

## country profile

# 1

The socio-economic  
impact of  
HIV/AIDS in  
Ukraine



In Ukraine, as in other CIS countries, 80% of HIV infections are concentrated among the most economically productive population.

From 1997 to 2002, reported cases increased 20 times; adult prevalence is estimated at 1%.

Ukraine now has a concentrated epidemic, with a growing impact on the labour market and production.

Copyright © International Labour Organization 2005  
First published 2005

Publications by the International Labour Office enjoy copyright under Protocol 2 of the Universal Copyright Convention. Nevertheless, short excerpts from them may be reproduced without authorization on condition that the source is indicated. For rights of reproduction or translation, application should be made to the Publications Bureau (Rights and Permissions), International Labour Office, CH-1211 Geneva 22, Switzerland. The International Labour Office welcomes such applications.

ISBN 92-2-115847-0

The designations employed in ILO publications, which are in conformity with United Nations practice, and the presentation of material therein do not imply the expression of any opinion whatsoever on the part of the International Labour Office concerning the legal status of any country, area or territory or of its authorities, or concerning the delimitation of its frontiers.

Reference to names of firms and commercial products and processes does not imply their endorsement by the International Labour Office, and any failure to mention a particular firm, commercial product or process is not a sign of disapproval.

ILO publications can be obtained through major booksellers or ILO local offices in many countries, or direct from ILO Publications, International Labour Office, CH-1211 Geneva 22, Switzerland. Catalogues or lists of new publications are available free of charge from the above address.

Printed by the International Labour Office, Geneva, Switzerland

## **Acknowledgements**

We would like to thank the institutions and individuals for their valuable contribution to this report: the Ministry of Labour and Social Policy in Ukraine; Vasyl Kostrytsya from ILO Kiev, as well as all other members of the Ukraine country team, for their field inputs; Jantine Jacobi from UNAIDS; Marie-Claude Chartier (ILO/AIDS Geneva) for her legal advice; the ILO/AIDS office in Geneva for their continuous support—in particular, that of Mr Franklyn Lisk; and Claudia Kessler, Swiss Tropical Institute, Basel, Switzerland for peer-reviewing the text.

## **Authors**

The report was developed with the technical cooperation of ILO/AIDS and GTZ (Deutsche Gesellschaft für Technische Zusammenarbeit). It was written by Dr Sabine Beckmann, Senior Technical Specialist for the ILO Programme on HIV/AIDS and the World of Work; Pallavi Rai, Technical Officer; and consultant Sofia Nielson.



Deutsche Gesellschaft für  
Technische Zusammenarbeit (GTZ) GmbH

## Acronyms

AIDS	Acquired immunodeficiency syndrome
BSS	Behavioural surveillance survey
CIS	Commonwealth of Independent States
DFID	Department for International Development of the United Kingdom
GFATM	Global Fund to Fight AIDS, Tuberculosis and Malaria
GDP	Gross domestic product
GTZ	Deutsche Gesellschaft Technische für Zusammenarbeit (German Technical Cooperation)
HDI	Human Development Index
HIV	Human immunodeficiency virus
IDU	Intravenous drug user
IEC	Information, education and communication
ILO	International Labour Organization
IMF	International Monetary Fund
FDI	Foreign direct investment
FSW	Female sex workers
MOH	Ministry of Health
MTCT	Mother-to-child transmission
NGOs	Non-governmental organizations
OSH	Occupational safety and health
PAF	Programme Accelerating Fund (UNAIDS)
PLWHA	People living with HIV/AIDS
STI	Sexually transmitted infection
UAH	Ukrainian Hryvnia
UISR	Ukrainian Institute for Social Research
UNAIDS	Joint United Nations Programme on HIV/AIDS
UNCT	United Nations Country Team
UNFPA	United Nations Population Fund
UNDP	United Nations Development Programme
UNICEF	United Nations Children's Fund
USDOL	The US Department of Labor
VCT	Voluntary counselling and testing
WHO	World Health Organization

# Contents

<b>Executive summary</b>	<b>1</b>
<b>A. Situation analysis</b>	<b>2</b>
<b>1. Recent economic trends and labour market situation</b>	<b>2</b>
<b>2. Trends in HIV/AIDS prevalence</b>	<b>2</b>
i. Characteristics of the epidemic	2
ii. Factors contributing to the spread of HIV	4
iii. Projections of the epidemic	5
<b>3. Demographic impact</b>	<b>6</b>
i. Trends in population structure	6
ii. The impact of HIV/AIDS on the labour force	7
<b>B. Economic impact of HIV/AIDS</b>	<b>8</b>
<b>1. Macroeconomic impact</b>	<b>8</b>
i. The national budget	8
ii. Unemployment	9
iii. Gross domestic product	9
iv. Poverty	10
<b>2. Impact on specific economic sectors</b>	<b>10</b>
i. Core industries	10
ii. Agriculture	11
iii. Health care	12
iv. The armed forces	13
v. Sex workers	13
<b>3. Microeconomic impact</b>	<b>14</b>
i. Enterprises	14
ii. Households	14
iii. Orphans	14
<b>C. Policy options</b>	<b>15</b>
<b>1. Response to the HIV/AIDS epidemic</b>	<b>15</b>
i. National response	15
ii. Legislative reforms	15
iii. International response	16
iv. ILO projects in the workplace	17
<b>D. Recommendations</b>	<b>18</b>
<b>1. General</b>	<b>18</b>
<b>2. The response of ILO's constituents and partners</b>	<b>18</b>
<b>Bibliography</b>	<b>20</b>

# Executive summary

This paper was prepared as part of a broader series studies examining the impact of HIV/AIDS at the country level. It examines the demographic and socio-economic impact of HIV/AIDS in Ukraine. It addresses the effect of HIV/AIDS on labour supply and demand in key skills and occupations, with a view to identifying current and potential shortages vital for human development and economic growth. It also develops policy implications and provides recommendations for a coherent intervention by the ILO, in cooperation with its tripartite partners.

The plan of the paper is as follows: Section A focuses on the recent economic and labour market situation, with analyses of the current epidemiological trends provided as a background to the subsequent discussion. The estimates of the epidemic and its impact on the demographic and labour market are also explored. Lack of health-care facilities, nursery provision and nutrition has led to a reduction in fertility and life expectancy. The spread of HIV/AIDS will further intensify the weakening of demographic indicators by aggravating the reduction in life expectancy and increasing mortality rates in the country.

Section A also investigates certain behavioural and socio-economic factors that have played a role in the rapid spread of HIV infection, not only in Ukraine but also in neighbouring countries in Eastern Europe and Central Asia. Although initially concentrated among injecting drug users (IDUs) only, the infection has started to spread into the general population. The opening up of society, the breakdown of political institutions and diminishing social cohesion have prompted a change in sexual behaviour. In addition to the increasing burden of chronic non-infectious diseases, several infectious diseases have become more common. Tuberculosis has re-emerged and sexually transmitted infections (including HIV) are spreading rapidly. This significant deterioration in socio-economic indicators confirms the need to address the problem of HIV/AIDS. The economic crisis not only creates an environment for the spread of HIV, but leads to a reduced capacity to respond to it. If measures are not taken to check the epidemic, prevalence rates may not only continue to rise, but may rise more rapidly.

Section B describes the macroeconomic and microeconomic impact of HIV/AIDS on the labour force in Ukraine, as well as the impact on economic variables and on human capital

accumulation in various sectors. The fall in GDP had led to increased poverty and unemployment, sometimes driving young women into prostitution, and young men into drug and alcohol abuse. The opening up of borders has contributed to cross-border sex trade. Unemployment and increased poverty have led to the expansion of shadow economies, including those associated with crime, sex work, and trafficking, which also form the bedrock for the spread of HIV infection. Sectors such as mining, agriculture, the army and sex work have been badly hit by the epidemic. Evidence from firms suggest that businesses have become aware of the number of employees infected in Ukraine and are beginning to commit themselves to implementing workplace programmes on HIV prevention and care.

At the household level, the extremely low levels of pension support force the working-age population to take care of their elderly parents, as well as looking after their own children. And when young people die from AIDS, their parents are left without financial support and care in their old age, and their children become orphans with no one to take care of them. The HIV/AIDS epidemic could ultimately lead to a change in family structures by increasing the number of people who need support and, at the same time, decreasing the number of employable family members. This, in turn, would influence the level of financial security and the nature of expenditures.

Section C identifies key areas of significance for ILO/AIDS in developing its programme of support for Ukraine. The response to the pandemic should be multi-pronged and should include implementation of an effective prevention programme at the national, oblast<sup>1</sup>, city and township levels. It would also include employers' organizations and labour unions and assess their existing competence for active involvement in workplace programmes, training and other activities. The starting point would be an assessment of changes in the availability of key skills and occupations; review of training capacity relative to the needs of specific sectors; and proposals for system reform, so as to ensure that key labour potential is retained to meet national priorities (such as health, education etc). Moreover, any kind of programme intervention will also require involvement with the informal sector and medium-sized enterprises.

<sup>1</sup> Ukraine is divided into 24 oblasts, which are administrative divisions.

# A. Situation analysis



## 1. Recent economic trends and labour market situation

Ukraine has a current population of 49 million and it attained independence in 1991 with the collapse of the USSR. Known as the Soviet Union's 'bread basket', it produced more than one-fourth of the Soviet agricultural output. Since 1991, Ukraine has experienced a long and severe economic crisis. As a result, economic and demographic processes are becoming increasingly vulnerable at macro and micro levels.

The general labour market situation in Ukraine shows acute negative trends, with millions of Ukrainians continuing to work without pay, as the economy still suffers from a lack of functioning market institutions and weak legal protection, with barriers to foreign investors. The year 2000 brought the first signs of reversal of this negative growth trend. GDP grew by almost 6%, industrial production by 13% and gross agricultural output by 9%. The continuation of this positive trend, however, remains uncertain. There are still major obstacles to sustained growth, such as the incomplete structural transformation of the economy, including the weak banking system, and the still-unpredictable investment climate.

Social infrastructures (health, education, social services) are crumbling, and shrinking budgetary resources and unclear definition of responsibilities have led to deterioration in social service delivery. At the same time, the real income of the population has decreased and arrears in salaries, pensions and social

subsidies continue. About 27 % of the population are below the poverty line and 20% work part time or is on administrative leave; formal unemployment has risen to 11.3 %<sup>2</sup> and hidden and informal unemployment is increasingly higher. The rural population generally earn their livelihood from their private land plots and kitchen gardens. The worsening health situation is illustrated by the decline in life expectancy, from 71.0 in 1989 to 68.1 in 2000 (UNPOP). This has contributed to a large outflow of people into central and Western Europe (ILO). The HIV/AIDS epidemic in Ukraine unfolds in the context of economic decline, declining production and increasing unemployment and poverty.

