



# WHO

REGIONAL OFFICE FOR EUROPE

---

EUR/ICP/GPA 049(C)  
ENGLISH ONLY  
UNEDITED

44598 ✓

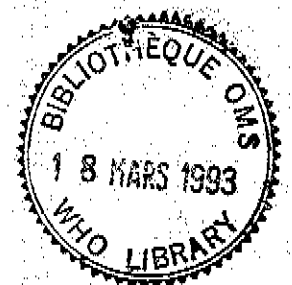
## *AIDS AMONG DRUG USERS IN EUROPE*

Second Review

SCHERFIGSVEJ 8  
DK-2100 COPENHAGEN Ø  
DENMARK

TEL.: (45) 39 17 17 17  
TELEFAX: (45) 31 18 11 20  
TELEX: 15348

1993



EUR/HFA TARGET 4

## **TARGET 4**

### **REDUCING CHRONIC DISEASE**

*By the year 2000, there should be a sustained and continuing reduction in morbidity and disability due to chronic disease in the Region.*

## **ABSTRACT**

This is the second review of developments concerning AIDS among drug users in Europe. The present document presents the results of a study undertaken by the WHO Regional Office for Europe (Andrea Kirsh, Consultant, Abuse of Psychoactive Drugs and Cees Goos, Regional Adviser, Abuse of Psychoactive Drugs) together with Michael Gossop, Head of Research, Drug Dependence Clinical Research and Treatment Unit, Bethlem Hospital, London, United Kingdom.

### **Keywords**

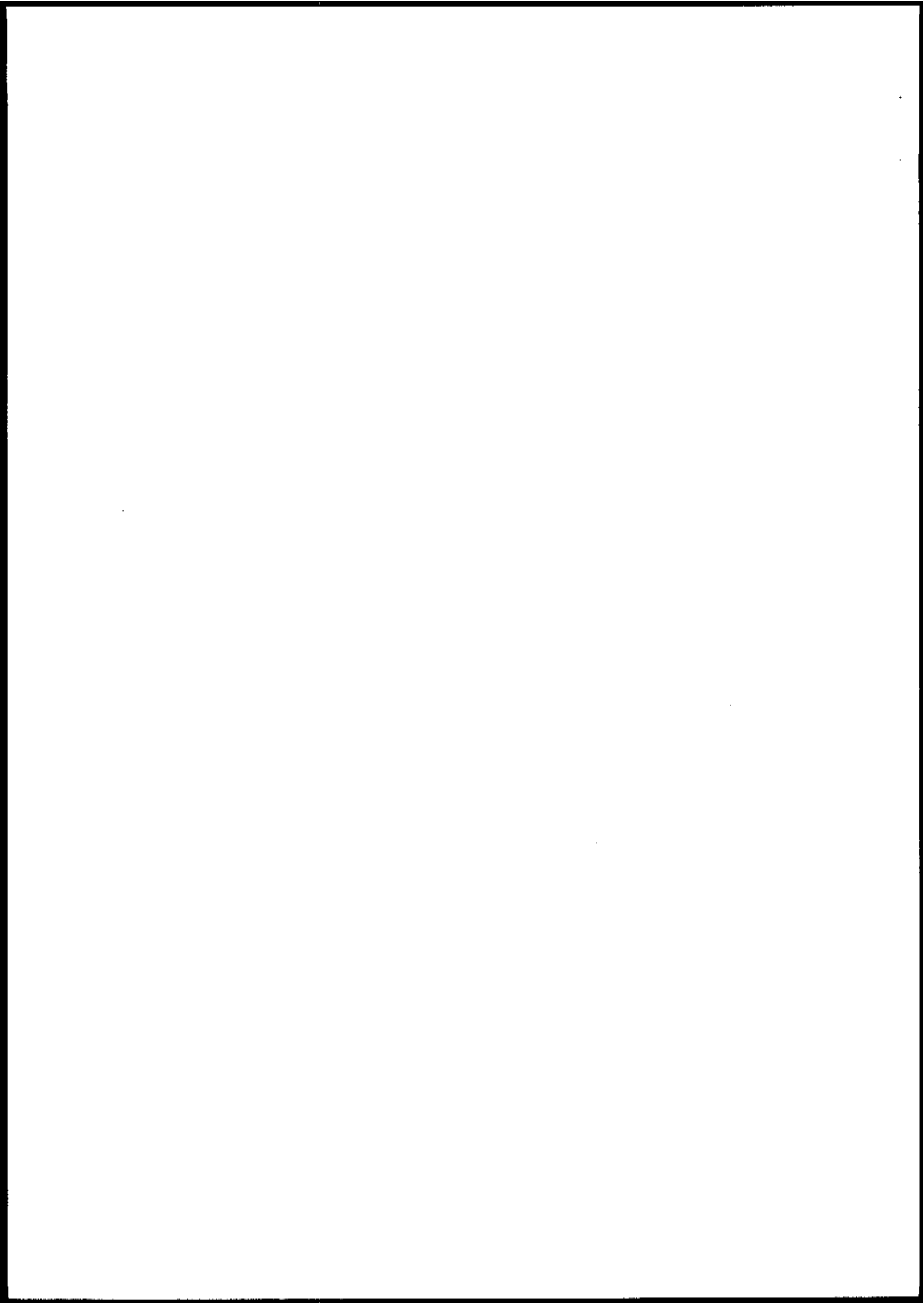
ACQUIRED IMMUNODEFICIENCY SYNDROME  
HIV INFECTIONS – prevent/control  
SUBSTANCE ABUSE  
HEALTH OCCUPATIONS – education  
EUR

---

All rights in this document are reserved by the WHO Regional Office for Europe. The document may nevertheless be freely reviewed, abstracted, reproduced or translated, but not for sale or for use in conjunction with commercial purposes. Any views expressed by named authors are solely the responsibility of those authors. The Regional Office would appreciate receiving three copies of any translation.

## CONTENTS

	<u>page</u>
Introduction . . . . .	1
Methodology . . . . .	2
Drug abuse trends in Europe . . . . .	2
HIV-seropositivity among drug users . . . . .	6
AIDS cases among drug users . . . . .	8
Public health measures taken in the various countries . . . . .	9
Outreach and educational programmes . . . . .	10
Availability of needles and syringes . . . . .	13
Substitution therapy programmes . . . . .	17
Prostitutes as a special AIDS/drug risk group . . . . .	20
Prison inmates . . . . .	22
Training for health care professionals treating drug users and AIDS patients . . . . .	23
Conclusions . . . . .	25
References . . . . .	26



## Introduction

All countries throughout the world have been affected by the advent of HIV and AIDS, and since HIV and AIDS were first identified it has been known that drug injectors are at high risk of acquiring and transmitting HIV infection through the sharing of needles and syringes and through some other injecting practices. As a result, there is an important need to obtain information about drug taking and HIV. This report looks at drug abuse and AIDS in the countries of Europe.

Europe is a large and vastly complex area. Not surprisingly, the national circumstances of the European countries differ in many respects with regard to the abuse of drugs. Such differences are always interesting. In many cases they are also of considerable importance to the development of policies and practices to prevent and control drug problems and their health consequences.

