



DIRECTORATE
OF HEALTH

Chief Epidemiologist for Iceland

EPI-ICE

Volume 7. Issue 2. April – June 2011.

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Editorial Board:
Haraldur Briem,
Chief Epidemiologist

Gudrun Sigmundsdottir
Thorolfur Gudnason

Editor:
Jonina M. Gudnadottir

DIRECTORATE OF HEALTH
CHIEF EPIDEMIOLOGIST
FOR ICELAND

Austurströnd 5
170 Seltjarnarnes
Tel: +354 510 1900
Fax: +354 510 1920

E-mail: mottaka@landlaeknir.is
Website: www.landlaeknir.is

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GREAT INCREASE IN THE INCIDENCE OF HIV INFECTION AMONG INTRAVENOUS DRUG USERS

From the beginning of the HIV epidemic in Iceland a quarter of a century ago, 269 patients have been diagnosed with the disease. Most of these, or 105, are men who have had sex with men, 98 are patients with heterosexual risk behavior, 53 are intravenous drug users (IVDUs), and patients with other risk factors are 13.

Among the 53 IVDUs, 32 have been diagnosed in the past four years (see fig. below). Characteristic of this recent HIV-positive group is a relatively high mean age, or 34 years (fig. p. 2), and certain intimate contacts between many of them.

The present HIV outbreak among IVDUs is not entirely surprising while it is more of a surprise how infrequent the HIV infections among them have been in the past. Physicians and other health care workers pointed out in 2007 that HIV infection among IVDUs was on the increase and might be explained by more ruthlessness on their part and lack of respect for their own health and that of others.

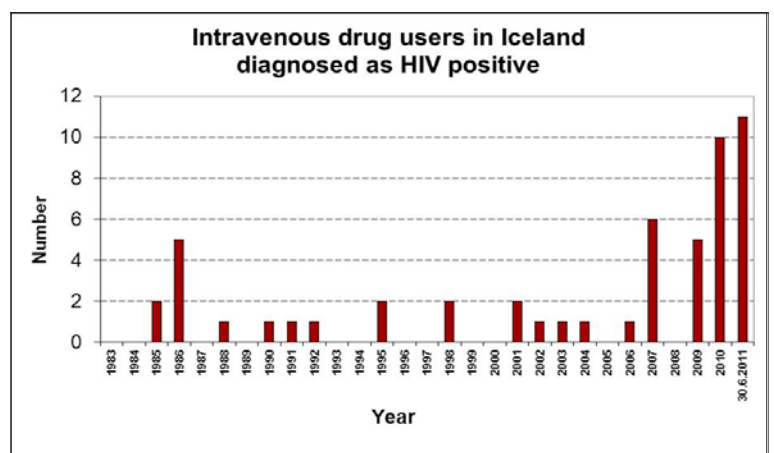
Another characteristic of this outbreak is the frequent use of Ritalin® (methylphenidate) for intravenous abuse.

Preventive measures for addicts and their treatment present certain difficulties. Prevention of HIV infection is closely linked to the treatment of the addiction and easy access to clean needles and syringes. In Ice-

land, the access to needles and syringes has been relatively easy at low cost in pharmacies. The Reykjavik Division of the Red Cross has also offered mobile “health care on wheels” for the past couple of years where nurses provide counselling, needles and syringes for free, and needle exchange.

The treatment of HIV infection is also complicated. The treatment may improve the health of patients with HIV infection and the viral load may be reduced to such an extent that the probability of viral transmission is also reduced. The problem is that the patients need to take the drugs regularly. If they fail to do so the viral load may increase again and the virus may become drug resistant. In many cases it may prove impossible for the IVDU to comply with treatment and health checks adequately.

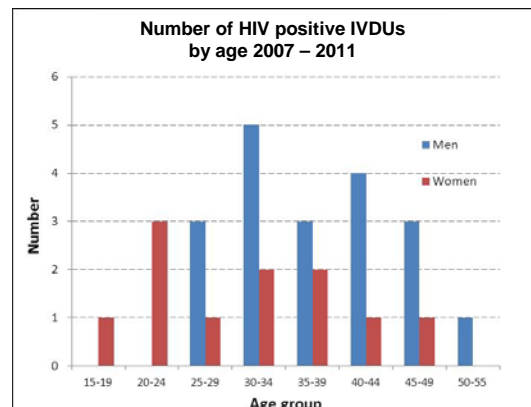
At present, possible actions against this problem are being discussed. There is general consensus that an easy access to clean needles and syringes free of charge is essential. Condoms must be affordable. The outpatient clinics for infectious diseases and



By vaccination against HPV it is estimated that 40–50% of precancerous lesions and 60–70% of cervical cancers in Iceland can be prevented.

drug addiction at the Landspítali University Hospital and other hospitals must be strengthened. The activity of these addiction clinics should work in cooperation with the mobile service of the Reykjavik Division of the Red Cross in order to strengthen compliance with preventive measures and treatment.

