ANALYTICAL REPORT ON RESULTS OF THE LINKED RESEARCH

«Monitoring of awareness, behavior and HIV prevalence among prisoners as part of second generation HIV surveillance»

Authors

Iryna Demchenko, Candidate of economic sciences (supervisor) Maryna Kostyuchok Natalya Byelonosova



The Global Fund The publication is prepared and published within the framework of To Fight AIDS, Tuberculosis and Malaria the programme "Support for HIV and AIDS Prevention, Treatment and Care for Most Vulnerable Populations in Ukraine" supported by the Global Fund to Fight AIDS, Tuberculosis and Malaria.

The views described herein are the views of the authors, and do not represent the views or opinions of The Global Fund to Fight AIDS, Tuberculosis & Malaria, nor is there any approval or authorization of this material, express or implied, by The Global Fund to Fight AIDS, Tuberculosis & Malaria.

© МБФ "Міжнародний Альянс з ВІЛ/СНІД в Україні"

вул. Димитрова, 5, корпус 10А, 03680, КИїв, Україна

Тел.: (044) 490-54-85 (6, 7, 8)

Факс: 044) 490-54-89

E-mail: office@aidsalliance.org.ua http://www.aidsalliance.org.ua

ACKNOWLEDGMENT

This paper presents the results of bio-behavioral monitoring research among convicts. The work is unique in the scope and quality of data. Unlike previous surveys conducted in the institutions of the State Criminal-Executive Service, for the first time in Ukraine, a linked research of awareness and behavior of convicts as a component of second generation HIV surveillance was conducted at the national level. According to a specially developed methodology, the convicts were surveyed and tested for HIV infection, which allowed to analyze the connection between the awareness, behavior and level of HIV infection of convicts held in CES institutions.

On behalf of the researchers I would like to express my sincere gratitude to the management and staff of the central office of the State Department of Ukraine for Execution of Punishment for supporting the idea of performing monitoring research by a new, more challenging than in previous years methodology, addressing all methodological and organizational issues including participation in the training of doctors and paramedics of CES institutions, ensuring interviewers' security during the survey as well as discussing the results of the research. I would like to express special thanks to doctors and paramedics of penitentiary institutions in which the data were collected, for the quality of pre- and post-testing counseling of convicts, blood sampling for HIV tests as well as for assisting the interviewers.

We are grateful to employees of the Ukrainian Center for AIDS Prevention of the Ministry of Health of Ukraine, the State Institute of Epidemiology and Infectious Diseases named after L.V. Gromashevskiy, including the team of the researcher Olena Kislykh for prompt and quality analysis of blood serum samples of convicts.

We thank the coaches Natalya Kozhan, Inna Antoniuk, Olena Kislykh, for preparing the doctors and paramedics of the colonies for adequate organizing of the voluntary counseling and testing of convicts-respondents.

We also note with appreciation the professionalism and dedication of the Chief of the Division for collecting and processing the information of the Analytical center "Socioconsulting" Lily Tarasyuk, who put significant efforts to organizing and coordinating the field research aiming at obtaining reliable and valid data.

We are glad that through this project we again worked together to develop the protocol and tools of the research and discussed the key findings with experienced specialists Natalya Kozhan, Yuri Kruglov, Olena Kislykh, Inna Schwab, Tatyana Saliuk.

> On behalf of the Authors Iryna Demchenko

CONTENTS

ABBREVIATIONS	6
INTRODUCTION	7
RESEARCH METHODOLOGY	9
RESPONSE TO HIV/AIDS IN THE INSTITUTIONS OF THE STATE CRIMINAL- EXECUTIVE SERVICE	10
1.1. Raising HIV/AIDS/STI awareness	
1.2. Distribution of free condoms and disinfectants	
1.3. Voluntary counseling and testing for HIV	
1.4. Coverage of convicts with preventive programs	
2. CONVICTS' AWARENESS ON HIV/AIDS AND ATTITUDE TOWARDS PLWHA	30
2.1. The level of convicts' awareness on HIV/AIDS and STI	
2.2. Convicts' attitude towards PLWHA	
3. RISK BEHAVIOR OF CONVICTS	39
3.1. Drug injecting	39
3.2. Tattooing	41
3.3. Risky sexual behavior models	42
4. HIV PREVALENCE IN CES INSTITUTIONS AND FACTORS OF INFECTION	45
OF INFECTION	40
CONCLUSIONS	50
RECOMMENDATIONS	54
ANNEX 1	57
ANNEX 2	58
The calculation of national indicators	58
ANNEX 3	60
Description of the selection for the national survey of convicts in 2009	60

ABBREVIATIONS

ARV therapy – antiretroviral therapy

HIV – human immunodeficiency virus

PC – institutions where adult convicts serve sentences

SDUEP – State Department of Ukraine for Execution of Punishment

VCT – voluntary counseling and testing

STI – sexually transmitted infections

STDs – sexually transmitted diseases

CES – Criminal-Executive Service

PLWHA – people living with HIV/AIDS

NGO - non-governmental organization

DF – detention facility

IDUs – injecting drug users

AIDS – acquired immunodeficiency syndrome

SPS – social – psychological service

PI – penitentiary institutions

UNAIDS – the United Nations Joint Programme on HIV/AIDS

UNICEF – the United Nations Children's Fund

INTRODUCTION

Penitentiary institutions are regarded worldwide as institutions of high risk of transmission of socially dangerous infections, HIV being one of the leading ones. Within 2005-2009 the proportion of new HIV cases diagnosed annually has remained at 8-9% of the total number of convicts testing, or 12% of all new HIV cases officially registered in Ukraine in 2009. Every year there is a growing number of convicts registered in health care institutions of the Department in the dispensary register. In 2005 the number of such convicts constituted 4058 persons, in 2007 – 4702 persons, and in 2009 – 6069 persons. Among some regions, as before, the leader by the number of HIV-infected convicts registered in the dispensary register, in 2009 was the Donetsk oblast (1649). Further, in a somewhat different than in 2007 order, Donetsk oblast is followed by Dnipropetrovsk (403), Kherson (387), Mykolaiv (381), Lugansk (372), Odessa (366), Chernihiv (292) and Kharkiv (291) oblasts. The increasing number of HIV-infected convicts, including the increasing population of patients with AIDS, is an important factor of epidemiological development in the country.

In-between the previous (mid 2007) and current (late 2009) phases of monitoring, there was an increase in the scope of epidemic fighting activities in the system of the State Criminal-Executive Service, including awareness raising and secondary prevention measures among convicts. This was facilitated by the significant support from international donors. Particularly, the component "Prisons" was implemented (though not in full) with other components of the project "Tuberculosis and HIV/AIDS surveillance in Ukraine", funded by the World Bank. There is a gradual increase in the number of harm reduction projects implemented by NGOs and charitable organizations supported by ICF "International HIV/AIDS Alliance in Ukraine" within the framework of the program "Overcoming HIV/AIDS in Ukraine" funded by the Global Fund to Fight AIDS, Tuberculosis and Malaria. During the year from October 1, 2008 to September 30, 2009 the secondary HIV/AIDS prevention services among convicts and persons taken into detention were provided by the representatives of 19 NGOs in 50 CES institutions. From August 2007 till present, the AIDS Foundation East-West in cooperation with SDUEP and supported by the Netherlands Ministry of Foreign Affairs is implementing the project "Institutionalization of HIV/AIDS prevention and health promotion on the basis of education system of the institutions of the State Department for Execution of Punishment" aimed at raising awareness of staff and convicts. Supported by UNICEF an interactive educational program on HIV was introduced in the juvenile correctional facilities.

However, according to a comprehensive external evaluation of the national AIDS response in Ukraine, the needs of convicts in HIV servi-

ces are not sufficiently satisfied, and preventive measures in CES institutions are inconsistent and low-efficient¹. Moreover, there is no effective system for monitoring the quality of these services.

That is why a linked research of the level of awareness and behavior characteristics of convicts as a component of second generation HIV surveillance remains an important component of monitoring the epidemic situation in Ukraine, allowing to evaluate the effectiveness of preventive measures implemented by CES personnel and NGOs and identify the most critical gaps in fighting the epidemic and develop proposals for their timely elimination. Specifically, on the basis of the research, the calculation of the three national UNGASS indicators was conducted, which is the responsibility of the State Department of Ukraine for Execution of Punishment. These indicators reflect the efficiency of epidemic response measures implemented among convicts and are included in the National Report on Implementation of the Declaration of Commitment on HIV/AIDS, prepared every two years by Ukraine.

The research was conducted by the Analytical center "Soioconsulting" upon request of the International Charitable Foundation "International HIV/AIDS Alliance in Ukraine" within the framework of the program "Overcoming HIV/AIDS in Ukraine" funded by the Global Fund to Fight AIDS, Tuberculosis and Malaria, in active cooperation with the staff of the State Department of Ukraine for Execution of Punishment, Ukrainian Center for AIDS Prevention and Control and experts of the Monitoring and Evaluation Department of ICF "International HIV/AIDS Alliance in Ukraine".

¹ Comprehensive external evaluation of the national AIDS response in Ukraine: Summary report (in English, January 2009). – p. 82.

RESEARCH METHODOLOGY

The aim of the research: monitoring of the behavior of convicts towards HIV/AIDS in order to provide adequate response to the epidemic and assess the effectiveness of prevention programs in the institutions of the State Criminal-Executive Service of Ukraine.

To reach this goal the following objectives were achieved, namely:

- Comparative analysis of the impact of risk factors for HIV infection among convicts.
- Analysis of major trends for changes in awareness, attitudes and behavior of convicts.
- Data collection and calculation of the national indicators of monitoring and evaluation of measures ensuring HIV/ AIDS surveillance in penitentiary institutions.
- Determining the level of HIV prevalence in the Pls.
- Assessment of the coverage of convicts with HIV/AIDS prevention activities, as well as their impact on the awareness and behavior of convicts.
- Preparation of recommendations for improving the strategy and tactics of preventing the spread of HIV/AIDS in the Pls.

During the research, the following hypotheses were examined

- Raising convicts' awareness of HIV/AIDS led to the increase in the level of their knowledge about ways of transmission and prevention of HIV infection.
- The level of knowledge of convicts involved in activities of the projects of secondary HIV/AIDS prevention implemented by NGOs is higher than among those who do not attend such events.
- Convicts that are covered by both passive and active types of awareness raising activities have a higher level of knowledge about HIV/AIDS than those covered only by passive forms of activities.
- The level of knowledge about HIV/AIDS increases proportionally to the age of convicts.
- With the improvement of PI supply with means of individual protection (condoms, disinfectants) the volume of risky behavior reduces.
- The behavior of the first-time convicts is less risky than the behavior of the repeat convicts.
- The main factor of HIV infection of convicts is a risky practice of injecting drugs.
- Due to the higher physiological and social vulnerability of female convicts of penitentiary institutions, the level of their HIV infection is higher than among male convicts.

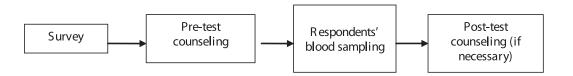
It is most likely to detect HIV among the convicts who have experience of drug injecting. These chances increase with the increase in the age of convicts and the number of times of serving the sentence.

Object of research: convicts under the age of 16 years and older, who are serving sentences in the institutions of the State Criminal-Executive Service of Ukraine.

Type of research: iintegrated bio-behavioral research, research that combines target group survey and blood testing for HIV.

For testing for HIV antibodies the ELISA test kits were applied. The testing was performed according to the Order of the State Department of Ukraine for Execution of Punishment and the Ministry of Health of Ukraine of January 18, 2000 #3/6 "Instructions for the work of laboratories of HIV infection diagnosis" (Order of the MoH of Ukraine of 22.02.2002 #71). The confirmation tests were conducted according to the "Provisional procedure for conduction of confirmation tests for HIV ½ and antigen p24 antibodies for 2009" (The Letter of UkrCenterAIDS #32 of 16.01.2009).

The implementation of field research was carried out under the scheme below:



Convicts' survey

Type of selection: multi-level, stratified, individual, with application of the quota method of selecting the respondents at the last level. In the course of surveying the respondents the following quota parameters were followed: age, sex, number of times of serving the sentence in the form of imprisonment (the first – time and repeat convicts).

In 2009 the third survey was conducted by the same method of selection composition. However, due to the fact that the survey of convicts was for the first time combined with their VCT, the selection acquired some specific features compared to previous phases of monitoring, namely: increased number of PIs and accordingly reduced number of respondents surveyed.

In 2004 and 2007 the survey was conducted in 10 male and 2 female penal colonies. As a whole, the survey covered 12 institutions of the State Criminal-Executive Service. In each male PI, 100 male convicts were interviewed and in each female PI – 120 female convicts

In 2009 the selection comprised 20 male and 4 female penal colonies as well as 2 juvenile correctional facilities: a total of 26 penitentiary institutions. The number of respondents in separate colonies was limited to 50 persons. This is related to the specificity of bio-behavioral research, namely to the need to observe the requirements of collection, storage and transportation of blood samples of the respondents to the Ukrainian Center to Prevent and Fight AIDS. This process is time-limited (no more than 3 days).

Applied selections

Year	Period of data collection	Number of respondents	Discrepancy, %
2004	November 26 – December 7	1240	+/-1,7–2,9
2007	May 17 – June 11	1234	+/-1,7–2,9
2009	December 7 – 18	1300	+/- 1,7–2,8

Method of the survey: cself administration of questionnaires in the presence of the interviewer and CES institution staff member. During the survey the personal envelopes for respondents were utilized to ensure openness of the respondents and privacy of their personal responses.

Research ethics

The program of the research received positive approval of the Commission on professional ethics of sociologists of the Sociological Association of Ukraine. The epidemiological component of the research was examined by the Committee on Medical Ethics of the Institute of Epidemiology and Infectious Diseases named after L.V. Gromashevskiy of AMS Ukraine.

The issue of voluntary convicts' participation in the research and privacy of the empirical data received was paid special attention during the trainings of PI doctors and paramedics, arranged prior to the research.

Before interviewing each group the interviewers of AC "Socioconsulting" guided the convicts on research agenda and rules of filling in the questionnaires, including on their right to refuse from participation in the survey, refuse to answer certain questions and participate in testing. Then the interviewers presented to the respondents the informed consent form.

All the respondents, regardless of HIV status, were provided with collective pre-test consultation by PI doctors and upon request by additional individual counseling. In order to conduct group interviewing and pre-test counseling the separate rooms were provided in each PI. A separate room was also provided for the pre-test individual counseling (upon respondents' request) and testing. Thus, only the health care worker and the respondent were present in the room.

The research team didn't file any names or other identifying data on the questionnaires or in registers with tests results. Each respondent was assigned an identification number indicated on the card number. The individual results were not reported to the PI staff (except for doctors) and regional offices of the Department.

Methods of research data analysis:

- The monitoring of awareness, risky behaviors and coverage of convicts with preventive measures envisaged a comparative analysis of the data of the national surveys of convicts conducted in 2009, 2007 and 2004. Based on the volumes of selections, the differences in the dynamics of indicators by years are significant, if the difference exceeds 3%. During the analysis of survey data for 2009, 2007 and 2004, the calculation of indicators for 2009 did not include the data on juvenile correctional facilities, as in 2004 and 2007 they were not included in the selection.
- The comparative analysis of the data of convicts survey by demographic (age, gender) and social (types of PI, first-time and repeat

- convicts etc.) factors was conducted by the methods of descriptive statistics one-dimensional and two-dimensional distribution of responses.
- The observation of the correlation (linear) relationship between the amount of preventive interventions, the level of knowledge and behavior of respondents was carried out by calculating the Pearson's correlation coefficient (r), the main characteristics of which are as follows:
 - correlation coefficient varies from -1 to +1;
 - in the absence of any relationship the coefficient is close to zero; given the functional relationship to one;
 - upon the presence of the correlation relationship, the coefficient constitutes a fraction, the absolute value of which increases proportionally to the closeness of the relationship, namely:

 $0 < r \le 0.2 - \text{very little correlation};$

 $0.2 < r \le 0.5$ – little correlation;

 $0.5 < r \le 0.7$ – medium correlation;

 $0.7 < r \le 0.9 - strong correlation;$

0.9 < r <= 1 - very strong correlation.