As of 31 March 1992, a cumulative total of 71 570 AIDS cases had been reported by 31 countries of the European Region of the World Health Organization. Of these, 33.7 per cent are injecting drug users. This compares with an HIV prevalence rate of 41.3 per cent among homosexual and bisexual men.

Drug abuse has been linked to HIV infection and to AIDS since it first appeared in Europe and it has been an increasingly important factor in the spread of AIDS in the countries of the European region. Of all AIDS cases reported in 1984, 6.6 per cent were identified among drug injectors. In 1986, this percentage had increased to 20.6; in 1988, it had gone up to 34.5, reaching its peak in 1991 of 38.2 per cent.

Several countries in Europe also reported that a substantial proportion (and in some cases the majority) of all paediatric cases of AIDS are known to be related to drug abuse.

Many countries in Europe have now established special public health measures aimed at reducing the spread of AIDS among drug users. These include:

- educational and outreach programmes;
- ensuring the availability of sterile needles and syringes;
- establishing treatment approaches which cater for immediate needs of drug users including substitution programmes;
- special programmes for high risk subgroups of drug users as prostitutes and prison inmates and
- training programmes for health and welfare professionals, particularly those who work with drug users.

This paper reviews the most recent data on drug abuse and AIDS in the European Region and summarizes the actions which have been taken in the various countries.

#### Methodology

The first review of the situation in Europe regarding AIDS among drug users was produced in 1990 and issued as a EURO document in 1991. This second update on AIDS among drug users was produced by the Regional Office for Europe of the World Health Organization and most of the information in the report is based on information provided directly by collaborators in the various Member States. Most of the collaborators had already participated in the development of the first review, others had been identified later often with assistance of the ministries of health concerned. A letter was sent to each collaborator requesting information on each of the subject areas following this review. In this way direct information was obtained from 23 countries. Some publications were also consulted. We are most indebted to the individual collaborators in the countries without whom this review would not have been possible.

#### Drug abuse trends in Europe

The information collected in this survey showed differences as well as similarities in national situations. Some of these national differences are obvious and relate to numbers of drug users and types of drugs used. For instance, the number of opiate users is higher in Italy, Spain and the U.K. than in the Scandinavian countries. Patterns of abuse also differ. The abuse of stimulants appears to be a more common pattern of illicit drug abuse in the Scandinavian countries.

However, national differences extend well beyond these factors and include patterns of importation and distribution, history of drug problems and history of preventive responses, and development of treatment services. Many of these factors are themselves powerfully influenced by other socio-economic determinants including the available national economic and manpower resources of the country. Such factors may have powerful implications since the opportunities for responding to the problems of drug abuse and AIDS among the richer countries are clearly different from the restricted options available to the less well resourced countries.

From the information in the first European Summary on Drug Abuse (ESDA) report, and that received on the occasion of this exercise, it is clear that there are major differences between countries. However, there are also many similarities with respect to the type of drugs and route of use, the prevalence of drug abuse, and the current trends.

In the majority of the countries the prevalence of many types of drug abuse is stable or increasing. Whilst in some of the western and northern European countries a tendency towards levelling off is reported, worrying increases have been reported in many of the southern, central and eastern European countries. Drug problems are most often concentrated within urban areas, usually in large cities. In some countries (but not all) drug problems are also associated with urban deprivation including poor housing and high unemployment.

With respect to the type of drugs used, heroin or similar opiates continue to be regarded as the most serious problem in most countries. Throughout most of the western and northern European countries, reports indicate that heroin is the primary drug leading to problems. Certainly, most treatment services are geared to the needs for opiate users and heroin users are the group most frequently seen in treatment services.

Injecting is still the major route of heroin use in many countries (as in Italy and Spain). However, other routes of administration are becoming increasingly prevalent. A recent study conducted in the U.K. showed that a change in patterns of heroin use with virtually all new users of heroin in the London area first taking this drug by "chasing the dragon" (inhaling heroin vapours after heating the drug on tinfoil). This method of taking heroin is not simply a first stage of use which leads on to injecting and many users continue to be chasers for many years with some never making a transition to injecting. Similar patterns of heroin smoking are also found in other countries. In Israel the majority of heroin users smoke the drug, and heroin smoking is also well established and increasingly common in the Netherlands. Opiates are also mainly used by smoking in parts of the CIS (e.g. Moldova). In Austria, many opiate users take these drugs by methods other than injection (less than a third of the opiates consumed are injected).

Route of administration has obvious and direct relevance to HIV risk, especially where injecting patterns are linked to the sharing of injecting equipment. It was precisely the prevalence of injecting and needle sharing that produced the rapid increase in rates of HIV infection in parts of Scotland during the mid-1980's. In Israel, among those opiate users who do inject, 50 per cent are reported to share their injecting equipment. High injecting rates have also been reported from countries such as Ireland, although at the same time a marked decrease in the numbers of those who ever share their injecting equipment has been reported for this country.

Several special forms of opiate abuse have been reported in eastern European countries. In Poland there have been problems with a local heroin preparation called "kompot" or "Polish heroin". This locally grown product is used by injection in circumstances in which there are clear opportunities for HIV infection. A similar preparation

('Kopnar') is prepared and injected in parts of the CIS (e.g. Kazakhstan).

In the Czech Republic, and primarily in Prague where drug abuse is concentrated, opiate abuse typically involves home-made codeine preparations extracted from pharmaceutical preparations containing codeine. One of these extracts is known as 'brown' and is reported to have effects similar to heroin. About 30% of users take the drug by injection and unsterile and unsafe HIV practices are believed to be common among this group.

Home-made opium preparations have also been noted in Hungary. Sometimes this is consumed orally as an opium poppy tea; sometimes an opium extract is prepared for injection.

Considerable concern has been expressed about the use of cocaine and about its possible association with HIV infection. Reports on increasing levels of cocaine use are coming from many countries in western and southern Europe, but also from central European countries like Austria. However, there is a general discrepancy between reported national increases in cocaine use and in the numbers of cocaine users attending treatment centres. Several surveys in Spain indicate that although cocaine and amphetamines are more widely used than heroin, heroin causes a disproportionate number of adverse consequences (including hospital emergencies, dependence, communicable diseases, and death).

In France, the proportion of cocaine users in treatment centres remained stable at 2 per cent over the last two years. Similarly, in a 1990 study in the U.K., it was found that although about one third of the patients at drug dependence treatment centres reported recent use of cocaine, virtually none of them (about 1%) reported cocaine as their primary drug or indicated that they had any cocaine problems requiring treatment. Similar results are reported from Italy where only about 1% of treatment cases involve clinical problems with cocaine. Cocaine may be used by various different routes of administration (including smoking, sniffing, and by injection) and route of administration may have implications for the development of dependence and exposure to HIV risk.

Concern has been expressed both about the possible links between cocaine use (including crack smoking) and high risk sexual behaviour as well as the links between cocaine injection and HIV risk. Cocaine injection has been reported in many European countries. Cocaine is often injected by drug injectors whose primary drug is heroin (as in Italy, the Netherlands and the U.K.). Cocaine is also frequently injected in Malta. There are broad trends towards increased use of crack in many countries, though this is still relatively infrequent in the European region and there is little evidence that it has led to the sort of problems associated with crack smoking in the United States.

