoroughly handled compared to the young men; the opposite tendency could be noted by the topics of venereal diseases, HIV/AIDS, sexuality and relations between men and women (see figure 41).



Figure 41: The thoroughly handled topics at school in the opinion of the persons aged 14-18 by gender (%)

In general the Estonians aged 10-13 assess the topics forwarded more thorough than the non-Estonians. The differences in the opinions of <u>national groups</u> are insignificant regarding the topics related to need of condom and HIV/AIDS (see figure 42). The major difference could be detected related to puberty questions – there are 15% more of the ones among the Estonians who assess that the given topic has been thoroughly handled in school lessons. In the opinion of the Estonian children aged 10-13 the topic of need to use the condom has been least handled at school, in the opinion of the non-Estonians the least handled topic is venereal diseases.

In the opinion of the non-Estonians in the group aged 14-18 the several topics have been more thoroughly handled in school lessons when compared to the Estonians. These topics involve the matters related to use of drugs, venereal diseases and HIV/AIDS (see figure 43). The latter occurs rather extremely by the topics of HIV/AIDS, where the non-Estonians include 20% more of the ones who state that the topic has been thoroughly handled compared to Estonians. The relations between men and women and the need for use of condoms are the topics the thorough handling of which is almost equally assessed in national groups. The Estonians have stated the more thorough topic handling than the non-Estonians in two questions: puberty and sexuality.



Figure 42: The thoroughly handled topics at school in the opinion of the children aged 10-13 by national groups (%)



Figure 43: The thoroughly handled topics at school in the opinion of the persons aged 14-18 by national groups (%)

No significant differences occur in the assessments of the young city people and young country people in general. As an exception the young city people aged 10-13 find compared to the young country people that the questions related to puberty, sexuality and need for use of condoms have been more thoroughly handled in school lessons.

Statistically significant relations between the thoroughly handled topics at school and different levels of knowledge are the following:

- the knowledge of the persons aged 14-18 of the STD preventive methods is the better, the more thoroughly the topics related to puberty, HIV/AIDS, venereal diseases and need to use the condom have been handled at school;
- the knowledge of the children aged 10-13 of the STD preventive methods is better when all the topics provided have been handled at school;
- the knowledge of the persons aged 14-18 of the ways of HIV transmission is the better, the more thoroughly the topics of HIV/AIDS, venereal diseases and need to use the condom have been handled at school;
- the knowledge of the children aged 10-13 of the ways of HIV transmission is the better, the more thoroughly the topics of HIV/AIDS, venereal diseases, need to use the condom and sexuality have been handled at school;
- the young persons aged 14-18 distinguish HIV from AIDS the better, the more thoroughly the topics related to puberty, HIV/AIDS, venereal diseases, need to use the condom and harmfulness of drugs have been handled at school;
- the young persons aged 10-13 distinguish HIV from AIDS better when all the topics provided have been handled at school.

### 4.8. Obtaining information

Followingly the more specific overview was required of which information channels were used by the young people in obtaining information related to HIV/AIDS and which additional information regarding the topics they most need.

### Topics on which more information is needed

The need of information regarding various topics related to HIV/AIDS was assessed on a four-point scale: I need information "mainly on this", "on this too" and "not on this", "I have already sufficient knowledge". The topics which were most mentioned by the young in their information need have been analysed.

The young people aged 19-29 bring the topic of HIV/AIDS treatment to the fore most regarding their information need. The young persons aged 14-18 consider the prevention of HIV and venereal diseases more necessary by the topic of treatment. The youngest age group considers itself least information possessive in all the questions provided. The group aged 10-13 includes the largest range of topics where information mainly in the given question is needed by about third or more of the respondents. These are: HIV/AIDS treatment, prevention of HIV and venereal diseases, ways of HIV transmission, possibilities of taking a HIV test and the topic what is HIV and AIDS (see figure 44). The questions related to the use of condom provide least interest in all age groups.



Figure 44: Topics on which the young people mainly require information, in age groups (%)

\* missed in the questionnaire of the ones aged 19-29

\*\* missed in the questionnaire of the ones aged 10-13

The major differences regarding the topics which are interesting for <u>young men and women</u> could be found among the ones aged 14-18. The figure 45 indicates the topics, as to which the opinions of young men and women are statistically significantly different. Both girls and boys are in total more interested in the topics related to HIV. As to observing each topic separately the young men are more interested in the topics related to the use of condom, the girls in the matters related to HIV.



Figure 45: Topics on which the young persons aged 14-18 mainly require information in age groups by gender (%)

Only some differences occur regarding the need of information <u>by national groups</u>. The Estonian children aged 10-13 require more information on ways of HIV transmission, the ones aged 14-18 on the nature of HIV and AIDS and the ones aged 19-29 on the probability of HIV transmission in case of different ways of having sex. The non-Estonians aged 14-18 stated more than the Estonians that they need mainly information on the reliability of condom in preventing the infections and on the topic how to ask the partner to use the condom.

Major differences could be noted in two older age groups among the <u>young city people and</u> <u>young country people</u>. The young city people aged 14-18 require more information on the correct use of condom, how to ask the partner to use the condom and in the questions related to HIV/AIDS treatment. The young country people aged 19-29 are more interested than the young city people to learn more about the probability of HIV transmission in case of various ways of having sex and how to ask the partner to use the condom.

During the analysis the connection between knowledge and information was controlled. It occurred that the young people aged 14-18 possessing correct knowledge of the preventive methods of HIV and venereal diseases require less information. The relations between the correct knowledge and need for information were essential almost in case of all topics on which the respondents' need for information was asked about. The correct knowledge and need for information of HIV transmission from mother to child had no statistically significant relations with most of the topics – only the young people aged 19-29 having correct knowledge of the given topic require less information on the use of condom, topics of ways of HIV transmission and prevention. No considerable relations between today's knowledge and need for information occurred in case of the children aged 10-13.

#### Information channels for obtaining information about HIV

The questions examined which channels have been used for obtaining information up to now and which channels people wish to use. In order to specify the channels which have provided most information on HIV for the young, the respondents were asked to assess different information sources on a 3-point scale (1- mainly from there, 2 – from there too, 3 – not from there). The average assessment on the given scale is 2.0 and the smaller the average value of the assessment, the more information on HIV has been received from the information channel.

According to the average assessments it occurred that no major differences exist in the order of five most essential information sources. Television, newspapers and magazines hold the first place as the information channels for all age groups provided. The first five include also information materials in all ages. The lessons follow as the significant information sources in the age groups of schoolchildren. The first five also include family members as to the children aged 10-13, school events as to the ones aged 14-18. In two older groups (19-24 and 25-29) the outdoor advertising is mentioned among the five main information channels and radio in the oldest age group (see table 20).

Table 20: Five main channels where from information on HIV has been received during the last year in age groups

The lower the avera	ge assessm	ent, the mor	e informatior	n has been r	eceived from	the given source
Information sources	10-13	14-15	16-18	19-24	25-29	
television	2,00	1,82	1,85	1,78	1,66	
newspapers, magazines	2,16	1,96	1,87	1,77	1,73	
school lessons	2,22	1,97	2,04	2,31		
family members	2,35					
information sheets, foldings	2,36	2,16	2,06	2,02	2,16	
school events		2,18	2,14			
outdoor advertising				2,29	2,35	
radio					2,31	

Information channels used by <u>young men and women</u> generally do not differ, only the girls aged 14-18 had received HIV-related information more from the newspapers than from television.

Some differences occurred between the Estonian young persons and the ones of other <u>nationality</u> regarding the information channels. The five most important information channels of the non-Estonians aged 10-13 involved friends and internet instead of foldings and family members. The lessons were more important information sources for the young non-Estonians aged 14-18 than the newspapers-magazines, in case of the Estonians vice versa.

<u>The difference between the young city people and young country people occurs among the ones aged 19-29</u>. The young city people had received more information from the outdoor advertising, radio was the more important HIV-related information source for the young country people. Differences regarding the information channels also occur among the young people aged 19-29 with different <u>educational levels</u>. In case of the young with the lowest educational level the five key information sources included friends-acquaintances and outdoor advertising was not important for them. Internet was present within the five key information sources of the young people with the highest education.

The young people were also separately asked which channels would be most convenient and pleasant ones for receiving the information related to HIV/AIDS. It occurred that the preferred information sources do not materially differ from the ones where the information had been obtained up to now. Television is still considered most convenient. School lessons and events are the convenient places for receiving information for the schoolchildren. Internet as the major change within the five most convenient information sources could be noted in all age groups. The schoolchildren do not consider the foldings the convenient method for receiving information differently from the ones aged 19-29. The children aged 10-13 would be pleased to obtain information also from the books (see figure 46 and figure 47). Some differences occur also within the group aged 19-29.



Figure 46: Five main channels where from the ones aged 10-18 would prefer to receive information on HIV in age groups (%)



Figure 47: Five main chanells where from the ones aged 19-29 would prefer to receive information on HIV in age groups (%)

The parents as the information sources are more important among the ones aged 10-13, the share of friends as the suitable information channel increases in the older group. Related to

the latter the schoolchildren were asked whether and how thoroughly they have talked about HIV/AIDS with their parents and friends.

More than half of the schoolchildren have talked with their parents about these topics – 53% of the ones aged 10-13 and 61% of the ones aged 14-18. The difference between young men and women occurs in the older age group. 65% of the girls and 56% of the boys have talked about HIV and AIDS with their parents. Many of them do not see these discussions as thorough – 21% of the children aged 10-13 and 17% of the ones aged 14-18 consider the discussions thorough.

The young people– 64% of the children aged 10-13 and 85% of the ones aged 14-18 - have more often talked about HIV/AIDS with friends. HIV and AIDS have also been the topics of discussion more often among the girls as to friends. 89% of the girls aged 14-18 have talked about these topics with friends (81% of the young men). In dividing the age group of older schoolchildren into two in case of the ones aged 14-15 the difference occurs between the Estonian young persons and the ones of other nationality. The non-Estonians include more young people who have talked about HIV/AIDS with friends – 65% (59% among the Estonians).

Less than one fourth of the young persons see the discussions about the topics of HIV/AIDS as thorough. In older age group the young persons have assessed their discussions with friends a little more thorough than the discussions with parents – 23% of the ones aged 14-18 consider the discussions with friends thorough and 17% consider the discussions with parents thorough. In the youngest age group the tendency is opposite – 16% of the ones aged 10-13 consider the discussions with friends thorough and according to 21% the discussions have been very thorough. The given result is confirmed by the abovementioned, according to which the family members are prevalent within the five key information sources of only the children aged 10-13.

The data analysis indicated the statistically significant relation between the relationships of family and friends and thoroughness of discussions. The better the relations of the young people with their parents, the more thorough the discussions on the topics of HIV/AIDS have been. The same relation was valid in case of friends.

### 4.9. Summary of the chapter

To sum up the fourth chapter the following tendencies could be provided on the knowledge of the young and the related matters:

- 1. Young people are best informed of the fact that HIV and AIDS are different; though there are misunderstandings in closer explanation of this difference and the term of immunodeficiency is mentioned by only a few.
- The summary knowledge of the young of the ways of HIV transmission is not good. 18% of the respondents aged 15-24 had correct knowledge of the ways of HIV transmission.
- 3. The knowledge of the young persons about STD preventive methods is somewhat better. 24% of the respondents in the group aged 15-24 had correct knowledge about the given topic.
- 4. The knowledge of the young related to prevention of MTCT is the poorest. 7% of the respondents aged 15-24 had only correct knowledge of the given topic.

