SCHEDULE FOR THE IMPLEMENTATION OF THE NATIONAL PROGRAMME FOR PREVENTING HIV INFECTIONS AND COMBATING AIDS FOR 2022-2026

Justification

On the basis of Article 4 of Section 1 of the Act of 5 December 2008 on preventing and combating infections and infectious diseases in humans (Journal of Law of 2020, item 1845, as amended), the Council of Ministers may determine by regulation, programmes for preventing and combating specific infections or infectious diseases and drug resistance of biological pathogens resulting from the epidemiological situation in Poland or due to the necessity of adapting to international programmes, bearing in mind their effective implementation, and providing health care to people whose particular vulnerability to infections 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 (Journal of Laws, item 227).

The implementation of the National Programme for Preventing HIV Infections and Combating AIDS (hereinafter referred to as 'Programme') is directed by the Minster of Health (hereinafter referred to as 'the competent minister for health' or 'Minister of Health') and coordinated by the National AIDS Centre. The competent ministers are the entities obliged to implement the Programme in accordance with the objectives of the Programme, local government administrative bodies and units subject to them. All entities obliged under separate regulations to develop and implement social policy strategies, including social assistance programs, pro-family policies, the 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 that conduct activities that enable undertaking tasks included in the schedule for implementing the Programme or running campaigns supporting its implementation may also participate in implementing the tasks of the Programme. The Programme assumes taking action in five areas:

- 1) preventing HIV infections among the general population;
- 2) preventing HIV infections among people with an increased level of risky behaviour;
- 3) support and health care for people with HIV infections and living with AIDS;
- 4) international cooperation;
- 5) monitoring.

According to § 4 (1) of the Regulation by the Council of Ministers of 15 February 2011 on the National Programme for Preventing HIV and Combating AIDS, the Coordinator of the Programme, i.e., the National AIDS Centre, a unit subordinated and supervised by the Minister of Health, in collaboration with entities obliged to realize the Programme, prepares a schedule for the realization of the Programme. Afterwards, the Coordinator 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.

The Schedule for the Implementation of the National Programme for Preventing HIV Infections and Combating AIDS, elaborated for 2022-2026, covers all of the above-mentioned areas.

DIAGNOSIS OF THE HIV/AIDS AND SEXUALLY TRANSMITTED DISEASES (STIs) SITUATION

Table of Contents

I.	Introduction	2
II.	The Epidemiology of HIV and Other STIs in the Republic of Poland and Europe	7
III.	Selected Legal Aspects Concerning HIV/AIDS and STIs	26
IV.	HIV/AIDS and STIs in the context of public health	32
V.	New trends and challenges in preventing HIV/AIDS and STIs	45
VI.	The Schedule for the Implementation of the National Programme for Preventing HIV	√ Infections
	and Combating AIDS for 2022-2026 - HIV/AIDS and STIs Prevention, ARV	Treatment,
	International Cooperation, Monitoring	48
VII.	Financing	55
VIII.	Evaluation	60
IX.	The Schedule for the Implementation of the National Programme for Preventing HIV	Infections
	and Combating AIDS for 2022-2006	63

I. INTRODUCTION

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

Many years of experience and observation, knowledge in the field of HIV/AIDS, forecasts of the spread of epidemics in our region as well as international policy justify the legislative initiatives and activities undertaken within the scope of this Programme. Developing and implementing the Programme constitute the foundation 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 and other sexually transmitted infections on behalf of the Minister of Health. In accordance with the Regulation of the Minister of Health of 11 August 2019 on the National AIDS Centre (Journal of Laws of the Ministry of Health, item 60), the activities of the National AIDS Centre focus on, among others:

- 1) undertaking activities aimed at limiting the health risk and harm resulting from the epidemic of HIV/AIDS and other sexually transmitted infections, particularly:
 - a) conducting health education and promoting a healthy lifestyle,
 - b) promoting preventive measures against HIV/AIDS and other sexually transmitted infections among the general public and people with an increased level of risky behaviour,
 - c) supporting people with sexually transmitted infections, including people with HIV infections or those living with AIDS and their families, in terms of combating stigmatization and discrimination and providing access to health care,
 - d) collecting and analyzing information on the epidemic situation and innovative preventive measures,
 - e) conducting international cooperation,
 - f) maintaining an electronic database of activities conducted in the area of HIV/AIDS by other entities in Poland;
- 2) coordinating and monitoring the implementation of the National Programme of Preventing HIV and Combating AIDS;

3) coordinating the implementation of the health care policy concerning antiretroviral treatment set out by the Minister of Health on the basis of provisions of the Act of 27 August 2004 on Health Care Services Financed From Public Funds (Journal of Laws of 2021, item 1285, as amended).

Subsequent 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. The Coordinator of the Programme, in collaboration with the entities obliged to implement the Programme, is responsible for preparing the schedule of the Programme (hereinafter named: 'Schedule'), which covers, in particular, the tasks necessary to achieve the objectives set out in the Annex to the Regulation.

The Schedule, which covers a period of five years, determines 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 by 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 finished, the entities obliged to implement the Program will present the Minister of Health with a report on the tasks covered by the Schedule together with a summary of this period by 15 April of the following year. The Coordinator will prepare a collective report on the performance of the tasks covered by the Schedule and a summary of this period and submit them to the Minister of Health by 15 May of the following year. The Minister of Health will 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 2022-2026 (according to § 4 (4) of the above-mentioned Regulation). Representatives of public administrative offices, the medical community and non-governmental organizations participated in developing this Schedule.

Glossary of terms used in the document

AIDS – acquired immunodeficiency (impairment) syndrome

ARV – antiretroviral treatment.

Chemsex – sexual contact under the influence of psychoactive substances.

ECDC – European Centre for Disease Prevention and Control in Stockholm.

HAART – combination antiretroviral treatment, so-called highly active antiretroviral therapy,

HBV – a virus that causes type B inflammation of the liver

HCV – a virus that causes type C inflammation of the liver

HIV - acquired immunodeficiency (impairment) syndrome

HIV (-) – a negative screening test result, meaning that antibodies against HIV were not found in the tested blood.

HIV (+) – a positive screening test result, meaning that antibodies against HIV were found in the tested blood.

IDU – injecting drug users

CD4 cells (CD4 lymphocytes) – a type of white blood cell with a CD4 surface receptor on its surface that helps fight infections; HIV attacks CD4 cells, causing them to malfunction or be destroyed.

MSM – male population who have sexual contact with men.

MH – Ministry of Health

NDPHS – Northern Dimension Partnership in Public Health and Social Well-being.

NIZP- PZH— National Institute of Public Health (PZH) - National Research institute.

UN – United Nations

Seropositive person – an HIV-infected person.

PCB – UNAIDS Programme Coordinating Board.

PEP – post-exposure prophylaxis

VCT – Voluntary Counselling and Testing Centre

Key populations - in particular: men having sex with other men, people using psychoactive substances (presently or in the past), people in prison or detention, people providing sexual services or using such services, and transgender people.

PrEP - Pre-exposure Prophylaxis.

CSES – County Sanitary and Epidemiological Stations

PTN AIDS – Polish AIDS Society;

Risky behaviour – sexual contact without the use of a condom, *chemsex*, sharing equipment for taking narcotics and tattooing, contact with the mucous membrane, open wounds with blood or sexual secretions of another person.

STDs – sexually transmitted diseases.

STIs – sexually transmitted infections.

EU – European Union.

UNAIDS – The Joint United Nations Programme on HIV/AIDS.

WHO – World Health Organization

PSES – Provincial Sanitary and Epidemiological Stations

Conditions for Implementing the Programme

The effectiveness of implementing the Programme's activities should be viewed in terms of the issues covered by it. When planning actions, a message or a communication channel, the social and medical conditions that may arise throughout the implementation process should be taken into account. Various legal aspects also have an impact on effectively implementing this Programme. This Programme's success largely depends on how specific implementers (entities) understand the importance of the issue of HIV/AIDS and their involvement in implementing the activities.

Effectiveness is analyzed based on past experience. It will be possible to evaluate the effects of the five areas in which this Programme assumes taking action only in the long-term perspective.

Implementing all of the Programme's objectives is possible, provided that all of the participating entities allocate appropriate funding for its implementation. Prevention is the most important area that requires increased efforts in the upcoming years. The main priorities include educating the general public, including adolescents, targeting preventive measures to change attitudes/behaviour and encouraging people to take responsibility for their health.

The activities undertaken within the Programme should be constructed based on scientific knowledge about the effectiveness of their impact. In this area of public health, *Evidence-Based Medicine* should serve as a model.

Therefore, the Programme's effectiveness depends on factors including:

- compliance with the current state of knowledge,
- using this knowledge in proven strategies, forms and methods of impact,

- the creators and implementers' level of professionalism,
- the conditions in which the Programme is implemented.

Based on the Regulation of the Minster of Health of 13 March 2020 regarding the announcement of the state of epidemic threat in the territory of the Republic of Poland (Journal of Laws, item 433), the Minister of Health declared a state of epidemic threat within the territory of the Republic of Poland, which came into effect starting 14 March 2020. Later, on 20 March 2020, a SARS-CoV-2 epidemic was declared on the basis of the Minister of Health's regulation on declaring the state of the epidemic in Poland (Journal of Laws, item 491, as amended).

Therefore, the COVID-19 epidemic's impact on implementing the tasks outlined in the Schedule and consequent threats and subsequent restrictions should also be considered.

Winnie Byanyima, the Executive Director of UNAIDS, wrote in the introduction to the UNAIDS report prepared for World AIDS Day 2020 that there were serious concerns that the COVID-19 pandemic could destroy the achievements made so far in the field of health and medicine over the last 20 years worldwide. This situation could also pose a threat to the scientific accomplishments made in the fight against HIV/AIDS. The data presented in the UNAIDS report demonstrated that the goals set for 2020 were not achieved as a result of the spread of the COVID-19 pandemic.

It is now clear that the pandemic inhibits the smooth implementation of activities in the field of HIV and AIDS and that there are serious concerns that this situation could further deteriorate. Both the number of new cases of HIV infections worldwide and Polish epidemiological data indicate that much more work is required in the process of combating the HIV/AIDS epidemic.

Other strategic documents

The submitted Schedule for the Implementation of the National Programme for Preventing HIV Infections and Combating AIDS for 2022-2026 is consistent with national and international documents and strategic declarations, including:

- 1) National Health Fund;
- 2) Poland 2030 "Long-term National Development Strategy;
- 3) The 2030 Agenda for Sustainable Development (document adopted in 2015 by the United Nations General Assembly);
- 4) Fast-Track: ending the AIDS epidemic by 2030;
- 5) The partial strategy of the UNAIDS target by 2020 (the so-called 90-90-90 strategy) implemented as part of the Ending the AIDS Epidemic by 2030 Strategy;
- 6) The global UN strategy: New Global AIDS Strategy 2021–2026, End Inequalities, End AIDS; 2016-2021 Global Health Sector Strategies for HIV/Viral Hepatitis/Sexually Transmitted Infections (Document adopted at the 69th World Health Assembly);
- 7) Declaration of the United National General Assembly in 2016 On the Fast-Track to End AIDS in the age of Sustainable Development;
- 8) Regulation (EU) No 282/2014 of the European Parliament and of the Council of 11 March 2014 on the establishment of a third Programme for the Union's action in the field of health (2014-2020): third Programme for the Union's action in the field of health (2014-2020);
- 9) Regulation (EU) 2021/522 of 24 March 2021 establishing a Programme for the Union's action in the field of health ('EU4Health Programme') for the period 2021-2027: Programme for the Union's action in the field of health ('EU4Health Programme') for the period 2021-2027
- 10) Northern Dimension Partnership NDPHS Strategy 2020:
- 11) European Parliament resolution of 20 November 2008 on HIV/AIDS: early diagnosis and early care;

- 12) European Union Declaration (2008);
- 13) The Bremen Declaration Responsibility and Partnership Together against HIV / AIDS, EU (2007);
- 14) The Dublin Declaration on Partnership to Fight HIV/AIDS in Europe and Central Asia, WHO, EU (2004);
- 15) The Vilnius Declaration EU (2004);
- 16) The 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);

II. THE EPIDEMIOLOGY OF HIV AND OTHER STIS IN THE REPUBLIC OF POLAND AND EUROPE

The 2020 data provided below should be treated as provisional data to be updated in line with the principles of the epidemiological surveillance system and public statistics in Poland. In addition, it should be mentioned that the 2020 data on infectious diseases surveillance are underestimated due to the epidemiological situation and the COVID-19 pandemic. The data is mainly based on reports of infectious diseases, infections and poisonings in Poland (MZ-56) sent through the Provincial Sanitary and Epidemiological Stations to the National Institute of Public Health – National Institute of Hygiene (NIZP-PZH) and not on the basis of individual interviews. As a result, not all of the data can be presented in the report.

Epidemiological data from Europe on HIV is available for 2019 and on STIs for 2018 (report as of 5 February 2021).

The Epidemiology of HIV in the Republic of Poland

Since the introduction of tests in 1985 until 31 December 2020:

- 26,395 people have been diagnosed with HIV,
- 3,802 cases of AIDS have been noted,
- 1,428 deaths have occurred (excluding deaths in 2020).

In 2016-2019, nearly 5,282 new cases were registered, and the average incident rate of newly detected infections amounted to 3.44 cases in 100,000 inhabitants, including an average of 1,300 new infections registered annually. In 2020, as of 31 December, 938 new cases of HIV infections and 43 cases of AIDS were registered. Excluding 2020, the number of AIDS cases remains at a similar level – an average of approximately 100 cases a year (over the last five years). The number of AIDS-related deaths did not exceed 30 cases between 2016 and 2019 (Graph 1).

120 1450 1400 100 1350 80 1300 60 1250 40 1200 20 1150 0 1100 2016 2017 Zachorowania na AIDS Zgony chorych na AIDS Zakażenia HIV

Graph 1. Trends in the number of HIV infections, AIDS infections and AIDS-related deaths in 2016 - 2019.

Source: The National Institute of Public Health – The National Institute of Hygiene on the basis of individual interviews sent through the Provincial Sanitary and Epidemiological Stations (*2020 data excluded due to underestimation).

Zachorowanie na AIDS - AIDS cases

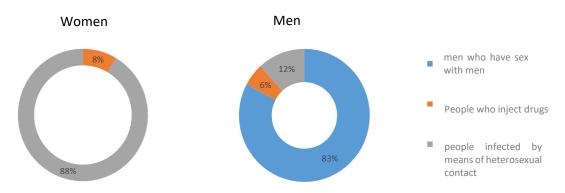
Zgony chorych na AIDS – AIDS-related deaths

Zakażenia HIV - HIV infections

The decrease in the number of infections between 2017 and 2018 is likely due to delays in reporting cases or not reporting them at all and not due to a decrease in the number of new infections, as shown by the resurgence of cases observed the following year (Graph 1).

The increase in the number of infections was noted among men and women. Among women, there was a 38% increase in the number of newly detected infections over the number of infections registered in 2016.

Graph 2. The median percentage distribution of the main ways of transmission among newly detected HIV infections in 2016-2019

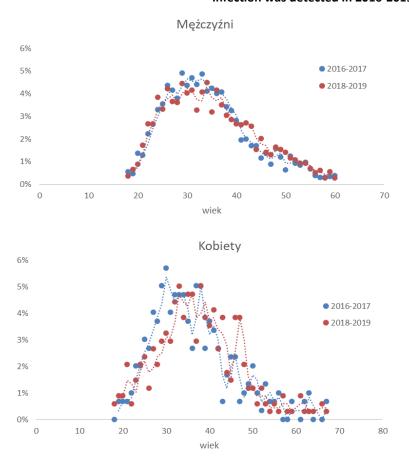


Source: The National Institute of Public Health – The National Institute of Hygiene on the basis of individual interviews sent through the Provincial Sanitary and Epidemiological Stations (*2020 data was excluded due to underestimation, and cases in which the way of infection was not reported and cases of vertically transmitted infections were not included).

Although data on the main ways of HIV infections in 2020 is still being prepared, based on data from recent years, it may be concluded that the percentage share of the probable ways of HIV infections in the general population will remain at a similar level (excluding cases of vertically transmitted infections and cases in which the way of infection was not reported). The predominant way of infection among men still remains sexual contact with other men (MSM) and heterosexual sexual contact. Among the 4,587 men whose HIV infection was detected between 2016-2019, the probably way of infection was not given in 64.3% of the reports and such data was not provided in 75% of the reports (of 648 cases) concerning women. Infections attributed to injecting drug use constitute fewer than 10% of the cases in both men and women.

In 2016-2017 and 2018-2019, infections among men peaked in the same age group, i.e., 30-35 years of age; however, among women in 2016-2017, the peak was recorded for the same age group, 30-35 years of age. In later years, however, it shifted to around 33 years of age (Graph 2). This trend is also confirmed by the percentage increase of HIV infections detected among women 50 years of age and older – from 9% in 2016 to 11% in 2019. On the other hand, a clear decrease in the number of infections may be observed in the group of younger women (20-34 years of age), from 47% in 2016 do 35% in 2019.

Graph 3. Age distribution at the moment of detecting HIV infections among men and women whose HIV infection was detected in 2016-2019



Source: The National Institute of Public Health – The National Institute of Hygiene on the basis of individual interviews sent through the Provincial Sanitary and Epidemiological Stations (*2020 data was excluded due to underestimation).

Mężczyźni – men Kobiety – women wiek - age

The problem of HIV/AIDS also varies in terms of particular provinces. In 2016–2019, the rate of newly detected HIV infections per 100,000 residents exceeded the national average in the Dolnośląskie, Mazowieckie, Śląskie, Wielkopolskie, Małopolskie and Zachodniopomorskie provinces in 2016-2017. Particular provinces also reveal various trends in newly detected infections. In 2016–2019, an upwards trend of 25% was reported in the Lubelskie and Lubuskie provinces, while a decrease of ¼ of infections or more was noted in the Pomorksie, Zachodniopomorskie and Świętokrzyskie provinces (Table 1). In Poland, the HIV epidemic can still be described as being mainly concentrated in the MSM population. The frequency of HIV infections in other populations is significantly lower. However, in some provinces, the percentage of infections is comparable to those among the MSM population registered among people engaging in heterosexual sexual contact, e.g., in the Podlaskie (46.3%) and Warmińsko-Mazurskie provinces (37.8%). Furthermore, in some provinces, more infections have been registered among injecting drug users. That proportion exceeded 10% in the Zachodniopomorskie, Lubuskie, Opolskie and Warińsko-Mazurskie provinces (Table 1).

Table 1. Detectability of HIV in the years 2016 – 2020 and the character¹⁾ of infections detected between 2016–2019 according to province.

Province		or of nev	•			and the 100,000	Detected (percenta		ons in 2016-2019 e)					
	Media: 2016-2				2020*		Women	MSM	IDU	Heterosexual contacts	trend			
Dolnośląskie	139	4.77	144	4.95	77	2.66	13.7	75.1%	8.1%	16.8%	3.6%			
Kujawsko-Pomorskie	25	1.18	31	1.49	51	2.46	16.2%	76.5%	0.0%	23.5%	26.5%			
Lubelskie	26	1.22	34	1.58	27	1.28	22.7%	66.7%	5.6%	27.8%	28.8%			
Lubuskie	33	3.20	28	2.71	38	3.76	16.7%	62.5%	12.5%	25.0%	- 15.4%			
Łódzkie	68	2.72	59	2.39	12	0.49	19.4%	68.1%	8.4%	23.5%	- 12.6%			
Małopolskie	122	3.59	101	2.97	192	5.62	7.4%	84.4%	2.6%	13.0%	- 16.9%			
Mazowieckie	289	5.38	248	4.58	263	4.85	10.3%	81.4%	2.7%	15.9%	- 14.4%			
Opolskie	22	2.22	25	2.53	15	1.53	21.3%	58.6%	17.2%	24.1%	13.6%			
Podkarpackie	27	1.24	30	1.39	11	0.52	9.8%	68.3%	2.4%	29.3%	11.3%			
Podlaskie	18	1.52	18	1.48	12	1.02	15.5%	46.3%	7.3%	46.3%	-2.8%			
Pomorskie	69	2.97	49	2.08	59	2.51	11.1%	77.9%	2.1%	20.0%	- 29.7%			
Śląskie	173	3.80	198	4.36	49	1.09	12.8%	73.7%	7.2%	19.1%	14.2%			
Świętokrzyskie	15	1.20	7	0.56	0	0.00	9.1%	61.9%	4.8%	33.3%	- 53.3%			
Warmińsko-Mazurskie	24	1.64	27	1.85	19	1.34	23.0%	40.5%	21.6%	37.8%	12.8%			
Wielkopolskie	138	3.94	134	3.84	77	2.20	7.6%	84.4%	7.0%	8.6%	-2.5%			
Zachodniopomorskie	66	3.84	48	2.79	36	2.13	19.0%	59.8%	11.0%	29.3%	- 27.5%			
No data	120		96		-	-	9.0%	68.8%	12.5%	18.8%	- 19.7%			
Total	1369	3.56	1272	3.31	938	2.45	12.3%	74.9%	5.8%	19.2%	-7.1%			

¹⁾ Missing data on way of transmission omitted.

Source: The National Institute of Public Health – The National Institute of Hygiene on the basis of individual interviews sent through the Provincial Sanitary and Epidemiological Stations (*2020 data was excluded due to underestimation).

One of the main preventive measures that can limit the number of new infections includes increasing HIV testing in populations that are hard-to-reach, e.g., IDU and MSM, in which, according to European recommendations, HIV tests should be performed at least once a year or every three months depending on the number of risk factors [1], and among the general population without specific risk factors or only in the case an HIV or AIDS infection is suspected.

The annual number of HIV tests performed throughout Poland remains at a low level. Between 2016 and 2019, the testing rate dropped from 3 to 1 per 100,000 inhabitants annually, which corresponds to approximately only 1% of the population of the Republic of Poland tested for HIV. The frequency of positive results remains at the level of 0.26-0.36 for every 100 tests performed among the general population. The highest frequency of positive results, at a level of 1.69 - 2.36, is reported among the MSM population tested in STD clinics.

This fact is also confirmed by the results of tests conducted in VCT centres, in which the frequency of positive results is, on average, seven times higher among the high-risk populations than in the general population. The percentage of clients likely to take an HIV test for the first time in slightly increasing.

Table 2. The frequency of HIV testing in the general population and hard-to-reach population based on data provided by VCTs and the number of tests performed in laboratories

Anti-HIV tests		2016		2017		2018		2019		2020*	
		Number or %	freque ncy	Number or %	frequ ency	Number or %	Freque ncy	Number or %	frequ ency	Numbe r or %	freque ncy
VCT	Number of tests	27,005	1.64	29,353	1.68	28,348	1.43	31,325	1.71	11,741	1.94
	Percentage of clients tested for the first time	57.4	1.16	56.3	1.22	58.6	0.91	59.8	1.13	55.5	1.49
aboratory	Percentage in pregnant women	2.8	0.003	3.8	0.02	7.0	0.01	3.2	0.0	-	-
	Percentage of people tested as part of routine medical examinations in primary healthcare centres, infectious diseases centres and hospitals.	6.5	0.28	24.8	0.29	24.3	0.16	18.1	0.67	-	-
lab	Percentage of people tested in STI centres (including MSM)	0.2 (15.1% of 1,823)	2.36 (11.23)	0.3 (15.5% of 1,823)	2.03 (9.81)	0.5 (12.1% of 1,823)	1.69 (11.76)	0.1 (no data)	0.0	-	-
	Number of tests in the general population	1,159,627	0.29	430,266	0.36	385,173	0.26	420,805	0.27	-	-
	Number of blood donors	1,298,745	0.002	1,305,998	0.002	1,293,424	0.003	1,335,519	0.002	-	-

N - number of tests; F - frequency of confirmation (number of positive tests confirmed at a ratio of the number of screening tests performed per 100 screening tests);

Source: The National Institute of Public Health – The National Institute of Hygiene based on annual reports from laboratories performing HIV screening tests (incomplete data) and data from HIV anonymous testing points (data from the National AIDS Centre).