• The analysis of impact of HIV spread factors among convicts, particularly, the experience of injecting drug use, unprotected sex, etc., was carried out by multinomial logistic regression. For this purpose the multidimensional statistical models of relative impact of each of the several independent factors (predictors) on the chances of convicts to have HIV were designed. The logistic regression method allows to estimate the unique contribution of each of the predictors in anticipation of the HIV status of convicts without considering the impact of other predictors (supposedly the latter remained constant). The logistic regression coefficients presented in the report, the so-called exp (b), provide for assessment of the chances of certain groups representatives to become HIV-infected convicts. If these coefficients are higher than «1», the chances of certain group representatives to become HIV-infected are higher than the ones of the reference group; and if coefficients are lower than «1» – the chances are lower..

1. RESPONSE TO HIV/AIDS IN THE INSTITUTIONS OF THE STATE CRIMINAL- EXECUTIVE SERVICE

In compliance with the National Program of Provision of HIV-Infection Prevention, Medical Treatment, Care and Support of HIV-, and AIDS-infected People for 2009-2013, the State Department of Ukraine for Execution of Punishment is responsible for implementation of HIV/AIDS surveillance measures in the institutions of the State Criminal-Executive Service. In order to implement these measures the Department cooperates with non-governmental and international organizations.

The main directions of cooperation are:

- Raising awareness among persons serving sentences in CES institutions regarding HIV/AIDS and STI.
- Ensuring availability of condoms and disinfectants for people serving sentences in PI.
- Ensuring access of persons serving sentences in CES institutions to counseling and testing for HIV.
- Providing patients with HIV/AIDS serving sentences in CES institutions with antiretroviral therapy, diagnosis and treatment of opportunistic infections.
- Providing social and psychological support and care for patients with HIV/AIDS serving sentences in CES institutions.

According to the nature and rate of HIV infection spread in Ukraine and penitentiary institutions, the largest by the scope and volume of resources involved are the prevention measures among convicts.

1.1. Raising HIV/AIDS/STI awareness

Analysis of survey data over the past few years shows a marked increase (13%) in the share of convicts provided during serving the sentences with information about HIV/AIDS/STI: from 57% in 2004 to 70% in 2009² (Fig. 1.1.1).

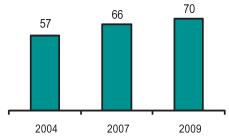


Fig. 1.1.1. The distribution of affirmative answers to the question: "Were you provided with information on HIV/AIDS/STI during serving the sentence?", by years, %

² The calculation of indicators for 2009 did not include the data on juvenile correctional facilities, as in 2004 and 2007 they were not included in the selection.

In female CES institutions the awareness raising on HIV/AIDS/STI is implemented more actively (Table 1.1.1). This is reflected in a slight but steady increase in the number of female convicts provided with relevant information during the studied period. However, in the male colonies, the situation is somewhat different. In 2007 vs. 2004 the share of convicts informed about HIV/AIDS during serving the sentence increased by 11%, in 2009 this positive trend slowed.

Provision of information on HIV/AIDS/STI to convicts, %

Table 111

	Female				Male	
	2004	2007	2009	2004	2007	2009
Yes	68	72	79	54	65	68
No	26	23	14	34	24	22
Don't remember	6	5	8	12	11	11

The inclusion in the selection of 2009 of respondents – convicts of juvenile correctional facilities made it possible to compare the amount of information provided on HIV/AIDS/STI in colonies and juvenile correctional facilities. According to the data obtained, the more active awareness raising is observed in juvenile correctional facilities, where minors are serving sentences. In these institutions the number of respondents informed about HIV/AIDS/STI appeared much larger (87%) than in all types of penal colonies. The indicator of information coverage of PI first-time convicts is 67%, and sometimes – 73%.

The raising of awareness on HIV/AIDS in the PI is not limited to one-time information provision and is usually performed on a regular basis. This in particular is reflected in the increase in the number of convicts who received information about HIV/AIDS/STI in the colony, with the increase in the duration of stay in the colony. Among convicts serving the sentence for less than 3 months, 59% received the relevant information; the similar indicator for convicts serving sentences in the colony for two years or more is 75% (Fig. 1.1.2)

The convicts serving sentences in CES facilities are provided with information on HIV/AIDS/STI by doctors and paramedics. This complies with an established Order³, whereby health workers must conduct interviews with the newly arrived convicts staying in the quarantine department, and is confirmed by the results of surveys (Table 1.1.2).

Along with CES staff, there was a significant increase in the activity of NGOs in the field of raising awareness among convicts in penal colonies. Within the last two years the share of respondents provided with information about HIV/AIDS/STI by NGOs representatives almost doubled: from 18% in 2007 to 34% in 2009. To-day, NGOs as a source of information rank second after health care workers of colonies.

The Order of medical care provision for persons held in detention facilities and correctional labor institutions of the State Department for Execution of Punishment of Ukraine/Approved by the Order of the State Department for Execution of Punishment of Ukraine and the Ministry of Health of Ukraine of January 18, 2000 #3/6, amended by the Orders of the State Department of Ukraine for Execution of Punishment and the Ministry of Health of Ukraine of December 19, 2001 N 242/513 and of November 18, 2003 N 216/532.

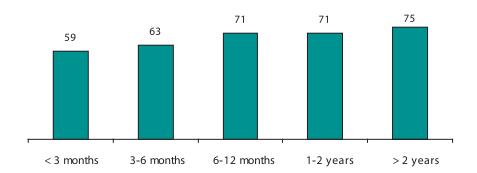


Fig. 2.1.2. The distribution of affirmative answers to the question: "Were you provided with information on HIV/AIDS/STI during serving the sentence?", by the period of respondents' serving the sentences in colonies (2009), %

There is a slower but also a positive dynamics of these two sources rating – heads/staff of social and psychological services of colonies and other convicts. Possibly, this positive trend is associated with the increasing volumes and types of preventive activities of NGOs, which provided training for SPS experts and convicts-volunteers for further provision of information about HIV/AIDS/STI to convicts.

Table 1.1.2

The distribution of answers to the question:

«Who provided the information on HIV/AIDS/STI?», %

	2004	2007	2009
Health care workers	60	51	54
NGO representatives	*	18	34
Other convicts	24	16	19
Head/staff member of SPS	22	10	18
Fellows, friends, acquaintances	18	13	13
Other	3	7	4
Don't remember	9	7	5
Nobody	1	15	20

^{*} the questionnaire of 2004 lacked answer "NGO representatives"

The 2009 survey results showed that by the use of all sources of information the juvenile correctional facilities significantly outperform penal colonies. There are certain particularities among different types of penal colonies. In the colonies for repeat convicts the influence of health care workers is more significant (60%) compared with other information sources, and considerably less influential is the NGOs activity (26%). In PIs for the first-time convicts, the NGOs in terms of the scope of awareness raising approximate health care workers (41% and 49%) (Table 1.1.3).

The 2009 distribution of answers to the question: "Who provided the information on HIV/AIDS/STI?", by the type of PI, %

	Pls for first- time convicts	Pls for repeat convicts	Juvenile correctional facilities
Health care workers	49	60	82
NGO representatives	41	26	47
Other convicts	19	20	33
Head/staff member of SPS	19	17	42
Fellows, friends, acquaintances	13	13	18
Other	5	4	10
Don't remember	5	4	4
Nobody	22	18	8

As for the content of information on HIV/AIDS/STI provided to convicts during imprisonment, the trend analysis is somewhat limited. This is related to the improving and updating of the list of answers to questionnaires throughout the stages of monitoring.

In general, it can be noted that as in previous years, the awareness raising in colonies is mainly aimed at primary prevention of HIV. Typically, the convicts are informed on the essence of HIV/AIDS, ways of HIV transmission and ways to avoid HIV infection.

The analysis of respondents' answers by years shows a positive trend in the increase of the percentage of respondents provided with general information about HIV/AIDS. This trend, however, is not constant. For example, in 2007, despite the increase in the number of respondents provided with information on HIV/AIDS compared to 2004, the information on the key issues was provided to significantly less number of respondents (Table 1.1.4)

 $\label{thm:convicts} \mbox{Table 1.1.4}$ The main types of information on HIV/AIDS provided to the convicts in PIs, %

	2004	2007	2009*
1. On the peculiarities of HIV-infection and AIDS	60	40	80
2. On ways of HIV transmission	72	55	73
3. On means of protection from HIV	62	44	59

^{*} in 2009 the stated answers had different wording: 1. What is HIV/AIDS? 2. What are the ways of HIV ransmission? 3. How to avoid HIV

There is a positive trend of active coverage of a wider range of issues, including tolerance for people living with HIV/AIDS, treatment of the HIV-infected, antiretroviral therapy. In 2007 the 30% of convicts stated that they discussed the attitude towards PLWHA, and in 2009 this indicator was 41%⁴. Within this period

 $^{^5}$ There were some differences in the wording of answers to the question "What kind of information on HIV/AIDS/STI were you provided with?" in the surveys of different years. Namely: in 2004 – "On the attitudes towards people living with HIV/AIDS", and in 2009 – "How to treat people living with HIV/AIDS". In 2007 – "On the peculiarities of HIV treatment", and in 2009 – "How can you treat HIV infection". In 2007 – "On antiretroviral therapy", and 2009 – "What is antiretroviral therapy". The wording in 2009 is more simple and understandable. Some effects of this factor on the distribution of answers can not be ruled out.

the share of respondents provided with information about HIV treatment almost doubled – from 16% to 30%, including on ARV therapy: from 11% to 25%. However, there seem to be prevention issues neglected during awareness raising. For example, in 2009, 28% respondents reported on obtaining the information about the "window period", 30% – about the rights and obligations of HIV-positive, 38% – on how to properly store and use condoms.

By PI type the largest range of information on HIV/AIDS/STI was provided in the juvenile correctional facilities, the smallest – in penal colonies for repeat convicts.

The awareness raising on HIV/AIDS/STI in the institutions of the State Criminal-Executive Service is implemented in various forms, namely by passive and active information provision, measures to draw attention to the HIV/AIDS. Among them, as in previous years, the passive information provision prevails and includes providing information on HIV/AIDS by:

- display stands or posters in medical units;
- display stands or posters on the territory of colonies;
- posters/leaflets on the of dormitories;
- booklets/brochures.

It should be noted that staff members of colonies as well as representatives of NGOs and religious organizations operating in colonies take part in the above activities.

The indicator of convicts' coverage with passive information provision was calculated as percentage of respondents, which during serving sentences in colonies were provided with information about HIV/AIDS/STI from at least one of the above listed sources.

The data obtained showed negative dynamics of convicts – respondents coverage with passive information provision. Compared to 2007 this indicator dropped by 26% and in 2009 constituted 53% (Figure 1.1.3). Given that in all the PIs participating in the survey there are illustrative materials on HIV/AIDS, most likely that the low percentage of coverage with passive information provision reflects the effect of respondents' habituation to the external information carriers, which are not updated regularly.

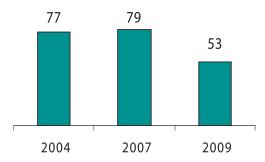


Fig. 1.1.3. Coverage of convicts with passive information provision, %

In 2009, the convicts of penal colonies mentioned passive forms of information provision less frequently (52%) than the convicts of juvenile correctional facilities (71%). Greater attention to external information carriers is paid by female convicts (61%) than by male convicts (51%).

In recent years the non-governmental organizations at the cost of the funding provided by the Global Fund were actively engaged in implementation of HIV prevention projects in CES institutions. For example, during the year from 1.10.2008 till 30.09.2009 the grants from the International HIV/AIDS Alliance in Ukraine for

implementation of preventive activities in 55 penitentiary institutions were provided to 19 NGOs. Characteristic for their activity is the use of different forms of awareness raising measures focusing on the active information provision to convicts about HIV/AIDS as well as implementation interactive activities to draw attention to different aspects of the epidemic. With this in view, for the first time during the monitoring, the questions about the coverage of convicts with measures arranged by the NGO representatives were included in 2009 questionnaire.

Almost half (45%) of the convicts – respondents reported about their participation in such measures during imprisonment. The minor differences between the proportion of those offered to attend and the number of actual participants demonstrates the great interest of the convicts in such measures (Table 1.1.5). Most of the respondents who did not participate in the NGOs activities were in institutions, where the secondary prevention projects were not implemented.

One of the key objectives of the NGOs staff is to draw convicts' attention to the issue of HIV/AIDS. With this aim in view, thematic theatrical performances, stage plays, contests, creative activities and sports competitions are arranged (Table 1.1.5).

Table 1.1.5

The 2009 distribution of answers to the question: «In which of the below measures to prevent HIV/AIDS were you suggested to take part in by representatives of NGOs or religious organizations?», %

	Suggested to take part	Took part
Special trainings for convicts to discuss the issues related to HIV/AIDS etc.	31	27
Theatrical performances, stage plays	9	7
Creative activities (preparation of posters on HIV/AIDS, drawing, dancing classes)	9	8
Sports competitions	11	11
Support groups for convicts to discuss problems and communicate	15	16
Special trainings for volunteers	11	12
Special trainings for drug addicts willing to overcome drug addiction	9	9
Other	3	4
Received no suggestions/ did not take part	50	55

In order to determine the scope of coverage of convicts with such measures we calculated the indicator "Percentage of people covered by measures to attract attention to HIV/AIDS issues", which takes account of the number of respondents that participated at least in one of the following activities, namely in:

- dancing classes, drawing;
- theatrical performances, stage plays;
- creative activities (preparation of posters on HIV/AIDS);
- sports competitions.

Thus, in 2009 the above-mentioned measures covered 12% of convicts. A significantly higher indicator of coverage was observed among convicts serving sentences in juvenile correctional facilities (30%), while, among the repeat convicts it was 12% and among the first-time convicts only 9%

An important measure of combating HIV/AIDS spread in the penitentiary system is the active information provision to convicts. This kind of awareness raising is considered a more effective type of prevention. The 2009 list of active forms of HIV/AIDS information provision included

- lectures on HIV/AIDS:
- individual counseling of medical staff, psychologists;
- information from convicts;
- sermons/ counseling of religious organizations representatives;
- video lectures on HIV/AIDS.

The above list was supplemented by educational measures implemented by NGOs in some colonies, namely:

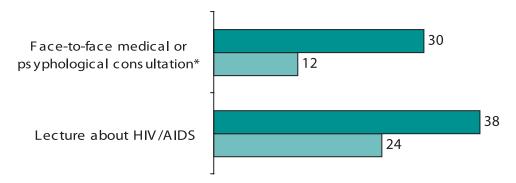
- trainings:
- supports groups;
- trainings for volunteers;
- trainings for drug addicts.

In order to calculate the total indicator "Percentage of persons covered with active information provision" the respondents that participated in at least one of the above measures were taken into account.

In general, all types of 2009 active information provision measures covered 49% of convicts surveyed, including 61% female and 46% male convicts. This indicator was the highest in juvenile correctional facilities (70%). There were no significant differences in the coverage of the first-time and repeat convicts serving sentences in penal colonies: 48% and 46% respectively

The distribution of answers by the age of the respondents showed that awareness raising activities involve mostly young people aged 16-19 years (58%) and most rarely the 20-24 year old convicts (43%). Among the respondents aged 25 and older the active information provision measures cover 49% of convicts.