The summary indicators of knowledge are made worse by the fact that the number of only these respondents are added to the knowledge indicator who have given correct answers to all questions gathered under the given knowledge group. In viewing each question separately the percentage of the respondents having answered correctly is not so low as the summary indicator. The statistically significant relation exists between different knowledge related to HIV/AIDS and STD – the better the knowledge of one topic, the better the knowledge of other matters.

- 5. The young people assess their theoretical knowledge of the topics related to HIV/AIDS better than they actually are.
- 6. The schoolchildren stated that the topics related to the use of drugs have been most thoroughly handled in lessons at school. The topics of sexuality and HIV/AIDS had been least handled.
- 7. The young people receive and require HIV-related information mainly through TV and newspapers-magazines. The school lessons and events are important information sources for the schoolchildren.
- 8. The young persons need most information in their opinion on the questions of treatment of HIV/AIDS and prevention of HIV and venereal diseases.
- The majority of the young persons are aware that HIV test could be taken in anonymous AIDS cabinet and by the specialist doctor. People are considerably less informed about other possibilities.
- 10. One fourth of the young persons aged 19-29 and 3% of the ones aged 14-18 have taken the HIV-test.

# 5. Prejudices, beliefs and attitudes related to HIV

The following chapter provides an overview of which beliefs and attitudes of the young persons are related to getting infected with HIV and HIV positiveness. The viewpoints of the young in the topics of HIV and pregnancy are also handled. The information in this chapter is partly related to the topic of knowledge provided in the previous chapter, as many common misunderstandings and myths are related to the level of correct fact information on HIV infection possessed by the young person. In order to specify the attitudes of the young persons the statements regarding the topic were provided to be answered on a five-point scale (*1-fully agree, …, 4not at all agree; 5-cannot tell*). The further analysis does not include these young persons who did not express their opinion regarding the statements provided or answered "cannot tell". The value of an average assessment on the scale established is 2.5. The respondents have been provided in part of four age groups, as major differences are missing within the group aged 19-29, the differences could be though found by dividing the group aged 14-18 into two.

### 5.1. Understandings of the ways of HIV transmission

In examining the understandings of the young people on possibilities of HIV infection in everyday contacts, the statements that getting infected is possible by eating from the common dishes with HIV-infected person or by using the common toilet are most confusing. All age groups include the ones who agree with these two statements (and thus the ones not understanding the transmission ways of HIV).

The assessments of the young by age groups are greatly variable. The number of the young persons agreeing with the statement never exceeds 15% among the ones aged 19-29, whereas the group aged 10-13 includes more than one third of these children who think that one could get infected with HIV in this way in case of each statement. It is least believed that one could get infected through close contact with HIV positive person – by caressing him. As to each statement the number of the ones having misunderstandings about the possible ways of infection transmission decreases with ageing. The change between the groups aged 10-13 and 14-15 is most outstanding (see figure 48).



Figure 48: Understandings about the ways of HIV transmission in age groups (%) The answers "fully agree" + "rather agree" have been taken into account

In order to observe the extent of difference of the given understandings by gender, residence and districts, the average assessments were taken as the basis (the lower the average assessment, the more common the misunderstandings are).

The false understandings about HIV transmission are generally more common among the young men. The major difference <u>by gender</u> discloses in the question of using the common dishes with the PLWHA (e.g. the average assessment of the young men aged 14-15 to the statement is 2.58 and of the young women 2.92).

The assessments of the <u>Estonians and non-Estonians</u> to all statements differ considerably – the false understandings are more common among the young people of other nationality. The opinions of the Estonians and non-Estonians of two older age groups (the ones aged 16-18 and 19-29) are most different in case of the statement that one could get infected with HIV by using the common dishes with the person infected. The major differences regarding the understandings of the youngest age group (the ones aged 10-13) lie in the possibility of getting infected by caressing with PLWHA. The opinions of the Estonians and the non-Estonians aged 14-15 differ most in case of the statement regarding the use of common toilet with the one infected with HIV (see table 21).

	10-13		14-15		16-18		19-29	
	Е	n-E	Е	n-E	Е	n-E	Е	n-E
swimming together with PLWHA in the pool	2,65	2,20	3,35	3,08	3,58	3,22	3,64	3,44
caressing with PLWHA	2,99	2,44	3,66	3,38	3,83	3,50	3,87	3,69
eating from the common dishes PLWHA	2,18	1,87	2,84	2,63	3,22	2,82	3,42	3,16
using of common toilet with PLWHA	2,70	2,18	3,05	2,75	3,13	2,85	3,42	3,18

Table 21: Understandings about the ways of HIV transmission in age groups by nationalities The lower the average assessment, the more common the misunderstandings are E-Estonian: n-E – non-Estonian

No significant differences occurred in the assessments of the <u>young city people and young</u> <u>country people</u>. As to misunderstandings the following could be brought to the fore:

- the country children aged 10-13 think more than the ones living in the city that one could get infected with HIV by using the common toilet with HIV-infected person (average assessments 2.42 and 2.64 respectively);
- the young city people aged 16-18 believe more that it is possible to get infected by caressing with PLWHA (average assessment of the young city people is 3.71, 3.81 for the young country people);
- The young country people aged 19-29 assess the probability to get infected with HIV by swimming in the common pool with PLWHA (average assessment of the young country people is 3.54, 3.63 for the young city people) and by eating from common dishes (average assessment of the young country people is 3.28, 3.40 for the young city people) higher.

The following observations could be made on the age groups by making a summary of the <u>district</u> data:

- The false understandings of HIV transmission are less common in East-Estonia district among the children aged 10-13.
- The children aged 14-15 include few differences among the young persons living in different districts.
- The false understandings among the children aged 16-18 are less common in Ida and West Estonia districts.
- The young people in Ida-Viru County aged 19-29 include more of these who agree with the false statements on HIV transmission.

The analysis of the assessments by <u>educational levels</u> in case of the ones aged 19-29 indicates that statistically significant differences exist between all levels and the higher the education, the less common is the false knowledge of HIV infection transmission. The major difference between the young people with the lowest and highest education is related to the opinion on infection spread by using common dishes with HIV positive person (average assessment of the young persons with the lowest education is 3.04, 3.57 in case of the highest educational level).

# 5.2. Attitude towards the contacts with PLWHA

The readiness of young people for communicating with PLWHA has been below analysed.

The age division indicates that two younger groups, 10-13 and 14-15, include more prejudices related to HIV – more than half of the representatives of both age groups would avoid the contact with PLWHA at a meal table and at school. In case of the statements provided the group aged 10-13 includes more of those who do not wish to have contact with the person infected in the given situation. In case of the people aged 19-29 the stay of one's children in one group with HIV-infected child is most feared. The fear is most common among those who have their own children – 80% of the respondents with children would not prefer to put their child into one group with HIV-infected child (this indicator is 71% among the rest). The purchase of food from the store, where the seller has been infected, is most avoided among the ones aged 19-29 (see figure 49).

There are least of these young persons who would terminate the contacts, in case the one infected would be their close person. The number of the ones who would not care about their infected relative or would terminate the relations with infected acquaintance or friend is be less than one third in each age group. This indicator is less than 15% in case of both statements among the people aged 19-29. The older the respondents, the more tolerant their attitudes are (see figure 49).



Figure 49: The young persons not ready for contact with PLWHA in age groups (%)

\* question was missing in the questionnaire of the persons aged 19-29

\*\* question was missing in the questionnaires of the persons aged 10-18

\*\*\* statistically significant difference between different age groups among the persons aged 19-29 was missing

The average assessments were compared by gender, nationalities, residence, districts (the average assessment is the value 2.5). The readiness of <u>the young men and women</u> to have close contacts with PLWHA is usually different. The exception was the group aged 19-29 where the assessments differed only in case of a couple of situations. To sum up, it could be stated that young men have more prejudices towards the contacts with PLWHA in the given situations than the young women. The major differences could be noted in the younger age groups by communicating with PLWHA in everyday situations – e.g. eating at a common table (average assessment of the young men aged 10-13 is 3.42, 3.11 for the young women and the average assessment of the young men aged 14-15 is 2.78, 2.31 for the young women).

The attitudes <u>by national groups</u> are also generally different. In only single cases no difference exists. The prejudices towards HIV-infectedness among the non-Estonians in most situations are more common. At the same time it could be noted that in case of the closest contacts (taking care of the relatives) the fear of the Estonians in all age groups was greater. It also occurs that the Estonian schoolchildren would require more that the teacher infected with HIV stopped working at school (see table 22).

Table 22: Readiness for contact with PLWHA in age groups by nationalities	
The higher the average assessment, the less ready for contact one	; is
F-Estonian: n-E – non-Estonian	

Statement	10-	-13	14	-15	16	-18	19	-29
	E	n-E	E	n-E	E	n-E	E	n-E
eating at a common table	3,27	3,31	2,50	2,57	2,09	2,40	1,69	2,24
not taking care of the relative	2,19	2,00	2,13	1,88	2,04	1,75	1,78	1,67
studying in the same class	3,27	3,32	2,77	2,65	2,41	2,32	-	-
finishing relations with the acquaintance	1,96	2,44	1,65	1,94	1,52	1,73	1,38	1,78
teacher working at school	3,27	3,01	2,86	2,57	2,57	2,23	2,07	2,22
purchase of food from the seller	2,56	2,64	2,26	2,54	2,36	2,55	2,28	2,42
keeping one's child in the same	_	_	_	_	_	_	2 05	3.24
kindergarten group	_		_	_	_		2,35	3,24
working in common collective	-	-	-	-	-	-	1,86	2,16

No major differences occurred in the assessments of the young dty people and young country people. The situations where the statistical difference occurs between the given statements are the following:

- Eating at a common table, finishing relations with an acquaintance/friend, continuous working of the infected teacher at school, working in the common collective among the group aged 19-29;
- Taking care of the infected relative among the group aged 16-18;
- Studying in the same class among the group aged 10-13;

Practically all assessments of the abovementioned situations indicate that the young country people fear more the contact with PLWHA. The exception was the finishing of relations with HIV-infected acquaintance or friend, for which the young city people would be more prepared.

The major <u>district</u> differences occur in the group aged 19-29 where the assessments of practically all situations indicate that the prejudices are more common among the young in Ida-Viru County. The other major difference in the group aged 14-18 in Harju County is the greater readiness for contact with the infected person.

The young people with different <u>educational level</u> could be compared among the group aged 19-29. The young persons with high education or the ones acquiring the latter are most ready for direct everyday contact with PLWHA.

# 5.3. Beliefs related to HIV/AIDS

According to the abovementioned five-point scale the young persons were asked to assess some statements expressing the attitude towards HIV/AIDS topics. As the variabilities as to age groups were major in case of two previous topics (understandings about the ways of HIV transmission and readiness for contact with the infected), the opinions regarding the statements handling beliefs do not differ so much.

The understanding that HIV-infected person have to inform his friends and acquaintances about it is quite homogenous in comparing different age groups – more than three quarters of the respondents of any age find that. As to age groups there are few differences in the assessments regarding the statement that the HIV-infected person is himself/herself guilty of getting infected. The major discrepancy by age groups discloses as to the statement "women's probability of getting infected with HIV is smaller than that of men, as they are more cautious". The group aged 10-13 could be brought to the fore, about 60% of whom believe the latter, the rest include approximately less than half of the representatives of this opinion. It is interesting to note that when based on the above the group aged 19-29 differs from the younger group in having more knowledge and correct understandings, the differences are not so noticeable regarding the beliefs related to HIV. In case of the

statement "HIV and AIDS are the problems of drug addicts and homosexuals" one third of the ones aged 19-29 agrees with the given myth, at the same time 14% less of the young persons in the group aged 16-18 shares this viewpoint. The opinion that the life of PLWHA have no sense, is least common (see figure 50).