In 2016-2020, 437 AIDS infections were registered. The average HIV incidence rate was 0.23 cases per 100,000 inhabitants, and after excluding the data for 2020, the average value increased to 0.26 cases per 100,000 inhabitants. Higher incidence rates, in comparison to the average national rate for the years 2016 - 2019, were registered in the following provinces: Dolnośląskie, Kujawsko-Pomorskie, Łódzkie, Opolskie, Podlaskie, Pomorskie, Śląskie, Warmińsko-Mazurskie, Wielkopolskie and Zachodniopomorskie (Graph 4). A decrease in the HIV incidence rate was registered in the following provinces: Dolnośląskie, Łódzkie, Mazowieckie, Podlaskie, Świętokrzyskie, Warmińsko-Mazurskie and Zachodniopomorskie.

^{*}Incomplete and reduced data as a result of the temporary closure of VCT centres in connection with the COVID-19 pandemic (as of 30 September 2020).

0,70 The average AIDS incidence rate per 100,000 0,60 0,50 0,40 inhabitants 0,30 0,20 0,10 0,00 warnitskorratuskie knigansko bolnotskie zachodniopomorskie vielkopolskie razioniedie matopolskie podlaskie

Graph 4. The average AIDS incidence rate per 100,000 inhabitants in specific provinces 2016 - 2020.

Source: The National Institute of Public Health – The National Institute of Hygiene on the basis of individual interviews sent through the Provincial Sanitary and Epidemiological Stations (*2020 data was excluded due to underestimation).

2020*

średnia dla Polski w latach 2016 - 2019

Średnia dla Polski w latach 2016 - 2019 - average for Poland in 2016 - 2019

2018 - 2019

2016 - 2017

In 2016 - 2019, 106 deaths of HIV-infected people were reported in epidemic supervision, including 85 AIDS-related deaths. Throughout this period, the average mortality of people diagnosed with AIDS amounted to 0.22 deaths per 100,000 inhabitants, and considering the deaths of HIV+ people who had not developed AIDS, the mortality rate increased to 0.28 per 100,000 inhabitants. However, it should be kept in mind that the number of deaths registered in epidemiological surveillance is incomplete and does not completely cover the number of deaths of HIV+ people who were not diagnosed with AIDS or the deaths that were not reported to the National Health Inspectorate. In surveillance, among the people diagnosed with AIDS and who are HIV+, people who have died as a result of HIV/AIDS-related diseases can be specified, which allows them to be compared with the deaths registered by the Central Statistical Office (Table 3). In 2016 - 2019, 62 deaths were registered in surveillance, of which one of the causes of death was attributed to HIV/AIDS, while the Central Statistical Office recorded 358 deaths, i.e., 5.8 times higher, which means that less than 18% of HIV/AIDS-related deaths were reported to the surveillance.

Table 3. The number of AIDS cases and AIDS-related deaths depending on the time of detecting HIV infections

Year	Total AIDS cases	AIDS cases within three months of detecting HIV	Deaths of HIV+ people: Surveillance (total*)	Deaths of people living with AIDS: Surveillance (total**)	Total number of HIV/AIDS-related deaths in HIV+ people or living with AIDS: Surveillance (B20- B24)	Number of HIV/AIDS- related deaths Data from the Central Statistical Office (B20 – B24)	Deaths of people living with AIDS within a year of detecting HIV
2016	102	69	13	27	21 (5/16)	102	13
2017	109	87	2	20	16 (2/14)	89	13
2018	110	82	3	23	13 (1/12)	98	15
2019	74	59	3	15	12 (2/10)	69***	13

^{*}Reported deaths of people with infections, regardless of cause; *** reported deaths of people living with AIDS, regardless of cause; *** preliminary data from the Department of Demographic Studies of the Central Statistical Office, unverified data

Source: The National Institute of Public Health – The National Institute of Hygiene on the basis of individual interviews sent through the Provincial Sanitary and Epidemiological Stations (*2020 data was excluded due to underestimation) and data from the Central Statistical Office [2].

The Epidemiology of HIV in Europe

In recent years, the epidemiological situation of HIV infections in Europe has remained at a similar level. However, when assessing the trend in the rate of new diagnoses rate between 2016 - 2019, it is clear that the continuous increase in the number of new infections is a problem in Central European countries (an increase in the incidence rate of detecting new infections by nearly 10%). In 2018, data from Russia was reported for the first time, including updates of pre-2009 data in terms of HIV+ women and men, which resulted in an average annual increase in the rate of new diagnoses in Eastern Europe to 43.1 per 100,000 inhabitants. However, in recent years, it has remained at a similar level of 41.7 - 43.7 per 100,000 inhabitants [3]. The number of new HIV diagnoses fell by nearly 23% in 2016-2019 in Western European countries alone (Graph 5).

Europa

Europa

Unia Europejska / UE

HIV ber

HIV ber

Europa Wschodnia / East

Europa Środkowa / Centre

Europa Zachodnia / West

0 10 20 30 40 50

■ 2016 **■** 2017 **■** 2018 **■** 2019

Graph 5. Frequency of newly diagnosed cases of HIV per 100,000 inhabitants in Europe according to region

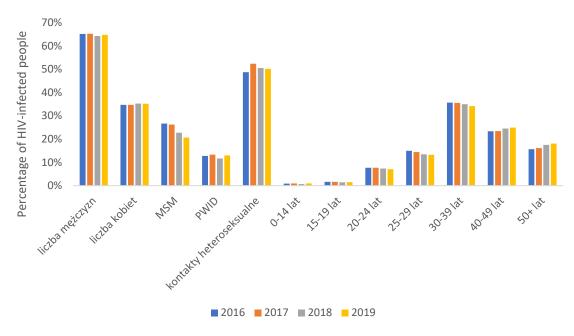
Elaborated by: The National Institute of Public Health – The National Institute of Hygiene, Source: ECDC [3]

Despite the downward trend in Western Europe, high rates of newly diagnosed cases have been noted in several countries in comparison to the European Union indicator (4.9 per 100,000 inhabitants in 2019). The rate of newly diagnosed cases in Malta amounted to 16.2 per 100,000 inhabitants (80 HIV infections), in Latvia, 15.2 cases per 100,000 inhabitants (295 HIV infections), in Estonia, 13.4 per 100,000 inhabitants (178 HIV infections), while in Cyprus – 11.4 (100 HIV infections) and in Ireland – 10.9 (533 HIV infections).

A higher percentage of registered HIV infections in Europe can be observed among men: 65% of cases were among men, and 35% of cases were among women in the years 2016 - 2019 [4] (Graph 6). The average rate of diagnosing new cases among men is nearly two times higher than in the population of women. This rate decreased slightly for men from 22.4 per 100,000 men in 2016 to 20.8 per 100,000 men in 2019; however, it remained at a similar level for women – 10.6 to 11.2 per 100,000 women, respectively. The dominant age group in Europe with the highest number of infections consists of people aged between 30 and 39 (constituting from 34 to 36% of the infected population in 2016 - 2019).

The second largest group is made up of people aged between 40 and 49 (23 - 25% of the infected population in 2016 - 2019) and people aged over 50 (16 - 19% of the infected population in 2016 - 2019) (Graph 6).

Graph 6. The epidemiological situation of HIV infections in Europe – characteristics of the HIV+ population in 2016 - 2019



Elaborated by: The National Institute of Public Health - The National Institute of Hygiene, Source: ECDC [3,4]

Liczba mężczyzn – number of men contact

liczba kobiet - number of women

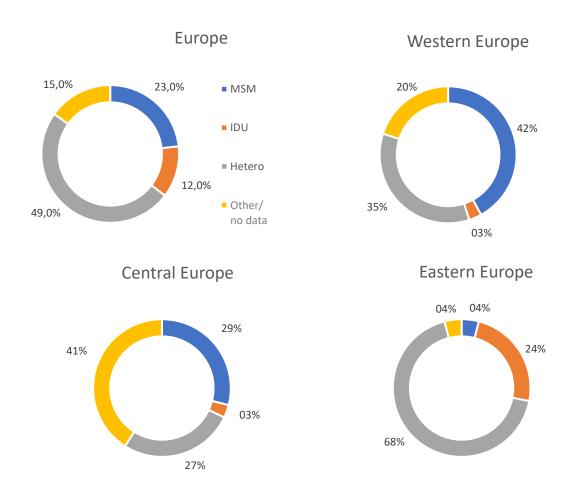
kontakty heteroseksualne - heterosexual

Lat – years of age

The dominant way of infection in Europe is heterosexual contact which constitutes over half of the infections. In the group of men who have sexual contact with men, there was even a drop in the number of new infections from 27% to 21% in 2019, compared to 2016 (Graph 6). However, there are differences throughout Europe depending on the probable way of infection (Graph 7). In Western Europe, homosexual sexual contact is the dominant way of transmission (constituting over 42% of all infections), while infections among heterosexuals amount to around 35%.

In Eastern Europe, the dominant risk factor is made up of heterosexual contact and injecting drug use (over 68%), which is the highest in Eastern Europe in comparison to other regions – over 24% of all infections. Infections within the MSM population account for less than 4% of all infections. In Central Europe, the proportion of sexually transmitted infections is comparable both among MSM and heterosexuals, constituting 27-29% of infections. At the same time, the proportion of missing data on the probable way of infections is the highest in this part of Europe – information on the way of transmitting infections is missing in over 40% of all of the reports (Graph 7).

Graph 7. The probable way of transmitting HIV infections in specific regions of Europe in 2016 - 2019



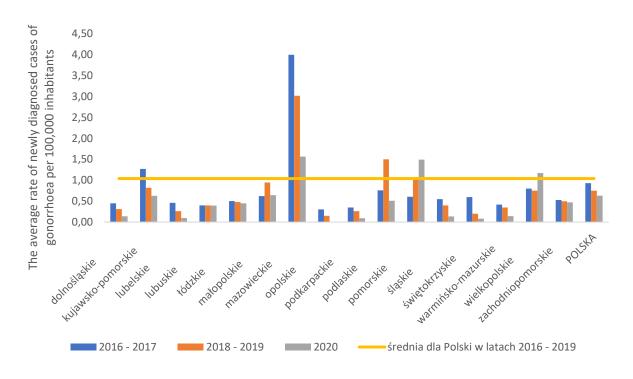
Elaborated by: The National Institute of Public Health – The National Institute of Hygiene Source: ECDC [3,4]

Note: Data reported from Russia (reported as an update), in which information about the way of transmission is missing, was completely excluded, which caused a rise in the percentage of missing information and disrupted the epidemiological assessment of available data.

The epidemiological situation of sexually transmitted infections in the Republic of Poland

In the years 2016 - 2020, the surveillance of STIs in Poland registered 1,854 cases of gonorrhoea. The indicator of new gonorrhoea diagnoses in 2016 - 2019 was 1.02 per 100,000 inhabitants (2020 figures were not considered due to high underestimation). In the same period, 6,973 cases of syphilis were registered, and the indicator of new diagnoses in 2016 - 2019 was 4.07 per 100,000 inhabitants. Moreover, 1,382 cases of *Chlamydia trachomatis* infections were registered, and the indicator of new diagnoses was 0.79 per 100,000 inhabitants in 2016 - 2019 [5].

Graph 8. The average rate of newly diagnosed cases of gonorrhoea per 100,000 inhabitants in 2016 - 2020



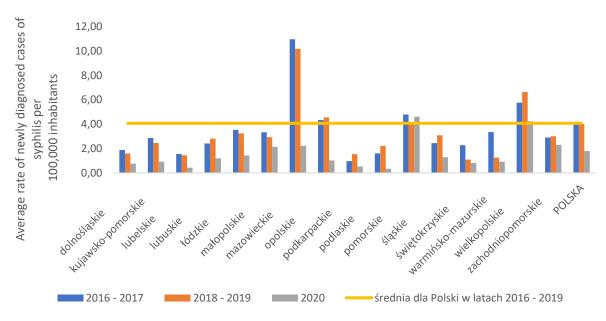
Source: The National Institute of Public Health – The National Institute of Hygiene on the basis of individual interviews sent through the Provincial Sanitary and Epidemiological Stations (*2020 data was excluded due to underestimation).

Średnia dla Polski w latach 2016 – 2019 – average for Poland in 2016-2019

The average rate of newly diagnosed cases of gonorrhoea in 2016 - 2017, 2018 - 2019 and 2020 was 1.09; 0.85 and 0.65 per 100,000 inhabitants, respectively. Indicators exceeding the general national indicator were registered in the following provinces: Kujawsko-Pomorskie (2016 - 2017), Podlaskie (2018 - 2019), Pomorskie and Wielkopolskie (2020) and Mazowieckie (2016 - 2020). A steady increase in the rate was registered in 2016 - 2019 in the Małopolskie, Podlaskie and Pomorskie provinces. A steady decline in the rate of newly diagnosed cases was registered in the following provinces: Dolnośląskie, Kujawsko-Pomorskie, Lubelskie, Łódzkie, Mazowieckie, Opolskie, Podkarpackie, Śląskie, Świętokrzyskie, Warmińsko-Mazurskie, Wielkopolskie and Zachodniopomorskie (Graph 8).

The average rate of newly diagnosed cases of syphilis in 2016 - 2017, 2018 - 2019 and 2020 was 4.14, 4.01 and 1.87 per 100,000 inhabitants, respectively. Rates exceeding the general national indicator were registered in the following provinces: Mazowieckie (2016 - 2019), Opolskie (2016 - 2019), Pomorskie (2016– 2020) and Wielkopolskie (2016– 2020). A steady rate increase was registered in 2016-2019 in the following provinces: Lubuskie, Opolskie, Podkarparckie, Podlaskie, Śląskie, Wielkopolskie and Zachodniopomorskie. A steady decline in the rate was registered in the following provinces: Dolnośląskie, Kujawsko-Pomorskie, Łódzkie, Małopolskie, Mazowieckie, Pomorskie, Świętokrzyskie and Warmińsko-Mazurskie (Graph 9).

Graph 9. The average rate of newly diagnosed cases of syphilis per 100,000 inhabitants in 2016 - 2020



Source: The National Institute of Public Health – The National Institute of Hygiene on the basis of individual interviews sent through the Provincial Sanitary and Epidemiological Stations (*2020 data was excluded due to underestimation).

Średnia dla Polski w latach 2016 -2019 – average for Poland in 2016-2019

The rate of newly diagnosed cases of chlamydia in 2016 - 2017, 2018 - 2019 and 2020 was 0.64, 0.95 and 0.44 per 100,000 inhabitants, respectively. The highest rates compared to the general national indicator were registered in the following provinces: Mazowieckie (nearly five times higher than the 2018 – 2019 average) and Wielkopolskie (three times higher), and Podlaskie (two times higher). In 2020, a higher rate of newly diagnosed cases compared to the average rate in previous years was registered in the following provinces: Podlaskie, Pomorskie, Wielkopolskie and Zachodniopomorskie. A steady increase in the rate of newly diagnosed cases was registered in 2016-2019 in the following provinces: Łódzkie, Podkarparckie, Podlaskie, Śląskie, Wielkopolskie and Zachodniopomorskie. A steady decrease in this rate was registered in the following provinces: Dolnośląskie, Kujawsko-Pomorskie and Opolskie (Graph 10).

average rate of newly diagnosed cases of chlamydia 3,50 3,00 2,50 100,000 inhabitants 2,00 1,50

Graph 10. The average rate of newly diagnosed cases of chlamydia per 100,000 inhabitants in 2016- 2020

Source: The National Institute of Public Health - The National Institute of Hygiene on the basis of individual interviews sent through the Provincial Sanitary and Epidemiological Stations (*2020 data was excluded due to underestimation).

podkarpackie

2020

podlaskie

portorskie

warnifekornaluskie

snietokryskie

slaskie

zachodniopomorskie

wielkopolskie

średnia dla Polski w latach 2016 - 2019

Średnia dla Polski w latach 2016 – 2019 – average for Poland in 2016-2019

matopolskie matowiedkie

2018 - 2019

yodzkie

1,00

0,50

0,00

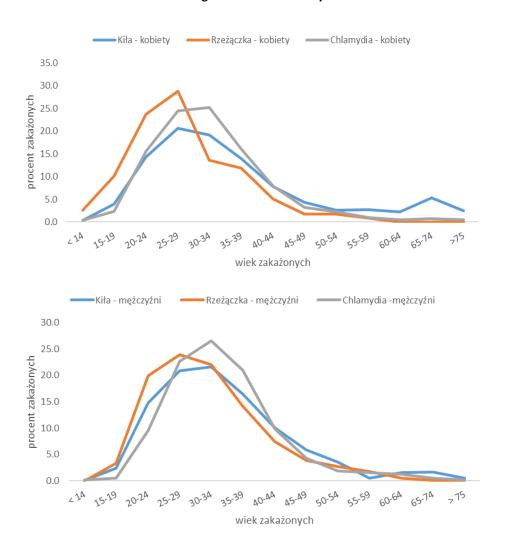
dolnoślaskie

lubelskie

2016 - 2017

Between 2016 and 2019, 118 cases of gonorrhoea were registered among women (7.3% of all cases) and 1,486 infections among men (92.65%). The ratio of infected men to women was almost 13:1. The highest number of gonorrhoea cases was registered in the male population aged between 25 and 29 (23.9% of infections) and over 28% of women in the same age group. The proportion of infected women aged between 15 and 19 amounted to 10.2% of the cases (Graph 11). In the same period, 958 cases of syphilis were registered among women (15.6% of all cases) and 5,200 infections among men (84.4%). The ratio of infected men to women was almost 5:1. The highest number of people infected with syphilis in 2016 - 2019, nearly 42%, was registered in the male population aged 30 - 34 years (21.6%) and 25 - 29 years (20.9%). The proportions were opposite in the female population, i.e., the highest number of infections were registered for women aged 25 - 29 years (20.7%) and 30 - 34 years (19.2%). The percentage of infected people in younger age groups, i.e., 20 - 24 years and people aged 35 - 39, was similar among women and men (Graph 11). However, among Chlamydia trachomatis infections, infections in women prevailed in 2016 - 2019, constituting 52.4% of all infections (634 cases), while infections among men accounted for 47.6%. The female to male ratio of infections was 1.1:1. As in the case of the remaining sexually transmitted infections, the distribution of infections in specific age groups was similar. Among infected women, the highest number of infections was registered in the women aged 30 - 34 (25.2%) and 25 - 29 (24.4%), while infections in these age groups in the male population accounted for 26.5% and 22.7%, respectively.

Graph 11. The percentage distribution of age by sex of infected people at the time of diagnosing syphilis, gonorrhoea or chlamydia in 2016 - 2019



Source: NIZP-PZH on the basis of individual interviews sent through the Provincial Sanitary and Epidemiological Stations (*2020 data excluded due to underestimation).

Kiła – syphilis Rzeżączka – gonorrhea kobiety – women mężczyźni – men procent zakażonych – percentage of infected people wiek zakażonych – age of infected people

The epidemiological situation of sexually transmitted infections in Europe

In 2016 - 2018, 266,237 cases of gonorrhoea were reported across Europe, and the average rate of newly diagnosed cases was 22.07 per 100,000 inhabitants. This rate increased by 45%, from 18.22 per 100,000 inhabitants in 2016 to 26.42 per 100,000 inhabitants in 2018. In this same period, 97,692 cases of syphilis were reported. The rate of newly diagnosed cases ranged from 6.08 - 7.03 per 100,000 inhabitants. However, the most common sexually transmitted infection in European countries is *Chlamydia trachomatis*. It occurs even four times more often than Neisseria gonorrhoeae and 11 times more frequently than Treponema pallidum. Over the last five years, approximately 1,223,180 cases of chlamydia were registered, and the average rate of newly diagnosed cases amounted to 142 per 100,000 inhabitants (an increase from 140.98 per 100,000 inhabitants in 2016 to 145.89 per 100,000 inhabitants in 2018). The rates of newly diagnosed cases of STIs vary significantly in Europe. The rate of *Neisseria gonorrhoeae infections* fluctuated on average between 0.11 - 93.21 per 100,000

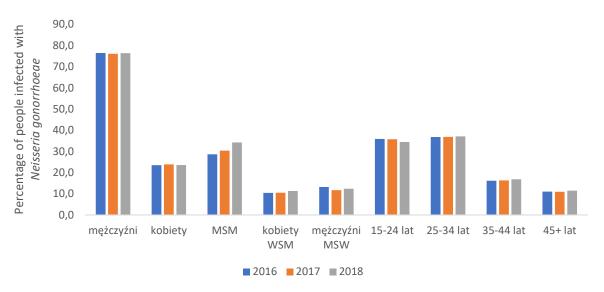
inhabitants in this period, including the highest rate in five years of newly diagnosed cases registered in Great Britain resulting from the large number of screening tests performed there, and also for other sexually transmitted infections. High indicators were also noted in Ireland (average 45.05), Denmark (35.49), Island (29.17), Norway (26.32) and Sweden (23.38). The lowest indicator (under 1 case per 100,000 inhabitants) in 2016-2018 was registered in countries such as Bulgaria, Croatia, Cyprus, Poland Romania.

The indicators of newly diagnosed cases of *Treponema pallidum* remained at 0.64 - 9.95 per 100,000 inhabitants in 2016 and 0.85 - 17.86 per 100,000 inhabitants in 2018, constituting an increase of nearly 80% in the rate of newly diagnosed cases in this period. While the highest indicator of newly diagnosed cases of syphilis, similarly to cases of gonorrhoea, were noted in Great Britain (9.95) in 2016, the highest indicators were registered in Malta (13.47) and Island (15.37) in 2017 and in Luxembourg (17.11) and in Malta (17.87) in 2018.

The indicator of newly diagnosed cases of chlamydia fluctuated between 0.04 and 666.60 cases per 100,000 inhabitants (in 2016 - 2018). The highest average indicators, exceeding the indicator of newly diagnosed cases in the European Union, were registered every year in countries including Ireland (154.62), Finland (264.31), Sweden (337.68), Great Britain (356.44), Norway (493.47), Denmark (581.56) and Island (612.51). The lowest indicators, below 10 cases per 100,000 inhabitants, were registered in countries including Slovakia, Lithuania, Hungary, Cyprus, Luxembourg, Croatia, Portugal, Bulgaria, Poland, Greece and Romania.

Neisseria gonorrhoeae infections were registered more frequently in the male population – over 76% of all cases annually (the average indicator of newly diagnosed cases among men was approximately 34.59 cases per 100,000 men in 2016 - 2018). This indicator increased significantly among men – by over 40% between 2016 and 2018 (Graph 12). The ratio of infections in men to women between 2016 and 2018 remained at 4-5:1 (i.e., 4-5 infected men for every infected woman). Although in most countries, the ratio of infected men was lower than or similar to the European average, in countries such as Slovenia, Portugal, Poland, Romania, Malta and Croatia, the differences between the number of infected men and women exceeded 10:1. No infections among women were registered between 2016 - 2018 in Cyprus, and in Greece in 2018 and in Spain between 2016 - 2017 [4].

