Schedule for Implementation of the
National Programme for Preventing HIV Infections and Combating AIDS
for 2017-2021

JUSTFICIATION

On the basis of § 4 (1) of the Regulation of the Council of Ministers of 15 February 2011 on the National Programme for Preventing HIV Infections and Combating AIDS (Journal of Laws, item 227), the Coordinator of the Programme (National AIDS Centre), units subordinated and supervised by the Minister of Health, in collaboration with entities obliged to realize the National Programme for Preventing HIV Infections and Combating AIDS, named henceforth "Programme", prepares a schedule for the realization of the Programme and submits it to the Minister of Health, who, in accordance with § 4 (6) of the aforementioned Regulation, submits the schedule to the Council of Ministers for approval.

On the basis of Article 4 (1) of the Act on Prevention and Combating Human Infections and Control of Infectious Diseases of 5 December 2008 (Journal of Laws 2016, item 1886), the Council of Ministers can determine by regulation, programmes for preventing and combating specific infections or infectious diseases and drug resistance resulting from the epidemiological situation of the country or due to the necessity of adapting to international programmes, having in regard their effective implementation and providing health care to people whose particular vulnerability to infection is a result of the epidemiological situation. The state policy concerning HIV and AIDS has been set out in the Regulation by the Council of Ministers of 15 February 2011 on the National Programme for Preventing HIV and Combating AIDS.

The realization of the Programme is directed by the Minster of Health and the National AIDS Centre is the coordinator of the programme implementation. The competent ministers are the entities obliged to implement the Programme in accordance with the objectives of the Programme, local government administrational bodies and units subject to them constitute the entities obliged to implement the Programme. All entities obliged under separate regulations to develop and implement social policy strategies including social assistance programs, pro-family policies, promotion and protection of health, preventative and problem solving policies concerning alcoholism and drug

addictions, and public education participate in implementing the tasks of the Programme. Entities conducting activities that enable undertaking tasks included in the schedule for implementing the Programme or running campaigns supporting its implementation can also participate in implementing the tasks of the Programme. The Programme assumes undertaking activities in five areas:

1) Prevention of HIV infections within the entire society;

2) Prevention of HIV infections among persons with higher levels of risky behaviour;

3) Support and healthcare for HIV positive persons and persons suffering from AIDS;

4) International cooperation;

5) Monitoring.

The Schedule for Implementation of the National Programme for Preventing HIV Infections and Combating AIDS developed for 2017-2021 includes all of the abovementioned areas. A detailed substantive justification for the planned activities according to the structure is presented below:

I. Introduction

II. The HIV Epidemiology in the Republic of Poland

III. The HIV Epidemiology Around the World

IV. Programme Model

V. Social Diagnosis

VI. Financing

VII. Monitoring and Evaluation

I. INTRODUCTION

The policy of the Republic of Poland on combating the HIV/AIDS epidemic has been defined in the National Programme for Preventing HIV Infections and Combating AIDS.

Many years of experience, knowledge in the field of HIV/AIDS, predictions of the spread of the epidemic in our region as well as international policy justify the legislative initiatives and activities undertaken within the National Programme for Preventing HIV Infections and Combating AIDS. Developing and implementing the Programme create the basis for partnership in implementing public health programmes in the national and international arena.

The National AIDS Centre implements the tasks related to preventing HIV infections and combating AIDS on behalf of the Minister of Health. The activities of the National AIDS Centre are aimed at: limiting the spread of HIV infections and improving the quality of life of people infected with HIV and suffering from AIDS, their families and relatives through:

1) preventing HIV infections and providing adequate access to information, education and services concerning HIV/AIDS prevention,
2) improving the psychosocial quality of life of people living with HIV/AIDS, their families and relatives,
3) providing of ample access to diagnostics and ARV treatment,
4) improving the quality and diagnostic/healthcare accessibility for people living with HIV/AIDS and those vulnerable to HIV infections,
5) reducing HIV infections among children.

The National AIDS Centre implements a wide range of tasks related to international cooperation by actively participating in several international projects. The experience and international practices are translated into introducing world standards in prevention, diagnostics and therapy of people infected in the Republic of Poland.

The following editions of the Programme were implemented in 1996-1998, 1999-2003, 2004-2006, 2007-2011, 2012-2016.

Currently, the legal basis for these activities is constituted by the Regulation by the Council of Ministers on 15 February 2011 on the National Programme for Preventing HIV Infections and Combating AIDS.

In accordance with the provisions of the aforementioned regulation, the Coordinator of the Programme in collaboration with the entities obliged to implement the Programme, elaborates the schedule of the Programme, named hereinafter "Schedule" which covers in particular the tasks that contribute to achieving the objectives set out in the Annex to the Regulation.

The Schedule, set out for a period of five years, will determine: the type of task, target group, entities responsible for their implementation, indicators of task implementation and the year of implementation. The Coordinator will prepare and submit the Schedule to the Minister of Health prior to 30 June of the year preceding the commencement of the tasks set out in the Schedule. The Minister of Health will then submit the Schedule to the Council of Ministers for approval.

After the five-year edition of the Schedule has been finished, the entities obliged to implement the Program shall present the Minister of Health with a report on the tasks covered by the Schedule together with a summary of the period by 15 April of the following year. The Coordinator shall prepare a collective report on the performance of the tasks covered by the Schedule together with a summary of this period and will submit them to the Minister of Health by 15 May of the following year. The Minister of Health shall submit a report to the Council of Ministers for approval.

The present Schedule for implementing *the National Programme for Preventing HIV Infections and Combating AIDS* has been developed for 2017-2021 (according to § 4 (4) of the Regulation of the Council of Ministers of 15 February 2011 on the National Programme for Preventing HIV Infections and Combating AIDS). Representatives of public administrative offices, medical fields and non-governmental organizations participated in developing the Schedule.

Other Strategic Documents

The submitted *Schedule for Implementation of the National Programme for Preventing HIV Infections and Combating AIDS for 2017-2021* is consistent with the recommendations and commitments contained in international documents and strategic declarations, such as:

1) The National Health Programme for 2016-2020;
2) The National Development Strategy 2020;
3) The UNAIDS strategy to end the AIDS epidemic as a public health threat by 2030;
4) The WHO strategy for the health sector: 2016-2021 Global Health Strategies for HIV/Viral Hepatitis/Sexually Transmitted Infections (this document has been accepted by the 69th World Health Assembly);
5) UNAIDS Strategy: Fast Track to end the AIDS epidemic for 2016-2021;
6) Northern Dimension Partnership NDPHS Strategy 2020;
7) The declaration of the 2016 UN Assembly on the Fast-Track to End AIDS in the age of Sustainable Development (document in preparation);
8) EU Strategy: Activities to raise the level of quality of HIV prevention programs, Quality Action 2016;
9) Action Plan on HIV/AIDS in the EU and neighbouring countries: 2014-2016;
10) WHO: Consolidated strategic information guidelines for HIV in the health sector, 2015;
11) European Parliament resolution of the 20 November 2008 on the early diagnosis and early treatment of HIV / AIDS;
12) European Union Declaration (2008);
13) The Bremen Declaration *Responsibility and Partnership - Together against HIV / AIDS, EU (2007);*
14) The Dublin Declaration WHO, EU (2004);
15) The Vilnius Declaration EU (2004);
16) Declaration of Commitment on HIV / AIDS adopted by the General Assembly of the UN Special Session dedicated to the fight against HIV / AIDS (27 June 2001);
17) Beijing Action Declaration (Beijing 1995) and subsequent initiatives and actions aimed at implementing the Beijing Declaration and Platform for Action adopted at the 23rd Special Session of the UN General Assembly (June 2000);

1) Programme of Action of the International Conference on Population and Development (Cairo 1994);

II. THE HIV EPIDEMY IN THE REPUBLIC OF POLAND

Epidemic situation in 2015 – preliminary data

From the introduction of tests in 1985 until 31 March 2016:

1) 20,252 people have been infected with HIV in total;
2) 3,363 cases of AIDS have been detected;
3) 1,335 deaths have occurred.

The statistical data for 2015 provided below should be treated as provisional data which will be subject to updates in accordance with the rules of functioning of the epidemiological surveillance system and public statistics in the Republic of Poland.

The general epidemiological trends in 2015 remain similar to those of previous years. An increase in the number of newly detected HIV infections among men is still being observed: in 2015, there were 13% more cases than in 2014 (1,050 vs 927) and a stable trend of newly detected infections among women has also been noted. MSM remains to be the dominant group of transmission among men (78% of known routes of infection). Among women, heterosexual infections are dominant (table 1). The dominant age groups as regards infection among men is 25-29 years of age and among women 30-39 years of age.

Table 1. Newly detected HIV infections in 2015 (as of 2 February 2016) according to sex, age and way of infection.

	Men						Women					Sex n/a	Total
Age group	MSM	PWID	MSW	MtCh	n/a	total	PWID	WSM	MtCh	n/a	Total		
<15				1	4	5			2	4	6		11
15–19	2	1	1		10	14				1	1		15
20–24	50	1	4		95	150	1	3		11	15	4	169
25–29	78	3	5		154	240	2	5		13	20	3	263
30–39	105	12	15		242	374	4	16		52	72	9	455
40–49	34	10	15		98	157	2	10		24	36	2	195
50+	14	2	9		56	81	1	5		11	17	1	99
n/a	1	1			27	29				2	2	3	34
Total	284	30	49	1	686	1,050	10	39	2	118	169	22	1,241

Elaborated by: The National Institute of Public Health – The National Institute of Hygiene

MSM – men having sex with men; PWID – people who inject drugs MSW – men having sex with women; WSM – women having sex with men; MtCH – Mother-to-Child Transmission

Table 2. New AIDS infections in 205 (as of 2 February 2015) according to sex, age and way of infection.

	Men					Women					Total
Age group	MSM	PWID	MSW	n/a	Total	PWID	WSM	MtCH	n/a	Total	
<15								1		1	1
15–19											
20–24	1				1		1	1		2	3
25–29	3	1			4		1			1	5
30–39	11	15	4	12	42	1	6		2	9	51
40–49	5	8	1	9	23	3	6		1	10	33
'50+	3	2	4	4	13	1	4		2	7	20
Total	23	26	9	25	83	5	18	2	5	30	113

Elaborated by: The National Institute of Public Health – The National Institute of Hygiene

The number of diagnosed cases of AIDS in 2015 (113) is lower than in previous years. This figure might be underestimated due to a greater delay in registration than in the case of HIV infections. Table 2 presents the summary according to sex, age and risk group.

Table 3. AIDS related deaths in 2015 (as of 2 February 2016) according to sex, age and way of infection.

	Men					Women					Total
Age group	MSM	PWID	MSW	n/a	Total	PWID	WSM	MtCH	n/a	Total	
25–29								1		1	1
30–34				1	1		1		1	2	3
35–39	1	2		3	6		1			1	7
40–49	1	6	1	3	11	1	2		1	4	15
50+	2	2	1	3	8				1	1	9
Total	4	10	2	10	26	1	4	1	3	9	35

Elaborated by: The National Institute of Public Health – The National Institute of Hygiene

The number of deaths remains at a similar level as in previous years (table 3). This figure could be considerably underestimated. Table 4 presents the situation in particular

voivodships and draws attention to the high number of diagnoses in the Mazowieckie voivodship and the sharp increase in Silesia.

Table 4. Newly detected HIV infections, diagnosed cases of AIDS and deaths due to AIDS in 2015 (as of 29 February 2016) according to voivodship of residence.

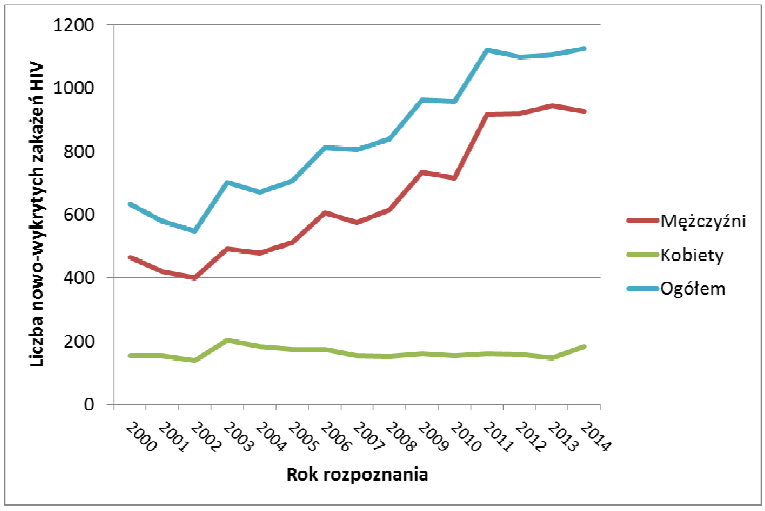
	Number:		
	Newly detected HIV infections	Diagnosed cases of AIDS	Deaths
DOLNOŚLĄSKIE	127	25	10
KUJAWSKO-POMORSKIE	30	3	
LUBELSKIE	29	3	
LUBUSKIE	31	1	1
ŁÓDZKIE	88	13	2
MAŁOPOLSKIE	96	2	2
MAZOWIECKIE	253	9	1
OPOLSKIE	15	4	1
PODKARPACKIE	30	1	1
PODLASKIE	17	8	4
POMORSKIE	67	8	4
ŚLĄSKIE	173	14	3
ŚWIĘTOKRZYSKIE	10	0	
WARMIŃSKO--MAZURSKIE	22	5	3
WIELKOPOLSKIE	121	8	2
ZACHODNIOPOMORSKIE	50	9	1
N/A	82	0	0
Total	1241	113	35

Elaborated by: The National Institute of Public Health – The National Institute of Hygiene

General information concerning diagnosed infections

A particular dynamic in infections took place in the years 2000-2014 when 12,665 cases of the infection were registered. Throughout this period of time, the number of newly detected infections nearly doubled – from 548 cases in 2002 to 1,125 cases in 2014.