Moreover, with the expansion of the European Union eastwards, further labour migration, and mobility of vulnerable groups such as sex workers to neighbouring European Union countries, is expected to promote the spread of the epidemic to a larger population. This opening up of society, the breakdown of political institutions and diminishing social cohesion have contributed to a change in sexual behaviour. The fall in GDP has led to increased poverty and unemployment, driving young women into prostitution, and young men into drug and alcohol abuse. The opening up of borders has contributed to cross-border sex trade. Besides the increasing burden of chronic non-infectious diseases, several infectious diseases have become more common. Tuberculosis has re-emerged and sexually transmitted infections, including HIV, are expanding rapidly. This significant deterioration in social and economic indicators confirms the need to address the problem of HIV/AIDS. The economic crisis not only creates an environment for the spread of HIV, but leads to a reduced capacity to respond to it. It is in this context that the issue of HIV/AIDS needs to be examined.

## 2. Trends in HIV/AIDS prevalence

### i) Characteristics of the epidemic

Preceding the break-up of the Soviet Union, the Ukrainian authorities were complacent about escaping the AIDS epidemic, and the existing HIV data further corroborated this view. Severe control of sexually transmitted

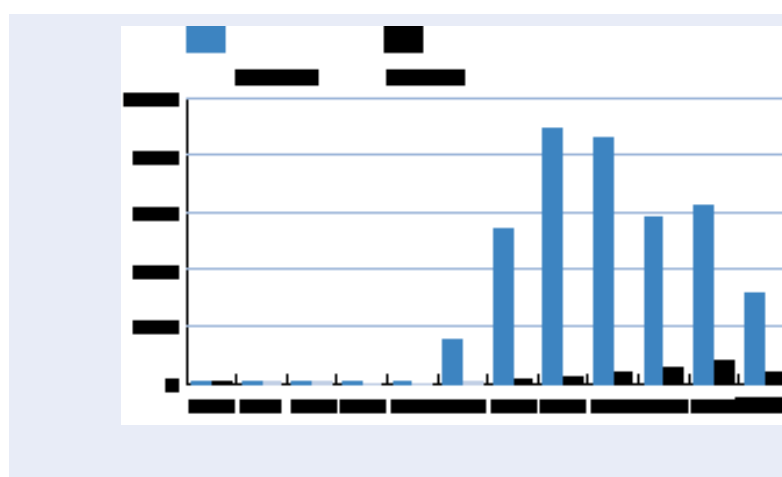
<sup>2</sup> These figures are arrived at by sample surveys based on ILO methodology, carried out by the State Statistics Committee of Ukraine, level of unemployment in October 1995 was 5,6%, in 1996 - 7,6%, 1997 - 8,9%, 1998 - 11,3% of economically active population.

infections and state provision of health and social services kept the epidemic at bay. Until 1994, a few HIV-positive tests had been associated with foreigners. However, in 2002, the number of reported cases was shown to have increased 20 times in the previous five years<sup>3</sup>. Approximately 250,000 adults and children (15–49 years old) were living with HIV/AIDS and the adult prevalence rate was 1%. The HIV epidemic in Ukraine is thus in a concentrated stage. Figures 1 and 2 depict the escalation of the epidemic since 1995. The exact number of infections in Ukraine remains unknown.

The trends in transition modes have varied over time. In the last four years, the proportion of infections caused by injecting drug use, as a percentage of the total number of infections, decreased from 83.6% in 1997 to 62.5% in 2000, while the percentage of heterosexually transmitted infections grew from 11% (1997) to 27% (2001). This is another sign of the beginning of HIV infection spreading across the entire population<sup>4</sup>. Figure 3 shows injecting drug use as the dominant mode of HIV transmission in Ukraine (74%), followed by heterosexual contact. This is similar to the pattern experienced by other CIS countries in the region.

Figure 4 (overleaf) shows the number of HIV infections, AIDS cases and AIDS-related deaths in total, clearly indicating a jump in the number of infections. The data for Figures 1, 2, and 3 are extracted from different sources, clearly seen in the discrepancy in the number of deaths recorded. This may be due to different data-collection methods, different sampling methods or also due to a lag between reporting and recording cases. These figures are evidence of the problems faced in estimating HIV/AIDS incidence and related infections. Nonetheless, they are a good indicator of the likely impact of the epidemic.

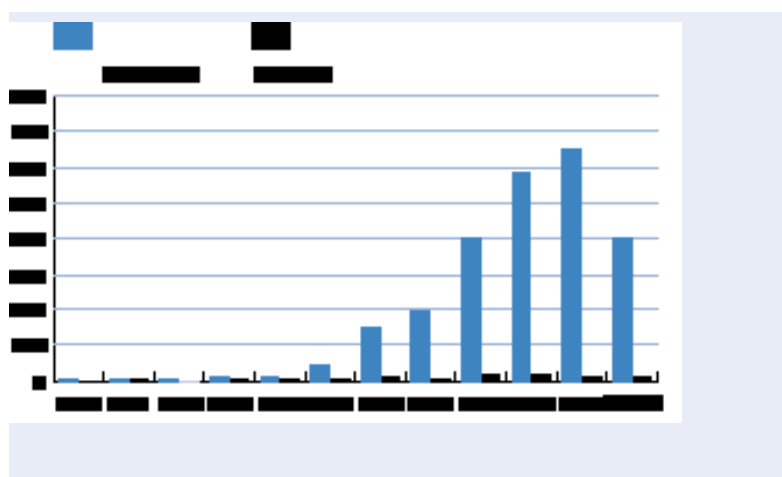
The highest rates of reported *overall* infection were found in Odessa and Nikolayev, but cases are now reported in all 27 regions of the country. The diffusion of the epidemic through heterosexual contact in Odessa and Nikolayev has reached levels similar to those of Western European cities. Table 1 overleaf shows a region-wise prevalence rate among IDUs in different geographical regions in Ukraine, the highest recorded being in Odessa, Poltava and Donetsk.



**Figure 1: Total HIV infections in 1990-first half of 2001**

\* 2001 data covers the first six months of the year only.

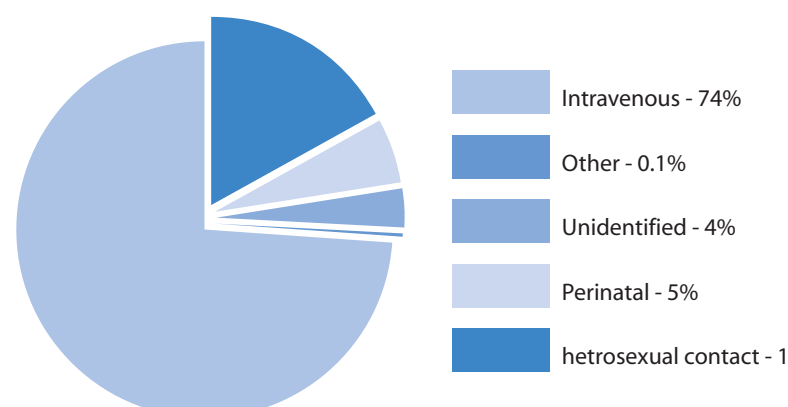
Source: Data from the Ukrainian Centre for AIDS prevention and control, MoH, Ukraine.



**Figure 2: Total AIDS cases in 1990-first half of 2001.**

\* 2001 data covers the first six months of the year only.

Source: Data from the Ukrainian Centre for AIDS prevention and control, MoH, Ukraine.



**Figure 3**

**HIV transmission routes in Ukraine, 2000**

Source: Ukrainian Institute for Social Research

<sup>3</sup> HIV/AIDS for CEE/CIS and the Baltics; UNICEF, 2002, UNAIDS.

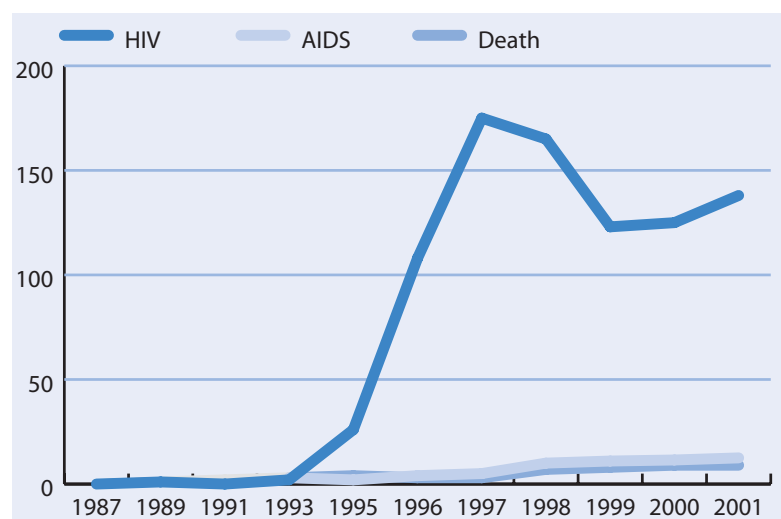
<sup>4</sup> Source: Ibid.



**Table 1: HIV/AIDS prevalence among IDUs, by region**

City	Number of persons surveyed	Prevalence, %
Poltava	259	41.7
Donetsk	252	39.7
Kyev region	249	28.1
Odesa	293	64.0
Simferopol	261	27.2
Kharkiv	250	17.8

Source: HIV/AIDS Sentinel surveillance surveys in Ukraine (1987-2000), 2000, Kyiv city



**Figure 4**  
**HIV cases, AIDS cases and AIDS death: rates per million**

Source: HIV/AIDS Surveillance in Europe Mid-year Report 2002

The epidemic is still being driven by injecting drug use, at an alarming rate—higher than the rate of transmission through sexual contact. (According to some estimates, each drug user currently infects at least two other drug users annually.) Ukraine has a large and rapidly growing pool of intravenous drug users: 22,400 (4.3 per 10,000) in 1990, and 74,500 (15 per 10,000) in 2000. The actual number of intravenous drug users versus the number of those currently registered with the authorities is 5–10 times higher. Anecdotal evidence on IDUs suggests that drug-takers preparing opiates in some parts of the region drop fresh blood into the solution as a way of absorbing toxins commonly found in home-produced drugs. If the blood is infected with HIV, then all the injectors drawing drug solution from that batch can become infected, even if they are using sterilized injecting equipment.

In Ukraine, data on HIV spread among homosexuals should be interpreted with caution, given that, until 1991, homosexuality was illegal and punishable. Mother-to-child transmission of HIV has also been rising rapidly in the last few years, shooting from 2.2% of total incidence in 1997 to 13% in 2001. According to the Ukrainian AIDS Centre, the HIV prevalence among pregnant women increased from 0.09% in 1997 to 0.22% in 2001. (Since

most pregnant Ukrainian women report to antenatal clinics, the data can be regarded as representative in terms of HIV prevalence rate among the general sexually-active population.)