Other stimulants are also used in many countries. The use of amphetamines is reported to be popular among drug users in the Scandinavian countries and also other countries, including Luxembourg and the United Kingdom. Amphetamine is also used by injection in some areas and carries the same HIV risks that are associated with the injection of any other drug. For many drug users, amphetamine may be the first drug that is used by injection (this has been reported, for instance, among drug users in Norway), and it may therefore have special significance as an HIV risk.

In most European countries a wide range of illegal drugs are being used. It is not the purpose of this report to attempt a comprehensive description of these complex patterns. However, among the other forms of drug abuse that were reported by national informants, the responses indicate that cannabis is relatively widely used. In most of the western European countries cannabis is the most widely used of the illegal drugs. Prior to the recent upheavals increasing rates of cannabis use were being observed in Croatia. Similar increases were also reported in Slovenia and Malta. Some use of LSD has been reported in some countries (Iceland, Croatia, Malta and the United Kingdom). In several countries (Belgium, Finland and Germany, for example), the use of psychoactive pharmaceutical drugs is regarded as a major drug abuse problem. In Belgium and Finland, the use of illicit drugs seems to be a marginal problem only at this time. Precise data about the misuse of solvents are largely lacking from the country reports. Yet, this is regarded to be perhaps the bulk of the drug abuse problem today in many of the eastern European countries. Anecdotal reports from Romania, for example, indicate that this is widespread, particularly among youngsters in the underprivileged classes, but also in a country like Spain glue sniffing seems to be a major problem. These forms of drug abuse may lead to several different problems both for the individual user and for society; however, in themselves, they are seldom directly related to the risks of acquiring or transmitting HIV infection.

In the majority of the countries on which data was collected, various estimates of the numbers of drug users in the country exist and may be widely accepted. Such estimates often have more or less official status. The figures which are reported here are not directly comparable since the definitions for cases differ from country to country; also, the sources for data collection are entirely different. In addition, some of these "accepted" figures are themselves based upon local "gestimates" or upon data collected by less than rigorous methods. With these cautionary remarks in mind the following prevalence figures are quoted:

Austria	18 389 registered drug users in 1989;
Belgium	.....;
CIS	marked variation between states; most cases in the Russian Federation where prevalence of drug addiction has doubled between 1985-1991 -

	150,000-300,000 addicts mainly using home-made opiates;
Croatia	4000 opiate users;
Czech Republic	official statistics show 6500 dependent drug users (3500 in Prague); the true number is estimated to be five to fifteen times higher;
Finland	3000 cannabis users; 2000 users of other illicit drugs;
France	estimated 100 000 drug users in 1990;
Germany	60 000-80 000 drug addicts;
Iceland	250-300 injecting drug users;
Ireland	2000 drug users in the greater Dublin area attending treatment services in 1990;
Italy	100,000-200,000 heroin users estimated in 1988; a 1989 survey found that 60,000 drug abusers had started at least one treatment with the State health facilities and 33,000 were in treatment on the day of the survey;
Lithuania	495 registered cases of drug dependence of which 90 per cent use home-made heroin;
Luxembourg	1200-1500 estimated drug addicts;
Malta	642 registered drug users (mostly heroin);
Norway	estimate of 4000-5000 injecting drug users;
Serbia and Montenegro	2462 heroin users treated in 1991 in the national centre in Belgrade;
Slovenia	current estimate of 200-4000 injecting drug heroin users;
Spain	no numbers given; prevalence surveys of drug use within last 30 days indicate that cannabis, amphetamines, cocaine tranquilisers and hypnotics tend to be more widely used than opiates;
United Kingdom	75,000 - 150 000 heroin users.

Overall there is a greater prevalence of illicit drug use among men. Figures from the United Kingdom indicate that there are between two and four times as many male users of heroin (depending upon sampling procedures), while approximately equal numbers of men and women use cocaine. In Ireland, just over three times as many men as women have been treated at the National Drug Treatment Centre. In Luxembourg, there are reportedly twice as many male drug users. In Malta, among registered addicts, there are five times as many men as women. Only in Israel, drug use seems to be equally distributed among men and women. Some countries expressed concern about trends towards increased drug abuse problems by women (e.g. Czech republic).

#### HIV-seropositivity among drug users.

There is marked variation in estimates of national HIV seroprevalence rates throughout Europe. HIV seroprevalence rates among drug users are estimated to be low in some European countries. These include Greece (0.6%), Croatia (1-2%), Finland (3.4%), Luxembourg (3.8%), Belgium (4.5-8.5%) and Norway (5-8%). Many eastern European countries have reported only a few AIDS cases among

drug users. In the Russian Federation, for instance, thousands of drug abusers were tested for HIV antibodies in 1991 and no positive cases were found; similarly, as of October 1990 no cases of HIV or AIDS had been detected among more than one thousand drug addicts tested in the Czech Republic.

Higher seroprevalence rates have been reported among drug users in Slovenia (estimated at 10 per cent), Austria (10-20 per cent), Ireland (13 per cent), Germany (17 per cent) and Poland (8-20 per cent).

Within all countries there is geographical variation in the prevalence of HIV infection. Pockets of HIV infection have been reported from Belgrade (25%), Amsterdam (20-40%), and western Austria (70-80%). In Germany, seroprevalence rates among drug users are up to five times greater in Berlin than in Hamburg. In France, the highest rates typically occur in the southern part of the country (Provence, Alps, Cote d'Azur) and Ile de France. In southern Italy, seroprevalence rates are estimated at 6 per cent whilst in the northern part of the country percentages as high as 50 per cent have been observed. In the Netherlands, HIV rates are at least twice as high in Amsterdam as in the city of Rotterdam.

Similarly, in the U.K., HIV rates are high in some major cities (notably Edinburgh) but low in others (e.g. London and Liverpool).

Estimates on the proportion of drug users in HIV seropositive populations are known from a number of countries. In Poland, approximately 70 per cent of all HIV seropositive cases are drug users. In 1989, one third of the 3000 confirmed HIV seropositive cases in Austria were injecting drug users. Similarly, 29 per cent of all HIV seropositive cases diagnosed in Norway are drug users; in Sweden, this proportion was slightly lower - 20 per cent. In the Netherlands, 7.3% of 3,065 cases (as at 31.12.91) were associated with drug injecting. In some areas, the rate of increase in cases among drug users is higher than for other risk groups (as in Berlin). The situation is especially serious in Spain and Italy where the proportion of cases among drug injectors is amongst the highest in the world (68% and 66% respectively).

Policies on testing for HIV differ throughout the region. Massive population screening has been done in the former USSR. Compulsory testing in most countries is limited to blood and organ donors. Drug users are often being recommended to be tested for HIV antibodies on the ground of their known high-risk status.