Graph 12. The epidemiological situation of Neisseria gonorrhoeae infections in Europe – characteristics of the infected population in 2016 - 2018



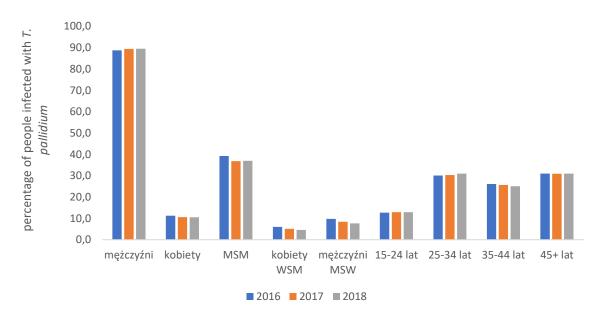
Elaborated by: The National Institute of Public Health - The National Institute of Hygiene, Source: ECDC [4].

Mężczyźni – men kobiety – women lat – years of age

Of all of the syphilis cases reported in Europe, infections predominate among males – nearly 90% of all cases annually in 2016 - 2018. The average rate of newly diagnosed cases among men significantly exceeded the rate of newly diagnosed cases among women, i.e., 11 times more infections were registered in the male population (on average, the indicator of newly diagnosed cases among men was 11.51 cases per 100,000 men, while the average indicator for women remained at 1.41 newly diagnosed cases per 100,000 women) (Graph 13).

In the case of newly diagnosed cases of syphilis, the average ratio of infected men to infected women was 8:1 in 2016 - 2018. The lowest level of differences between men and women was registered in countries such as Romania, Estonia, Lithuania and Latvia. The highest ratio between the number of infected men and women, i.e., over 20 cases of infected men to the number of infected women, was registered in countries such as the Netherlands, Ireland, Norway and Croatia.

Graph 13. The epidemiological situation of Treponema pallidum infections in Europe – characteristics of the infected population in 2016 - 2018

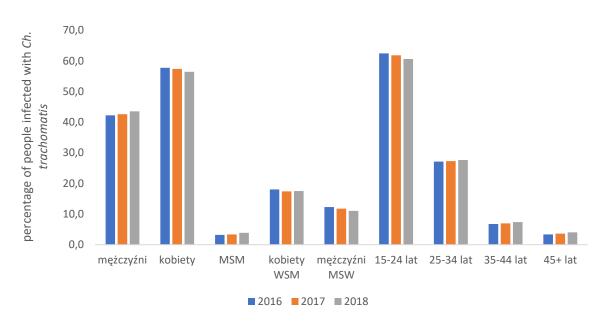


Elaborated by: The National Institute of Public Health – The National Institute of Hygiene, Source: ECDC [4].

Mężczyźni – men kobiety – women lat – years of age

A reverse epidemiological situation can be observed in the case of Chlamydia trachomatis infections that more often affect women. In 2016-2018, the percentage of infected women remained constant at 56.6-57.8%. The ratio of infected women to infected men was 1.3:1; however, the average diagnosis rate for women in 2016-2018 was 159.03 cases per 100,000 women and 123.39 per 100,000 men. In 2016-2018, the number of infections among women remained at the same level as infections in the male population in most countries. The number of infected women was significantly higher only in certain countries, including Estonia, where there were 15 infected women for every infected man in 2016 and only 7 in 2017-2018; in Slovakia, the ratio of infected women to men was 3:1 in 2016-2017, and in 2018 – 2:1; while in Croatia, the ratio was 4:1 (2016-2017) and 2:1 in 2018 [4].

Graph 14. The epidemiological situation of Chlamydia trachomatis infections in Europe – characteristics of the infected population in 2016 - 2018



Elaborated by: The National Institute of Public Health – The National Institute of Hygiene, Source: ECDC [4].

Mężczyźni – men kobiety – women lat - years of age

In 2016-2018, cases of gonorrhoea were most common among young people aged 25-34 (over 36% of all cases annually) and among adolescents aged 15-24 (approximately 35% of all cases annually). In the remaining age groups, i.e., 35-44 and 45+, the distribution of infections each year was 16% and 11%, respectively.

A slightly different distribution of newly diagnosed cases in terms of age was observed in cases of syphilis, where most infections were detected in older age groups. Over 31% of the cases were registered in the 45+ population and similarly among people aged 24-34. Infections among people aged 35-44 constituted 25% of all infections annually, and the percentage of infections in the youngest age group, i.e., 15-24 years of age, was approximately 13%.

A different distribution of infections in terms of age can be observed in cases of Chlamydia trachomatis infections, where almost every year, over 60% of all registered cases are among young people aged 15-24. The second largest group of infected people are aged 25-34 (the percentage remained at 27% in 2016-2018. Among people aged 35-44, approximately 7% of cases were registered, while infections in the oldest age group amounted to less than 4% of the infected population in 2016-2018.

Although the predominant way of infection in the case of syphilis and gonorrhoea was sexual contact between men (MSM), the number of infections among people involved in risky heterosexual contact was often at a similar level, especially in the case of Neisseria gonorrhoeae infections (Graph 13). In 2016-2018, the percentage of infections among heterosexuals was comparable to infections among MSM and affected 11.7-13.2% of heterosexual men and 10.4-11.3% of women registered in 2016-2018, while 28.6-34.2% of cases registered **MSM** were among yearly. Nearly half of the reported cases provided no information on the probable way of infection. Similarly, among reported cases of syphilis, the largest group was made up of MSM (37.7%) and heterosexual men – 8.6%. Nearly half of the cases reported no information on the way of infection (Graph 14).

In contrast to syphilis and gonorrhoea, chlamydia infections were most frequently registered among heterosexual women -17.7% of cases and heterosexual men -11.7%, while infections among MSM in 2016-2018 amounted on average to only 3.5% of cases annually. As with syphilis, the probable way of transmission was not given in as many as 66% Chlamydia trachomati cases, (Graph 14).

Conclusion

The data provided above does not fully reflect the magnitude of the problem due to significant limitations in routine reporting, including frequent cases of missing information, which limits the possibility of assessing the epidemiological situation of HIV and sexually transmitted infections and comparing this data with European indicators.

Constant trends can be observed between 2016-2022 both in terms of HIV and STIs:

- Currently, the main problem that requires prevention is the spread of HIV infections among MSM.
 The situation is similar in terms of the number of cases of syphilis and gonorrhoea, although surveillance data is limited.
- A growing share of infections in people over 40 can be observed in newly diagnosed cases of HIV and STIs.
- There are significant differences in the number of reported infections among provinces, which may indicate the need for taking action to provide improved access to diagnostics and reporting newly diagnosed cases to surveillance.

Bibliography

- 1. European Centre for Disease Prevention and Control. *Public health guidance on HIV, hepatitis B and C testing in the EU/EEA An integrated approach*. Stockholm: ECDC 2018 (Downloaded on 18 January 2021) https://www.ecdc.europa.eu/sites/default/files/documents/hiv-hep-testing-guidance_0.pdf
- 2.The Central Statistical Office. Bazy danych Demografia Wyniki badań bieżących Ruch naturalny ludności Zgony: Tablica LN14A Zgony według przyczyn i województw rejestracji. (Downloaded on 18 January 2021) https://demografia.stat.gov.pl/BazaDemografia/Tables.aspx
- 3.ECDC, WHO Regional Office for Europe. *HIV/AIDS surveillance in Europe 2020 2019 data*, Copenhagen: WHO Regional Office for Europe 2020. (Downloaded on 18 January 2021)
- https://www.ecdc.europa.eu/sites/default/files/documents/hiv-surveillance-report-2020.pdf
- 4.ECDC, Surveillance ECDC: Surveillance Atlas for Infectious Diseases. (Downloaded on 18 January 2021) https://atlas.ecdc.europa.eu/public/index.aspx
- 5.The National Institute of Public Health The National Institute of Hygiene The Infectious Diseases and Poisoning Bulletin in 2016, 2017, 2018 and 2019; and The Report on Cases of Infectious Disease, Infection and Poisoning MZ-56 (biweekly, quarterly and annual reports) for 2020 (Downloaded on 18 January 2021)

http://wwwold.pzh.gov.pl/oldpage/epimeld/index_p.html

III. SELECTED LEGAL ASPECTS CONCERNING HIV/AIDS AND STIS

The current situation regarding the rights and obligations of infected people, rules of criminal responsibility and legal challenges.

HIV/AIDS patients' rights

Patients have the right to give informed consent to be tested for HIV.

The regulations in force do not stipulate special rules for obtaining consent for performing HIV tests. As a result, general provisions regarding a patient's consent for healthcare services apply, which as a rule, entails the patient's conscious, so-called informed consent for medical services or medical intervention.¹

In the case of patients aged under 16, completely incapacitated or incapable of informed consent, their legal representative must express consent for testing or other healthcare services, including HIV screening, and, if necessary, consent for initiating antiretroviral therapy (in the case of children, this person is most often their parents). A guardian may exercise the right to be tested if there is no legal representative. If this is not possible, approval of the guardianship court is required.²

In the case of patients 16 years of age or older who possess sufficient knowledge, double consent is required, i.e., both the legal representative or guardian (often one of the parents) and the patient himself.³ At the same time, underaged patients who are 16 years of age or older, or who are incapacitated persons, mentally ill or mentally challenged patients, but possess sufficient knowledge, have the right to object to the provision of healthcare services, despite their legal representative or guardian's consent. In this case, the approval of the guardianship court is required.⁴

Patients detected with HIV have the right to keep their personal data confidential.

A physician or military surgeon, who suspects or diagnoses an infection, infectious disease or death due to an infection or infectious disease (including HIV/AIDS), is obliged to report this fact to the competent district sanitary inspector immediately, i.e., within 24 hours from the time of suspecting or diagnosing an infection, infectious disease or death due to an infection or infectious disease. However, people living with HIV or AIDS may request that their personal identification be kept confidential, and doctors should inform them about this option.

Patients have the right to be informed about their health condition, including HIV test results. Patients, including minors aged 16 or older, or their legal representative, have the right to obtain from medical professionals accessible information on their health condition, diagnosis, suggested and possible diagnostic and treatment methods, the foreseeable consequences of their use or omission, treatment results and prognosis within the scope of the healthcare services provided by that person and in accordance his/her authorization.⁷ Only the patient (or patient and/or legal representative) should be informed of the test result unless the patient (or legal representative) consented to share this information with others.⁸ At the same time, patients have the right not to be informed of their test results.⁹ In this case, the healthcare worker is obliged to respect the patient's will.

Patients have the right to participate in making medical decision concerning their treatment. Such rights include, among others, patients' right to information and their right to express informed consent for initiating diagnostic, treatment or preventive procedures (including HIV tests or starting ARV therapy).¹⁰ Physicians may perform tests or provide any healthcare service other than the exceptions stipulated in the Regulation once the patient has expressed consent.¹¹ Initiating diagnostic, treatment or preventive procedures without a patient's informed consent may be permitted as an exception in specific circumstances threatening the life or health of the patient or other people.¹²

Patients have the right to keep their personal information confidential.

This includes the patients' right to keep their personal information confidential and – in the case of people detected with HIV – the right to keep their personal data confidential (possible only when reporting infection and anonymous ARV treatment is not possible). Patients have the right to request that healthcare service providers keep their personal information (in particular, their health condition) obtained while performing their medical profession in confidence. Significantly, medical professionals and healthcare providers are bound to confidentiality after the patient's death. ¹³ Since 2019, however, a patient's close relative has the right to access medical records and thus information about the patient's medical condition after his death. This access to information is possible even if such a person was not previously authorized unless another family member objects or the patient objected to this option while still living. ¹⁴

At the same time, the Patients' Rights and Patient Ombudsman Act permits the disclosure of confidential information in situations, among others, when keeping it confidential would constitute a threat to the life or health of other people (including the patient's sexual partner) or when it is necessary to provide other medical professions and healthcare providers with essential information about the patient.

Patients have the right to medical assistance if their lives or health are threatened.

Patients also have the right to immediate healthcare services in the event that their lives or health are threatened. Physicians are obliged to provide medical assistance in any circumstances in which delaying it could put a patient's life at risk or cause serious bodily injury or a serious health disorder. If a physician decides to withdraw from providing treatment, he/she is obliged to inform the patient or his legal representative or guardian of this fact sufficiently in advance and indicate real possibilities of obtaining this service with another physician or at another treatment centre. Physicians may refrain from initiating or withdraw from providing treatment if there are serious reasons for doing so upon obtaining their supervisor's consent. At the same time, in the case of withdrawing from treatment, physicians are obliged to justify their decision and note this fact in the patient's medical records. Is

The rights of people living with HIV/AIDS in the work environment

People living with HIV have the right to work and the right not to disclose information concerning their infection at their place of work. As a rule (there are legally sanctioned exceptions mentioned below), employers may not demand employees (both future and current) to take an HIV test and employees are not required to inform their employer about their infection. According to international recommendations, "the problem of HIV/AIDS in the workplace should be treated similarly to other health problems. People living with HIV should be able to conduct an active professional life for as long as their health condition permits." The vast majority of professions do not require HIV tests as part of either pre-employment examinations or routine check-ups.

Based on current provisions, people living with HIV may work in medical occupations, including working as physicians, dentists, nurses, midwives, paramedics, physiotherapists and massage therapists. Currently, after the amendments to the Regulation on carrying out medical examinations of workers, to the extent of the preventive health care for workers, as well as on medical decisions issued to such ends provided for by the Labour Code, which entered into force on 16 December 2020, when conducting preventive examinations of employees (preliminary, periodic and check-ups) in the case of hazardous, harmful or onerous factors in the workplace such as the HIV virus, "medical examinations, anti-HIV antibodies, and after accidental exposure to potentially infectious material, serological examinations depending on the current guidelines for post-exposure procedure" are performed. Regarding the frequency of preventive tests, the regulation stipulates "every 2-4 years, HIV

antibodies tests as part of preliminary examinations and then depending on recommendations."20 Therefore, in the case of preliminary examinations, if the HIV virus is among the hazardous, harmful or onerous factors in the risk assessment at a given workplace, the physician conducting the examination has not only the right but also the obligation to refer the work candidate for an HIV test. If the candidate refuses to take the test, the physician may refuse to issue a certificate declaring the candidate's ability to work. This is a significant change to the previously binding provisions because it introduces the obligation to refer HIV tests as part of every preliminary examination if the HIV virus is among the hazardous, harmful or onerous factors in the risk assessment at a given workplace (this mainly concerns medical workers, but not only). However, HIV testing generally requires obtaining the consent of the person being tested and being previously informed about the test's purpose, method and potential effects. 21 HIV tests are not compulsory as part of preventive tests, although they may be obligatory, as in the case of preliminary examinations if the HIV virus is among the hazardous, harmful or onerous factors in the risk assessment at a given workplace. However, irrespective of the above, restrictions on exercising medical professions are not directly related to a possible HIV infection - the HIV infection itself cannot automatically result in determining a patient incapable of working in the medical profession.

The exception is the entire group of professions related to uniformed services, where HIV tests are or may be performed as part of basic tests, both preliminary and check-ups. Currently, the medical boards of virtually all uniformed services may perform HIV tests on candidates for the position of functionary or soldier. All regulations currently in force offer this possibility to different extents and various effects. HIV tests are not compulsory as part of check-ups and periodic examinations, i.e., they can not be performed under duress without the knowledge and consent of the person being tested. However, if they are ordered, these tests are, in essence, obligatory, which means that the candidate or functionary does not have the option of refusing an HIV test and successfully completing the qualification process. However, it should be emphasized that currently, thanks to the ground-breaking verdict of the Constitutional Tribunal issued ten years ago, in many situations, detecting an HIV infection among functionaries no longer automatically results in declaring such a person incapable of working, as was previously the case.

The rights of people living with HIV/AIDS

The most important obligation of people living with AIDS is to inform their partner or partners of their infection. This obligation results from Article 161 § 1 of the Criminal Code, which stipulates punishment for directly exposing others to an HIV infection. It should be kept in mind that physicians, military surgeons, nurses or midwives should inform patients whose blood tests show an HIV infection of the obligation to notify their sexual partner (sexual partners) of their infection, of the requirement to report them to the doctor, of the necessity of modifying their sexual lives so that it would not pose a threat to others if required, and of the fact that they cannot donate blood, organs, tissues or sperm. They should be informed of the possibility of further treatment and care and their right to keep their personal identification data confidential (when reporting an infection to the sanitary and epidemiological station). Information about notifying the infected patient is entered in his medical records and confirmed with his signature.²³

Another obligation that rests on the infected person, also stemming from Article 161 § 1 of the Criminal Code, concerns a situation in which a third party is exposed to the infected person's blood (either by chance or accidental exposure). Aware of their infection, such a person should inform the person at risk (or medical staff, depending on the situation), allowing him or her to seek post-exposure treatment and avoid infection.

Rules of Criminal Responsibility

The binding Act of 6 June 1997 of the Criminal Code contains two provisions directly related to HIV infections. The first is the crime of consciously exposing other people to an HIV infection, and the second is the crime of causing an epidemiological threat or spreading an infectious disease.

According to Article 161 § 1 of the Criminal Code, "[...], anyone who, knowing that he or she is infected by the HIV virus (knowledge of the infection is essential), directly exposes another person to infection from that disease (exposure does not need to be direct) is liable to imprisonment from six months to eight years". ²⁴ On 31 March 2020, based on Article 13 item 1 and Article 101 of the Act of 31 March 2020 amending the Act on specific solutions related to the preventing, counteracting and combating COVID-19, other infectious diseases and crisis situations caused by them, together with other acts, the potential sentences for the crimes mentioned in Article 161 § 1 of the Criminal Code was raised from three years to eight years of imprisonment.²⁵ This crime is prosecuted by the public prosecutor on the motion of the victim (law enforcement authorities cannot act on their own motion).²⁶ According to Article § 1 (2a) of the Criminal Code, the crime mentioned in Article 161 § 1 of the Criminal Code becomes statute-barred 15 years after it had been committed.²⁷ As a result of raising the maximum prison sentence to eight years, the limitation period has been extended from five to fifteen years. It should be emphasized that physicians should inform HIV patients about their rights and obligations and the criminal liability for exposing others to their infection. Another provision that may be directly associated with HIV infections is Article 165 § 1 (1) of the Criminal Code, according to which anyone who endangers the life or health of many people or property of significant value by causing an epidemiological hazard or spreading infectious diseases is subject to imprisonment for between six months and eight years. In commentaries to the Criminal Code, it is highlighted that in the event of an epidemiological threat, it is not necessary to create an epidemiological status caused by a specific infectious disease to face punishment. However, the fact of creating a real possibility of its outbreak is sufficient. If the offender acts unintentionally, he or she is liable to imprisonment of up to three years.²⁸ However, if the act results in the death of a person or serious harm to many people's lives, the potential sentence increases if the act was committed unintentionally.³⁰ This crime is prosecuted by the public prosecutor on its own initiative. It should be emphasized that pursuant to the Code of Criminal Procedure provisions, anyone who has learned that a crime prosecuted by the public prosecutor has been committed is obliged to notify the prosecutor or Police.³¹ State and local government institutions that have learned that a crime prosecuted by the public prosecutor has been committed as part of their activity are also obliged to notify the prosecutor or Police immediately.³² The Criminal Code penalizes violations committed by the medical staff of patients' two fundamental rights and, at the same time, the principles of medical law, i.e., patients' right to keep their personal information confidential and patients' right to express informed consent to provide them with medical services.

On the basis of Article 266 § 1 of the Criminal Code, anyone who, in violation of the provisions of this Act (including the Act on the professions of a doctor and dentist, the Act on the profession of nurse and midwife, and the Act on the rights of the patient and the Patient's Rights Ombudsman) or assumed obligations, discloses or uses information obtained as part of a position held or work performed, is subject to a fine, restriction of liberty or imprisonment of up to two years.³³ It is an intentional crime, prosecuted on the victim's motion.³⁴

In addition, according to Article 192, item 1 of the Criminal Code, anyone who performs a medical procedure without the patient's consent is subject to a fine, restriction of liberty or imprisonment of up to two years.

Based on Article 192 § 2 of the Criminal Code, it is an intentional crime prosecuted on the victim's motion. Furthermore, the concept of medical procedure may be understood broadly and include diagnostic services.

In addition, the Act on preventing and combating infections and infectious diseases in humans introduces a fine for medical staff for violating the provisions on obligations imposed on them concerning information pertaining to legal care providers for minors or vulnerable people or for the patient's guardian (including the obligation to instruct patients) and also the obligation to report cases of infections, diseases or deaths caused by infectious diseases, or suspecting them.³⁵

Systemic challenges for the coming years

According to the binding Act on preventing and combating infections and infectious diseases in humans, both diagnostics and treatment of syphilis and gonorrhoea are obligatory and free of charge regardless if the patient is insured.³⁶ This Act does not outline specific conditions for the diagnostics and treatment of other STIs (although the obligation to report suspicions and diagnosed cases of infections exists).³⁷ In general, HIV/AIDS treatment depends on the patient's insurance status or whether he is entitled to public healthcare services.³⁸

Challenges for upcoming years, including educational, organizational, financial and legal challenges, concern not only HIV/AIDS tests and treatment but also sexually transmitted infections and the general need to significantly increase the number of tests and access to treatment, both for risk groups and in the entire population, to better detect a hidden epidemic.

For this reason, more and more specialists recommend lowering the testing age without the consent of parents or a legal guardian from the current 18 years of age to 16, which would require changing the current law and, most certainly, reaching social agreement.

Another recommendation that would require legal and organizational changes and, at the same time, greater financial expenditure, which would make STI diagnostics and treatment more accessible, is introducing the possibility of performing anonymous STI tests and simultaneously integrating data at the national level. Currently, only anonymous HIV tests may be performed. According to current law, anonymous STI tests are not possible in Poland. However, many people who take anonymous HIV tests could simultaneously test themselves for other STIs and, if need be, initiate necessary treatment.

In addition, changes in recent years and the significant increase in migration – particularly from Ukraine and Belarus – have indicated that the number of foreigners living with HIV and requiring ARV treatment will continue to grow despite the temporary decrease noted during the SARS-COV-2 pandemic. In this respect, the entire "grey area", i.e., people working without National Health Fund (NFZ) coverage, cannot apply for ARV treatment in Poland according to binding law.

Legal status as of 2 August 2021.