The level of HIV-infected persons among people who wanted to become blood donors in Ukraine is the highest in the WHO European region (data from the European Centre on AIDS Epidemiological Monitoring). Figure 5 shows the trends in prevalence among various high-risk groups. The order of prevalence has changed over the course of the epidemic, as seen in the graph below: after peaking in 1997, injecting drug use has decreased considerably in recent years as a mode of HIV transmission. This is probably due to inadequate data-collection techniques not accurately reflecting the situation, as there is no evidence of harm-reduction strategies being undertaken by the government. However, the number of heterosexual cases of HIV transmission is on the increase; the number of reported cases of transmission among men who have sex with men went from 9 in 1995, to a high of 290 in 1998, and then back down to 230 in 2001; the number of mother-to-child transmissions is increasing, from 150 in 1995, to 380 in 1998, and 915 in 2001.

## ii) Factors contributing to the spread of HIV

Multiple behavioural and socio-economic factors have played a role in the rapid spread of HIV infection, not only in Ukraine but also in neighbouring countries in Eastern Europe and Central Asia.

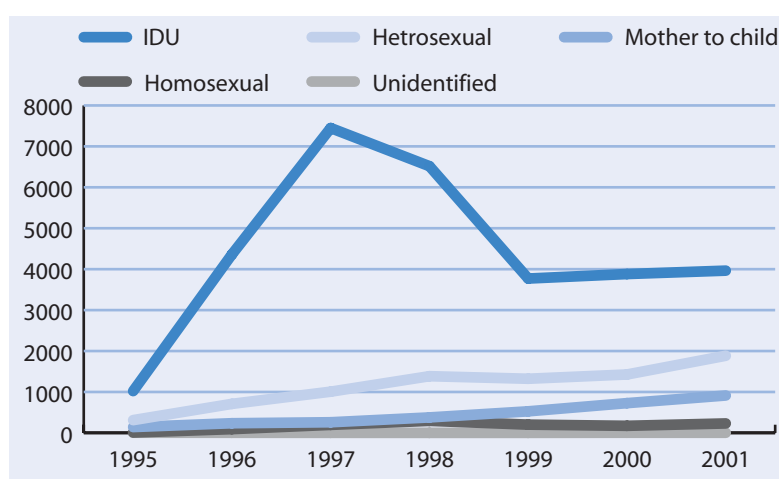
**Societal factors:** The weakened role of marriage as the basis for stable sexual relationships, a reduction in the number of marriages and an increase in the number of divorces have led to negative changes in the family structure of the population—i.e., there is a growing number of incomplete families. In terms of attitudes, even though most Ukrainians are aware of the existence of HIV/AIDS, there are many myths about the modes of transmission, prevention, testing,

among others, which generates stigma and discrimination against those with HIV<sup>5</sup>.

**Absence of organized civil society:** At the macroeconomic level, there is an absence of organized civil society, due to a history of repression and lack of relevant expertise marked by political uncertainty, which makes society even more susceptible to the epidemic. The non-governmental sector requires a wide range of skills and has to compete for these in the general labour market. Non-governmental organizations (NGOs) are less able to offer wages that compete with those of the private sector. This forces people to explore other ways of earning a living.

**Poverty:** Ukraine is split between the Russian-speaking, heavily-industrialized east and south, and the Ukrainian-speaking rural west and central regions. The socio-economic inequalities between regions has resulted in HIV/AIDS spreading more rapidly in poverty-stricken areas, such as the south-east and north-west, than in others. The existing poverty differential has been determined by local economic structures and the geographical location of the regions. These regions were distinguished by the worst indices of living standards, the lowest life expectancy at birth, and the highest losses due to depopulation in the course of the 90s. In addition, the build-up of an unfavourable epidemiological situation in these regions is influenced by active migration and a concentration of refugees and marginalized populations. Income and living standards vary between regions, and the gaps in income have deepened faster than the rate of economic development. The poverty levels<sup>6</sup> are highest in Luhansk (44.8%) and Mikolaiv (42.6%). It is considerably less in Kyiv city (10.9%), in the oblast of Chernigiv (16.1%) and in Kharkiv (19.6%) (see map, page 2).

**Migration:** Finally, emigration has also contributed to the spread of the epidemic from high-prevalence to low-prevalence regions. (It should be noted, however, that emigration is not the only reason for population declines in Ukraine; negative population growth already existed as a result of decreasing birth rates.) The population in Ukraine decreased from 52.2 million in 1993 to 49.7 million in 2000. Migration and HIV/AIDS mortality contribute significantly to this population decline. It has been seen that HIV is prevalent in migrant communities and often spreads among them. There has, however, been no empirical research on this in Ukraine. Research in other countries<sup>7</sup> has shown that, once



**Figure 5**  
**HIV/AIDS prevalence rates in different groups**

Source: *Social and economic impact of HIV/AIDS in Ukraine: UISR, Kiev 2001*

migrants arrive at their destination, HIV-risk factors include being separated from regular partners, loneliness, and anonymity that influences their behaviour. Some engage in risky behaviour as a result of peer pressure, or the need to belong to a group or a community. More generally, many migrants have other concerns, such as legal, housing and employment problems, and are not aware of AIDS. Female migrants are especially vulnerable to abuse, violence, trafficking and inequality. Employment opportunities are usually more limited for them as they are often seen as docile 'cheap labour', confined to the parallel economy, working in inferior conditions, subject to discrimination, and unable to claim their rights<sup>8</sup>. These factors are likely to be valid for Ukraine, also, but more research is required in the country.

### iii) Projections of the epidemic

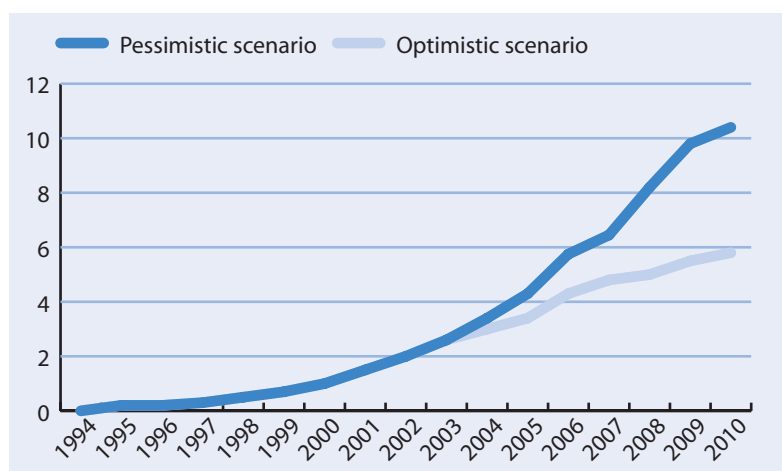
Problems with data collection and interpretation are often encountered when estimating the impact of the epidemic. Nonetheless, making projections of the epidemic's growth and impact is a vital component of strategic planning for an effective response. A study carried out by UNAIDS (1997) shows two possible scenarios of the spread of the epidemic<sup>9</sup>.

<sup>5</sup> UNAIDS (1997) *The Social and Demographic Impact of HIV/AIDS in Ukraine*. A project financed by the British Council.

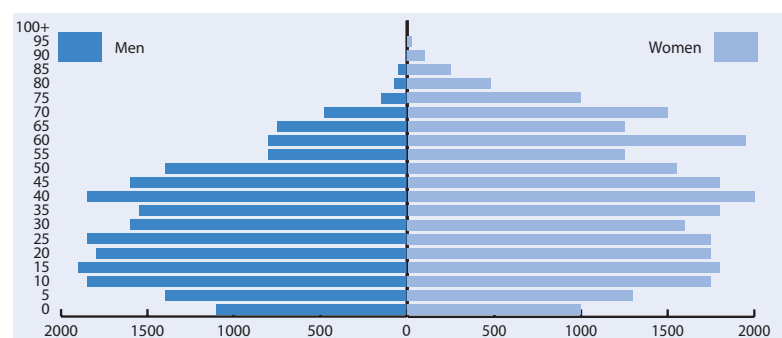
<sup>6</sup> These poverty standards were established by the Government of Ukraine.

<sup>7</sup> World Bank reports on Bulgaria and Balkan States, Global Fund reports on Ukraine, Georgia and Central Asian countries.

<sup>8</sup> For information on migration and HIV/AIDS, see 'Migration and HIV/AIDS in



**Figure 6**  
**Percentage of AIDS-related deaths among all deaths in Ukraine**  
 Source: Ukrainian Institute of Social Research



**Figure 7: Life expectancy in Ukraine at the beginning of 2001**

The first scenario suggests that the epidemic could develop slowly, as it has in Western Europe, and that the spread of infection would be primarily among IDUs, with little significant transmission to the general population. The second scenario projects that Ukraine could suffer from an explosive spread of HIV, similar to that of South-East Asia and Brazil<sup>10</sup>.

Figure 6 shows the high-AIDS scenario, in which the number of AIDS-related deaths accounts for nearly 11% of all deaths. The low-AIDS scenario shows that the number of HIV cases will reach 5.5% (1.4 million), which means that, in the absence of successful prevention measures, the number of those who die from AIDS might reach approximately 500,000 people by 2010, the majority of them being men. The cumulative number of AIDS-related deaths during the whole forecast period (1994–2010) is 307,810.

<sup>10</sup> Ukrainian Institute of Social Research (with financial support from the Department of International Development of the United Kingdom (DFID) and the British Council. 'A Social and Economic Impact of HIV and AIDS in Ukraine: a re-study'. This paper has drawn on the research findings of the above document and henceforth many references are made to the above.

### 3. Demographic impact

So far, a decline of 2 million has been recorded in the total population following post-independence collapse and deterioration in economic and social conditions due to factors other than HIV/AIDS. However, the unfolding impact of the HIV/AIDS epidemic on human life will further intensify the changes taking place in the demographic landscape of the country.

#### i) Trends in population structure

**1. Disproportionately high number of older people:** In early 2001, the number of people aged 69 years or more amounted to 21% of the population. Because of AIDS, which largely affects the working-age population, older people will have to work longer to support their families.

**2. Reduction in population size:** In the early 1990s, the decline in population caused by higher death rates was offset by large net immigration from other former Soviet republics—in particular, by the arrival of 250,000 Crimean Tatars from Central Asia, where they had been exiled during the Second World War. However, the trend since 1995 has been towards net emigration, particularly to the US, Canada, Europe and Israel (see section A). This drastic decline in population gives rise to an age structure as illustrated in Figure 7. It should be noted that the demographic impact of the epidemic is unlikely to be anywhere near as acute as that observed in sub-Saharan Africa. While it will affect mortality and morbidity, with consequent effects on the demand for health-care resources, AIDS will mainly intensify the negative demographic effects already being felt (i.e., decreasing birth and fertility rates).