Most European countries do not have national regulations for compulsory testing of drug users. This group includes Austria, France, Iceland, Ireland, Luxembourg, Netherlands, Norway, Poland, the U.K., and Serbia and Montenegro. In France, testing among drug users is strongly encouraged at all the drug treatment facilities and the data are analyzed at a

national level. Similar practices exist in some other countries. In Greece, HIV testing is a prerequisite for all drug users wanting to enter the therapeutic community programme, and in Malta all drug users attending the detoxification centre are tested. In Italy, testing has been available since 1985; in principle, it is voluntary, although involuntary testing may take place in "life threatening situations".

Certain countries have policies enabling mandatory HIV testing for certain high risk groups, which would include drug users. Czechoslovakia, for example, tests all identified injecting drug users, pregnant women, blood donors, people travelling abroad frequently or for long periods of time, and foreigners who stay in the country for longer than three months. In Belgium, there is no official policy on testing drug users, though compulsory testing of prison inmates is legal and tests are conducted based on individual prison policies.

Thus, the proportions of drug users tested for HIV in any individual country may differ widely. In countries such as France, Norway and Switzerland it is believed that as many as 90 per cent of all drug users have been tested at least once. In Italy, some 40 000 of a total of approximately 66 500 persons attending a treatment centre in 1990 have been tested.

#### AIDS cases among drug users

##### AIDS CASES AMONG INJECTING DRUG USERS\*

Reported cases of AIDS among injecting drug users						Percentage increase in number of cases				
1987	1988	1989	1990	1991	1992**	1987/88	88/89	89/90	90/91	91/92***
N	N	N	N	N	N					
%	%	%	%	%	%					
1941	3691	5007	5853	6355	3635	90.1	35.6	16.8	8.5	NA
27.2	34.6	35.8	35.9	38.4	38.3					

\* From the European Centre For the Epidemiological Monitoring Of AIDS: WHO-EC Collaborating Centre On AIDS; Paris, France. AIDS Surveillance In Europe, Quarterly Report No. 35

\*\* 1 January to 30 September

\*\*\* Data for 91/92 are not comparable since data for 1992 includes only those for the period January-September.

The figures from the table presented above show that the rate of increase in new AIDS cases from drug users is slowing down. However, the proportion of all new cases in 1991 has reached its highest level at a peak of 36.3 per cent. (By comparison, 37.3 per cent of cases belonged to the homosexual/bisexual group).

The five countries with the highest numbers of drug users in the total number of diagnosed AIDS cases are France (3776 cases - 21.2 per cent of all AIDS cases in the country), Italy (7637 cases - 65.8 per cent), Poland (31 cases - 36.5 per cent), Spain (7446 cases - 64.4. per cent) and Switzerland (814 cases - 36.5 per cent of all cases of AIDS in the country).

There are significant differences in the proportions of AIDS cases among men and women. In general there are more men than women among drug using populations. Among opiate users this is usually between 2 : 1 and 4 : 1. Men are even more strongly represented among AIDS cases with a ratio of 6 : 1. This ratio has remained stable since 1989. Furthermore, of all cases of AIDS among women, 55 per cent are from the group of drug users and 30 per cent are in the heterosexual transmission group as compared to all male cases where 30 per cent belong to the drug users' group, 6 per cent to the heterosexual group, and 51 per cent are from the homosexual/bisexual transmission group.

Unsafe injecting practices contribute to the spread of AIDS among the group of drug users themselves, from them to the general population, and also to newborn children. As of 31 March 1992, 40 per cent of the cumulative number of paediatric cases of AIDS in Europe in the mother to child transmission group was related to drug abuse.

A largely unresolved question is to what extent the high infection rates among drug users are attributable to sexual transmission rather than to transmission through contaminated injecting equipment. Recent studies have expressed considerable concern about the risks of sexual transmission of HIV among drug users and their sexual partners. In the U.K. a study of London heroin addicts noted that HIV seroprevalence rates were similar (about 10%) among heroin users who had shared injecting equipment and among others who had not shared (i.e. had not been exposed to this route of HIV infection).

#### Public health measures taken in the various countries

Practically all countries which are confronted by the problem of AIDS among drug users have established special programmes to prevent the further spread of the virus amongst this group and from this group to the rest of the population. Unfortunately such preventive measures have been largely neglected in countries which have not yet experienced significant problems with HIV infection among drug users. Of particular concern is the situation in the countries of central and eastern Europe where hardly any action is currently being taken to prevent this problem from

establishing itself. In the following sections a description is given of the various measures taken (including outreach and educational programmes, provision of injecting equipment and substitution programmes).

### Outreach and educational programmes

Considerable effort has been devoted to outreach work in recent years and a great variety of educational programmes aimed at the general public have been implemented in most of the European countries. In addition, information and education programmes have been implemented aimed at special groups known to be at high risk of HIV infection, such as drug users.

Of particular relevance to this group is the establishment in many communities of outreach programmes which provide activities aimed at proactively approaching drug users with information, education and other ways of motivating towards positive behaviour changes within their own environment and with adapted communication means and strategies. Outreach activities typically would include providing guidance on immediate needs; the promotion of healthy behaviour in general, of safer sex, and of course of less harmful ways of using drugs. The target population for such interventions includes individuals or groups that otherwise are difficult to reach, and as a result, innovative ways of achieving access have often had to be developed.

The following is a summary of what is being done in the individual countries in the domain of education and outreach programmes for drug users:

Albania Public education programmes are beginning to use printed media, radio, television and films.

Austria During the past two years, centres in Vienna have been established to provide information about the health hazards associated with drug use, as well as information on safe sex. At the street level, outreach workers are using educational methods with drug using populations.

Belgium There are two umbrella organizations in the fields of alcohol and drug abuse, one in the Flemish and one in the Walloon region. Each publishes information on AIDS, develops outreach services, and organizes education programmes for drug users in which ex-drug users educate their peers on the risks associated with drug taking. Results are positive and reports show that there is an increase in the cleaning of injecting equipment using of bleach. Financial constraints are slowing expansion and progress.

Bulgaria The Council on AIDS of the Medical Academy in Sofia has organized three experimental AIDS prevention programmes for teachers and school children between the ages of 12-17.

- Croatia Public education programmes have begun using mass media. Drug users are strongly encouraged to have an HIV test and individual and family counselling are provided.
- Czech Republic Prevention and rehabilitation have yet to be developed and the few treatment facilities tend to be specialist and centralised.
- Finland Injecting drug use is rare in Finland. Therefore, AIDS and Drug Abuse education is provided through a broad general public health campaign.
- France In 1989, the French agency for the prevention of AIDS and the Ministry of Health developed a successful four-part programme for drug users. This began in Marseille and has now spread to other major cities in France. programme components include:
- (1) Pharmacies provide AIDS educational material, sell sterile injecting equipment, and distribute condoms.
  - (2) Peer education has been organized at street level to reach those drug users who do not have access to adequate health care and AIDS information.
  - (3) Community action is coordinated to rehabilitate and integrate injecting drug users back into the community.
  - (4) A telephone line has been established for phone in questions on AIDS and drug abuse to experts in this field.
- Germany In 1987, a programme was set up in eighteen 'Drug Counselling Centres' specifically to provide AIDS education to drug users early in their drug-taking career, and to provide outreach activities at the street level and in halfway houses. In addition to education on AIDS and drug abuse, condoms and sterile needles and syringes were distributed. In 1988, an action research programme utilizing a behavioural modification approach was established to provide counselling and information on sexual behaviour, use of condoms, and how to clean injecting equipment. Preliminary reports are positive.
- Greece Outreach and educational programmes for drug users are not yet available.
- Iceland AIDS education takes place in schools and by public information campaigns.