Figure 50: Attitudes related to HIV/AIDS in age groups (%)

The answers "fully agree" + "rather agree" have been taken into account

The analysis of the given statements by gender, nationalities, residence, districts and educational level was based on the average of assessments and the smaller the average assessment, the more common the given myth was among the young persons.

The major difference exists generally in the viewpoints of the <u>young men and women</u> – the myths are more common among the young men. The major difference in opinion lies in the statement that HIV and AIDS are the problems of only drug addicts and homosexuals (see table 23).

Table 23: Attitudes related to HIV/AIDS in age groups by gender

The lower the average assessment, the more common the given myth is *M*-man, *W*-woman

Statement	10-	-13	14	-15	16	-18	19	-29
	М	W	М	W	М	W	М	W
PLWHA are themselves guilty	2,01	2,09	2,06	2,35	2,17	2,45	2,23	2,38
The life of the HIV-infected person has no sense	2,60	2,71	2,82	3,06	3,05	3,16	3,08	3,05
HIV-infected person should inform his friends-acquaintances about it	1,58	1,62	1,68	1,71	1,70	1,85	1,79	1,93
HIV and AIDS are the problems of only drug addicts and homosexuals	2,43	2,75	2,77	3,19	3,12	3,43	2,83	3,00
Women's probability of getting infected with HIV is smaller than that of men, as they are more cautious	2,45	2,32	2,82	2,97	3,14	3,20	3,34	3,30

In general the false beliefs related to HIV are somewhat more common among the young persons of other <u>nationality</u> compared to the Estonians. The major difference between the

national groups lies in the myth, according to which HIV is considered the problem of drug addicts and homosexuals. This difference occurs most in the group aged 14-15, where the average assessment of the Estonians is 3.30 and 2.35 as to non-Estonians.

No major differences existed regarding the residence. The difference between the young city people and young country people occurs in two younger age groups (10-13 and 14-15) regarding two beliefs. The young country people stand more for the viewpoint that the person infected with HIV should tell about it to his friends and acquaintances. The young city people agree to a major extent with the statement that HIV and AIDS are the problems of drug addicts and homosexuals. In case of the group aged 16-18 the myths are more common among the young city people, no major differences in average assessments exist among the ones aged 19-29 (see table 24).

Ci – young city people, Co – young country people								
Statement	10	10-13		14-15		16-18		-29
	Ci	Со	Ci	Со	Ci	Со	Ci	Со
PLWHA are themselves guilty	2,04	2,07	2,22	2,20	2,32	2,40	2,33	2,27
The life of the HIV-infected person	2.68	2.61	2.94	2.96	3.07	3.24	3.08	2.99
has no sense	_,	_,	_,• .	_,	-,	•,= ·	-,	_,
HIV-infected person should inform	1.64	1.53	1.74	1.60	1.82	1.72	1.90	1.79
his/her friends-acquaintances about it	.,	.,	.,	.,	.,•=	•,• =	.,	.,. 0
HIV and AIDS are the problems of	2 52	2 74	2 90	3 25	3 21	3 59	2 93	2 91
only drug addicts and homosexuals	2,02	2,7 1	2,00	0,20	0,21	0,00	2,00	2,01
Women's probability of getting								
infected with HIV is smaller than that	2,40	2,35	2,92	2,87	3,15	3,26	3,32	3,29
of men, as they are more cautious								

The lower the average assessment, the more common the given myth is

Table 24: Attitudes related to HIV/AIDS in age groups by residence

In generalizing the data analysis by <u>districts</u> Ida-Viru County differs most out of the four districts, where the false understandings are most common. The major differences in opinion between the young persons living in other districts and the ones living in Ida-Viru County lie in the myth that HIV and AIDS are the problems of drug addicts and homosexuals.

As in case of the abovementioned understandings the statistically significant differences occur in the beliefs of the young with <u>different education</u> aged 19-29 and the higher the education of the young people, the less common the myths provided are. The major difference between the young people with the lowest and highest educational level lies in the opinion according to which the life of the HIV-infected person loses sense (average assessment of 2.78 and 3.19 respectively).

In data analysis the relations between all understandings handled in the given chapter and correct knowledge on the ways of HIV transmission were controlled (provided in chapter 4.2). The comparison indicated that there are less false understandings regarding possible HIV transmission among the young possessing more correct information. The more correct the knowledge of the young, the less repelling attitudes towards the topic of HIV/AIDS and PLWHA exist.

In case of the statements examining the readiness of the young persons for direct contact in everyday situations with the infected people, there exists the essential connection between the situations provided and knowledge about HIV regarding the ones aged 19-29. In case of the younger age groups the correct knowledge was closely related to eating at a common table with the infected, having contact at school (in case of both infected co-student and teacher) and buying food from the store (in contact with the HIV-infected seller). The statistically significant relation does not exist only in case of situations expressing the close relationships with PLWHA (taking care of the infected relative, communicating with the infected acquaintance). The statistically significant relations are non-existent in the

comparison of the beliefs related to HIV and knowledge of the ways of HIV transmission only in some cases: between correct knowledge and the statement "PLWHA are themselves guilty" (in all age groups); between correct knowledge and the statement "HIV infected person should inform his/her friends-acquaintances about it" in the group aged 14-18; between correct knowledge and the statement "girls' probability to get infected with HIV is smaller than that of boys, as they are more cautious" in the group aged 10-13.

### 5.4. Woman infected with HIV and the abortion

As regards pregnancy and HIV the young persons aged 14-29 were asked to express an opinion on whether the HIV-infected woman expecting a baby should have an abortion or not. The answers could have been provided on a five-point scale (1-yes, for sure,..., 5-no, of course not; 3- cannot tell). The answers in the analysis have been divided into three groups: the ones not in favour of abortion, the ones in favour of it and the ones who could not make up their mind.

The breakdown of respondents by two age groups between three options of answer is quite equal – both the group aged 14-18 and the group aged 19-29 include about one third of the young persons having chosen each option of answer. The group aged 14-18 include more of these who cannot make up their mind whether a pregnant HIV-infected woman should have an abortion or not compared to the ones having chosen other options of answer.

No special differences <u>by gender</u> exist between the groups aged 14-18 and 19-29. In dividing the two age groups again into two, some variabilities between age and gender could be indicated. The young women in the group aged 14-15 include about one tenth more of those who find that the HIV-infected pregnant woman should not have an abortion compared to young men. At the same time the group aged 16-18 and 25-29 include again one tenth more of these young women who favour abortion. One could not summarize that the representatives of one gender favour less the abortion of the HIV-infected pregnant than the others. Such breakdown of answers where the young men include less of those who favour and do not favour abortion, is enabled by the situation where more women than men could not make up their minds in almost all age groups (except 19-24) regarding the given question.

<u>As to nationalities</u> we see that the Estonians include somewhat more of the ones who do not favour that the HIV-infected pregnant woman had an abortion (see figure 51).



Figure 51: Attitude towards the abortion by the HIV-infected pregnant in age groups by nationalities (%)

The differences between the young city people and young country people remain below ten percent regarding the age groups as to residence. It could be noted <u>by districts</u> that there are one tenth more of these young persons in Ida-Viru County who find that the HIV-infected pregnant woman should have an abortion and 6-11% less of those who find that abortion is unnecessary compared to all other districts.

According to the analysis of data <u>by educational level</u> among the ones aged 19-29 it could be noted that the higher the educational level of respondents, the more they agree that the abortion is unnecessary when the HIV-infected woman is expecting a baby. When dividing the age group into two the difference in opinions of the respondents representing different educational levels is slightly higher among the ones aged 25-29 – the respondents with the highest education include 16% more of the ones who do not favour abortion (9% among the ones aged 19-24).

The young people aged 19-29 could be also observed <u>by status</u>. The fact that the students (schoolchildren, students, degree students) include more of the ones who think that having an abortion by the HIV-infected pregnant woman is unnecessary is important. The inactive group includes somewhat less of the ones who consider the abortion necessary.

In order to better understand why the young people favour or do not favour the abortion of the HIV-nfected pregnant, they were asked to provide reasons for their viewpoint as follows. The most common options of answers have been provided in table 25.

Answer	14-18	19-29
1. The child might not be infected	23,2	24,3
2. The major risk that the child might be born with infection	17,1	25,6
3. The child is infected/sick	6,2	-
4. Each woman/person decides by herself	11,8	17,9
5. Not in favour of abortion, all people have a right to life	6,6	5,3
6. The child is suffering, the child's life has been ruined	8,0	6,4
7. No need for new virus carriers/ those with AIDS disease	2,9	4,4
8. Other answers	24,2	16,3

Table 25: The most common reasons p	provided for the attitude towards the abortion of the HIV-infected
pregnant in age groups (%)	

The options of answer provided indicate the level of knowledge regarding the HIV infection transmission from mother to child on the one side and the attitudes towards PLWHA on the other side. Awareness is expressed by the options of answer 13, attitudes 45 and knowledge and attitudes 6-7.

Both, the opinion that the child might not be infected and the opinion that the risk of infecting is high, are important in both age groups. The first answer was mainly for reasoning the viewpoint of not favouring the abortion and the other for explaining the attitude of favouring the abortion of the HIV-infected pregnant woman. The first three by frequency of mentioning also include the opinion of answer that having an abortion is the decision everyone should make herself.

The ones having written the 3rd, 6th and 7th answer are sure that the HIV-infected mother gives birth to the HIV-infected child. When the sixth answer expresses some compassion for the infected child, then the seventh one reflects the negative attitude towards PLWHA. The people favouring this viewpoint still remain below five percent.

Based on the fact that in taking relevant measures into use the newborn's risk of getting infected decreases up to some percent, all answers except the first reflect the minor awareness of the young people about the subject. The information provided in chapter 4.3 indicates that the young people have not heard much of the prevention of MTCT. The better

the knowledge of the respondent of the prevention of MTCT the more it is found that abortion is unnecessary.

# 5.5. Summary of the chapter

The following tendencies could be provided about the opinions, attitudes and beliefs of the young people related to HIV topics:

- 1. The younger the respondents, the more it is believed that one could get infected with HIV through everyday contacts. The young people consider the infection by eating from the common dishes or by using the common toilet with PLWHA most possible. Getting infected by caressing is considered least probable.
- 2. The two younger age groups (10-13, 14-15) include more of the ones who better avoid contact with PLWHA in everyday situations like at school or at a meal table. The oldest age group fears most to put one's child to the same kindergarden group with the infected one. The contacts with the infected close persons are least avoided.
- 3. More than half of the respondents in all age groups agree with the statements that the person infected with HIV should inform his/her acquaintances and friends about it and that PLWHA are themselves guilty.
- 4. The higher the education of the young people aged 19-29 the least common are the false understandings of the possibilities of HIV transmission, prejudices regarding the contact with PLWHA and the repelling attitudes towards the topics related to HIV/AIDS.
- 5. The young persons having correct knowledge of the ways of HIV transmission are least in thrall with the myths, prejudices and false understandings related to HIV/AIDS.
- 6. All age groups include about one third of the ones favouring the abortion of the HIV-infected pregnant woman, not favouring it and who could not make up their mind. The better the knowledge of the prevention of HIV transmission from mother to child, the more it is found that the abortion is unnecessary. The viewpoint not favouring the abortion is most reasoned with the statement that the child born for the HIV-infected mother might not be infected.

