

AIDS — dramatic surge in ex-Soviet Union, no respite worldwide, new data show

The Russian Federation and other parts of Eastern Europe are facing a major AIDS crisis according to the latest HIV/AIDS figures released last December by the Joint UN Programme on HIV/AIDS (UNAIDS). Although sub-Saharan Africa has still the highest number of cases, some of the largest recent increases have been in the Russian Federation, the UNAIDS report says.

Latest research suggests the number of people infected with HIV in Eastern Europe and the former Soviet Union has jumped to 700 000, a rise of nearly 70% in the space of a year. Most of the increase is due to injecting drug users. The worst affected countries, in descending order of numbers of people living with HIV/AIDS, are Ukraine, the Russian Federation, Belarus, Republic of Moldova, and Kazakhstan.

Vadim Pokrovsky, director of the Russian Centre for the Prevention of AIDS, predicts that one million Russians will be infected with HIV within two years: "Given the existing growth trend in the number of HIV cases, Russia will have millions of HIV cases in two to three years time," he said.

For Neff Walker, epidemiologist with UNAIDS, "the big surprise is what has

happened in Eastern Europe. To see the epidemic suddenly take off as it has in Russia was a shock."

Sub-Saharan Africa, however, has still by far the biggest AIDS problem. Nearly 9% of adults there are living with the infection or the disease, vs a worldwide adult prevalence rate of 1.1%. Former South African President Nelson Mandela warned in a World AIDS Day message: "We are facing a silent and invisible enemy that is threatening the very fabric of our society". But not all the news from Africa is bad. "For the first time, there are signs that HIV incidence may have stabilized in sub-Saharan Africa," the report says. New infections there in 2000 totalled about 3.8 million vs 4 million in 1999.

Asia is a cause of growing concern. With 0.6% of the population living with HIV/AIDS in South and South-East Asia, it is the most affected region after Africa. Dr Chris Beyrer, director of the Johns Hopkins Fogarty AIDS International Training and Research Program, says: "Now at risk are some of the largest human populations. The window of opportunity to respond to HIV in Asia is narrow and closing. The time for action is now."

The UNAIDS report says that industrialized countries are facing a different type of AIDS problem — complacency due to the mistaken belief that the disease can now be easily treated with drugs. The result is that "in high-income countries prevention is faltering," the report says. "Risk behaviour is undeniably on the rise in some communities."

"In the developed countries, people in some communities may engage in more risk behaviour because they have a mistaken belief that the new drugs will solve the problem," commented Dr Walker in an interview. "But we don't know how long these drugs will work and for some people they don't work. The virus can also mutate and become resistant, so we don't know what the long-term prospects for these treatments will be." ■

Roger Dobson, *Abergavenny*

Tannery pollution threatens health of half-million Bangladesh residents

About half a million residents of the Bangladesh capital, Dhaka, are at risk of serious illness due to chemical pollution

from tanneries near their homes, according to a report released last year by the Bangladesh Society for Environment and Human Development (SEHD). The report says large numbers of the 8000–12 000 workers at the tanneries suffer from gastrointestinal, dermatological and other diseases that could be related to the pollution and that 90% of them die before the age of 50 vs less than 60% for the country as a whole. About a quarter of these workers are under 11 years of age.

The affected area is Hazaribagh, a community in the south-east corner of Dhaka, where 240 tanneries are located on 25 hectares of land, the report notes. Most of the tanneries are 30–35 years old and use mineral tanning processes that discharge about 6000 cubic metres of liquid effluent and 10 tons of solid waste every day, according to figures from the Bangladesh government and the Food and Agriculture Organization.

Chromium, the SEHD report says, is one of the most harmful chemicals found in the tannery waste because of its carcinogenic potential. Acidic effluents, it adds, can cause severe respiratory problems. Gaseous emissions from the tanneries contain sulfur dioxide that is converted into sulfuric acid on contact with moisture and can damage lungs. "You only have to see the corrosion of iron that has occurred in buildings and sheds in the area, to realize what these people are exposed to," says Han Heijnen, WHO's environmental health adviser in Bangladesh.

The SEHD report says that 58% of the tannery workers suffer from gastrointestinal disease (vs 24% for the country as a whole), 31% from dermatological diseases (vs 9%), 12% from hypertension (vs 0.9%) and 19% from jaundice (vs 0.07%).

A recent article in a Bangladesh newspaper, *The Independent*, says that "residents in the Hazaribagh area have been complaining for a long time that the tanneries emit bad odour and pollute the air beyond tolerable limits".

A local environmentalist group urged the government a few years ago to move the tanneries to a less populated site, Mr Heijnen told the *Bulletin*. "The proposal was opposed by industrial interests." Two years ago, the United Nations Industrial Development Organization recommended installing a plant to treat the tannery waste but, says Mr Heijnen, "beyond debating

Global summary of the HIV/AIDS epidemic, December 2000

People newly infected with HIV in 2000

Adults	4.7 million
Women	2.2 million
Children < 15 years	600 000
Total	5.3 million

Number of people living with HIV/AIDS

Adults	34.7 million
Women	16.4 million
Children < 15 years	1.4 million
Total	36.1 million

AIDS deaths in 2000

Adults	2.5 million
Women	1.3 million
Children < 15 years	500 000
Total	3 million

Total number of AIDS deaths since the beginning of the epidemic

Adults	17.5 million
Women	9 million
Children < 15 years	4.3 million
Total	21.8 million