

# Turkey

# EPIDEMIOLOGICAL FACT SHEETS ON HIV/AIDS AND SEXUALLY TRANSMITTED INFECTIONS







### HIV/AIDS estimates

In 2003 and during the first quarter of 2004, UNAIDS and WHO worked closely with national governments and research institutions to recalculate current estimates on people living with HIV/AIDS. These calculations are based on the previously published estimates for 1999 and 2001 and recent trends in HIV/AIDS surveillance in various populations. A methodology developed in collaboration with an international group of experts was used to calculate the new estimates on prevalence and incidence of HIV and AIDS deaths, as well as the number of children infected through mother-to-child transmission of HIV. Different approaches were used to estimate HIV prevalence in countries with low-level, concentrated or generalised epidemics. The current estimates do not claim to be an exact count of infections. Rather, they use a methodology that has thus far proved accurate in producing estimates that give a good indication of the magnitude of the epidemic in individual countries. However, these estimates are constantly being revised as countries improve their surveillance systems and collect more information.

Adults in this report are defined as women and men aged 15 to 49. This age range covers people in their most sexually active years. While the risk of HIV infection obviously continues beyond the age of 50, the vast majority of those who engage in substantial risk behaviours are likely to be infected by this age. The 15 to 49 range was used as the denominator in calculating adult HIV prevalence.

### Estimated number of adults and children living with HIV/AIDS, end of 2003

These estimates include all people with HIV infection, whether or not they have developed symptoms of AIDS, alive at the end of 2003:

Adults and children

Low estimate High estimate Adults (15-49) Low estimate High estimate Children (0-15) Low estimate High estimate

Adult rate (%) Low estimate High estimate

Women (15-49)

Low estimate High estimate

### Estimated number of deaths due to AIDS

Estimated number of adults and children who died of AIDS during 2003:

Deaths in 2003

Low estimate High estimate

### Estimated number of orphans

Estimated number of children who have lost their mother or father or both parents to AIDS and who were alive and under age 17 at the end of 2003:

Current living orphans

Low estimate High estimate

# UNAIDS/WHO Working Group on Global HIV/AIDS and STI Surveillance

Global Surveillance of HIV/AIDS and sexually transmitted infections (STIs) is a joint effort of WHO and UNAIDS. The UNAIDS/WHO Working Group on Global HIV/AIDS and STI Surveillance, initiated in November 1996, guides respective activities. The primary objective of the Working Group is to strengthen national, regional and global structures and networks for improved monitoring and surveillance of HIV/AIDS and STIs. For this purpose, the Working Group collaborates closely with national AIDS programmes and a number of national and international experts and institutions. The goal of this collaboration is to compile the best information available and to improve the quality of data needed for informed decision-making and planning at national, regional, and global levels. The Epidemiological Fact Sheets are one of the products of this close and fruitful collaboration across the clobe.

Within this framework, the Fact Sheets collate the most recent country-specific data on HIV/AIDS prevalence and incidence, together with information on behaviours (e.g. casual sex and condom use) which can spur or stem the transmission of HIV.

Not unexpectedly, information on all of the agreed upon indicators was not available for many countries in 2003. However, these updated Fact Sheets do contain a wealth of information which allows identification of strengths in currently existing programmes and comparisons between countries and regions. The Fact Sheets may also be instrumental in identifying potential partners when planning and implementing improved surveillance systems.

The fact sheets can be only as good as information made available to the UNAIDS/WHO Working Group on Global HIV/AIDS and STI Surveillance. Therefore, the Working Group would like to encourage all programme managers as well as national and international experts to communicate additional information to them whenever such information becomes available. The Working Group also welcomes any suggestions for additional indicators or information proven to be useful in national or international decision-making and planning.

For this country not enough data were available to produce an estimate of HIV prevalence for end 2001. For each of these countries the 1999 prevalence rate published by UNAIDS was applied to the country's 2001 adult population to produce the estimates given in the table. No country-specific models were produced for countries marked with an asterisk.

