

Combat HIV/AIDS, malaria, and other diseases



Target

Have halted and begun to reverse the spread of HIV/AIDS and the incidence of malaria and other major diseases by 2015

The ECA region is experiencing the world's fastest growing HIV/AIDS epidemic, with the number of people infected increasing from 30,000 in 1995 to 1.4 million in 2004. Russia and Ukraine account for 93 percent of these cases.

42

Despite a prevalence (the absolute number of people living with HIV) lower than other regions, the ECA region, though a latecomer to the HIV/AIDS epidemic, has the world's fastest growing incidence rate (the number of new cases). The number of HIV infections in increased from less than 30,000 cases in 1995 to an estimated 1.4 million by the end of 2004 (UNAIDS and WHO 2004). Some 210,000 people became infected with HIV in 2004, while an estimated 60,000 died of AIDS.

Russia, where it is estimated that 1–2 percent of the adult population may be infected, has the largest HIV/AIDS epidemic in the ECA region. The epidemic is growing fastest among the 15- to 30-year-old general population. And Ukraine has the most serious and firmly established epidemic. Together, these countries account for 93 percent of the ECA region's HIV/AIDS-infected people, where injecting drug use is driving the epidemic. Between 1.5 and 3 million Russians and more than 800,000 Ukrainians are believed to be injecting drug users—most of them male and

more than 80 percent less than 30 years old. Several of the lower income CIS countries are in the early phases of the epidemic. In Southeastern Europe HIV might be gaining a foothold among high risk groups, particularly youth and injecting drug users. Of the EU8 countries only Estonia (and to a lesser extent Latvia and Lithuania) has a significant number of people infected.

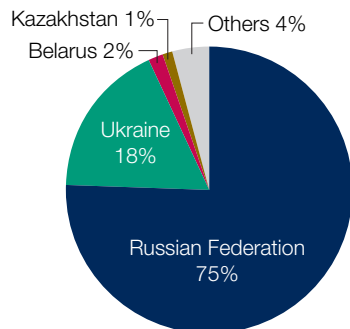
The vast majority of reported infections in the ECA region are among young people—mainly injecting drug users and commercial sex workers. Given the injecting drug use epidemic, female and maternal infection rates are less relevant. This is reflected in the fact that data for HIV prevalence among 15- to 24-year-old pregnant women (the recognized global indicator for measuring progress toward achieving this MDG) are recorded at a significant level for only three countries—Russia, Ukraine, and Estonia (MDG table 6).

The indicator measuring HIV infection rates per million people provides a

much clearer picture of how HIV/AIDS is progressing in all ECA countries. Estonia, Russia, and Ukraine have the highest infection rates. However, after several years of rapid spread the number of new HIV cases appears to be declining in such countries as Estonia, Russia, and Latvia. Caution needs to be used in interpreting these trends because they are heavily dependant on HIV testing. Although no obvious trends in the total number of tests have been detected to explain the sudden decline, additional data are needed to describe testing patterns among high risk populations. Patterns in HIV diagnoses observed in countries with declining incidence rates are nevertheless typical of epidemics concentrated in relatively limited populations (in this case, injecting drug users)—most at risk people rapidly become infected and are not replaced by equal numbers of new “susceptibles” (a saturation effect). Another reason for declining HIV diagnoses could be prevention programs to help reduce risky behavior. Regardless, the situation remains alarming because of the

Based on HIV infection rates and tuberculosis incidence, none of the lower and middle-income CIS countries appears likely to achieve the MDG for HIV and other diseases

Russia has 75 percent of the HIV/AIDS infections in the ECA region



Source: EuroHIV 2004.

large numbers of young people currently living with HIV.