Graph 1. Trends in the number of newly detected HIV infections among men and women in Poland in 2000-2014.

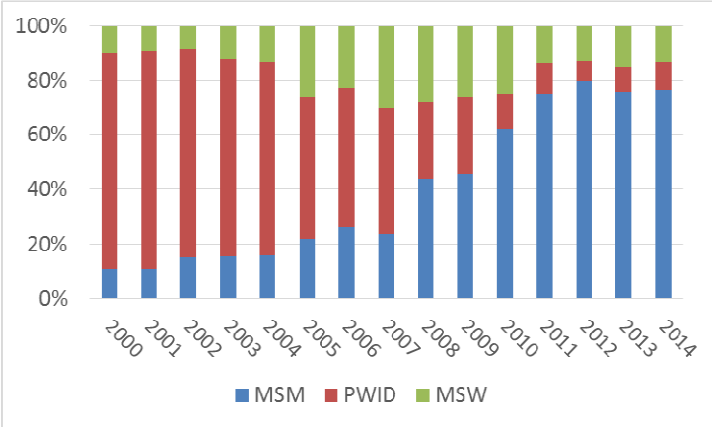


Elaborated by: The National Institute of Public Health – The National Institute of Hygiene

Liczba nowo-wykrytych zakażeń HIV – Number of newly detected HIV infections
Rok rozpoznania – Year of diagnosis; Mężczyźni – Men; Kobiety – Women; Ogółem - Total

An increase in the number of detected infections has been observed generally among men. Among women, the number of newly detected infections has remained at the same level with a slight increase in 2014.

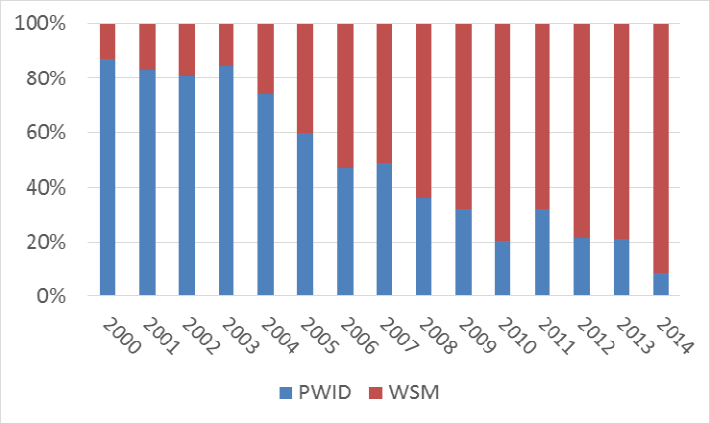
Graph 2. Percentage distribution of the main ways of transmission among newly diagnosed cases of HIV infections among men in the years 2000-2014 (excluding cases in which the way of infection was not reported and cases of vertically transmitted infections).



Elaborated by: The National Institute of Public Health – The National Institute of Hygiene

Among the 9,724 men diagnosed with an HIV infection in the years 2000-2014, the probable means of infection was not given in 58.3% reports. Graph 2 shows the change that took place in the analysed period of time concerning the probable means of infection (excluding cases in which the way of infection was not reported and cases of vertically transmitted infections. At the beginning of the 2000s, the predominant way of infection remained drug injections (2000-2001 – 79%) which gradually changed due to the downward trend in infections attributed to drug injections (PWID), and the increase of sexually transmitted infections. According to the percentage distribution graph, this was caused by an increase in the percentage of infections attributed to homosexual contact (MSM – Men Having Sex with Men), and heterosexual contact (MSW – Men Having Sex with Women) in the first half of 2000s (in the years 2011-2014 around 75% detected infections were MSM infections).

Graph 3. Percentage distribution of the main ways of transmission among newly diagnosed HIV infections among women in the years 2000–2014*.



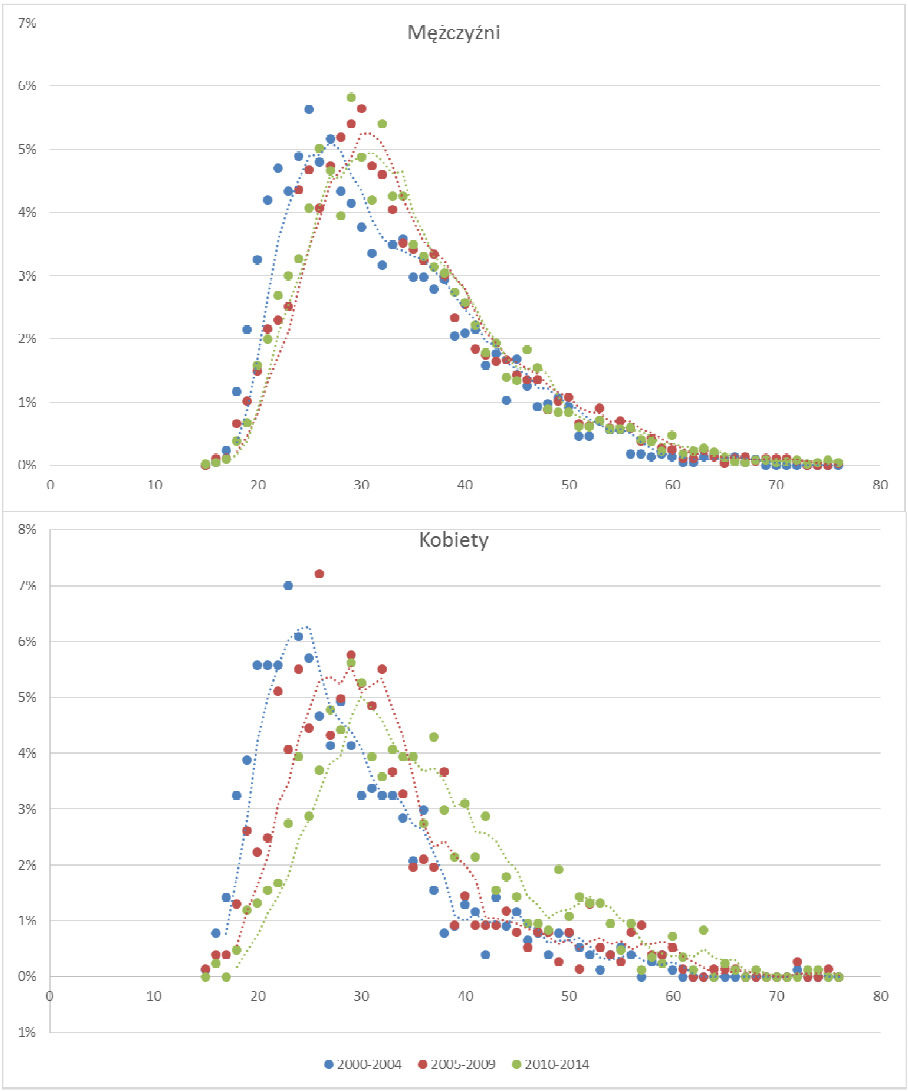
Elaborated by: The National Institute of Public Health – The National Institute of Hygiene

* This excludes cases in which the way of infection was not reported and cases of vertically transmitted infections. PWID – People Who Inject Drugs. WSM, women having sex with men.

A similar tendency can be observed among women (graph 3). At the beginning of the 2000s, newly detected infections were more frequently attributed to cases of PWID; however, in the years 2011–2014, 75% of infections were heterosexual infections (*WSM* - women having sex with men). This change is a result of the nine-fold decrease in the annual number of infections caused by psychoactive drug injections recorded in this period and the fourfold fall in the number of WSM infections.

Along with the change in the main ways of spreading the virus, the distribution of age at the moment of diagnosis changes.

Graph 4. The distribution of age at the moment of diagnosis of HIV infections among men and women detected with HIV infections in the years 2000–2004, 2005–2009, 2010–2014.



Elaborated by: The National Institute of Public Health – The National Institute of Hygiene

Mężczyźni – Men; Kobiety - Women

In the years 2000–2004, the age at which HIV infections were detected peaked at 25–28 years of age, and at around 30-32 years of age in the later period. Among women between 2000-2004, the peak was recorded for ages 22–25, which shifted to around 30 years of age between 2005–2009 and age 32 between 2010–2014 (graph 7). It also draws attention to the large percentage share (29%) among HIV infections detected

among women in the years 2010–2014 occurred among women aged 40. The corresponding rate among men rose by 24%.

Due to the higher frequency of infections detected in older ages and an increased survivability of infected people, the population of people with detected HIV infections is quickly aging. It can be estimated that among those living with diagnosed cases of HIV in 2014, 22% are people 50 years of age and older and 32% are people between 40-49 years of age. The current average age of people living with diagnosed cases of HIV infections is 42 years of age. The aging population of people living with HIV creates an additional challenge for social policy in the scope of professional social care. The HIV/AIDS problem is also varied in terms of territory.

Table 5. Detectability of HIV in the years 2000 – 2014 and the character of infections detected between 2010–2014 according to voivodships.

Voivodship	Number of newly detected infections and the indicator of newly detected infections per 100,000 residents						Diagnosed infections between 2010–2014				
	2000–2004		2005–2009		2010–2014		%women	%MSM	%PWID	%HET	trend
Dolnośląskie	575	3.9	576	3.3	597	4.1	19.3%	32.8%	31.1%	36.1%	+18.3%
Kujawsko-pomorskie	100	1.0	152	1.2	168	1.6	14.5%	77.8%	8.9%	13.3%	-1.2%
Lubelskie	73	0.7	69	0.5	186	1.7	15.8%	59.8%	5.7%	34.5%	+51.4%
Lubuskie	62	1.2	127	2.1	124	2.4	29.8%	30.8%	53.8%	15.4%	+17.5%
Łódzkie	245	1.9	241	1.6	253	2.0	21.3%	45.9%	14.8%	39.3%	+1.6%
Małopolskie	96	0.6	177	0.9	330	2.0	9.6%	74.2%	8.1%	17.7%	+62.9%
Mazowieckie	243	1.0	597	1.9	1295	4.9	12.4%	80.3%	5.4%	14.3%	-0.5%
Opolskie	53	1.0	69	1.1	122	2.4	20.5%	59.4%	18.8%	21.9%	+51.5%
Podkarpackie	58	0.5	61	0.5	117	1.1	17.1%	50.0%	14.6%	35.4%	+149.3%
Podlaskie	69	1.1	53	0.7	105	1.8	18.1%	40.6%	23.4%	35.9%	+16.5%
Pomorskie	196	1.8	176	1.3	275	2.4	11.1%	55.3%	8.8%	36.0%	-5.0%
Śląskie	301	1.3	251	0.9	611	2.6	14.2%	70.4%	18.4%	11.2%	-9.7%
Świętokrzyskie	24	0.4	40	0.5	63	1.0	3.3%	76.0%	0.0%	24.0%	+86.4%
Warmińsko-mazurskie	175	2.4	161	1.9	139	1.9	22.6%	45.0%	26.7%	28.3%	-43.8%
Wielkopolskie	96	0.6	209	1.0	435	2.5	9.8%	79.6%	7.0%	13.4%	+49.3%
Zachodniopomorskie	166	1.9	150	1.5	195	2.3	25.8%	43.8%	12.5%	43.8%	+19.1%

n/a	602	-	1015	-	391	-	17.1%	54.9%	7.8%	37.3%	+9.7%
Total	3134	1.6	4124	1.8	5406	2.8	15.4%	65.8%	11.3%	22.9%	+12.6%

Elaborated by: The National Institute of Public Health – The National Institute of Hygiene

In the years 2010–2014, the indicator of the number of newly detected HIV infections per 100,000 residents exceeded the national average in the Dolnośląskie and Mazowieckie voivodships. Particular voivodships also reveal various trends in newly detected infections. Between 2010–2014, the trend an upwards trend of 50% or more was reported in the following voivodships: lubelskie, małopolskie, opolskie, podkarpackie and świętokrzyskie. Generally these are voivodships located in the south-eastern region of the Republic of Poland where fewer infections have been detected to date.

The information provided above does not fully reflect the extent of the problem, because significant limitations in data obtained from routine reporting occur including a considerable level of incomplete data and frequent cases in which data is not provided. The estimated level of incompleteness shows that the detected infections could be significantly more, even over 40%.[1]

An equally important problem is the inability to evaluate if the increase in the number of newly detected infections is caused by the increasing amount of people tested for HIV or the increasing number of detected infections. We are most likely dealing with both processes.

Considering the limitations presented above associated with the availability of authoritative data, the following issues should be noted:

1) At present, the main problem which requires intensified preventative action in the Republic of Poland is the spread of HIV among men having sex with men (MSM). Due to the amount of bisexuals among the large MSM population (20% of MSM surveyed at VCT centers[2)] who declare themselves bi or heterosexual, 39% of the EMIS respondents have had at least one female partner in their lives and 9% within the last year.[3)] This increase can have a direct impact on the rise in the number of infections in women. Due to the noted increase of such infections among women, it would be advisable to conduct a more thorough examination of their causes;
2) The second tendency worth emphasising is the large proportion of infections in people aged over 40 among newly detected infections, particularly in the case of women. These trends, together with an increased survival cause that among people

living with HIV infections in 2014, people middle aged and older dominate (54% are people 40 years of age and older);

3) Among the voivodships there is a significant difference in the development of the epidemy. In several voivodships, there was an increase between 2005 and 2009 (mazowieckie, dolnośląskie, śląskie, pomorskie, wielkopolskie) where the epidemic has currently stabilized at a higher level. In the years 2010-2014, the most dynamic increase was observed in the voivodships where the lowest indicators have been observed to present, which can be evidence of a delay in the second wave of the epidemy (associated with the spread of the epidemic by means of sexual contact in particular among MSM) in relation to other voivodships.