### 6. Sexual relationships and use of condom

As the use of condom is the only protective measure helping to avoid HIV and venereal diseases through sexual intercourse, the sixth chapter provides an overview of the sexual relationships of the young people and habits of condom use. It is examined where the young people obtain condoms from, how they relate to the protective effect of condom, how they assess their practical skills in using it and why condom is not used in the sexual intercourse. The questions regarding sexual intercourse have not been asked from the representatives of the group aged 10-13.

### 6.1. Subjective assessment of the protective effect of condom

The young persons aged 14-18 and 19-29 were asked to assess the protective effect of condom in avoiding the HIV infection. Both age groups include three quarters of the young persons who consider the protection of condom very important, as the latter helps to significantly decrease the possibility of getting an infection (76% of the ones aged 14-18 and 73% of the ones aged 19-29). No differences occur between different age groups within both age groups. The condom is considered insignificant, as the latter will not help to avoid infection through sexual intercourse, by only 1% of the young in both age groups. The rest think that condom is important, as it could decrease the probability of getting an infection (23% of the ones aged 14-18 and 26% of the ones aged 19-29).

The difference in opinions of the <u>young men and women</u> occurs within the group aged 14-18, where the young women consider the condom less important. 81% of the young men and 73% of the young women in the given age assess the protective effect of condom very important. In general the <u>Estonians</u> think more highly of the protective effect of the condom compared to the young people of <u>other nationality</u>. Statistically significant differences in opinions occur in case of the ones aged 16-18 within the group aged 14-18 and among the ones aged 19-29. The major difference lies in the group aged 19-29 – more than three quarters of the Estonian youth, but slightly more than half of the young persons of other nationality consider the protection of condom very important (see figure 52).



Figure 52: Assessments of the persons aged 19-29 of the protective effect of condom in avoiding HIV in age groups (%)

66% of the young persons with the lowest <u>education</u> and 76% of the young with the highest education aged 19-29 consider the condom very important. The group with lower education involve more of those who consider condom in protecting from HIV insignificant - 4% (1% of the young persons with the highest education). No significant differences occur in the opinions by residence, but the data analysis <u>by districts</u> indicates that the young persons of Ida-Viru County aged 19-24 value the effect of condom less. Three quarters of the respondents in other districts consider the condom very important in protecting against HIV, whereas 57% of the young people in Ida-Viru County share this opinion. They also include more young people who consider condom unimportant, as there is no help in avoiding the spread of infection through sexual intercourse - 7% (1% or less than that in other districts).

### 6.2. Subjective assessment of the skills of using the condom

The young persons aged 14-18 and 19-29 were asked to assess their practical skills in the activities such as putting the condom on the penis, making a proposal to the partner to use the condom and refusing from occasional sex in case of absence of a condom. The assessment was asked on a four-point scale *(1-very poor, ..., 4-very good)*. The average assessment on the given scale is 2.5 and the higher the assessment the better the skills are considered. The data of the young having had sexual intercourse have been below analysed.

It could be stated that the young persons assess their practical skills related to the use of condom good. The skills related to making the proposal to the partner to use the condom are considered best – more than 80% of the young persons consider this skill at least good (incl. 36% of the people aged 14-18 and 34% of the ones 19-29 excellent). The major differences between two age groups occur in the assessments of the skills of putting the

condom on the penis (see figure 53). Related to the skill of putting the condom on the statistically significant difference occurs also within the group aged 14-18. There are more people aged 14-15 compared to the ones 16-18 who have assessed their skills excellent, but less of those who have given the assessment "rather good". 31% of the younger group have assessed their skills of putting the condom on excellent, whereas ten percent less in the older age group (21%). At the same time 36% of the young persons aged 14-15 and 47% of the ones aged 16-18 have assessed this skill as good.



Figure 53: The young persons having assessed their practical skills of using a condom good in age groups (% of the ones having had sexual intercourse) The answers "excellent" + "rather good" have been considered

Based on the average assessments the practical skills related to use of condom were analysed by gender, nationalities, residence and in case of the ones aged 19-29 by educational levels (differences by district were missing). In most cases the young men and women have assessed their skills above average (the level of average assessment on the given scale is 2.5). Just the girls aged 14-15 and 16-18 regarding the putting of condom on the penis have assessed their practical skills below average level, whereas the given indicator among the young men is considerably higher. The young women consider the skills of refusing from occasional sex without condom better (see table 26).

 Table 26:
 Average assessments of the practical skills related to use of condom in age groups by gender

 The higher the average assessment, the better the skills are considered

 M - man, W - woman

Skill	14-15		16-18		19-24		25-29	
	М	W	М	W	М	W	М	W
Putting the condom on	3,33	2,29	3,22	2,49	3,26	2,78	3,26	2,77
Making the proposal to the partner to use the condom	3,33	3,08	3,08	3,10	3,14	3,18	3,10	3,09
Refusing from occasional sex without condom	2,95	3,10	2,67	3,23	2,83	3,47	3,01	3,49

The young persons of other nationality consider their skills related to use of condom better than the Estonians when compared by <u>national groups</u>. The latter could be specially noted in the assessments in making the proposal to the partner to use the condom, where for example the assessment average of the non-Estonians aged 14-15 is 3.43 and the one of the Estonians 3.11 (e.g. the major difference has been chosen). No skill related to the use of condom was assessed by national groups below the average level of scale.

The young city people assess their skills better. No differences occur between <u>the young</u> <u>city people and young country people</u> among the group aged 19-24 regarding any topic described (see table 27).

 Table 27: Average assessments of the practical skills related to use of condom in age groups by residence

 The higher the average assessment, the better the skills are considered

Skill	14-15		16-18		19-24		25-29				
	Ci	Со	Ci	Со	Ci	Со	Ci	Со			
Putting the condom on	2,84	2,74	2,84	2,66	3,01	2,86	3,00	2,87			
Making the proposal to the partner to use the condom	3,35	2,88	3,14	2,95	3,14	3,25	3,12	3,02			
Refusing from occasional sex without condom	3,12	2,79	2,99	3,04	3,20	3,22	3,29	3,32			

Ci – young city people, Co – young country people

The young people with the highest education assess their practical skills in making the proposal to the partner to use the condom and refusing from sex without condom better based on <u>the educational levels</u> of the group aged 19-29. The major difference exists in part of the latter skill – the average assessment of the young people with the highest educational level is 3.31, the young with the average educational level 3.18 and the young with the lowest education is 3.03.

# 6.3. Obtaining and availability of condoms

The following chapter describes where the young persons purchase the condoms from and whether they consider condoms as available. For assessing the availability the young people were asked whether the condom has been left unused as it was not possible to purchase one and how long time it takes to buy condoms from the closest place to one's residence. The abovementioned questions were handled regarding the young persons aged 14-29. The young persons aged 10-13 were examined whether they had bought condoms, why they had done it and why the condom was not bought regardless of the relevant wish.

### Obtaining of condoms

The young persons were asked about obtaining condoms during the previous 12 months. 40% of the young persons aged 14-18 and 63% of the ones aged 19-29 have obtained condoms during the previous 12 months. Five most common places for obtaining condoms have been provided in figure 54. The most popular place is the pharmacy – about half of the persons aged 19-29 and one quarter of the ones aged 14-18 prefer to buy condoms just from there. The food store and gas station follow in the older group, food store and friends-acquaintances in the younger one.



Figure 54: Five main places for obtaining condoms in age groups (%)

29% of the children aged 10-13 have wished to buy condoms. 70% of the latter answers that in case of wish they have not bought the condom as they are not brave enough and 62% states that the seller refused to sell condoms.

12% of the children aged 10-13 have actually bought condoms. There are more boys who have bought condoms -19% (4% of the girls). 23% of the non-Estonians and 9% of the Estonians have bought condoms. The share of the children in the city having bought the condoms was higher when compared to the children in the country (13% and 8% respectively). The children aged 10-13 buy condoms mainly for fun (see figure 55).



Figure 55: The reasons for buying condoms among the group aged 10-13 (% of the ones having bought condoms)

### Availability of condoms

The questions related to availability of condoms were presented to the young persons aged 14-29. One third of the young persons having had sexual intercourse had not used the condom, as they could not obtain it (incl. 7% has encountered such situation frequently) (see figure 56).



Figure 56: Frequency of not using the condom due to lack of opportunity of obtaining one in age groups (% of the young persons having had sexual intercourse)

Statistically significant differences in case of not using the condom due to lack of opportunity of obtaining one occur within the group aged 19-29. Such situation has more occurred among the younger persons (aged 19-24) than the older ones (37% and 29% respectively). More <u>young men</u> than women have experienced such situation. The major difference occurs among the ones aged 25-29, where 38% of the young men (incl. 8% frequently) have not used the condom due to the lack of opportunity for obtaining it (22% of the young women, incl 5% frequently).

The difference could be noted within the group aged 19-29 <u>by nationalities</u> – more young people of other nationality have found themselves in the above situation. Here the difference is greater between the Estonians aged 25-29 and the young people of other nationality – 41% of the non-Estonians (incl. 11% frequently) have not used the condom as there was no opportunity to obtain it. 25% of the Estonians have been in such a situation (incl. 5% frequently).

It takes less than half an hour for obtaining the condoms close to the residence for most of the young people (see figure 57). Both age groups include few young persons who do not know where the condoms could be bought from. They are mostly the young people who have not had sexual intercourse (the people aged 14-18: 169 out of 181 have not been in the sexual intercourse; and the ones aged 19-29: 18 out of 27 have not had an intercourse).



Figure 57: Time spent on buying the condoms from the place closest to residence in age groups (%)

In <u>the country districts</u> it takes more time for the young people to buy condoms than it takes for the young city people. 89% of the young city people could obtain condoms with less than half an hour, whereas 72% of the respondents living in the country areas can do the same. It takes more than an hour for 7% of the young in the country to obtain condoms, at the same time less than two percent of the young city people think the same way.

### Carrying the condoms along

The above indicated that more than one third of the young people having had sexual intercourse have not used the condom, as they could not obtain it. How many would pursue to anticipate this situation by carrying the condoms along? This question was asked from the young persons aged 14-29. The older the respondents, the more young people who do not carry the condoms along are involved. It is most apparent among the young persons aged 19-24 and 25-29. At the same time it should be noted that most of the ones having no condoms with them live together with a spouse or life companion (74%). Most young persons having always a condom along could be found in the group aged 14-15 – more than a quarter of the ones having had sexual intercourse (see figure 58).



Figure 58: Frequency of carrying the condoms along in age groups (% of the ones having had sexual intercourse)

There are more people carrying the condom always along among <u>young men</u> than among <u>young women</u>. The share of such young men is the highest among the ones aged 14-15 - 39% of the ones having had sexual intercourse (12% of the girls). Differences also occur regarding the carrying along the condoms between the <u>nationalities</u> – the young people of other nationality do it more often. The young persons aged 14-15 include most of the persons of other nationality carrying the condoms always along – 38% (20% of the Estonians). 31% of the young city people aged 14-15 and 12% of the young country people carry the condoms always along when comparing the young city people and young country people.

Most of the young people having never had sexual intercourse do not carry the condoms along – three quarters of the ones aged 14-18 and 19-29. The ones who have never had the intercourse, but always carry the condom along, make up 6% in both age groups.