Ireland

The 'AIDS Resource Centre' as part of the Statutory Health Authority, provides outreach community workers who identify people at risk and provide counselling and treatment; it also runs the low dose methadone maintenance programme. The Government of Ireland has plans to establish 'Community Drug Teams' under the auspices of the Health Board in targeted areas to provide treatment for identified drug users in the community and in prisons. Volunteer agencies in the community and at the street level provide counselling for individuals, groups, families, and people in prison. The treatment, education, and follow-up of drug users is also the responsibility of the general practitioners.

Israel

Currently no outreach and educational programmes regarding drug abuse are in place.

Italy

In the last three years, the number of drug users attending drug treatment centres has been continuously increasing. Efforts to treat and educate drug users are felt to be successful and a continuously increasing population is presenting itself for HIV testing. Programmes at the street level will be expanded.

Malta

The 'Interdepartmental Commission Against Drug Abuse and Illicit Trafficking' (ICADAIT), organizes programmes to increase public awareness of AIDS and drug abuse. The Department of Education runs a life skills programme for adolescents which includes information on drug abuse. At the forefront of drug prevention work, a non-governmental, church based organization, 'CARITAS', organizes educational meetings for the community on drug abuse and AIDS. The Detoxification Centres also provide counselling and AIDS education.

Netherlands

There are many outreach projects where ex-drug users, amongst other things, are trained in peer education and AIDS prevention activities.

Norway

All major towns and some smaller towns (approximately 50 towns in total) have street based outreach programmes which provide education to drug users and youth in high risk areas. In six towns, peer education programmes have been set up as pilot projects.

Portugal

Project VIDA groups (peer facilitated support groups) are being set up on a decentralised basis at district, council and parish level though these are insufficiently funded; printed prevention materials are used for their ease of access;

- Poland 'Monar', a non-governmental organization, which runs a great variety of activities in the country, is particularly active in outreach and education programmes for drug users. Governmental and local community agencies are also active.
- Serbia and Montenegro The 'Institute on Addictions' in Belgrade has several "open door policy" programmes which provide counselling and outreach services at the places where young people congregate.
- Slovenia Government and professional outreach programmes are not established. Most of the educational and outreach work is by three volunteer self-help groups composed of ex-addicts and current addicts supervised by health care and social workers. This programme has been effective in educating the hard-to-reach illicit drug using population in Slovenia.
- Sweden The overriding aim of the drug policies in Sweden is to put a stop to all use of narcotics. The government offers HIV screening, detoxification, treatment and counselling to all injecting drug users. This includes street clinics run by social workers.
- Switzerland In many communities, intensive programmes to reach the drug users and to motivate them towards safer drug use practices have been established. Needle and syringe exchange schemes play an important role.
- Turkey Public education on AIDS is carried out by the distribution of publications, television broadcasts and news programmes.

#### Availability of needles and syringes

For several years now, many countries have been running programmes which provide sterile needles and syringes from a variety of outlets at low costs or free of charge. These schemes aim to increase the availability of sterile injecting equipment and they are often seen as an important component within the national prevention programmes against communicable diseases particularly hepatitis B and AIDS. More recently, centres have been established in many communities in western European countries which cater for an exchange of needles and syringes and where other treatment and health care services are also provided, such as counselling, education about AIDS, distribution of condoms, and general medical care. Countries in which such needle and syringes exchange programmes are available include Austria, France, Germany, Ireland, Norway, Netherlands, Poland, Slovenia, Spain, Switzerland and the United Kingdom. The operation of these sorts of programmes has often aroused opposition and at various places has met with negative or even hostile attitudes from the general public.

In a few countries, research has been carried out into the effectiveness of such programmes. This has tended to indicate that easy access to sterile injecting equipment can lead to a decrease in sharing and does not seem to lead to an increase in drug use nor to an increased frequency of injecting. A common (and disturbing) finding in this connection is that drug users are more likely to show changes in their risk behaviour with regard to injecting practices than in their sexual behaviour.

For a comprehensive review of the availability of needles and syringes in European countries the reader is referred to a recent report issued by the European Regional Office of the World Health Organization (ref. EUR/ICP/GPA/ 136).

The following policies and programmes were reported by the collaborators in the various countries:

- Albania            Some programme planning has taken place but the implementation of these programmes is hindered by lack of stocks.
- Austria            Needles and syringes are available all over Austria. They can be bought in pharmacies or medical supply stores without a prescription. In some treatment centres they are given out without charge. There has been a programme in Vienna since August 1991 for the exchange of needles and syringes.
- Belgium            Syringes and needles can be bought without a prescription but pharmacists often refuse to sell them to drug users. The distribution of needles and syringes to addicts is illegal in Belgium. Occasionally, limited distribution by low-threshold drug treatment centres has been permitted as part of an "outreach" programme. Syringes are considered medication only to be sold by a pharmacist and vending machines cannot therefore be used.
- Croatia            Sterile needles and syringes can be purchased in pharmacies or where medical equipment is sold. Consideration is being given to introduce a needle/syringe exchange programme where free sterile equipment is provided in return for the used.
- Finland            Needles and syringes are sold in pharmacies. There is no national programme for the distribution of sterile equipment as there are very few injecting drug users.
- France             In May 1987, needles and syringes were legalized for public sale. Some pharmacies continue to be reluctant or refuse to sell equipment to drug users. Studies show that the majority of drug users in general and the drug using prostitutes do not share needles, but buy

them at the low prices from pharmacies. In December 1988, programmes for the exchange of needles and syringes were established. In the end of 1989, the 'Ministere chargée de la Santé', established three experimental needle and syringe exchange programmes in Paris, Seine Saint Denis, and Marseille. As most drug users do not know that bleach is an effective cleaning technique, efforts have been made to promote cleaning equipment as well. This includes the distribution of bleach, promoting the use of 'personal' syringes, and providing containers for the safe disposal of used equipment.

- Germany Needle and syringes are becoming increasingly available in practically all the Länder through exchange programmes, vending machines, and the distribution by pharmacies.
- Greece There are no specific programmes for the availability or exchange of needles and syringes; however, they have always been for sale in pharmacies at low prices without prescription.
- Iceland Needles and syringes are sold in pharmacies. A leaflet is included with the equipment providing information on how infectious diseases are transmitted.
- Ireland It is national policy to provide clean needles and syringes to injecting drug users. However, due to lack of resources and public attitude toward the needle and syringe exchange programmes, this service has been constrained. In Dublin, there are currently two exchange programmes in operation under the auspices of the local Health Board. In 1986, the Pharmaceutical Society of Ireland adopted a policy that the supply of needles and syringes is at the discretion and professional judgement of the individual pharmacist.
- Israel Currently, no programmes for the availability of sterile needles and syringes are in place.
- Italy Pharmacies sell re-usable and self-occluding syringes to the public. A project has begun to expand the production and sale of self-occluding syringes. There are no formal needle and syringe exchange programmes.
- Luxembourg Needles and syringes are distributed free of charge by the drug treatment centres and measures are being taken to install automatic dispensers.

