In rapid communications

INCREASE IN THE SPREAD OF HUMAN IMMUNODEFICIENCY VIRUS IN SWEDEN, 2007

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As of the end of 2007, 8,014 people have been reported as human immunodeficiency virus (HIV)-positive in Sweden. About 4,500 of them were still alive and living in Sweden at the end of 2007. Many deaths occurred before effective antiretroviral treatment became available in 1996, and a substantial number of those who tested positive were only temporarily in Sweden. From the late 1980s until 2002, around 300 new cases were reported annually. In recent years, there has been a gradual increase, and in 2007, a total of 541 cases were reported, which is the highest figure since the mid-1980ies, when it first became possible to diagnose HIV infections (Figure 1).

The average age at diagnosis is between 35 and 40 years for all three major routes of transmission: heterosexuals, men who have sex with men (MSM) and injecting drug users (IDUs). This is high compared to other sexually transmitted infections, such as chlamydia (average age at diagnosis 24 years) and gonorrhoea (30 years), but similar to syphilis, which is diagnosed at an average age of 37 years [1,2].

A large proportion of the diagnosed patients were infected before moving to Sweden (Figure 2). This number has varied over the years and reflects the growing HIV epidemic in the world as well as current refugee and migration patterns.

Annually, around 40 Swedish residents are infected abroad (41 in 2007). This number has remained fairly constant over the past decade. In this group, men infected through heterosexual contacts when visiting Asia, and in particular Thailand, dominate. However, people originating from countries with a widespread epidemic, particularly in Africa, and who become infected when visiting their country of origin, also constitute a significant proportion.

The spread in Sweden

The most noticeable trend in 2007 was a sharp increase in the number of people reported as having been infected in Sweden. In 178 cases in 2007, the infection was contracted within Sweden, compared to an average of 88 cases in the five previous years (Figure 3).

The increase is seen in all transmission groups, but primarily among MSM and IDUs. Among MSM, 81 cases were reported, compared to an average of 45 in the past five years. The increase was predominantly seen in the Stockholm area and to some extent in the Malmö area, which has close links with the Copenhagen

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**Figure 1**

Mumps cases
A) by week (17 December 2007 to 2 March 2008, n=13,853) and B) by month (July 2007 to February 2008, n=14,438) of notification. Republic of Moldova*

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**Figure 2**

HIV cases reported in Sweden 2002–2007 by country of residence and place of infection (n=2,377)
metroplitan area. In Sweden, this increase was noted later than in many other European countries, where it has been seen among MSM for more than five years [3]. In 2007, there was also a sharp rise in cases of lymphogranuloma venereum among MSM [4], a fact that further highlights the need to increase preventive measures in this population group.

In 2007, 52 cases of HIV among IDUs were reported, compared to an average of 21 cases in the five previous years. Forty-nine of those cases were reported from the Stockholm area, where HIV is currently spreading among IDUs. This has again provoked calls for a needle-exchange programme for IDUs in Stockholm, a service that is currently only available in the Malmö-Lund area in southern Sweden.

There was also an increase in the number of cases acquired through heterosexual contact in Sweden. In 2007, 40 cases were reported, compared to an average of 27 in the five-year period from 2002 to 2006. Almost half of these cases were people born in countries with a high prevalence of HIV, who constitute about one percent of the population in Sweden [5]. This shows that, even after they having moved to Sweden, people originating from countries with a high HIV prevalence have a higher risk of being infected through heterosexual contact than people born in Sweden.

Ten cases of mother-to-child transmission were reported in 2007. Nine of them were children born outside Sweden, and in one case the transmission took place in Sweden.

During 2007, 65 cases of acquired immunodeficiency syndrome (AIDS) were reported in Sweden, compared to an average of 48 cases during the last five-year period.

References

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Figure 3
HIV infections acquired in Sweden 2002−2007 by route of transmission (n=652)