**3. Narrowing of the age pyramid:** Figure 7 indicates the narrowing age pyramid that results in the reduction of all factors that would have otherwise favoured the demographic prospects of Ukraine. These include: depopulation and its irregular dynamics, and the decline in fertility and labour potential. The total number of births declined from 700,000 in 1989 to 400,000 in 2000. In urban areas, this decline was almost 50% of the total, while, in rural areas, it was 33%. The low life expectancy, mainly due to adults dying in their productive years, has declined among men and women (see Table 2 overleaf).

**4. Gender differences:** The mortality rate among 20–40-year-old men is 3–3.5 times higher than that of their female counterparts. Excessive mortality of men in Ukraine is not purely biological; it is rather the consequence

**Table 2: Demographic indicators of Ukraine**

	1990	2000
<b>Population (in millions)</b>	51.0	49.0
<b>Life expectancy at birth (in years)</b>		
<b>Male</b>	65.4	62.4
<b>Female</b>	74.9	73.6

Source: UNDP, *Ukraine Human Development Report*

of risk-taking behaviour, violence, harsh working conditions, excessive consumption of alcohol and tobacco, and suicide. There is currently (and potentially) a gender difference in Ukraine: among the HIV-infected and those who have died from AIDS, the majority are male (urban residents). However, the UNAIDS projections presume a gradual increase in the number of female AIDS cases (30% in 2001 to 47% in 2010), due to the spread of infection from IDUs to the general population.

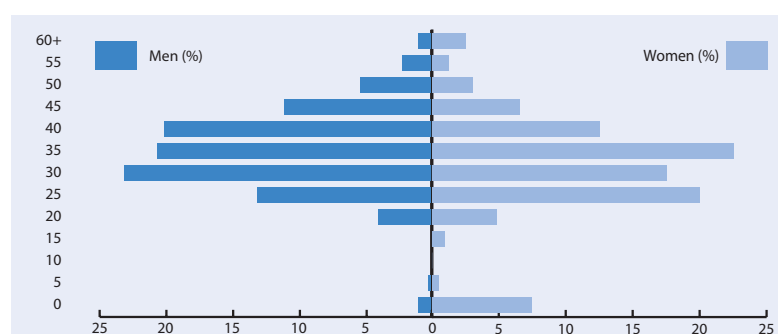
#### 5. Increasing demographic vulnerability:

UNAIDS estimates that most AIDS cases will be seen among males aged 35–39 and females aged 25–29. The demographic losses due to HIV/AIDS in Ukraine in the next 10 years could amount to between 400,000 and 600,000 people, with about 300,000–450,000 early deaths, and 88,000–140,000 unborn children. Without AIDS, the population would decline from 47 to 45.5 million in 2005–10. With AIDS, it would roughly be half a million smaller in 2010. Thus, the current demographic situation is marked by an ageing population, a high dependency rate, low fertility, and a sharp increase in mortality—all culminating in a rapid depopulation.

#### ii) Impact of HIV/AIDS on the labour force

In Ukraine, as in other CIS countries, 80% of infections are concentrated among the most economically productive population. The age structure of people living with HIV/AIDS (PLWHA) and of those who died of AIDS show that the economy loses not only the most productive members of its labour force but also those with long-standing experience and skills that are hard to replace. The projections among the productive population show the following: by 2005, 89–97% of PLWHA will be of a productive age (15–59 years old); a significant part of those who are HIV-infected in Ukraine belong to the most active members of the population (25% of those infected are 30–34 years of age); and approximately 40% of those who die from AIDS are under 30 years old (see Figure 8).

Moreover, labour mobility within Ukraine is low. Long-term employment with one enterprise



or institution has been the social norm since the Soviet occupation. This has placed severe human resource constraints on the country's labour market as it makes mobility of labour from one job to another difficult.

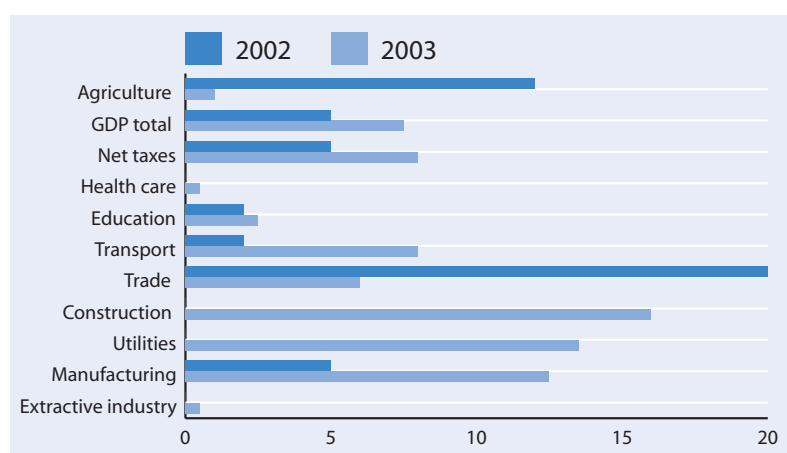
**Figure 8. Age structure of people who died of AIDS in Ukraine in 2000**

**Informal economy:** The effects of the epidemic on the informal sector are even more acute. This sector is largely hidden and it is difficult to assess the impact in this area. However, assessing the impact is extremely important as the informal sector provides economic sustenance for many Ukrainian families and is one-and-a-half times the size of the formal sector. Labour mobility is extremely low in informal-sector enterprises, which normally comprise a few people with limited skills (specific to the relevant task, with specific outputs). The loss of individuals/productivity due to AIDS is quite pronounced as these people are hard to replace.



## B. Economic impact of HIV/AIDS

Since most people currently living with HIV/AIDS are IDUs, the economic impact has been limited. However, if left unchecked, the impact may become substantial if the epidemic becomes more generalized. The Ukrainian economy is influenced by many other concurrent factors and it is difficult to assess the impact of HIV/AIDS alone on the economy. However, a substantial impact will be felt as a result of rising health-care costs due to expanding antiretroviral therapy (ART) and provision of care and support to HIV-infected employees.



**Figure 9.**  
**Real GDP and value-added growth by sector**

Source: State Statistics Committee Ukraine

Economic impact can be defined as that which “causes the diversion of resources to uses that would not have been necessary in the absence of HIV/AIDS, and decreased production due to the disease.”<sup>11</sup> In the Ukrainian context, it would refer to the rise in health-care expenditures. There is an absence of comprehensive research to document the human losses experienced by the various sectors in the Ukrainian economy, and it is therefore only possible to make speculative assumptions. Among the losses observed, it is difficult to distinguish those due to HIV/AIDS from those that relate to the general economic situation in the country. The economic impact of HIV/AIDS is likely to be indirectly felt in the following ways: a shortage of workers in key skill categories will lead to higher wages, as well as replacement costs, which will lead to higher domestic production costs. Higher production costs will, in turn, lead to a loss of international competitiveness, which can cause foreign exchange shortages and discourage investment. It will also result in higher health expenditure by the government.

### 1. Macroeconomic impact

Figure 9 shows the real GDP and value-added growth in various sectors of the Ukrainian economy, as recorded in April 2003. It indicates slow growth in the mining, health and education sectors, which are suffering from a slow pace of structural reform. The impact of HIV/AIDS will further dampen improvements in the education and health sectors.

#### i) The national budget

Experience from other countries shows that HIV/AIDS treatment and prevention measures impose a fiscal burden on the budget, and impinge upon budgetary expenditures for other social programmes such as health and pension schemes. In Ukraine, the epidemic is escalating very fast, but whether the decline in macroeconomic indicators is due to the prevailing conditions (post-Soviet collapse) existing within the region or is intensified even further due to HIV/AIDS, is hard to distinguish. It is probably due to a combination of variables. However, the experience in countries with a full-blown epidemic can serve as a warning, indicating that some of the macroeconomic impacts of HIV/AIDS include an increase in poverty, a fall in GDP rates, greater youth unemployment, a higher fiscal burden and an increase in government expenditure.

The national government is well aware of the magnitude of the problem and has reviewed its budget, taking into account the AIDS crisis. It faces greater demands on its resources and cuts in financial capacity. To date, very little information exists on the impact on government activities, and this remains one of the most under-researched areas. Table 4 provides a perspective on the direct and indirect effects on government spending on health. Currently, the state funding for the health sector is half of what is needed for the system to function effectively. Over the last three years, the GDP has grown, while allocations to health care have increased: 3.5% of GDP was spent on the health sector in 1998, 2.9 % in 1999, and 2.8% in 2000. The World Bank estimates that, in real terms, state provision for health expenditure has reduced by 51%. The health sector is the first to be affected by the epidemic and, ironically, is the least prepared to deal with it. According to the Ministry of Health, 30% of the

<sup>11</sup> Barnett T, Whiteside A (2000) Guidelines for studies of the social and economic impact of HIV/AIDS. UNAIDS, Geneva.

**Table 3: Proportion of government expenditure on health care**

Year	1998	1999	2000	2001	2002*
<b>Consolidated budget (in millions of UAH)</b>	31,196	34,821	48,149	55,528	60,319
<b>State budget (in millions of UAH)</b>	16,177	19,005	31,155	33,170	35,530
<b>Consolidated budget of the health-care system (in millions of UAH)</b>	3,632	3,809	4,888	6,239	7,538
<b>% of the consolidated budget</b>	11.64	10.94	10.15	11.24	12.50
<b>% of the GDP</b>	3.54	2.92	2.87	3.09	3.41
<b>State budget expenditures on the health-care system (in millions of UAH)</b>	351	359	722	1,106	1,582
<b>% of the state budget</b>	2.2	1.9	2.3	3.3	4.5

Source: (Ministry of Finance) 1999–2001, Kyiv 2002; State Treasury Report for 2002, Kyiv 2003.

\*Preliminary data

population can only partially avail of medical services, and 20% of citizens cannot avail of any medical services at all.

Furthermore, Ukrainians have the oldest average age in Europe and per capita one of the highest numbers of pensioners. This puts a fiscal burden on a government that is already struggling to cancel out its past arrears. The number of pensioners is estimated to be about 14 million (UNAIDS). Most retired Ukrainians work to supplement their pensions. Those who have the means grow their own food and depend on their children. With HIV/AIDS depleting the most productive sector of the labour force, many pensioners will be unable to get support from their family and will be totally dependent on the government for survival.

## ii) Unemployment

The industries most affected by the collapse of the USSR were defence, mining and machine-building sectors. The old coal-producing regions in the Donbass (Donetsk and Luhansk regions) have been among the hardest hit by Ukraine's economic collapse, as mines, faced with subsidy cuts and cheaper imports, have closed. This explains the higher unemployment rate among men (mostly employed in these sectors) than women—11.9% and 10.8% (2000) of the economically active population, respectively. A unique feature of the Ukrainian economy is that women account for the majority of all those who are employed, even though employment has fallen by a third since 1991<sup>12</sup>.