Unfortunately, analysis of data on active information provision in the dynamics is limited. Due to the changes in the toolkit, the 2009 survey results can not be compared with the 2004 data and only partly with 2007 data. Based on available data it can be observed, that for the last two years the share of respondents provided with information on HIV/AIDS during individual counseling doubled: from 12% in 2007 to 24% in 2009. The number of respondents who mention taking part in thematic lectures gradually increases (Fig. 1.1.4).



^{*} in 2007 this answer in the questionnaire was worded «Individual counseling».

Fig. 1.1.4. The distribution of answers on the question "In what form were you provided with information on HIV/AIDS during imprisonment", % to those who received the information on HIV/AIDS/STI during serving the sentence

In general, according to 2009 survey results, 68% of convicts, including 79% female and 66% male convicts were covered with at least one form of information provision on HIV/AIDS (passive, active information provision or measures to attract attention to HIV/AIDS issues). By the type of penitentiary institutions, the volume of awareness raising in juvenile correctional facilities (84%) significantly outruns the same indicator in penal colonies for repeat convicts (68%) and first-time (65%) convicts. The convicts aged from 18 to 25 years, serving sentences in penal colonies are the least covered with information on HIV/AIDS (55%). They should be addressed when planning further awareness raising activities. The indicator of information coverage of older (25 years and older) convicts serving sentences in penal colonies constitutes 70%.

Thus, data analysis showed the activation in HIV/AIDS awareness raising in CES institutions in comparison with 2004. There is a growing impact of active and slight reduction of the volume of passive information provision.

As in previous years, the main source of information on HIV/AIDS for the convicts is the health care workers of colonies. However, there is a noticeable trend of the increase in the volume of informing the convicts by NGOs, particularly in juvenile correctional facilities and colonies for the first-time convicts.

Compared with previous years, the convicts more often mention provision of information on more specific issues, namely on the treatment of the HIV-infected, antiretroviral treatment and tolerance towards people living with HIV.

However, it is necessary to take into account the fact that participation in awareness raising activities can be random/occasional and thus does not guarantee acquisition of basic knowledge about HIV/AIDS. Moreover, only obtaining the information is not a reliable guarantee of preventing HIV infection among convicts.

1.2. Distribution of free condoms and disinfectants

An important component of HIV/AIDS prevention in the institutions of the criminal-executive service is provision of convicts with means of individual protection: condoms, disinfecting solutions. Until recently, the distribution of free condoms was carried out only by non-governmental organizations as part of harm reduction programs, and the access of convicts to disinfectants was provided at the cost of budget financing. Through the World Bank loan, in 2009 the State Department centrally purchased and transferred to the institutions almost 600 000 condoms for further free distribution in PIs.

Availability of condoms

Despite the significant number of condoms transferred to Pls, which could adequately meet the needs of convicts, only 22% of respondents reported that during the last 12 months they were provided with condoms. It is twice as many as in 2007, when their number was only 11%. As in previous years, the condoms are more available for male (25%) than for female (15%) convicts (Fig. 1.2.1).

The instability of condoms provision is reflected in the fact that the proportion of convicts-respondents provided with condoms last year, significantly increases with the increase in the duration of detention: from 10% for those who stay in the colony for less than three months, to 26% – for those staying in the colony for 2 and more years.

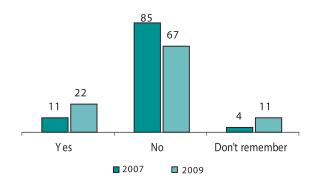


Fig. 1.2.1. The distribution of answers to the question: "Were you provided within the last 12 months with free condoms?", %

The analysis of access to condoms shows the lack of differences among penal colonies for the first-time and repeat convicts. With regard to juvenile correctional colonies, only one respondent from these institutions (1%) received free condoms last year. It is likely that the distribution of condoms in the juvenile correctional facilities is not provided by HIV/AIDS preventive programs.

As a whole, among all the respondents interviewed during the survey only 11% of convicts have regular access to condoms, that is they know where and under what conditions, if necessary, they can get a condom in the PI. Those who received condoms in CES institutions over the last 12 months constitute 56%. Others indicated that condoms are provided with some regularity (Table 1.2.1).

Table 1.2.1

The distribution of answers to the question: «How often are you provided with free condoms?», % to those provided with condoms within the last 12 months (n=252)

	2009			
	Female	Male	Total	
Once a week and more often	4	18	17	
Several times a month	8	16	15	
Less than once a month	31	11	13	
If necessary, I can always get a condom	58	56	56	

According to the survey, male convicts have more regular access to condoms, especially those repeatedly serving the sentence. In the male PIs one third of the respondents (34%) reported on getting the condoms with frequency from once a week to several times a month, while only 12% of female convicts reported the same (Table 1.2.1). Existing differences can be partly explained by the much smaller condom needs of female convicts. However, given the high rates of HIV infection in female penal colonies it would be most appropriate if female respondents answered "if necessary, I can always get a condom".

Usually, there are several ways of condoms distribution in institutions. In most cases they can be taken from the box in the medical units of colonies (35%) or from NGO representatives (31%). Less frequently the condoms are provided by the colonies staff (18%), other convicts of the same division (12%) or by visiting a bath or a stall (10%). Less often convicts-respondents mentioned rooms for long-

term visits (8%) as a place where one can get a condom. Very rarely the condoms were brought by relatives during visits (2%).

The models of condoms distribution in female and male CES institutions have certain differences. The male convicts received condoms from NGO representatives (22%) as well as in other ways used by the staff of the Department for distribution of condoms, such as boxes in medical units (29%) or baths/stalls. The female convicts are provided with condoms mostly by NGO representatives. Only two female convicts reported on getting condoms in the room for long-term visits or taking them from the box in the medical unit. Most likely, it indicates that the centrally purchased condoms were provided mainly to male Pls.

An important aspect of HIV/AIDS/STI prevention in penitentiary institutions is the provision of free access to condoms in the rooms for long-term visits. However, two of the three convicts surveyed (65%) did not know if the condoms were available in such rooms. It is clear that many convicts lose their social connections or do not have spouses. Thus we analyzed the answers of the respondents, which over the past six months of their stay in PIs were visited in the rooms for longterm visits by husbands/wives. The number of such convicts constituted 11% or 141 respondents serving sentences in 25 Pls. Most of them either do not know if the condoms are available in the rooms for long-term visits (40%), or deny their availability (36%). Only 20% of this group of respondents gave an affirmative answer, namely that condoms are usually available in the rooms for visits. And in 8 penitentiary institutions (seven of them male colonies) none of the respondents confirmed the availability of condoms in the rooms for visits. In the rest of the PIs (17) the convicts of the target group answered affirmatively, denied the availability of condoms in the rooms for visiting, or chose "don't know" answers. This shows, on the one hand, the low awareness of convicts on the availability of free condoms and on the other hand - a problem related to provision of condoms in many Pls (Fig. 1.2.3).

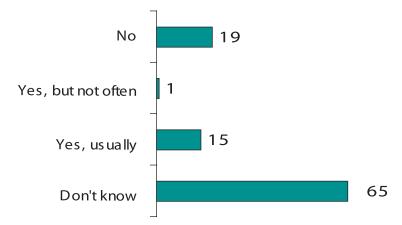


Fig. 1.2.3. The distribution of answers to the question: «Are the free condoms available in the rooms for long-term visits», %

Generally, according to the survey, 14% of the respondents had sexual intercourse with spouses or other convicts in the last six months. Only one third (34%) of them during this period received at least one free condom. At the same time, a lot of condoms are provided to convicts, who for a long time do not have sexual contact. For example, during the last six months these convicts constituted 78% of all convicts provided with condoms. This reflects the flaws in the existing model of the distribution of free condoms in the PIs. Often the condoms are provided to

convicts who do not need them while for the majority of sexually active convicts the condoms remain inaccessible.

Availability of disinfectants

Quite similar is the situation with convicts' access to disinfectants that can be used for cleaning the shaving, manicure, tattooing and other devices that contact with blood and under the condition of sharing, pose a threat of infection with HIV, hepatitis B, C as well as other infections. According to departmental documents, the disinfectants should be provided to all SPS divisions. Therefore, there is a growing concern about the answers of the respondents who believe that disinfectants are not available or very rarely available. It is possible that not all the convicts are aware of the availability of disinfectants in the divisions or would like to have them in individual containers, for example sterile napkins that were previously allowed to purchase by NGO within harm reduction programs. However, it is possible that in some colonies the disinfectants are not provided to all divisions due to the lack of budgetary funds.

According to the survey, for one third of convicts-respondents the disinfectants are available free of charge, including always – for 22% and sometimes – for 8% of the respondents. However, 41% of convicts consider the disinfectant solutions unavailable. Notably, 29% of convicts did not understand, which disinfectants were mentioned in the question.

Young people aged 16-19 years (40%) are more inclined to believe that disinfectants are available than those who are 25 years old or more (19%). Possibly, for young convicts the disinfectants are more relevant than for older convicts or it is the fact that the young convicts are better informed on prevention of HIV and other infections transmitted through blood.

Thus, unlike the situation with condoms, the disinfectants are available for most convicts serving sentences in the juvenile correctional facilities (50%), and the least – for the first-time convicts in penal colonies (14%). Among the institutions for repeat convicts, this indicator constituted 27% (Fig. 1.2.4).

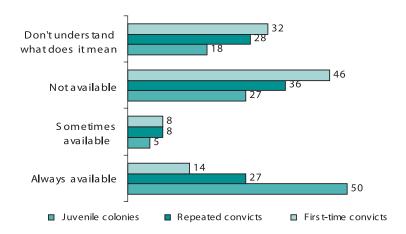


Fig. 1.2.4. The distribution of PI answers to the question: «Are the free of charge disinfectants available for you to clean the razor blades, syringes, etc.», by type, %

Based on the responses obtained, much more attention is paid by the Department to the accessibility of disinfectants in male colonies. Always or sometimes

the disinfectants are available for one third (32%) of surveyed male convicts. In the female colonies, this indicator is almost twice lower (18%).

Thus, despite the positive trend of significant improvement in providing the means of individual protection to convicts, most of them believe that they do not have free access to disinfectants (two thirds of respondents) and condoms (22% of respondents were provided with condoms last year). Male convicts were more often provided with means of individual protection than female convicts. There is an extremely limited access to condoms for convicts in the juvenile correctional facilities. However, in these institutions the convicts have the best access to disinfectants.

There is an urgent need to improve the awareness of CES convicts on disinfectants, conditions of their application, opportunities to obtain free condoms, provision of specific practical advice on reducing the risk of infection with HIV/STI and other infections transmitted through blood. The PI staff members together with the representatives of HIV-service NGOs should also review the models of condoms distribution in order to choose those that ensure their maximum availability, considering the psychological characteristics of convicts, for example use containers with condoms in baths, toilet rooms and stalls.

1.3. Voluntary counseling and testing for HIV

As part of the response to HIV/AIDS in the institutions of the State Criminal-Executive Service it is relevant to motivate the convicts to voluntary HIV counseling and testing. A prerequisite for making by convicts the informed decisions about VCT is the provision of quality information by health workers and representatives of HIV-service organizations about the advantages of receiving these services.

The analysis of available data showed a negative trend for the reduction of the share of convicts aware on where to get tested for HIV. In 2007, 68% of convicts were aware of the places and conditions of VCT and in 2009 their share reduced by 11% (57%). The least aware on the subject are the convicts aged 16-19 years held in the juvenile correctional facilities (40%)⁵ and the most aware are the young people serving sentences in juvenile correctional facilities, 75%.

Generally, the 2009 data array shows that 44% of convicts were tested for HIV, including 44% of convicts held in penal colonies and 37% – in juvenile correctional facilities. Thus, the rate of coverage by VCT services throughout the monitoring period remained almost unchanged, since in 2004 it constituted 41% and in 2007 - 44%.

The relative number of vulnerable groups representatives that have been tested for HIV last year and know their results, according to national and international experts, contribute to the national response. Therefore, this indicator was included in the list of national indicators, for which Ukraine develops biennial reports to the international community on the effectiveness of HIV/AIDS response. It is calculated separately for each vulnerable to HIV groups, especially for convicts (Table 1.3.1).

Thus, within the last 12 months 12% of convicts were tested for HIV and obtained test results. For female convicts the indicator constitutes 17%, for male

⁵ The calculation of indicators for 2009 did not include the data on juvenile correctional facilities, as in 2004 and 2007 they were not included in the selection. The anwers of juvenile correctional facilities respondents were analyzed separately.

convicts - 11%. There are no differences by age groups: the importance of this indicator for 16-24 year old respondents is 11%, for people aged 25 and older - 12% (Table 1.3.1).

Table 1.3.1

Calculation of the national indicator #8 «Percentage of convicts tested for HIV within last 12 months that know their test results»

Numerator	Female		Male		Total	
	persons	%	persons	%	persons	%
1. Did you test within the last 12 months for HIV	40	20	147	15	187	16
2. We do not inquire about the test result, we are only interested whether you got it	88	44	270	27	358	30
3. The number of respondents that answered "yes" to the question 1 and 2	34	17	105	11	139	12

During 2004-2009 this indicator was the lowest, and compared to 2007, when it constituted 25%, the reduction almost doubled. The coverage by VCT services could be significantly larger if the study period was not limited to 12 months: 44% of respondents over the last few years participated in VCT, and two of the three of them know their results.

However, the value of the national indicator calculated based on the responses of convicts is below the official data on coverage by testing. According to the official data, within a year, 20% of convicts serving sentences in the institutions of CES Ukraine participated in VCT. Probably, they comprise the majority of "refusals" to participate in the survey, as the motivation for the re-testing within one year should be quite strong. It should also be mentioned that there are certain objective factors of the delays between the sampling of convicts' blood and convicts' familiarization with the laboratory results: many Pls are considerably distanced from the oblast or the Ukrainian Center for HIV/AIDS Prevention, there is an unstable departmental financing of health care costs etc.

Among the convicts-respondents ever tested for HIV, the vast majority (71%) underwent the test in the PI last time. One third (27%) of respondents indicated that they were tested prior to imprisonment. Among them, more often are the convicts serving relatively short sentences (up to 6 months). The 2% of respondents do not remember where they participated in VCT.

With advancing age, the proportion of convicts-respondents that were tested prior to imprisonment slightly increases. Among 16-19 year old convicts their share is 14%, and among 25 years and older – 29%.

In 2009 the list of main questions about the participation in VCT has been extended. New indicators enable to conduct analysis of conditions of respondents' testing for HIV, namely the observance of the principle of voluntariness and availability of pre-and post-testing counseling.

The data obtained showed that both prior to imprisonment and during imprisonment in CES institutions, the principle of voluntariness when testing for HIV, according to respondents was generally observed. Only 2% of convicts ever tested for HIV believe that they were forced to do so. The vast majority (80%) participat-

ed in VCT not only willingly, but on their own initiative, 11% were tested according to doctor's recommendation. Other (7%) respondents did not remember the circumstances in which the testing was conducted.

There are no statistically significant differences in the reasons for testing reflected in the responses of convicts that participated in VCT in PIs, and of those tested outside the colonies.

According to the Protocol of VCT, apart from direct blood collection, the patient is required to participate in pre-and post-test counseling. In the framework of the pre-test counseling, the doctor should explain to the patient what is "positive" and "negative" test result. Upon obtaining the results, in the course of post-test counseling the patient should be repeatedly reminded about the differences between the "positive" and "negative" results, and depending on the HIV status explained how to behave.