# Assessment of the epidemiological situation

POXEDEÖÙÁsæer^•Á©æç^Ás^^} Á, ~88amil^Á^][!o\*áÁaj &^Æt]ÌÍÉÓpÁCEEHÁs@Á^][!o\*áÁs\*{ "|aæaāy^Á;!^çaq\*} &^Á!Á; a^lÁ; -ÁrĒ'FCÁÇEIÁCEÖÙÁng àÁrĒSEIÁPOXDÁÙ[ÁæàÁ/\*!\^^Á@æœáÁnd}^!•ā;a;a\*fű, Ár XEDEÖÙÁng &ār?} &^Áægà áÁ;!^çaq\*) &^Ág [!o\*áÁ;-Á;o\*o\*ág]•œæjoÁ;o\*;Ár@áæ∞óÁtÁ^ææóÁd;\*) àárJ€Á^][!o\*áÁ,^¸ Ásæe^•Áæn}; adilliðió@Á\*•æiði;\*) åár£ESEæ\*o\*•Á\*\*oÁ;-Ándf[]\*|ææã;}Á;-Á;o^lÁ.€Á; adilliðié

2004

HĒ €€\$æ•^•Á`oÁ-ÁæÁ[]`|ææã}Á.Á;ç^¦Á.€Á; ajā}È V':\^^Áæ•ÁæÁ: Á`oÁ-ÁæÁ[]`|ææã}Á.Á;¢^¦Á.€Á; ajā}È

V\*;\\^^^A@æ•^Amaf[\_\_Á\\co\_\A\*] 面^{{\over\_Amaf\_A\*\over\_Amaf\_B\*\over\_Amaf\_A\*\over\_A\*\over\_Amaf\_A\*\over\_A\*\over\_Amaf\_A\*\over\_A\*\o

QxÁ^&^} œÁ^æ÷ĒÁ[ˇ\* @ˇÁ.€Ã.Á; Ásæ; •{ ã•ã;}Á,æ Á@ œ¦;•^¢ˇæþÁæ; åÆş ÁG€€—ĒÁ[ˇ\* @്ÆÐHÁ; Á^][¦œåÆş A&æã;}•Á,^¦^ÆşÁ;[{ ^}È

## Basic indicators

For consistency reasons the data used in the table below are taken from official UN publications.

DEMOGRAPHIC DATA	YEAR	ESTIMATE	SOURCE		
Total population (thousands)	2004	72,320	UN population division database		
Female population aged 15-24 (thousands)	2004	6,908	UN population division database		
Population aged 15-49 (thousands)	2004	39,602	UN population division database		
Annual population growth rate (%)	1992-2002	1.6	UN population division database		
% of population in urban areas	2003	66	UN population division database		
Average annual growth rate of urban population	2000-2005	2.2	UN population division database		
Crude birth rate (births per 1,000 pop.)	2004	20.4	UN population division database		
Crude death rate (deaths per 1,000 pop.)	2004	6	UN population division database		
Maternal mortality rate (per 100,000 live births)	2000	70	WHO (WHR2004)/UNICEF		
Life expectancy at birth (years)	2002	70	World Health Report 2004, WHO		
Total fertility rate	2002	2.5	World Health Report 2004, WHO		
Infant mortality rate (per 1,000 live births)	2000	36	World Health Report 2004, WHO		
Under 5 mortality rate (per 1,000 live births)	2000	44	World Health Report 2004, WHO		
SOCIO-ECONOMIC DATA	YEAR	ESTIMATE	SOURCE		
Gross national income, ppp, per capita (Int.\$)	2002	6,120	World Bank		
Gross domestic product, per capita % growth	2001-2002	6.1	World Bank		
Per capita total expenditure on health (Int.\$)	2001	294	World Health Report 2004, WHO		
General government expenditure on health as % of total expenditure on health	2001	71	World Health Report 2004, WHO		
<b>-</b>	2000	15	UNESCO		
Total adult illiteracy rate	2000	10			
Adult male illiteracy rate	2000	6.6	UNESCO		
•		-			
Adult male illiteracy rate	2000	6.6	UNESCO		
Adult male illiteracy rate  Adult female illiteracy rate	2000	6.6 23.5	UNESCO UNESCO		
Adult male illiteracy rate  Adult female illiteracy rate  Gross primary school enrolment ratio, male	2000 2000 2000/2001	6.6 23.5 105	UNESCO UNESCO UNESCO		

### **Contact address**

UNAIDS/WHO Working Group on Global HIV/AIDS and STI Surveillance 20, Avenue Appia

CH - 1211 Geneva 27 Switzerland

Fax: +41-22-791-4834

email: hivstrategicinfo@who.int or estimates@unaids.org

website: http://www.who.int/hiv

http://www.unaids.org

Extracts of the information contained in these fact sheets may be reviewed, reproduced or translated for research or private study but not for sale or for use in conjunction with commercial purposes. Any use of information in these fact sheets should be accompanied by the following acknowledgment "UNAIDS/WHO epidemiological fact sheets on HIV/AIDS and Sexually Transmitted Infections, 2004 Update".

