

The risk of transmission of blood-borne viral diseases such as hepatitis and AIDS among health-care workers is a matter for concern, particularly to surgeons, anaesthetists, nurses and others involved in the surgery of orthopaedics and trauma.

By the late 1970s, 13% to 18% of surgeons had been infected with the hepatitis-B virus (HBV) compared with 3% to 5% of the general population.¹ The annual rate of infection in health-care workers was found to range from 0.5% to 5.0%, compared with 0.1% in the general population of the USA.¹ An anti-HBV vaccine became available in 1981 and has helped to control this problem; the risk of occupational infection from the hepatitis-C virus (HCV) has been increasingly recognised. A new and threatening problem has arisen from the emergence of the human immunodeficiency virus (HIV) and its rapid spread.

Epidemiology of HIV infection

At the end of 1999, the Joint United Nations Programme on HIV and AIDS (UNAIDS) and the World Health Organisation (WHO) estimated that about 33.6 million individuals were infected with HIV throughout the world, including 32.4 million adults and 1.2 million children under 15 years of age. About 16.3 million people had died from the disease.² It is estimated that 5.6 million people had become infected in 1999, including 570 000 children.²

Europe. The prevalence figures for European countries are based on the numbers of AIDS patients declared to national surveillance systems. By 30 June 1999, 224 359 cases had been registered in the WHO European region; 60% had died.³ There has been a declining trend in the incidence of AIDS since 1996 due in part to measures for prevention, but also because of the efficiency of antiretroviral treatment. For this reason, the data from AIDS surveillance do not now reflect the full impact of the epidemic. A case-

reporting system for HIV was set up at European level in 1999 to complement registration of cases of AIDS in order to improve the monitoring of the disease. National registration of HIV infection is now used in 37 countries of the WHO, including 11 in the EU.

At the end of 1997, the mean prevalence of adult HIV in western Europe was estimated at 0.23% ranging from 0.01% in Slovenia to 0.69% in Portugal (Table I). There are large variations in the incidence and prevalence of HIV infection which may reflect differences in pathology as well as in the efficiency of surveillance systems. In 1998, 24 978 new cases of HIV infection were reported. Sexual transmission accounted for 88% of those in western Europe while injecting drug users represented 80% of new infections in eastern Europe. Trends in the annual number of cases of HIV reported during the 1990s varied markedly by geographic area. In western Europe, the number decreased in

Table I. Cumulated number of HIV and AIDS cases registered in June 1999³ and estimated prevalence of HIV in adults (15 to 49 years) in Europe at the end of 1997⁴

Country	HIV cases Number	AIDS cases Number	HIV prevalence Percentage
Austria	NA*	1915	0.18
Belgium	11 067	2599	0.14
Bulgaria	NA	60	0.01
Croatia	248	144	0.01
Czech Republic	393	125	0.04
Denmark	2482	2216	0.12
Finland	945	294	0.02
France	NA	49 421	0.37
Germany	NA	18 239	0.08
Greece	NA	1964	0.14
Hungary	772	328	0.04
Ireland	NA	674	0.09
Italy	NA	44 516	0.31
Luxembourg	342	139	0.14
Netherlands	NA	5054	0.17
Norway	1869	638	0.06
Poland	5591	794	0.06
Portugal	10 012	6020	0.69
Romania	5928	3704	0.01
Russian Federation	10 935	395	0.05
Slovakia	68	22	<0.005
Slovenia	140	81	0.01
Spain	NA	54 964	0.57
Sweden	4911	1663	0.07
Switzerland	23 821	6641	0.32
United Kingdom	33 329	16 437	0.09
Yugoslavia	NA	806	0.10

* not available

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