Key populations

In the Republic of Poland, the HIV epidemic can still be described as an epidemic concentrated on two key populations: PWID and MSM. The frequency of the occurrence of HIV infection in other groups is significantly lower. This is also demonstrated in the number of detected infections in specific populations and in the analysis results of people taking HIV tests.

Available test results concerning the spread of the HIV infection in key populations have been presented in table 6.

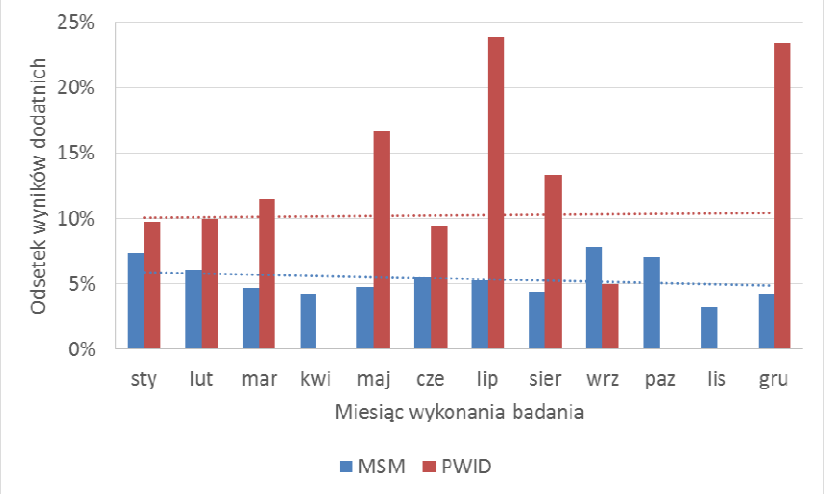
Table 6. The spread of the HIV infection in key populations in the years 2005-2014 according to available studies.

Target Group	Method	Interpretation of the studied indicator	Analysed period	Analysed area	Value of indicator	Source
MSM						
	Declared serostatus, on-line research, samples, N=2870	Frequency of detected infections in the MSM population	2010	Poland (overrepresentation Mazowieckie voivodship)	5.0%	EMIS study report[4]
	Serostatus of VCT clients, N=4726	Frequency of previously undetected infections	2013	Poland	5.6%	Report on ARV clients[5]
	Estimation based on several data sources	Frequency in the MSM population	End of 2009	Poland	2.3%	publication[6]
	Serostatus in cross-sectional studies, N=408	Frequency in the MSM population	2013	Warsaw	7.2%	SIALON II project report[7]
PWID						
	Serostatus of VCT clients, N=318	Frequency of previously undetected infections	2013	Poland	11%	Report on VCT clients
	Serostatus in cross-sectional studies, N=776	Frequency in PWID population	2004–2005	15 locations in 6 voivodships	18% (Warsaw 16%)	publication[8]
	Serostatus in cross-sectional studies, N=193	Frequency in PWID population	2008–2009	Gdańsk and Cracow	10.3%	Survey report[9]
	Serostatus in cross-sectional studies	Frequency in PWID population	2013	Warsaw	14.7%	Survey report[10]

Elaborated by: The National Institute of Public Health – The National Institute of Hygiene

The methodological differences in monitoring the epidemic situation, also in terms of territory, and the small number of cross-sectional studies conducted in the Republic of Poland, make it virtually impossible to follow trends over time. However, information regarding HIV tested individuals are available. The frequency of diagnosed HIV infections among respondents corresponds to the frequency of previously undetected infections; and, if it increases, it means that the number of new infections is higher than the number of detected infections and vice versa – if there it decreases, the number of new infections is lower than the number of detections. Trends in HIV detection in the MSM and PWID groups are shown in graph 8 (data for PWID and MSM are derived from the analysis of VCT client surveys). For the MSM population, the trend is decreasing slightly while it is increasing for the PWID population. Both, however, are statistically insignificant due to the small amount of PWID tests (318 people).

Graph 5. The Percentage of positive results among MSM and PWID in VCT centers in 2013



Elaborated by: The National Institute of Public Health – The National Institute of Hygiene

Odsetek wyników dodatnich – percentage of positive results; Miesiąc wykonania badania – month of conducting tests

Death caused by AIDS

In epidemiological surveillance in the years 1985-2014, 1,295 deaths of people with AIDS were noted. It should be kept in mind that the number of registered deaths can be incomplete. Deaths are recorded regardless of their cause, however it is possible to distinguish people who have died as a result of AIDS. This is possible by comparing the deaths recorded by the Central Statistical Office (Table 7). Between 2005-2014, 458 HIV related deaths were registered in the surveillance, while the same number according to the Central Statistical Office amounted to 1,219, i.e. 2.7 times more.

Table 7. The number of deaths of HIV infected people according to various source data.

	Number of deaths according to cause			
Year	CSO: B20 – B24	Surveillance: B20-B24	General Surveillance**	Among treated*
2005	121	44	65	66
2006	101	37	43	49
2007	123	56	61	76
2008	150	64	71	68
2009	94	36	46	46
2010	135	44	53	62
2011	130	57	68	97
2012	118	51	57	100
2013	123	38	46	107
2014	124	31	39	n/a

*based on the Report on the ARV treatment program implementation – reason for discontinuing treatment "death"

** reported deaths of HIV infected people, regardless of cause

Elaborated by: The National Institute of Public Health – The National Institute of Hygiene

In turn, European studies show that only around 30% of deaths of patients under care between 1999-2011 can be attributed to AIDS[xi]. Thus, it can be concluded that the registration of deaths from other causes is less complete and the total number of deaths of HIV infected people in Poland can amount to even 9,700.

The increasing number of deaths of people in antiretroviral treatment programs also draws attention. This is a result of the increasing number of people in this group. Mortality fell from 22.6 in 2007 to 15.0 in 2013 per 1,000 people in therapy. On the other hand, assuming that around 30% of deaths are AIDS related and comparing that to the number of deaths provided by CSO, it can be concluded that around 82% of deaths resulting from AIDS occur among people outside the ARV treatment program.

Table 8. Deaths of HIV infected people in the years 2005-2014 registered in the epidemiological surveillance system depending on the time of HIV detection and ARV treatment.

	Number of deaths			
Year	HIV detections within a year	>1 year from detecting HIV, untreated	>1 year from detecting HIV, treated	Total
2005	28	19	12	65
2006	20	19	2	43
2007	24	17	16	61
2008	41	17	8	71
2009	24	17	3	46
2010	31	13	8	53
2011	38	11	10	68
2012	28	16	9	57
2013	26	7	11	46
2014	22	8	7	39

Elaborated by: The National Institute of Public Health – The National Institute of Hygiene

HIV Testing

The number of HIV tests conducted annually around the country remains at a rather low level. Excluding blood donor tests, it is around 5/100 thousand annually. However, taking into consideration tests conducted among blood donors – 5% (donor tests concern for the most part people who donate blood multiple times). The number of tests conducted annually excluding blood donors is steadily rising (Table 5). This is largely due to tests taken by people who previously had not been tested, which confirms the questionnaire results, in which the percentage of people who have been tested for HIV at any point in life is rising along with a simultaneous rise in the number of people who have been tested only once in their lives. Aside from an increase in the number of tests, it would be appropriate to define the group of people of a higher risk of infection, of which tests should be conducted regularly. Among them are the key populations (PWID and MSM), which according to European recommendations should be tested at least once a year[xii,xiii]. According to the research cited earlier, the percentage of individuals testing themselves over the last 12 years was: PWID at 35% (2004-2005) and MSM at 30%-38% (2010). Moreover, HIV tests are recommended for

people who will be diagnosed with other sexually transmitted diseases.[xiv] Further research should be conducted on the barriers to more frequent HIV tests of people with a higher risk of infection.

Table 9. Frequency of HIV tests in the population of the Republic of Poland based on evaluation research of social campaigns and the number of tests conducted by laboratories.

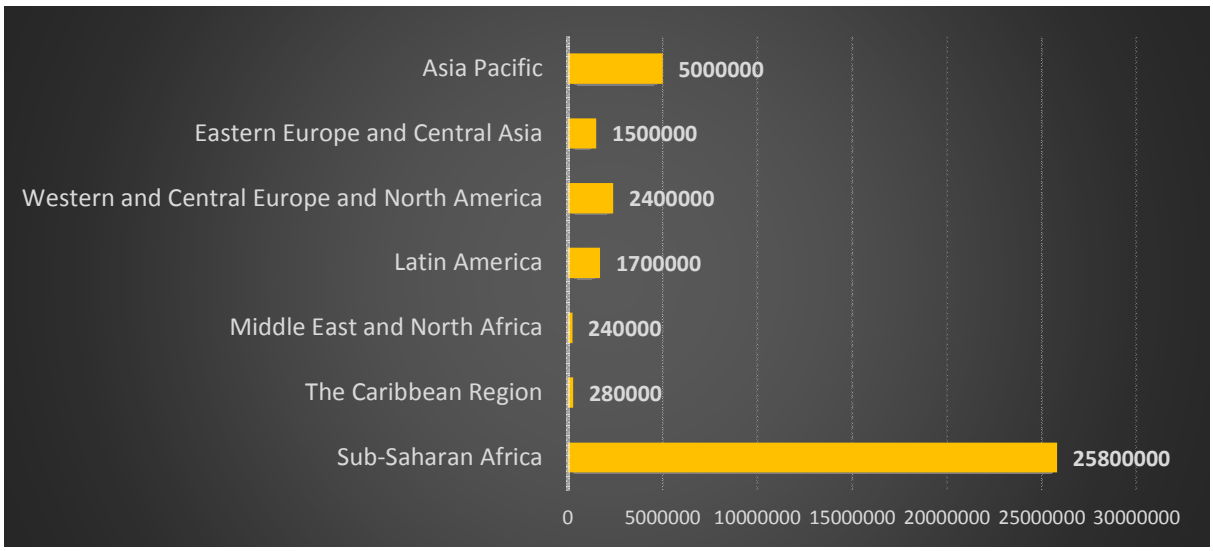
	2005	2007	2008	2009	2011	2012
Percentage of the population tested for HIV at any point in life[xv]	6,2%	10,8%	6%	10%	13%	14%
– Percentage of people tested for the first time	-	~57%	66%	58%	66%	79%
– Percentage of people tested when donating blood	29,6%	~37%	23%	26%	32%	22%
– Percentage of people tested during routine medical tests	26,90%	~25%	18%	13%	28%	24%
– Percentage of people tested as required by situation	23,60%	~15%	21%	33%	25%	23%
Number of tests conducted apart from blood donations[xvi]	91,459	161,065	152,764	214,263	317,286	358,953
Number of blood donor tests	1,006,639	1,025,746	1,102,177	1,201,545	1,204,003	1,225,720

Elaborated by: The National Institute of Public Health – The National Institute of Hygiene

III.HIV EPIDEMIC AROUND THE WORLD

The HIV epidemic continues to be a serious public health issue around the world. Over 34 million people have died as a result and in 2014 alone, between 1-1.5 million people died due to AIDS. At the end of 2014, around 37 million people were living with HIV around the world. In the same year, 2 million [1.9-2.2] new cases of the infection were noted around the world.

Graph 6. Number of people living with HIV in 2014 according to region.



Source: UNAIDS

As can be seen from the figures on the graph, Sub-Saharan Africa continues to be the region most affected by the epidemic. In 2014, between 24.0-28.7 million HIV infected people lived there. On the global scale, this region accounts for 70% of new cases of the infection.