Most of the young persons answered to the question "Who should carry the condoms along?" that this should be done by the representatives of both sex. The older the respondent, the more he agrees with the given opinion. The younger the respondent, the more there are the ones supporting the viewpoint that the carrier of the condom should foremost be a man (see figure 59).



Figure 59: Opinion of who should carry the condoms along in age groups (%)

### 6.4. Reasons for not using a condom

The young persons were asked to provide reasons for having not used a condom during the intercourse in the questionnaire of the ones aged 14-18 and 19-29. The young people assessed the provided reasons on a 3-point assessment scale (1- yes, this for sure, ..., 3 - no, this for sure not). The average assessment on the given scale is 2 and the lower the assessment, the more important the reason for not using the condoms is. Below five main reasons for not using the condoms have been analysed.

Five main reasons are the same for the people aged 16-29, but the average of assessments vary in the age groups. In case of the children aged 14-15 five main reasons for not using the condoms include the facts that the condom is not used in the movies and one is ashamed to buy it differently from other age groups. The key reason in case of all age groups is the existence of a trustful relationship with a steady partner – this reason occurs most among the group aged 19-29 (see table 29). 98% of the young persons aged 19-29
living with spouse or life companion do not use the condom due to this reason. The belief that the partner has no STD or HIV holds the second place in all age groups.

		10.40	10.04	05.00
Reason	14-15	16-18	19-24	25-29
steady partner and mutual trust	2,31	2,02	1,46	1,24
do not believe that the partner has STD or HIV	2,48	2,27	1,98	1,82
condoms are not always at hand	2,55	2,51	2,40	2,40
condoms are never used in the movies	2,58			
I am ashamed to buy condoms	2,60			
putting on the condom during the intercourse is troublesome		2,60	2,47	2,47
use of condom decreases the feeling of pleasure		2,64	2,33	2,28

 Table 29: Five main reasons for not using the condoms in age groups (average assessment)

 The lower the average assessment, the more important the reason is

According to the data analysis by gender, nationalities and residence the differences occur only within the group aged 14-18, therefore only the given age group has been followingly analysed. Material differences between the districts are missing.

According to the separate analysis of the children aged 14-15 by gender the fact that it is embarrassing to speak about the use of condom with a partner has been added to the five main reasons of both young men and women (instead of the statement of young men "I am ashamed to buy a condom" and of young women "condom is never used in the movies"). The data analysis of the young people aged 16-18 by gender indicates that the five main reasons for not using the condom exclude the statement "use of condom decreases the feeling of pleasure". Instead of the given statement the fact that condoms are never used in the movies and the belief of the girls that one is ashamed to buy condoms are within the five main reasons (see table 30).

Table 30: Five	e main reasons for not using the condoms in age groups by gender (average assessment)
TI	he lower the average assessment, the more important the reason is
M	1-man <sup>-</sup> W-woman

Reason	14-15		16-18	
	М	W	М	W
steady partner and mutual trust	2,18	2,42	2,06	1,99
do not believe that the partner has STD or HIV	2,41	2,54	2,27	2,27
condoms are not always at hand	2,43	2,65	2,49	2,49
condoms are never used in the movies	2,50		2,54	
I am ashamed to buy condoms	2,64	2,65		
putting on the condom during the intercourse is troublesome		2,56		2,59
use of condom decreases the feeling of pleasure			2,53	2,65

The feeling of embarrassment in talking about the use of condoms (the non-Estonians aged 14-15) and the fact that it just happens like that although one is aware of the need for using the condom (the Estonians aged 16-18) are brought to the fore by nationalities compared to the general age groups (table 29 provided above). The usual key reason is the steady partner and mutual trust, whereas in case of the non-Estonians aged 14-15 the fact that condoms are never used in the movies has occurred by the reason of steady partner as the reason for not using the condom (see table 31).

 Table 31: Five main reasons for not using the condoms in age groups by nationalities (average assessment)

 The lower the average assessment, the more important the reason is

Reason		-15	16-18	
	E	n-E	Е	n-E
steady partner and mutual trust	2,25	2,45	1,95	2,18
do not believe that the partner has STD or HIV	2,48	2,47	2,32	2,16
condoms are not always at hand	2,56	2,53	2,53	2,42
condoms are never used in the movies	2,64	2,44		2,51
it is embarrassing to talk about using the condom with the partner		2,62		
I am ashamed to buy condoms	2,58			
putting the condom on during the intercourse is troublesome			2,62	2,56
use of condom decreases the feeling of pleasure				
I know that condom should be used, but it happens like that			2,66	

E - Estonians; n-E – non-Estonians

The differences <u>by residence</u> could be noted only among the young persons living in the country districts. The young country people aged 14-15 state the embarrassment in talking about the use of condom with the partner as one of the five key reasons. The five key reasons of the young country people aged 16-18 include the fact that one is ashamed to buy condoms (the statement "use of condom decreases the feeling of pleasure" is missing (see table 32).

Table 32: Five main reasons for not using the condoms in age groups by residence (average assessment) The lower the average assessment, the more important the reason is Ci – voung city people: Co – voung country people

Reason		14-15		-18
	Ci	Со	Ci	Со
steady partner and mutual trust	2,34	2,23	2,03	1,98
do not believe that the partner has STD or HIV	2,48	2,48	2,22	2,41
condoms are not always at hand	2,55	2,55	2,48	2,58
condoms are never used in the movies	2,57			
it is embarrassing to talk about using the condom with the partner		2,60		
I am ashamed to buy condoms	2,64	2,50		2,63
putting the condom on during the intercourse is troublesome			2,58	2,65
use of condom decreases the feeling of pleasure			2,61	

# 6.5. Use of different protective devices

Male condoms are usually kept in mind while talking about condoms. In addition to the condoms meant for men the female condoms could be used and the protective membrane in case of oral sex (by putting it on the vagina or anus). The young persons aged 14-29 were asked how aware they are of the various abovementioned protective devices which help to avoid getting infected with HIV and STD.

The table 33 indicates that the most common protective device is the male condom for sure. Most of the questioned have also used it while having the intercourse. One should note that both age groups include such persons within the extent of some percent who have not used nor heard of the male condom, and still having had the intercourse. The protective membrane is less heard of as the protective device – one third of the respondents in the younger age group and more than half of the ones in the older age group have not heard anything about it. The number of the ones having used both the female condom and protective membrane is very small (see table 33).

The differences occur between the ones aged 19-24 and 25-29 within the older age group – the younger ones are more aware of the female condom and protective membrane. 19% of the ones aged 19-24 have not used nor heard of the female condom and 23% of the ones aged 25-29. 59% of the ones aged 19-24 and 67% of the ones 25-29 know nothing about the protective membrane.

Protective device		14-18				
	used	only heard	neither used	used	only heard	neither used
		of	nor heard of		of	nor heard of
male condom	85,0	12,6	2,4	85,4	10,9	3,7
female condom	5,0	82,2	12,8	3,5	75,9	20,6
protective membrane	3,0	58,8	38,2	0,4	36,9	62,7

Table 33:	Awareness	of the differ	ent protectiv	ve devices	in age groups
	(% of the or	nes having h	nad sexual i	ntercourse)	

<u>Young women</u> are more aware of the female condoms than the <u>young men</u>. Statistically significant difference occurs among the ones aged 14-18, whereby 19% of the young men and 8% of the young women have heard nothing of them. The major difference by <u>nationalities</u> could be noted regarding the awareness of various protective devices in the group aged 19-24. 33% of the non-Estonians know nothing of the female condom (16% of the Estonians) and the protective membrane is unknown by 69% of the non-Estonians (by 57% of the Estonians).

In case of the people aged 19-29 we see again by taking the <u>educational level</u> into account (see for example also chapter 6.1) that the understandings of the young persons with higher education related to HIV/AIDS topics are better. 36% of the young persons with the lowest educational level know nothing of the female condom, 12% of the young persons with the highest education have not heard about it. 70% of the young with lower education and 54% of the young with the highest educational level know nothing of the ducational level know nothing of the protective device.

# 6.6. Risk behaviour in sexual relationships

The overview of how common the risky sexual behaviour is among the young people will be provided as follows. The following indicators are used for risk assessment:

- number of young people who have had two or more sexual partners within the last year;
- rate of using the condom during the first sexual intercourse;
- number of young people who have always used condom in the occasional intercourses within the last year;
- number of young people who used condom during the last occasional intercourse.

The occasional partner in the given meaning is a one-night and short-term partner. The lower the given indicators, except the first indicator, the more common the risky sexual behaviour is. The young people who have had sexual intercourse during their life have been taken into account in calculating the risk assessment indicators. The vaginal, anal and oral intercourse is considered the experience of sexual intercourse.

### Experience of sexual intercourse and number of partners

The existence of the experience of sexual intercourse of the young people among the ones aged 14-29 has been indicated in figure 60. One fifth of the respondents aged 14-15 and about half of the ones aged 16-18 have had the intercourse. The older age groups include the ones who have never had the sexual intercourse.



Figure 60: The young people having experience of sexual intercourse in age groups (%)

The statistically significant difference between the <u>young men and women</u> occurs in the group aged 19-29, where the young men include some percent less of the ones having the experience of sexual intercourse. The difference is the greatest among the young persons aged 19-24, whereby 87% of the men and 91% of the women have had sexual intercourse. The significant difference occurs <u>by nationalities</u> in the group aged 16-18, where the Estonians include more young persons having had sexual intercourse when compared to the young people of other nationality (49% and 41% respectively). No significant difference occurs between the young city people and young country people.

38% of the young people with sexual experience aged 14-18 had two or more partners within the last 12 months. The share of these young people in the group aged 19-29 was 30%. The statistically significant difference also occurs within both age groups. There are most young people having had sexual intercourse with more than one partner among the young people aged 16-18 (40%) and the group aged 19-24 (36%) follows. The higher share of the young people with several partners in the given age groups is mainly due to the <u>gender</u> difference – there are more young men who have had more than one sexual partner within the last year (see figure 61).



Figure 61: The young persons who have had two or more sexual partners within the last 12 months in age groups by gender (%)

The given result is supported by the average number of partners – young men have had considerably more sexual partners within last year than young women. The young men aged 16-18 have had most different sexual partners. The women aged 25-29 have had least number of partners (see table 34). Three quarters of the women aged 25-29 live together with a spouse or life companion (see chapter 3.1).

Age group	man	woman	TOTAL
14-15	2,7	1,9	2,3
16-18	3,8	1,9	2,7
19-24	3,0	1,9	2,3
25-29	2,1	1,4	1,7

Table 34: Average number of sexual partners within the last 12 months in age groups by gender (%)

The differences occur in the group aged 25-29 between the young city people and young country people regarding the other indicators. The young city people include more of the ones who have had two or more sexual partners compared to the young country people (15% and 24% respectively). The difference <u>by district</u> also occurs in the given age group. Harju County comes to the fore where the share of the young people with several partners is the highest when compared to the other districts. 28% of the young persons of Harju County aged 25-29 had more than one partner within the previous year. East-Estonia differs most from Harju County where the ones having had at least two partners made 17%.

The table 35 indicates the number of the young people who had been in the occasional intercourses within the previous 12 months. Here also the indicators of the group aged 16-18 are the highest.

Table 35: The number of people who had occasional sexual intercourses within the last 12 months in age groups (% of the ones having had sexual intercourse)

Partner	14-15	16-18	19-24	25-29
one-night partner	29,4	35,6	25,5	12,5
short-term partner	34,1	34,8	27,3	16,6

61% of the group of the young persons under special attention – the ones aged 15-24 – have experience of sexual intercourse, 37% of whom had two or more partners within the year preceding the questioning. The average number of sexual partners was 2.4. There were 29% of the people having had the intercourse with a one-night partner and 30% with the short-term partner.