Haraldur Briem



VACCINATION AGAINST PNEUMOCOCCAL DISEASE AND HPV INFECTION

General childhood vaccination in Iceland against pneumococcal disease

On 11 April 2011, general childhood vaccination against pneumococcal disease was initiated for children aged 3, 5, and 12 months.

Following a call for tenders it was decided to accept an offer from GSK regarding the vaccine *Synflorix*. The vaccine is expected to protect against infections caused by 10 serotypes of the pneumococcus bacteria and the nontypable *haemophilus influenzae* bacteria which are an important cause of otitis media and sinusitis.

Pneumococcal infection can be serious in childhood and for adults. It is expected that general childhood vaccination will reduce serious childhood pneumococcal infections by 70%, otitis media by 25%, pneumonia by 30% and that antimicrobial consumption by children will be reduced by 25%.



In April 2011 vaccination against pneumococcal disease became part of the national childhood vaccination programme. Children born in 2011 and later will be vaccinated at the age of 3, 5 and 12 months.

In Iceland, approximately 11 children are diagnosed every year with a life-threatening pneumococcal disease, 9000 children with otitis media and around 400 with pneumonia. Antimicrobial drugs will be prescribed to 4000 children.

General vaccination in Iceland against HPV infection

In September 2011, general vaccination against HPV (*Human Papilloma Virus*) infections will be launched among girls 12 and 13 years of age (born in 1998 and 1999). In the future, all girls will be vaccinated at 12 years of age.

Following a call for tenders it was decided to accept an offer from GSK regarding the vaccine *Cervarix* which protects against certain viruses causing cervical cancer. The vaccination will take place in primary schools and in order to gain full protection each girl needs three injections (a second dose 1 month after the first one and the third dose 6 months after the first dose).

In Iceland, hundreds of women are diagnosed annually with cervical precancerous lesions and about 17 women are diagnosed with cervical cancer. By vaccination it is estimated that 40–50% of the precancerous lesions and 60–70% of the cervical cancers can be prevented. Since cervical cancer takes 20–30 years to develop from HPV infection, some 10–30 years will pass until any results of the vaccination become evident. It is therefore of paramount importance that women continue to attend the cancer detection screening programme as recommended in Iceland.

Thorolfur Gudnason

SALE AND PRESCRIPTION OF ANTI-MICROBIAL DRUGS IN ICELAND IN 2010

Compared with the other Nordic countries, the total sale of antimicrobials in Iceland has been similar to that in Finland and 50% higher than in Sweden.

Since 1999, the sale of antimicrobials has been relatively constant in Iceland, ranging from 20 to 23 DDDs per day per 1000 population.

According to the Act on Health Security and Communicable Diseases in Iceland the Chief Epidemiologist is obliged to keep registers on the consumption of antimicrobials and on communicable diseases, vaccinations as well as any unforeseen events threatening public health.

Since 1999, the sale of antimicrobials has been relatively constant in Iceland, ranging from 20 to 23 defined daily dosages per day per 1000 population. The sale was at its lowest in 2000–2003 and highest in 2004–2008. In terms of prescriptions the consumption in the age groups 0–4 and 5–9 years has gone down in the last four years.

Compared with the other Nordic countries, the total sale of antimicrobials has been similar in Iceland and Finland. In 2009, the sale in Iceland was 20% higher than in Denmark, 12% higher than in Norway and 50% higher than in Sweden. The sale of antimicrobials has been increasing in all the Nordic countries except Iceland and Sweden.

Antimicrobial resistance is a growing problem in Iceland as elsewhere. One explanation for the spread of antimicrobial resistance is the high consumption of antimicrobials. Prudent use of antimicrobials is therefore a very important factor in the fight against resistant

microbes. Education and knowledge is the key to prudent use of antimicrobials and various efforts have been made in that field in recent years.

The Minister of Welfare has appointed a National Committee on Antimicrobial Consumption and Antimicrobial Resistance to advice health authorities on measures to reduce the risk of antimicrobial resistance. Each year a report is issued on antimicrobial sale and prescriptions which is reviewed by the commission.

Thus, the prudent use of antimicrobials is advocated in Iceland. Health care associated infections are controlled and monitored. The antimicrobial consumption within and outside health care institutions is monitored to detect how the consumption relates to antimicrobial resistance. The information on antimicrobial consumption and resistance may be useful to physicians prescribing these drugs.

The Chief Epidemiologist has, in cooperation with physicians and medical unions, worked on programmes to promote prudent use of antimicrobials. The results of these programmes will be evaluated for nationwide applications.

*Haraldur Briem
Thorolfur Gudnason*