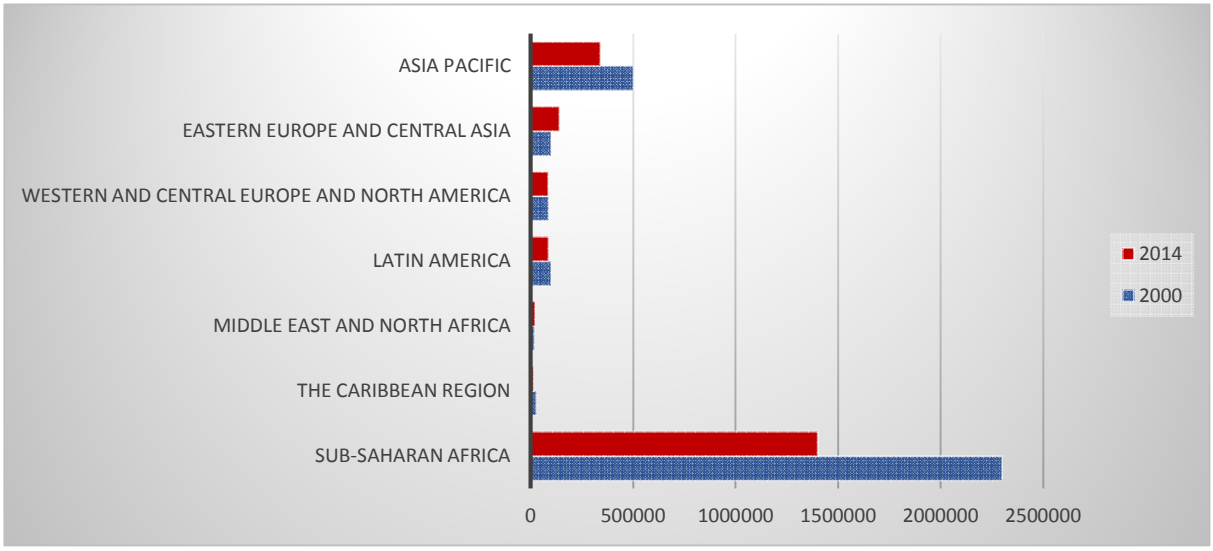
One of the two regions of the world (alongside the Middle East and North Africa), in which the number of HIV infections is increasing is Eastern Europe and Central Asia. Between 2000 and 2014, the number of new HIV infections rose by 30% in this region. In countries such as Ukraine, the Baltic States, the Russian Federation and the remaining former Soviet states, a rapid increase of the number of HIV infections and AIDS mortality can be observed. In particular states such as Estonia, Ukraine and the Russian Federation, HIV prevalence among adults exceeds 1%. In Eastern Europe and Central Asia, the rates of HIV infections are at 31.7/100,000 of the population (mainly due to the high level of infections in Ukraine and the Russian Federation), i.e. five times more than in Western Europe (6.6/100,000) and over 20 times more than in Central Europe (1.2/100,000). The main factor which caused the outbreak and high dynamic of the HIV epidemic in Eastern Europe was the high percentage of people who use intravenous drugs. It is estimated that in the Russian Federation and in Ukraine, these people account for 1-2% of the total society and around 3.7 million in the whole region.

The crisis in Ukraine is exacerbating the dramatic situation of the widespread of sexually transmitted diseases including HIV/AIDS. Half of the registered HIV infected people lives in 3 out of 34 districts, i.e. Dnepropetrovsk, Donetsk and Odessa. At the same time, 25% of

people receiving ARV treatment lives in the districts of Donetsk and Lugansk, i.e. in the areas affected by the armed conflict.

It is estimated that only 51% of HIV infected people around the world are aware of their serological state. In 2014, around 150 million children and adults in 129 low-income or middle-income states had the possibility of being tested for HIV. In total, 14.9 million people living with HIV were include in ARV treatment, 13.5 million of which lived in low-income or middle-income countries. The 14.9 million people receiving ARV treatment constitute around 40% [37-45%] of all HIV infected people requiring treatment.

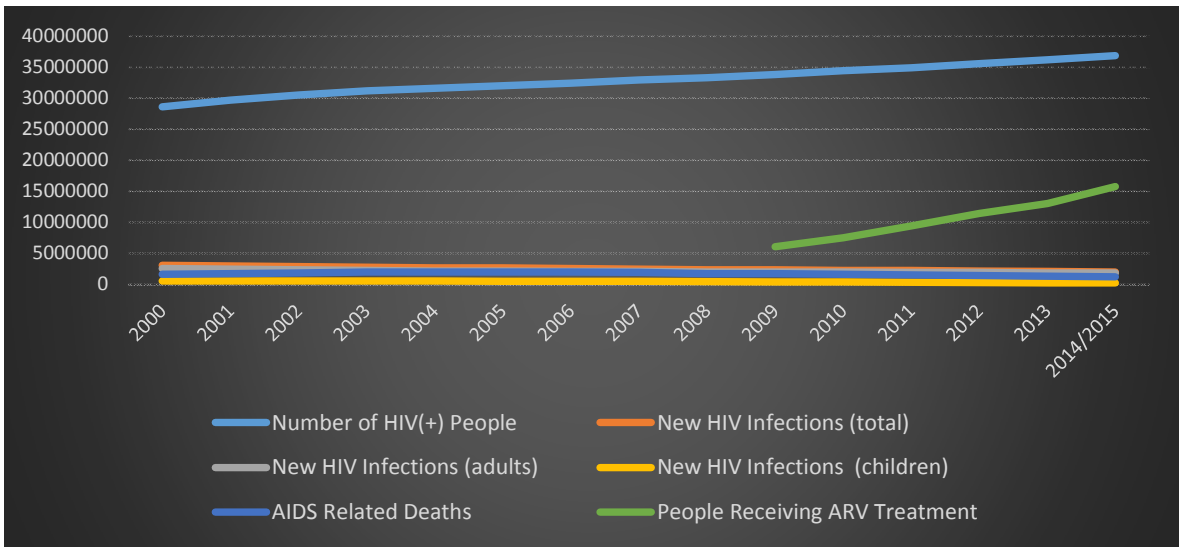
Graph 7. Number of new cases of HIV infections between 2000-2014 according to region.



Source: UNAIDS

Over the last 15 years, a clear decrease in the number of new HIV infections can be noticed among adults and children. An increase in the number of people living with HIV and a fall in the number of deaths caused by AIDS can also be noted, which is a result of the increased availability of ARV treatment. Presently, almost 16 million people (compared to 6.1 million in 2009) receive ARV treatment.

Graph 8. World HIV epidemiological trends between 2000-2015.



Source: UNAIDS. Until 2008 no data on the number of people receiving ARV treatment was available.

It would not be possible to stop the epidemic around the world without providing adequate funding for the fight against HIV/AIDS, which has increased more than fourfold since 2000 to amount to over 20 billion USD in 2014-2015. The increasing amount of funding is accompanied by the implementation of more effective strategies aiming to end the AIDS epidemic.

UNAIDS *Fast-Track* Strategy

The UNAIDS (*Fast-Track)* strategy aims to accelerate the fight against AIDS and assumes that by 2020: 90% of HIV infected people will be aware of their serological status, 90% of all diagnosed cases will receive ARV treatment, and 90% of all people receiving ARV treatment will have viral suppression (90-90-90 strategy). In addition, this strategy assumes that by 2020, it will be possible to lower the total number of new HIV infections by 75% and eliminate the problems of discrimination of HIV infected people and those living with AIDS.

As part of the Sustainable Development Goals, the world has committed itself to end the AIDS epidemic by 2030. The UNAIDS Strategy 2016–2021 is one of the first strategies accepted within the UN system, which sets out the global development policy for the next 15 years including the question of stopping the HIV/AIDS epidemic. A condition to ending the epidemic by 2030 is realising the UNAIDS 90-90-90 strategy by increasing the availability and number of HIV tests, which will protect the health of 21 million people living with HIV who do not receive ARV treatment. The UNAIDS strategy for 2016-2021 includes:

1) No new HIV infections among children;
2) Providing 90% of young people with the appropriate skills and knowledge that will protect them against HIV infections;
3) 90% of women and men, especially young people and those in high-prevalence settings, have access to HIV combination prevention and sexual and reproductive health service;
4) 27 million additional men in high-prevalence settings are voluntarily medically circumcised, as part of integrated sexual and reproductive health services for men;
5) 90% of key populations, including sex workers, men who have sex with men, people who inject drugs, transgender people and prisoners, as well as migrants, have access to HIV combination prevention services;
6) 90% of women and girls live free from gender inequality and gender-based violence to mitigate the risk and impact of HIV;
7) 90% of people living with, at risk of and affected by HIV report no discrimination, especially in health, education and workplace settings;
8) Overall financial investments for the AIDS response in low- and middle-income countries reach at least USD 30 billion, with continued increase from the current levels of domestic public sources;
9) 75% of people living with, at risk of and affected by HIV, who are in need, benefit from HIV-sensitive social protection.

IV. PROGRAM MODEL

Comprehensive and analytical method of program planning

For the purposes of outlining the Schedule for the Implementation of the National Programme for Preventing HIV Infections and Combating AIDS for 2017-2021, a theoretical model of comprehensive and analytical program planning was used.[1)] It assumes a holistic approach to the Programme which includes five main and strategic areas: preventing HIV infections in the entire society, preventing HIV infections among people with high risk behaviors, support and health care for people living with HIV and AIDS, international cooperation and monitoring.

[1)] Comprehensive Analytical Program Planning (CAPP), LFA (Logical Framework Approach). This method assumes multidimensional planning and realization of programmes. It assumes a holistic approach to the programme/programmes. This method makes use of elements of strategic planning such as: the identification of the main stakeholders and beneficiaries of the programme, environment analysis, identification and analysis of the problem (problem tree), identification, hierarchization and analysis of objectives (objective tree) and matrix structure. The method has been elaborated by Kevi Consulting Pvt.Ltd. Finland.

Each of the areas has been assigned general and detailed objectives, tasks to be realized, main stakeholders and beneficiaries, indicators and implementation time. The schedule was developed with the substantive support of experts and program impregnators from previous years. It was therefore possible to define and analyse the main developmental needs related to HIV/AIDS and sexually transmitted diseases in the Republic of Poland and then to translate them in to goals and actions. The evaluation results from the edition of the Program from pervious years was also taken into consideration in the work on the new Schedule.

The programme as an structured set of activities

Utilizing a comprehensive and analytical method of programme planning (and other models of strategic management) is a starting point for developing long-term strategies including the strategy for preventing HIV infections and combating AIDS in the Republic of Poland.

This method makes it possible to precisely define the directional objectives for our country and measuring their implementation in a given time. It also assists us in planning, implementing, controlling and evaluating activities at the regional level. The comprehensive and analytical method of programme planning determines the programme as: a series of activities implemented according to a specific schedule with a limited resources, with the use of mechanisms designed to achieve a specific goal. It is also a tool for directing activities for changes and development.

At the operation level, the comprehensive and analytical method of programme planning assists in systemizing and increasing the effectiveness of the activities by:

1) Presenting the programme as a structured set of activities and processes;
2) Recording the hierarchy of goals, assumptions, tasks, activities and their results, and evaluation indicators;
3) Identifying the main stakeholders;
4) Determining the main beneficiaries;
5) Identifying and analysing the development problems and needs of the programme;
6) Translating the development problems and needs into objectives and actions in the programme;
7) Analysing the environment and context (possible action and risk scenarios).

Beneficiaries of the programme

One of the key determinants of the programme's success is an appropriate selection of beneficiaries, i.e. organizations and groups of people (populations) which should receive the

greatest direct benefits of its implementation. The most important programme activities focus on them and all of the arising questions, problems, needs evaluation and developed objectives (and their hierarchy) are analysed from the perspective of this group.

The main beneficiaries of this programme are: the general public, people with increased levels of risky behaviour, people living with HIV and AIDS and their family.

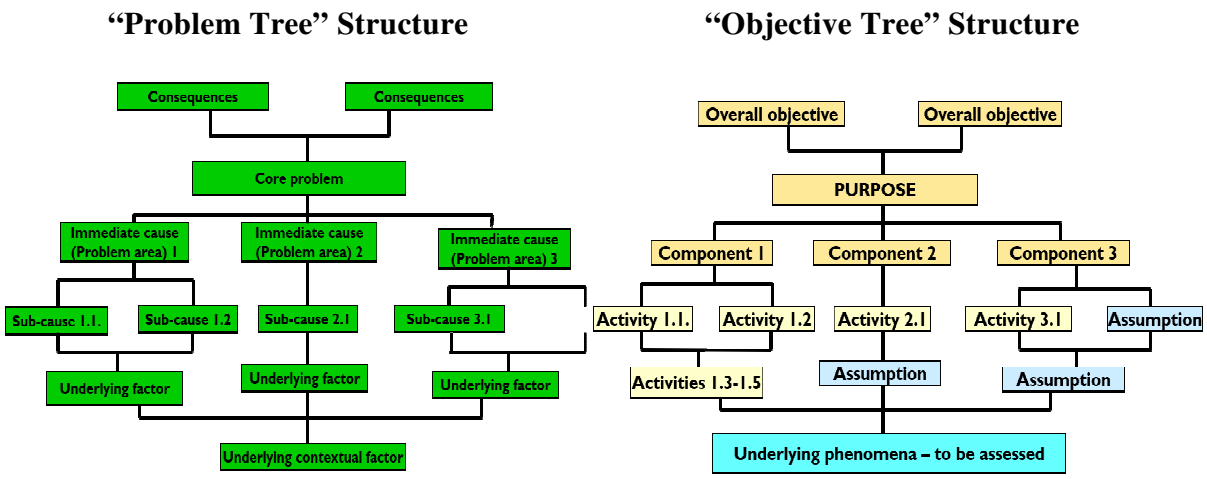
Transforming development problems and needs into objectives and actions

In order for the activities implemented in the programme to produce positive results, it is necessary to define the objectives (our response to the existing problem) which we would like to realize. Graph 9 presents the structure and stages of transformation of a problem tree into a objectives tree.

The first stage (problem tree): identification and analysis of the main problem e.g. the increase in the number of HIV infections and other sexually transmitted diseases. Next, the identification and analysis of the direct causes of the main problem (including the basic causes, primary and contextual factors) and the possible consequences resulting from the main problem.

The second stage (objective tree): transformation of the main problem and its causes into specific goals, activities and tasks (including contextual factors) and development of possible scenarios i.e. the increase in access to current information/data related to the educational needs of adults in the scope of HIV/AIDS and sexually transmitted diseases, increase in knowledge of risky sexual behaviour, and increasing the sensitivity of the health care and educational systems to the needs of those who are looking for information on HIV/AIDS and sexually transmitted diseases.

Graph 9. The structure of the problem tree and objective tree.