In November 2001, about 1.15 million individuals (3.6%) were registered to be unemployed, the actual figures being higher than estimated. Real unemployment was estimated at about 20%. These figures hide the reality that, in a number of ex-Soviet Union countries, many workers are only employed part time and, even when they do work, their

wages may be months or years in arrears. For example, it was estimated that, in 1995, unemployment had risen from 14% to 21%. However, an incomplete working week was routine for an additional 4.6%. In addition, 23 % received wages below the minimum wage—if and when they received wages. By 1997, it was estimated that 5% of GDP was owed in back pay (30.5% of the total wage bill)<sup>13</sup>. Unemployment and increased poverty have caused the expansion of shadow economies, including those associated with crime, sex work, trafficking and drug use. Geographically, the south-east and north-west are the poorest regions, with the lowest level of self-employment, the most developed 'in-kind economy' and high levels of labour migration. These factors are also related to the sharp increase in alcohol consumption. Since 1991, drug markets have proliferated in the region, particularly in the domestically-produced injecting opiates. Because of these factors, IDUs in Eastern Europe can be more easily drawn into these shadow economies than the youth of other industrialized countries.

## iii) Gross domestic product

The impact of HIV/AIDS will reverse the somewhat positive changes in GDP growth experienced in recent years. In 2000, the GDP increased by 6.0%, industrial output by 12.9%, and agricultural productivity by 9.2%, with production intensity factors continuing to be the driving force behind such changes. In 2001, labour productivity increased by 22% and, for the first time in the last decade, there was growth in real income: real wages and salaries increased by 20.4%, amounting to US\$72 per month<sup>14</sup>. The recovery from the economic downturn has relied predominantly on a boost in output from sectors such as metals and chemicals, which, starting in late 1999, benefited from a strong demand from Russia and Asia. However, GDP per capita in Ukraine remains low, ranking only 93rd on

<sup>12</sup> Source: Official ILO document accessible at: ILO <http://www.ilo.ru/aids/docs/dec02/cis/>

<sup>13</sup> UNDP Human Development Report 1997.

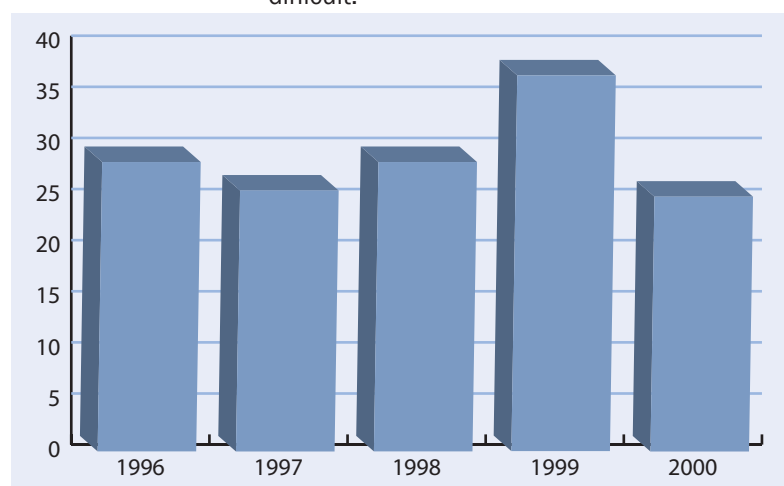
<sup>14</sup> Official ILO document accessible at: ILO <http://www.ilo.ru/aids/docs/dec02/cis/>

the GDP per capita index. The low level of GDP is partly mitigated by the existence of an unofficial economy that could be up to 50% as large as the official one, as demonstrated by comparing GDP per capita with changes in consumption of electricity (usually a good indicator of levels of economic activity)<sup>15</sup>. The number of entrepreneurs in the informal sector (i.e., unregistered businesses) is estimated at 1.8–3.0 million people.

These trends have all been accompanied by increases in HIV/AIDS, affecting large clusters of the population. Evidence from AIDS studies in sub-Saharan Africa show that, in general, it is difficult to estimate the impact of HIV/AIDS on economic systems as it is hard to incorporate factors such as losses of female labour, systemic effects, disruption of economic life due to labour losses and loss of organizational capacity. Even so, the negative impact of AIDS on economic indicators will make the economic recovery of Ukraine more difficult.

**Figure 10.**  
**Percentage of**  
**households below**  
**the poverty line in**  
**Ukraine.**

**Source:** State  
Statistical Committee  
of Ukraine



#### iv) Poverty

The issue of HIV/AIDS has strong links with poverty. On the Human Development Index (HDI), Ukraine ranks 74th among 162 countries globally. In 2000, 26.7% of the population were categorized as living in poverty. According to an ILO/UNDP survey<sup>16</sup>, 46.8% of the Ukrainian population identified themselves as “poor”, and an additional 36.9% identified themselves as being “not well off”. However, according to a survey of 8,000 households carried out by the State Statistics Committee in 2000<sup>17</sup>, over 80% of Ukrainians described themselves as poor, saw no chance of escaping poverty in the short term, and expected to be poor in their old age. Only 3% of households in the survey had a per capita income of over 300 Ukrainian hryvnia per month (US\$56)—the suggested minimum required for food, shelter and medical care. Figure 10 shows the increasing percentage of households living beneath the poverty

line during the years 1996–2000. (However, the stark 10% drop in one year—1999–2000—maybe be partly due to only biannual reporting).

The high level of inequality in Ukraine is linked to the non-existence of a middle class. Some occupations, such as teaching, engineering and those in the medical profession, that played an important and stabilizing role in the society, have found themselves among the ‘new poor’, which has damaged the intellectual potential of the society. Had the economy been stable, such people would only be temporarily poor, with the expectation that they would be able to exit from poverty because of their qualifications, and with government assistance for job-creation measures.

High levels of poverty and unemployment often force women to take up sex work. This, together with high-risk sexual behaviour by men who lose their jobs (and, hence, suffer deprivation and disparagement), contributes to HIV transmission. These factors are inter-linked and HIV intervention programmes should be scaled up in poor areas where HIV/AIDS is deepening the already-existing levels of deprivation.

## 2. Impact on specific economic sectors

Economies based on extractive industries or export agriculture are among those most likely to be most severely affected by the epidemic. The aggregate GDP of Ukraine contributed from various sectors can be broken down as follows:

#### i) Core industries

Ukraine’s main traditional sectors since the Soviet collapse have consisted of metallurgical and related sectors: mining and coal industries and agriculture. Ukraine is the world’s fifth-largest producer of iron ore and it possesses the world’s second-largest reserves of magnesium. The country’s most important mineral resource is the Donbass coal basin, with 60% of the former Soviet Union’s coal reserves. The industry has strong political support and a very strong sectoral lobby, including company managers, big business associations, and sectoral trade union leaders. It consists of about 300 enterprises, and about 500,000 workers are employed in, or connected to, the industry. The metallurgical sector is the major exporting industry, accounting for 40% of foreign exchange. Although it has suffered a sharp decline, the coal mining industry still accounts for about 12% of Ukraine’s industrial

<sup>15</sup> Source: Ukraine Country profile 2002, The Economist Intelligence Unit, p. 24.

<sup>16</sup> In 2001, the ILO In-focus Programme on Socio-economic Security carried out the People’s Security Survey and the latest Ukraine Enterprise Labour Flexibility and Security Survey, the results of which were presented at a tripartite conference in Kiev, Ukraine. Available at <http://www.ilo.org/public/english/protection/ses/index.htm>

<sup>17</sup> Ukrainian People’s Security Survey Report, State Statistics Committee, December 2000

Table 4: Disaggregation of GDP in Ukraine

Origin of gross domestic product 2001	% of total GDP
Industry	41.5
Services	35.1
Agriculture	23.4
Total	100

Principal exports 2001	% of total
Non-precious metals	39.3
Machinery and equipment	13.7
Chemicals	10.9
Food, beverages and agricultural products	10.7
Fuel, energy, including ores	9.4

Source: Country Report October 2002, the Economist Intelligence Unit 2002

production. The country's coal industry has the world's highest death rate due to obsolete equipment and inadequate safety standards. Economic restructuring and the closing of obsolete factories have put many people out of work. The mining and steel industries have also recorded high rates of alcohol consumption and drug use, with HIV-infection rates among the highest in the country.

Apart from mining and steel industries, other sectors that are traditionally vulnerable to HIV/AIDS are construction, tourism and transport. In contrast to the transport sector, the tourism and construction sectors in Ukraine are underdeveloped, and local research has been focused on the transport sector. Employees in this sector—long-distance truck drivers, in particular—spend a great deal of time away from home, often for long periods. Many of them have frequent contact with sex workers on the highways, who, in turn, are often injecting drug users as well. Sentinel surveys of female sex workers showed that many women provide sexual services along the main transport routes. In 1999, a sentinel survey among 53 women providing sex services on the motorways of Donetsk City was conducted. The data showed a 13.2% HIV prevalence in this group (with 37.7% of those surveyed syphilis-infected). From the sex workers' clients—mostly long-haul truck drivers—the virus is transmitted to the wider community<sup>18</sup>. It can also be said that some regions could be more susceptible to the epidemic as a consequence of negative socio-economic factors. These are regions that experience economic decline or massive unemployment. The biggest concentration of vulnerable families can be expected in the highly industrialized regions of Ukraine such as Donetsk, Dnipropetrovsk, Luhansk, Zaporizya and Kharkiv.

## ii) Agriculture

Ukraine is home to nearly a third of

the world's highly fertile black soils, called chernozem, and 69.3% of Ukraine is arable land. Over 20% of employment in Ukraine is found in the agricultural sector. After a sharp decline during the 90s, the agricultural sector now shows signs of revival. This sector now accounts for less than 23.4% of GDP, catching up with the pre-crisis years. In early 2000, the state began to implement reforms in the agricultural sector and dismantle collective farms. The disparity between two indicators of the importance of the agricultural sector—the decrease in its share of GDP, and the growth or stability of its share in total employment in the transition period—is explained by the low mobility of labour and/or productivity. The development of the free market sector in post-socialist Ukraine causes, on the one hand, the reduction of employment in the agrarian sector and, on the other, the creation of new opportunities for employment in agribusiness, including food processing, marketing of agricultural products, and infrastructure.

Active government efforts to increase commercial lending to newly privatized farms, this contributed to a 66% increase in the grain harvest in 2001, and 5% growth in 2002. The sector is expected to continue growing in 2003 due to technological improvements and higher labour productivity<sup>19</sup>.