Tuberculosis is another disease posing daunting challenges to the region's social and economic development. The incidence of tuberculosis is increasing in all the lower and middle-income CIS countries—more than doubling since 1990 in such countries as Armenia, Azerbaijan, Georgia, Kazakhstan, Kyrgyz Republic, Russia, and Ukraine—while decreasing for most countries in the EU8 and Southeastern European subregions. Interestingly, the few EU8 countries with increasing tuberculosis incidence (Estonia, Latvia, and Lithuania) also have increasing rates for HIV—probably due to the weakened immune systems of people infected with HIV causing higher susceptibility to tuberculosis.

Tuberculosis is fueled by ineffective approaches to diagnosis and

treatment, poor coverage of effective treatment protocols, and weak, deteriorating health systems. In prisons there is a high prevalence of tuberculosis among inmates, who serve as epidemiological pumps for the spread of the disease. WHO has endorsed a strategy for effective tuberculosis control based on DOTS. This approach, which has cure rates of up to 95 percent, emphasizes positive diagnosis followed by an effective course of treatment and care. Unfortunately, there is growing drug resistance, with tuberculosis patients in parts of the ECA region 10 times more likely to have cases resistant to multiple drugs. WHO data indicate that 6 of the top 10 global hotspots for tuberculosis drug resistance are: Estonia, Kazakhstan, Latvia, Lithuania, Uzbekistan, and parts of Russia, with drug resistance

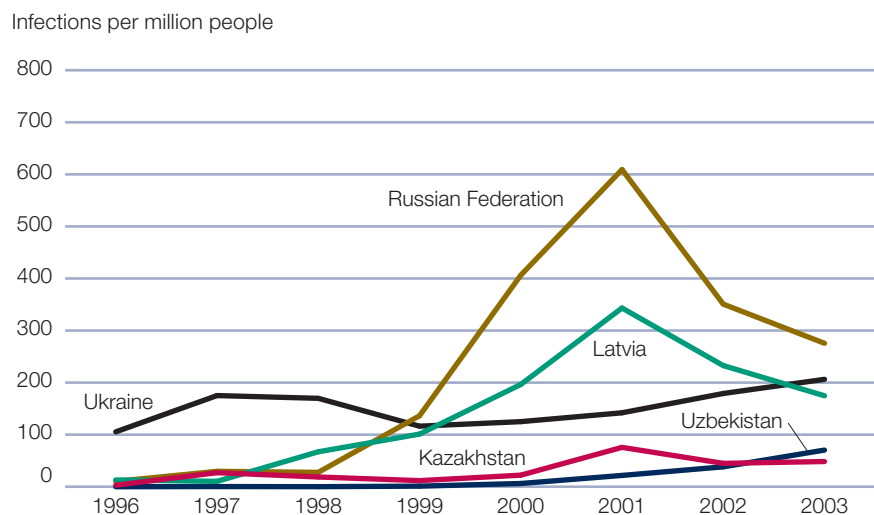
in new patients as high as 14 percent.

Based on HIV infection rates and tuberculosis incidence, none of the lower and middle-income CIS countries appears likely to achieve the MDG for HIV and other diseases. In the EU8 and Southeastern European subregions only Estonia and Romania are assessed as unlikely to meet the MDG—Estonia is not on track for HIV or tuberculosis, and Romania is not on track for tuberculosis. There are also a few countries, such as Albania, Bulgaria, Latvia, and Lithuania, where it is too difficult to tell if the MDG is likely to be achieved or not.

Definitions

Prevalence of HIV is the percentage of people ages 15–49 infected with

The ECA region is experiencing the world's fastest growing HIV/AIDS rates



Source: EuroHIV 2004.