Elaborated by: The National AIDS Centre

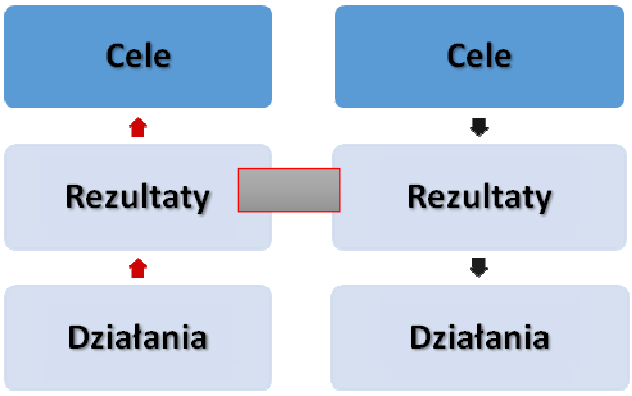
Two schools

The methodology of programme management (at both the national and local levels) requires the hierarchization of objectives and determining specific means for their implementation. The comprehensive and analytical method of programme planning examines two different approaches to managing the programme:

1) By activities and partial objectives we reach the main goal (from bottom to top);
2) The main objective determines our partial goals and activities (from top to bottom).

In the first case, engagement takes place at the beginning of the programme implementation on the part of a possibly large number of experts from organizations/institutions dealing with a specific field e.g. HIV prevention and combatting AIDS. Since we depend on their knowledge and experience, we can precisely determine the key problems and needs concerning the issue of HIV/AIDS, and then transfer them into specific goals and actions (keeping in mind the possible scenarios and results of future activities) which are to lead us to the main objective. The participation of the broadest range of interested parties allows for verification if the process of establishing an objective is appropriate, if the appropriate entities are engaged in it and if the activities (tasks) are adequate to the problems define (graph 10 from bottom to top).

Graph 10. The two approaches to the manner of implementation of objectives.



Elaborated by: The National AIDS Centre
Cele: Goals; Rezultaty: Results; Działania: Actions

In the second case, we focus on the predefined main objective (the most important programme assumption) which determines the objectives and partial activities. The specific elements of the programme are focused on the main objective and the expected result is the systematic implementation of planned activities. This approach enables a quick realization of the planned goals (graph 10 *action from top to bottom*).

In the current Regulation of the Council of Ministers of 15 February 2011 for Preventing HIV Infections and Combating AIDS, the general and specific goals and the scope of the content of the schedule of programme implementation are defined. In view of this, the schedule defines the tasks/activities whose implementation contributes to reaching the goals. Experts dealing with the issue of HIV/AIDS and representatives of entities obliged to implementing the Programme participated in working on the document.

V. DIAGNOSIS OF SOCIETY

The problem of HIV/AIDS is a multidimensional problem, integrally linked with several phenomena of social life. The dynamic of infection and the quality of life of people living with AIDS depends on the dominating values, patterns of behaviour, social attitudes, level of education, the economic condition of the state and also the political situation at the international level. Recent years have been characterized by an extraordinary dynamic of changes in society. New qualitative features of many of the phenomena are appearing including new undetected problems, which either directly or indirectly impact the scale and

quality of the HIV/AIDS problem. An example of such problems in recent years is the mass labour migration contributing to the loosening of family ties and at the same time, a limit of a behavioural control system.

Taking into consideration the social context of HIV and the organizational and institutional changes that are taking place, along with changes in the needs and social attitudes towards people with HIV infections and those living with AIDS – the subsequent editions of the Programme were preceded by an evaluation of the actions undertaken. The HIV epidemiological situation is monitored on an ongoing basis not only in Poland, but also around the world, taking into account the countries located to the east of our borders. Conducting an evaluation of the epidemiological situation and monitoring it has contributed to the identification of problem areas and cumulation of knowledge on various aspects of HIV/AIDS. This knowledge was translated into the modification of planned actions in the subsequent editions of the Programme which consists of using the conclusions and recommendations of the finished Programme.

From the beginning of the HIV/AIDS problem, the priority in the actions undertaken was the prevention of HIV, educating society of the medical and social aspects of HIV, forming appropriate social attitudes towards infected people and providing integrated care for people with HIV and AIDS. In the subsequent editions of the Programme, these objectives were supplemented with interdepartmental and interinstitutional cooperation, the inclusion of specific actions on the part of NGOs, the media, the Roman Catholic Church, religious associations, and the involvement of local governments in creating and implementing the local strategy for HIV/AIDS. These integrated actions over the years have resulted in many achievements in prevention, diagnostics, medical care and social assistance or people living with HIV/AIDS. The Republic of Poland is one of the few countries in which people infected with HIV and suffering from AIDS receive complex medical care free-of-charge in accordance with medical achievements. There is no waiting time for ARV therapy in the antiretroviral treatment system, which should be noted as a success of the Republic of Poland at national and international level.

Other successes include the systematic solutions for HIV diagnostics. This role is fulfilled by VCT centres at which tests can be conducted anonymously and free with counselling services. The possibility of anonymous HIV tests, the use of professional counselling before and after tests is one of the preventive and diagnostic forms which have been recommended for years by international institutions and organizations. The operation of the VCT centres also

contribute to diagnosing infections in people who are unaware of their serological status in a significant way. A diagnosis of HIV infections in such cases is a chance to start therapy, but also a chance to limit risky behaviour and thereby spreading the infection.

From the perspective of time, other actions undertaken to prevent the spread of HIV infections should be evaluated positively. Such activities that merit particular emphasis is the significant activity of NGOs. These organizations are particularly engaged in the prevention of HIV/AIDS and providing psychological, social and therapeutic assistance. They are also an important partner in implementing the Programme due to the actions they have undertaken and the manner they are realized.

The next positive course of action related to HIV/AIDS is the realization of programmes aimed at reducing harm addressed mainly to people addicted to psychoactive substances, selling sexual services and sexual minorities. These people belong to the groups of people who involved in risky behaviours in the context of HIV/AIDS.

It is also worth mentioning the engagement of several environments and institutions dedicated to counteracting the spread of HIV. They are responsible for activities related to education, culture, health care, the uniformed services and the media. Despite these successes in the scope of prevention, diagnosis, therapy and expenditures, the spread of the HIV infection can not be stopped in Poland. The dynamic of newly registered cases of HIV infections is still alarming (up to 31 March 2016, 20,252 people have been diagnosed with the HIV infection), and epidemiologists estimate that the number of HIV infected people can reach around 30,000 in the Republic of Poland. As a result, a large group of people is unaware of their serological condition.

A current problem in the Republic of Poland is the limited knowledge about HIV/AIDS, the lack of awareness of one's own risky behaviour and the lack of relating the risk of HIV infection to one's own self. According to common belief, HIV/AIDS is the problem of the "risk group". This is shown by the results of research conducted by the campaign concerning social discrimination of people living with HIV/AIDS.

Emphasis should be placed on preventative activities including education and protection in educational programmes addressed to students at all levels, increasing the number of experts in prevention and greater engagement of the media in sound presentation on the topic.

The effect of organized prevention is risky sexual behaviour in groups of heterosexuals and MSM. In addition to sexual behaviour are characterized by new qualitative features. They are the consequences of cultural changes and new patterns of sexual behaviours. Based on Professor Zbigniew Izdebski's research on "The Sexuality of Poles 2011", the following

regularities follow: the average age of sexual initiation of men is 18.1 years of age and 18.7 years of age among women. The age of initiation is gradually decreasing. Contemporary men and women often change partners and the average number of sexual partners in one's life amounts to 4.28. The number of informal relationships is increasing and 22% of Poles currently live in informal relationships. Poles are also not monogamists as 21% of men and 12% of women have had sex outside a committed relationship. The realization of such patterns of sexual life has an influence on the risky behaviours in the context of HIV/AIDS. For this reason, sound sexual education is essential. This education is particularly important in the current process of cultural globalization. The penetrating values, patterns of behaviour and lifestyles cause of change in cultural spheres such as: individualism, self-fulfilment and attitudes towards personal success. On the one hand, accepting these values is often awarded by society; but, on the other hand, they carry the risk of negative effects such as the departure from traditional societal ties, attitudes, and lifestyles that often directly or indirectly lead to a large number of threats at the individual level. An example of such threats, and the effect of changes in civilization, is the numerous health problems, e.g. mental problems, infectious diseases among which the problem of HIV/AIDS still remains one of the greatest health and civilizational threats.

The risk of spreading the HIV infection also concerns people who use psychoactive substances. The recent ESPAD (*European School Survey Project on Alcohol and Drugs*) research conducted in 2015 suggests that the most prevalent psychoactive substance among youth is alcoholic beverages (88.5% of 15 year-olds and 96.2% of 17 year-olds have at least once consumed an alcoholic beverage in their lives). Other psychoactive substances that should be mentioned includes the use of tranquilizers or sleep inducing pills (13.5% of 15 year-olds and 15.2% of 17 year-olds) and experimentation with marijuana and hashish (33.5% of 15 year-olds and 50.4% of 17 year-olds). The problem of psychoactive substances is particularly dangerous since social attitudes have changed towards people who use them – in the direction of greater tolerance and perhaps even "getting used to" the problem. It has ceased to be a criminogenic problem and in some cases, it has become an accepted lifestyle in their closest environments.

The problem of taking psychoactive substances in the context of engaging in risky behaviours also concerns adults. The Republic of Poland is still one of the countries with a high level of annual alcohol consumption. Among the new qualitative features related to alcohol consumption, the increase in the number of girls and women who abuse alcohol and a change in drinking habits should be noted. The effect of such behaviours is a loss of self control and

thereby engaging in risky behaviour including sexual behaviours, which are still the main cause of the spread of the HIV infection.

Prevention, treatment, care and support are all elements that mutually supplement and strengthen each other and are a continuation of effective reaction to the HIV/AIDS epidemic.

VI. FINANCING

Investing in HIV/AIDS prevention

In the era of economic crisis, with a decrease in funding for prevention and promoting health, the effective use of financial resources is becoming very important. While planning activities and expenditures analysis is helpful - if and which projects are most justified from the point of view of costs and use, if they are worth allocating funds to e.g. multimedia campaigns, social mobilization at the local level, individual counselling or a combination of these activities. How can these activities be enhanced - e.g. by improving the quality of training for health care and counselling staff, changes in the content of messages or the way they are communicated in order to prompt the desired reaction or change in behaviours towards health. With limited financial resources for HIV/AIDS prevention in Europe, health care policy makers and those managing prevention programmes should weigh the costs and benefits of specific activities at the planning stage, taking into consideration their final effect, i.e. the maximum prevention of a large number of HIV infections. A cost analysis of every option followed by a measurement of effectiveness, e.g. by population surveys, and client or service statistics, allow for comparing the effectiveness of various options and making the most optimal choice. Disbursement of public funds involves the need for justification if these activities constitute an appropriate use of public funding in relation to alternative solutions or if these actions are justified with regards costs.[2)]

Early detection and treatment of HIV/AIDS is significant for the health of particular people and society at large. The amount of funding for HIV/AIDS prevention and treatment has an influence on the effectiveness of diagnostics and treatment activities which extend the lifespan of people with HIV infections and enable them to maintain an appropriate standard of life. According to the Joint United Nations Programme on HIV/AIDS (UNAIDS), in order to effectively counteract HIV/AIDS, financial support for this purpose should be significantly increased from 20 million USD in 2014 to over 2014 million USD in 2020. According to

[2)] Communication about health, illness and treatment. Between psychology and medicine. Ed., Jacennik B, Hulewska A, Piasecka A. Vizja Press&IT. Warsaw 2012.

UNAIDS, one fourth (25%) of this amount should be invested in preventative activities which are sure to be effective and implemented in an efficient manner.

Activities at the local community level

One of the basic means of HIV prevention at the local community level is activities aimed at changing human attitudes and behaviours towards HIV/AIDS. In the scope of HIV/AIDS prevention, a change in behaviours can affect various groups of behaviours: tests and screenings, adherence to the recommendations of physicians regarding treatment, the use of measures preventing HIV infections (condoms), needle and syringe exchange (in the case of people using narcotics and injections), risky behaviours and the ability to search for information on HIV/AIDS.

Although many of the activities aimed at changing attitudes and behaviours towards HIV/AIDS are successfully carried out, many states do not evaluate them in a systematic and holistic manner (including economically). This evaluation is very important in order to find out to what extent undertaking activities contributes to a decrease in the number of HIV infections, if and to what extent there is a dependency between the amount of investment in HIV prevention and the number of registered infections. Monitoring and evaluating activities also allows us to compare the number of registered HIV infections with the number of infections that could have taken place in a situation with a lack of preventative actions.

The knowledge of the extent to which specific activities translate into a fall in the number of HIV infections seems to be key from the perspective of effective allocation of financial resources. The problem still remains that a significant amount of time must pass between the investment in HIV/AIDS prevention and a realistic reduction in the number of infections. The possibility of unpredictable factors (economic, legal, political and social) which can hinder effective combat against HIV/AIDS should be taken into consideration.