Among those who have ever been tested for HIV, the 69% of convicts received pre-test counseling and 19% did not receive the counseling, 12% found it difficult to answer to the question. Often, the basic information was not provided to patients tested in the PIs, (22%), and less often, patients tested prior to imprisonment, (12%).

Post-test counseling was provided to fewer respondents than the pre-test counseling – 62%, including 76% of those who already knew their test result. The 9% of respondents tested prior to imprisonment were not provided with relevant information, and 16% – of those tested in the colony.

The results of the survey showed that regardless of the place of respondents' participation in the VCT, the basic information within the pre- and post-testing counseling is often provided. However, in the Pls the cases of low quality counseling are observed more often than "outside the Pls". Moreover, the complexity of consultative work with convicts due to their psycho-social features, including low educational level, distrust and prejudice to the Pl staff, widespread fears and phobias etc should be highlighted. Also, it is necessary to consider the lack of health care personnel in CES institutions and high intensification of labor of HIV/AIDS consultants, whose functions are often entrusted to the heads of Pl medical units.

The important due to forming the commitment to participate in VCT is the analysis of convicts' motivation and reasons impeding the diagnosis. According to the data obtained, for the majority of convicts (at least 33% of respondents that participated in VCT) the participation in the VCT was not an informed choice (Fig.1.3.1). One out of three convicts chose the answer "there are many infected around, so just in case". This answer is more popular among male convicts (34%) than among female convicts (26%), as well as among young people. Among 16-19 year old respondents, 40% chose this answer, and among 25 and more years old – 31% of respondents.

Less often the convicts link their decision to their own risky behavior, such as drug use (23%) or unprotected sexual contacts (4%). Often, female convicts that experienced drug use (30%) are more aware of the threat of HIV infection, than male convicts with the same experience (21%), and also the respondents over 25 years of age (25%).

The results of the survey showed that 18% of respondents participated in VCT following doctor's recommendation provided during treatment. This option is often chosen by respondents aged 16-19 years.

Less important for convicts surveyed were other reasons, for example, ethical motivation, especially the fear to infect the spouse (11%).

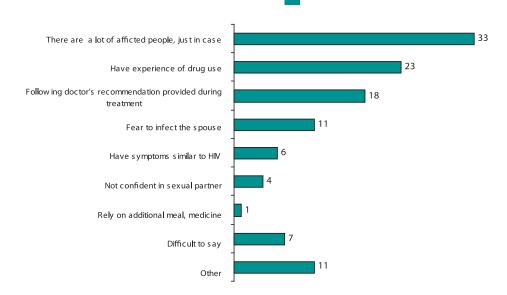


Fig. 1.3.1. The distribution of answers to the question: «Why did you decide to participate in HIV testing? (please state when was your last HIV test prior to this survey), % of ever tested for HIV (n=569)

However, among the main reasons impeding the testing for HIV in detention facilities (prisons, PIs), were the immature need (40%), lack of relevant suggestions (31%) and own ignorance of these matters (14%) (Fig. 1.3.2).

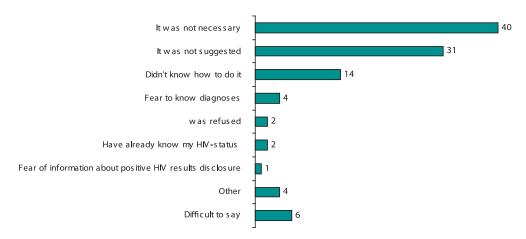


Fig. 1.3.2. The distribution of answers to the question: «If earlier you were tested for HIV, why you did not test in detention (prison, PI)», % of those never tested for HIV (n=731)

Male convicts more often tend to choose the answer "it was not necessary" (41%), while female convicts choose the answer "it was not suggested" (40%).

Thus, building the motivation for the informed participation in VCT by convicts of penitentiary institutions remains a current objective of the response to the epidemic in the penitentiary system. Moreover, particular attention should be paid to young men serving sentences in penal colonies. Despite the prevalence among 16-19 years old convicts the persons with the experience of risky behavior, among them there is the smallest number of tested and those who made informed decisions about participating in VCT. There is also an urgent need to improve the quality of pre- and **especially the post-testing counseling** of convicts, accelerate the process of obtaining tests results by convicts through the optimization of logistics of blood samples transportation for laboratory analysis and return of test results.

1.4. Coverage of convicts with preventive programs

One of the main objectives of the research was to evaluate the coverage of convicts by prevention programs – one of UNGASS indicators, which is included in the national report on the Implementation of the Declaration of Commitment on HIV/AIDS. According to UNAIDS methodology, for calculating this indicator it is necessary to determine the number of convicts aware on where to go for voluntary counseling and testing for HIV infection, and yet, over the past 12 months received condoms, including from NGOs (Table 1.4.1).

The percentage of convicts covered by prevention programs in 2009 was 15%, almost twice higher than in 2007 when it amounted to 8%. The significant progress by this indicator was achieved due to the significant improvement of provision of condoms to CES institutions at the cost of the Global Fund and the loan provided to Ukraine by the World Bank. In 2007 only 11% of respondents within the last 12 months were provided with at least one free condom, and in 2009 their number was 21%. However, the share of convicts aware on where to go for voluntary HIV testing decreased from 67% in 2007 to 58% in 2009.

Table 1.4.1

The calculation of the national indicator #9 "Percentage of convicts covered with prevention programs"

Numerator	Female		Male		Total	
	2007	2009	2007	2009	2007	2009
1. Do you know where you can voluntarily test for HIV?	64	65	68	57	67	58
2. Were you provided with condoms within the last 12 months, including by NGOs	3	15	13	22	11	21
3. Percentage of respondents that answered "yes" to the question 1 and 2	1	13	10	16	8	15

Although female convicts are better than male convicts aware of the places for testing, the level of coverage by preventive programs of male convicts is higher (16%) than of female convicts (13%). This is connected with better supply of male colonies with free condoms. By age groups no significant differences were observed: the level of coverage of 16-24-year-old convicts constitutes 14%, and convicts aged 25 years and older - 16%.

The data obtained reflect a positive trend in the increase of percentage of convicts covered by preventive measures. However, the volume of coverage remains insufficient. Special attention should be paid to the improvement of the access of convicts, especially female, to free condoms and improving the quality of informing the convicts about conditions and procedures for VCT in the institutions of the State Criminal-Executive Service.

However, in our opinion, the UNAIDS methodology does not provide an accurate reflection of the minimal amount of preventive measures needed in order to respond to HIV/AIDS in the penitentiary facilities. Debatable is the inclusion in the calculation of the national indicator of convicts' coverage with HIV/AIDS prevention of the indicator "the number of convicts who know where to voluntary test for HIV". Indeed, it is only one of the elements of health awareness raising, which also provides information on HIV transmission, methods of preventing the infection etc. Moreover, it is likely that among the respondents who know where to get VCT for

HIV infection would be those who don't care for colony and/or "liberty". Therefore, the question on voluntary testing in PIs should not be included in the calculation of the national indicator.

Similar is the situation with the inclusion in the calculation of the national indicator of the coverage with preventive programs of the indicator "the number of convicts provided with information about HIV/AIDS during their detention in penal colony". Indeed, the information on various aspects of HIV/AIDS (ways of transmission, prevention methods, etc.) can be obtained during communication with other convicts, visiting relatives, colonies staff members that were not trained to inform the convicts on these issues. Thus, such information may be incomplete or inaccurate.

Therefore, more significant, in our opinion, may be the indicator of the number of convicts provided with printed materials on HIV/AIDS and STI (brochures, booklets) or individual consultations with specialists in the penal colonies.

Thus, in calculating the national indicator "Percentage of convicts covered by preventive programs", in our opinion, the following aspects should be considered:

- the number of convicts provided with condoms within the last 12 months:
- the number of convicts provided with booklets/brochures on HIV/ AIDS and STI, or with individual consultations on these matters.

According to the results of the survey, the percentage of convicts provided with condoms, and at the same time, printed materials on HIV/AIDS or individual counseling, compared to 2007 increased by half – from 6% to 12% in 2009. Unlike last year, there were no significant differences between the coverage by preventive programs of female and male penal colonies – 13 and 10% respectively.

Also, no significant differences by this indicator by the type of colonies (for the first-time and repeat convicts) were recorded. The exceptions are the juvenile correctional facilities, where there were no convicts-respondents covered by preventive programs, primarily because of the lack of respondents who over the last 12 months were provided with condoms.

The data obtained on the coverage by prevention is somewhat lower than the similar indicators calculated based on UNAIDS methodology (12% vs. 15%), though we believe them to more accurately reflect the level of access of convicts of the State Criminal-Executive Service of Ukraine to a minimum package of HIV/AIDS prevention activiti.

2. CONVICTS' AWARENESS ON HIV/AIDS AND ATTITUDE TOWARDS PLWHA

2.1. The level of convicts' awareness on HIV/AIDS and STI

HIV/AIDS awareness

An important, albeit insufficient, prerequisite for a safe in the context of HIV/AIDS behavior is the awareness about the ways of HIV transmission and the possibility of reducing the risk of infection.

With regard to reducing the risk of HIV infection through sexual contact, the respondents were quite knowledgeable about the protective properties of condoms (86%). Substantially fewer respondents (66%) agreed that the reduction of the risk of infection can be also achieved by limiting their sexual contact to one faithful uninfected partner. The relatively low percentage of correct answers to this question is connected with peculiarities of provision of information to convicts of the institutions of the State Criminal-Executive Service. Due to the fact that a large proportion of convicts have the experience of risk behavior and do not have regular sex partners, they are instructed to refuse from unprotected sex.

The vast majority of affirmative answers regarding the need to regularly use condoms in order to reduce the risk of HIV infection relates only to vaginal sexual intercourse. The fact that HIV is transmitted during oral sex or anal sexual intercourse without using the condoms is known to relatively fewer respondents: 71% and 73% of respondents respectively.

The level of respondents' awareness on the fact that the presence of STI increases the risk of infection with HIV, compared to the rest of the questions dedicated to HIV/AIDS, is much lower and constitutes 55%.

In general, the convicts are quite familiar with HIV transmission through injecting and somewhat less – about HIV transmission from mother to child. Particularly, over 90% of the respondents know that HIV is transmitted by sharing needles and syringes for intravenous injections (92%) or non-sterile instruments for tattooing (93%). However, the possibility of HIV infection through common tools and materials for making drugs or their solutions is known to significantly fewer respondents – 73%. The fact that HIV is transmitted from an HIV-positive mother to her future child is known to 81% of respondents.

There still are some false perceptions of HIV/AIDS. Specifically, 78% of respondents know that an HIV-infected person may look healthy; others deny it (9%) or provide hesitating response (13%). Some of the convicts share the stereotypes about the possibility of HIV infection

in the household, including through sharing utensils or toilet/bath with HIV-infected person (11%) or via insect bite (14%). However, the fact that HIV is not transmitted this way is known to 74-77% and 67% of respondents respectively.

Aiming at conducting comparative and comprehensive analysis of the level of convicts' awareness about HIV/AIDS, the national and integrated indicators of awareness were designed. In particular, the proportion of convicts who correctly identify the ways of preventing sexual transmission of HIV and know how it is not transmitted (national indicator #14⁶) is 41%. This suggests that the level of convicts' awareness compared to 2007 when it amounted to 42% has not changed significantly. Moreover, there is an increase in the awareness of female convicts, which in 2009 constituted 43%, which is by 5% higher than in 2007. Among male convicts this indicator within the two years remained almost unchanged — 41% (43% in 2007). As before, the convicts aged 16 – 24 years show lower awareness (38%) than persons aged 25 years and older (43%). In addition, for the juvenile correctional facilities this indicator constitutes 54%, while for penal colonies for the first-time and repeat convicts – 41% and 40% respectively. The lowest level of awareness is observed among the convicts aged 18-24 years held in penal colonies. For this group the national indicator of awareness constitutes 38%.

The level of convicts' awareness is most precisely characterized by the integral indicator. It is calculated as a share of respondents who correctly answered 13 questions⁷ about the ways of transmission and ways to prevent HIV infection. Overall the array it constitutes 13%, whereby there are no significant differences between male (14%) and female (12%) convicts. The most knowledgeable respondents were aged 36-50 years and least knowledgeable – 18-25-years old; the value of the integral indicator for these groups is 20% and 9% respectively. For the repeat convicts this indicator is somewhat higher (17%) than for the first-time convicts (11%). Rather low is the integral indicator in the juvenile correctional facilities (7%) due to the fact that the percentage of correct answers for each of the 13 questions – on the risk of HIV infection for people who already have STI – was substantially lower than in the "adult" colonies.

Further, we shall analyze in more detail the awareness of convicts based on demographic and social characteristics. By certain types of Pls, the convicts of juvenile correctional facilities have the higher level of awareness on most issues than the convicts of penal colonies. This is connected with larger amounts of awareness raising activities and possibly with the introduction of interactive educational programs on HIV/AIDS in the juvenile correctional facilities implemented with support from UNICEF (Table 2.1.1).

Particularly, the respondents from juvenile correctional facilities are better aware of the way of HIV transmission from mother to child, and often deny the popular stereotypical allegations about the possibility of HIV infection in the household and that a healthy looking person can not be HIV infected. The only question, for which the awareness among adult convicts was significantly higher than among the respondents from juvenile correctional facilities, was about an increased risk of HIV infection if the person already has STD. At the same time, there were no significant differences between the first-time and repeat convicts' answers.

Is calculated based on 5 questions. For more details see Annex 2.

⁸ These questions are presented in Tables 2.1.1-2.1.3.

The level of convicts' awareness on HIV/AIDS by the type of colony, % of correct answers

INDICATOR	First-time convicts (n=650)	Repeat convicts (n=550)	Juvenile correctional facilities (n=100)
The risk of HIV infection can be reduced by having sex with one faithful uninfected partner*	65	65	72
The risk of HIV infection can be reduced, by proper use of condoms during each sexual contact*	85	89	83
A healthy looking person can be HIV-infected*	77	78	85
HIV can not be transmitted through insect bite	66	64	85
HIV can not be transmitted though sharing the same glass with the HIV-infected person*	76	76	88
HIV can not be transmitted through sharing the toilet/bath with HIV-infected person*	73	73	92
HIV can be transmitted through sharing injecting equipment with HIV-infected person	92	92	90
HIV can be transmitted from an HIV-positive pregnant woman to her future child	82	78	90
Person having syphilis or gonorrhea, has a greater risk of HIV infection	55	60	37
HIV can be transmitted through common tools and materials for making drugs, drug solutions	71	74	74
HIV can be transmitted during oral sexual contact without a condom	69	74	74
HIV can be transmitted during anal sexual contact without a condom	70	75	78
HIV can be transmitted by using non-sterile instruments for tattooing	92	93	94
National indicator*	41	40	54
Integral indicator**	11	17	7

^{*} The share of respondents that simultaneously provided correct answers to 5 questions marked (*).

Analysis of the level of respondents' awareness by gender shows that generally, the level of male and female awareness in 2009 was about the same, although on certain questions, female convicts demonstrated a small advantage compared to male convicts. The exception is only the awareness on the fact that regular use of condoms helps to reduce the risk of HIV infection and that HIV is transmitted during unprotected anal sexual contacts. The latest indicators are slightly higher for male convicts (Table 2.1.2).

^{**} The share of respondents that simultaneously provided correct answers to all the above questions.