6

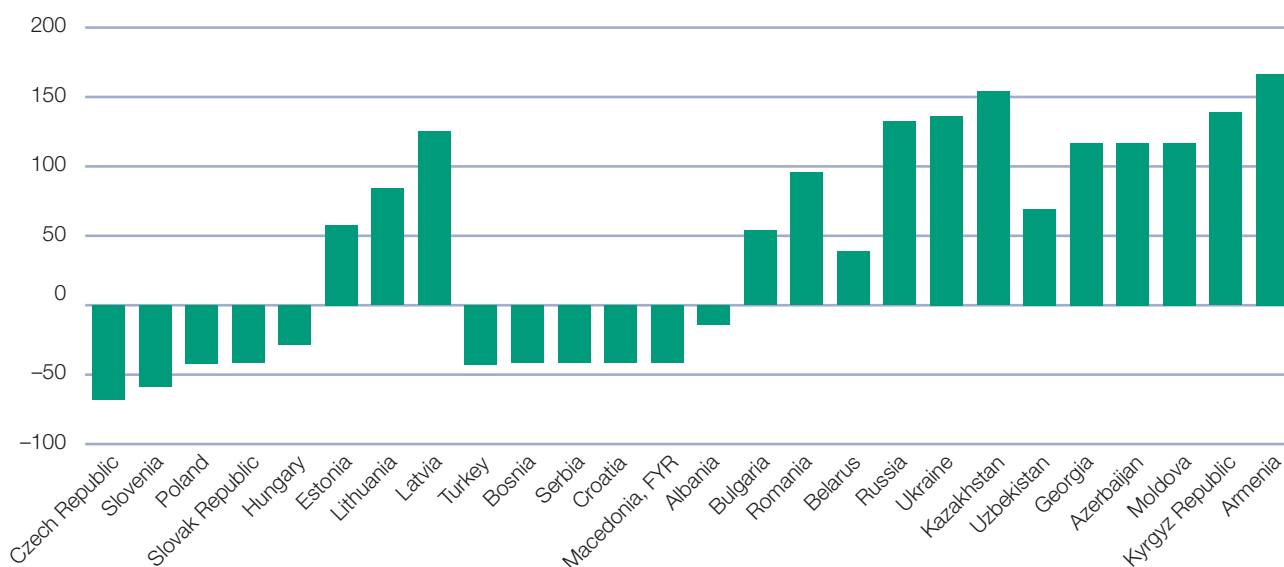
Combat HIV/AIDS, malaria, and other diseases

MDG

44

Tuberculosis is a serious problem, especially in lower and middle-income CIS countries

Change in tuberculosis incidence, 1990–2003 (%)



Source: World Bank, *World Development Indicators*, 2005.

HIV. Figures are an average of high and low estimates.

HIV infection rate is the estimated number of new cases of HIV per million people.

Incidence of tuberculosis is the estimated number of new cases

(pulmonary, smear positive, extrapulmonary) per 100,000 people.

Data sources

The data presented in this section have been sourced from the WDI, ECEM AIDS, and TransMONEE.

The TransMONEE data are largely provided by the central statistical

offices participating in the MONEE project and are used as a proxy for official and administrative data in this publication. The ECEM AIDS data are compiled by the European Center for the Epidemiological Monitoring of AIDS and published in the *HIV/AIDS Surveillance in Europe End-Year Report 2003, No. 70*.