In the rural parts of the country, there has been also an increase in the number of self-employed entrepreneurs and small family businesses. The number of companies and family farms that are being managed by young businessmen is also increasing. Local researchers have observed the spread of HIV infection in this sector—firstly, because higher incomes have allowed these businessmen to purchase expensive narcotic drugs and, secondly, because many of them have an extensive and diverse social life, with multiple sexual partners, including sex workers.

<sup>18</sup> Social and Economic Impact of HIV/AIDS in Ukraine. A re-study by Ukrainian Institute for Social Research, Kiev, 2000.

<sup>19</sup> The Institute for Economic Research and Policy Consulting (Ukraine).



**Table 5: Estimated AIDS cases (high and low predicted scenarios) and number of beds**

Year	AIDS cases/low	Beds for 50%	AIDS cases/high	Beds for 50%
2000	11,850	324	12,927	354
2001	19,999	547	23,648	647
2002	29,055	796	37,370	1,023
2003	37,864	1037	54,113	1,482
2004	46,790	1281	72,355	1,982

**Assumptions:** 1. Of the patients with AIDS, only 50% seek care in the state sector  
2. Each patient is admitted for 20 days only per annum.

**Source:** Social and Economic Impact of HIV/AIDS in Ukraine, Ukrainian Institute of Social Research (with financial support from the Department for International Development of the United Kingdom (DFID) and the British Council).

### iii) Health care

The public health sector was the first to feel the effects of the epidemic. An ILO survey<sup>20</sup> of 8,200 adults found that more than 80% of Ukrainians lack access to adequate health-care services, with some 14% working in conditions described as 'very unsafe'. Moreover, the government still has a repressive approach towards IDUs, clearly indicated by the fact that there is an absence of harm-reduction programmes and mandatory HIV-testing implemented by the government.

The socio-economic transition has caused a deep crisis in the domain of health care. Today, the state funding for the health sector is half of what is needed for the system to function effectively<sup>21</sup>. Over the last three years, GDP has grown, while allocations to health care have decreased; 3.8% of GDP was spent on the health sector in 1998, 3.5% in 1999, and 2.8% in 2000. Health-care structures do not meet the needs of the population—in particular, young people. They have curative, rather than preventive, approaches to health care; they are uniform and do not reach out to marginalized groups; they are judgmental and client-unfriendly; and counselling is lacking in most cases. Moreover, there are often hidden costs for clients: although, officially, health care may be free for all, health-care staff may request payments unofficially<sup>22</sup>. Private medical services cannot compensate for the decrease in state medical services to address the needs of the population under the current economic conditions. Moreover, expenses for medical services (other than state-provided) are not taken into account when salaries are calculated, which makes it impossible for most of the population to afford medical care at all.

Medical tests and health care are free in Ukraine; however, it is difficult to receive specialized medical aid. Thus, when specialized treatment is required, an HIV-infected person must buy medicines him or herself, and must also pay for additional services. Lack

of funding has resulted in a severe lack of properly equipped clinics, qualified medical staff and effective drugs. AIDS treatment is extremely expensive in Ukraine, with the annual treatment course per patient costing about US\$8,000–10,000. An HIV tests costs US\$5, and a DNA test can cost from US\$100 to US\$200.

No system of psychosocial support for HIV-positive adults exists in Ukraine. Despite the fact that the law provides for mandatory pre- and post-test counselling, a qualified counsellor is still an exception. According to various studies conducted in Ukraine, the majority of the population—both adults and children—are fearful and uneasy when they are in contact with HIV-infected people. The same is true for some ill-informed medical staff, which has a negative influence on the quality of care for people living with HIV/AIDS. Table 6 reflects the current gaps in hospital care requirements envisaged as the HIV/AIDS epidemic approaches.

Based on the above-mentioned requirements, Table 6 shows the approximate required spending on AIDS treatment. It should be noted that both these figures give estimates and not actual figures. In both cases (i.e., in the low- and high-AIDS scenarios), there will be an explosive increase in spending on training and re-training of medical staff, testing laboratories, counselling and social services, etc. The demand for AIDS treatment will be an additional burden on the medical services. Following the health-sector reform, the problems resulting from a shortage of hospital beds was compounded by the closure of some hospitals. The projection below seeks to analyse the potential budget expenditures associated with the epidemic.

These figures demonstrate that, even if the situation develops as predicted in the low-AIDS scenario, the cost of HIV/AIDS treatment will grow sharply, requiring more funding throughout the health-care system. By 2010, these costs

<sup>20</sup> The People's Security Survey and the latest Ukraine Enterprise Labour Flexibility and Security Survey, the results of which were presented at a tripartite conference in Kiev, Ukraine. Available at <http://www.ilo.org/public/english/protection/ses/index.htm>

<sup>21</sup> HIV/AIDS Epidemic in Ukraine: the current situation, Kiev City, 2000. p.72.

<sup>22</sup> Nicoletta Confalone, *Avoiding catastrophe: How to deal with HIV/AIDS in Eastern Europe and Central Asia*. Euro health Vol. 7, No. 4, 2001.

**Table 6: Health-care spending due to HIV/AIDS**

	Low AIDS scenario		High AIDS scenario	
	2005	2010	2005	2010
<b>Spending on AIDS treatment (US\$)</b>	11,850	324	12,927	354
<b>% of the Health Ministry's budget spent on dealing with the HIV/AIDS epidemic</b>	19,999	547	23,648	647
<b>Occupancy level (million days per one hospital bed)</b>	29,055	796	37,370	1,023
<b>% of hospital beds needed</b>	37,864	1037	54,113	1,482
<b>2004</b>	46,790	1281	72,355	1,982
<i>Source: Ibid.</i>				

will exceed one-fifth of the total budget of the Health Ministry. If, however, the high AIDS situation becomes a reality, the costs related to the HIV/AIDS epidemic will require almost half of the total budget of the Health Ministry by 2010. Therefore, in the field of health-care alone, the cost of the epidemic may prove to be untenable.

#### iv) The armed forces

Ukraine's conventional armed forces have shrunk by around one-half, from more than 600,000 service personnel in 1992 to just over 300,000 in 2001. Nonetheless, Ukraine still remains one of the largest military forces in Europe (along with Russia and Turkey).

The HIV/AIDS situation in the armed forces in Ukraine is worsening every year. During the epidemiological investigation of HIV cases, it was found out that over 40% of blood donors and 40% of persons examined clinically used injecting drugs before joining the army. Around 80% of HIV-infected military men were identified among blood donors during clinical examinations. This substantiates the suspicion that the real number of HIV-infected military men is much higher than estimated. Military service can contribute to the spread of HIV infection in the armed forces environment due to the high level of harassment, the sharing of razor blades, and the common practice of tattooing. Because armed forces personnel are separated from their spouses, they often frequent sex workers, which puts them at increased risk of HIV infection. The Ukrainian legislation does not foresee HIV testing of those who are subject to military conscription. Therefore, not all potential drug users are identified during the recruitment and HIV infection therefore becomes a real threat to the armed forces. According to the order of the Minister of Defence of Ukraine, HIV-infected conscripts must resign from the armed forces.

HIV-infected officers and contract servicemen have the right to continue their service if they wish to do so and if there are no clinical indications that would force them to resign from the armed forces<sup>23</sup>.

#### v) Sex workers

It is difficult to estimate the number of women involved in the sex industry in Ukraine. According to a sociological survey<sup>24</sup>, the estimated number of female sex workers (FSWs) in Ukraine is about 50,000. This project involved 636 FSWs in 12 large Ukrainian cities. The data obtained indicate that, on average, the number of clients per FSW varies from 1–3 to over 16 a week. A sentinel survey in Odessa (1998) revealed that 2.5% of the 241 women covered by the survey were HIV-positive<sup>25</sup>, which puts the general population at considerable risk of infection.

Within the framework of HIV/STI-prevention projects, behavioural studies among injecting drug users were conducted in 10 Ukrainian cities<sup>26</sup>. The following behaviour factors involved in HIV spread were reported: 44–60% of those studied have casual sexual partners; 68% practise sex without condoms; 6–10% provide sexual services for money or for drugs; and 18–23% have STIs. Behavioural factors that are connected with injecting drug use among FSWs (resulting from interviews with FSWs working on highways and stopping points in Odessa) indicated that 30% regularly have sex with IDUs; 22% never use condoms; and 44% of those who work on the highways use drugs. HIV prevalence in the different regions of Ukraine is irregular. The regions of Dnipropetrovsk, Donetsk, Odessa, Mykolaiv, AR Crimea (i.e. the regions east and south of the country) are most affected<sup>27</sup>.

<sup>23</sup> Response to HIV/AIDS on 2001–2003. HIV/AIDS in Ukraine: Situation Analysis.

<sup>24</sup> The survey was conducted in 1999–2000 by the UISR (Ukrainian Institute for Social Research) jointly with NGOs within the Project 'Establishment of a NGO Network to Support Female Sex Workers'.

<sup>25</sup> HIV/AIDS surveillance in Ukraine (1987–2000), Kiev, 2000, p. 41.

<sup>26</sup> Source: HIV/STD Prevention amongst Female Sex Workers in Odessa City, A report provided by the NGO Faith, Hope, Love, Odessa City, 1999, p. 12.

<sup>27</sup> Social and Economic Impact of HIV/AIDS in Ukraine. A re-study by Ukrainian Institute for Social Research. Kiev, 2001.

### 3. Microeconomic impacts

#### i) Enterprises

HIV/AIDS has two effects on the supply of labour as the epidemic becomes generalized: a decline in absolute numbers, as the death rate increases, and a decline in the productivity of workers who are affected by AIDS. The direct effects are increased sick leave, related diseases, increase in expenditure for recruiting and training of additional labour force. This means that the cost of recruitment, training, and social insurance of the employment market will increase.

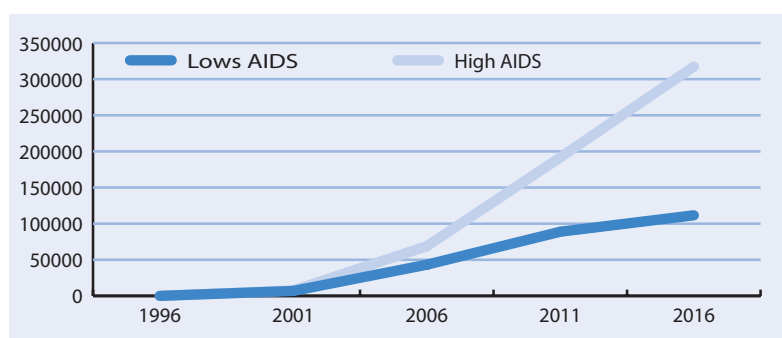
Anecdotal evidence and press documents indicate that businesses have become aware of the number of employees infected in Ukraine and are beginning to commit themselves to implementing special programmes on HIV prevention and care in their firms and factories. More research is under way on this subject through the ILO office in Ukraine. The Global Business Coalition—a rapidly-expanding alliance of over 100 leading international companies worldwide—is also carrying out research projects in Ukraine<sup>28</sup>. The Coalition appointed as its first Ukrainian member the UN Ukraine Goodwill Ambassador on HIV/AIDS, Andrey Medvedev, formerly a famous tennis player and now a businessman. The Coalition aims to demonstrate the vital role that the

#### ii) Households

The illness of a family member will mean less input towards housework and the family budget, as well as increased expenditure for the family on medical services and medicines, and the diversion of other family members from their work or study. The illness of the breadwinner will affect poor families most. In Ukraine, low-income families and the poorer classes are represented by almost all types of households: families with children constitute 43.4% of all poor households; families of retired people constitute 29.1%; and families without breadwinners, 27.6%. Inflation, increases in costs for rent, utilities and consumer products, unemployment and delays in salary payments place an enormous financial burden on families. This could lead to an increase in HIV-infection susceptibility as individuals resort to alcohol and/or drug abuse or other risky behaviour. Efforts at HIV prevention are adversely affected by poor living conditions.