Bibliography

- 1. Act of 6th November 2008 on the rights of the patient and the Patient Ombudsman (Journal of Laws of 2020, item 849), hereinafter: UPPiRPO, Art. 15-18.
- 2. Act of 5 December 1996 on professions of doctor and dentist (Journal of Laws of 2021, item 790), hereinafter: UZLiLD, Art. 32, item 2, UPPiRPO, Art. 17, item 2.
- 3. UZLiLD, Art. 32, item 2, UPPiRPO, Art. 17, item 1 and 2.
- 4. UZLiLD, Art. 17, item 3.
- 5. On the basis of the Act of 5 December 2008 on preventing and combating infections and infectious diseases in humans (Journal of Law of 2020, item 1845, as amended), hereinafter: UZZZiCZ, Art. 27, item 1.
- 6. UZZZiCZ, Art. 41, item 1.
- 7. UPPiRPO, Art. 9, item 1 and 2.
- 8. UPPoRP, Art. 9, item 2, UZLiLD, Art. 31, item 2.
- 9. UPPiRPO, Art. 9, item 4.
- 10. Medical Code of Ethics, Art. 15, item 3 and UZLiLD, Art. 32, item 1.
- 11. UZLiRPO, Art. 32, item 1.
- 12. Medical Code of Ethics, Art. 15, item 3.
- 13. UPPiRPO, Art. 13 and 14.
- 14. UPPiRPO, Art. 26, item 2.
- 15. UPPiRPO, Art. 13 and 14.
- 16. UPPiRPO, Art. 7.
- 17. UZLiRPO, Art. 30.
- 18. UZLiLD Art. 38, item 2, 3 and 4.
- 19. I. Głowaczewska. Trochę prawa i etyki. In: A. Cybula, I. Głowaczewska, G. Konieczny, D. Latarska, A. Marzec-Bogusławska. Najważniejsze pytania o HIV i AIDS. Poznań: Wydawnictwo Poznańskie 2007, p. 122.
- 20. Regulation of the Minister of Health and Social Welfare of 30 May 1996 on medical examinations of employees, the scope of preventive health care for employees and medical certificates issued for the purposes provided for in the Labor Code Journal of Laws of 2016, item 2067, as amended), Appendix 1.
- 21. UZLiLD, Art. 31 and Art. 32 and UPPiRPO, Art. 9 and 16.
- 22. Act of 6 June 1997. The Criminal Code (Journal of Laws of 2020, item 1444, as amended), hereinafter: CC, Art. 161 § 1.
- 23. UZZZiCZ, Art. 26, item 1–3.
- 24. CC, Art. 161 § 1 and 3.
- 25. Act of 31 March 2020 amending the Act on specific solutions related to the preventing, counteracting and combating COVID-19, other infectious diseases and crisis situations caused by them, together with other acts (Journal of Laws, item 568, as amended), Art. 13, item 1 and Art. 101.
- 26. CC, Art. 161 § 4.
- 27. CC, Art. 101 § 1 section 2a.
- 28. CC, Art. 165 § 2.
- 29. CC, Art. 165 § 4.
- 30. CC, Art. 165 § 3.
- 31. Act of 6 June 1997 Code of Criminal Procedure (Journal of Laws of 2021, item 534, as amended), hereinafter: CCP, Art. 304 § 1.
- 32. CCP, Art. 304 § 2.
- 33. CC, Art. 266 § 1.
- 34. CC, Art. 266 § 3.
- 35. UZZZiCZ, Art. 52.
- 36. UZZZiCZ, Art. 40, item 1, 4–5.
- 37. Regulation of the Minister of Health of 10 December 2019 on reporting suspicions and diagnosed cases of infections, infectious diseases and related deaths (Journal of Laws Item 2430) issued on the basis of Article 27 of Section 9 of the Act of 5 December 2008 on preventing and combating infections and infectious diseases in humans (Journal of Law Of 2020, item 1845, as amended).
- 38. UZZZiCZ, Art. 41, item 3–5.

IV. HIV/AIDS AND STIS IN THE CONTEXT OF PUBLIC HEALTH

The foundation of implementing effective actions in the area of public health¹ in terms of HIV/AIDS and STIs, in line with assumptions of the World Health Organization (WHO), includes two diagnostic dimensions: epidemiological and social. In the social dimension, the main goal is to explore current social attitudes towards the various aspects of HIV/AIDS and STIs. Diagnosing social attitudes should include various behaviours and the current state of knowledge and beliefs that determine involvement in any type of activity.

An overview of social research over the last twenty years on HIV/AIDS indicates that research projects on the issue of HIV infections and the quality of life of people living with HIV/AIDS are conducted less frequently. Research aimed at raising the issue of social attitudes towards sexually transmitted infections is also carried out sporadically. It appears that this issue has been moved to the background despite the real need for constantly diagnosing this matter based on knowledge of the current and still unsatisfactory epidemiological situation in Poland.

This is probably due to the fact that in the social consciousness of Poles, HIV/AIDS and STIs currently do not pose a significant threat. Based on the representative and regular research conducted by Z. Izdebski in 2011 and 2017, it follows that 20% and 13% of Poles, respectively, are convinced that "the risk of HIV infections is so small that there is nothing to be worried about" [Izdebski & Wydawnictwa Uniwersytetu Warszawskiego, 2020].

HIV/STIs Tests

Based on the data collected in consultation and diagnostic centres, the number of HIV tests performed there has significantly increased over the last decade. The data shows a significant increase in the number of tests – from approximately 160,000 in mid-2000 to over 300,000 in 2013-2015 and over 400,000 in 2016 [Wojtyniak et al., 2018].

However, the information obtained in social surveys is not that optimistic. Based on existing data, it can be said that very few Poles currently test themselves for HIV and very few people are prepared to test themselves in the future.

- The national testing rate has been steadily increasing since the end of the last century; however, it has not exceeded 10%.
- Analyses show that since 2011, women have been testing themselves significantly more frequently than men (a reverse trend was noted up to that point) [Izdebski, 2000a, 2006, 2012; Izdebski & Wydawnictwa Uniwersytetu Warszawskiego, 2020], and the number of women taking tests rose from 3% to 13% in 2017.
- Residents of large cities (over 100,000 inhabitants), people with undergraduate and higher education, and young people (aged 22-39) statistically test themselves more often [Izdebski, 2006; Izdebski & Wydawnictwa Uniwersytetu Warszawskiego, 2020].
- A high testing rate may be noted in certain social groups, e.g., students 12% [Łukaszek, 2019a, 2020], men engaged in homosexual activities MSM 57% [Izdebski, 2012], and women providing sexual services 70% [Izdebski, 2000b] and (64%) [Izdebski, 2012].
- A low testing rate at the level of 5% is noted among men serving prison sentences (despite this group having a high percentage of risky sexual behaviour) [Łukaszek, 2019b].

¹ According to the National Research Institute (PZH), it is assumed in the European Region of the World Health Organization (WHO) that public health is "science and the art of preventing illness, prolonging life and promoting health by means of organized social efforts", www.pzh.gov.pl/zdrowie-publiczne/.

- In Izdebski's nationwide surveys, the low and still falling percentage of people who are considering taking an HIV test amounted to 21% in 2011 and 16% in 2017; [Izdebski & Wydawnictwa Uniwersytetu Warszawskiego, 2020] and 18% of students considered taking a test [Łukaszek, 2019a].
- A low percentage of people test themselves for sexually transmitted infections, particularly in the context of the declared indicators of STI cases. Based on Z. Izdebski's nationwide surveys conducted in 2017 (18-49 years of age), 12.4% of the respondents (10.1% men and 14.7% women) had tested themselves for STIs at least once in their lives. Moreover, the percentage of people testing themselves more frequently increased with age (from 4% in the 18-19 age group to 16% in the 40-49 age group) [Izdebski & Wydawnictwa Uniwersytetu Warszawskiego, 2020].
- There is a low testing rate for sexually transmitted infections in relation to the high percentage of Poles who have confirmed an STI:
 - throughout the survey, 5.2% of respondents (5.8% men and 4.6% women) declared that they had had an STI-related infection [Izdebski & Wydawnictwa Uniwersytetu Warszawskiego, 2020];
 - o 17.1% of men engaging in sexual contact with men (2005) declared that they have suffered from a sexually transmitted infection [Izdebski, 2012].

Sexual behaviours

HIV and other sexually transmitted infections in the general population are closely related to the existing model of sexual morality, broadly understood as "a set of socially recognized norms and patterns (models) of behaviour relating to sexual behaviour (manifestation and fulfilment of sexual needs)" [Wąż, 2010, 2011].

Over the last twenty years, a significant change in the sexual morality of Poles has occurred, particularly in the case of young people: adolescents and "young adults".²

The consequences of these changes are also evident in the structure of clients reporting to consultation and diagnostic centres. Since 2007, a significant increase in the percentage of people having sexual experiences with several partners has been noted – e.g., in 2013, 41% declared having six or more partners [Krajowe Centrum ds. AIDS, 2014] in comparison to the national average not exceeding five partners. In addition, in 2010-2013 [Krajowe Centrum ds. AIDS & IBC GROUP, 2010], a drastic increase in the percentage of people who never use protection during their sexual activity with partners other than their main partner (from 10% to 46%). A similar trend concerns people's decision to stop using protection during sexual contact their main partner (an increase from 10% to 48%).

An analysis of social surveys on the sexual behaviour of contemporary Poles reveals the following trends:

- An increase in the number of sexual partners, particularly among women:
 - Based on Z. Izdebski's regular surveys, the average number of partners in 1997, 2005, 2011, and 2017 were 4.5 [Izdebski, 2000]; 4.49; 4.6; 5.0 [Izdebski & Wydawnictwa Uniwersytetu Warszawskiego, 2020];
 - Since 2005, a significant increase in the number of sexual partners among women was been noted – from 2 to 3.8 in comparison to the indicator for men, which remained at 6.2-6.37 at the same time [Izdebski & Wydawnictwa Uniwersytetu Warszawskiego, 2020];

² "Young adults" are usually defined as people from 18 to 29-35 years of age.

- A decrease in the percentage of people who have had sexual experiences with only one partner
 in their lives and an increase in the percentage of people with experiences of sexual activity
 with several partners were noted [Izdebski, 2012].
- A high but decreasing percentage of men and women engaged in sexual contact outside their permanent relationship:
 - o in 1997, 28% of male and 16% of female in the nationwide survey declared being sexually active outside their permanent relationship [Izdebski, 2000a]; 26% and 15% respectively in 2005 [Izdebski, 2012]; 21% and 12% respectively in 2011 [Izdebski, 2012], 19.2% and 13.2% respectively in 2017 [Izdebski & Wydawnictwa Uniwersytetu Warszawskiego, 2020];
 - For 11% of contemporary "young adults", their sexual initiation partners were people they did
 not know personally or did not know very well; in addition, 33% of the respondents aged 1819 informed that they had met their partner no earlier than a month prior to initiation; among
 students (aged 19-20), this percentage rose to 36% [Komorowska-Pudło, 2013];
 - o throughout the survey, a significant increase in the percentage of people (7% of men and 5% of women) engaged in sexual contact with random partners met online [Izdebski, 2017].
- An increase in the openness of Poles to various forms of sexual activity, including:
 - A multiple increase in the percentage of Poles (mainly women, people aged 25-39, with higher levels of education) engaging in oral contact: 12% of women and 12% of men had such experiences in 1997 [Izdebski, 2000a]; 43% and 55% respectively in 2005; 50% and 54% respectively in 2011 [Izdebski, 2012], and 65% and 63% in 2017 [Izdebski & Wydawnictwa Uniwersytetu Warszawskiego, 2020]. In the context of the risk of HIV and other sexually transmitted infections, it is important to note that half of the contacts involved ejaculation into the mouth;
 - A triple increase in the number of Poles engaging in anal contact 7% of women and 9% of men in 1997, 16% and 20% respectively in 2005, 13% and 17% in 2017 and 21% and 20% in 2017 [Izdebski, 2000a; Izdebski, 2012; Izdebski & Wydawnictwa Uniwersytetu Warszawskiego, 2020].
- A low percentage of people using condoms, particularly during the riskiest forms of sexual contact:
 - It was found that sexually active Poles had never used a condom over the previous year in 2011
 44% of women and 29% of men [Izdebski, 2012], while in 2017 46.3% of women and 35.3% of men during vaginal sex and 73.5% of women and 51.1% of men during anal contact [Izdebski & Wydawnictwa Uniwersytetu Warszawskiego, 2020];
 - During the last sexual contact with a person other than their regular partner, only 31% of men and 21% of women used a condom [2005 survey – Izdebski, 2012];
 - Adolescents and "young adults" rarely use condoms and often stop using them during risky sexual contact.
- There is a high percentage of people (over 50% in various groups) with sexual experiences without using condoms while intoxicated with psychoactive drugs.

Non-sexual risky behaviours that may indirectly generate HIV infections or SITs

While analyzing HIV infections and other sexually transmitted infections, behaviours that may constitute risky situations need to be indicated. The most frequent include using and abusing psychoactive substances, particularly harmful for adolescents and "young adults" who, due to their age, have difficulties adequately assessing risks, e.g., those associated with sexual activity [Bancroft et

al., 2019]. Based on available reports, it may be concluded that using and abusing psychoactive substances among Poles is a significant problem, particularly among young people:

- Data collected through representative surveys conducted by the Centre for Public Opinion Research (CBOS) in 2010 indicate that 48% of men and 12% of women who drink alcohol declared that they had become intoxicated at least once a year. In addition, in CAGE screen tests, 19% of men and 2% of women obtained a result suggesting that they may have a problem with alcohol [CBOS, 2010];
- Population health surveys conducted by the National Institute of Public Health National Institute of Hygiene (NIZP-PZH) [Wojtyniak et al., 2018] revealed that 21.4% of men and 6.1% of women feel that they consume excessive amounts of alcohol or face criticism from their families with regards their drinking habits or feel guilty about their alcohol abuse;
- Based on a report prepared by the National Bureau for Drug Prevention and Kantar Poland in 2018, 7.8% of respondents aged 15-34 use marijuana, while in the general population (aged 15-64), 16.4% of men and 7.7% of women; 1.4% of the respondents (aged 15-34) admitted to using amphetamines throughout the previous year [National Bureau for Drug Prevention, 2019].

In the context of HIV infections and STIs, using and abusing psychoactive substances in groups is particularly risky. As this behaviour could result in random and unprotected sexual contact and downplaying the need to use a condom:

- the report indicated that approximately 30-36% of 15-year-olds in 2004-2008 had participated in social gatherings where marijuana or hashish was used, while 24% of the respondents both in 2004 and 2008 became intoxicated together with their peers [Ostaszewski, 2009];
- 52% of students admitted to attending gatherings and parties while being intoxicated, and 20% were under the influence of narcotics [Łukaszek, 2019a];

The Polish population's level of knowledge about HIV/STIs

Information collected while conducting projects involving large populations suggests that the level of knowledge about HIV is falling – an analysis of WHO/UNAIDS indicators for assessing knowledge of HIV/AIDS (Table 4) indicated that since 2005, the percentage of people who provided correct answers has decreased.³

_

³ Counting the average results for three specific indicators in surveys after 2005.

Table 4. WHO/AIDS indicators to assess the level of knowledge about HIV/AIDS

	Percentage	of correct ans	swers				
WHO/AIDS indicators to assess the level of knowledge about HIV/AIDS (WHO PI 1)	Z. Izdebski 1997 N=2702	Z. Izdebski 2001 N=3200	Z. Izdebski 2005 N=3154	Z. Izdebski 2011 N=2467	TSN OBOP for the National AIDS Centre 2008 N=600	TSN OBOP for the National AIDS Centre 2011 N=619	M. Łukaszek 2019 N=2764
The risk of HIV/AIDS infections may be limited if condoms are used during sexual intercourse	75.2%	70.9%	94.7%	88.9%	86%	89%	69.7%
Infections may be avoided by having intercourse with one faithful partner	86.7%	79.7%	85.6%	82.7%	88%	92%	57.2%
Infections may be avoided if a sterile needed is used for every injection	87.9%	82.5%	93.1%	89.4%	79%	77%	80.4%

Source: Łukaszek [Łukaszek, 2020c].

In particular, the level of knowledge of Poles about ways of infection in everyday situations is unsatisfactory (e.g., sharing meals, sharing toilets, mosquito bites) – it is significantly lower than the risk of infection related to sexual activity (Table 5).

Table 5. Assessing the risk of HIV infections in everyday situations

	Percentage of correct answers									
Assessing the risk of HIV infections in everyday situations	CBOS 1992 N=1124	Z. Izdebski 1997 N=2702	CBOS 1996 < 1097	Z. Izdebski 2001 N=3200	CBOS 2001 N=968	Z. Izdebski 2005 N=3154	Z. Izdebski 2011 N=2467	M. Łukaszek 2019 N=2764		
Using public toilets	61%	45%	55%	43%	61%	54%	51%	32%		
Sharing meals with people living with HIV (using the same plates, utensils, etc.)	64%	71%	62%	70%	67%	81%	75%	65%		
Mosquito or other insect bites	46%	50%	54%	51%	51%	61%	59%	32%		

Source: own study.

Insufficient knowledge is partly related to ignorance of the real share of particular risk factors in the structure of newly detected infections. This results from the fact that available and published information comes from data collected at testing points (NIZP-PZH) and has been elaborated based on information obtained from on average 35% of people with a diagnosed infection (based on NIZP-PZH data from 2014-2018). However, information on the remaining Poles living with HIV is lacking. Based on social surveys, adolescents and "young adults" have a very low level of knowledge. They possess insufficient knowledge in identifying the risk of being infected in everyday situations and diagnosing and treating HIV.

- Based on reports by TNS OBOP (2007), 79% of middle school students know the abbreviation HIV and 73% the abbreviation AIDS. The percentage of correct answers provided by respondents to questions related to ways of infection were as follows: with regards to the risk of sharing syringes and needles 90%, sexual contact with several partners 33%, shaking hands, embracing and kissing another person 34%, using the same toilet 33%, using the same dishes 35%, using the same means of transportation 48% and attending the same school 51%.
- A survey conducted in 2015 revealed that most adolescents possessed general knowledge about HIV (although only 81.3% were aware that people living with HIV could infect others throughout their entire life), and 80-90% of the respondents were aware that it is possible to infect oneself during unprotected sexual intercourse. However, there was a significantly lower percentage of correct answers concerning infections in everyday situations (e.g., using the same dishes, although washed beforehand 75% and infections resulting from insect bites only 23% of the respondents knew the amount of time from the moment of exposure the virus may be detected, 57% knew where diagnostic tests could be taken, and there was a low level of knowledge about the possibility of treatment (69% knew that a person infected with HIV could be treated) [Pikala et al., 2015].
- Students' knowledge concerning the possibility of diagnosing HIV was much lower than their knowledge about ways of infection. One-fourth of the students provided less than 50% correct answers, and only 5.9% gave 84.6% correct answers to questions about ways of infection. As far as the problems of diagnosing HIV is concerned, only 1.9% of students answered more than 85.7% of the questions correctly, and over 60.5% of the respondents were unable to provide more than 42.9% correct answers [Łukaszek, 2020].
- The survey revealed a low level of knowledge among "young adults" knowledge of the abbreviations HIV and AIDS (88% and 81% correct answers, respectively). Only 37% of the respondents were able to indicate the three basic ways of infection correctly; 46% of the participants were aware that HIV infections are not the same as AIDS; only 38% of people correctly indicated temperatures over 56°C and detergents as factors that kill the virus [Janiszewska et al., 2019].
- Over 97% of students felt the need to learn more about HIV/AIDS [Komosińska & Małkowska-Szkutnik, 2008].

Despite the high indicator of sexually transmitted infections in the Polish population, very few projects have been carried out to diagnose society's knowledge on this topic. Based on studies conducted among university students in the area of Lublin, 34.7% of the respondents have a low level of knowledge, 32.7% average, and 32.7% have a high level of knowledge on sexually transmitted infections [Wdowiak et al., 2011]. Studies conducted among public school students indicate that their main source of information on STIs included their school environment (mainly peers) and the Internet. Only 29% of the respondents assessed their level of knowledge about sexually transmitted infections as good or very good [Olejniczak et al., 2012].

The beliefs held by Poles

Despite the constant implementation of the Programme (since 1996), stereotypical, i.e., simplified and biased beliefs about various areas related to the problem of HIV/AIDS and STIs are still present in social awareness. On the one hand, this is the effect of outdated information, while on the other hand, a decrease in the number of people dying because of AIDS, which is possible thanks to the current treatment options [Wojciechowska, 2011]. Therefore, there is a greater chance of meeting people living with HIV. Based on available studies, it may be concluded that these beliefs refer to the following areas:

- A sense of one's own safety:
 - It was found that the percentage of Poles afraid of AIDS is falling (41% in 1996, 35% in 1999, 30% in 2005 and 29% in 2008), and the proportion of Poles who express fear of sexually transmitted infections is marginal [CBOS, 2008a];
 - A high percentage of Poles (30.3%) is convinced that they will never contract an HIV infection or assess the probability of contracting the virus as low 49.6% [Izdebski, 2006]; in 2011, 20% of Poles were convinced that the general risk of contracting an HIV infection is so insignificant that there is nothing to be worried about, and in 2017 13% [Izdebski & Wydawnictwa Uniwersytetu Warszawskiego, 2020];
 - 55% of the surveyed medical students believed that the most effective form of protection against HIV infections was avoiding any sort of contact with infected people [Cybulski & Pawłowska, 2012],
- assessment of people with infections:
 - The students were convinced that most HIV-infected people die because of AIDS and that the majority of people with HIV infections will develop AIDS (39% and 54%, respectively) [Komosińska & Małkowska-Szkutnik, 2008];
 - 38.2% of students believe that people who have been infected with HIV by means of sexual contact or injecting drugs got what they deserve [Wojciechowska, 2011];
 - A high percentage of respondents (see the table below) believe that people living with HIV are to blame for their infection;

Table 6. The percentage of people who support the belief that people with infections are to blame for their infection/are responsible for their illness

Year of test	Number of samples	Author of study	The percentage of people who support the belief that people with infections are to blame for their infection/are responsible for their illness
1992	N=1124	CBOS	42%
1995	N=627	K. Kmiecik-Baran	28%
1996	N= 1097	CBOS	49%
2000	1266	RUN Company for the National AIDS Centre	32%
2001	N=968	CBOS	32%
2007	N=1272	J. Wojciechowska	56.6%
2019	N=2764	M. Łukaszek	11%

Source: own study based on [CBOS, 1992, 1996, 2001; Kmiecik-Baran, 1995; Krajowe Centrum ds. AIDS, 2000; Łukaszek, 2019a; Wojciechowska, 2011].

People infected with HIV are perceived as being immoral because such infections are associated with engaging in behaviours that break moral principles (risky sexual contact, narcotics). It was found that, in the opinion of students, the following groups of people were dominant among HIV-infected people: drug addicts (34.5 of responses), homosexuals (18.7%), healthcare workers (15.9%), prostitutes (12.4%) and people who have intercourse with random partners (7.1%) [Łukaszek, 2019a].

Beliefs about using condoms:

- the opinion that using a condom in a permanent relationship when there is no concern of becoming pregnant is a sign of not trusting one's partner was expressed by 56% of Poles in 1997 [Izdebski, 2000a], and in 2005 – over 20% [Izdebski, 2012];
- o 71% of Poles were convinced (1997) that using a condom during intercourse negatively affects its spontaneity [Izdebski, 2000a];
- barely 28% of Poles (1997) thought that a condom reduces the risk of an HIV infection [Izdebski, 2000a];
- A TNS OBOP survey [TNS OBOP, 2007] revealed that 11% of middle school students believe that condoms do not reduce the risk of infection, while 22% had no opinion; in 1996, significantly fewer people held that opinion – 9% and 6%, respectively.
- 76% of Poles would agree to use a condom during their first sexual contact with a partner if he/she suggested it, and 70% would suggest using this measure [Izdebski, 2006];
- 16.8% of professional soldiers doubt the effectiveness of condoms in limiting the risk of HIV infections [Niedźwiedzka et al., 2010] entirely.
- The belief that alcohol positively impacts sex in 2005, 31% of men and 20% of women shared this opinion [Izdebski, 2012].

Stigmatization and discrimination of people living with HIV

In line with the UNAIDS's position, "stigma and discrimination linked to HIV/AIDS, as a breach of human rights, constitutes one of the greatest barriers in preventing new cases of infection, providing care, support and treatment" [UNAIDS, 2022].

As the research shows, the life situation of people who have been diagnosed with an HIV infection changes significantly, particularly in terms of social contact. It found that 21% of people were forced to change their group of friends due to their infection, 11% experienced the breakdown of an intimate relationship because of it, 11% lost friends, 10% contact with family, and 7% lost the possibility of working professionally [Ankiersztejn-Bartczak, 2013].

It is known that the subjective sense of the lowering of the quality of life of people living with HIV/AIDS is closely connected with their experience of social stigmatization, marginalization [Peltzer & Ramlagan, 2011], and above all, the lack of emotional support [Bajunirwe et al., 2009]. In addition, it has been proven that receiving support lowers the level of trauma symptoms associated with an HIV infection [Oniszczenko et al., 2018].