Country	Indicator/source	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Albania	Prevalence of HIV, female (age 15–24)	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Infection rates per million people: ECEM AIDS	..	..	..	..	..	..	2.2	1.0	1.6	1.3	3.2	6.4	8.3	6.6
	Incidence of TB per 100,000 people	26.7	26.1	26.6	27.9	28.0	29.0	28.6	29.5	29.6	28.9	26.9	24.9	23.9	22.9
	TMD	20.0	19.5	16.7	20.0	17.0	20.3	21.4	19.6	20.6	21.3	21.6	..	..	..
Armenia	Prevalence of HIV, female (age 15–24)	..	..	..	..	..	..	..	..	..	..	..	0.1	..	..
	Infection rates per million people: ECEM AIDS	..	..	..	..	..	..	8.2	11.5	2.8	11.1	9.3	9.4	13.3	9.5
	Incidence of TB per 100,000 people	26.3	20.8	21.1	21.7	34.9	40.1	44.6	49.7	58.6	63.8	63.5	63.1	66.6	70.1
	TMD	16.6	20.0	15.8	15.8	19.5	21.6	24.0	27.7	37.4	43.2	42.3	39.9	50.8	..
Azerbaijan	Prevalence of HIV, female (age 15–24)	..	..	..	..	..	..	..	..	..	..	..	0.0	..	..
	Infection rates per million people: ECEM AIDS	..	..	..	..	..	..	0.4	1.6	8.2	10.0	7.8	15.6	12.7	13.9
	Incidence of TB per 100,000 people	35.0	33.5	35.3	38.8	43.3	49.7	56.4	61.7	66.9	71.1	75.3	76.7	76.3	75.9
	TMD	34.9	37.0	36.9	39.4	37.1	38.9	48.0	54.9	55.0	58.0	63.5	60.1	53.7	..
Belarus	Prevalence of HIV, female (age 15–24)	..	..	..	..	..	..	..	..	..	..	..	0.2	..	..
	Infection rates per million people: ECEM AIDS	..	..	..	..	..	..	99.9	64.2	54.7	40.8	52.5	57.9	92.1	72.1
	Incidence of TB per 100,000 people	37.9	33.2	37.1	39.3	48.2	53.6	59.7	64.6	71.3	74.7	72.6	64.8	58.7	52.6
	TMD	29.8	30.9	33.8	37.3	42.5	44.3	49.3	53.4	55.6	53.6	49.9	47.5	45.0	..
Bosnia and Herzegovina	Prevalence of HIV, female (age 15–24)	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Infection rates per million people: ECEM AIDS	..	..	..	..	..	..	0.0	0.6	6.2	2.3	0.5	1.5	1.9	2.9
	Incidence of TB per 100,000 people	93.9	92.6	92.9	91.8	89.1	84.7	82.8	81.3	78.7	70.9	62.8	58.1	56.4	54.8
	TMD	90.2	69.4	..	..	..	..	22.7	24.9	25.3	21.6	18.0	18.7	19.0	..
Bulgaria	Prevalence of HIV, female (age 15–24)	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Infection rates per million people: ECEM AIDS	..	..	..	..	..	..	4.1	3.6	3.2	3.3	6.1	5.0	5.4	8.0
	Incidence of TB per 100,000 people	28.2	31.6	35.6	38.4	39.3	39.1	40.3	44.2	46.3	46.2	45.5	45.1	44.2	43.4
	TMD	25.9	29.8	37.9	38.0	37.5	40.5	37.2	41.3	49.9	45.5	41.0	48.9	47.8	..
Croatia	Prevalence of HIV, female (age 15–24)	..	..	..	..	..	..	..	..	..	..	..	0.0	..	..
	Infection rates per million people: ECEM AIDS	..	..	..	..	..	..	0.2	3.9	8.1	10.8	7.4	7.0	9.9	10.2
	Incidence of TB per 100,000 people	73.9	72.9	73.1	72.3	70.2	66.7	65.2	64.0	61.9	55.8	49.4	45.7	44.4	43.1
	TMD	53.9	45.1	45.8	47.7	46.4	44.3	48.4	44.9	47.1	38.9	37.5	34.3	33.1	..
Czech Republic	Prevalence of HIV, female (age 15–24)	..	..	..	..	..	..	..	..	..	..	..	0.0	..	..
	Infection rates per million people: ECEM AIDS	..	..	..	..	..	..	4.8	6.1	3.0	4.9	5.6	5.0	4.9	6.0
	Incidence of TB per 100,000 people	36.6	33.5	30.7	28.1	25.7	23.6	21.6	19.8	18.1	16.6	15.2	13.9	12.7	11.6
	TMD	18.7	20.2	19.2	18.0	19.0	17.8	18.8	17.8	17.5	15.9	14.0	13.2	11.8	..
Estonia	Prevalence of HIV, female (age 15–24)	..	..	..	..	..	..	..	..	..	..	..	0.6	..	..
	Infection rates per million people: ECEM AIDS	..	..	..	..	..	..	5.6	6.4	7.2	8.7	285.3	1089.7	671.9	627.8
	Incidence of TB per 100,000 people	31.5	31.3	34.7	41.3	48.0	53.1	57.3	63.6	66.2	68.2	65.6	62.3	56.0	49.8
	TMD	20.7	21.3	21.4	29.5	35.4	35.9	41.9	44.4	46.9	43.8	46.9	42.0	38.6	..
Georgia	Prevalence of HIV, female (age 15–24)	..	..	..	..	..	..	..	..	..	..	..	0.0	..	..
	Infection rates per million people: ECEM AIDS	..	..	..	..	..	..	1.5	3.9	4.7	6.6	15.0	17.8	18.3	19.5
	Incidence of TB per 100,000 people	38.2	36.6	38.6	42.3	47.2	54.2	61.6	67.3	73.0	77.6	82.2	83.7	83.2	82.8
	TMD	27.7	27.5	22.9	21.7	53.0	59.8	102.9	100.7	82.8	85.9	85.2	80.1	..	..
Hungary	Prevalence of HIV, female (age 15–24)	..	..	..	..	..	..	..	..	..	..	..	0.0	..	..
	Infection rates per million people: ECEM AIDS	..	..	..	..	..	..	6.1	7.0	7.3	6.2	4.7	8.2	8.1	6.4
	Incidence of TB per 100,000 people	40.3	41.2	43.6	45.6	47.1	48.0	48.4	47.3	44.2	40.0	36.1	33.2	31.0	28.8
	TMD	34.6	35.3	38.2	40.6	40.2	42.0	41.5	40.3	39.0	38.2	35.2	32.6	29.6	..
Kazakhstan	Prevalence of HIV, female (age 15–24)	..	..	..	..	..	..	..	..	..	..	..	0.0	..	..