The level of convicts' awareness on HIV/AIDS, by gender, % of correct answers

INDICATOR	Male convicts (n=11-00)	Female convicts (n=200)
The risk of HIV infection can be reduced by having sex with one faithful uninfected partner*	66	64
The risk of HIV infection can be reduced, by proper use of condoms during each sexual contact*	87	81
A healthy looking person can be HIV-infected*	77	82
HIV can not be transmitted through insect bite	66	72
HIV can not be transmitted though sharing the same glass with the HIV-infected person*	76	79
HIV can not be transmitted through sharing the toilet/bath with HIV-infected person*	75	71
HIV can be transmitted through sharing injecting equipment with HIV-infected person	91	96
HIV can be transmitted from an HIV-positive pregnant woman to her future child	79	89
Person having syphilis or gonorrhea, has a greater risk of HIV infection	55	60
HIV can be transmitted through common tools and materials for making drugs, drug solutions	72	78
HIV can be transmitted during oral sexual contact without a condom	72	69
HIV can be transmitted during anal sexual contact without a condom	74	65
HIV can be transmitted by using non-sterile instruments for tattooing	92	95
National indicator*	41	43
Integral indicator**	14	12

^{*} The share of respondents that simultaneously provided correct answers to 5 questions marked (*).

The dynamics of the level of awareness by years is ambiguous, but by most individual indicators there is a trend for its increase. In particular, it relates to the awareness on the increased risk of infection for people who already have STD, the possibility of HIV transmission through common tools and materials for making drugs or non-sterile instruments for tattooing, as well as on the stereotypes about the possibility of infection in the household or by the bite of insects (Table 2.1.3).

^{**} The share of respondents that simultaneously provided correct answers to all the above questions.

The level of convicts' awareness on HIV/AIDS, by years, % of correct answers

INDICATOR	2004	2007	2009 ⁸
The risk of HIV infection can be reduced by having sex with one faithful uninfected partner*	76	72	65
The risk of HIV infection can be reduced, by proper use of condoms during each sexual contact*	86	80	86
A healthy looking person can be HIV-infected*	82	80	77
HIV can not be transmitted through insect bite	58	60	65
HIV can not be transmitted though sharing the same glass with the HIV-infected person*	66	69	76
HIV can not be transmitted through sharing the toilet/bath with HIV-infected person*	59	68	73
HIV can be transmitted through sharing injecting equipment with HIV-infected person	93	82	92
HIV can be transmitted from an HIV-positive pregnant woman to her future child	78	79	80
Person having syphilis or gonorrhea, has a greater risk of HIV infection	50	50	57
HIV can be transmitted through common tools and materials for making drugs, drug solutions	62	70	72
HIV can be transmitted during oral sexual contact without a condom	67	66	71
HIV can be transmitted during anal sexual contact without a condom	76	68	72
HIV can be transmitted by using non-sterile instruments for tattooing	88	84	93
National indicator*	39°	42	41
Integral indicator**	***	13	13

^{*} The share of respondents that simultaneously provided correct answers to 5 questions marked (*).

Every second respondent (51%) considered his/her awareness on HIV/AIDS sufficient. Particularly, among the first-time and repeat convicts there were 49-51% of such respondents, and among convicts serving sentences in juvenile correctional facilities – 72%; among male convicts – 53%, female convicts – 41%. Much more optimistic about their awareness are the representatives of the oldest (51-62 years) – 68%, and the youngest (16-17 years) age groups – 84% vs. 48-54% of the remaining convicts. It turned out that convicts considering their awareness sufficient have some reason for optimistic estimates. Both national (51%) and integral (18%) indicators of awareness in this group of respondents are noticeably higher than those on the array (40 and 13% respectively), but still not high enough.

^{**} The share of respondents that simultaneously provided correct answers to all the above questions.

^{***} The calculation of the indicator was impeded by the changes in the toolkit.

⁸ The calculation of indicators for 2009 did not include the data on juvenile correctional facilities, as in 2004 and 2007 they were not included in the selection.

⁹ In 2004 the altered judgments were formulated differently: "Can HIV be transmitted through insect bite?", "Can you get HIV if you eat food prepared by an HIV-infected person?"

As previously mentioned, one of the most insidious for the convicts was the question about the risk of HIV infection in the presence of STDs. The survey data indicate that the general convicts' awareness on STDs is quite low. Specifically, 38% of the respondents ignored the question: "What symptoms of sexually transmitted diseases do you know?". Given that this question was open, the number of responses received is good and does not indicate the lack of awareness. However, the low level of awareness is reflected by other indicators. In particular, almost half (48%) of the respondents who answered this question indicated not the symptoms but names of STDs; 22% answered "don't know", and 5% – indicated that they know a lot of symptoms, but did not specify any of them (Table. 2.1.5).

Table 2.1.5

The distribution of respondents' answers to the question: «What symptoms of sexually transmitted diseases do you know?», % of respondents that answered the question (n=801) *

Excessive discharge	16	Ulcers	3
Rash on the body	7	Temperature	3
Discomfort when urinating (urethralgia)	6	Odor	1
Itch	5	Chancre	1
Inflammation (inflammation of lymph nodes)	3	Fungus	1
Weakening immunity, general weakness	3	Purulent rash	1
I know (though the symptoms were not indicated)			5
Don't know			22
The names of STDs were indicated			48

^{*} The sum exceeds100%, as he respondents could indicate several symptoms

Generalizing the survey data, it should be indicated, that only a quarter of respondents among those who attempted to answer this question, or 15% in the whole array provided the "correct" answer (specified one or more symptoms of STDs). However, in assessing this indicator it is important to note that the symptoms of STI are different for different diseases, and some of them can run almost asymptomatic, and 83% of respondents are aware of this (including 82% male and 91% female convicts). Thus, the lack of respondents' awareness on prevention, diagnosis and treatment of STI is obvious. This is a serious obstacle impeding proper perception by the convicts of information on HIV prevention.

In order to assess the influence of the amount and types of preventive interventions on the convicts' awareness, several factors, including the relationship between the different models of convicts' awareness raising and indicators of their knowledge were analyzed. Namely, we analyzed the distribution of national and integral indicators depending on whether the respondent was provided with information on HIV/AIDS by NGOs representatives.

For convicts that worked with NGOs representatives, the national indicator of awareness is 57%, while for the rest of the respondents – 44%. The value of the integral indicator for representatives of these groups is 19% and 15% respectively.

Generally, the respondents covered with awareness raising activities have a higher level of awareness on HIV/AIDS compared to the rest of the convicts. Despite the hypotheses of the research, the awareness of information measures participants does not depend on the form in which they receive the information. The differences between the national indicators of awareness of the group of convicts that received information on HIV/AIDS only in the passive form (special stands/posters/letters on the territory of the colony, on the walls of the dormitory, in medical units, booklets/brochures on HIV/AIDS) and those covered with additional awareness raising activities (lectures, individual consultations with health workers/psychologists, trainings etc.) are not significant: 51% and 48%. The lack of differences in the awareness of these groups is confirmed by the calculation of the integral indicators: 18% and 16%.

On the one hand, this conclusion can be partly explained by the participation in trainings on HIV/AIDS of convicts with low awareness on the topic. On the other hand, the data obtained indicate the need to review the content and improve the quality of information provided to convicts during active information provision activities, including lectures, individual consultations with health workers/psychologists, communication with other convicts, representatives of churches, video lectures, trainings, mutual support groups, trainings for volunteers, drug addicts.

However, based on the calculations conducted, the relationship between the coverage of convicts by HIV/AIDS prevention programs and their level of awareness on the sexual transmission of HIV, calculated by UNAIDS method¹⁰ is very weak. The Pearson's coefficient (r) in this case constitutes 0,12 at 0.01 level of significance. That is, these indicators have little mutual dependence.

A slightly better (but still weak) correlation appeared between the preventive measures and the integral indicator of convicts' awareness. It is connected with the bigger number of questions about the main ways of HIV transmission (total 13) included in the integral indicator of awareness. The Pearson's coefficient constituted 0,16 at 0.01 significance.

Table 2.1.4

The correlation of coverage by preventive programs and the level of convicts' awareness

Indicators of awareness	Coverage by HIV/AIDS preventive programs		
	Pearson's coefficient (r)	Significance	
The national indicator of convicts' awareness	0,12	0,01	
The integral indicator of convicts' awareness	0,16	0,01	

These results indicate, on the one hand, that the method of calculating the national indicator of coverage by preventive programs does not sufficiently take account of the task of raising convicts' awareness on HIV transmission and means of preventing the infection. At the same time, they confirm the lack of attention of the organizers of preventive measures paid to the coverage of the issue of convicts' testing for HIV infection. In addition, the component of harm reduction programs – condoms distribution – is often implemented separately from the quality awareness raising activities.

Thus, the level of respondents' awareness on most aspects of HIV/AIDS prevention (ways of transmission, conditions preventing infection, diagnosis) slightly increas-

¹⁰ Coverage by preventive programs – NI #9. The level of awareness – NI #14.

ed compared to 2007. Despite the positive dynamics, the level of convicts' awareness remains quite low. This is confirmed by the comparative analysis of the national and integrated indicators. The lowest level of awareness is observed among the respondents aged 18-25 years serving sentences in penal colonies. The preventive work with such convicts is complicated by their low educational level, lack of positive experiences of socialization and communication that are often associated with early experience of drug use. This factor significantly impedes the perception of information on HIV/AIDS, and makes it impossible to refuse from the risk behavior. Among all the HIV/AIDS – related issues for which the convicts' awareness was examined, the lowest level of awareness was demonstrated about the risks of STI. Particularly, less than half of the respondents know that their presence significantly increases human vulnerability to sexual transmission of HIV infection.

2.2. Convicts' attitude towards PLWHA

An important component of HIV/AIDS awareness raising is tolerance to PL-WHA. Some convicts are prejudiced towards HIV-positive people, which is expressed in the unwillingness to interact with them in everyday life. Moreover, the stigmatized perception of people living with HIV/AIDS is more prevalent among men than among women.

Specifically, 15% of respondents indicated that they would ask to be transferred to another team or to other job in order not to work with HIV-positive convicts (17% male and 4% female convicts). Similarly, 16% of respondents admitted that they would attempt to change for another table in the dining room, if one of their neighbors were HIV-positive (18% male and 5% female convicts). About 3/4 of respondents said that they wouldn't do so.

Most respondents (87%) expressed their willingness to assist and support their friends, if they find that they are HIV-positive (86% male and 92% female convicts).

The level of tolerance for people living with HIV significantly depends on the age of respondents: 16-24 year old convicts are more prejudiced towards people living with HIV than the older age groups representatives. Specifically, 20% of young respondents said that they would try to change the team/job in order not to work with HIV-positive people; 23% – would ask for another table in the dining room, if one of the neighbors were HIV-positive. Among the respondents aged 25 years and older, the similar indicators constitute 12%. However, the level of readiness to help their friends if finding out that they were HIV positive is the same for both age groups and constitutes 86-87%.

There were no significant differences found as for the studied indicators between the penal colonies for the first-time and repeat convicts. However, the representatives of the juvenile correctional facilities showed slightly more prejudice towards people living with HIV than other respondents, but this is obviously connected with their age group.

It is also worth noting that during the study period the level of tolerance of convicts towards HIV-positive people slightly increased. According to 2004 survey results, the proportion of respondents who tried to change job/team in order not to work with HIV-infected persons was 24% and the proportion of convicts ready to

¹¹ The calculation of these indicators did not include the data on juvenile correctional facilities, as in 2004 and 2007 they were not included in the selection.

support HIV-infected friends was 68%, whereas in the current year the similar indicators constituted 15% and 85% respectively¹¹. In the course of 2007 survey, the questions dedicated to people living with HIV stigma, were formulated differently, so the data obtained are not subject to comparison.

Thus, most respondents are fairly tolerant towards people living with HIV; at least they are not going to avoid household contact with them (74-78%). There is an even greater proportion of those willing to help their friends if they appear to be HIV-positive. The tolerance tends to spread: during the monitoring period, the share of people ready to interact with PLWHA in everyday life and sympathizing them gradually increased. However, the discriminatory attitudes towards HIV-positive reflected in the projective models of behavior, like "trying to stay away from them" are still observed. Thus, the integral indicator of tolerance, calculated as the share of respondents that expressed their willingness to help HIV-infected friends, and said that they were not going to change their job or table in the dining room in order to avoid a neighborhood of people living with HIV in 2009 constituted 64%.

Thus, the problem of tolerance towards PLWHA is most relevant for adolescents and young people under 25 years (the integral indicator of tolerance is 57% versus 68% for older respondents) and male convicts (61%) that were significantly less tolerant, than female convicts (82%).

3. RISK BEHAVIOR OF CONVICTS

Analyzing the data obtained on the prevalence of risky behaviors among convicts it is necessary to take into account the fact that they were too optimistic. In the institutions of the State Criminal-Executive Service the homosexual relationships are condemned, and the storage and use of drugs, syringes and instruments for tattooing is prohibited by the "Internal code of conduct". That is why part of the respondents either do not provide frank answers to questions on the risky behaviors or do not respond to them at all. In this survey, this block of questions was ignored by 3-6% of the respondents, and the questions about the use of different types of psychoactive substances by even more respondents (11-28%). Furthermore, answering the questions that required the estimation of prevalence of certain risky behavioral practices in CES institutions, along with their own variant of answer to this question, some respondents stated: "There are no such practices in our colony".

3.1. Drug injecting

Most convicts have experienced the use of different psychoactive substances: 56% of respondents confirmed the use of drugs, including 35% – the use of drugs by injecting. Some convicts continued to use psychoactive substances, even in the PI (Table 3.1.1).

The 9%¹² of respondents confirmed drug injecting in the last 12 months, and 2% of respondents confirmed drug use over the last 30 days. The differences by the first of the indicated indicators between the male (10%) and female (6%) convicts as well as between the first-time (8%) and repeat (12%) convicts are minor. In the juvenile correctional facilities the cases of injecting drug use are rare (2 of 100 respondents). Also there are rare reports on the similar behavior among the youngest (16-17 years) and the oldest (51-62 years) age groups, while among the remaining convicts, the share of respondents who inject drugs, is not significantly different and constitutes 8-11%.

Moreover, the "first exposure" to drugs, especially non-injecting, occurs in very early age (Fig. 3.1.1).

The most risky in view of HIV infection is the practice of sharing syringes and needles. More than half of convicts (55%) of those who used injection drugs during the last 12 months used non-sterile instruments (Fig. 3.1.2).

¹¹ This indicator coincides with the percentage of respondents that confessed about the use of opiates, stimulants or methamphetamine in the colony.

The distribution of answers to the question: "What psychoactive substances did you use?">, % of respondents that provided an answer

	In the PI and out- side the PIs	Only outside the PIs	Only in the colony	Never injected drugs
Alcohol (wine, vodka, home brew, spirit, beer)	17	70	1	12
Cannabis (grass, anasha, hashish, cannabis, marijuana)	17	43	2	38
Opiates (tramadol/tramal, heroin, opium, black)	9	31	0	60
Stimulants (cocaine, amphetamine ("phen")	4	15	1	80
Methamphetamine ("speed", "pervitin", "Jeff", "crank", "crystal", "ecstasy», MDMA, etc.)	6	21	1	72
Hallucinogens (LSD etc.)	3	12	0	85

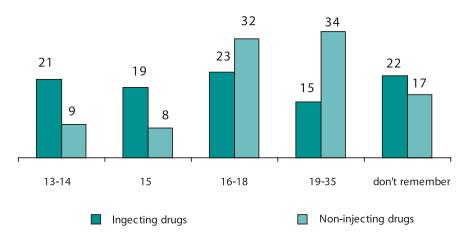


Fig. 3.1.1. The distribution of answers to the question: "In what age did you use drugs for the first time?", % to those injecting drugs within the last 12 months (n=122)

The use of hand-made equipment for drug injecting is, according to surveys, quite rare: it was used by 4 of the 122 respondents who used drugs during the last 12 months (3%), whereby 3 of them shared these instruments with other convicts.