Economic evaluation of HIV/AIDS prevention (examples)

The most significant amount of research on the economic evaluation of HIV/AIDS prevention is being conducted in the USA, Canada and Australia. Research into the economic effectiveness of HIV prevention is being carried out by, among others, the Centre for Disease Control and Prevention (CDC) where a methodology and models of calculating the economic effect of HIV preventative programmes have been elaborated. These models are to assist the decision process associated with managing financial resources for HIV prevention in the USA. By the means of analysing correlations, the dependency between the amount of funds designated for prevention and the decrease of the incident rate for HIV between 1985-2006

has been shown.[3] Investment in HIV prevention which occurred in the USA between 1991-2006 assisted in preventing 361,878 HIV infections and saved the healthcare system 130 billion USD.[4] The results of the model evaluation research have indicated savings in the case of the majority of activities aimed at changing attitudes and behaviours towards HIV organized in local communities (community--based).[5]

According to the research, an optimal selection (portfolio) of preventative activities will result in a decrease of 34% of the number of new HIV infections over the next twenty years (i.e. to 2033) which will also produce a financial savings of 5 billion USD.

A similar evaluation of an investment in HIV prevention at the local community level was conducted in Canada, in the province of Ontario.[6] Investments made between 1987 and 2011 (from the perspective of the payer) were evaluated. It was shown that in that period of time, investments in HIV prevention resulted in preventing 70,279 HIV infections which saved the healthcare system a total of over 25.3 billion Canadian dollars (CAD). From 2005 to 2011, for every 1 USD invested in HIV prevention, 5 USD were saved. With an estimation of 70,279 HIV infections which were prevented by means of biomedical methods (associated with ARV), and supporting (community-based activities, public health activities), the difference between the indicator of HIV infections in Ontario in the period of time during which preventative activities were conducted and the period of time in which such activities were not conducted or carried out on a small scale were taken into consideration. The result regarding the savings in Ontario's healthcare system was obtained by multiplying the number of HIV infections that were prevented (attributed to specific preventative activities) by the cost of treatment of people infected for their whole life, thus the annual costs of direct treatment was estimated on the basis of literature from 1986-2012 which includes "cost-of-illness". The analysis of the return on investment (ROI) of HIV prevention at the local

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[3] Holtgrave DR, Kates J. HIV incidence and CDC's HIV prevention budget: an exploratory correlational analysis. Am J PrevMed. 2007;32:63–7. Available from: http://www.ncbi.nlm.nih.gov/pubmed/17184960. Cited 15 Aug 2012

[4] Farnham PG, Holtgrave DR, Sansom SL, Hall HI. Medical costs averted by HIV prevention efforts in the United States, 1991-2006. J Acquir Immune Defic Syndr. 2010;54:565–7. Available from: http://www.ncbi.nlm.nih.gov/pubmed/20647830. Cited 14 Jan 2015

[5] Kessler J, Myers JE, Nucifora KA, Mensah N, Kowalski A, Sweeney M, et al. Averting HIV infections in New York City: a modeling approach estimating the future impact of additional behavioral and biomedical HIV prevention strategies. PLoS One.2013;8:e73269. Available from: http://dx.plos.org/10.1371/journal.pone.0073269 . Cited 6 Mar 2014.

[6] Choi SKY, Holtgrave DR, Bacon J, Kennedy R, Lush J, McGee F, Tomlinson GA, Rourke SB. Economic Evaluation of Community-Based HIV Prevention Programs in Ontario: Evidence of Effectiveness in Reducing HIV Infections and Health Care Costs. Springerlink.com. AIDS Behav. DOI 10.1007/s10461-015-1109-8. 2015.

community level between 2005 and 2011 amounted to 4.8 (meaning that 1 USD invested in the community-based programme results in a savings of nearly 5 USD in treatment costs).

Effective communication related to HIV/AIDS prevention

A report[7)] prepared by the European Centre for Disease Prevention and Control (ECDC, 2009) indicates two essential elements of strengthening the readiness for the threat of infectious diseases including HIV/AIDS: collaboration between public health institutions and supporting the development of information centres providing accurate knowledge based on research regarding communication about health. The basis of the preventative systems' functioning against epidemiological threats is providing accurate scientific knowledge.

Prevention and calling for change in human attitudes and behaviours (including towards HIV/AIDS) requires an effective message. According to data provided by the American Disease Control and Prevention (CDC), on the effectiveness of activities associated with communication about health, a series of criteria is decisive: the level of competence of people dealing with communication, the effectiveness of transfer, in-depth knowledge about targeted recipients, proper selection of techniques and channels of transfer, the identification of opinion makers from the perspective of target groups, accurate information, society's level of trust for sources of information on health. The key criterium influences the remaining is the availability of financial resources for activities related to communication and the effectiveness of using these resources.

Preventative activities

The HIV/AIDS epidemic is a health, social and psychological problem. For this reason, the implementation of programmes directed to multisector support for people living with HIV/AIDS is recommended. Neglecting HIV/AIDS prevention causes an increase in the spread of HIV infections and a significant increase in the number of new infections, and in consequence, an increase in the number of people who will require ARV treatment. As a result, the continuation of the following activities is recommended:

1) Educational programmes aimed at the general public and in particular youth;
2) Training for selected professional and social groups;
3) Activities that will reach various social groups while taking into consideration the needs of each group;

[7)] ECDC (2009). Joint ECDC/EUPHA meeting on health communication for innovation in the EU: a focus on communicable diseases. Report.

4) Preventative activities including campaigns, educational programmes, programmes led by active methods, programmes of reducing harm aimed at key populations, i.e. in particular those exposed to infection;
5) Continuing the activities of the VCT centres that conduct anonymous and free diagnostic tests detecting HIV infections, providing professional counselling, collecting epidemiological data on the ways of spreading the HIV infection in the Republic of Poland on the basis of information obtained from people being tested.

Diagnosing the problem, i.e. directing preventative activities to specific populations, conducting systematic behavioural and social tests which would enable the identification of threats and occurrences, would allow for undertaking adequate activities in this scope and an appropriate reaction to trends that require financial resources.

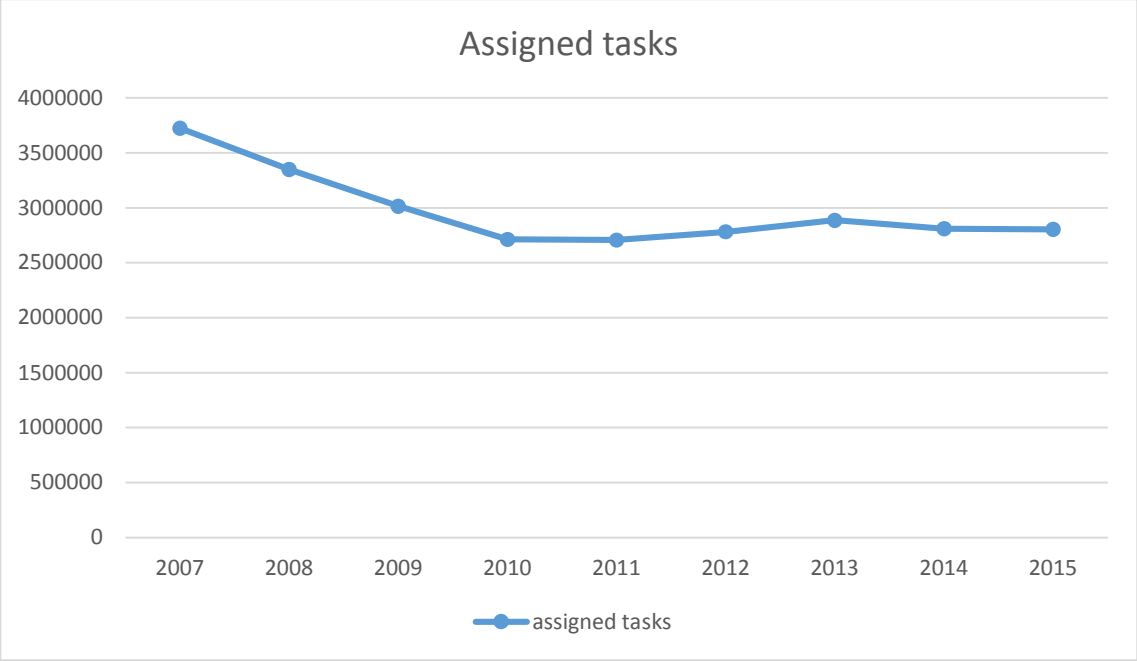
The next challenge is preventative activities related to sexually transmitted diseases – Poles do not possess basic knowledge in this matter, are not aware of the ways of infecting, symptoms of diseases, do not test themselves for sexually transmitted diseases and do not use preventative measures.

At the international level, the Republic of Poland is perceived as a equal and significant partner thanks to its activity in HIV/AIDS issues. The activities and experiences of the Republic of Poland in the context of preventing HIV/AIDS (including operating VCT centres and ARV treatment) are the basis for exchanging best practices with international partners. The Republic of Poland actively makes substantive contributes in international projects. A constant exchange of experiences and active participation in projects at both the national and international levels is recommended.

Running further activities aimed at increasing the engagement (also in terms of financing) of other Programme implementers aside from the Ministry of Health is essential.

The graph below presents the amount of funding that was allocated between 2007 and 2015 for tasks assigned in the budget of the National AIDS Centre. These funds, at the national scale, are not sufficient to continue and operate preventative activities.

Graph 11. Financial resources (PLN) in chapter 85152 – Prevention and Combating AIDS at the disposal of the National AIDS Centre between 2007 and 2015.



Elaborated by: The National AIDS Centre

An increase in financial support for health promotional activities and subsidy is essential. The following activities require support:

- Organization of a nationwide multimedia social campaign:
  by using social marketing tools, we provide reliable information and initiate action to change inappropriate attitudes and behaviour of society towards HIV/AIDS. The realization of these goals is made possible by social multimedia campaigns, which are an effective and influential tool.
- Publishing activity:
  in collaboration with experts in the area of medicine, social sciences and law publishing activities are carried out. Various types of publications are released, from small leaflets with basic information about HIV/AIDS to manuals for medical doctors and other highly specialized items.
- Organization of training:
  training that raises the qualifications of selected groups, trainings for people working or planning to work in VCT Centres, in which it is possible to receive an anonymous and free-of-charge HIV testing and counselling.

- Creation, modernization, substantive oversight and funding of an educational portal for gynaecologists, physicians, nurses and midwives and medical students interested in the issues of HIV/AIDS.
- Commissioning socio-scientific studies:

  cross-sectional studies are a recognized tool for monitoring HIV/AIDS. The aim of such a study is to identify various aspects of public attitudes in relation to the problems of HIV/AIDS and to the level of knowledge about prevention of HIV/AIDS.
- Other preventive activities, including:
  - periodically announcing competitions for the best projects in the field of HIV/AIDS among young people,
  - engaging the media in HIV/AIDS prevention activities,
  - cooperation with the International Federation of Medical Students' Associations IFMSA-Poland,
  - organization of International AIDS Day,
  - organization of the International Candlelight Memorial,
  - organizing information campaigns for different target groups,
  - financing the nationwide twenty-four-hour AIDS hotline,
  - financing the HIV/AIDS internet counselling facility,
  - financing of the VCTs, performing anonymous and free-of-charge HIV testing and counselling.
- Financing assistance programmes in the area of quality of life improvement and functioning of people living with HIV/AIDS.
- Supporting activities aimed at harm reduction.

The table below presents the proposed budget of the National AIDS Centre for 2017-2021 needed to implement the above-mentioned tasks. In accordance with the microeconomic assumptions for 2015-2019 and guidelines for 2020-2025 elaborated by the Ministry of Finances, an average annual growth of 2.5% was taken into consideration when estimating the financial impact.

Table 10. Suggested financial resources for preventative activities implemented by the National AIDS Centre (The suggested amount of funding can be subject to change with respect to the provisions of the budgetary act for 2017 and budgetary acts for subsequent years).

	2017	2018	2019	2020	2021
Promotion	1,700,000	1,742,500	1,786,100	1,830,715	1,876,500
Programmes/grants	2,200,000	2,255,000	2,311,500	2,370,000	2,429,000
Total	3,900,000	3,997,500	4,097,600	4,200,715	4,305,500

Elaborated by: The National AIDS Centre

The ARV treatment programme

In accordance with the provisions of the Regulation of the Council of Ministers of 15 February 2011 on the National Programme for Preventing HIV Infections and Combating AIDS in area III of the programme implementation: within support and healthcare for people living with HIV/AIDS, the following are included: the Minister of Health's health policy programme entitled: "Antiretroviral treatment of people living with the HIV virus in Poland" which is available at the National AIDS Centre (chapter 85149 – Health Policies Programmes). This ARV treatment programme constitutes an integral part of the National Programme for Preventing HIV and Combating AIDS.

The objective of the Minister of Health's health policy programme entitled: "Antiretroviral treatment of people living with the HIV virus in Poland" is limiting the effects of the HIV/AIDS epidemic by providing access to antiretroviral treatment and specialized diagnostics. Properly conducted ARV treatment ensures a decrease in the cases of HIV incidents and AIDS related deaths and a fall in the amount of infectivity in the healthy population in the Republic of Poland. The principles of medical care for patients infected with HIV in the Republic of Poland including antiretroviral treatment are elaborated in the form of Recommendations (last update: 2016) by the Polish Society for AIDS Research. The recommendations are elaborated by a group of experts from various centres which conduct ARV therapy in the Republic of Poland on the basis of European recommendations (European AIDS Clinical Society – EACS).

Antiretroviral therapy (HAART), together with specialized diagnostics monitoring the course of the HIV infection, general and psychosocial care, are all elements that mutually complement each other and constitute a continuous effective response to the HIV/AIDS epidemic. They must be integrated in appropriate system solutions.