- Malta Needles and syringes are easily purchased in pharmacies, or obtained for free at health centres.
- Netherlands There are 115 needle and syringe exchange programmes located at centres for drug users, the mobile methadone projects, municipal health service centres, and some pharmacies. There are also new experimental syringe exchange machines for after-hours supplies.
- Norway Needles and syringes are easily purchased in pharmacies and in some towns through vending machines. In Oslo, a special bus project provides free syringes and health services. Equipment is also provided free of charge by the municipal HIV Clinic, several treatment centres, and outreach agencies.
- Portugal No needle exchange schemes have yet been set up.
- Poland Since 1990, needle and syringe exchange programmes have been available at the centres treating drug users. They can also be bought at pharmacies without a prescription.
- Serbia and Montenegro There is no programme providing free sterile needles and syringes, but they can be purchased at low cost in pharmacies.
- Slovenia Needle and syringe exchange is provided by volunteer self-help groups. Pharmacies sell equipment in certain towns, however discrimination and the prevailing negative attitude towards injecting drug use makes sterile equipment difficult to purchase in many pharmacies.
- Sweden Needle and syringe exchange programmes have been available in southern Sweden since 1986. This is an experimental programme. The Swedish Parliament has opposed the launching of similar projects elsewhere as the distribution of needles and syringes is contrary to the national goal of having a 'drug-free society'. Instead, rehabilitation services for drug users will be expanded so that all drug users can be offered treatment and counselling.
- Switzerland Policy about substitution treatment varies between cantons. In Zurich, where the problems relating to drug abuse are concentrated, mobile and stationary syringe exchange centres have been established.
- Turkey The report from Turkey states that the medical profession has now begun efforts to use sterile

disposable needles and syringes during medical procedures. There is no comment on the availability of these to the public.

United Kingdom Pharmacies sell sterile needles and syringes and GP's may issue injecting equipment when treating drug users. There are needle and syringe exchange programmes which provide sterile injecting equipment, canisters for safe disposal of used equipment, and counselling on AIDS and the risks associated with drug use.

#### Substitution therapy programmes

The effective treatment of drug abuse is likely to include many different approaches. However, it is desirable that treatment should be based upon a proper assessment of the social, psychological and pharmacological state of the individual, and specifically upon the nature and type of the individual's problems and needs, on the type of drugs used, on the severity of dependence and the duration of drug abuse, and upon the presence of psychiatric comorbidity.

One of the many commonly used treatment options involves "therapeutic communities". These are often used with those drug users who are able to participate in a strict drug-free programme. Counselling, either on its own or in conjunction with other treatment options is also widely used.

One particular treatment modality that has been "rediscovered" in relation to HIV prevention involves methadone substitution or maintenance. This is sometimes also used as a therapeutic option in cases where other treatments have been tried without success or as a way of attracting drug users to the health services.

Methadone substitution or maintenance treatments are often used as part of a broader HIV risk reduction strategy. Research conducted in recent years has tended to show significant overall improvements in drug abuse behaviours. However, the value of such treatments is sometimes over-rated by those who see them as a panacea for HIV risk behaviours. There is still no consensus between countries about the overall effectiveness of methadone treatments in the prevention of HIV risk behaviours, and the national implementation of such treatments varies widely (compare, for instance Belgium and France, and Italy and the Netherlands). Within some countries there is a firm belief that methadone maintenance treatments can lead to a net positive outcome in terms of public health and individual health.

Current policies and practices regarding substitution programmes vary widely in the region. The following table offers a summary of approaches in the different European countries:

- Albania Substitution treatments are not used.
- Austria Since 1987, substitution and maintenance therapy with methadone has been available for injecting opiate users. As of December 1991, a cumulative total of 1848 patients have been treated with methadone maintenance. Sixty-five per cent of patients treated with methadone are living in Vienna.
- Belgium Substitution therapy is restricted and maintenance therapy is illegal. Substitution therapy is discouraged by the National Board of Medicine and as a result, programmes using methadone are scarce (150 people in Brussels and 50 people in Antwerp). In the ambulatory setting, methadone substitution is only legal if performed by specialized teams; individual physicians who prescribed methadone for substitution therapy have been prosecuted.
- Croatia Methadone maintenance and substitution therapy programmes are coordinated by the Ministry of Health of the Republic of Croatia. In 1991, there were 500 opiate users on a methadone maintenance programme and 300 on an outpatient methadone substitution programme.
- Finland There have not been any new patients started on methadone substitution therapy since the early 1980's. However the National Agency for Welfare and Health is at present evaluating the need to restart these programmes.
- France In 1973, methadone substitution was initiated; it has been available on a very limited basis for drug users in three centres in Paris. In 1989, the Ministry of Health expanded this in Paris and to other large cities in France. Methadone substitution therapy is indicated for certain drug users only: heavy users, those dependant for a long period of time, and those not socially integrated and therefore having little access to care. In all cases, methadone is prescribed for a limited period of time. Maintenance therapy is not available.
- Germany Many methadone programmes have been established recently in spite of widespread critical opinion. Throughout Germany, research projects to test methadone maintenance programmes are being implemented for specific groups; injecting drug users with AIDS, drug users which have dropped out of treatment, or those with a long history of drug use.

- Greece Methadone substitution programmes are not available, but they are presently under consideration by the government.
- Iceland Methadone substitution programmes are not available. Injecting drug users are mainly using amphetamines and not heroin.
- Ireland The National Drug Treatment Centre advises who should be on methadone maintenance. This treatment is used with those who have repeatedly failed to abstain from other drug use, particularly opiates, while receiving detoxification or other treatment for drug problems. Currently, one hundred and fifty patients are being treated by methadone maintenance in the two specialized centres.
- Israel Drug free modalities are the basis of both detoxification and rehabilitation programmes. For those drug users on methadone, there is currently a trend away from the dispensing of methadone by prescription, to the daily dispensing of methadone in specialized centres.
- Italy Methadone is prescribed for the treatment of heroin users in addition to comprehensive health care, and psychosocial support for the patient and family.
- Luxembourg In 1992, the pilot methadone programme increased its patient load from 15 to 30 patients in view of encouraging results of the first phase of the project.
- Malta At the Detoxification Centre, heroin users are treated on an outpatient basis with methadone substitution.
- Netherlands Low-threshold methadone programmes are established in all major towns and are seen as an important part of prevention activities. As a result of these programmes, an estimated 60-70% of the 'hard-drug users' are reached annually. In some cities, methadone is prescribed for several days, in others, it is given daily.
- Norway Methadone is available to HIV positive injecting drug users as part of medical treatment. Formal methadone substitution programmes do not exist.
- Poland Only recently, methadone has been imported into Poland for the implementation of a pilot

substitution programme.