In general, 5% of the respondents confirmed their experience of risky drug injecting, namely together with other convicts using syringes or hand-made instruments for drug injection in the PI. More often this kind of risky practices is common for repeat convicts (8%) than for the first-time convicts (4%). There are no such case recorded in the juvenile correctional facilities.

As regards the prevalence of risky behaviors associated with injecting drugs, by year, the share of convicts using drugs in the PI during 2004-2009 remained almost unchanged and constituted 7-10%¹³. Also, there is a stable share of those exposing themselves to the risk of HIV infection caused by the use of shared inje-

¹³ Hereinafter, the calculation of these indicators did not include the data on juvenile correctional facilities, as in 2004 and 2007 they were not included in the selection.

cting equipment: in 2004 their number was $59\%^{14}$ among those who used injection drugs, in 2007-60%, within the current study -62%, and after answering the filter question by those who said that they never shared syringes/needles: "Think again, was there a case when you used another person's syringe?", the latest indicator in 2009 constituted 58%.

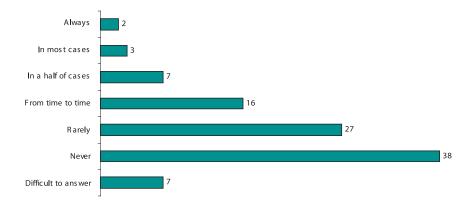


Fig. 3.1.2. The distribution of answers to the question: «How often within the last 12 months did you share a syringe or needle?», % to those injecting drugs within 12 months (n=122)

It is generally known that the experience of injecting drugs significantly increases the risk of HIV infection. This is confirmed by the data of bio-behavioral research. Among the convicts having experience of injecting drugs, 31% received a positive test result for HIV infection. Among the other convicts, this indicator is 6%. There is less difference in the levels of HIV infection among respondents who used injecting drugs during the past year (28%) and those who deny existence of such practices (13%). Possibly, this is connected with less sincerity of respondents when it comes to drug use in prisons. However, it may be the indirect evidence of the significantly restricted access of convicts to drugs due to implementation in PIs of the adequate supervision and regular operational activities.

3.2. Tattooing

Another risky in terms of HIV infection behavior model is tattooing with nonsterile instruments. The 12% of respondents indicated that they had a tattoo done over the past 12 months. Moreover, the three quarters of them believe that the instruments were sterile. Obviously, this estimate is too optimistic, as the ability of prisoners to adequately evaluate instruments sterility is doubtful.

Tattooing is more common among male convicts, especially among the representatives of the younger age groups. Particularly, the share of male respondents that decorated their bodies with tattoos is 14% compared with 1% of female respondents; for 16-24 year old convicts it is 19%, whereas for older respondents (25-62 years) – 8%. These services are most actively demanded by convicts during their detention in Pls for the period of 3 to 6 months, 16%.

Moreover, the prevalence of tattooing in CES institutions to some extent depends on the type of the colony. Thus, among the repeated convicts the tattooing is practiced almost twice more often (15%) than among those serving a sentence for the first time (8%). However, in the juvenile correctional facilities, this indicator

¹⁴ This indicator is calculated as a share of those who did not deny the practice of sharing injecting equipment (the answer "I never take someone else's syringes/needles")

is even higher than in the penal colonies for repeat convicts (19%), but this likely relates to the age of the respondents.

During the 2004 and 2007 surveys, the questions about tattooing were formulated slightly differently, making it impossible to correctly monitor the data by years.

The comparative analysis of the test results and answers of the respondents to questions about tattooing shows that given risky practice does not significantly affect the course of the epidemic among convicts. Out of all HIV-positive respondents only 6,5% (or 10 convicts) indicated that they had a tattoo done while serving the sentence. Most of these people living with HIV/AIDS have the experience of other risky behaviors such as injecting drug use (7 out of 10 respondents), risky sexual contacts (5 people underwent treatment of STDs). Only two respondents that received positive test results chose tattooing from all risky practices in the questionnaire.

3.3. Risky sexual behavior models

Given that the presence of sexually transmitted infections is usually the result of risky sexual behavior and simultaneously increases the risk of HIV infection, it is important to analyze the behavior of convicts as for their diagnosis and treatment.

According to survey results, 39% of convicts were ever diagnosed of STI, including 53% of female and 36% of male convicts. Half of the respondents (51%) reported on the lack of such experience. Other convicts found it difficult to provide an answer (9%) or refused to provide it (1%). These low indicators of STI testing caused some surprise because, according to the Procedure of medical care provision to persons held in isolators and corrective labor institutions of the State Department, the test¹⁵ for major STI id mandatory (syphilis and gonorrhea). Most likely, the distribution of answers received indicates the inadequate quality of counseling the convicts on those issues. This is indirectly confirmed by the interviewers. According to their reports, the respondents often applied for explaining the concept of "diagnosis" during the survey.

According to sociological data, with advancing age, the share of respondents diagnosed for STI increases from 26% among youth of 16-24 years old to 45% – among convicts of 25 years and older.

Among the respondents that confirmed the diagnosis for STI, 37% received treatment (every fifth respondent). Mostly these respondents are aged 25 years and older. Among them, 43% received STI treatment. Among the young people aged under 25 years, there only 16% of such respondents.

Based on available data, female convicts are more attentive to the state of their own reproductive health and are more aware on STI diagnosis. They more often confirm the experience of testing (53%) and treatment of STI (28%) than male convicts (36 and 20% respectively). In general, the data on the high prevalence of STDs indicate that there is a large proportion of convicts that experienced risky sexual behavior.

As for the risk of sexual transmission of HIV in penitentiary institutions, it is mostly associated with unprotected sexual contact between convicts and spouses visiting them. According to sociological data, sexual contacts between the convicts are less common. Thus, the experience of sexual relations with other convicts

¹⁵ Prisoners – upon arrival to colonies and annually – convicts – during serving the sentence.

was reported by the total of 54 convicts, representing 4% of the respondents. In addition, over one third of them (21 people) indicated using a condom during the last sexual intercourse.

The absence of the established practice of sexual contact between convicts in the PIs is confirmed by the assessment of the level of prevalence of this behavior model by convicts themselves (Fig. 3.3.1).

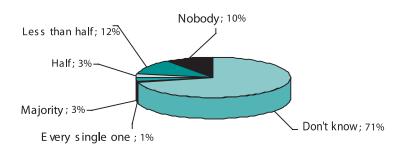


Fig. 3.3.1. The distribution of answers to the question: "What share of convicts to your opinion has sexual contact with other convicts?", %

Due to the fact that male convicts are more often visited by their wives than the female convicts by their husbands, the risky sexual practices are more common in male Pls. Thus, sex contacts with spouses for the past 6 months were generally reported by 11% of the respondents: 12% of male and 5% of female convicts. There are no significant differences between the first-time and repeat convicts. As for the age of the respondents, the sex contacts with spouses are most common among respondents aged 26-35 years (Fig. 3.3.2).

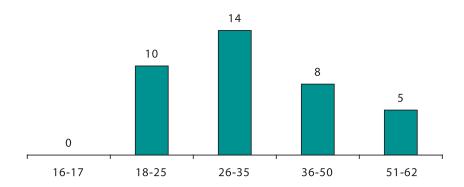


Fig. 3.3.2. Percentage of convicts that within the last 6 months experienced sexual contacts with their spouses, depending on the age of the respondents, %

Only 15% of the respondents who had sex with spouses during the last 6 months, practiced safe sexual behavior, that is always used condoms. Another 15% used them from time to time, the remaining (70%) – did not use condoms at all or did not want to answer this question. Only 18% of respondents indicated using a condom during the last sexual contact with spouse.

Thus, based on the data obtained, at least 10% of convicts practice unprotected sex with spouses visiting them and/or other convicts in the colonies¹⁶.

¹⁶ This calculation did not include the 8% of the respondents that provided no answer to the question on the use of condoms during sex contacts with spouses.

The prevalence of risky sexual behavior slightly increases over time due to the spread of unprotected sexual contacts with spouses. However, the share of convicts practicing sex contacts with other convicts remains almost unchanged. Thus, according to 2004 survey data, the experience of sexual relations with other convicts was reported by 6% of the respondents, in 2007 and 2009 their number was 4%. In 2004, about one-third of convicts who had sexual contact with spouses constantly used condoms; in 2007 the same indicator was 13%, in 2009 – 15%.

This tendency is somewhat unexpected, since the provision of condoms to convicts in 2009 compared to 2007 has doubled. The lack of apparent progress, namely the reduction of the level of risky behavior, we believe, is linked to the ineffective models of condoms distribution in Pls. This is evidenced, inter alia, by the following data:

- A large proportion of convicts have no free access to condoms. Even among the respondents provided at least once during the last year by free condoms, only half stated that if necessary they could always get a condom. The rest of the respondents depend on the visits of NGO representatives and/or work of medical units etc.
- Many condoms are provided to convicts that do not enter into sexual relations. Only 22% of the respondents who at least once during the last year received free condoms, reported about the experience of sexual relations with spouses or other convicts during the last 6 months and 2% provided no answer to this question.
- The distribution of condoms is not accompanied by convincing information provision on the benefits of safe sex, because most respondents who regularly (at least once a week) within the last year were provided with free condoms or have constant access to them, did not use condoms during their last sexual contact. This was reported by 31 of the 45 respondents who entered into such contacts with spouses and/or other convicts.

Thus, based on the survey data, the unprotected sex contacts with spouses are the most common practices in terms of the risk of HIV infection among convicts in the penitentiary institutions. By years, the share of respondents reporting on this pattern of behavior increases. However, the percentage of respondents who confirmed the practice of using non-sterile injecting equipment in PIs or having unprotected sexual contact with other convicts remains stable.

The integral indicator of risky behavior (percentage of respondents who practiced at least one model of behavior, risky in terms of HIV infection) constitutes 17%, including 18% – for male convicts and 10% – for female convicts. As for the representatives of different age groups, there is no significant difference between the young people aged under 25 years (16%) and the remaining respondents (18%). By a more detailed age classification, the highest – 22% – was the indicator for respondents aged 26-35 years, while for younger and older respondents it was 15% and 12% respectively.

4. HIV PREVALENCE IN CES INSTITUTIONS AND FACTORS OF INFECTION

According to the methodology, the bio-behavioral research envisaged provision of voluntary counseling and HIV testing to convicts that were included in the selection and agreed to participate in the survey. The test results showed that the prevalence of HIV infection among convicts serving sentences in the institutions of the State Criminal-Executive Service in 2009 was 15%. The prevalence is higher among female respondents (32%) than among male respondents (12%).

Almost two thirds of HIV cases (63%) involve prisoners aged 26-35 years. This corresponds to trends in the epidemic among the general population: the average age of people living with HIV/AIDS increases.

The level of HIV infection in PIs for repeat convicts is higher (18%) than among the first-time convicts (14%). No HIV-infected were found among the respondents from juvenile correctional facilities.

Among the identified HIV-positive convicts who participated in the survey, half were tested for the first time.

In order to conduct a determining analysis of HIV infection spread in the PIs, the method of multinomial logistic regression was applied. Using the logistic models several hypotheses about the factors of HIV infection among convicts were checked, namely:

- The share of HIV-positive convicts is higher among female convicts due to certain physiological and social factors.
- The share of HIV-positive convicts is higher in the older age group.
- The probability of HIV infection is much higher for those who experience drug injecting.
- The probability of HIV infection depends on the risky practices of convicts in PIs, namely: the use of non-sterile instruments to inject drugs, tattooing, unprotected sex with spouses and other convicts during serving the sentence.
- The probability of HIV infection is many times greater for repeat convicts than for the first-time ones.
- The probability of HIV infection increases proportionally to the number of times of serving the sentence.

In order to check these hypotheses, the four models were designed, that differ by the number of variables included in them. The design of several models was related to the fact that a number of variables analyzed, correlated with each other, namely:

- the age of convicts and the number of times of serving the sentence (r=0,3);
- type pf the PI and the number of times of serving the sentence (r=0,4);
- experience of injecting drugs during life and risky practice of injecting drugs during serving the sentence (r=0,3).

This means that inclusion of these variables to one model would lead to equation instability caused by the so-called problem of multicollinearity. Therefore, their values were tested in separate models.

Thus, with the help of the first model (Table 4.1) the influence of gender, age, experience of injecting drug use, i.e. variables that do not correlate with each other was analyzed. The second model instead of age included the number of times of serving sentences. With the help of a third and fourth model (Table 4.2) the influence of the type of colony was analyzed. Due to the fact that in PIs for juvenile convicts there were no cases of HIV infection detected, the influence of the type of colonies was examined only in the array of adult respondents held in PIs for the first-time and repeat convicts. The third model in addition to gender, age and type of PI, included a variable "the risk of injecting drug use in colonies". The last variable in the fourth model was replaced by the "experience of injecting drugs during lifetime". This approach allowed to compare the impact of related but still different variables.

The final models were built based on a large number of variables that affect the risk of HIV infection in the examined selection. The aim was to find the optimal model in terms of its explanatory power for the entire selection as well as for certain types of colonies. That is, in the final models there were only variables that are statistically significant predictors of HIV infection and correlate with each other: gender, age, type of colony (for the first-time and repeat convicts), the number of times of serving the sentence (one, two, three or more times), experience of drug injecting and risky injecting of drugs in PIs. The final models did not contain questions about other risky practices, such as sexual contacts with spouses and other convicts without condom, using non-sterile tattooing instruments in the PI for the last 12 months and the experience of STI treatment during lifetime. This is due to the fact that the above factors were not significant, or these groups were too small, which made it impossible to calculate the statistically significant coefficients. Also, the statistically proven relationship between the HIV status and the period of stay in PI, experience of treating STI was not found.

The models based on selections from 1278 to 1198. They do not include respondents that did not answer certain questions. The number of HIV-positive in all models is the same (190 respondents), that is models differ only by the sets of risk factors, and the internal structure of the selection (given the characteristics of the HIV-positive) remained identical.

The chances of HIV infection were evaluated in comparison to the so-called reference groups:

- 1) The chances of men to get HIV were compared to the chances of women.
- 2) All age groups were compared to the age group of 35 years and older.
- 3) The repeat convicts were compared to the group of firs-time convicts.
- 4) By the number of times of serving the sentence: the group of those serving the sentence for the second, third and more time was compared to the group of first-time convicts.
- 5) The convicts that experienced drug injecting were compared to the group of those who did not have such experience during the lifetime.
- 6) The convicts that reported on the practice of risky drug injecting during serving the sentence in the PI were compared to the convicts that denied having such experience.

Below are the results of the logistic regression.

Results of the logistic regression on the chances of HIV infection, all coefficients (exp(B)

	Model 1 (N=1278)	Model 2 (N=- 1211)
Men (compared to women)	0.388***	0.312***
Age group of 16-19 years of age (compared to the group of 35 years and older)	0.211***	-
Age group of 20-24 years of age (compared to the group of 35 years and older)	0.311***	-
Age group of 25-34 years of age (compared to the group of 35 years and older)	1.358*	-
Second time convicts (compared to the first-time convicts)	-	1.797**
3 or more times of serving the sentence (compared to the first-time convicts)	-	2.543***
Convicts with the experience of drug injecting (compared to the group denying having such experience)	7.067***	6.814***
Intercept (B)	-1.884***	-2.204***
Pseudo R-sq: Cox & Snell	0.159	0.145
Pseudo R-sq: Nagelkerke	0.280	0.258

The level of significance: *: <0.1, **:< 0.01, ***:< 0.001

In all the models men have less chances of HIV infection than women. On average, the chances to detect HIV among men are by 61-69% lower in comparison with women.