### HIV prevalence in different populations

This section contains information about HIV prevalence in different populations. The data reported in the tables below are mainly based on the HIV database maintained by the United States Bureau of the Census where data from different sources, including national reports, scientific publications and international conferences are compiled. To provide a simple overview of the current situation and trends over time, summary data are given by population group, geographical area (Major Urban Areas versus Outside Major Urban Areas), and year of survey. Studies conducted in the same year are aggregated and the median prevalence rates (in percentages) are given for each of the categories. The maximum and minimum prevalence rates observed, as well as the total number of surveys/sentinel sites, are provided with the median, to give an overview of the diversity of HIV-prevalence results in a given population within the country. Data by sentinel site or specific study from which the medians were calculated are printed at the end of this fact sheet.

The differentiation between the two geographical areas Major Urban Areas and Outside Major Urban Areas is not based on strict criteria, such as the number of inhabitants. For most countries, Major Urban Areas were considered to be the capital city and - where applicable - other metropolitan areas with similar socio-economic patterns. The term Outside Major Urban Areas considers that most sentinel sites are not located in strictly rural areas, even if they are located in somewhat rural districts.

### HIV sentinel surveillance\*

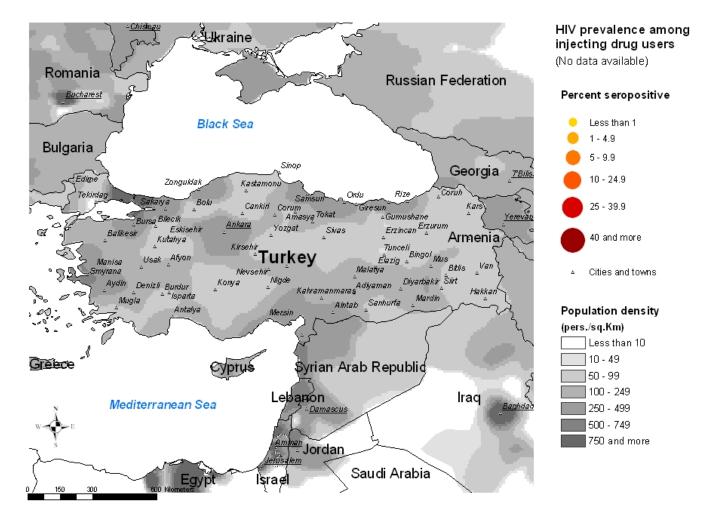
Group	Area		1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Pregnant	Major urban	N-Sites		1.00															
women	areas	Minimum		0															
		Median		0															
		Maximum		0															
Sex workers	Major urban	N-Sites								1.00	1.00	1.00							
	areas	Minimum								0.02	0	0.13							
		Median								0.02	0	0.13							
		Maximum								0.02	0	0.13							
	Outside major	N-Sites	1.00																
	urban areas	Minimum	0																
		Median	0																
		Maximum	0																
Injecting drug users	Major urban	N-Sites						1.00				1.00							
users	areas	Minimum						0				0							
		Median						0				0							
		Maximum						0				0							
STI patients																			
Men having sex with men	:																		
Tuberculosis patients																			

<sup>\*</sup>Detailed data by site can be found in the Annex.

### Maps & charts

Mapping the geographical distribution of HIV prevalence among different population groups may assist in interpreting both the national coverage of the HIV surveillance system as well in explaining differences in levels of prevalence. The UNAIDS/WHO Working Group on Global HIV/AIDS and STI Surveillance, in collaboration with the WHO Public Health Mapping Team, Communicable Diseases, is producing maps showing the location and HIV prevalence in relation to population density, major urban areas and communication routes. For generalized epidemics, these maps show the location of prevalence of antenatal surveillance sites.