#### Use of condom during the first sexual intercourse

More than half of the young persons aged 14-18 have used a condom during the first sexual intercourse. No significant difference occurs between the younger and older ones within the given age group. It could be noted in case of the people over 18 years of age that the older the respondents the less the condom during the first sexual intercourse had been used (see figure 62).

46.5% of the group aged 15-24 used the condom during the first sexual intercourse.



Figure 62: The use of condom during the first sexual intercourse in age groups (%)

The difference could be noted between the <u>young men and women</u> in the group aged 14-15, whereby the young men have used the condom significantly more during the first intercourse - 66% compared to 49% of the young women. In general the young people of other <u>nationality</u> have used the condom more frequently during the first intercourse. Statistically significant differences occur in the group aged 14-15 and 19-29. 74% of the non-Estonians aged 14-15 used a condom in the first intercourse, whereas 52% of the Estonians. The relevant indicators in the group aged 25-29 were 29% and 22%.

The group aged 19-29 indicates that the higher the <u>educational level</u> of the respondent, the more the condom has been used during the first sexual intercourse: 23% of the ones having the highest education, 29% of the young persons with the average educational level and 40% with the lowest educational level.

When comparing the young in the city and in the country the young country people used less condom at the first intercourse (see figure 63).



Figure 63: Use of condom during the first sexual intercourse in age groups by residence (%)

The difference in data by <u>districts</u> could be noted in the group aged 25-29. This group includes most of the young persons of Harju County who used condom during the first

intercourse – 29%. The given indicator differs most from the one of the people aged 25-29 from West Estonia where the condom users made 17%.

#### Use of condom

Figure 64 indicates the number of these young people who have always used the condom during the previous year. In general we see that the older the respondent, the less the condom is used in case of different partners. As to steady partner the use of condom in case of mutual trust is unnecessary, if no partner has been infected with sexually transmitted diseases or HIV. At the same time there are less than half of the ones using always the condom in case of one-night partner in the older age groups.



Figure 64: Use of condom always during the sexual intercourse within the last 12 months in age groups by partners (%)

\* n=49 in case of steady partners, n = 29 in case of one-night partners, n = 24 in case of short-term partners

The young persons having always used a condom in the occasional intercourses within last year will be further analysed. The one-night and short-term partners are separately observed, as the habits of using the condom in the given cases considerably differ – in case of one-night partners there are more young persons using the condoms. As the number of the children aged 14-15 having had the one-night (n= 53) and short-term partners (n=61) among the ones aged 14-15 is small, the given age group by gender, nationalities etc. have not been further analysed.

<u>As to gender</u> there are more young men aged 16-18 who always used condoms in case of one-night partners – 64% of the young men and 39% of the young women. No significant differences exist in other age groups. In case of short-term partner each age group includes more young men who have always used a condom within the last year (see figure 65).



Figure 65: Use of condom always during the sexual intercourse in case of short-term partner within the last 12 months in age groups by gender (%)

The difference between the Estonians and the young people of other <u>nationality</u> regarding the use of condom occurred among the people aged 16-18. The non-Estonians included more of the ones compared to the Estonians who have always used the condom with onenight and short-term partner. 72% of the non-Estonians and 49% of the Estonians have always used the condom in case of one-night partner. In case of short-term partner the relevant indicators are 67% and 40%. Statistically significant differences are missing as to educational levels, residence and districts.

In addition to the questioning regarding the last 12 months the young persons were separately asked whether they have used the condom during the last intercourse, as the last intercourse is best remembered and one could ask very specifically about that. During the last intercourse the young persons have used the condom by one fifth more in case of onenight and short-term partners compared to the last year – this indicator does not remain lower than that in any age group. Here the same tendency is present – the older the respondents, the less the young persons who used the condom during the last intercourse (see figure 66).



Figure 66: Use of condom during the last sexual intercourse in age groups by partners (%) \* n=70 in case of steady partners, n = 42 in case of one-night partners, n = 37 in case of shortterm partners

Here the <u>young men</u> also use considerably more condoms than <u>young women</u> in case of both one-night and short-term partner. The difference is greatest in the group aged 16-18 and the smallest in the group aged 24-29 (see figure 67 and figure 68). When talking about the last intercourse one could not state specifically that in case of one-night relationships the condom was considerably more used. As to the women aged 16-18 this indicator is opposite – 14% more young women used the condom during the last intercourse with both the short-term and the one-night partner.



Figure 67: The use of condom during the last sexual intercourse with the one-night partner in age groups by gender (%)



Figure 68: The use of condom during the last sexual intercourse with the short-term partner in age groups by gender (%)

The difference occurs only among the people aged 16-18 by nationalities when talking about the one-night partners. 86% of the non-Estonians and 67% of the Estonians used the condom during the last sexual intercourse with one-night partner. The indicators of the non-Estonians are better when talking about the short-term partner in all age groups (though it is statistically insignificant in the group aged 25-29) (see figure 69). No differences occurred as to other factors (educational level, residence, district).



Figure 69: Use of condom during the last sexual intercourse with the short-term partner in age groups as to nationalities (%)

47% of the young persons aged 15-24 used always the condom in the intercourse with onenight partner within the last year and 65% during the last intercourse. 41% of the people having had the intercourse with the short-term partner always used the condom during the last year and 64% during the last intercourse.

# Other sexual relationships

Based on the questionnaire the young people were also asked about the existence of sexual experience with the partner of the same sex and the situation where the young person had paid for sex (in cash or in any other way). The survey with the given sample included very few people who had experienced these sexual intercourses. Therefore no thorough analysis could be provided.

2% of the young persons aged 14-18 having had sexual intercourse (n= 15) and 1% of the ones aged 19-29 (n=29) had had sex with the partner of the same sex during the last year. 3.5% (n= 27) of the young people aged 14-18 having had sexual intercourse had been in the intercourse with the partner who was paid for sex during the last year. The latter persons made 4% among the group aged 19-29 (n= 80). In this case one could state that most of the latter were men (n=73).

# 6.7. Summary of the chapter

The following brief conclusions could be drawn based on the sixth chapter:

- 1. Three quarters of the young people consider the protection of condom against HIV very important, as it helps to considerably decrease the possibility of getting infected.
- 2. The young people assess their practical skills related to the use of condom good. The skills related to making the proposal to the partner to use the condom are assessed the best.
- 3. 40% of the people aged 14-18 and 63% of the ones aged 19-29 have bought condoms during the last 12 months. The most popular place for buying a condom is the pharmacy.
- 4. More than one third of the young people who have had sexual intercourse have not used the condom as it was not possible to obtain one. It takes less than half an hour to buy condoms from close to one's home for most of the young people.

- 5. The main reason for not using the condoms is the steady partner and mutual trust. The following reason in all age groups is the belief that the partner has no venereal diseases or HIV.
- 6. One fifth of the young people aged 14-15 have sexual experience, about half of the ones aged 16-18 and the share of the young persons having sexual experience in two older age groups is 89% and 97% respectively.
- 7. 38% of the young people aged 14-18 and 30% of the persons aged 19-29 had two or more sexual partners within the last 12 months. The young men aged 16-18 and 19-24 (about 50%) include most young people having had the intercourse with more than one partner.
- 8. During the first sexual intercourse more than half of the young people aged 14-18 used the condom during the first sexual intercourse. The share of such young people is considerably lower in the older age group.
- 9. The older the respondent, the less the condom is used in case of different partners. 56% of the children aged 14-18 used always the condom in case of one-night partner and 46% in case of short-term partner. The relevant indicators among the young persons aged 19-29 are 41% and 32%.
- 10. There are one fifth more of the young persons having used the condom with the onenight or short-term partner during the last intercourse than those who always used the condom during the last year.

# 7. Major risk groups

The last chapter of the report provides an overview about which groups of young people act in the sexual life with most risk. For that purpose the score of risky sexual behaviour was calculated based on the following components:

- number of sexual partners during the last year
  - (0 = 1 sexual partner; 1= two or more sexual partners);
- use of condom during last year having the intercourse with one-night, short-term partner, partner of the same sex or partner for money

(0 = use of condom during all intercourses; 1 = did not use always the condom during all intercourses);

- use of condom with one-night, short-term partner, partner of the same sex or partner for money during the last sexual intercourse
  - (0 = use of condom, 1 = not using the condom);
- sexual intercourse with the partner during the last year, who was paid for in cash or any other way
  - (0 = no such sexual intercourse exists, 1 such sexual intercourse has existed).

The score of risky sexual behaviour in the scope of 0 up to 4 was received after adding four components. The higher the score, the more risk components it includes. The young persons aged 14-29 under observation were divided into three risk groups:

- 1) group with 0 risk level the young persons who have never had the sexual intercourse or whose general score is 0;
- 2) group with low risk level the young persons whose score of sexual behaviour is 1-2;
- 3) group with high risk level the young persons whose score of sexual behaviour is 3-4.

### 7.1. Breakdown between risk levels

The youth include most people with 0-risk in their sexual behaviour – more than half in each age group. Their share is especially high among the youngest (the people aged 14-15). The latter mainly results from the fact that the given age group includes least young people with sexual experience (see chapter 6.6). The groups aged 16-18 and 19-24 include least of the ones with 0-risk. The share of the young people with the low risk level in their behaviour is by far the highest among the young people aged 16-18 - more than third of the respondents. The groups aged 19-24 and 25-29 include most of the young persons with the highest risk level (see figure 70).



Figure 70: Breakdown of young people into risk groups in age groups (%)

The risk levels of <u>young men and women</u> considerably vary in two older age groups (19-24 and 25-29), where the risk level of young men is higher. The major difference regards the young people who belong to the groups of 0-risk and low risk – the share of young people with 0-risk is smaller among the young men than among the young women (see table 35).

Table 35: Breakdown of young people into risk groups in age groups by gender (%) M - man, W - woman

101 11		Voman						
Risk level	14-	-15	16	-18	19-	·24	25	-29
	М	W	М	W	М	W	М	W
0-risk	78,0	82,4	50,5	54,6	50,0	65,7	61,6	74,1
low risk	18,5	14,5	40,0	37,5	28,7	17,5	20,2	12,4
high risk	3,5	3,1	9,5	7,9	21,3	16,8	18,2	13,5

The difference by <u>nationalities</u> occurs among the young people aged 16-18 where more Estonians than non-Estonians belong to the most risky group (10% and 5% respectively) regarding their sexual behaviour. The same tendency occurs in other age groups, but the differences are not statistically significant.

When taking the <u>educational levels</u> of the young people aged 19-29 into account that the group of the lowest educational level includes most of the ones belonging to the group with the highest risk level and considerably less young people with 0-risk. Statistically significant difference occurs between the young people with the highest and lowest educational level. The group with the highest educational level compared to the young people with the lowest educational level includes one tenth less young people with the high risk in behaviour and one fifth more of the ones belonging to 0-risk group (see figure 71).



Figure 71: Breakdown of the people aged 19-29 into risk groups by educational levels (%)

No significant differences occur regarding the belonging to the risk groups between the young persons in the city and in the country. Differences by <u>district</u> could be noted only in the group aged 14-15 regarding 0-risk behaviour and the groups with the highest risk. The share of the young people with 0 risk aged 14-15 is the highest in East-Estonia and statistically significant difference occurs with Harju County (85% and 78% respectively). The district of East-Estonia has least young people with the high risk (slightly more than 1%) and this difference is significant compared to the districts of Ida-Viru County and West Estonia (5% of the young people belong to the group with the highest risk of behaviour in both regions).