Knowing that 12.1% of Poles living with HIV have also had thoughts of attempting suicide and an additional 21.3% have thoughts of suicide [Ankiersztejn-Bartczak, 2013], it seems reasonable to look at whether the attitudes of Poles are favourable and supportive of people with infections, or in contrast if they tend to foster discrimination, stigmatization and marginalization of this group. Analyses of available surveys show that despite several years of HIV/AIDS prevention, the situation of Poles living with HIV is still very difficult. Among 545 people living with HIV, 46% have experienced discrimination due to their infection at some point in their lives and 20% reported that it occurred in the year leading up to the survey [Ankiersztejn-Bartczak, 2013].

- A higher percentage of women (56.1% and men 41%) experience discrimination, regardless of the time that had passed from learning of their infection.
- People who have been infected due to drug use were discriminated twice as frequently as those who had contracted an infection through sexual contact.
- A higher percentage of heterosexuals (20%), compared to homosexuals (16%) and bisexuals (11%), feel that they face discrimination.
- The following people were indicated as being the source of discrimination: healthcare workers (28%), acquaintances (11%), prison service workers (7%), extended family (7%), one's own "close" family (6%), employers (5%) and siblings (4%).
- As many as 5% of the respondents had lost their jobs due to their infection over the year leading up to the survey.
- In addition, 20% of the respondents had been denied medical services because of their infection throughout the previous year.

The rights of people living with HIV/AIDS in public opinion

An analysis of research projects carried out on representative or large research samples suggests a renewed increase (since 2000) in the rate of discrimination against people living with AIDS (according to the four-factor model of indicators developed by WHO/AIDS).

The report found that 49-80% of Poles supported the right to care for an infected family member, 36-53% – the right to keep one's infection confidential, from 19% (in medical professions) to 84% – the right to continue working and from 59% (medical procedures) 86% – the right to receive medical care [Izdebski, 2011, 2012; Krajowe Centrum ds. AIDS, 2014; Łukaszek, 2020; Wojciechowska, 2011].

It was also found that the intensity of discriminatory attitudes among Poles depends on how the HIV infection is transmitted. People infected due to injecting drugs, homosexual contacts, sex with random partners and commercial sex were stigmatized the most [Łukaszek, 2019a; Wojciechowska, 2011].

Based on available studies, a decrease in the percentage of people who respected the rights of people living with HIV to care provided by a family member can be observed:

- The percentage of Poles who would be willing to care for an infected family member was 80.2% in studies conducted by Z. Izdebski in 2005 [Izdebski, 2012] and 73% in 2011 [Izdebski, 2011];
- In an IPSOS Independent Market Research Institute study for the National AIDS Centre (2014), 49% of the respondents expressed a willingness to care for a family member living with AIDS [National AIDS Centre, 2014];
- In 2019, 73.2% of students in the Podkarpackie province shared the view that family should take care of relatives that had contracted their infection in non-sexual situations, and 68.9% when the infection resulted from sexual contact; 70.5% declared their willingness to care for their closest relatives in such a situation [Łukaszek, 2019a].

Over half of the Poles surveyed question the right of infected people to keep their infection in confidence:

- In a study conducted by Z. Izdebski, the right to not inform the community in which infected people lived was supported by 52.5% (2005) [Izdebski, 2012] and 37.2% [Izdebski, 2011];
- in 2014, it was found that 57% of Poles believe that infected people should reveal their condition to strangers with whom they have contact, and 48% expressed the view that infected people should reveal their condition to family and close loved ones [National AIDS Centre, 2014];
- 49% of students accept the right to keep information about one's infection confidential from people outside the family, and only 36% from family members [Łukaszek, 2019a].

Respecting the right of HIV+ people to continue working:

- In a study conducted by Z. Izdebski, the percentage of people who support the right of HIV+ people to continue working in professions involving contact with people was 83.9% (2005) [Izdebski, 2012] and 71.5% [Izdebski, 2011];
- In an IPSOS Independent Market Research Institute study for the National AIDS Centre (2014), 67% of Poles accept the right of HIV-infected people to work [Krajowe Centrum ds. AIDS, 2014];
- it was found that 54.5% of students accept HIV-infected people continuing to work in professions requiring contact with other people, and the same number of respondents agreed to them working in the uniformed services. However, only 18.9% agreed to such people working in positions where contact with human bodily fluids was probable (physician, nurse or paramedics) [Łukaszek, 2019a].

A decrease in the percentage of people respecting the right of infected people to receive medical care may be observed.

- Based on Z. Izdebski's surveys (2005), the percentage of people who share the opinion that
 infected people have the right to receive medical care to the same or greater extent as HIVnegative people was 85.6% [Izdebski, 2012];
 In studies carried out by the IPSOS Independent Market Research Institute for the National AIDS
 - Centre, the percentage of people who agreed with the statement that "people infected with HIV/living with AIDS should have the same access to medical care as people with other chronic/infectious illnesses" amounted to 74% [National AIDS Centre, 2014];
- The percentage of students who respect people living with HIV receiving medical counselling on the same basis as HIV-negative people was 84.1%, while in terms of medical procedures, only 58.9% [Łukaszek, 2019a].

Over 50% of the medical students surveyed supported the creation of personal registers of infected people [National AIDS Centre, 2000]; and 10.7% of university students in Gdańsk were in favour of the last names of people living with HIV being disclosed [Wojciechowska, 2011]. Close to 46% of dentists expressed the opinion that people living with HIV should be treated in special offices, and only 36% agreed with the statement that people living with HIV are rightly entitled to keep their health conditions confidential [Biała et al., 2016].

Declared behaviour of Poles in relation to people living with HIV

In the context of Poles' beliefs concerning people living with HIV, it is no surprise that 40.4% of students (moderately or strongly) fear HIV-infected people, and 14.6% feel disgust towards them [Wojciechowska, 2011]. These fears are evident in the actions the respondents declared.

It was found that 70% of the respondents would not go to a dentist who treated HIV-infected people[Komosińska & Małkowska-Szkutnik, 2008]. Among students surveyed in 2007, 11.5% would withdraw their child from a school another HIV-positive student attended; 44.3% would stop shopping in a store whose owner was HIV positive; 6.5% of office workers would avoid contact with HIV-positive co-workers, and 6.3% would insist that they be transferred to another job [Wojciechowska, 2011].

As many as 41.7% of students would not live in the same room with an HIV-positive roommate; 40.7% would not send their child to a school that a student living with HIV attends; 38.5% would not use the services of a dentist who treats seropositive patients; and 25.5% would not attend a tourist camp with a couple of HIV-infected students [Łukaszek, 2019a].

Bibliography

- 1. Ankiersztejn-Bartczak M. *Psychospołeczna sytuacja osób żyjących z HIV i chorych na AIDS w Polsce* [Praca doktorska]. Uniwersytet Warszawski Instytut Stosowanych Nauk Społecznych (2013).
- 2. Bajunirwe F., Tisch D. J., King C. H., Arts E. J., Debanne S. M.& Sethi A. K. *Quality of life and social support among patients receiving antiretroviral therapy in Western Uganda. AIDS Care, 21*(3), 271–279 (2009). https://doi.org/10.1080/09540120802241863
- 3. Bancroft J., Lew-Saronic, Z., Robacha A., Śmietana R.& Edra Urban & Partner, Seksualność człowieka = Human sexuality and its problems. Edra Urban & Partner (2019).
- 4. Biała M., Biały M., Lelonek E., Inglot M.&Knysz B. *Assessment of dentists' general attitude towards HIV-infected patients.* Forum Zakażeń, 7(1), 9–12 (2016). https://doi.org/10.15374/FZ2015065
- 5. CBOS. Społeczeństwo wobec problemów dotyczących AIDS. (1992).
- 6. CBOS. Społeczeństwo wobec problemów dotyczących AIDS (1996).
- 7. CBOS. Społeczeństwo wobec chorych na AIDS (2001).
- 8. CBOS. Polacy o niepokojach, zagrożeniach i oczekiwaniach dotyczących zdrowia psychicznego. Research findings
- 9. CBOS. Postawy i zachowania seksualne młodych Polaków. Raport z badania ilościowego (2008b).
- 10. CBOS. Postawy wobec alkoholu (2010).
- 11. CBOS. *Młodzież 2016.* Raport z badania (2016).
- 12. CBOS. Moda na tatuaże. Komunikat z badań. (Nr 113, 2017). https://cbos.pl/SPISKOM.POL/2017/K_113_17.PDF
- 13. Cybulski M., & Pawłowska M. Knowledge about HIV and attitudes towards people with HIV/AIDS among students of Public Health, Medical University of Bialystok. Problemy Higieny i Epidemiologii, *3*, 618–622 (2012).
- 14. Dzielska A. *Picie alkoholu*. Wyniki badań HBSC. W J. Mazur (Red.), *Zdrowie i zachowania zdrowotne młodzieży szkolnej w Polsce na tle wybranych uwarunkowań socjodemograficznych* (2015).
- 15. Flatow E. *Zdrowie seksualne: Analiza porównawcza wybranych aspektów seksualności studentów w Polsce i we Francji.* Wydawnictwo Wyższej Szkoły Bezpieczeństwa (2013).
- 16. Gawron-Skarbek A., Nowacka E., Łaszek M.&Szatko F. Negative behavior patterns of students. *Part IV. Sexual behaviors conducive to infections* Problemy Higieny i Epidemiologii, 92(3) (2011).
- 17. Izdebski Z. Wiedza, przekonania o HIV/AIDS w społeczeństwie polskim: Zachowania seksualne. Wydawnictwo Naukowe PWN (2000a).
- 18. Izdebski Z. Zachowania seksualne kobiet świadczących usługi seksualne, mężczyzn homoseksualistów i osób uzależnionych od narkotyków. Organon: UNDP (2000b).
- 19. Izdebski Z. *Ryzykowna dekada: Seksualność Polaków w dobie HIV/AIDS: studium porównawcze 1997-2001-2005.* Oficyna Wydawnicza Uniwersytetu Zielonogórskiego (2006).

- 20. Izdebski Z. Seksualność Polaków 2011. TSN OBOP (2011).
- 21. Izdebski Z. *Seksualność Polaków na początku XXI wieku: Studium badawcze* (Wyd. 1). Wydawnictwo Uniwersytetu Jagiellońskiego (2012).
- 22. Izdebski Z. Seksualność Polaków 2017. IX Ogólnopolska Debata o zdrowiu seksualnym 8 lutego 2017, Warszawa.
- 23. Izdebski Z., & Wąż K. *Aktywność seksualna młodzieży 15-letniej.* in: J. Mazur & A. Małkowska-Szkutnik (Red.), Zdrowie uczniów w 2018 roku na tle nowego modelu badań HBSC (2018).
- 24. Izdebski Z., & Wydawnictwa Uniwersytetu Warszawskiego. *Zdrowie i życie seksualne Polek i Polaków w wieku 18-49 lat w 2017 roku: Studium badawcze na tle przemian od 1997 roku*. Wydawnictwo Uniwersytetu Jagiellońskiego (2020).
- 25. Janiszewska E., Pluta D.&Dobosz T. Knowledge of HIV/AIDS among young people. *Alergia Astma Immunologia*, 24 (1), (2019).
- 26. Janiszewski M. Raport Żołnierze 2001. Świat Problemów, 11 (2002).
- 27. Kmiecik-Baran K. *HIV/AIDS alienacja oraz wsparcie i odrzucenie społeczne* (Wyd. 1). Wydawnictwo Uniwersytetu Jagiellońskiego (1995).
- 28. Komorowska-Pudło M. Seksualność młodzieży przełomu XX i XXI wieku. (2013).
- 29. Komosińska K.&Małkowska-Szkutnik A. *Wiedza i przekonania związane z HIV/AIDS oraz zachowania seksualne studentów Uniwersytetu Warszawskiego*. (2008).
- 30. Kowalewska A. *Picie alkoholu, palenie tytoniu i marihuany*. In: J. Mazur (Red.), Zdrowie uczniów w 2018 roku na tle nowego modelu badań HBSC (2015).
- 31. National Bureau for Drug Prevention. Report on drug addictions in Poland 2019.
- 32. National AIDS Centre. The attitudes of medical students towards HIV and AIDS (2000).
- 33. National AIDS Centre. Report 2: Diagnosis of educational needs in terms of HIV/AIDS and sexually transmitted infections (STIs) (2014).
- 34. National AIDS Centre. Final Study Report. An analysis of data obtained from surveys conducted in VCTs in 2010.
- 35. Łukaszek M. *Cechy obyczajowości seksualnej mężczyzn niedostosowanych społecznie.* in: I. Mudrecka (Red.), Resocjalizacja, readaptacja i reintegracja społeczna—Problemy, programy i perspektywy rozwoju komunikacji, Pedagogium Wyższa Szkoła Nauk Społecznych (2017a).
- 36. Łukaszek M. HIV/AIDS the problem in Polish prisons. HIV & AIDS Review, 18(3), (2019b). https://doi.org/10.5114/hivar.2019.88195
- 37. Łukaszek M. *Obyczajowość seksualna mężczyzn społecznie niedostosowanych*. in: K. Wąż (Red.), Obyczajowość seksualna Polaków: Perspektywa interdyscyplinarna. Oficyna Wydawnicza Humanitas. (2019c).
- 38. Łukaszek M. *Postawy studentów uczelni podkarpackich wobec HIV/AIDS*. National AIDS Centre(2019a). https://aids.gov.pl/badania_spoleczne/postawystudpodk/
- 39. Łukaszek M. Prisoners with regard to female life and sex partners. Teoretična i didaktična filologià (2017b).
- 40. Łukaszek M. Wiedza studentów podkarpackich uczelni na temat HIV/AIDS. Kontra, Vol. 84, nr 2, (2020).
- 41. Łukaszek M. *Szorstka młodość: Socjalizacyjne wyznaczniki zachowań seksualnych młodzieży* (na podstawie badań wychowanków Ochotniczych Hufców Pracy) (Wydanie I). Wydawnictwo Uniwersytetu Rzeszowskiego (2013).
- 42. Łukaszek M. Socially maladjusted men and their sexual scripts in the context of psychoactive substance use. Alcoholism and Drug Addiction, 31(3), (2018). https://doi.org/10.5114/ain.2018.80852
- 43. Łukaszek M. Students' behaviors in the context of the risk of HIV infection. Journal of HIV/AIDS & Social Services, 19(3), (2020). https://doi.org/10.1080/15381501.2020.1806165
- 44. Niedźwiedzka M., Nowacka E.&Grzybowski A. Ryzykowne zachowania żołnierzy służby zasadniczej sprzyjające zakażeniu HIV. Problemy Higieny i Epidemiologii, 91(2,) (2010).
- 45. Olejniczak D., Wodzyńska K.&Religioni U. Wiedza uczniów klas maturalnych na temat chorób przenoszonych drogą płciową. Problemy Pielęgniarstwa, 20 (3), (2012).
- 46. Oniszczenko W., Rzeszutek M., Żebrowska M.&Firląg-Burkacka E. Wiek a nasilenie objawów traumy i wsparcie społeczne u osób zakażonych wirusem HIV. in: A. Pluta, E. Łojek&A. Horban (Red.), Życie i starzenie się z wirusem HIV. Podejście interdyscyplinarne (s. 209–222). Wydawnictwo Uniwersytetu Jagiellońskiego (2018).
- 47. Ostaszewski K. Raport techniczny z realizacji projektu badawczego p. n. Monitorowanie zachowań ryzykownych młodzieży: Badania mokotowskie. Instytut Psychiatrii i Neurologii (2009).
- 48. Parker R.&Aggleton P. HIV and AIDS-related stigma and discrimination: A conceptual framework and implications for action. Social Science & Medicine, 57(1), (2003). https://doi.org/10.1016/S0277-9536(02)00304-0
- 49. Peltzer K.&Ramlagan S. Perceived stigma among patients receiving antiretroviral therapy: A prospective study in KwaZulu-Natal, South Africa. AIDS Care, 23(1), (2011). https://doi.org/10.1080/09540121.2010.498864
- 50. Pfeffer M. Zachowania ryzykowne żołnierzy służby zasadniczej jako czynniki ryzyka zakażenia wirusem HIV. 111(4), (2001).
- 51. Pikala M., Osiewacz D.&Maniecka-Bryła, I. Ocena wiedzy uczniów szkół średnich na temat zakażeń wirusem. Problemy Higieny i Epidemiologii, 96(1,) (2015).
- 52. Sierosławski J. *Używanie alkoholu i narkotyków przez młodzież szkolną*. Raport z ogólnopolskich badań ankietowych zrealizowanych w 2015 r. Europejski Program Badań Ankietowych w szkołach ESPAD. (2015).
- 53. TNS OBOP. Raport z pomiaru poziomu wiedzy i postaw uczniów szkół gimnazjalnych odnośnie HIV/AIDS. Porównanie wyników do badania "Ocena wiedzy i postaw młodzieży szkół podstawowych na temat zakażenia i zapobiegania HIV i AIDS". (2007).
- 54. UNAIDS. HIV-related stigma and discrimination—the epidemic continues, Genewa, UNAIDS November (2002).
- 55. Waszyńska K. Biograficzne uwarunkowania życia seksualnego (Wyd. 1). Wydawn. Naukowe UAM (2010).

- 56. Wąż K. *Znaczenie kultury popularnej w (re)konstruowaniu obyczajowości seksualnej*. in: D. Hejwosz & W. Jakubowski (Red.), Kultura popularna—Tożsamość—Edukacja (2010).
- 57. Wąż K. Socjalizacja seksualna i przemiany w obyczajowości seksualnej młodzieży. in: Z. Izdebski, T. Niemiec, K. Wąż. (Red.), Zbyt młodzi rodzice. Wydawnictwo TRIO (2011).
- 58. Wdowiak A., Bąk M., Bakalczuk G., Lewicka M.&Bakalczuk S. *Analiza poziomu wiedzy studentów odnośnie chorób przenoszonych drogą płciową*. *27*, (2011).
- 59. Wojciechowska J. *Przyczyny dyskryminacji osób żyjących z HIV: Nowe ujęcie teoretyczne i jego implikacje dla edukacji zdrowotnej.* Wydawnictwo Uniwersytetu Jagiellońskiego (2011).
- 60. Wojtyniak B., Goryński P.&Narodowy Instytut Zdrowia Publicznego Państwowy Zakład Higieny. *Sytuacja zdrowotna ludności Polski i jej uwarunkowania*. Narodowy Instytut Zdrowia Publicznego Państwowy Zakład Higieny (2018).
- 61. Woynarowska B. *Używanie marihuany/haszyszu przez młodzież 15-letnią*. in: Mazur (Red.), Zdrowie i zachowania zdrowotne młodzieży szkolnej w Polsce na tle wybranych uwarunkowań socjodemograficznych (2015). Wyniki badań HBSC. (2015).

V. New trends and challenges in preventing HIV/AIDS and STIs

The prevention methods used for many years, combined with more effective antiretroviral therapy (ARV), which has fewer and fewer side effects, have led to a reduction in HIV incidence around the world [3]. On the other hand, the spread of the epidemic continues in some regions, and an increase in the number of new HIV infections can be observed (including Russia and Ukraine for injecting drug users – IDU and men having sex with men – MSM and Central and Eastern Europe among MSM [3.7%]. At the same time, virtually no country has been successful in controlling the epidemic of syphilis, gonorrhoea or chlamydia [4, 5, 6].

In the case of the Republic of Poland, the epidemic of HIV and other sexually transmitted infections (STIs) is concentrated in key populations and requires varied solutions addressed to people engaged in risky behaviour.

Effectively combating HIV/AIDS and other sexually transmitted infections is based on [8]:

- anonymous and free-of-charge testing combined with a rapid therapy implementation in the case of detecting an infection,
- providing access to pre-exposure and post-exposure prevention,
- education explaining the significance of specific forms of prevention and reducing stigmatization.

Anonymous and free-of-charge testing

The consultation and diagnostic system (VCT) enables anonymous and free-of-charge HIV diagnostics; however, universal access to STI tests (such as syphilis, gonorrhoea or chlamydia) is difficult [7]. Epidemiological data and practice indicate that there is a high level of interest in such diagnostics, and the percentage of infections, including asymptomatic infections, is significant [see: Zakażenia przenoszone drogą płciową w dobie PrEP. Polska, Europa [Sexually transmitted infections in the PrEP era. Poland, Europe] – Dr B. Szetela, Prepare]. Diagnostics and therapy successfully interrupt infection transmissions in most cases of syphilis, gonorrhoea and chlamydia.

The recommendations of the World Health Organization and the Polish AIDS Society [8, 9] concerning the implementation of testing are presented below:

- mobile (regular/on a campaign basis),
- in clubs,
- self-testing (tests to be performed at home or by sending samples to a laboratory together with a support system, e.g., hotline),

aimed at, among others, making it easier to test socially excluded people.

Currently, it is possible to take an anonymous HIV test, free-of-charge and without a doctor's referral, and receive counselling from certified counsellors in VCTs under agreements signed with NGOs funded by the National AIDS Centre. Regardless of the patient's test result, direct conversations with a consultant are conducted in VCTs, eliminating serological window periods or the risk of incorrectly interpreting test results. This type of counselling provides significant psychological and professional support in learning one's serological status. People who have received a positive HIV test result are encouraged to seek further medical care.

Many individual conditions should be taken into account in the process of performing tests as part of HIV diagnostics. An incorrect positive or negative test result is possible. Other causes for obtaining invalid results, e.g., an incorrect procedure, an insufficient sample amount, etc., may also occur.

Access to pre-exposure and post-exposure prevention

Behavioural prevention based solely on education and activities aimed at making attitudes/behaviours less risky or reducing their frequency has not changed the HIV or STI epidemiological trend anywhere in the world. Downward trends in key populations have been achieved only after implementing biomedical methods, i.e., primarily pharmacological pre-exposure prevention, treating all HIV infections directly after a diagnosis, and universal and regular HIV and STI diagnostics with immediate treatment for all infected people.

Since October 2017, pre-exposure prevention methods (PrEP) have been available in the Republic of Poland and are currently used by over 3,000 people. This programme, aimed at making PrEP available for people particularly exposed to HIV infections, was created based on guidelines provided by the Polish AIDS Society and international recommendations. This fully paid programme is available in large cities where private PrEP clinics have been opened.

It is advisable to continue implementing the health policy programme entitled The AVR Treatment of People Living with HIV in Poland, which ensures, aside from ARV treatment for people infected with HIV or living with AIDS, post-exposure prevention after exposure to HIV infections in accidents occurring in non-occupational settings.

Holistic programmes should include prevention, diagnostics and treatment of HIV/STIs. Aside from the aspects already mentioned (a holistic approach, free-of-charge, easy access), changes to legal provisions and the possibility to report epidemiological data in a limited way – as is the case of HIV infections, should be considered in such a programme.

Education

An important element of educational activities is exploring the needs of the recipients of such campaigns and adjusting the content appropriately. Various ways of reaching the recipients, their age, place of residence and interests should also be considered. New techniques, trends and communication channels are used to create interest in this issue. Activities that fail to include the specific lifestyle of people engaged in risky behaviour, particularly in key populations, and their psychological background, are ineffective and perceived as irrelevant and imposed. A pragmatic, harm-reduction approach is a chance to limit the number of HIV infections and other STIs. Therefore, the goal of educational activities in key populations should also include broadly understood harm reduction.

Activities combining all aspects of prevention and therapy that consider the different and changing needs of people at risk of contracting HIV and other STIs and other people who are already being treated in the healthcare system may reverse the unfavourable infection trend. Implementing early diagnostics, rapid inclusion of HIV-infected people in ARV treatment and activities in the field of integrating HIV and STI prevention together may bring about the expected effect. Further in-depth analysis in this matter is advisable in order to base actions on research results. A pragmatic approach to reality requires extensive educational and informational activities that include the de-stigmatization of the infections themselves.