#### iii) Orphans

Children who have been orphaned by AIDS are one of the most serious social consequences of the epidemic. In Ukraine, there are no official data on the numbers of children who have lost one or both of their parents due to AIDS. According to data from the State Committee for Statistics, at the end of 2000 there were 44 orphanages in Ukraine, with a total of 12,254 children. Figure 11 indicates how some of the projections for the number of orphaned children in the year 2011 in Ukraine could reach 88,877 in the low-AIDS scenario and 191,804 in the high AIDS-scenario. This would result in a serious additional load on the system of social welfare in Ukraine. It is also predicted that the older, retired population will have to play an increasing role in caring for and supporting orphaned grandchildren. Care and support of orphans are important to policy planning since, if left on their own, these children are likely to turn to drugs, alcohol, risky sexual behaviour and criminal activities in order to survive. Ensuring that these orphans survive and, in turn, become productive members of the population, is crucial to any AIDS policy. For this to happen, they would need to be provided with the requisite technical skills and education to prepare them for the current labour market conditions.



**Figure 11**  
**Children orphaned by AIDS.**

Source: Ukrainian Institute of Social Research

business sector can play in global and local efforts to reverse the HIV/AIDS epidemic. It recommends that the business sector respond to HIV/AIDS in the following three ways:

- by implementing HIV-prevention-and-care programmes in the workplace, based on the ILO Code of Practice;
- by applying the core business strengths of innovation and efficiency to improve the scope and effectiveness of AIDS programmes; and
- by promoting leadership and advocacy among business leaders, and lobbying for greater action by governments and civil society.

<sup>28</sup> See, for example, press release on: <http://www.un.kiev.ua/en/pressroom/news/233/>

# C. Policy options

## 1. Response to the HIV/AIDS epidemic

### i) National response

Ukraine is a regional leader in responding to the AIDS crisis and there is growing political will to acknowledge and address the issue. In 2001, the Cabinet adopted the Fourth Programme of HIV/AIDS Prevention (since Independence in 1991) for 2001–2003, featuring HIV/AIDS as one of the government's priorities in the domain of social development and health care and ensuring a multisectoral approach to the implementation of prevention measures.

Previously, other programmes had laid down a strategy for prevention. These resulted in the creation of domestic manufacturing of disposable syringes, other medical instruments and latex goods. At the same time, scientific research into AIDS-related problems was initiated and preventive interventions were undertaken among high-risk groups with the cooperation of about 100 civil society organizations and international organizations. A new strategy of HIV testing has been developed in order to improve the current system of monitoring of the epidemiological situation in the country, providing voluntary counselling and testing and improved medical services for HIV patients.

At present, the following two institutions are involved in the response to HIV/AIDS in Ukraine: the Department of Socially Dangerous Diseases and AIDS, in the Health Ministry; and the Ukrainian AIDS Centre at the Gromashevskiy Research Institute on Epidemiology and Infectious Diseases. The Government of Ukraine has created an Intersectoral/Interministerial Committee to steer the national programme.

Apart from the National Programme on HIV Prevention, there are other programmes related to the HIV/AIDS epidemic, as follows:

**1. Programme for Implementation of Poverty Alleviation for 2002–2009.** Its objective is to reduce poverty through social security reforms and the introduction of medical insurance schemes, and other measures complementary to the national HIV-prevention programme.

**2. The Nation's Health (2002–2011)** is a multisectoral comprehensive programme whose goal is the protection of health from a human rights perspective. The programme contains measures to prevent STIs and to supply disposable instruments to medical institutions.

**3. The Programme on Development of Donorship of Blood (2002–2007)** and its components stipulate measures for the safety of donor blood, including with respect to HIV infection.

**4. The national Reproductive Health programme (2001–2005)** has a dual objective: STI prevention and prevention of mother-to-child HIV transmission.

**5. The regional Programme of Urgent Response** launched by members of the Commonwealth of Independent States. This was endorsed by the Heads of Governments at the CIS Summit in Moscow in May 2002, and offers an important platform for progress at regional and national levels.

6. The Cabinet of Ministers of Ukraine has approved the strategy of governmental actions aimed at preventing the spread of HIV in Ukraine till 2011, and the National Programme on HIV prevention, care and treatment for 2004–2008. It also issued an order on Approval of Measures related to an awareness-raising campaign on HIV prevention for the year 2004.

### ii) Legislative reforms

In September 2003, the Government of Ukraine requested the ILO to examine a Draft Labour Code. The Draft Code was prepared by a team of national labour law experts, who benefited from the logistic support of the ILO, within the framework of a technical Cooperation project entitled Ukraine: Promoting Fundamental Principles and Rights at Work. Article 3 of the Draft Code prohibits explicitly any discrimination in the sphere of labour based on HIV/AIDS, real or perceived. The Draft Code was introduced before the Parliament at the end of 2003 and the next debate is expected in early 2005.

### iii) International response

There are many international organizations involved in HIV-prevention activities in Ukraine, with the following projects under way:



- **United Nations joint programmes 'ACT NOW'**<sup>29</sup> (on-going): a new UN Country Team (UNCT) programme implementing the comprehensive National Programme on Prevention of HIV/AIDS to impact the HIV-infection curve in Ukraine and thwart a full-scale epidemic. UNAIDS brings together nine UN organizations: UNICEF, WFP, UNDP, UNFPA, UNDCP, ILO, UNESCO, WHO and the World Bank to strengthen support for an expanded response to the epidemic.
- UNAIDS/UNICEF (2002): The 'Development of Management, Monitoring and Evaluation System' programme is part of the National Programme on HIV/AIDS Prevention based on second-generation HIV/AIDS surveillance. The aim of the project is to strengthen the monitoring and evaluation system of the National HIV/AIDS prevention programme as well as HIV/AIDS epidemic control.
- The Applied Human Rights Project (UNDP) (2002–05) focuses on empowering high-risk groups living with HIV/AIDS.
- The establishment of the WHO-GTZ BACKUP initiative, which was started in March 2004 for the provision of care and treatment facilities.
- The Global Fund to Fight AIDS, Tuberculosis and Malaria, with the Ministry of Health, UNDP and the National Foundation for HIV/AIDS as its principal recipients, is in the process of formulating its HIV/AIDS programme. This includes:
  - o UNDP: Overcoming the HIV/AIDS Epidemic in Ukraine – Reducing the risk of HIV infection among vulnerable groups. The project target groups are: IDUs, sex workers, prisoners and the armed forces. Their activities include ensuring access to antiretroviral drugs and treatment of opportunistic infections for PLWHA.
  - o Ministry of Health project: Ensures treatment, care and support for PLWHA to reduce morbidity and mortality rates in Ukraine and to improve the living standards of those infected.
  - o National Foundation for HIV/AIDS project aims to overcome the HIV/AIDS epidemic through the information dissemination and education.
- Mass media campaigns aimed at increasing AIDS awareness have been facilitated by the Presidential declaration of 2002 as 'The year of the fight against AIDS'.
- The SMART Work project 2003 (funded by USDOL—the US Department of Labor), operating primarily in Kiev and Odessa, offers assistance in establishing effective HIV-prevention, education, care and support

programmes, and appropriate workplace policies that guarantee human rights.

- UNDP has pioneered a project on media participation by involving journalists in HIV prevention.
- In L'viv, the NGO 'All together' works in the city centre among sex workers, distributing condoms and information about safer sex and STIs.
- UNAIDS and UNFPA, with the help of the Ministry of Defence, have introduced another education programme to target high-risk groups beginning with 20,000 conscripts in the armed forces.
- The harm-reduction project of the Blagodiynist Foundation in Mikolayiv provided IDUs with HIV/AIDS-related information and material including 23,000 condoms (2001).
- UNICEF is carrying out prevention-of-mother-to-child-transmission initiatives in many countries in Asia and Africa.

This list is not exhaustive and more projects are being developed every day.

#### iv) ILO projects in the workplace

The ILO has been active in Ukraine, together with the Ministry of Labour and Social Affairs and the social partners. The programme follows up the Resolution concerning HIV/AIDS and the world of work adopted at the International Labour Conference in June 2000<sup>30</sup>. The Resolution specifically recognizes that the AIDS epidemic has the most severe impact on vulnerable members of the community, and contributes to worsening gender inequalities. The ILO, together with its partners, is currently implementing the following national projects in Ukraine:

- a) Project UKR/96/006, UKR/99/006-007: Introduction of flexible vocational training programmes for the unemployed (Government of Ukraine/UNDP/ILO).
- b) Project UKR/01/51M/USA: Ukraine: Promoting Fundamental Principles and Rights at Work (ILO/US Department of Labor).
- c) Project UKR/01/P50/USA: Prevention and Elimination of Worst Forms of Child Labour (ILO/US Department of Labor).

#### Catalytic activities in the world of work:

This proposal was developed by the ILO and the GTZ in accordance with national priorities and the UNCT joint programme ACT NOW, and serves as an entry point to leverage further donor funding, to initiate a strategic and extensive awareness and mobilization campaign, supported by advocacy, training and technical assistance. The aim of the

<sup>29</sup> Funded by the UNAIDS Programme Acceleration Funds (PAFs).

<sup>30</sup> Resolution concerning HIV/AIDS and the world of work, International Labour Conference, 88th Session, June 2000.

programme is to increase awareness of HIV/AIDS-related issues in the workplace among key decision-makers.

The programme has the following objectives (2003–2004):

- to carry out an in-depth study in Zakarpatska Oblast on HIV and labour, which will be used as the basis for developing the framework and systems for appropriate data collection, analysis and use in measuring and monitoring the impact of HIV on the world of work;
- to develop a multisectoral regional framework on HIV/AIDS;
- to initiate the process of incorporating HIV/AIDS into labour legislation and bargaining for effective HIV-prevention programmes and support for HIV-positive workers; and
- to develop two training seminars in Uzhgorod (Transcarpathian region) and Kyiv by June 2004.