As to <u>other factors</u> the variabilities occurred between the status groups. The economically inactive young people differ considerably from others (this group mainly includes the ones staying at a maternity leave). These include most of the young people with 0-risk – 80%. The other status groups include 50-60% of these young persons. The young people with the highest risk behaviour in sexual relationships could be found most among the unemployed (22%) and least among the economically active young people (9%).

# 7.2. Level of knowledge in risk groups

The knowledge related to the ways of HIV transmission, STD preventive methods and prevention of MTCT was compared in the groups with different risk levels. Major differences occur as to the correct knowledge of the ways of HIV transmission.

In the group aged 14-18 the better knowledge exist in the groups acting more risky in sexual life. There are most young people with correct knowledge in the group of low risk (16%). The level of correct knowledge is the lowest in the group with 0-risk behaviour. The latter is obviously due to the smaller sexual experience of the group members of the given risk level and the related lower interest towards the topic.

The controversial tendency occurs among the people aged 19-29 compared to the ones aged 14-18. The young people belonging to the group of 0-risk behaviour have more correct knowledge of the ways of HIV transmission compared to other groups (see figure 72). In case of this age group the information provided is obviously due to the fact that there are very few people not having had the sexual intercourse, whereas the belonging to the group of 0-risk level is more due to the relation between correct knowledge and behaviour.



Figure 72: Correct knowledge of the group aged 19-29 of the ways of HIV transmission in risk groups (%)

The connection of different risk levels with the assessment of theoretical knowledge about sexuality and infection preventive methods was controlled based on the correlation analysis. The analysis of the data of the persons aged 14-18 indicated that young persons more risking in the sexual behaviour assess their theoretical knowledge in the given field better. Statistically significant relation occurs with practically all assessments of the topics related to handling sexuality and preventive methods (the exception is the topic related to puberty) (see chapter 4.6). The overassessment of one's knowledge could take the young people with the high risk level to the situation where regardless of the risk liable behaviour no interest is taken of the topics related to HIV/AIDS and STD.

The analysis of the data of the persons aged 19-29 disclosed the statistically significant connection between one topic of theoretical knowledge and different risk levels. The young persons belonging to the group of high risk assess their knowledge related to making the proposal to use the condom lower.

# 7.3. Use of addictive substances in risk groups

The data analysis indicated that the young people acting more risky in their sexual life smoke and use both alcohol and drugs considerably more often than the young people with the lower risk level.

The more contrasting differences occur among the people aged 14-18. The share of the everyday smokers and the ones drinking alcohol at least once a week in the group of 0-risk level is within the range of ten percent, whereas more than half in the group with high risk level do it (see figure 73).



Figure 73: Use of different addictive substances among the group aged 14-18 by risk groups (%)

The major differences between the groups of different risk levels in the group aged 19-29 occur in use of alcohol (see figure 74). In the gruop of young people aged 19-29 the use of addictive substances in the 0 and low-risk level is higher compared to the younger ones, but lower in the high-risk group than among the ones aged 14-18 (except the repeated use of drugs).



Figure 74: Use of different addictive substances among the people aged 19-29 by risk groups (%)

# 7.4. Assessment of risk of getting infected with STD and HIV in risk groups

The young persons were asked with one of the questions to assess one's risk of getting infected with STD or HIV on a 5-point scale (1-very high, ..., 5-no risk). The correlation analysis indicated that the statistically significant relation exists between risk assessment and risk level of behaviour. The young persons risk liable in sexual relationship assess their possibility of getting infected with STD or HIV higher. The relation occurred in case of both groups aged 14-18 and 19-29. The relation was stronger in the older age group both between the risk of getting infected with venereal disease and risk level (? = -0,28, ? = -0,06)

in younger age group) and between the risk of getting infected with HIV and risk level (? = -0,22, ? = -0,15 in younger age group).

The young people with more risky sexual behaviour have more often wished to take the HIV test. Less than five percent of the young people aged 14-18 belonging to the group of 0-risk wish to take the test, whereas almost one third of the young people with high risk behaviour have thought about taking a HIV-test. Such tendency also occurs among the people aged 19-29 (see figure 75).



Figure 75: The people wishing to take a HIV-test in age groups by risk groups (%)

# 7.5. Summary of the chapter

The information provided in the chapter seven discloses the following about the different risk groups:

- 1. The group aged 19-29 includes most young people with the highest risk level in sexual relationships.
- 2. The risk liable sexual behaviour is more common among the young men.
- 3. The behaviour of the Estonians is more risk liable than the one of the non-Estonians in the group aged 16-18.
- 4. The young people aged 19-29 with the lower educational level risk more in their sexual relationships.
- 5. The level of risk behaviour of the unemployed young people is higher of the one of the economically active ones.
- 6. The young people behaving more risky in their sexual life have better knowledge of the ways of HIV transmission in the group aged 14-18. This tendency is opposite among the ones aged 19-29.
- 7. The young people behaving more risky in their sexual life smoke and use alcohol and drugs much more frequently than the young people with lower risk level.
- 8. The young people behaving more risky assess their possibility of getting infected with venereal diseases or HIV more probable.

## Summary

The research Knowledge, Attitudes and Behaviour Related to HIV/AIDS Among the Estonian Youth was carried out among the children and young people aged 10-29 in order to get a better overview of the level of risk behaviour and knowledge related to HIV/AIDS, understandings and beliefs and the channels used for obtaining information. The data of six thousand five hundred Estonian young people have been used in the analysis. As to different topics the tendencies provided below are most dominant.

#### Addictive substances

The results of the research indicate that the young people start both smoking and using alcohol in their early teens. The children aged 10-13 already include more than half of the ones who have tried alcohol and more than one tenth of them have been drunk. More than half of the young people aged 14-15 have been drunk. The teens aged 14-18 include one tenth of the ones who use alcohol at least once a week; the equal number of young people aged 14-18 visit bars several times a week. The number of the young persons aged 14-15 who have used drugs once or repeatedly exceeds one tenth; the group aged 16-18 include about one third of such persons.

Special attention could be drawn to the fact that the group aged 19-29 with higher education or the ones acquiring it includes four and a half times less everyday smokers than the young people who have basic education, less than that or are just acquiring secondary education. There are also less young people with higher education who get drunk.

### Knowledge

To sum up, far more than half of the young people as from the age of 14 are aware of the HIV preventive methods in injecting and by having sex. The young people at any age are best aware that one could get infected with HIV by injecting with syringe which has been earlier used by someone else. The number of respondents having answered correctly gets close to hundred percent in older age groups. The question whether one could get infected with HIV through the sting of a gnat has been confusing. There are far less than half of the ones who know that HIV is not spreading through gnats in each age group.

As regards the preventive methods of HIV transmission from mother to child the young persons know least that one of the methods is the delivery with Caesarean section. People are more aware that the timely use of medicines and avoiding breastfeeding of the child are the preventive methods – this is known by about one third of the respondents. The general level of knowledge is low – the number of the ones who could differentiate all preventive methods of MTCT remains below ten percent. Different age groups include one fifth up to one fourth of the young people who consider HIV heritable.

Regarding the methods of preventing STD the young persons – approximately three quarters of the ones aged 10-13 and over ninety percent in older age groups - are most aware that the use of condom helps to avoid sexually transmitted diseases. The knowledge about the fact that the pessary could not be used as the preventive device is most scanty – this is stated by less than half of the young persons. Less than one fifth of the schoolchildren and slightly more than one third of the grown-up people (aged 19-29) could recognize the device of preventing STD out of all methods provided.

The young people from the age of 14 consider their theoretical knowledge in avoiding venereal diseases and HIV better than average, especially concerning the matters related to the use of condom. The comparison with the actual level of knowledge indicates that the young people overestimate themselves.

More than half of the young people are aware that HIV-test could be taken in the anonymous testing sites of AIDS and by the specialist doctor. A quarter or less of the young

people in different age groups are aware of other testing opportunities. HIV-test has been taken by one fourth of the ones aged 19-29 and 3% of the ones aged 14-18.

- The knowledge of the ways of HIV transmission and preventive methods of STD increase with <u>age</u> of young people. The older ones assess their theoretical knowledge better. The knowledge of the preventive methods of MTCT increase with age among the young women.
- <u>As to gender</u> the young women (aged 16-29) have better knowledge than young men regarding the ways of HIV transmission, prevention of MTCT and avoiding venereal diseases.
- The better knowledge of the Estonians could be noted <u>by nationalities</u> in several age groups compared to the non-Estonians: in case of ways of HIV transmission in the ages of 14-15 and 19-29, in case of preventing MTCT in all age groups and in case of preventive methods of STD in the ages of 10-13 and 19-29.
- The knowledge of the young people aged 19-29 from Ida-Viru County is poorer compared to <u>other districts</u> regarding all three groups of knowledge.
- The higher the <u>educational level</u> among the grown-up youth, the better their knowledge in all three groups of knowledge.
- As to <u>social status</u> the studying young persons aged 19-29 have the best knowledge of the ways of HIV transmisson and preventing STD; the unemployed young persons have the worst knowledge.
- The young persons from 16 years of age having had sexual intercourse have better knowledge of the preventive methods of STD.
- The knowledge of the prevention of STD is better than the knowledge of the ways of HIV transmission among the grown-up young persons.
- The better the knowledge of the young persons of HIV transmission and prevention topics, the better the knowledge in avoiding the STD.

#### Information

According to the students the topics related to use of drugs have been most handled in school lessons. The persons aged 14-18 have been most told about the need of using the condom; in case of the ones aged 10-13 this topic has been very little dealt with. STD, sexuality and HIV/AIDS are the topics less handled in lessons in case of all schoolchildren at any age.

Television and newspapers-magazines are holding the first place as the sources of obtaining information related to HIV/AIDS in all age groups. The five more used information sources in all age groups also include the information materials. In addition the lessons are important information sources for the schoolchildren, the outdoor advertising for the grown-up young people. The information sources preferred by the young people do not materially differ from the ones where the information was earlier obtained from. Internet has been added as the place of receiving the required information.

The young people in their opinion need most information on the questions related to HIV/AIDS treatment, the least interest is shown towards the topics related to the use of condom. The schoolchildren also require more information on preventing HIV and STD.

#### Understandings

Many young people are in the opinion that one could get infected with HIV through everyday contacts with PLWHA. By mistake the young people consider the eating from common dishes or using the common toilet with PLWHA the possibilities of getting infected. Getting infected by caressing is considered least probable.

The younger group (aged 10-15) includes more of the ones – more than half of the respondents - who rather avoid contacts with PLWHA in everyday situations like at school or at a meal table. The oldest age group fears most to take their child to common kindergarten

group including the one infected. There are least of the young people who would terminate the contact if the HIV-infected person were their close person. More than three quarters of the young persons are in the opinion that HIV-infected person should notify his/her acquaintances and friends of it and more than half find that the HIV-infected person is himself/herself guilty in that.

About one third of the young people think that HIV-infected pregnant woman should have an abortion. The same number of people find that abortion is unnecessary and the third group of the respondents could not make up their mind. The viewpoint not favouring the abortion was most often reasoned with the fact that the child might not be infected with HIV; the favouring of abortion with the high probability of the child getting infected.