6

**Combat HIV/AIDS, malaria,
and other diseases**
MDG
46

Country	Indicator/source	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
	Infection rates per million people: ECEM AIDS	..	..	..	..	..	..	2.9	27.0	18.7	11.7	22.2	75.6	44.9	48.4
	Incidence of TB per 100,000 people	57.3	53.2	52.4	52.0	53.0	59.3	69.3	85.9	105.9	124.0	134.9	140.3	142.9	145.4
	TMD	67.2	66.0	66.4	63.6	61.9	70.1	87.0	93.9	122.8	141.0	153.2	155.4	164.8	..
Kyrgyz Republic	Prevalence of HIV, female (age 15–24)	..	..	..	..	..	..	..	..	..	..	..	0.0	..	..
	Infection rates per million people: ECEM AIDS	..	..	..	..	..	..	0.4	0.4	1.3	2.1	3.3	29.8	32.0	25.3
	Incidence of TB per 100,000 people	52.1	55.0	55.5	56.7	62.1	73.5	90.1	105.0	119.2	124.3	128.7	128.3	126.4	124.4
	TMD	52.1	56.4	57.2	53.7	58.7	71.6	85.9	110.5	121.0	131.8	108.0	127.3	126.5	..
Latvia	Prevalence of HIV, female (age 15–24)	..	..	..	..	..	..	..	..	..	..	..	0.2	..	..
	Infection rates per million people: ECEM AIDS	..	..	..	..	..	..	13.0	10.3	67.1	101.1	196.4	343.3	232.7	174.7
	Incidence of TB per 100,000 people	33.4	34.9	36.5	39.7	48.2	59.3	72.0	81.6	84.1	84.5	82.7	82.2	78.7	75.2
	TMD	27.4	29.0	29.5	33.9	44.9	51.3	60.1	69.4	75.5	70.0	72.3	73.4	65.9	..
Lithuania	Prevalence of HIV, female (age 15–24)	..	..	..	..	..	..	..	..	..	..	..	0.0	..	..
	Infection rates per million people: ECEM AIDS	..	..	..	..	..	..	3.4	8.8	14.8	18.8	18.6	20.7	114.6	31.9
	Incidence of TB per 100,000 people	37.9	39.8	43.9	49.5	56.9	63.9	71.4	77.7	79.6	77.3	73.8	70.5	70.1	69.6
	TMD	34.1	34.7	37.2	44.2	55.1	58.5	65.7	78.0	79.6	72.6	66.6	63.9	60.4	..
Macedonia, FYR	Prevalence of HIV, female (age 15–24)	..	..	..	..	..	..	..	..	..	..	..	0.0	..	..
	Infection rates per million people: ECEM AIDS	..	..	..	..	..	..	2.0	0.0	4.5	2.5	3.5	2.5	2.0	0.5
	Incidence of TB per 100,000 people	53.8	53.0	53.2	52.6	51.1	48.5	47.4	46.6	45.1	40.6	36.0	33.3	32.3	31.4
	TMD	39.7	35.2	32.1	36.8	35.7	39.6	..	34.7	30.9	26.4	33.0	34.3	..	..
Moldova	Prevalence of HIV, female (age 15–24)	..	..	..	..	..	..	..	..	..	..	..	0.1	..	..
	Infection rates per million people: ECEM AIDS	..	..	..	..	..	..	11.1	93.6	94.8	36.1	41.1	54.7	48.9	60.5
	Incidence of TB per 100,000 people	64.0	61.3	64.6	70.8	79.1	90.8	103.1	112.7	122.3	130.0	137.6	140.2	139.4	138.7