Bibliography

- 1. Grinsztejn. AIDS 2020 Abstr. OACLB01
- 2. Baeten. AIDS 2019 Abstr TUAC0203.
- 3. UNAIDS Data 2020
- 4. European Centre for Disease Prevention and Control. Chlamydia infection. In: ECDC Annual epidemiological report for 2018. Stockholm: ECDC 2020
- European Centre for Disease Prevention and Control. Gonorrhoea. In: ECDC Annual epidemiological report for 2018. Stockholm: ECDC 2020
- 6. European Centre for Disease Prevention and Control. Syphilis. In: ECDC Annual epidemiological report for 2018. Stockholm: ECDC 2020
- 7. European Centre for Disease Prevention and/ WHO Regional Office for Europe. HIV/AIDS surveillance in Europe 2019 2018 data. Stockholm: ECDC 2019
- 8. Prevention and control of sexually transmitted infections (STIs) in the era of oral pre-exposure prophylaxis (PrEP) for HIV. Geneva: World Health Organization; 2019
- 9. Zasady opieki nad osobami zakażonymi HIV, zalecenia PTN AIDS 2019
- 10. Szetela et al. Making HIV clinic appointments for clients with positive HIV results at testing sites can improve referral rates. Adv.Clin.Exp.Med. 2019 Vol.28 no.1 s.121-124,
- 11. Ankiersztejn-Bartczak et al. Factors responsible for incomplete linkage to care after HIV diagnosis: preliminary results from the Test and Keep in Care (TAK) project. HIV Med. 2015;16(2):88-94.
- 12. Parczewski et al. Meeting the WHO 90% target: antiretroviral treatment efficacy in Poland is associated with baseline clinical patient characteristics. J Int AIDS Soc. 2017 17;20(1):1-11.
- 13. Prevention and control of sexually transmitted infections (STIs) in the era of oral pre-exposure prophylaxis (PrEP) for HIV. Geneva: World Health Organization; 2019
- 14. Smith DK, et al. MMWR Morb Mortal Wkly Rep. 2015;64:1291-1295.

VI. SCHEDULE FOR IMPLEMENTATION OF THE NATIONAL PROGRAMME FOR PREVENTING HIV INFECTIONS AND COMBATING AIDS FOR 2022-2026 – HIV/AIDS AND STIS PREVENTION, ARV TREATMENT, INTERNATIONAL COOPERATION, MONITORING

HIV/AIDS and STI prevention

Preventing risky behaviours occurs at three levels:

skills required to prevent problems.

- Primary prevention addressed to low-risk groups.
 Preventive actions cover the general population and all sub-groups. The aim of primary prevention is to promote healthy lifestyles, reduce risk factors and limit the reach of risky behaviours (limiting the initiation of various risky behaviours and preventing new cases). The main activities include conveying knowledge and teaching the most important psychological and social
- Secondary prevention is directed to increased risk groups.
 The goal of these activities is to limit engagement in risky behaviours. The main activities are similar to universal prevention but consider a given subgroup's specific needs and problems.
- Tertiary prevention pertains to high-risk groups.
 It is aimed at preventing the disease process from advancing and enabling people to return to life in society. This type of prevention is based primarily on treatment/rehabilitation.

In prevention, it is important to maintain the correct order of actions. A reliable diagnosis should precede preventive actions. The actions taken in these three categories (levels) of prevention differ in their intensification and duration. The deeper the level of prevention, the longer and more intense the actions. At the same time, the deeper the prevention level, the fewer recipients.

The following strategies are used in prevention at various levels:

- Information strategies activities aimed at providing adequate information about the
 consequences of risky behaviour and thus empowering people to make rational choices. These
 strategies are based on the belief that people engage in risky behaviours because they possess
 insufficient knowledge about the mechanisms and consequences of such conduct. It is assumed
 that providing information about the consequences of smoking tobacco, drinking alcohol,
 intoxicating drugs, or sexual activity produces a change in attitudes resulting in behavioural
 changes.
- Educational strategies aimed at assisting in developing psychological and social skills (interpersonal skills, coping with stress, conflict resolution, assertiveness, etc.). These strategies are based on the belief that people, even if they have appropriate knowledge, engage in risky behaviour due to a lack of sufficient social skills. A deficit in social skills prevents them from building deeper and satisfying relationships with others, causes frustration, and inhibits success, e.g., in professional careers. Therefore, they seek chemical substances or other means of support. It is assumed that developing such skills enables people to satisfy their deepest needs in a socially acceptable way.
- Alternative strategies are aimed at assisting people in meeting important needs (e.g., success, belonging) and achieving success in life by creating the possibility of engaging in positive activities, e.g., artistic, social or sports. These strategies are based on the assumption that many people cannot fulfil their need to be active, improving their self-esteem by achieving success or developing their interests. Alternative activities consist in creating alternatives to risky behaviours.

- Intervention strategies these activities aim to assist people with difficulties in identifying and solving their problems and offering support in crisis situations. Information, educational and alternative strategies are applied in all three levels of prevention, while intervention strategies are used as deeper and more individualized activities and mainly pertain to the second and third levels.
- Harm reduction is addressed to groups who engage in risky behaviour and people who are unable or unwilling to give up their risky behaviour for various reasons. The basic elements of the harm reduction strategy include access to medical care, substitution treatment (methadone therapy), exchanging needles and syringes, distributing condoms and social assistance. Examples of such activities in certain European countries include "mobile units", which offer free-of-charge medical assistance, needles, syringes, condoms and sometimes methadone. The harm reduction strategies are justified by the fact that many people do not give up risky behaviour and therefore, the risk itself needs to be reduced.

With regard HIV/AIDS and STI-related issues, broad education (including sexual health) and long-term prevention addressed to both the general population and specific groups/populations is advisable. These activities should be constant and not only campaign based. It is essential to reach people/populations at risk of HIV or STIs and engage in risky behaviour. Due to the discrimination experienced by HIV+ people, anti-discrimination campaigns should be held. It is necessary to increase the presence of HIV/AIDS-related topics in local media, educational/health campaigns and regional health events.

ARV treatment

The objective of the health policy programme entitled *ARV treatment of people living with HIV in Poland* is to limit the effects of the HIV/AIDS epidemic by providing effective antiretroviral treatment and monitoring its effectiveness in HIV/AIDS patients. ARV therapy reduces the incidence and mortality⁴ of AIDS among HIV+, keeping their viral load undetectable and reducing the risk of HIV infections being transmitted to the HIV- population (including drug-resistant strains).

The specific nature of antiretroviral treatment and all currently authorized antiretroviral drugs allows for the possibility of ARV treatment in hospitals and outpatient clinics. Depending on one's current health condition, patients are treated in outpatient clinics as needed, periodically and in hospitals. Patients have the right to choose a treatment centre and may change to another one during the first year.

The ARV treatment programme is an outpatient therapy programme unless medical indications for hospitalization are not always directly linked with HIV infections.

The health policy programme of antiretroviral treatment covers everyone living with HIV/AIDS as long as it does not contradict current laws, i.e., the Act of 27 August 2004 on health care services financed from public funds (Journal of Laws of 2020, item 1285, as amended), also including pregnant women infected with HIV and newborns born to HIV-infected mothers, in accordance with currently applicable standards in this scope (*Recommendations of an expert group appointed by the Polish Gynaecological Society on Prevention of Mother-to-Child Transmission of HIV of 2018* and the Recommendations of the Polish AIDS Society of 2019). Aside from the ARV treatment of people living with HIV and AIDS financed

_

⁴ The number of patients dying within a specific period of time due to a particular disease is more frequently expressed in relative numbers in which the reference is the number of patients in the population. Morality is given in percentages.

under the ARV Treatment Programme, antiretroviral drugs are also used in post-exposure prevention after exposure to HIV infections in non-professional accidental exposures (e.g., rape, assault). This is antiretroviral treatment for people who might have been exposed to HIV. Funds from the above-mentioned Programme for treating people who might have been exposed to HIV are allocated for purchasing drugs required for therapy for up to four weeks as part of post-exposure non-occupational accident prevention. This is initial therapy (treatment). Depending on laboratory test results, therapy is either ended or continued at this point.

Funds from the ARV Treatment Programme do not cover the purchase of ARV drugs for the implementation of:

- pre-exposure prevention (ARV drugs are prescribed on an individual basis by a physician at the full cost of the patient;
- post-exposure prevention resulting from an accident in the course of professional activities, where financing takes place in accordance with the Act of 5 December 2008 on preventing and combating infections and infectious diseases in humans prevention treatment for HIV infections is funded by the employer or contracting authority) and the Act of 26 June 1974 Labour Code (Journal of Laws of 1974, item 141, as amended) employers incur the costs of their employees' preventive health care necessary due to working conditions).

Based on the analysis of the growth dynamics of HIV infections, the epidemiological situation in Poland, and the current growth dynamics of the number of patients receiving ARV therapy, the Programme assumes a minimum increase of 10% annually. In ARV therapy, patients receive a therapeutic set of three or more drugs on average. Usually, such patients have several health problems, including drug addictions, occasional use of psychoactive substances, indicator diseases and tuberculosis. Other clinical problems, adolescence and the ageing process may also be observed in patients. This situation requires therapeutic sets to be adjusted to the patient's current health condition.

The key benefits of providing access to ARV treatment include the prolonged longevity of HIV/AIDS patients allowing them to resume their social and family functions; keeping their viral load undetectable, which reduces the risk of HIV infection being transmitted to the HIV- population (which is an important epidemiological aspect limiting the number of new cases); a decrease in the number of AIDS cases and AIDS-related deaths, and a reduced incidence rate of tuberculosis, which is an opportunistic infection in people living with HIV and AIDS, and other AIDS indicator illnesses.

Successfully treated patients do not generate additional medical costs or burdens caused by medical absences. Thanks to antiretroviral therapy, patients are less likely to develop opportunistic infections and require treatment for those infections. ARV treatment has a positive impact on the reduction of death rates, including cases of cancer. It has a significant and scientifically proven preventive effect as it reduces the level of HIV RNA viral load, resulting in a reduced viral load, which is extremely important for the health of the entire population, in particular for health care workers.

Thanks to the use of antiretroviral prevention in newborns born to HIV-infected mothers, the percentage of vertical infections significantly decreased in this group (from 23% prior to 1989 to under 1% of HIV-infected newborns since ARV prevention for vertical infections has been implemented).

Since 2001, no cases of HIV infections have been reported in the population receiving this form of prevention thanks to the ARV drugs in post-exposure procedures used within this Programme. Patients with HIV infections and living with AIDS requiring antiretroviral treatment based on clinical indications had access to the national uniform medical care system, in particular to modern HAART therapy with full access to ARV drugs (in accordance with the Recommendations of the Polish AIDS Society and WHO and ECDC). Currently, approximately 1% of patients qualified to participate in the

programme periodically receive hospital treatment and approximately 99% treatment in outpatient clinics.

Antiretroviral treatment has a great impact on reducing the transmission of infections to one's sexual partner. Such an effect may also be expected in terms of exposure to infections in occupational and non-occupational exposures. By implementing the concept of increasing pharmacoeconomic supervision, i.e., introducing costs per patient per month, it was possible to reduce the overall costs of implementing the ARV treatment Programme while maintaining the individualization of selecting ARV therapy.

International cooperation

HIV/AIDS continues to be one of the main threats to public health worldwide, and eliminating it by 2030⁵ requires multilateral coordination between states. The importance of HIV/AIDS has been expressed in the numerous documents and agendas of the United Nations and, in particular, in the documents of the World Health Organization,⁶ the Joint United Nations Programme on HIV/AIDS⁷, the European Commission (DG SANTE) ⁸ and the European Parliament. In 2021, the implementation of a new, long-term UNAIDS strategy for 2021-2026 was initiated. The main emphasis is placed on combating HIV/AIDS in marginalized populations, the need to strengthen prevention (including new methods of prevention) and to overcome legal, social and structural barriers that hinder making progress in eliminating HIV/AIDS.

Support for early diagnostics, testing and treating HIV/AIDS and sexually transmitted infections (STIs) reflect the joint action taken by the European Union in this respect by means of long-term health programmes (EU Joint Action). Support for combating HIV and STIs is also mentioned in the numerous initiatives, projects and recommendations of the most important organizations called to protect the health of the population in Europe, including the European WHO Office and the European Centre for Disease Prevention and Control. The effective implementation and success of these initiatives ensure the joint responsibility and coordinated cooperation of state governments, municipal authorities, national health care institutions, and associations of people infected with HIV and STIs.

The National AIDS Centre plays a key role in international initiatives for improving the lives of people infected with HIV/AIDS. The Centre's activities are aimed at developing and expanding international cooperation in terms of early diagnostics and ARV treatment, activating the Republic of Poland's participation in building and co-ordinating international HIV/AIDS policies and its participation in the work of international institutes and organizations, i.e., UNAIDS, WHO, ECDC, the Northern Dimension Partnership in Public Health and Social Well-being, and the European Commission's expert groups.

-

⁵ According to the Sustainable Development Goals, and Goal 3 (SDG 3) in particular, which concerns ensuring everyone a healthy life regardless of their age and promoting well-being (Ensure healthy lives and promote well-being for all at all ages), HIV and viral hepatitis (in particular HBV and HCV) will be eliminated as a public health threat by 2030. Significant progress should also be made in eliminating sexually transmitted infections such as syphilis, gonorrhoea or *Chlamydia trachomatis*.

⁶ Among others, a document entitled *2016–2021 Global Health Sector Strategies for HIV/Viral Hepatitis/Sexually Transmitted Infections* (adopted at the 69th World Health Assembly).

⁷ UNAIDS Fast-Track: ending the AIDS epidemic by 2030.

⁸ Among others, in the EC document entitled *Commission Staff Working Document on combating HIV/AIDS, viral hepatitis and tuberculosis in the European Union and neighbouring countries-state of play,* instruments *and good practices*. This document stresses the key importance of preventing the above-mentioned infections as the most effective method of their elimination in the perspective of this decade (i.e., by 2030).

The Republic of Poland was one of the co-founders of the UNAIDS Programme Coordinating Board (UNAIDS PCB) and, from the very beginning, has played an active role in the process of developing and adapting the Joint Programme's strategy for 2016-2021. Our country chaired the UNAIDS Programme Coordinating Board (2012) and later became a PCB's Council member.

Since 2010, the National AIDS Centre has participated with great success in health programmes cofinanced and supervised by the European Commission, including as a partner of COBATEST, a programme promoting early HIV diagnostics in Europe (2010-2014). Moreover, as a partner in work packages implemented as part of the European Union Health Joint Action in 2014-2020, and particularly in programmes including the HA-REACT, HIV and coinfection prevention and harm reduction (2015–2019) and INTEGRATE, Integrating prevention, testing and link to care strategies across HIV, viral hepatitis, TB and STIs in Europe (2017–2021).

Reports are sent to UNAIDS, ECDC and WHO within the framework of international cooperation.

Despite the general fall in the number of new cases of infection, one-third of the European Union and European Economic Area (EU/EEA) member states have noted an increase in the number of HIV infections. In 2019, over 136,000 (136,449) new cases of HIV infections (15.6/100) were detected in the European region of the WHO, of which over half (53%) were detected very late. This phenomenon is accompanied by a high percentage of people unaware of their serological status. The majority of new cases of HIV infections occur in the central and eastern parts of the European region of WHO.

Eastern Europe and Central Asia are areas where the number of HIV infections has increased in recent years, which is opposite to the global trend (a general fall in the number of HIV infections).

In order to eliminate HIV/AIDS by 2030, states should intensify their cooperation in areas of early diagnostics and rapid inclusion of HIV-infected people in antiretroviral treatment and in the field of integrating HIV and STI prevention services. The co-operation of experts and use of European and world best solutions in the scope is essential. Programmes co-financed and coordinated by the European Commission serve as platforms for exchanging experience and best practices.

It is important to maintain close cooperation and use effective methods of preventing HIV and STIs developed at the EU/EEA level. European public health institutions possess knowledge, good practices and tools – including new forms of media – to combat not only HIV but also other STIs effectively. One of the main achievements of various European programmes of HIV/AIDS prevention and treatment is the extensive base of knowledge and good practices accumulated throughout Europe, which may be used at the level of specific states and also in the case of other STIs. For many states, employing existing solutions is particularly important due to the significant decrease in financial support for prevention and the lack of specialists in Europe and worldwide.

The Republic of Poland has been active in the international arena for several years. It is a partner of many institutions and organizations dealing with the issue of HIV/AIDS and STIs. Thanks to its activity and effective systemic solutions, our country (including the National AIDS Centre) is perceived as an important partner in building HIV/AIDS prevention strategies in Central and Eastern Europe. This is particularly significant when launching and implementing new, long-term strategies for combating HIV/AIDS (2021-2026) aimed at eliminating HIV/AIDS by 2030.

Monitoring

The Minister of Health supervises this Programme's implementation. Coordinating activities and running a monitoring system has been entrusted to the National AIDS Centre – an agency of the Minister of Health – established to implement tasks in the prevention and combating of HIV and AIDS.

According to § 9 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 appoint, for the duration of the schedule, a Programme Implementation Teams. These teams coordinate activities resulting from the annual schedules at the provincial level and co-operate in this respect with the Programme Coordinator. The team's goal is to integrate the implementation of the tasks outlined in the schedule.

In the previous edition of the Programme, in effect between 2017 and 2021, teams implementing the National Programme for Preventing HIV Infections and Combating AIDS were set up in every province. Representatives of the following institutions active in the territory of given provinces were included in the Teams:

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

In addition, the teams also included representatives of therapeutic centres, District Medical Chambers, District Chambers of Nurses and Midwives, Polish AIDS Research Society, organizational units of public blood services, the Boarder Guard, Custom Chambers and other entities.

In general, the office that called the Team into existence (the department responsible for the team) administratively handles the team.

In accordance with the Regulation referred to above, the Schedule determines the tasks (assigned to specific areas, main goals and detailed objectives), the indicators, the entities implementing the task in the area of its substantive and territorial jurisdiction, and the date of implementation. The Coordinator will prepare and submit the Schedule to the Minister of Health before 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. 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 15 April the following year. The Coordinator will prepare and submit a comprehensive document concerning the five-year Schedule for the Programme's implementation to the Minister of Health by 15 May (2027), after which it will be 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 15 October of the year preceding the commencement of activities and report them to the Coordinator. The Coordinator submits them in aggregate form to the Minister of Health by 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 April of the following year to the Coordinator, who then develops a comprehensive annual report by 15 May and submits it to the Minister of Health.

In order to monitor the implementation of the Programme, a system of data collection was prepared, including 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.

On the basis of § 10 point 3 of the above-mentioned Regulation, 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, after being provided with a password by the Coordinator.

The Electronic Monitoring Database is used to catalogue and review tasks planned and implemented as part of the Programme. By means of the Electronic Monitoring Database, entities obliged to implement the Programme 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 website: www.aids.gov.pl

VII. FINANCING

HIV prevention and treatment for people living with AIDS is an issue that should be considered in terms of broadly understood social benefits – the entire society, narrower social groups, and families and relatives of people living with HIV or AIDS – and in the narrowest dimension – in terms of every infected person. The issue of HIV prevention and treatment for people living with AIDS should also be considered in the aspect of social costs and therefore protecting healthy members of society against infections not only by means of preventive activities but also by treating people with infections, which significantly reduces the possibility of spreading infections.

The activities of the National AIDS Centre are financed from the state's budget, from part 46 – Health, section 851 – Health protection, chapter 85152 – Preventing and Combating AIDS (implementation of assigned tasks) and from part 46 – Health, section 851 – Health protection, chapter 85149 – Health policy programmes (implementation of the health policy programme entitled *Antiretroviral Treatment of People Living with the HIV virus in Poland*). The funds are disbursed in accordance with budget execution rules: the provisions of the Act of 27 August 2009 on public finances (Journal of Laws of 2001, item 305, 1235, 1535, 1927) and in the scope of and according to the principles stipulated in the Regulation of the Minister of Finances of 7 December 2010 on the financial management of budgetary units and local government budgetary establishments Journal of Laws of 2019, item 1718). Assigned tasks are implemented in accordance with the Act of 11 September 2019 – Public Procurement Law (Journal of Laws of 2021, item 1129), and in the case of allocating funds in the form of subsidies according to the Act of 11 September 2015 on public health (Journal of Laws of 2021, item 1956).

Preventive activities

The HIV/AIDS epidemic is a health, social and psychological problem. In planning activities and expenses, it is helpful to analyze whether and which undertakings are most justified in terms of costs and benefits and how these actions can be best improved to produce the desired reaction and change behaviours into healthy ones.

With limited financial support for preventing HIV/AIDS and STIs, health care decision-makers and people in charge of prevention programmes should already be at the planning stage of carefully balancing the costs and benefits of specific activities, bearing in mind their final effect, i.e., preventing as many infections as possible. The cost analysis of each option is followed by an effectiveness assessment, e.g., population surveys and client or service statistics that allow for comparing the effectiveness of various options and choosing optimal solutions. Making use of public funding requires justifying whether these actions are, in fact, proper use of financial resources in relation to alternative solutions and whether they can be justified in terms of costs.

Early detection and treatment of HIV/AIDS and STIs are also crucial for the health of specific individuals and society as a whole. The amount of financial support for HIV/AIDS prevention and treatment impacts the effectiveness of diagnostic and treatment measures enabling HIV-infected people to live longer and maintain a good quality of life.

One of the basic forms of HIV prevention includes activities aimed at changing attitudes and behaviours towards HIV/AIDS. Within the scope of HIV/AIDS, these changes pertain to different groups of behaviours: performing tests and screening tests, following treatment recommendations (adherence), using various measures to prevent or reduce the risk of HIV infections, exchanging needles or syringes (in the case of people injecting drugs), risky behaviours or the ability to search for information on HIV/AIDS and STIs. Several states do not conduct systematic and comprehensive assessments (including economic assessments) in terms of the extent to which the actions taken translate into a

decreased number of HIV infections and whether and to what extent there is a correlation between the level of investment allocated to HIV prevention and the number of registered cases. This is important since monitoring and assessing activities also allow for comparing the number of registered cases of HIV infections and the number of infections that could occur without prevention. From the perspective of allocating financial resources, knowledge about how specific activities impact decreases in the number of HIV infections is key. This also concerns the time between investing in prevention and the actual reduction in the number of cases. The possibility of unforeseen factors (economic, legal, political and social) that may hinder effectively combating the epidemic of HIV/AIDS and other sexually transmitted diseases should be taken into account.

The HIV/AIDS epidemic is a health, social and psychological issue. For this reason, programmes aimed at providing multi-sectoral support for people living with HIV/AIDS are advisable. Failing to provide HIV/AIDS prevention runs the risk of an increased spread of HIV infections, a surge in the number of cases, and, consequently, a growth in the number of people requiring ARV treatment. As a result, it is advisable to continue these activities.

An in-depth diagnosis, which would enable preventive measures to be directed to specific populations, and systematically carrying out behavioural and social research, which allow for identifying risks and situations, would result in taking adequate actions in this scope and an appropriate reaction to changing trends. However, this requires increased financial support at the national level.

Another challenge is preventive measures for sexually transmitted diseases. Poles do not have sufficient knowledge in this respect, are unaware of the ways of infection or their symptoms, do not test themselves for STIs and fail to use preventive measures.

The table and graph below present the level of funding from the budget of the National AIDS Centre allocated in 2017-2020 and planned for assigned tasks in 2021.

Table 7. Funding (in PLN) in chapter 85152 – Health policy programme allocated from the budget for The ARV Treatment Programme in Poland at the disposal of the National AIDS Centre in the years 2017–2021.