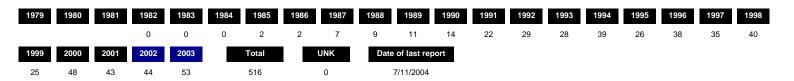
Trends in antenatal sentinel surveillance for higher prevalence countries, or in prevalence among selected populations for countries with concentrated epidemics, are a new addition. These are presented for those countries where sufficient data exist.



### Reported AIDS cases

Following WHO and UNAIDS recommendations, AIDS case reporting is carried out in most countries. Data from individual AIDS cases are aggregated at the national level and sent to WHO. However, case reports come from surveillance systems of varying quality. Reporting rates vary substantially from country to country and low reporting rates are common in developing countries due to weaknesses in the health care and epidemiological systems. In addition, countries use different AIDS case definitions. A main disadvantage of AIDS case reporting is that it only provides information on transmission patterns and levels of infection approximately 5-10 years in the past, limiting its usefulness for monitoring recent HIV infections.

Despite these caveats, AIDS case reporting remains an important advocacy tool and is useful in estimating the burden of HIV-related morbidity as well as for short-term planning of health care services. AIDS case reports also provide information on the demographic and geographic characteristics of the affected population and on the relative importance of the various exposure risks. In some situations, AIDS reports can be used to estimate earlier HIV infection patterns using back-calculation. AIDS case reports and AIDS deaths have been dramatically reduced in industrialized countries with the introduction of Anti-Retroviral Therapy (ART).



# Curable sexually transmitted infections (STIs)

The predominant mode of transmission of both HIV and other STIs is sexual intercourse. Measures for preventing sexual transmission of HIV and STIs are the same, as are the target audiences for interventions. In addition, strong evidence supports several biological mechanisms through which STIs facilitate HIV transmission by increasing both HIV infectiousness and HIV susceptibility. Thus, detection and treatment of individuals with STIs is an important part of an HIV control strategy. In summary, if the incidence/prevalence of STIs is high in a country, then there is the possibility of high rates of sexual transmission of HIV. Monitoring trends in STIs provides valuable insight into the likelihood of the importance of sexual transmission of HIV within a country, and is part of second generation surveillance. These trends also assist in assessing the impact of behavioural interventions, such as delaying sexual debut, reducing the number of sex partners and promoting condom use.

Clinical services offering STI care are an important access point for people at high risk for both STIs and HIV. Identifying people with STIs allows for not only the benefit of treating the STI, but for prevention education, HIV testing, identifying HIV-infected persons in need of care, and partner notification for STIs or HIV infection. Consequently, monitoring different components of STI prevention and control can also provide information on HIV prevention and control activities within a country.

test-

Reported cases		1996	1997	1998	1999	2000	2001	2002	2003	ı	Incidence 200
Comments:				1000	1000	2000	200.	2002	2000	I	
Source:											
/philis prevalenc	eo womon										
prillis prevalerio	e, women										
Percent of blo during routine	od samples take screening at se	en from preg lected anter	gnat wome natal clinic	en aged 15 s.	5-49 that te	est positive	e for syphi	lis - positiv	e reagin	ic ar	nd treponemal to
_	Year		Area	1		Rate			Range		
Comments:											
Comments.											
Source:											
Source:		OTI			al a a a						
	nce of curable	e STIs amo	ong femal	e sex wo	orkers	_					
Source:	nce of curable	e STIs amo	ong femal	e sex wo	orkers	-					
Source: stimated prevale	nce of curable Year	e STIs amo	ong femal Area	e sex wo	orkers	Rate		R	tange		
Source: stimated prevale		e STIs amo		e sex wo	orkers	Rate		R	tange		_
Source: stimated prevale - Chlamydia		e STIs amo		le sex wo	orkers	Rate		R	ange		_
Source:  stimated prevale  - Chlamydia  Comments:		e STIs amo		e sex wo	orkers	Rate		R	ange		
Source: stimated prevale - Chlamydia  Comments: Source:		STIs amo		e sex wo	orkers	Rate			ange ange		_
Source: stimated prevale - Chlamydia  Comments: Source:	Year	e STIs amo	Area	e sex wo	orkers						

Page - 8 Turkey

Source:

	Year	Area	Rate	Range
Comments:				
Source:				
Trichomonias	is			
	Year	Area	Rate	Range

Estimated prevalence of curable STIs among female sex workers (continued)

### Health service and care indicators

HIV prevention strategies depend on the twin efforts of care and support for those living with HIV or AIDS, and targeted prevention for all people at risk or vulnerable to the infection. It is difficult to capture such a large range of activities with one or just a few indicators. However, a set of well-established health care indicators may help to identify general strengths and weaknesses of health systems. Specific indicators, such as access to testing and blood screening for HIV, help to measure the capacity of health services to respond to HIV/AIDS - related issues.