This is the first time that such a study on HIV and labour has been carried out and it will help in developing sectoral and regional plans, including HIV provisions in collective agreements, and application of national policy at regional and enterprise level. The programme will build a results-oriented coalition of government officials of key sectors and leaders of employers' and workers' associations at intrasectoral seminars and workshops.

The programme will be implemented by the Ministry of Labour and Social Policy of Ukraine, the Ministry of Transport of Ukraine, the Ministry of Health of Ukraine, the State Committee on Youth and Family Affairs and State Tourism Administration, the Federation of Employers of Ukraine, the Federation of Trade Unions of Ukraine, the Federation of Water Transport and Crewing Trade Unions of Ukraine, the NGO ARMADA, and associations of people living with HIV/AIDS. The project is in line with the PAF criteria of national strategic planning, including planning and programming at the decentralized levels (state, provincial, district).

Other criteria applied are the development of innovative activities, including activities to ensure follow-up and implementation of the UNGASS Declaration of Commitment on HIV/AIDS (agreed by 189 Member States at the United Nations General Assembly Special Session on HIV/AIDS in June 2001), and activities that address areas and issues that are sensitive and/or neglected but are key determinants of HIV/AIDS in specific contexts. The ILO/AIDS-GTZ project provides ongoing technical and financial assistance to these activities.

# D. Recommendations

## 1. General

It is clear from the preceding section that, even though attrition due to HIV/AIDS is concentrated in the active labour force, specific activities in the world of work have not yet been undertaken. The Ministry of Labour and Social Protection is not yet represented among the executive institutions working on HIV/AIDS. Given the fact that the highest prevalence in Ukraine is in industrial regions, the workplace is an appropriate platform to launch any activity to tackle HIV/AIDS. It also provides a venue for awareness-building, education programmes and provision of care and support for employees. HIV/AIDS should be an integral part of the organizational safety and health (OSH) training. It is an entry point for any intervention to be diffused into key target groups of the labour market and this is where ILO's role in coordinating these objectives becomes prominent. Formulation of workplace policies to protect HIV-infected employees is a principal aspect of economic policy for development.

## 2. The response of ILO's constituents and partners

The above-mentioned issues require effective coordination and partnership between the government and non-governmental and private sectors. In this regard, the most recent developments include the following:

**Global Compact policy dialogue on HIV/AIDS and the workplace response** (ILO, 12–13 May 2003) to encourage collaboration between the UN and the private sector, at which the International Organisation of Employers (IOE) and the International Confederation of Free Trade Unions (ICFTU) issued a historic joint statement committing themselves to collaborative action on HIV/AIDS in the workplace.

**International symposium on HIV/AIDS workplace policies and programmes in developing countries** (GTZ House, Berlin, 1–3 June 2003). This event was jointly organized and cosponsored by Georgetown University, the World Bank, GTZ and the ILO in a continued effort to increase responsible leadership and share best practices on HIV/AIDS workplace policies and programmes.

**UNGASS meeting on HIV/AIDS** (22 September 2003, UN, New York): as a follow-up to the United Nations General Assembly Special Session on HIV/AIDS (June 2001), at which the ILO organized a briefing on HIV/AIDS and the world of work.

**US-Russia Business and Labour Summit on AIDS** (25 September 2003, New York) organized in response to the growing economic and security threat of AIDS to Russia and the surrounding region. Transatlantic Partners against AIDS, US-Russia Business Coalition on HIV/AIDS, and the ILO convened a high-level summit meeting of corporate and labour leaders from both countries to engage in efforts to address the epidemic.

These efforts to foster workplace prevention programmes represent opportunities for ILO/AIDS-GTZ support. The objective of the ILO/AIDS-GTZ project is the facilitation between trade unions and businesses and collaboration among ILO constituents (governments and employers' and workers' organizations) in their efforts to fight HIV/AIDS. The development of workplace policies and programmes on HIV/AIDS has already been initiated by the ILO in many countries. The **ILO Code of Practice on HIV/AIDS in the world of work**, developed and approved by the International Labour Organization in June 2001, provides a coherent framework within which to encourage such efforts. In addition, the ILO has a well-established record of project management and technical cooperation, with particular expertise in education and training, experience in promoting health and safety at work, and substantial specialist expertise in sectors such as social security and human resource development. These skills can be utilized in creating the fundamental building blocks for development projects with concerned ministries.

**This paper offers the following recommendations for developing a response to HIV/AIDS in the workplace in Ukraine:**

1. The response to the epidemic should be multi-pronged and should include implementation of an effective prevention programme at the national, oblast, city and township levels.

2. Any response should include employers' and worker's organizations, and should strengthen their competence for active involvement in workplace programmes, training and other activities.
3. In Ukraine, the legislation does not deal directly with HIV/AIDS in the workplace, but rather includes it as part of the clause on provision of social protection to employees. HIV/AIDS needs to be specified in the legislation in accordance with the ILO Code of Practice.
4. Another problem is the insufficient legislation on, and implementation of, OSH in general. Under the old Soviet Union, integrated OSH inspection, information and research covered all republics. The trade unions were charged with the inspection. The break-up of the USSR resulted in the demise of national OSH centres, and insufficiently-equipped inspection systems. This situation requires concrete changes in Ukrainian labour laws.
5. The starting point for the programme would be an assessment of changes in the availability of key skills and occupations; followed by a review of training capacity relative to the needs of specific sectors and proposals for system reform, so as to ensure that key labour potential is retained for meeting national priorities (such as health, education etc.).
6. Any programme intervention should reach out to the informal sector and medium-sized enterprises. In most of these firms, initiatives such as training in the management of business risks posed by the epidemic would need to be provided, as would training in product design and diversification, provision of HIV/AIDS medical care and awareness-building, facilitation of access to other markets, and support to institutions providing credit to enterprises.
7. There is a need for urgent education and training of medical staff and other officials dealing with HIV/AIDS issues, as it was seen that there are no reinforcement mechanisms in the workplace providing employees with protection against the epidemic.
8. Discrimination in employment due to HIV status, including refusal to hire, and dismissal, are issues that must be addressed and resolved as soon as possible.



# Bibliography

---

- AIDS Infothèque (May 2000) 'Migration and HIV/AIDS in Europe', site accessible at: <http://www.asylumsupport.info/publications/iom/hiveurope.pdf>
- Barnett T, Whiteside A (2000) *Guidelines for studies of the social and economic impact of HIV/AIDS*. UNAIDS, Geneva.
- Confalone N (2001) *Avoiding catastrophe: How to deal with HIV/AIDS in Eastern Europe and Central Asia*, Euro health Vol. 7, No. 4.
- Decree of the Cabinet of Ministers of Ukraine N1051 (10 June 1998). 'Medical care and sickness benefit'.
- Economist Intelligence Unit (2002) Ukraine, Country profile 2002.
- Economist Intelligence Unit (2002) Ukraine, Country report, October 2002.
- European Centre for the Epidemiological Monitoring of AIDS. *HIV/AIDS surveillance in Europe* (end 2001), No.66. The State Statistics Committee of Ukraine (data available until 1 January 2001).
- Faith, Hope, Love (an NGO) (1999) *HIV/STD Prevention amongst Female Sex Workers in Odessa City*, Odessa.
- Government of Ukraine (2000) Strategy of National Response to the Epidemic of HIV/AIDS in 2001–2003, *HIV/AIDS epidemic in Ukraine: an assessment of the current situation*. Kiev, Ukraine.
- ILO (2001) HIV/AIDS: Social and economic consequences in countries of the Commonwealth of Independent States. Indicators for the world of work. Report on a tripartite seminar. Moscow, 10-12 December 2001.
- ILO In-focus Programme on Socio-economic Security (2001-2002) People's Security Survey and the latest Ukraine Enterprise Labour Flexibility and Security Survey, the results of which were presented at a tripartite conference in Kiev, Ukraine. Available at <http://www.ilo.org/public/english/protection/ses/index.htm>
- ILO (2002) Resolution concerning HIV/AIDS and the World of Work, International Labour Conference, 88th Session.
- Kiev Research Institute for Epidemiology of infectious diseases (1999) *HIV Infection in Ukraine*, Kiev City.
- Ministry of Health, Ukraine (2000) HIV/AIDS surveillance in Ukraine (1987-2000), Kiev, p.41.
- Scherbinska M (2001) *AIDS: problems and perspectives. HIV Infection: the variety of aspects*, Kiev.
- Steshenko V et al. (1999) *Demographic perspectives of Ukraine by 2026*. The Institute of Economics at the National Academy of Science of Ukraine, Kiev.
- The UN Country Team in Ukraine (2002) *United Nations system integrated plan on HIV/AIDS*. Kiev.
- UISR (Ukrainian Institute for Social Research) and Ukrainian youth social centre service (2001) Survey conducted among 638 IDUs in six Ukrainian cities.
- Ukrainian Institute of Social Research (2001) *The social and economic impact of HIV/AIDS in Ukraine*, a re-study, Kiev.
- Ukrainian Institute of Social Research (1997) *Youth of Ukraine: values and cultural demands*, Kiev City.
- Ukrainian Institute of Social Research (2000). *NGOs in HIV/AIDS Prevention among Female Sex Workers*, project report, Kiev.
- Ukrainian National AIDS Centre, Ministry of Health Ukraine (2001) Information bulletin No. 21.
- Ukrainian People's Security Survey Report, State Statistics Committee, December 2000.
- UNAIDS (1997) *The Social and Demographic Impact of HIV/AIDS in Ukraine*. A project financed by the British Council.
- UNAIDS/WHO (2002) Epidemiological Fact Sheets on HIV/AIDS and Sexually Transmitted Infections. 2002 update for Ukraine. UNAIDS/WHO, Geneva.
- UNAIDS/WHO (2002) *AIDS Epidemic Update* (December 2002), UNAIDS/WHO, Geneva.
- UNICEF (1999) *European Values Study Surveys*, Kiev. The survey was conducted as part of the UNICEF Project 'HIV/AIDS prevention among young people using intravenous drugs'.
- UNICEF (2002) *Key advocacy messages on HIV/AIDS for CEE/CIS and the Baltics*, UNICEF.
- United Nations Country Team in Ukraine (2001): *Common Country Assessment*.
- Whiteside A, Tony Barnett (1997) *HIV/AIDS: Socio-economic impacts in Ukraine*. Economic Research Unit, University of Natal, Durban and School of Development Studies, University of East Anglia, Norwich.



**ILOAIDS**

International Labour Office  
4, route des Morillons  
CH-1211 Geneva 22  
Switzerland.  
E-mail: [iloaids@ilo.org](mailto:iloaids@ilo.org)  
Website: [www.ilo.org/aids](http://www.ilo.org/aids)