Serbia and Montenegro

The 'Institute of Addiction' in Belgrade has a methadone maintenance programme which has been in effect for the last 15 years and which is now expanding. Approximately 500 former injecting heroin users have been treated.

Slovenia

There is no government policy on methadone maintenance and most of the individual prescribing of methadone seems to be poorly managed. Resale of take-home methadone seems to be a problem. During 1991, approximately 200 heroin users have been treated by maintenance therapy.

Sweden

The goal of the Swedish Government is to reach all injecting drug users and provide them with HIV testing, detoxification, and treatment. Methadone substitution therapy is considered part of this treatment. In 1987, the National Commission on AIDS doubled the size of the programme to 300 patients.

Switzerland

Oral methadone programmes are offered but are not considered to meet the national needs. The political and medical communities are considering the establishment of additional programmes such as substitution with morphine or intravenous methadone.

Turkey

Methadone substitution therapy programmes for drug users are not available.

Prostitutes as a special AIDS/drug risk group

Two subgroups which are particularly important in the epidemiology of AIDS among drug users are prostitutes and prison inmates. These two groups frequently report more than one risk factor.

In many western European countries, prostitutes have two identified risk factors for AIDS, heterosexual and/or homosexual contact, and injecting drug use. Several countries in the region reported that there is a strong correlation between drug use and prostitution. Research in Amsterdam shows that 80 per cent of female and 20 per cent of male drug users have worked as a prostitute at some time in their lives. The corresponding figures reported from the Flemish part of Belgium are 38 per cent for females and 10 per cent for male drug users. In Switzerland and Malta, "the majority" of injecting drug users revert to prostitution to finance their drug addiction. In Austria, all HIV seropositive prostitutes are drug users as well. Evidence from the 'Institute on Addiction' in Belgrade and the 'Diaconessed Institute' in Finland shows that injecting drug use is common among

prostitutes. France reports that drug using prostitutes are an extremely isolated group which are hard to reach from a public health standpoint.

The reports from Belgium, France and Switzerland included information on condom use among prostitutes. In Belgium, prostitutes use condoms regularly in "commercial sexual contacts", but very rarely in "non-commercial contacts". Similarly in France, many prostitutes claim to use condoms with all clients, but not with their "non-paying partners". However, other prostitutes in France report that condoms are used inconsistently because they are not easily available in the areas where prostitutes work, or as a result of customer requests not to use one. A lower rate of condom use is reported in Switzerland. Here the lack of condom use by prostitutes is creating a serious problem regarding HIV transmission.

Legal regulations regarding prostitution vary between countries. In France, there are no legal, and subsequently no health controls, and no registration of prostitutes. In Austria, male homosexual prostitution was legalized in 1991 as a means to decreasing the spread of AIDS among homosexual men. Both male and female prostitutes have to undergo medical examinations under strictly defined conditions which check for sexually transmitted diseases including AIDS. In Switzerland, homosexual prostitution exists, but it is illegal. This is felt to complicate HIV/AIDS prevention programmes.

Some countries have adopted HIV testing policies for this group. In France, most prostitutes have been tested at some point. Free and anonymous testing is available to all prostitutes and their partners. Testing is often infrequent as prostitutes report that testing is too time consuming, inaccessible from where they live or work, and there is a lack of information on where testing is available (11). In Malta, all women prostitutes who come to the detoxification centre are given an HIV test.

To control the spread of AIDS, most countries have developed specific Public Health programmes for the education and prevention of AIDS within this group.

In France, the national agency for the prevention of AIDS (AFLS) organized a very successful programme for women prostitutes in 1990 called the "Bus for Women". This is a peer support programme where prostitutes and ex-prostitutes, under the supervision of a doctor and a social worker, provide AIDS education to their peers. Medical care, social assistance, and rehabilitation services are also provided.

In Norway, there is a peer education programme for drug using prostitutes and an outreach programme for the education of male prostitutes, run by the municipal AIDS Clinic in Oslo. In Switzerland, prostitutes use the needle and syringe exchange centres for both supplies and health care. In Malta,

female prostitutes who come to the detoxification centre are provided with medical care, an HIV test, counselling on AIDS and other risks associated with their lifestyle, and they are offered depot injection for contraception.

In Sweden, social workers visit the parks frequented by homosexuals or prostitutes to provide AIDS information and condoms on the spot. In Luxembourg, the social workers at the street level keep close contact with prostitutes who are drug users and want support.

In the Netherlands, a number of programmes to provide information on 'safe-sex' to prostitutes have been set up. There are also open-door centres where prostitutes get information and counselling. Also in Germany, there are many programmes for drug using prostitutes; in general, the goal is to stop prostituting, to increase awareness of AIDS and to motivate condom use.

Some countries have plans to expand programmes for this group. In Greece, the Department of Psychiatry of Athens University in collaboration with the Ministry of Health is conducting studies on prostitutes and AIDS within this group.

#### Prison inmates

Prison inmates are another subgroup at increased risk for HIV infection. In many prisons in western Europe more than half of the population has a recent or a remote history of drug abuse, and drug abuse occurs within the prisons quite often, in spite of the many efforts of the authorities to prevent this.

Although injecting drugs is reported to be common in prisons in many parts of the region, there are no countries where there are provisions for the distribution of sterile injecting equipment. Consequently, the sharing of needles and syringes may become a frequent activity in some prisons. In Switzerland and in a few other countries, a few prisons have made arrangements for the availability of disinfectants, including bleach, with specific information on the effective cleaning of injecting equipment.

In addition to the sharing of possibly contaminated injecting equipment, there is an increased risk of contracting AIDS through unprotected sexual contact. Condoms are usually not available in prisons, although there are countries in which it has become explicit policy to make these available also for prisoners. This is the case for example in Austria, Belgium, Germany and Switzerland.

In many countries such as Finland, Iceland, Ireland, Italy, Luxembourg and Sweden, voluntary testing for HIV is routinely offered to prisoners. In the Netherlands, systematic testing for HIV in prisoners is not recommended.

Mandatory testing exists also in some countries, for example in Belgium and Croatia. In Belgium, compulsory HIV testing of prisoners is legal; in practice, the use of testing depends upon specific prison policies and financial restraints are seen as the most important issue in the application of testing. HIV seroprevalence among incarcerated drug users is reported to be 6.4 per cent.

Most countries have reported that they have specific programmes for the treatment of drug users and for AIDS education in prisons. In Croatia, methadone treatment is available in the prison hospital. In Ireland, methadone is offered by the Medical Service to those who has this treatment initiated prior to entering prison. In Malta, prison inmates who need detoxification are assessed medically and treated with methadone when indicated. In Switzerland, provisions for methadone treatment exist in some prisons.

In France, the Regional Medical-Psychological Services organize the treatment of drug users and the prevention of drug abuse among the prisoners. Some injecting drug users also participate in peer AIDS education programmes in prisons. In Greece, the Department of Psychiatry of the University of Athens is planning to implement an AIDS educational programme for prisoners in collaboration with the Ministry of Health. In some cities in the Netherlands (the Hague, Alkmaar, and Utrecht), AIDS prevention courses are offered to the prison inmates and officers.