	TMD	39.6	43.8	43.1	44.6	50.8	63.5	67.6	73.0	80.0	72.6	70.4	83.1	83.6	..
Poland	Prevalence of HIV, female (age 15–24)	..	..	..	..	..	..	..	..	..	..	..	0.0	..	..
	Infection rates per million people: ECEM AIDS	..	..	..	..	..	..	14.3	15.0	16.5	13.6	16.3	14.6	14.9	15.8
	Incidence of TB per 100,000 people	53.1	53.4	53.9	54.0	53.2	51.6	48.6	45.7	42.3	39.0	35.7	33.4	32.1	30.8
	TMD	42.3	43.1	43.1	43.8	43.2	41.3	39.8	36.1	34.4	31.5	29.7	27.6	27.3	..
Romania	Prevalence of HIV, female (age 15–24)	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Infection rates per million people: ECEM AIDS	..	..	..	..	..	..	30.9	28.8	28.8	16.2	12.9	19.6	15.0	10.9
	Incidence of TB per 100,000 people	76.1	81.9	89.0	99.4	108.5	115.5	120.0	124.4	127.9	134.0	139.0	145.5	147.2	149.0
	TMD	64.6	62.1	73.3	82.5	87.4	94.9	98.5	98.2	101.1	104.0	105.5	115.3	122.3	..
Russian Federation	Prevalence of HIV, female (age 15–24)	..	..	..	..	..	..	..	..	..	..	..	0.7	..	..
	Infection rates per million people: ECEM AIDS	..	..	..	..	..	..	10.3	29.6	27.6	136.3	406.3	609.2	350.7	275.5
	Incidence of TB per 100,000 people	48.2	45.2	49.0	55.0	64.4	78.5	93.0	100.9	108.2	115.0	122.0	120.9	116.5	112.2
	TMD	34.2	34.0	35.8	42.9	47.9	57.5	67.2	73.6	75.7	85.0	90.0	88.1	85.9	..
Serbia and Montenegro	Prevalence of HIV, female (age 15–24)	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Infection rates per million people: ECEM AIDS	..	..	..	..	..	..	9.7	9.7	9.9	8.0	6.7	9.2	8.4	9.1
	Incidence of TB per 100,000 people	59.4	58.6	58.8	58.1	56.4	53.6	52.4	51.4	49.8	44.9	39.7	36.7	35.7	34.7
	TMD	39.4	42.9	36.1	36.6	34.3	39.5	42.6	38.3	39.9	36.0	38.9	16.5	..	..
Slovakia	Prevalence of HIV, female (age 15–24)	..	..	..	..	..	..	..	..	..	..	..	0.0	..	..
	Infection rates per million people: ECEM AIDS	..	..	..	..	..	..	0.7	1.5	2.0	0.4	3.5	1.5	2.0	2.4
	Incidence of TB per 100,000 people	41.6	43.5	46.5	47.6	45.7	42.9	38.7	36.3	32.7	30.1	27.5	26.4	25.3	24.3
	TMD	26.3	29.9	32.6	33.7	32.9	28.7	28.0	27.9	23.9	22.5	20.6	20.0	19.6	..
Slovenia	Prevalence of HIV, female (age 15–24)	..	..	..	..	..	..	..	..	..	..	..	0.0	..	..
	Infection rates per million people: ECEM AIDS	..	..	..	..	..	..	4.5	4.0	7.0	7.5	6.5	8.0	11.1	7.1