The age of the respondents is also a strong predictor, explaining the significant variation of the first model. It turned out that the chances to detect HIV infection among 25-34-year old convicts are in 1,3 times higher than in the age group of 35 years and older. Less than for the reference group, are the chances of HIV infection among convicts of 16-19 and 20-24 years of age – by 79% and 69% respectively.

Within the replacing in the second model of the age with the number of times of serving the sentence, the influence of the last variable appeared much stronger. Compared to a group of prisoners serving sentences for the first time, the probability to detect HIV among the sentenced for the second time almost doubles (1,8). Even greater is the chance to detect HIV infection among convicts serving the sentence for the third or more times (by 2,5 higher than among the first-time convicts). Moreover, in the second model the risk of HIV infection among women increases (Table 4.1).

However, the strongest predictor of HIV infection among convicts was the experience of injecting drugs during lifetime. The chances of the representatives of this group to have HIV are on average by 7 times higher than of those who never injected drugs.

In order to check the hypothesis on the influence of the type of PI and risky injecting of drugs on the probability of HIV transmission, to the third and fourth models the relevant variables were introduced and the variable "the number of times of serving the sentence" was excluded (because of correlation with the variable "type of PI") (Table 4.2).

For the third model the strongest predictor of HIV infection is the risky injecting of drugs during serving the sentence in the PI, and in the fourth it is the experience of injecting drugs during lifetime. Thus, the last factor is three times stronger than the previous one. For convicts practicing injecting the drugs in PIs with the help of non-sterile instruments, the chances to detect HIV infection is by 2,4 times higher than for those who denied the existence of such experience (third model). And the probability to detect HIV infection among convicts that experienced injecting drugs during lifetime is 7 times higher than among those that did not report on such practices (4th model).

Significant differences in the explanatory capacity of the two indicators of HIV risk practices are partly related to the insincere answers of respondents to the questions related to the experience of injecting drugs with non-sterile instruments during serving the sentences in CES institutions. However, the objective factor limiting the access of convicts to drugs is the control and operational measures implemented in the PIs.

Table 4.2

Results of the logistic regression on the chances of HIV infection, all coefficients (exp(B), for respondents of 18 years of age and older

	Model 3 (N=1198)	Model 4 (N=1198)
Men (compared to women)	0.313***	0.350***
Age group of 18-24 years of age (compared to the group of 35 years and older) ¹⁷	0.404***	0.382***
Age group of 25-34 years of age (compared to the group of 35 years and older)	1.523*	1.411*
Pls for the repeat convicts (compared to the group of first-time convicts)	1.464*	1.375*
Convicts with the experience of drug injecting (compared to the group denying having such experience)	-	6.938***
Convicts that confirmed the risky injecting of drugs in the PIs (compared to the group denying having such experience)	2.440***	-
Intercept (B)	-1.061***	-1.988***
Pseudo R-sq: Cox & Snell	0.070	0.157
Pseudo R-sq: Nagelkerke	0.121	0.270

The level of significance: *: <0.1, **:< 0.01, ***:< 0.001

The influence of type of PI on the probability of HIV infection among convicts is less significant compared to risky practices. For respondents that serve sentences in PIs for repeat convicts, the chances to detect HIV infection are by 1,4-1,5 times higher than in the PIs for the first-time convicts, mostly due to the accumulation of risks. However, the level of coefficient significance, unlike the rest, is smaller and constitutes + -10%.

Almost the same as the type of the PI is the explanatory power of age. Thus, the chances of 25-34-year old convicts to have HIV infection are by 1,4-1,5 times higher than in the oldest group (35 and more years). For the youngest group (18-24 years) this probability is lower by 60-62%.

 $^{^{17}}$ Due to the small size of the youngest age group (18-19 years) in 3 and 4 models it was combined with the group of 20-24 year olds.

Thus, the results of logistic regression showed that more the more vulnerable to HIV infection are female convicts compared to male convicts. The hypothesis that older age groups have a greater risk of HIV infection was confirmed only partially. The highest probability of HIV infection is for convicts aged 25-34 years, while after 35 years of age this risk is reduces.

The significant factor for HIV infection is the number of times of serving the sentence and somewhat less important – the type of PI (for adult convicts).

The strongest predictor of the likelihood of HIV infection for all models was the experience of injecting drugs during lifetime. Quite strong is the predictor of use of non-sterile instruments for drug injecting in the PI. However, this factor has relatively smaller influence than the previous one, which, in particular, is connected with substantially restricted drug trafficking in penitentiary institutions.

The logistic models were unable to provide confirmation of the impact of risky sexual practices and tattooing in the PIs on the probability of HIV infection of convicts. However, the insincere or contradictory answers of convicts-respondents to all questions about risky practices in PIs should be taken into account.

CONCLUSIONS

The HIV/AIDS epidemic in Ukraine is still concentrated among the high risk groups. Among these groups, persons in the penitentiary institutions are one of the most significant in the spread of HIV. In 2009, 12% of all new HIV cases officially registered in Ukraine accounted for prisoners and convicts.

According to the results of testing during the bio-behavioral research, the level of HIV infection among convicts was 15%, including 32% of female and 12% of male convicts. The relatively higher level of HIV infection is observed among repeat convicts (18%), than among the first-time convicts – 14%. Among the convicts of juvenile correctional facilities no cases of HIV infection were identified.

Despite the growth in 2009 by a quarter of the number of tests for HIV, the proportion of new cases of HIV among PI convicts for the last five years remains at the level of 8-9%. This can be seen as a sign of certain stabilization of HIV infection in CES institutions.

The decisive role in the epidemic belongs to prevention activities. There is a positive trend of gradual increase in the volume of awareness raising on HIV/AIDS in CES institutions. Over the last six years the share of convicts provided with information about HIV/AIDS/STI during serving the sentence increased (+13%) – from 57% in 2004 to 70% in 2009. This indicator was the highest in the juvenile correctional facilities – 87%.

As in previous years, the main source of information on HIV/AIDS for the convicts is the health care workers of colonies. They were mentioned by the 54% of convicts – respondents. There is a gradual increase the volume of awareness raising of convicts provided by NGOs, especially in juvenile correctional facilities and penal colonies for the first-time convicts. Compared to 2007, the share of convicts provided with information on HIV/AIDS by NGOs almost doubled, and in 2009 reached 34%. In many penal colonies the heads/staff of SPS keep out of the arrangement of preventive measures. This source of information was indicated only by 19% of the respondents.

There is an accelerated rate of increase in the amounts of active information provision on HIV/AIDS, (lectures, individual counseling, trainings for volunteers, trainings for mutual support groups for drug addicts etc.). The convicts mention passive information provision (thematic stands/posters in Pls, in dormitories or medical units, distribution of booklets/brochures) very rarely. In 2004 77% respondents mentioned passive information provision and in 2009 their share was 53%. Most likely this reflects respondents' habituation to the external information carriers, which are not regularly updated.

The range of issues actively discussed with convicts during preventive measures gradually expand and include diagnosis and treatment of HIV-infected, antiretroviral therapy, tolerance to PLWHA etc.

There is a positive trend of improving the access of PI convicts to condoms and disinfectants. Compared to 2007, the share of convicts provided with free condoms in the colonies last year has doubled – from 11% to 22% in 2009. According to respondents' estimates, the availability of disinfectants improved – from 15% to 30% in 2009, but, as in previous years, male convicts have greater access to the means of individual protection than women. The distribution of condoms is not implemented in the juvenile correctional facilities.

The improvement in provision of colonies with condoms led to the increase of the national indicator of the coverage of convicts with HIV/AIDS prevention programs, calculated by the UNAIDS methodology. Thus, in 2009, 15% of convicts knew where to test for HIV infection, and at the same time were provided by condoms during the last 12 months. The same indicator of 2007 was twice lower -8%.

Unlike the second component, the first component of the calculation of the national indicator of the coverage with preventive measures has the negative trend, namely the share of convicts aware of the places of voluntary counseling and testing for HIV infection reduced – from 68% in 2007 to 57% in 2009. Moreover, the least aware was the youth of 16-19 years of age serving sentences in penal colonies. However, among their peers in the juvenile correctional facilities there is the highest level of awareness. Female convicts are better aware on where to be tested than male convicts.

During the period of monitoring, the level of coverage of PI convicts with services of voluntary counseling and testing was very high. According to the report of the SDUEP, in 2009, 20% of special contingent representatives were tested for HIV. According to the survey, the national indicator of HIV testing was lower: 12% of convicts were tested for HIV during the last 12 months and know their results, including female – 17% and male – 11% convicts. The relatively lower level of the national indicator is caused partly by the delays between the sampling of convicts' blood and convicts' familiarization with the laboratory results: many PIs are considerably distanced from the oblast or the Ukrainian Center for HIV/AIDS. However, mostly this is caused by the inadequate quality pre- and post-testing counseling. Many convicts- respondents tested for HIV infection in PIs reported that they were not provided with pre-test (22%) and post-testing (16%) counseling, and did not understand, according to interviewers, such concepts as "diagnosis" and "testing".

In 2007 the national indicator of testing was twice higher and constituted 25% (i.e. higher than the official annual data on the number of tests in CES). Probably this is particularly related to the peculiarities of the current survey: the need to test blood for HIV. Probably, majority of "refusals" to participate in the survey were expressed by the convicts that within the last year were tested for HIV and know the result, as the motivation for the re-testing within one year should be quite strong.

The level of awareness of respondents on most aspects of HIV prevention slightly increased compared to 2007. However, the level of convicts' awareness remains low, confirming the lack of dynamics of the national indicator of awareness. The share of convicts that in 2009 correctly defined the ways of preventing the sexual transmission of HIV and knew how it is not transmitted was 41%. This indicator was almost the same in 2007 – 42%. However, there is and increase in the awareness of female convicts, that in 2009 constituted 43%, which is by 5%

higher than the level of 2007. Among male convicts, the indicator for two years remained almost unchanged and constitutes 41% (in 2007 – 43%). As before, the convicts aged 16-24 years, demonstrated lower awareness (38%) than persons aged 25 years and older (43%). For the juvenile correctional facilities this indicator is 54%, while for penal colonies for first-time and repeat convicts it is 41% and 40% respectively. Thus, the lowest awareness on HIV/AIDS is observed among young penal colonies convicts under 24 years of age.

Although a small number of questions about STI did not provide for a detailed analysis of this aspect, the data obtained show: the awareness of convicts on other STI is lower than on HIV/AIDS.

Most respondents are fairly tolerant towards people living with HIV; at least they are not going to avoid a household contact with them (74-78%). There is an even greater proportion of those willing to help HIV-positive fellows. The level of tolerance tends to gradually increase. However, there still are discriminatory projective models of behavior towards HIV-positive people and, in particular, attempts to "stay away from them" (the integral indicator of tolerance is 64%).

The problem of forming tolerant attitude towards PLWHA is most relevant for adolescents and young people under 25 years of age (the integral indicator of tolerance is 57% versus 68% for older respondents) and male convicts (61%) that were less tolerant than female ones (82%).

The unprotected sex with spouses is the most common (9%), according to the survey, model of risky practices of convicts, which gradually increases with time. The share of respondents who confirmed using non-sterile injecting equipment to inject drugs (5% of respondents reported sharing syringes or home-made equipment for injection) or having unprotected sexual contact with other convicts (3%) remains stable. Quite probably, the indicators of the risky behavior appeared to be understated. Many respondents did not provide frank answers on the experience of risky behavior or refused to respond. However, there is a growing concern about the fact that even many convicts covered by preventive programs and provided throughout the year with condoms do not use them regularly.

To risky practices are more common for male than for female convicts. The risky behavior associated with injecting drug use is equally distributed in the age range of 18-50 years. A greater risk of infection with HIV and other infections transmitted through blood, due to tattooing, is common for young people aged 16-24 years, of infection through unprotected sex for persons aged 25-35 years.

The integral indicator of risky behavior is 17%, including 18% – for male and 10% – for female convicts. By age groups, the highest – 22% – was the indicator for respondents aged 26-35 years, for younger and older respondents it is 15% and 12% respectively.

The comparison of survey and testing results showed that risky sexual practices are less relevant to the course of the epidemic among convicts than the parenteral way. Most of HIV-positive convicts have the experience of drug use (81%), and injected drug use -74%. However, much fewer -32% of HIV-positive convicts - were ever provided with treatment of sexually transmitted diseases.

As for factors of HIV infection spread among convicts in the PIs, it is very difficult the objectively assess the situation due to denial or contradictory answers of respondents about the risky practices in prisons. According to available data, the 9% of all HIV-positive in the last six months had at least one sexual partner, including only 6% – confirmed the experience of risky sexual practices, and less than 4% – reported injecting drug use together with other convicts. Even if the data of

the bio-behavioral research on the risky practices in PIs can be considered understated, in any case most of the convicts are infected with HIV prior to detention.

Thus, the increase in the scope of prevention among convicts of penitentiary institutions has not yet provided for significant progress in the awareness of convicts or in the reduction of risky behavior. This calls for major review of the strategy and tactics of HIV prevention in CES institutions, focused not only on the increase in the volumes of information and distribution of condoms, but on really effective preventive interventions implemented on a regular basis.

RECOMMENDATIONS

Based on the lack of progress in the indicators of awareness and risk in terms of HIV/AIDS behavior of convicts during 2004-2009, analysis of the correlation of HIV test results and answers of the respondents, it can be states that the effectiveness of prevention in penitentiary institutions remains low. This shall require a thorough review of already existing programs and activities, provision of support to the most effective of them and elimination of gaps and barriers to their expansion.

Meeting these objectives is impossible without the coordinated political support and strengthening of leadership at both the national (from the staff members of the central office of SDUEP) and regional, local level (from the heads of oblast offices of the Department and PI staff).

This envisages as follows:

- inclusion to all regional programs of HIV prevention of treatment, care and support for HIV and AIDS patients and operational plans for their implementation, systemic awareness raising activities for prisoners and convicts, including the distribution of booklets, leaflets, condoms, provision of access of convicts to VCT services and treatment of HIV infection and opportunistic diseases;
- inclusion of SDUEP staff members to the regional coordinating councils on HIV/AIDS, more active interaction with coordinating councils members representatives of the budgetary healthcare facilities, especially AIDS centers, detoxication and STI clinics, centers of SSFCY;
- more active utilization of mechanism for forming consultative, expert and working groups to analyze the current regional trends in the epidemic and monitoring of the implementation of measures combating HIV/AIDS in the PIs;
- arrangement of regular trainings for PI staff, including coverage of modern strategy of epidemic response among convicts;
- active cooperation of PI managers with non-governmental HIV-service organizations, conclusion of agreements on cooperation in the field of HIV/AIDS awareness raising among convicts, providing them with means of individual protection, provision of care and support to PLWHA.

There is an urgent need to intensify he preventive programs focusing on the most effective measures and models of prevention of risky behavior among convicts. Therefore, the important components of HIV/AIDS prevention among convicts should be:

 Regular informing of all convicts on HIV prevention. Given the existing legal and regulatory framework, more active attention should be paid to the issue of HIV/AIDS/STI during the interviews conducted by the health care workers with the new arrivals in the quarantine department. Equally important is provision of regular broadcasting of radio lectures and updating of the content of stands in PIs, in dormitories for convicts etc. Especially acute is the need for provision of penitentiary institutions with thematic movies. Compared to radio lectures and brochures they are more acceptable and provide an easy source of information for convicts.