In Italy, specific programmes have been developed to prevent the spread of AIDS in prisons; these include efforts to treat and prevent drug abuse in the prisons and training courses for health professionals who work in prisons. In Serbia, general prevention and treatment programmes for prison inmates on drug abuse and AIDS have been developed. In Luxembourg, a special pilot project has been set up to contact prison inmates who are drug users and want this support. In Sweden, all remand centres have social workers who supply information and psychological support to the inmates.

#### Training for health care professionals treating drug users and AIDS patients

As more and more drug users with AIDS enter the health care system, it is necessary that services are developed and staff are educated so that comprehensive and effective treatment can be offered. In many countries, programmes for health care professionals have been established at either the national or local level. These programmes aim to train professionals so that they are qualified to provide health care to patients who are injecting drug users, and in particular to drug users who are HIV seropositive or have AIDS.

Such national training programmes have been developed, for example, in Austria, Belgium, France, Germany and Switzerland. In Austria, the Ministry of Health has organized and financed postgraduate training courses on drug abuse and AIDS for drug treatment personal.

The Ministry of Health in France has had a national programme since 1987 for all health care workers treating drug users and patients with AIDS. In nine regions in France, this programme encourages the exchange of information and collaboration between centres.

During the last five years, Germany has had several national projects to train staff treating HIV infected persons and those with AIDS. General AIDS education programmes are part of all continuing education courses for the staff of outpatient and residential facilities for drug addicts.

Recently, a national programme has been established in Switzerland to provide training for social workers, nurses, doctors, and others involved in the care of injecting drug users.

Since 1988, a network of trainers have organized AIDS courses for workers in drug treatment centres in fifteen regions in the Netherlands. Currently, approximately eighty per cent of those workers have had at least basic AIDS training.

In Italy, high priority is given to the training of health care workers treating drug users with AIDS, specifically for professionals in the infectious diseases units, drug treatment centres, and in prisons.

In Norway, training of health care personnel on HIV/AIDS has been available for several years. Initially, only factual information was provided but during the past four years, the emphasis has been on ways to encourage behaviour change among high risk patients.

In Finland, health care professionals responsible for the treatment of drug users who are HIV positive, participate in the inter-Scandinavian cooperation and training programme in this field.

In Belgrade, the 'Institute on Addiction' has conducted a number of short term courses for doctors, psychologists, social workers, and nurses working with drug users who are HIV positive or have AIDS. Last year, they also conducted a one week multi-disciplinary training course for participants from Serbia, Macedonia, Bosnia and Hercegovina on drug abuse and AIDS in collaboration with the World Health Organization (WHO).

In Croatia, the general practitioners, psychiatrists, psychologists, nurses and teachers are trained in the hospitals and by the 'Republic Centre for Dependence'. In

Malta, in-service training on the care of injecting drug users is provided. Other services for drug users are developing fast, but reports state that trained staff are needed to help direct these services.

In Luxembourg, there has only been limited training on AIDS for health care professionals, but there are plans to expand training on both addiction and AIDS.

#### Conclusions.

The information presented in this review is not comprehensive; neither does it contain any information on the situation or the responses in large parts in the Region, such as the CIS; nor does it contain a complete picture of the situation and the action taken in the countries which appear in this review. A further WHO review is being undertaken which aims to present a more complete picture. However, in spite of these shortcomings, the material presented shows that AIDS among drug users is a very serious public health problem. It also shows that many societies have come to appreciate the inherent dangers of this and have consequently mounted an impressive number of prevention and treatment efforts to influence the course of events. Effective prevention programmes aimed at drug users can have a great impact on the course of the HIV epidemic. The events within recent years have demonstrated that behaviour change among drug users is not an unrealistic goal. There is now substantial evidence demonstrating that drug users can make significant reductions in drug-related HIV risk behaviours. Intensification of health promotion programmes for this group is likely to have further positive effects. Great opportunities for AIDS prevention exist particularly in countries in central and eastern Europe where currently both drug abuse and HIV infection are in general at a fairly low prevalence level.

## REFERENCES

1. The European Centre For the Epidemiological Monitoring Of AIDS: WHO-EC Collaborating Centre On AIDS; 'AIDS Surveillance In Europe'; Quarterly Report No. 32; 31 December 1991.
2. Des Jarlais, D.C.; 'Observations on the Stabilization of HIV Seroprevalence Among Injecting Drug Users'; Drug Addiction and AIDS: 2-7.
3. Brenner, H., Goos, C., Hernando-Briongos, P., 'AIDS Among Drug Abusers In Europe: Review of Recent Developments'; 1991.
4. Strang, J., Griffiths, P., Powis, B. and Gossop, M. (1992) First use of heroin: changes in route of administration over time. British Medical Journal, 304, 1222-1223.
5. Scully, M., Pomeroy, L., Johnson, Z., and Barry, A.; 'Observed Patterns of HIV Related Risk Behaviour Amongst Intravenous Drug Users Attending a Dublin Needle Exchange in Its First Year'; Drug Addiction and AIDS: 368-371.
6. Tagliamonte, A., Maremmani, I., Meloni, D., 'Methadone Maintenance: A Medical Approach to Heroine Addition'; Drug Addiction and AIDS: 178-186.
7. Gossop, M. and Grant, M. (1991) The Content and Structure of Methadone Treatment Programmes: A Study in Six Countries. World Health Organization, Geneva. WHO/PSA/90.3.
8. National Audit of Drug Misuse Statistics: Drug Misuse In Britain; 1990; Published by the Institute for the Study of Drug Dependence (ISDD).
9. 'UK Action on Drug Misuse: The Government's Strategy'; April 1990.
10. Home Office Statistical Bulletin: 'Statistics of the Misuse of Drugs - Addicts Notified to the Home Office, United Kingdom, 1989'; Issue 7/90-19 March 1990.
11. Home Office Statistical Bulletin: 'Statistics of the Misuse of Drugs-Seizures and Offenders Dealt With, United Kingdom, 1989; issue 24/90-6 September 1990.
12. Ingold, Francois-Rudolphe MD, et al ; Prostitution in Relation to Drug Use and AIDS Prevention: An Ethnographic Approach and Methodological Discussion'; CEWG December 1990; Pages 451-458.
13. Strang, J., Gossop, M., Griffiths, P. and Powis, B. (1992) HIV among south London heroin users in 1991. The Lancet, 339, 1060-61.

14. Ingold, Francois-Rudolphe, et al ; 'A Brief Analysis of Cocaine Trends In France Followed By Preliminary Findings Of An HIV Transmission Study Among Prostitutes In Paris' ; June 1990; Pages II 77-82.
15. Facy, Françoise; 'Suivi Epidemiologique Des Programmes Experimentaux De Prevention Des Risques De Transmission Du VIH Chez Les Usagers De Drogues Par Voie Intraveineuse Avec Echange De Seringues'; INSERM U.302; Convention Avec La Direction Generale De La Sante Division SIDA; 3-9.