Year	2017	2018	2019	2020	2021
85152-	3,098,993	3,131,386	3,109,301	2,995,659	3,114,000
assigned task					

Elaborated by: National AIDS Centre.

The opinion of the Supreme Audit Office (NIK) presented in its post-inspection report submitted to the National AIDS Centre and in the information provided in audit results for the Implementation of the National Programme for Preventing HIV infections and Combating AIDS in 2012-2013, submitted to the Minister of Heath, acknowledged "[...] the continuous trend annual reductions in the expenditure on prevention in the total amount of expenditure on the implementation of the National Programme [...] as particularly disturbing and resulting in a dangerous marginalization of activities aimed at preventing infections and subsequent diseases [...]" remains valid. As a result, a significant increase in prevention funding should be considered.

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.

Table 8. Data prepared based on the Health Policy Programme of the Ministry of Health entitled "Antiretroviral Treatment of People Living with HIV in Poland."

	2017	2018	2019	2020
Number of patients	10496	11,063	12,471	13,475
Increase in the number of patients	+959	+567	+1,408	+1,004
% of annual increase of patients over the previous year	10.05%	5.41%	12.73%	8.05 %
number of centres	22	22	22	22
Number of interrupted ARV therapies	591	723	533	466
Number of interrupted ARV therapies due to death	105	101	76	87
Number of post-exposure infection prevention patients	181	309	264	108
Number of women - vertical infection prevention	46	54	91	58
Number of births	35	34	66	41
Number of newborns	35	34	66	41
Number of children	108	101	97	94

Elaborated by: National AIDS Centre.

It should be emphasised that in accordance with the latest world recommendations, antiretroviral treatment is also an essential 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 a crucial 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 has significantly decreased. Combined and effective antiretroviral treatment has significantly improved the prognosis for people living with HIV. HIV infections have become a protracted disease which can be controlled. Thanks to this therapy, patients live longer, improving their quality of life.

Since the beginning of the ARV treatment Programme, an increase in the number of patients requiring antiretroviral treatment due to life situations (the average annual increase is around 13%) has been observed. Treatment costs for so-called experienced (long-term ARV treated) patients are significantly higher than for patients beginning ARV treatment. Therapy for long-term treated patients requires the latest generation of medication, which affects the increase in ARV treatment.

Table 9. Funding (in PLN) in chapter 85149 – Health policy programme allocated from the budget for The ARV Treatment Programme in Poland at the disposal of the National AIDS Centre in the years 2017–2021.

Year	2017	2018	2019	2020	2021
85149-	359,637,281	222,911.084	373,497,283	347,995,898	390,000,000
ARV treatment					

Elaborated by: National AIDS Centre.

It should be kept in mind that as part of the allocated funding in a given year, the purchase of drugs is financed to provide treatment for at least the first quarter of the following year in order to ensure the possibility of continuing treatment after the end of the financial year. At the same time, the number of ARV treatment patients is increasing, which impacts the costs incurred by the state budget for the implementation of the Programme. The number of patients that qualify for the above-mentioned ARV treatment programme may be impacted throughout the year by factors including guidelines, particularly indication to initiate treatment based on diagnosing HIV infections and not the number of CD4 T cell count as was the case in previous years. In addition, UNAIDS estimations for the Republic of Poland indicate that the number of people living with HIV unaware that they are infected could be three times higher than the number of registered infections. This means that with the further improvements made in detecting HIV infections, a greater than ever increase of people who, according to PTN AIDS and EACS recommendations, will require ARV treatment will be observed.

In recent years, the level of financing for the health policy programme entitled *Antiretroviral treatment* of people living with the HIV virus in Poland (part 46 – Health, section 851 – Health protection, chapter 85149 – Health Policies Programmes) has been stable. Patients infected with HIV and living with AIDS have wide access to the latest diagnostic methods, benefit from diagnostics, and free-of-charge, highly specialized ARV therapy financed by the Minister of Health.

The financing of tasks included in the Schedule of the Implementation of the National Programme for Preventing and Combating AIDS for 2022-2026 by the Programme implementers

This Programme's implementation largely depends on how specific implementers understand the importance of the issue of HIV/AIDS and their financial partnership. The insufficient financial support provided by the institutions responsible for implementing the Programme contributes to an underimplementation of substantive and organizational potential that these entities have at their disposal. Attention should be drawn to the level of HIV/AIDS prevention. Underfunding prevention may impact the quality and amount of tasks and, consequently, result in an increase in the number of new HIV cases, followed by increased costs of purchasing ARV drugs covered by the state budget. In the event this tendency continues, due to epidemic indicators, the achievements made so far could be compromised in the upcoming years.

It is important that various institutions and environments take part in dealing with this health-related issue and that the actions taken would bring about the assumed effects and be implemented at various levels by the cooperating entities.

All Programme implementers should actively participate in implementing preventive measures, with care given to increasing the quantity, quality, reach and level of funding for activities related to HIV/AIDS and STIs.

It should be emphasised that every entity obliged to implement the Programme individually prepares a detailed annual task implementation schedule based on the schedule for 2022-2026, which includes information on tasks planned for implementation in the upcoming year and the planned amount of funding allocated in its budget for HIV/AIDS-related activities. A detailed annual schedule will be submitted to the Minister of Health. Task resulting from the Programme implementation schedule should be financed with funds at the disposal of the entities participating in the Programme. The final amount in 2022-2026 will depend on the budgets of particular 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.

The tasks will be financed with funds at the disposal of the Minister of Health and the remaining implementors, i.e., the funds of the entities responsible for task implementation.

The financial effects that will be incurred within the catalogue of expenses outlined in Article 131 c section 3 of the *Act of 27 August 2004 on health care services financed from public funds* will be incurred within the amount of expenditure specified for upcoming years in Article 131 c section 1.

VIII. PROGRAMME EVALUATION

Evaluation research

The National AIDS Centre carried out evaluation research on the National Programme for Preventing HIV Infections and Combating AIDS in 2012-2016. The objective of the research was to evaluate the effects and results of implementing the tasks outlined in the Programme together with the institutions and organizations that participated in its implementation.

General conclusions

- The indicators assumed in the Programme were achieved in accordance with the resources available. The goals associated with improving the lives of antiretroviral patients and the availability of treatment were achieved.
- Considering the limited budget for prevention, it should be mentioned that as much as possible
 was accomplished given the available financial resources. However, prevention is an
 underestimated and underfunded area that requires increased efforts in the coming years
 (educating society, the youth, changes in attitudes and social awareness).
- Assessing the results of implementing the Programme requires considering medical, social and financial conditions. Bearing the mentioned conditions in mind, it may be concluded that the actions taken were optimal in relation to the conditions in which the Programme was implemented.
- The effectiveness or impact/diffusion of the actions taken within the Programme should be viewed through the prism of the specific nature of the area they were undertaken. All of the matters related to human sexuality are sensitive and difficult topics to discuss for part of society. When undertaking activities to reach specific social groups (forms of communication, channels of communication), the psychological and ideological barriers that could appear throughout the implementation process should be considered.
- When planning the Programme's future preventive measures, activities targeted at the MSM population should be intensified.
- It should be highlighted that the Programme's success depends and will depend on particular implementors' understanding of the weight and significance of HIV/AIDS issues.

The following conclusions, divided into specific thematic areas, were made based on the evaluation of the last edition of the Programme.

AREA I – Preventing HIV infections among the general population

- Preventing infections among the general population has been understood as the main task of the National Programme for Preventing HIV Infections and Combating AIDS.
- The objectives implemented in the Programme should be evaluated mainly through the prism of financial support available for their implementation. Due to under-financing, long-term and wide-ranging activities were not carried out.
- Youth (aged 15-19) is a significant segment in the area of prevention. Experts must elaborate programme content in terms of sexually transmitted infections in an appropriate manner, adjusted to the mental and perceptive level of adolescents and school educators.
- The effective implementation of activities aimed at preventing HIV infections will be possible if funding is ensured at a sufficient level to cover the expenses of broadly understood prevention.

AREA II- preventing HIV infections among people with an increased level of risky behaviour

- Epidemiological data indicate an increase in HIV infections among MSM which might reflect the insufficient scale and intensity of the activities being carried out.
- A significant transformation occurred in the categories of risky behaviours (less frequent use of condoms, ignoring the problem of HIV, or no concern of infection).
- Identifying risky behaviours takes on particular importance. Implementing prevention programmes, particularly information and educational activities for people with an increased level of risky behaviour, have encountered cultural and ideological barriers.
- Subsidies for this area of activities are also of key importance.

AREA III- support and health care for HIV infections and living with AIDS

- The effectiveness of treatment activities for already diagnosed cases of HIV/AIDS is highly rated.
 Providing continuous funding for treatment is based on actual needs. The medical care and treatment of people living with HIV/AIDS are regarded as the Programme's greatest success.
- Medical care for people living with HIV/AIDS patients should be greatly appreciated as patients benefit from diagnostics and highly specialized ARV therapy financed by the Minister of Health.
 Furthermore, access to ARV drugs and HIV tests are provided.
- Thanks to the vast accessibility of ARV therapy, free of charge for patients, the number of AIDSrelated deaths has significantly decreased. The course of an HIV infection is now comparable to that of chronic disease. This therapy allows patients to live longer and improve their quality of life.
- Despite the National AIDS Centre's activeness in terms of preventing vertical infections, the
 percentage of pregnant women taking HIV tests remains at approximately 30-33%. The number
 of pregnant women who take tests in VCT centres may indicate that women are referred for
 testing in accordance with the law, while on the other hand, that they do not test themselves at
- Preventing vertical HIV cases (under 1% of infections among newborns in preventive care) has proven to be highly successful.

AREA IV- international cooperation

- The National AIDS Centre is present at the international level (participation in symposia, conferences, training sessions, expert groups and research projects).
- At the international level, the Republic of Poland is perceived as an equal and vital partner thanks to its activeness in terms of HIV/AIDS-related issues. It participates and makes a substantive and financial contribution to international projects.

AREA – monitoring

- The monitoring and methodology of collecting data on newly detected HIV infections and cases
 of AIDS require improvement. Both the procedure for excluding repeat reports and the
 possibility of supplementing epidemiological data essential for assessing the situation, including
 the supposed way of transmission, remains limited due to legal regulations.
- The system of monitoring infections is so ineffective that it is difficult to distinguish whether newly diagnosed cases result from an increasing number of people being tested for HIV or a higher number of newly detected infections.

- The annual analysis of questionnaires filled in VCTs is a way that may contribute to increasing the effectiveness of prevention both in the case of primary and secondary prevention should be continued. At present, these surveys serve as an irreplaceable resource of information.
- The system of monitoring drug management conducted by the National AIDS Centre is a highly
 effective tool. Thanks to the continuous drug management monitoring system, no ARV drugs
 purchased as part of the Programme have expired, effective redistribution of drugs between
 centres has been ensured, and their use has been monitored on an ongoing basis.

Recommendations

- 1) Despite Poland's relatively stable HIV/AIDS epidemiological situation, it is advisable to continue the Programme. Changing social behaviours in the area of sexuality and new real risks may contribute to an increased number of HIV and other sexually transmitted infections.
- 2) Activities in the area of prevention directed at key populations and other target groups in line with the rules of marketing, including social marketing, should be carried out. New technologies/communication channels to promote healthy behaviour and social education should be used. The reception of messages depends, among others, on features including sex, age, sexual orientation, education, place of residence, etc. Communication channels should be adjusted to various target groups.
- 3) A concept of preventing the spread of new, adverse, risky behaviours that have emerged in society in recent years, e.g., chemsex, should be developed.
- 4) A further, in-depth diagnosis of the problem; systematic social surveys enabling the identification of risk and phenomena and allowing for taking adequate actions and an appropriate reaction to trends; directing prevention activities to specific populations; elaborating effective messages; selecting appropriate communication channels are all recommended.
- 5) Further development of the VCT network, expanding the network of VCTs around the country, especially in large city centres currently without them, extending VCT hours of operation and taking further action associated with providing free-of-charge HIV tests.
- 6) Promotional activities for HIV tests for pregnant women should be conducted.
- 7) Continuing the implementation of the ARV treatment Programme that should also be treated as an important element in preventing HIV infections in the general population the viral load of ARV-treated patients significantly decreases.
- 8) Continuing and developing activities within the scope of international cooperation.
- 9) Improving the reporting system, collecting and processing epidemiological data at the national level.
- 10) Striving to plan and achieve goals in the area of public health and ensure prevention in line with Evidence-Based Medicine. Improving record systems and databases to serve as an effective source of information for decision making.
- 11) Increasing financial support for prevention in upcoming years.

IX. SCHEDULE FOR IMPLEMENTATION OF THE NATIONAL PROGRAMME FOR PREVENTING HIV INFECTIONS AND COMBATING AIDS FOR 2022-2026.

I. FIELD - PREVENTING HIV INFECTIONS AMONG THE GENERAL POPULATION

FIELDS	GOALS	OBJECTIVES	TASKS	TARGET GROUP	INDICATORS	RESPONSIBLE ENTITIES
ds ures	Reducing of the pread of HIV fections	a) increasing knowledge about HIV/AIDS in the general population and changing attitudes, with particular emphasis on responsibility for one's own life and health	 Organizing media campaigns on HIV/AIDS and other sexually transmitted diseases (STIs*) targeted to selected target groups according to the needs and assessment of the current epidemiological situation, including: developing a campaign project with its elements; elaborating and publishing various reference materials and publications; popularizing the campaign message in the media (television, radio, the press and the Internet) and in specialized media; organizing and participating in thematic conferences associated with the campaign; promoting and implementing preventive activities in the campaign, e.g., contests; organizing information stands for distributing educational materials, distributing campaign materials; other activities associated with the campaign, including assessing the effectiveness of the campaign/activities. Activities associated with the commemoration of the World Remembrance Day of AIDS Victims and World Aids Day, including: popularizing information in the media (television, radio, the press and the Internet) and on the websites of government ministries and their units and other implementors of the Programme. 	 the general public sexually active people with various gender identities and sexual orientations; People before sexual initiation; people over 50 years of age; elementary school pupils; secondary school students; university students; primary care physicians; gynaecologists/obstetr icians; physicians of other specializations; midwives/nurses; women of reproductive age; women planning pregnancy; pregnant women; 	 number of campaigns; number of recipients; number of creative works; number of publications; number of conferences; number of information stands; number of projects; circulation; number of distributed materials; campaign reach; 	 competent ministers according to the Programme's goals; National AIDS Centre; National Bureau for Drug Prevention; National Health Inspectorate; local government bodies; local government units; Polish AIDS Academic Society; Polish Gynaecologist Society; childbirth schools; academic associations; National Health Fund; Chamber of Physicians;

FIELDS GOALS	OBJECTIVES	TASKS	TARGET GROUP	INDICATORS	RESPONSIBLE ENTITIES
	b) developing and strengthening the training and education base targeted at different social and professional groups	 organizing and participating in thematic conferences associated with the campaign; promoting and implementing activating and innovative forms of prevention, e.g., contests; organizing stands with educational materials; distributing campaign materials; other activities. 3) Educational activities regarding HIV/AIDS and other sexually transmitted diseases (STIs) as part of projects for the general public, including organizing information stands for distributing educational materials, 4) Elaborating, publishing and distributing information/educational materials addressed to target groups within the scope of various initiatives. 5) Counteracting stigmatization and discrimination against people infected with HIV and other sexually transmitted diseases (STIs), their families and relatives by implementing programmes promoting attitudes free from prejudice and knowledge about living with HIV throughout antiretroviral therapy. 1) Training on HIV/AIDS and other sexually transmitted diseases (STIs), including: consulting specialists about the content of the training programme; provide a diploma/certificate/educational point at the end of the training, e.g., consultant, VCT**, educator, participation of experts in lectures, seminars, field trips and conferences. 	 partners of women planning a pregnancy or who are pregnant; other health care workers; educational workers; social workers; uniformed workers; rescue workers; government administration and local governments' staff; employees of the National Health Inspection; national and provincial workers; representatives of academic societies; representatives of universities; specialists/experts; media representatives; representatives of opinion makers; representatives of employers' organizations; representatives of NGOs; representatives of patient organizations; 	 number of publications; circulation; number of distributed materials. number of initiatives; raising the level of knowledge (surveys: initial and final). number of training sessions; number of recipients; number of consultations; number of certificates/diplomas issued; 	- Chamber of Nurses; - national and provincial workers; - education centres; - universities; - NGOs; - others.

FIELDS	GOALS	OBJECTIVES	TASKS	TARGET GROUP	INDICATORS	RESPONSIBLE ENTITIES
			Highly specialized training in HIV/AIDS and other sexually transmitted diseases (STIs), including post-graduate studies, courses, and training for family physicians.	 representatives of churches and religious communities; representatives of institutions or organizations creating and implementing school systems and certification; psychologists; 	 number of expert lecturers; raising the level of knowledge (surveys: initial and final); Assessing/diagnosing the possibility of implementing the knowledge gained in everyday practice. 	
	2. Ensuring adequate access to information, education and services related to HIV/AIDS prevention	a) extending the range of information tailored to the needs of individual recipients.	 Continuing and developing activities aimed at target groups in accordance with the needs and assessment of the current epidemiological situation, including: diagnosing the need for a specific form of prevention; Informational activities, e.g., workshops, talks, conferences, seminars, fora and lectures, peer education; Various activities, e.g., competitions, theatrical plays, staging, and health-promoting events; promotion and implementation of innovative preventative projects. 	 therapists; authors and implementers of educational-preventative programmes; experts; others. 	 number of activities; number of recipients; raising the level of knowledge (surveys: initial and final); changing attitudes. 	

FIELDS	GOALS	OBJECTIVES	TASKS	TARGET GROUP	INDICATORS	RESPONSIBLE ENTITIES
			2) Extending access to information regarding issues related to HIV and AIDS and sexually transmitted diseases (STIs) by employing selected media, including Promoting, creating and updating web pages; conducting hotlines; Extending infoline services; providing an online advice centre; Elaborating and distributing information brochures; Using social media sites, communicators and mobile applications, etc.; Cooperating with the media; other media;		 number of pages/number of visits; number of telephone conversations conducted; Number of thematic areas; Number of social media used; 	
		b) improvement of care for women of reproductive age or pregnant.	1) Promoting information on the obligation to recommend all pregnant women that they test for HIV and other STIs among medical staff and particularly gynaecologists and midwives. 2) Training for gynaecologists and midwives on specialized care during pregnancy, childbirth, puerperium of HIV (+) ***. pregnant women. 3) Training/seminars for health care workers in treatment centres providing care and treatment for couples of which at least one person is seropositive****.		 number of recipients; number of initiatives; level of success. number of training sessions; number of recipients; level of knowledge; raising the level of knowledge (surveys: initial and final); Assessing/diagnosing the possibility of implementing the knowledge gained in 	
			Promoting among women of reproductive age or who are pregnant and among their partners the		everyday practice.number of recipients;number of initiatives;	

FIELDS	GOALS	OBJECTIVES	TASKS	TARGET GROUP	INDICATORS	RESPONSIBLE ENTITIES
			possibility of testing for HIV and other sexually transmitted diseases (STIs).		- number of tests conducted in VCT; - number of conducted tests financed with public money (NFZ).	
			5) Monitoring the obligation of suggesting HIV tests by gynaecologists by authorized entities, including collecting and analysing information on the number of tests provided to pregnant women in medical centres.		 number of conducted tests financed with public money (NFZ); Number of inspected entities; 	
		c) increasing access to anonymous and free HIV tests.	Expanding the network of centres providing anonymous and free HIV tests and expanding diagnostic tests for sexually transmitted diseases (STIs). 2) Promoting anonymous and free tests and counselling.		 number of VCT; number of VCT clients; number of tests conducted number of initiatives. 	
			3) Promoting other forms of testing, including self-testing with particular emphasis on the needs of key populations*****. 4) Activities aimed at intensifying/activating the involvement of primary care physicians and other specialists in the HIV testing process.			
		d) increasing and integrating activities aimed at preventing HIV and other sexually transmitted diseases.	1) strengthening the implementation efforts in preventing HIV and other sexually transmitted diseases. implementing a basic education programme; supporting networks of schools and preschools that promote health; inter-ministerial cooperation; peer education. 2) Individualized educational activities promoting		 number of activities / initiatives / programmes; number of recipients; number of schools; level of knowledge. 	
			behaviours that reduce health risks aimed at various target groups, promoting pro-health behaviours, in particular sexual abstinence, mutual fidelity, and safer sexual techniques (including the use of condoms and lubricants).			

FIELDS	GOALS	OBJECTIVES	TASKS	TARGET GROUP	INDICATORS	RESPONSIBLE
FIELDS	GOALS	OBJECTIVES	3) Education on pharmacological prevention of HIV/AIDS (e.g., PEP******, PrEP*******, ARV********). 4) Creating policies at the provincial level by: - Creating provincial teams for implementing programmes; - elaborating and distributing information on provincial teams' activities to strengthen cooperation between the entities involved in implementing the Programme; - analyzing the activities conducted in provinces in terms of the epidemic, elaborating conclusions and recommendations for implementing the Programme (i.e., diagnosing needs and resources); - preparing detailed annual schedules and reports on task implementation by the provincial teams. 5) Creating, supporting and developing new activities and existing expert/advisory teams active in the area of HIV/AIDS and other sexually transmitted diseases, including: - advisory team operating within the National AIDS Centre for preventing HIV infections in key populations; - advisory team operating within the National AIDS Centre for preventing sexually transmitted diseases;	TARGET GROUP	- number of teams; - number of entities represented at the provincial level by the members of the team; - number of reports/analyses; - number of team initiatives; - Number of meetings of specific teams; - number of members; - number of members; - number of members; - number of initiatives; - number of meetings.	RESPONSIBLE ENTITIES
	3. Updating the law in effect in the field regarding HIV/AIDS	a) Adjustment of the current legal status of HIV/AIDS to international and EU obligations adopted by Poland.	1) Review and analysis of the law in effect. 2) 2) Legislative initiatives on HIV/AIDS and other sexually transmitted diseases (STIs) resulting from the epidemiological situation and recommendations of international organizations (WHO, UNAIDS, ECDC and others).		- number of analyses; - number of initiatives; - number of legal acts; - number of amendments.	

FIELDS	GOALS	OBJECTIVES	TASKS	TARGET GROUP	INDICATORS	RESPONSIBLE ENTITIES
		b) adopting legislative initiatives aiming at creating and updating legal provisions concerning HIV/AIDS.	2) Legislative initiatives on HIV/AIDS and other sexually transmitted diseases (STIs) aimed at adjusting legal regulations to the needs of the epidemiological situation.			

^{*}STIs (sexually transmitted infections).

^{**}VCT – Voluntary Counselling and Testing clinics providing anonymous and free HIV tests and counselling.

^{***} HIV (+) – a positive screening test result, meaning that antibodies against HIV were found in the tested blood.

^{****} Seropositive person – an HIV-infected person.

^{*****}Key populations - in particular: men having sex with other men, people using psychoactive substances (presently or in the past), people in prison or detention, people providing sexual services or using such services, transgender people

^{*****}PEP (Post-exposure Prophylaxis) – post-exposure prophylaxis of HIV infection (which consists in taking antiretroviral drugs in a situation where contact with potentially infectious material occurs, e.g., sex without a condom, condom rupture, contact with blood, semen, vaginal mucus, pre-ejaculate, in which blood may be present).

^{******}PrEP (Pre-exposure Prophylaxis) – pre-exposure prophylaxis (taking antiretroviral drugs that can prevent HIV infection).

^{******}ARV – antiretroviral treatment.