### Access to health care

Indicators	Year	Estimate	Source
% of population with access to health services - total			
% of population with access to health services - urban			
% of population with access to health services - rural			
Contraceptive prevalence rate (%)	1998	63.9	UNICEF/UNPOP
Percentage of contraceptive users using condoms			
% of births attended by skilled health personnel	2000	80.6	WHO
% of 1-yr-old children fully immunized - DPT	2002	78	WHO/UNICEF
% of 1-yr-old children fully immunized - Measles	2001	90	WHO/UNICEF
% of ANC clinics where HIV testing is available			

Number of adults (15-49) with advanced HIV infection receiving ARV therapy as of June 2004

Adults on treatment

Number: 700

Source: WHO

Estimated number of adults (15-49) in need of treatment in 2003

Adults needing treatment

Number: õ

Source: WHO/UNAIDS

Coverage of HIV testing and counselling

Number of public and NGO services providing testing and counselling services.

Year Area N=

Comments:

Source:

Comments: Source:

### Knowledge and behaviour

Knowledge of HIV prevention methods

In most countries the HIV epidemic is driven by behaviours (e.g.: multiple sexual partners, injecting drug use) that expose individuals to the risk of infection. Information on knowledge and on the level and intensity of risk behaviour related to HIV/AIDS is essential in identifying populations most at risk for HIV infection and in better understanding the dynamics of the epidemic. It is also critical information in asssessing changes over time as a result of prevention efforts. One of the main goals of the 2nd generation HIV serveillance systems is the promotion of a standard set of indicators defined in the National Guide (Source: National AIDS Programmes, A Guide to Monitoring and Evaluation, UNAIDS/00.17) and regular behavioural surveys in order to monitor trends in behaviours and to target interventions.

The indicators on knowledge and misconceptions are an important prerequisite for prevention programmes to focus on increasing people's knowledge about sexual transmission, and, to overcome the misconceptions that act as a disincentive to behaviour change. Indicators on sexual behaviour and the promotion of safer sexual behaviour are at the core of AIDS programmes, particularly with youg people who are not yet sexually active or are embarking on their sexual lives, and who are more amenable to behavioural change than adults. Finally, higher risk male-male sex reports on unprotected anal intercourse, the highest risk behaviour for HIV among men who have sex with men.

Year	Male	Female			
- Total	Maic	remaie			
ents:					
:					
rted condom use at last h	nigher risk sex (young p	people 15-24)			
ention indicator: Proportion of	young people reporting t	ne use of a condom during	sex with a non-regula	ar partner.	
Year	Male	Female			
1001	maio	Tomalo			
conte: For this indicator of	nly data will be shown if they	were collected after 1009			
	nly data will be shown if they	were collected after 1998.			
	nly data will be shown if they	were collected after 1998.			
ee:					
e: mixing in sexual partnersh	nips among youg wome	en			
mixing in sexual partnersh	nips among youg wome	en	who is 10 or more ye	ears older than themselves.	
e: mixing in sexual partnersh	nips among youg wome	en	who is 10 or more yo <b>Male</b>	ears older than themselves. <b>Female</b>	All
e: mixing in sexual partnershoroportion of young women w Year	nips among youg women ho have had sex in the la	en st 12 months with a partner			
mixing in sexual partnershoroportion of young women w  Year  nents:	nips among youg women ho have had sex in the la	en st 12 months with a partner			
ee:  emixing in sexual partnershoroportion of young women w  Year  ments:	nips among youg women ho have had sex in the la	en st 12 months with a partner			
re:  rmixing in sexual partnershoroportion of young women w  Year  ments:	nips among youg wome ho have had sex in the la Area	en st 12 months with a partner			
e:  mixing in sexual partnershoroportion of young women w  Year  nents: e:	nips among youg wome ho have had sex in the la Area	en st 12 months with a partner			
re:  rmixing in sexual partnershoroportion of young women w  Year  ments:  ce:  orted non-regular sexual p	nips among youg women ho have had sex in the la Area	enst 12 months with a partner Age group	Male	Female	All
ce: -mixing in sexual partnersh proportion of young women w	nips among youg women ho have had sex in the la Area	enst 12 months with a partner Age group	Male	Female	All

# Knowledge and behaviour (continued)

Percentage of people who ever used a condom.