Country	Indicator/source	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
	Incidence of TB per 100,000 people	45.0	41.9	39.9	38.4	35.7	33.8	32.7	31.1	28.2	25.9	24.0	22.3	20.4	18.4
	TMD	..	30.9	34.1	32.5	26.4	..	..	23.5	20.4	..	18.9	15.0	..	..
Tajikistan	Prevalence of HIV, female (age 15–24)	..	..	..	..	..	..	..	..	..	..	..	0.0	..	..
	Infection rates per million people: ECEM AIDS	..	..	..	..	..	..	0.0	0.2	0.2	0.0	1.1	6.0	4.7	6.7
	Incidence of TB per 100,000 people	107.4	91.4	64.0	45.5	49.5	62.6	78.9	83.4	94.5	101.8	114.5	132.7	150.5	168.3
	TMD	44.2	39.1	30.2	32.0	35.7	29.3	28.7	34.2	41.2	42.1	44.9	55.6	49.6	..
Turkey	Prevalence of HIV, female (age 15–24)	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Infection rates per million people: ECEM AIDS	..	..	..	..	..	..	1.9	2.2	1.7	1.8	2.3	2.7	2.7	2.8
	Incidence of TB per 100,000 people	45.7	44.1	43.4	41.9	39.8	36.7	37.0	37.7	38.2	33.7	29.0	26.5	26.3	26.0
	WHO HFA	43.6	44.0	43.6	39.7	39.0	37.3	34.3	40.1	34.5	33.3	26.8	25.2	25.9	26.3
Ukraine	Prevalence of HIV, female (age 15–24)	..	..	..	..	..	..	..	..	..	..	..	0.9	..	..
	Infection rates per million people: ECEM AIDS	..	..	..	..	..	..	105.4	175.1	169.8	116.3	125.0	142.0	179.1	206.3
	Incidence of TB per 100,000 people	39.0	37.4	40.0	42.9	45.4	48.2	54.1	59.2	66.7	70.8	78.2	84.5	88.3	92.1
	TMD	31.9	32.3	35.0	38.4	39.9	41.8	46.0	49.3	55.5	54.6	60.4	69.7	76.0	..
Uzbekistan	Prevalence of HIV, female (age 15–24)	..	..	..	..	..	..	..	..	..	..	..	0.0	..	..
	Infection rates per million people: ECEM AIDS	..	..	..	..	..	..	0.0	0.3	0.1	1.1	6.2	21.7	38.2	70.4
	Incidence of TB per 100,000 people	67.9	63.5	62.9	73.2	73.0	76.2	71.3	79.4	84.3	87.5	91.4	100.1	107.6	115.0
	TMD	46.1	46.0	44.0	44.8	43.5	44.1	52.4	55.8	59.4	64.6	65.5	73.3	79.4	..

Data source

All data are from the World Development Indicators 2005 unless otherwise stated
TMD TransMONEE Database, UNICEF Innocenti Research Centre, Florence, Italy
ECEM AIDS European Centre for the Epidemiological Monitoring of AIDS
WHO HFA WHO Health For All Database