- The number of the young people having false understandings related to the topics of HIV/AIDS and repelling viewpoints and beliefs related to PLWHA decreases with ageing.
- False understandings, major fear and negative attitude towards PLWHA exist more among young men than young women <u>by gender</u>.
- <u>As to nationalities</u> the false understandings on the ways of HIV transmission and prejudices and myths related to PLWHA are more common among the non-Estonians than the Estonians. The non-Estonians include one tenth more of the ones favouring the abortion of HIV-infected pregnant.
- The young persons who find that the HIV-infected pregnant woman should have an abortion make up the majority in all age groups in Ida-Viru County compared to other <u>districts</u>. The myths related to HIV-infectedness are more common among them. Regarding the other topics handled (false understandings about the ways of HIV transmission and prejudices towards PLWHA) the young people of Ida-Viru County aged 19-29 differ from other districts with their more false viewpoints.
- The higher the <u>educational level</u> of the grown-up persons, the less common are the false understandings on the possibilities of HIV transmission, prejudices regarding the contact with PLWHA etc. The number of the ones favouring the abortion of HIV-infected pregnant woman also decreases with the increase in educational level.
- According to <u>the status</u> the young persons aged 19-29 include more of the ones who do not consider the abortion necessary, in case the pregnant woman is HIV-infected.
- The young persons having more true information on the ways of HIV transmisson are less in thrall of myths, prejudices and false understandings related to HIV/AIDS.
- The better the knowledge of the young people on the prevention of HIV transmission from mother to child, the more they are in the opinion that abortion is unnecessary for the HIV-infected pregnant woman.

### Sexual relationships

One fifth of the persons aged 14-15 and about half of the ones aged 16-18 have experience of sexual intercourse. Less than one tenth of the grown-up age group have not had sexual intercourse. During the last 12 months more than one third of the persons aged 14-18 and slightly less than one third of the ones aged 19-29 had at least two sexual partners. One third of the persons aged 14-18, one fourth of the ones aged 19-24 and more than one tenth of the persons aged 25-29 having had sexual intercourse had sex with one-night partner during the last year. 4% of the young persons aged 14-18 and 19-29 have paid for the sexual intercourse during the last year.

More than half of the young persons aged 14-18 having had sexual intercourse do not carry the condom along or do it seldom. The grown-up young persons include three quarters of the latter ones. Three quarters of the ones who have never had the intercourse do not carry the condoms along. During the previous 12 months less than half of the persons aged 14-18 and more than half of the ones aged 19-29 have obtained condoms. Slightly more than one tenth of the persons in the group aged 10-13 have bought condoms.

Three quarters of the young persons consider the protective impact of the condom in preventing HIV-infection very important and far more than half of the persons assess their practical skills related to use of condom good.

During the first sexual intercourse more than half of the young persons aged 14-18 and one third of the persons aged 19-29 used the condom. Slightly more than half of the persons aged 14-18 used the condom always in case of one-night partner during the last year and slightly less than half of the young persons in case of short-term partner. The number of young persons aged 19-29 having always used the condom in case of one-night and short-term partners falls far below fifty percent. The main reason of not using the condoms is a steady partner and mutual trust; followed by the belief that the partner has no STD or HIV. About one third of the young persons having had the sexual intercourse have not used the condom, as they could not obtain it.

- The number of the ones carrying the condom along, who have used the condom during the first intercourse and who used the condom in case of different sexual partners during the last 12 months decrease with <u>ageing</u>.
- As to <u>gender</u> the young men have had more sexual partners compared to the young women during the last 12 months. The young men include more of the ones who carry the condom along; also the young men used the condom in the intercourse more often than the young women during the last year.
- As to <u>nationalities</u> the Estonians value the protective impact of condom more. At the same time the non-Estonians carry the condoms more often along than the Estonians and there are more young people among them who used condom during the first intercourse. The non-Estonians assess their practical skills related to use of condom higher. During the last 12 months the non-Estonians aged 16-18 have used the condom more than the Estonians.
- The young city people carry the condom along more often than the ones in the country when comparing the <u>living districts</u> and assess their skills related to use of condom higher. The city youth include more young people having used the condom during the first intercourse.
- The higher the <u>educational level</u> of the grown-up youth, the higher the number of the ones having used the condom during the first intercourse. The young people with higher educational level assess their skills related to use of condom and the protective impact of condom in avoiding the HIV-infection better.

### Risk groups

- Each <u>age group</u> includes more than half of the persons who do not risk in their sexual behaviour (group of Orisk level). There are most young people with high risk level – about one fifth - among the grown-up youth.
- The risk liable sexual behaviour by <u>gender</u> is more common among the young men, especially among the grown-up men.
- The sexual behaviour of the Estonians aged 16-18 <u>by nationalities</u> is considerably more risky than the one of the non-Estonians.
- The young persons aged 19-29 with lower <u>educational level</u> risk more in their sexual relationships and as <u>to status</u> the level of risk behaviour of unemployed grown-ups is higher of the one of the economically active young persons.
- In the group aged 14-18 the young persons behaving more risky in the sexual life have better knowledge on the ways of HIV transmission, the tendency among the grown-up persons is opposite the more risky the behaviour the lower the level of knowledge.
- The young persons aged 14-18 with the higher risk level in sexual behaviour assess their knowledge in the given field better than the young persons risking less.
- The young persons behaving more risky in the sexual life smoke and use alcohol and drugs considerably more often than the young persons with lower risk level.
- The risk liable young persons estimate their possibility of getting infected with STD or HIV higher and they include more the ones who prefer to take the HIV-test.

The summed up results of the research indicate that the knowledge of the youth related to the topics of HIV/AIDS and the assessment on one's level of knowledge increase with age. Less false understandings related to HIV transmission and negativity towards PLWHA occur by increase in age. At the same time the number of the ones carrying the condoms along, who used the condom during their first sexual intercourse and always during the last 12 months in case of one-night and short-term partner degreases with age.

The increase in knowledge and decrease in false understandings and negative attitudes related to HIV/AIDS topics could be clearly seen by increase in the educational level of grown-up young persons. The level of risk behaviour among the young persons with higher education is lower. The studying young persons aged 19-29 have better knowledge related to HIV/AIDS topic.

The abovementioned results refer to the high importance of school environment in increasing the knowledge of the young people and creating their behaviour. At the same time the young people state that the topics of sexuality, STD and HIV/AIDS are little talked about at school. The more risky behaviour among the grown-up young people indicates the need for continuing the preventive work also with the young people who are not connected with school environment any more.

The young men have poorer knowledge and more false understandings related to the topic of HIV/AIDS compared to the young women. On the other hand the young men carry the condoms along and use them more than young women. To sum up, the general level of risk behaviour of young men is higher due to the higher number of sexual partners. The given result refers to the need of gender specific approach in preventive work in accordance with the reasons of different behaviour of young men and women.

The Estonians have better knowledge than the non-Estonians in many questions related to HIV/AIDS topics when comparing the two national groups. In addition there are less false understandings and repelling attitudes related to the topic among the Estonians. At the same time the non-Estonians include more of the ones who carry the condom along and have used the condom during the first intercourse. The group of Estonians aged 16-18 has clearly more risky behaviour than the non-Estonians. The above indicates the parallel need for dealing with both national groups in the preventive work.

According to the results of the research the differences enfolding the whole block of knowledge, understandings or behaviour by districts do not occur. The district variabilities mainly regard the single subsubjects or smaller age group. The young persons from Ida-Viru County aged 19-29 are on focus regarding the age groups among whom the knowledge related to HIV/AIDS topics is poorer. The myths and false understandings related to HIV/AIDS are more common among the young persons of Ida-Viru County in several matters. The given result indicates the high need of informative preventive work among the young people of Ida-Viru County, where the number of HIV infection cases is higher, but the knowledge and understandings of grown-up young persons are poorer than in other districts.

The differences between the young city people and country people are notable as to single questions within the topic of research, therefore one could not state by generalizing that the young persons of one or another living district have better knowledge, higher level of risk behaviour etc.

The provided results of the research support the known undertanding in the preventive work that the better knowledge regarding the facts of HIV/AIDS might not yet lead to the changes in behaviour. Thus we see the controversy of the level of knowledge in many groups with the actual way of action. Connected are different risky behaviours – use of addictive substances and risky behaviour in sexual life; and different knowledge – the ones who are more aware of the matters related to HIV transmission are also more aware of the preventive methods of STD. It could also be noted that the myths and false understandings

related to the relevant topics decrease among the young persons with the increase in knowledge. The relations of different risky ways of behaviour demonstrate the need of close cooperation in the fields of preventing smoking, use of alcohol and drugs and prevention of HIV/AIDS.

The prevention of mother to child transmission is quite a new topic in Estonia in the preventive work of HIV/AIDS. The very low level of knowledge in this field and the major number of the young people who could not tell what should be done in case of pregnancy of HIV-infected woman, refer to the need for paying more attention to the problem of HIV-infected women and providing information in the topic of preventing MTCT.

The results of the research also indicate the poor awareness of the young people of the fact that in addition to anonymous testing sites of AIDS and specialist doctors HIV-test could be taken in the Youth Counselling Centres and by the family doctor. This fact refers to the need of forwarding information about different testing opportunities. There are five anonymous testing sites of AIDS in Estonia, therefore there are many young people who should know for sure about the testing opportunities closer to their home.

As to the use of safer sex devices we see that the use of female condom and protection membrane besides the male condom is quite unknown among the young people. Therefore the task of the preventive work is also to introduce the safer sex methods other than the most common male condom. The handling of the subject of prostitution as one of the topics of preventive work is also necessary, as few persentaces of young people having paid for sex could be found among the youth aged 14-18 and 19-29.

There are many young people who consider necessary that the person infected with HIV would notify his/her acquaintances of his/her status. This indicator discloses the major need for paying attention to the human rights of PLWHA and the questions of guaranteeing these rights.

In addition to the description of today's situation the given research results have raised many additional questions needing specification – mainly the reasons behind the false understandings and repelling attitudes related to the topics of HIV/AIDS and not using the condom. The search for finding the reasons of behaviour patterns and beliefs could be dealt with in the next studies to be implemented in this field.

# APPENDIX. The young people aged 10-29 living in Estonia in age groups by gender, nationalities, residence and districts

(Source of information: Estonian Statistical Office)

	man	woman	total
10-13	51,3	48,7	100
14-18	51,0	49,0	100
- incl 14-15	51,4	48,6	100
- incl 16-18	50,8	49,2	100
19-29	50,7	49,3	100
- incl 19-24	51,0	49,0	100
- incl 25-29	50,2	49,8	100

Table 1: The young persons aged 10-29 living in Estonia in age groups by gender (%)Source of information: ESO – Estonian Statistical Office, 1 January 2002

Table 2: The young persons aged 10-29 living in Estonia in age groups by nationalities (%) Source of information: ESO, 31 March 2000

	Estonians	Russians	other	total
			nationalities	
10-13	71,2	25,5	3,3	100
14-18	68,3	28,0	3,7	100
19-29	69,8	25,8	4,4	100

Table 3: The young persons aged 10-29 living in Estonia in age groups by residence (%) Source of information: ESO, 1January 2002

	city	country	total
10-13	62,4	37,6	100
14-18	64,8	35,2	100
19-29	72,6	27,4	100

Table 4: The young persons aged 10-29 living in Estonia in age groups by districts(%) Source of information: ESO, 1 January 2002

	Harju County	Ida-Viru County	East- Estonia	West- Estonia	total
10-13	34,9	11,9	28,2	25,0	100
14-18	35,9	13,8	26,6	23,7	100
19-29	43,8	11,5	26,3	18,4	100