- Widespread use of interactive teaching methods under the joint efforts of PI social and psychological service and medical service staff, NGOs. Particularly, it is necessary to consider the possibility of using for convicts of penal colonies of teaching methods, developed with the assistance of UNICEF and are implemented in the juvenile correctional facilities (providing for their age adjustment). The effectiveness of these methods was proved by a significantly higher level of awareness of juvenile correctional facilities convicts compared to other convicts. Moreover, the emphasis should be laid on awareness raising among convicts aged 18-25 years, because they have the lowest level of awareness about HIV/AIDS.
- Attention during mass information activities and individual counseling paid to questions for which there was a small number of correct answers provided by the convicts, namely about the peculiarities of sexual transmission of HIV, transmission of HIV from mother to child and prevention of HIV infection through the indicated ways, STI, their symptoms, detection, consequences, in particular the statement that the presence of STI increases the risk of HIV infection.
- Informational activities, aiming at not only raising awareness of convicts but also at building their motivation to avoid risky behavior (at least to regularly use the disinfectants in case of possible contacts with the "dirty" tools and use of condoms in any kinds of penetrating sex).
- Improvement of the quality of the pre- and post-testing counseling and testing for HIV and major STD, organization of positive prevention, improvement of the accessibility of substance abuse treatment, improvement of the informing of convicts on the availability and accessibility of means of individual protection (disinfectants, condoms) including on the location and conditions of their provision. Special attention should be paid to informing on conditions and the possibility of VCT of convicts of 16-19 years of age.
- More efficient use of available means of individual protection. It is most appropriate to combine active dissemination strategies (condom distribution by health care workers during VCT, NGO representatives, SPS, volunteers following the information activities) and passive activities (placement in rooms for visits, baths or toilets of condoms, that can be unnoticeably be taken by convicts).
- Given the high rates of HIV infection among female convicts, all the female PIs should be provided with condoms. Particular attention should be given to provision of condoms in the rooms for visiting.
- Under any circumstances the signatures of convicts should not be collected for provision with condoms.
- Ensuring regular testing of convicts for major STI (syphilis and gonorrhea) in the PIs and their quality treatment.

There is a current task of improving the cooperation of SDUEP with international, national and local HIV-service NGOs.

In order to optimize the impact of harm reduction programs implemented by local NGOs with the support of ICF "International HIV/AIDS Alliance in Ukraine" and in conditions of limited resources, in the first place the support should be provided to preventive measures in PIs with the lowest indicators of information provision and most limited access to means of personal protection. The territorial principle (determination of regions with highest HIV rates as priority ones) should become secondary, as the penitentiary institutions provide for the concentrated community of the most vulnerable to HIV people.

The NGOs engaged in implementation of harm reduction programs in the PIs should attempt to provide for the work of permanent multidisciplinary team throughout the project. It is desirable that the convicts are visited during the year not only by the same social workers, but also by the same lawyers and psychologists that relatively rarely visit the colony. It is necessary to involve professionals – infectiologists to lectures and discussions aimed for a broad audience. The observation of these conditions shall increase the trust and interest of convicts and PI staff to prevention activities of NGOs.

ΔΟΔΑΤΚΝ

ANNEX1

Statistical data on HIV/AIDS according to the data of the State Criminal-Executive Service of Ukraine, persons

Year	First time HIV diag- nosis	Among them pat- ients with AIDS	Died of AIDS	The num- ber of HIV tests	% HIV+ Of the number of tested
2004	2588	267	88	24170	11
2005	2033	322	147	21697	9
2006	1848	357	130	24145	8
2007	2190	312	155	24742	9
2008	2127	299	138	22453	9
2009	2318	422	169	28625	8

The calculation of national indicators ¹⁸ Indicator #8:

«Percentage of convicts tested for HIV within last 12 months that know their test results – 12%»

Over the past 12 months, 12% of convicts were tested for HIV and obtained test results. For female convicts this indicator constitutes 17%, for male convicts - 11%. There are no differences by age groups: the value of this indicator for 16-24 years old respondents is 11% and for persons aged 25 and older - 12%.

During 2004-2009 this indicator was the lowest, and compared to 2007, when it constituted 25%, the reduction almost doubled. The coverage by testing could be significantly larger if the study period was not limited to 12 months: 44% of respondents over the last few years participated in VCT, and two of the three of them know their results.

However, the value of the national indicator of testing calculated based on the responses of convicts is approaching the official data. According to the official data, within a year, 15% of convicts serving sentences in the institutions of CES Ukraine participated in VCT.

Indicator #9 "Percentage of convicts covered with prevention programs –15%"

The percentage of convicts covered by prevention programs in 2009 was 15%, almost twice higher than in 2007 when it amounted to 8%. The significant progress by this indicator was achieved due to the significant improvement of provision of condoms to CES institutions at the cost of the Global Fund and the loan provided to Ukraine by the World Bank.

In 2007 only 11% of respondents within the last 12 months were provided with at least one free condom, and in 2009 their number was 21%. However, the share of convicts aware on where to go for voluntary HIV testing decreased from 67% in 2007 to 58% in 2009.

Although female convicts are better than male convicts aware of the places for testing, the level of coverage by preventive programs of male convicts is higher (16%) than of female convicts (13%). This is connected with better supply of male colonies with free condoms. By age groups no significant differences were observed: the level of coverage of 16-24 year old convicts constitutes 14%, and convicts aged 25 years and older - 16%.

The data obtained reflect a positive trend in the increase of percentage of convicts covered by preventive measures. However, the volume of coverage remains insufficient. Special attention should be paid to the improvement of the access of convicts, especially female, to free condoms and improving the quality of informing the convicts about conditions and procedures for VCT in the penitentiary institutions.

¹⁸ Carried out in compliance with the Resolution of the Cabinet of Ministers of Ukraine of December 13, 2004 #890-R "On monitoring and assessment of the effectiveness of measures ensuring control over HIV/AIDS epidemic by national indicators" and the Order of the Ministry of Health of Ukraine of May 17, 2006 #280 (by MoH version of 28.12.2007 #870)

Indicator #14:

«Percentage of convicts that correctly identify the ways of preventing sexual transmission of HIV and know how it is not transmitted – 41%»

The percentage of convicts that correctly identify the ways of preventing sexual transmission of HIV and know how it is not transmitted is 41%. Moreover, there is an increase in the awareness of female convicts, which in 2009 constituted 43%, which is by 5% higher than in 2007. Among male convicts this indicator within the two years remained almost unchanged -41% (43% in 2007). As before, the convicts aged 16-24 years show lower awareness (38%) than persons aged 25 years and older (43%).

The analysis of respondents' answers obtained shows a high level of convicts' awareness on the ways of preventing sexual transmission of HIV. The way of reducing the risk of HIV infection through the use of condom during every sexual contact is known to 86% of respondents.

Substantially fewer respondents (66%) agreed with the fact, that the risk of HIV transmission can be reduced by having sexual contact only with one faithful uninfected partner. The relatively low percentage of correct answers to this question is related to peculiarities of presentation of educational information to the contingent of convicts in penitentiary institutions. Due to the fact that a large proportion of convicts have the experience of risky behavior and lack regular sex partners, they are provided with guidelines on the regular use of condoms.

There is a high level of respondents' awareness on the fact that a healthy looking person can be infected (78%). This indicator, compared with previous years, remained unchanged.

During the last two years the percentage of convicts sharing the wrong ideas about the possibility of HIV infection in the households reduced. Currently, 77% of respondents know that HIV is not transmitted by sharing the utensils; 74% – by sharing toilets, baths, which respectively is by 8% and 6% higher than in 2007.

Due to the fact that many convicts have the experience of drug use, and injecting drug use remains one of the major ways of HIV transmission, the questionnaire, on which the survey of convicts was based, also included the statement that HIV can be transmitted by sharing a needle for injection with another person. This is known to 92% of respondents, which is by 11% more than in 2007. The right answers about injecting HIV transmission were provided by 97% of female and 91% of male convicts, 90% of respondents aged under 25 years and 94% from the group of 25 years and older. However, these data were not utilized to calculate the indicator.

Given the relatively high mobility of the contingent of convicts during the reporting period, the level of their awareness can be assessed as quite satisfactory and shows the significant amounts of awareness raising undertaken by health care and social workers of penitentiary institutions together with NGO representatives. However, the significant differentiation of the level of knowledge of convicts of separate institutions demonstrates the possibility of achieving significant progress by this indicator given that informational activities are implemented at the appropriate level in all juvenile correctional facilities and penal colonies.

Description of the selection for the national 2009 survey of convicts

Type of selection: multi-level, stratified, individual, with application of the quota method of selecting the respondents at the last level. In the course of surveying the respondents the following quota parameters were followed: age, sex, number of times of serving the sentence in the form of imprisonment (the first – time and repeat convicts).

Total population: persons sentenced to imprisonment, serving sentences in the institutions of the State Criminal-Executive Service of Ukraine aged 16 years and older.

Selected population: 1300 respondents in 24 penal colonies and 2 juvenile correctional facilities. Random (theoretical) selection bias is +/- 3%.

During the first stage of the selection the types of penitentiary institutions in which convicts serve sentences under the prescribed quota were identified. According to typologization specified by the penal law (Article 18 of the Criminal Procedure Code of Ukraine), adult persons sentenced to imprisonment serve sentences in penal colonies:

- with minimum level of security;
- with minimum level of security and general conditions of detention;
- with medium level of security;
- with maximum level of security.

The underage persons sentenced to imprisonment, aged 16-18 years, serve sentences in juvenile correctional facilities. Their total number is about 1,5 thous. convicts.

According to statistical data of the State Department of Ukraine for Enforcement of Punishment, the fair share of men sentenced to imprisonment, serve sentences in penal colonies with medium security level (about 109 thous. persons or 70% of the total number of convicts of penitentiary institutions).

The penal colonies with medium level of security are divided into the colonies for the first-time convicts and colonies for repeat convicts. The ratio of the number of convicts in these institutions is about 1:1:

- in penal colonies with medium level of security for first-time convicts there are around 53 thous. convicts;
- in penal colonies with medium level of security for repeat convicts there are around 56 thous. convicts.

The choice of these penitentiary institutions is justified not only by the significance of our representative selection, but also by ensuring obtaining reliable information during the survey. In the institutions with other levels of security the above would be impossible to achieve due to certain requirements (placement of convicts, limited access to some categories of convicts etc.).

As for female convicts, in order to conduct the survey it is feasible to determine penal colonies with minimum level of security and general conditions of detention, which similar to male colonies, are divided into colonies for the first-time convicts and colonies for repeat convicts. The total number of female convicts in these

facilities is about 6 thous. people, including about 4,5 thous first-time convicts and 1,5 thous. repeat convicts. Thus, the proportion for female convicts by the type of institutions is 3:1.

Based on the number of persons of the total population, the selected population constituted approximately one percent of the total population or 1300 respondents. The stratification of the selected population is performed by proportional ratio of the defined categories of convicts in total population and was distributed as follows:

penal colonies with medium level of security (among male convicts):

500 persons – first-time convicts;

500 persons – repeat convicts;

penal colonies with general conditions of detention (among female convicts):

150 persons – first-time convicts;

50 persons – repeat convicts.

juvenile correctional facilities (for adolescents):

100 persons

During the second stage of selection regions of Ukraine in which these penal colonies are located were defined. This step of forming the selection was conducted based on the administrative-territorial distribution and representation of the principal regions. In selecting the regions the indicator of prevalence of HIV infection among convicts of CES institutions was taken into account. Therefore, there is a relatively larger proportion of convicts serving sentences in penal colonies located in the Southern and Eastern regions.

The following regions were identified:

- 1. Central part Poltava, Cherkassy oblasts.
- 2. Northern part Zhytomyr oblast.
- 3. Eastern part Lugansk, Donetsk, Kharkiv oblasts.
- 4. Southern part Odessa, Mykolaiv oblasts, AR of Crimea.
- 5. Western part Lviv oblast.

During the third stage of the selection based on the proposed quotas in selected oblasts, two male penal colonies were determined in the oblasts. The breakdown of 1000 persons was calculated in equal shares – 50 persons in each institution:

2 penal colonies * 50 respondents = 100 persons in each oblast.

Adult female convicts are detained in 8 penal colonies, including five for the first-time convicts and 3 for repeat convicts.

For surveying the female convicts the two female penal colonies were identified:

- 1. Chornomorska penal colony of Odessa oblast #74 first-time convicts (50 respondents).
- 2. Penal colony of Kharkiv oblast #54 first-time convicts (50 respondents).
- 3. Penal colony of Chernihiv oblast #44 first-time convicts (50 respondents).
- Zbarazka penal colony of Ternopil oblast repeat convicts (50 respondents).

In this case it should be noted that not in all the regions selected these two categories of female convicts (first-time and repeat) serve sentences. It was therefore suggested to conduct a survey of female convicts in colonies located in the main regions: Southern, Northern, Eastern and Western.

Juvenile convicts are detained in 9 juvenile correctional facilities, including 8 for boys and 1 for girls. However, juvenile correctional facilities are located not in all regions of the survey and their size is much smaller than adult colonies. Therefore, for the survey of juvenile convicts two juvenile correctional facilities for boys were identified:

Poltava oblast, Kremenchuk (50 respondents)

Ternopil oblast, Berezhansk (50 respondents).

Thus, the total amount of selection is 1300 respondents, including:

1000 respondents in 20 male penal colonies,

200 respondents in 4 female penal colonies, and

100 respondents in 2 juvenile correctional facilities

During the fourth stage проводиться відбір респондентів у самій установі.

the selection of respondents is performed in the institution.

Penal colonies with minimum and medium levels of security consist of the following structural divisions:

- 1. division for quarantine, diagnostic and distribution;
- 2. division for resocialization;
- 3. enhanced control division;
- 4. division for social rehabilitation.

Most convicts are held in the division for resocialization. In other divisions convicts don't stay for long and their number could not practically affect the results of the survey.

The convicts held in the division for resocialization are distributed by branches of social and psychological service. The residential zone of penal colonies consists of local (limited) divisions, on the territory of which there are several branches of social and psychological service. As a rule, the branch of social and psychological service includes 100 convicts.

Thus, the survey covered convicts kept in the division for resocialization. In order to conduct the survey, in each institution five branches are determined (in female institutions – six). These branches are chosen so that they are not located in one local division. In each division 10 respondents are selected.

For selection of respondents the lists of convicts compiled by the social and psychological service should be utilized. Since the division consists of 100 convicts, the selection step is set to "10", i.e. starting from the "No. 10" every tenth convict from the division is selected. In case of convict's refusal to participate in the survey the next "No." is selected.

In case if during the selection of convicts there is a lack of the required number of respondents (10 people), then further selection by the same scheme should be continued among the convicts of the branch that was located in the same local division. The survey of respondents is held in classrooms or clubs.

Thus, the calculated selected population replicates parameters and significant elements of the total population, namely: the convicts kept in the institutions of the penitentiary system.

Region	n Penal colonies								Juvenile correctio- nal facilities	
	Male				Female					
	First-time	resp.	Repeat	resp.	First-time	resp.	Repeat	resp.	Title	resp.
AR of Crimea	#126	50	#102	50						
Donetsk oblast	#32	50	#87	50						
Mykolaiv oblast	#83	50	#53	50						
Kharkiv oblast	#12	50	#25	50	#54	50				
Cherkassy oblast	#62	50	#92	50						
Odessa oblast	#51	50	#14	50	#74	50				
Poltava oblast	#64	50	#69	50					Kremenchuk	50
Zhytomyr oblast	#4	50	#71	50						
Lugansk oblast	#19	50	#36	50						
Lviv oblast	#110	50	#30	50						
Ternopil							#63	50	Berezhansk	50
Chernihiv					#44	50				
Total		500		500		150		50		100