	Year	Area	Age group	Male	Female	All
Comme	nts:					
Source:						
Adoles	scent pregnancy					
Percent	tage of teenagers 15-19 wh	o are mothers or pregnar	nt with their first child.			
	Year	Percentage				
Comme	nts:					
Source:						
Age at	first sexual experience	_				
Proport	ion of 15-19 year olds who	have had sex before age	15.			
	Year	Male	Female			
	<u> </u>	<u> </u>	<u> </u>			
Comme	nts:					
Source.						

# Prevention indicators

Male and female condoms are the only technology available that can prevent sexual transmission of HIV and other STIs. Persons exposing themselves to the risk of sexual transmission of HIV should have consistent access to high quality condoms. AIDS Programs implement activities to increase both availability of and access to condoms. Thes activities should be monitored and have resources directed to problem aresas. The indicator below highlights the availability of condoms. However, even if condoms are widely available, this does not mean that individuals can or do acess them.

Condom a	availability nationwide	_		
Total numb	er of condoms available f	for distribution nationwide	during the preceding 12 months, divided by the total population aged 15-49.	
	Year	N	Rate	
Comments:				
Source:				
Percentage	e of women who were cou	nsmission (MTCT) nation inselled during antenatal contact at any time in the presentations.	are for their most recent pregnancy, accepted an offer of testing and received their tes	t
	Year	N	Rate	
Comments:				
Source:				
			units are screened for HIV and other infectious agents. This indicator gives an idea of igh enough standards that they can confidently be declared free of HIV.	the
Screening	of blood transfusions	nationwide		
Percentage	e of blood units transfused	d in the last 12 months that	have been adequately screened for HIV according to national or WHO guidelines.	
	Year	N	Rate	
Comments:				
Source:				

### Sources

Data presented in this Epidemiological Fact Sheet come from several sources, including global, regional and country reports, published documents and articles, posters and presentations at international conferences, and estimates produced by UNAIDS, WHO and other United Nations agencies. This section contains a list of the more relevant sources used for the preparation of the Fact Sheet. Where available, it also lists selected national Web sites where additional information on HIV/AIDS and STI are presented and regularly updated. However, UNAIDS and WHO do not warrant that the information in these sites is complete and correct and shall not be liable whatsoever for any damages incurred as a result of their use.

Dehne, K. L., V. Pokrovskiy, Y. Kobyshcha, et al. 2000 Update on the Epidemics of HIV and Other Sexually Transmitted Infections in the Newly Independent States of the Former ... AIDS, vol. 14, supplement 3, pp. S75-S84.

Orak, S., A. E. Dalkilic, Y. Ozbal 1991 Serological Invesitgation of HIV, HBsAg and Syphilis Infections of Prostitutes in Elazig Mikrobiyoloji Bulteni, vol. 25, no. 1, pp. 51-56.

Rota, S., A. Yildiz, H. Guner, et al. 1989 HIV Antibody Screening in a Gynecology and Obstetrics Clinic Ankara, Turkey International Journal of Gynaecology and Obstetrics, vol. 30, no. 4, pp. 395-396.

Turkey 1997 European HIV Prevalence Database, December 1997 Update European Centre for the Epidemiological Monitoring of AIDS, WHO-EU Collaborating Centre on AIDS, Saint-Maurice, France.

Websites:

# Annex: HIV surveillance by site

Group	Area		1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Pregnant women	Major urban areas	Ankara		0															
Sex workers	Major urban areas	National								0.02	0	0.13							
	Outside major urban areas	Not specified	0																
Injecting drug	Major urban	Istanbul										0							
users	areas	National						0											
STI patients																			
Men having sex with men																			
Tuberculosis patients																			