The ARV treatment programme covers all people infected with HIV and living with AIDS and who fulfil medical criteria, are citizens of the Republic of Poland and others provided that they are covered by health insurance in Poland or voluntary insure themselves (in the National Health Fund on the basis of a written application on the condition that they have a place of residence in the territory of the Republic of Poland). This also includes pregnant women infected with HIV and newborns born to HIV infected mothers in accordance with the provisions of the Act of 27 August 2004 About Health Care Benefits from Public Funds (Journal of Laws of 2016 item 1793 as amended). Patients in penitentiary institutions are also covered by the treatment (as per an agreement with the Central Board of Prison Service). Aside from the ARV treatment of people HIV infected or living with AIDS, the ARV treatment programme covers people who require the use of ARV medications for post-exposure treatment after exposure to the HIV infection – non-professional exposures. In the case of professional exposure in accordance with Article 41 paragraph 5 of 5 December 2008 on Prevention and Combating Human Infections and Control of Infectious Diseases (Journal of Laws of 2016 item 1866), the employer or contractor covers the costs of post-exposure prevention including the costs of ARV medications.

Table 11. Data elaborated on the basis of the Minister of Health's Health Policy Programme entitled "Antiretroviral Treatment of People Living with the HIV virus in Poland".

	2007	2008	2009	2010	2011	2012	2013	2014	2015
Number of patients	3,358	3,822	4,434	4,897	5,606	6,297	7,110	7,881	8,606
Increase in the number of patients	-	+464	+612	+463	+709	+691	+813	+771	+725
% of annual growth of patients in relations to the previous year	9.35%	13.82%	16.01%	10.44%	14.47%	12.33%	12.91%	9.78%	9.19%
Number of institutions	18	18	20	20	20	21	21	21	21
Number of disrupted ARV therapies	388	605	401	485	373	410	622	626	587
Number of discontinued ARV therapies due to death	76	68	46	62	97	100	107	123	98
Number of patients in post-expositional infection prevention	1737 total	1771 total	460	247	282	282	273	242	226
	1328 professional	1378 professional							
	409 Non-	393 Non-							

	professional	professional							
Number of Women – vertical infection prevention	73	70	81	67	45	78	69	57	52
Number of newborns	54	69	69	54	34	52	49	47	38
Number of children	123	117	134	130	130	118	113	112	113

Elaborated by: The National AIDS Centre

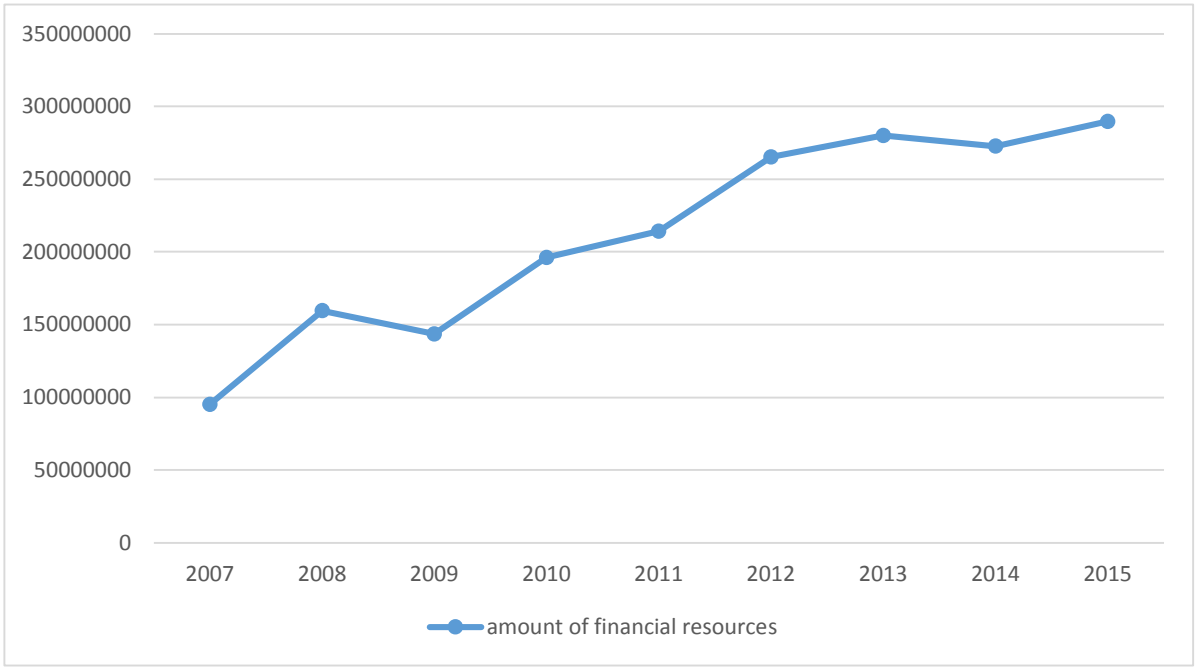
It should be emphasised that in accordance with the latest world recommendations, antiretroviral treatment is also a very important element of preventing HIV infections in the general population as an antiretroviral patient treated is less infectious. Continuing the implementation of the ARV treatment problem is an very important factor in combating the HIV/AIDS epidemic – thanks to the vast accessibility of ARV therapy free-of-charge for patients, the number of AIDS related deaths have significantly decreased. Combined and effective antiretroviral treatment has significantly improved the prognosis for people living with HIV. The HIV infection has become a protracted disease which can be controlled. Thanks to this therapy, patients live longer and the quality of their lives is improving.

Since the beginning of the ARV treatment Programme, an increase in the number of patients requiring antiretroviral treatment as a result of life situations (the average annual increase is around 13%) has been observed. The costs of treatment for so-called experienced patients (long-term ARV treated) are significantly higher than for patients beginning ARV treatment. Therapy for long-term treated patients requires the latest generation of medication (e.g. fusion inhibitors, integrase inhibitors), which affect the increase in ARV treatment.

Properly conducted vertical prevention (interdisciplinary care and ARV treatment) for pregnant women and new-borns living with HIV caused that the percentage of vertical infections fell from around 23% to around 1%.

When using antiretroviral medications in post-expositional prevention treatment (free for patients who were involved in an accident during which exposure to an HIV infection occurred) conducted as part of the ARV treatment programme, which to date has not been noted in any case of HIV infections.

Graph 12. Funding (in PLN) in chapter 85149 – health policy programme at the disposal of the National AIDS Centre in the years 2007–2015.



Elaborated by: The National AIDS Centre

In recent years, the level of funding for the health policy programme entitled: "Antiretroviral treatment of people living with the HIV virus in Poland" has systematically increased (part 46 – Health, section 851 – Health protection, chapter 85149 – Health policy programmes). Patients infected with HIV or suffering from AIDS have great access to the latest diagnostic methods and make use of – without waiting in lines – diagnosis and free-of-charge highly specialized ARV therapy financed by the Minister of Health. It should be emphasised that ARV treatment can not be interrupted – once therapy has started, it should be provided until the end of the patient's life.

Table 12. The estimated amount of financial resources allocated for the implementation of the health policy programme entitled: "Antiretroviral treatment of people living with the HIV virus in Poland", based on the analysis of the increase of patients in previous years and current costs of treatment (the suggested amount of funding can be subject to change with respect to the provisions of the budgetary act for 2017 and budgetary acts for subsequent years)

Year	Estimated number of patients	Value
2017	10,800 patients x 3500.00 x 12 months	343,279,000.00
2018	11,900 patients x 3500.00 x 12 months	499,800,000.00
2019	13,100 patients x 3500.00 x 12 months	550,200,000.00
2020	14,400 patients x 3500.00 x 12 months	604,800,000.00
2021	15,850 patients x 3500.00 x 12 months	665,700,000.00

Elaborated by: The National AIDS Centre

The sum presented in the table is the amount required to provide treatment for the estimated number of patients which should be included in ARV treatment as a result of medical indications in subsequent years.

At the end of 2015, the number of HIV infected people rose to 19,915, and the number of patients ARV treated amounted to 8,606. The number of new HIV infections registered in 2015 was 1,055. Every person infected with the HIV virus is a potential patient in the ARV treatment programme.

The financing of tasks included in the Schedule of the Implementation of the National Programme for Preventing and Combating AIDS for 2017–2021

The lack of sufficient financial support provided by the institutions responsible for implementing the National Programme for Preventing HIV infections and Combating AIDS contributes to an under-implementation of substantive and organizational potential which these entities have their disposal. The Supreme Audit Office (NIK) has drawn attention to this problem and stated in the information provided on the audit results for the implementation of the National Programme for Preventing HIV infections and Combating AIDS in 2012-2013: "(…) The Supreme Audit Office's audit has revealed far-reaching neglect in the scope of financing the preventative activities aiming to limit the spread of the HIV virus in the Republic of Poland. This results in a constant increase in the cost of purchasing medication covered by the state budget". NIK further expanded on the above-mentioned remark: "(…) In the opinion of NIK, continuing the described tendency of annual reduction of the share of the

National AIDS Centre's expenditure for prevention in the total amount of expenses for implementing the National Programme in 2007–2013 (2% of the budget of the National Centre) negatively affects the long-term effectiveness of the whole Programme, because in the long-term perspective it can pose a threat of negative marginalization to preventative activities which do not bring an immediate effect and whose results are evident only after a certain period of time (...)". According to NIK, a change in the consciousness of citizens regarding HIV/AIDS is the most effective means of realizing the most important objective, i.e. the prevention of infections and thereby avoiding subsequent illnesses. The financial limitation is one of the most significant barriers in implementing the prevention programmes initiated by the National AIDS Centre. This problem also escalates the limited use of financial resources at the disposal of local government administrations and local governmental units for the purposes of HIV prevention.

The task implementation is financed by the state budget respectively from the parts which are at the disposal of the competent ministers implementing these programmes (in accordance with Article 4 (2) of the Act on Preventing and Combating Human Infections and Infectious Diseases, and also by other entities indicated in these programmes in the scope and to the extent outlined in separate regulations.

The amounts given above are estimates, and the final amounts of financial resources for 2017–2021 will depend on the budgets of specific entities.

In the case of funding the tasks by central offices, it is a proposed amount of budgets (considering the great difference, the amount of financial resources from previous editions of the schedule and the needs and expectations of inclusion in implementing HIV/AIDS prevention were not taken into consideration). However, in the case of tasks implemented by voivodship and marshal offices, the calculations were based on the amount of at least 1 grosz annually for a resident in the given voivodship (on the basis of information provided by the Central Statistical Office (GUS) as of 30 June 2015). In accordance with the guidelines elaborated by the Ministry of Finance, the dynamic of 101.8% for 2018, 102.2% for 2019 and 102.5% for subsequent years was adopted. The proposal presented above refers to funds spent directly on the implementation of HIV/AIDS activities.

Table 13. The proposed funding for 2017–2021 within the framework of implementing the activities of the particular Programme implementers (the suggested amount of funding can be subject to change with respect to the provisions of the budgetary act for 2017 and budgetary acts for subsequent years and guidelines concerning the application of uniform micro-economic indicators which are the basis of estimating the financial impacts of draft bills. Between 2017 and 2019, this indicator should increase by 101.3%, 101.8% and 102.2%, respectively and to 2020 and in subsequent years by 102.5%).

Entity	2017	2018	2019	2020	2021
Minister competent for physical culture, sports and tourism	0	0	0	0	0
Minister competent for education and schools[8)]	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
Minister of National Defence	100,000	100,000	100,000	100,000	100,000
Minister competent for education	0	0	0	0	0
Minister competent for families, work and social security	0	0	0	0	0
Minister of Justice	100,000	100,000	100,000	100,000	100,000
Minister of Internal Affairs	45,000 – 55,000	45,000 – 55,000	45,000 – 55,000	45,000 – 55,000	45,000 – 55,000
National Sanitary Inspection	384,000	384,000	384,000	384,000	384,000
Dolnośląski Voivodship Office	29,000	29,000	29,000	29,000	29,000
Kujawsko-Pomorski Voivodship Office	21,000	21,000	21,000	21,000	21,000
Lubelski Voivodship Office	21,000	21,000	21,000	21,000	21,000
Lubuski Voivodship Office	10,000	10,000	10,000	10,000	10,000
Łódzki Voivodship Office	25,000	25,000	25,000	25,000	25,000
Małopolski Voivodship Office	34,000	34,000	34,000	34,000	34,000
Mazowiecki Voivodship Office	53,000	53,000	53,000	53,000	53,000

8) Further research on HIV/AIDS with support funding agencies, the National Science Centre (NCN) and the National Centre for Research and Development (NCBiR) depends on: setting priority areas of research in a given year, adopting the relevant resolutions by the institutions mentioned above, the amount of allocated financial resources and on the conditions of competitions and project topics, which are chosen by the applicant. Therefore, it is difficult at this point to determine the topic of future applications including those eligible for funding.