II. FIELD - PREVENTING HIV INFECTIONS AMONG PEOPLE WITH AN INCREASED LEVEL OF RISKY BEHAVIOUR

FIELDS GOALS	OBJECTIVES	TASKS	TARGET GROUP	INDICATORS	RESPONSIBLE ENTITIES
the spread of HIV infections.	a) increasing the level of knowledge about HIV/AIDS in order to reduce risky behaviour.	Education on preventing sexually transmitted diseases (STIs)* or those transmitted by blood, with particular emphasis on HIV.	 people undertaking risky behaviour**, particularly within key populations***; young adults; people over 50 years of age; partners of infected 	 number of projects; number of recipients; research assessment; number of distributed materials; number of people diagnosed as HIV+ in the general population; 	 competent ministers according to the Programme's goals; National AIDS Centre; National Bureau
the spread of HIV infections. 2. Expanding the network of VCT diagnostic centres providing anonymous and free HIV tests and counselling	a) improving the quality and accessibility to HIV diagnostics for people at risk of contracting the HIV virus.	 Support (financial and non-financial) the networks of diagnostic centres (VCT) providing anonymous and free HIV tests and counselling according to the standards of the National AIDS Centre. 2) 2) expanding VCT diagnostics to include other sexually transmitted and haematogenous infections. 3) Development of specialized counselling at the VCT, including services of a: venereologist, infectious diseases physician; proctologist, gynaecologist, sexologist, psychologist; psychotherapist; addictions specialist; social workers, 	people; people who have been diagnosed with a sexually transmitted disease; people who have experienced sexual violence; people with mental disorders; people in an irregular socio-legal situation (people uninsured, the homeless), VCT clients, their families and relatives; VCT staff; social workers; family assistance programs and foster care staff; family assistants;	 Number of VCT****; number of VCT clients; number of consultations in VCT; number of tests conducted in VCT; level of satisfaction of VCT clients; number of VCT offering diagnostics for sexually transmitted diseases STIs. number of VCTs providing a catalogue of extensive services/consultations; number of training sessions; number of trained advisers. 	for Drug Prevention; - National Health Inspectorate; - local government units; - local government bodies; - NGOs; - Treatment entities; - academic associations; - research institutions; - employers' organizations; - private sector; - others.

FIELDS	GOALS	OBJECTIVES	TASKS	TARGET GROUP	INDICATORS	RESPONSIBLE ENTITIES
		b) improving epidemiological data	4) Raising the qualifications of VCT workers. 5) Undertaking consultative and advisory activities for health care workers based on cooperation with VCT advisers. 1) Acquiring and improving (improving,	 foster care coordinators; foster care parents; rescue workers; health care workers; uniformed workers; government administration and local governments' staff; employees of the National Health Inspection; representatives of academic societies; Representatives of research 	 types and number factors affecting the number of infections; assessment of testing resources in VCTs; number of reports on VCT data; number of procedures developed within the data collection system. 	
		collection on the manner of HIV infection and risky behaviour.	modifying) the method of obtaining information important from the epidemiological point of view on factors increasing the risk of HIV infection, with particular emphasis on sexually transmitted and hematogenous infections.			
			2) Improving the data collection system in terms of testing and treatment invitation.	institutions/centres; - HIV-positive people;		
t e s	3. Ensuring adequate access to information, education and services related to HIV/AIDS prevention.	a) expanding the informational and educational offer tailored to the needs of individual recipients	1) 1) Expanding the access to information and education tailored to the needs of target groups including: - electronic media, - hotlines, info lines, - informational and educational materials in electronic form, QR codes. 2) Conducting educational and information campaigns aimed at target groups, including distributing condoms and lubricants.	– others.	 number of channels of access; number of views on websites dedicated to selected issues; number of counselling sessions as part of projects related to a selected issue; number of recipients; number of publications; number of educational materials downloaded from the webpage; 	
			Conducting activities in particular environments aimed at a target group, including distributing condoms and lubricants.			

FIELDS	GOALS	OBJECTIVES	TASKS	TARGET GROUP	INDICATORS	RESPONSIBLE ENTITIES
			4) Developing education and training offered for specialists working in the health care system in the scope of test counselling.		number of downloadsusing QR codes;number of distributed	
			5) Preparing information for people working outside the VCT system in the scope of test counselling.		materials; – number of campaigns; – number of condoms,	
			6) Developing the advisory competence of people issuing HIV test results and other sexually transmitted diseases outside the VCT system.		latex tissues and lubricants distributed; number of projects/programmes; number of reactions (likes and shares) in specific projects/campaigns; Number of plays and viewings of posts in specific projects/campaigns; campaign reach;	
		B) supporting activities aimed at health-related harm reduction.	 Developing harm reduction and social programmes with a particular emphasis on: Programmes that take into account new phenomena increasing exposure to infections due to risky sexual contact under the influence of psychoactive drugs; programmes with an element of condom and lubricant distribution, needle and syringes exchange programmes, substitution treatment programmes; outreach programmes (street working, party working, itd.); psychological support programmes; peer action programmes; social re-adaption programmes; 		 number of harm reduction programmes; number of recipients; number of male and female condoms, latex tissues and lubricants distributed; number of accessories for taking psychoactive substances provided; number of persons using substitutional treatment; number of available medications in substitutional programmes; 	

FIELDS	GOALS	OBJECTIVES	TASKS	TARGET GROUP	INDICATORS	RESPONSIBLE
					– number of issued and	ENTITIES
					distributed	
					informational and	
					educational materials;	
					– number of people who	
					have met the goals of	
					the re-adaptation	
					programme;	
			2) Creating, supporting and promoting testing for		– number of non-	
			HIV and other sexually transmitted diseases (STIs)		stationary / event-based	
			in target group environments.		testing centres;	
					number of clients;	
					– level of client	
					satisfaction;	
			3) Promotion of rapid tests with proper certificates		 number of rapid tests or 	
			(rapid tests) in diagnostics of infections of HIV and		self-tests conducted,	
			other sexually transmitted diseases.		 number of infections 	
					detected by means of	
					rapid test or self-	
			4) Promoting other forms of HIV testing, including		testing;	
			self-testing with particular emphasis on the needs		 Number of places where 	
			of key populations***.		rapid tests can be taken;	
					Number of	
					campaigns/publicatio	
					ns promoting rapid	
					tests or self-testing;	
			5) Educational and information activities on		- number of counselling	
			pharmacological Pre-exposure Prophylaxis		sessions;	
			(PrEP****).		 Number of people using 	
			6) Supporting the availability of pharmacological		centres providing PrEP	
			PrEP preventive care.		care;	
					– Number of centres	
					offering PrEP preventive	
					care;	

FIELDS	GOALS	OBJECTIVES	TASKS	TARGET GROUP	INDICATORS	RESPONSIBLE ENTITIES
					 Number of activities / 	
					campaigns / information	
					/ educational materials.	

^{*}STIs (sexually transmitted infections).

**** – Voluntary Counselling and Testing clinics providing anonymous and free HIV tests and counselling.

^{**}Risky behaviour – sexual contact without the use of a condom, *chemsex*, sharing equipment for taking narcotics and tattooing, contact with the mucous membrane, open wounds with blood or sexual secretions of another person.

^{***}Key populations, in particular: men having sex with other men, people using psychoactive substances (presently or in the past), people in prison or detention, people providing sexual services or using such services, transgender people

^{*****} PrEP (Pre-exposure Prophylaxis) – pre-exposure prophylaxis (taking antiretroviral drugs that can prevent HIV infection).

III. FIELD - SUPPORT AND HEALTH CARE FOR HIV INFECTIONS AND SUFFERING WITH AIDS

2 0 1. Improving the a) improving the 1) Raising the level of knowledge concerning – HIV-infe	ected people; – number of training sessions; – Number of	- competent
psychosocial life of people with HIV infections or living with AIDS, their families and relatives. Popular	campaigns/information; who have inced sexual e; its; in an irregular cuation; and HIV in (-) ** who are its of people with HIV at cuctive age, ing pregnancy or its prognant; in born to its living with ected children; ected people g adulthood; uardians of HIV ple; care workers; on workers; vorkers; assistance in an irregular intial and final). - number of initiatives; - number of implementing entities; - number of recipients. - number of recipients. - number of implementing organizations; - number of operating organizations; - number of projects/activities implemented by the organizations. - number of campaigns/information n - number of interventions.	ministers according to the Programme's goals; National AIDS Centre; National Bureau for Drug Prevention; Patient Ombudsman; Commissioner for Equal Status; The Medical Centre of Postgraduate Education; local government bodies; local government units; Treatment entities; national and provincial health care consultants; academic associations, in particular, The Polish AIDS Society (PTNAIDS);

FIELDS	GOALS	OBJECTIVES	TASKS	TARGET GROUP	INDICATORS	RESPONSIBLE ENTITIES
			and relatives by governmental and local governmental organizations and the media.	foster carecoordinators;foster care parents;	 raising the level of knowledge surveys: initial and final). 	Chamber ofPhysicians;Chamber of nurses
			aimed at assisting people who are HIV-infected or suffering from AIDS, their families and relatives. Ing the cial programmes for HIV-positive persons in shaping attitudes of self-acceptance, understanding and local governments' staff; aimed at assisting people who are HIV-infected or of age; uniformed workers; rescue workers; government administration and local governments' staff;	institutions for children under 3 years of age; – uniformed workers;	 number of programmes/initiative s; number of entities/centres; number of recipients. 	and midwives; - NGOs; - patient organizations; - others.
	2. Improving the quality and access to diagnostics and health care for people infected with HIV and who have AIDS and those vulnerable to HIV.	b)) increasing the level of social acceptance of people living with HIV/AIDS, their families and relatives.		administration and local governments' staff; – employees of the	number of initiatives;number ofimplementing entities;number of recipients.	
		existing health care system for people living with HIV/AIDS. Description of the care system for people living with HIV/AIDS. Description of the care staying nation maintain impler 2) Provided legal section (1) Period	1) Providing people who are HIV-infected and living with AIDS with access to ARV treatment staying in the Republic of Poland according to national standards (PTN AIDS***), and maintaining the continuity of treatment as part of implementing <i>Ministry of Health Programmes</i> .	Inspection; - representatives of NGOs; - representatives of academic societies; - national and provincial health care	 number of centres providing ARV treatment; number of recipients; Patients' level of satisfaction with the treatment system. 	
			Providing ARV treatment to people in an irregular legal situation Periodic updates of ARV**** therapy recommendations.	consultants; - representatives of research institutions/centres;	number of recipients - number of updates; - number of procedures;	
			4) Measures to provide access to diagnosis and treatment of opportunistic infections according to standards. 5) Measures to provide access to diagnosis and treatment of severally treatment diseases (CTIs).	– media representatives.	– number of recommendations.	
			treatment of sexually transmitted diseases (STIs) according to Polish standards. 6) Developing and updating recommendations regarding integrated testing for HIV, other infections and sexually transmitted diseases (STIs).			

FIELDS	GOALS	OBJECTIVES	TASKS	TARGET GROUP	INDICATORS	RESPONSIBLE ENTITIES
			7) Providing standardized specialized diagnostics performed by certified laboratories monitoring HIV infections, conducting antiretroviral therapy and diagnostics of coexisting diseases.		number of tests.	
			8) Improving access to palliative care and long-term care.		number of recipients;Number of entities;	
			9) Developing recommendations on treatment standards and long-term care for people with HIV / AIDS, including eligibility factors for treatment (including the abolition of the Barthel scale).		number of recommendations.	
			10) Providing access to services tailored to the needs of people living with HIV, including early prevention, diagnostics and treatment within the mental health protection system.		number of recipients;Number of entities;	
			11) Increasing the availability of reproductive health services, including infertility counselling and treatment for couples of whom at least one person is seropositive *****.		 number of pregnancies (couples) +/-; number of children born to couples +/-; number of infected children. 	
			12) Increasing access to rehabilitation and health resort services.		number of recipients.	
			13) Involving primary care physicians and other disciplines in diagnosing and preventing HIV and other sexually transmitted diseases (STIs).		number of specializations.	
			14) Activities aimed at intensifying/activating the involvement of primary care physicians and other specialists in the HIV testing process.			
		b) improving the health care system	Updating the procedures for handling exposure to HIV infections.		developing procedures;	
		for people exposed to HIV infections.	Implementing post-exposure training (PEP ******) for health care professionals and other professional groups.		number of centres;number of expositions;number of training sessions;	

FIELDS	GOALS	OBJECTIVES	TASKS	TARGET GROUP	INDICATORS	RESPONSIBLE ENTITIES
					- number of recipients.	
			3) Disseminating information on pre-exposure prophylaxis (PrEP *******) of HIV infections and increasing access to pre-exposure prophylaxis (PrEP).		 number of IT platforms; Number of commercial entities; number of recipients; number of prescriptions prescribed. 	
	3. Preventing vertical infections.	a) improving care for women of reproductive age, pregnant and breastfeeding.	1) Promoting HIV tests among women at a reproductive age who are planning a pregnancy or are pregnant and among their partners. 2) Updating standards for working with women living with HIV/AIDS who are planning pregnancy and their partners. 3) Updating HIV prevention standards in children of		- Number of tested pregnant women; - number of tested pregnant women number of women receiving preventive care; - number of recipients; - number of pregnant women living with HIV/AIDS; - number of centres for	
		B) improving the health care system for children living	1) Improving specialized care for children infected with HIV and those born to mothers living with HIV, including:		antiretroviral treatment programmes for pregnant women number of updates; - number of activities number of children born to mothers living with HIV;	
		with HIV/AIDS and those born to mothers living with HIV.	 HIV diagnostics, Implementing an individual programme of immunization for people under 18 years of age. 		- number of children vertically infected with HIV; - number of children receiving care;	

FIELDS	GOALS	OBJECTIVES	TASKS	TARGET GROUP	INDICATORS	RESPONSIBLE ENTITIES
					Number of centres/entities.	

^{*}STIs (sexually transmitted infections).

**** ARV – antiretroviral treatment.

^{**}HIV (+) – a positive screening test result, meaning that antibodies against HIV were found in the tested blood; HIV (-) – a negative screening test result, meaning that antibodies against HIV were not found in the tested blood.

^{*****} Seropositive person – an HIV-infected person.

^{******}PEP (Post-exposure Prophylaxis) – post-exposure prophylaxis of HIV infection (which consists in taking antiretroviral drugs in a situation where contact with potentially infectious material occurs, e.g., sex without a condom, condom rupture, contact with blood, semen, vaginal mucus, pre-ejaculate, in which blood may be present).

******** Prep (Pre-exposure Prophylaxis) – pre-exposure prophylaxis (taking antiretroviral drugs that can prevent HIV infection).

IV. FIELD - INTERNATIONAL COOPERATION

FIELDS	GOALS	OBJECTIVES	TASKS	TARGET GROUP	INDICATORS	RESPONSIBLE ENTITIES
International cooperation	Developing international cooperation	A) expanding international cooperation concerning HIV/AIDS.	Implementation of international projects concerning HIV/AIDS and sexually transmitted diseases (STIs*), particularly in the region of Central and Eastern Europe, by using existing knowledge, best practices and experience.	 the general public; people living with HIV/AIDS/STI and their relatives people undertaking 	number of activities;number of initiatives.	 competent ministers according to the Programme's goals;
Internation			2) Implementation of international projects concerning HIV/AIDS and sexually transmitted diseases (STIs), particularly in the region of Central and Eastern Europe, by using existing knowledge, best practices and experience.	risky behaviour**, particularly within key populations***; Local border communities; health care workers; education workers; uniformed workers;	 Number of projects/activities; number of recipients; Number of foreign partners; number of implementing 	 units subjected to or supervised by ministers; National AIDS Centre; National Bureau for Drug Prevention;
			Participation in international conferences: academic, social and media events.	social workers;rescue workers;governmentadministration and	entities. - number of events; - number of participants.	PatientOmbudsman;National Instituteof Public Health
	b) activating Polish participation in planning, creating and coordinating international policies concerning HIV/AIDS.	Developing and evaluating international legal acts, guidelines and other documents, in particular those pertaining to the human rights of people living with HIV/AIDS and other sexually transmitted diseases (STIs).	staff; - representatives of patient organizations; - representatives of NGOs; - representatives of academic societies;	 number of activities; number of initiatives; number of recommendations; number of studies; number of published evaluations; number of legal acts. 	(PZH) - National Research institute; - National Health Inspectorate local government bodies; - local government units;	
			2) Implementing international guidelines regarding HIV/AIDS and sexually transmitted diseases (STIs), including those concerning human rights and the improvement of lives of people living with HIV and STIs.	media representatives;representatives of opinion makers;	 number of published recommendations in the Polish language; number of implemented recommendations. 	 academic associations; NGOs; experts/specialist s; foreign partners;

FIELDS	GOALS	OBJECTIVES	TASKS	TARGET GROUP	INDICATORS	RESPONSIBLE ENTITIES
		c) activating Polish participation in the work of international institutions and organizations.	 Participating in the work of international institutions or organizations operating in the field of HIV / AIDS and sexually transmitted infections (STIs), in particular ECDC, CDC, WHO, and the United Nations. Providing reports to international institutions and disseminating data. 	 representatives of employers' organizations; representatives of churches and religious communities; others. 	 number of projects/activities (initiated, implemented, realized). number of reports; number of publications; Number of institutions or organizations; 	– others.
		d) expanding international cooperation to improve the quality of life of people infected with HIV/AIDS, their families and relatives.	1) International cooperation of Polish non-governmental organizations, with particular emphasis on organizations for people living with HIV / AIDS / STIs or for their benefit, aimed at improving the quality of life of people infected with HIV / AIDS / STIs and their relatives.		 number of initiatives; number of organizations; number of recipients; number of implemented projects/activities; number of realized projects/activities. 	

^{*}STIs (sexually transmitted infections).

^{**}Risky behaviour – sexual contact without the use of a condom, *chemsex*, sharing equipment for taking narcotics and tattooing, contact with the mucous membrane, open wounds with blood or sexual secretions of another person.

^{***} Key populations - in particular: men having sex with other men, people using psychoactive substances (presently or in the past), people in prison or detention, people providing sexual services or using such services, transgender people.

V. FIELD - MONITORING

FIELDS	GOALS	OBJECTIVES	TASKS	TARGET GROUP/BENEFICIENT	INDICATORS	RESPONSIBLE ENTITIES
Monitoring	Improving the monitoring of the epidemiological situation and activities and tasks related to HIV/AIDS.	a) improving the detectability of epidemiological surveillance of HIV infections, AIDS incidence and mortality of people living with HIV/AIDS and other sexually transmitted diseases, including the standardization of the notification system.	 Developing a system for improving the collection and reporting of epidemiological data concerning HIV/AIDS/STIs* and its dissemination by: Cooperation in collecting and reporting epidemiological data; Analyzing existing systems and the possibility of integrating source data; Developing a national unique identification code system ((UNIQUE IDENTIFIER); Maintaining, modifying and developing a system for electronically reporting HIV infections and cases of AIDS or other STIs as needed for enabling analysis of the epidemiological situation and sharing results; elaborating a document concerning a system of epidemiological supervision according to European and international recommendations; adapting national data collection systems to international reporting requirements on an ongoing basis. Epidemiological supervision of HIV/AIDS/STIs by means of routine case reporting, including:	 the general public; people living with HIV/AIDS; people undertaking risky behaviour**, particularly within key populations***; health care workers; laboratory workers; test centre workers; VCT staff; representatives of provincial teams; Programme implementers; representatives of academic societies; representatives of NGOs; representatives of research institutions/centres; media representatives; representatives of opinion makers; representatives of state and private universities; National Institute of Public Health – PZH; National AIDS Centre; 	 number of elaborated documents/recommen dations; number of recipients; number of entities/centres involved in activities; number of STI tests conducted; number of people detected with AIDS; number of people detected with STIs; number of people diagnosed with AIDS; number of people who have died as a result of AIDS; 	 competent ministers according to the Programme's goals; units subjected to or supervised by ministers; National AIDS Centre; National Bureau for Drug Prevention; National Institute of Public Health (PZH) - National Research institute; National Health Inspectorate; Institute of Venerology; National Consultant on Laboratory Diagnosis; national and provincial workers; academic associations; local government bodies; local government units;

FIELDS	GOALS	OBJECTIVES	TASKS	TARGET GROUP/BENEFICIENT	INDICATORS	RESPONSIBLE ENTITIES
			3) Monitoring data obtained from VCT centres including: - conducting and updating an anonymous electronic database; - analysis of data obtained from questionnaires filled out at consulting and diagnostic centres and sharing the results.	- National Health Inspectorate; - governmental and local governmental administration.	 number of training sessions; number of participants in training sessions; number of reports/analyses; analyzing activities. number of HIV tests conducted; number of STI tests conducted; number of people detected with AIDS; number of people detected with STIs; number of clients/tests (prior to implementing the unique identifier – UI); Number of questionnaires; number of reports; 	- Provincial teams; - NGOs; - Academic research units; - others.
		b) Improving the monitoring of the epidemiological situation and activities and tasks related to HIV/AIDS.	1) 1) Monitoring the implementation of the Programme, operating an anonymous electronic database and sharing information with Programme implementers. 2) Analyzing conducted activities at the provincial level with regards to reducing HIV infections, support and healthcare for people living with HIV/AIDS/STIs. 3) Development and consolidation of provincial monitoring by: - consultations and training for provincial representatives;		Reports/information from the database. - list of conducted activities in provinces; - number of analyses; - Access to / scope of combination preventive care; - number of training sessions;	

FIELDS	GOALS	OBJECTIVES	TASKS	TARGET GROUP/BENEFICIENT	INDICATORS	RESPONSIBLE ENTITIES
			 development and extending local monitoring; development and implementation of indicators at the provincial level. 		 number of represented provinces; number of studies at the provincial level; number of recipients of information from the monitoring database. 	2.1.1.1.2
			4) Adapting the IT database (used to obtain data from entities implementing the Programme) to the needs of provincial analyzes.		number of modifications.	
		c) information support for the implementation of the HIV / AIDS Prevention Programme.	1) Obtaining, collecting and sharing information on HIV/AIDS/STIs, including reports, studies, analyses, and research (own, research units, research companies and others). 2) conducting research in selected key groups, including - research on society's knowledge and social attitudes about HIV/AIDS/STIs; - behavioural research on HIV/AIDS/STIs; - research into the quality of life (including sexual life) of people living with HIV/AIDS; - other research (in key populations, age cohorts, etc.) tailored to the needs of Programme implementation. 3) Monitoring the media.		 number of reports/analyses; number of publications; research results; recommendations; conclusions. number of publications/articles.	
		d) information support for ARV treatment implementation.	Maintaining an anonymous IT database in the scope of the implementation of the antiretroviral treatment programme.		 number of entities/centres; number of centres providing ARV treatment****; Number of people with undetected viremia; 	

FIELDS	GOALS	OBJECTIVES	TASKS	TARGET	INDICATORS	RESPONSIBLE
				GROUP/BENEFICIENT		ENTITIES
					 number of children 	
					receiving ARV	
					treatment;	
					 number of pregnant 	
					women living with	
					HIV/AIDS;	
					 children born to 	
					mothers living with	
					HIV;	
					 number of children 	
					vertically infected;	
					number of	
					professional	
					exposures;	
					 number of available 	
					treatments.	

^{*}STIs (sexually transmitted infections).

^{**}Risky behaviour – sexual contact without the use of a condom, *chemsex*, sharing equipment for taking narcotics and tattooing, contact with the mucous membrane, open wounds with blood or sexual secretions of another person.

^{***} Key populations - in particular: men having sex with other men, people using psychoactive substances (presently or in the past), people in prison or detention, people providing sexual services or using such services, transgender people

^{****} ARV – antiretroviral treatment.