Opolski Voivodship Office	10,000	10,000	10,000	10,000	10,000
Podkarpacki Voivodship Office	21,000	21,000	21,000	21,000	21,000
Podlaski Voivodship Office	12,000	12,000	12,000	12,000	12,000
Pomorski Voivodship Office	23,000	23,000	23,000	23,000	23,000
Śląski Voivodship Office	45,000	45,000	45,000	45,000	45,000
Świętokrzyski Voivodship Office	13,000	13,000	13,000	13,000	13,000
Warmińsko-Mazurski Voivodship Office	15,000	15,000	15,000	15,000	15,000
Wielkopolski Voivodship Office	35,000	35,000	35,000	35,000	35,000
Zachodniopomorski Voivodship Office	17,000	17,000	17,000	17,000	17,000
Office of the Marshal of the Dolnośląski Voivodship	29,000	29,000	29,000	29,000	29,000
Office of the Marshal of the Kujawsko-Pomorski Voivodship	21,000	21,000	21,000	21,000	21,000
Office of the Marshal of the Lubelskiego Voivodship	21,000	21,000	21,000	21,000	21,000
Office of the Marshal of the Lubuskiego Voivodship	10,000	10,000	10,000	10,000	10,000
Office of the Marshal of the Łódzki Voivodship	25,000	25,000	25,000	25,000	25,000
Office of the Marshal of the Małopolski Voivodship	34,000	34,000	34,000	34,000	34,000
Office of the Marshal of the Mazowiecki Voivodship	53,000	53,000	53,000	53,000	53,000
Office of the Marshal of the Opolski Voivodship	10,000	10,000	10,000	10,000	10,000
Office of the Marshal of the Podkarpacki Voivodship	21,000	21,000	21,000	21,000	21,000
Office of the Marshal of the Podlaski Voivodship	12,000	12,000	12,000	12,000	12,000
Office of the Marshal of the Pomorski Voivodship	23,000	23,000	23,000	23,000	23,000
Office of the Marshal of the Śląski Voivodship	45,000	45,000	45,000	45,000	45,000
Office of the Marshal of the Świętokrzyski Voivodship	13,000	13,000	13,000	13,000	13,000
Office of the Marshal of the Warmińsko-Mazurski Voivodship	15,000	15,000	15,000	15,000	15,000

Office of the Marshal of the Wielkopolski Voivodship	35,000	35,000	35,000	35,000	35,000
Office of the Marshal of the Zachodniopomorski Voivodship	17,000	17,000	17,000	17,000	17,000

Elaborated by: The National AIDS Centre

Each entity independently creates, on the basis of the Schedule of 2017–2021, a specific annual schedule for implementing tasks in which information on planned implementation tasks in the following year and on the planned amounts of funding allocated in the entity's budget for HIV/AIDS activities is included. The specific annual schedule will be submitted to the Minister of Health. Tasks resulting from the Schedule for Implementation of the National Programme for Preventing HIV Infections and Combating AIDS for should be financed by funds which are at the disposal of entities participating in the Programme. Their final amount for 2017–2021 will depend on the budget of specific entities in a given year. For the full implementation of the schedule, the inclusion of specific entities in the HIV/AIDS activities is recommended (aside from ministries and those competent in the scope of health and social assistance of marshal offices, Regional Centres of Social Policy, municipal offices and the National Sanitary Inspection). Each task specified in this schedule is crucial from the point of view of combating the HIV/AIDS epidemic.

VII. MONITORING AND EVALUATION

The implementation of the Programme is directed by the Minister of Health. Coordination of the activities and the operation of the monitoring system of the Programme's implementation were entrusted to the National AIDS Centre, an agency supervised by the Minister of Health and established in order to carry out the tasks of prevention and combating HIV and AIDS.

In accordance with the provisions of the Regulation of the Council of Ministers of 15 February 2011 on the National Programme for Preventing HIV Infections and Combating AIDS, entities obliged to implement the Programme shall call into being Programme implementation teams which will be active for the duration of the schedule. These teams shall co-ordinate at the voivodship level, activities resulting from the annual schedule and cooperate in this scope with the Programme Coordinator. The goal of the Team's operation is to integrate the task implementation specified in this schedule for implementing the National Programme for Preventing HIV Infections and Combating AIDS.

In the previous edition of the Programme in effect in 2012–2016, Teams for implementing the National Programme for Preventing HIV Infections and Combating AIDS were set up in

every voivodship. Representatives of the following institutions active in the territory of given voivodships were included in the Teams:

1) Voivodship offices;
2) Marshal offices;
3) Municipal offices;
4) National Sanitary Inspection;
5) National Health Fund;
6) Voivodship consultants;
7) Curators of education;
8) The Police;
9) NGOs

In addition, the Teams also included representatives of:

1) Therapeutic centres;
2) District Medical Chambers;
3) District Chambers of Nurses and Midwives;
4) Polish AIDS Research Society;
5) Universities (e.g. University of Zielona Góra, Pomeranian Medical University in Szczecin);
6) Organizational units of public blood services;
7) Boarder Guard;
8) Custom Chambers;
9) Other entities.

In general, the office that called the Team into existence (the department responsible for the Team) provides the administrative service for the Team.

In accordance with the Regulation of the Council of Ministers on the National Programme for Preventing HIV Infections and Combating AIDS, the Schedule of the Programme's implementation (encompassing a five-year span) is developed by the Coordinator in cooperation with the entities obligated to implement the Programme. The Schedule determines: the tasks (assigned to specific areas, main goals and detailed objectives), the indicators (assigned to each task), the entities implementing the task in the area of its substantive and territorial jurisdiction, and the date of implementation. It is submitted by the Coordinator to the Minister of Health by the 30 June the year preceding the commencement of the activities included in the Schedule. Then, the Minister of Health submits the document to the Council of Ministers. At the end of the five-year duration of the Schedule of the

Programme's implementation, the entities implementing the tasks shall submit reports on the performance to the Coordinator by the 15 April the following year. The Coordinator shall prepare and submit to the Minister of Health a comprehensive document concerning the five-year Schedule for the Programme's implementation by the 15 May 2022 which is then passed on, in accordance with procedure, to the Council of Ministers.

Aside from this, the entities responsible for the Programme's implementation develop, on the basis of the Schedule of the Programme's implementation, detailed annual schedules of the Programme's implementation, called hereinafter the "annual schedules" by the 15 October of the year preceding the commencement of activities and report them to the Coordinator. The Coordinator submits them in the aggregate form to the Minister of Health by the 15 November of the year preceding the commencement of activities.

The reports from specific years on the implementation of the tasks included in the detailed annual schedules are submitted by the 15 April of the following year to the Coordinator, who then develops a comprehensive annual report by the 15 May and submits it to the minister of health.

In order to monitor the implementation of the Programme a system of data collection from the entities implementing the Programme was prepared. It includes in particular:

1. the entities obliged to implement the Programme and those participating in its implementation,
2. implemented tasks (concerning funding, the date of implementation, and the scope),
3. the target groups of implemented tasks,
4. coherence of activities undertaken with other statutory programmes.

Entities taking part in the implementation of the Programme shall introduce annual schedules to the monitoring system, along with annual reports and five-year reports, on the basis of the § 10 point 3 of *the Regulation of the Council of Ministers on the National Programme for Preventing HIV Infections and Combating AIDS,* after being provided with a password by the Coordinator.

The Electronic Monitoring Database is used to catalogue and reviewing tasks which are planned and implemented by the National Programme for Preventing HIV Infections and Combating AIDS. By means of the Electronic Monitoring Database, entities obliged to

implement the National Programme for Preventing HIV infections and Combating AIDS submit Reports on the Programme implementation for the previous year along with the schedule for the following year.

Direct access to the system is possible on the National AIDS Centre's webpage: www.aids.gov.pl

General evaluation and conclusions from the Programme implementation

Audit of the Supreme Audit Office

The implementation of the National Programme for Preventing HIV Infections and Combating AIDS was audited by the Supreme Audit Office ("Implementation of the National Programme for Preventing HIV Infections and Combating AIDS in 2012-2013," no. 10/2015/P/14/076/LKA, www.nik.gov.pl/plik/id,8675,vp,10792.pdf).

The objective of the audit was to evaluate the effects achieved by the entities responsible for preparing and implementing the Programme tasks for 2012–2013.

In the opinion of the Supreme Audit Office, conducting the Programme is dependent to a great extent on the of particular implementers' level of understanding of the importance of HIV/AIDS issues. Knowledge of the risks associated with this issue should be translated into action, above all in the area of broadly defined prevention.

The Supreme Audit Office drew attention to the increasingly smaller amount of funding for preventative activities aimed at limiting the spread of the HIV virus. In the opinion of the Supreme Audit Office, continuing the tendency of decreasing the share of expenses of the National AIDS Centre for prevention, the total amount of expenses for the Programme implementation for 2007–2013 negatively affects the long-term effectiveness of the whole Programme, because in the long-term perspective it can pose a threat of negative marginalization to preventative activities, which do not bring an immediate effect and whose results are evident only after a certain period of time.

The findings of the audit justify, in the opinion of the Supreme Audit Office, undertaking activities aimed at increasing funds allocated for prevention in the total amount of expenses incurred for the Programme's tasks by the National AIDS Centre in agreement with the Minister of Health.

The conclusions of the Supreme Audit Office: (www.nik.gov.pl/aktualnosci/nik-o-zapobieganiu-hiv-i-zwalczaniu-aids.html).

- The Supreme Audit Office positively assesses the National AIDS Centre's coordination of the implementation of the National Programme for Preventing HIV Infections and

Combating AIDS for 2012-2013, as well as the support and health care of people HIV infected and living with AIDS in the scope of allocated funds and possibilities. At the same time, the Supreme Audit Office stated effective prevention of HIV infections will be possible only in the case of ensuring the appropriate funding for broadly defined prevention.

- The Supreme Audit Office emphasises the appropriate care for improving the quality of life and functioning of people living with HIV/AIDS and their families and relatives in all inspected centres (centres providing ARV and VCT treatment). The access to medications and HIV tests provided by the National AIDS Centre also deserves a positive assessment.
- The findings of the audit indicate that more funds are needed for prevention in the total amount of funds allocated to the National Programme for Preventing HIV Infections and Combating AIDS and elaborating and implementing methods enabling quality measurement of the effects of the activities undertaken in the scope of the Programme.
- The Supreme Audit Office also emphasises the importance of verifying at the national level doctor's compliance with the obligation to report HIV virus infections.

Evaluation Research

The National AIDS Centre carried out evaluation research on the National Programme for Preventing HIV Infections and Combating AIDS. The objective of the research was to evaluate the limitation of the spread of HIV and improvement of the quality and access of care for people living with HIV/AIDS.

The strengths and reinforcing factors of the Programme implementation are:

- The National AIDS Centre as the coordinating unit,
- The engagement of NGOs,
- The engagement of authorities in implementing the Programme,
- The Support of decision makers at the parliamentary, governmental and ministerial levels,
- Maintaining constant access to ARV therapy,
- Implementing activities related to prevention and treatment and their adaptation to the needs and epidemiological situation in the Republic of Poland,
- Preventative and educational activities for a wide group of recipients,
- Support from self-government and local institutions,
- Support from international institutions.

Weaknesses of the Programme implementation include:

- Lack of active participation on the part of all governmental departments,
- Limited information and educational activities which resulted from insignificant interest of the media and increasing costs of preventative activities (mainly social campaigns),
- Decreasing amount of funding for preventative activities,
- Lack of a social programme directed to people living with HIV/AIDS, which would enable them to return to professional and social activities,
- Insufficient Programme monitoring.

Conclusions presented after the research:

- The Programme includes in its assumptions a complex range of issues associated with HIV/AIDS and serves as a guideline for continuing activities aimed at preventing HIV infections and care for people living with HIV/AIDS,
- Objectives and directions of activities in subsequent Programmes are defined in a clear and specific manner. For each of them, activities directed to a specific group of society were assigned, each of the actions were specified, for each of the tasks requested by the Programme, an institution engaged in its implementation was indicated,
- Throughout the implementation of the subsequent editions of the Programme, certain solutions were introduced which enabled the evaluation of methods and effects of implementing the solutions,
- The majority of activities undertaken met social expectations in this scope,
- Not all of the institutions obliged in the Programme fully complied with completing their tasks,
- The Programme was fully and most effectively implemented by the Ministry of Health along with supervising units and NGOs working on behalf of people living with HIV/AIDS.

Recommendations and challenges for upcoming years:

- the HIV epidemiological situation in the Republic of Poland requires further monitoring taking into consideration the spread of the virus by means of sexual contact particularly in the MSM population and strengthening the educational and preventative activities customized for a given population. The prevention of HIV and sexually transmitted diseases remain the key to decreasing the scale of the HIV/AIDS epidemic,

- increasing the number of people taking tests for HIV and other sexually transmitted diseases by promoting the idea of testing, information and educational projects and campaigns encouraging people to take tests,
- knowledge among the general population on HIV/AIDS and other sexually transmitted diseases and health-promoting education in this scope requires constant improvement,
- improving the system of providing medical services and lowering the costs of HIV diagnostics and the cost of medication,
- in view of the dynamic of the epidemiological situation, a significant increase in population of people requiring antiretroviral treatment should be expected, and the aging of the population of people infected is a new challenge for the welfare system,
- development of multisector cooperation and undertaking activities (supported by epidemiological data) addressed to specific societies and populations at the local, regional and national levels (available national sources of information do not allow for obtaining important epidemiological information and should be supplemented regularly with research conducted on standardized methodology,
- support for states neighbouring the European Union in combatting HIV/AIDS and sexually transmitted diseases,
- the necessity for more effective ways of gathering data from specific states and regions. More information is needed on key populations.

Emphasis should be placed on continuing and intensifying activities related to:

- epidemiological analysis in the aspect of counteracting the HIV/AIDS epidemic,
- prevention of HIV infections,
- assistance and support for people living with HIV and AIDS and their relatives,
- access to diagnostic methods,
- ARV treatment according to current medical knowledge,
- implementing a vast social education programme to avoid risky behaviours and to change social attitudes towards tolerance and acceptance of people living with HIV and AIDS.

Activities undertaken should be interdisciplinary, interdepartmental and interinstitutional at the national and local level.

Footnotes for "II. THE HIV EPIDEMIC IN THE REPUBLIC OF POLAND" section

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