NDPHS Expert Group on HIV/AIDS

Thematic Report

HIV/AIDS in the Baltic Sea Region and Northwest Russia

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Northern Dimension Partnership in Public Health and Social Well-being (NDPHS)

NDPHS thematic report: *HIV/AIDS in the Baltic Sea Region and Northwest Russia*

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Thematic report

HIV and AIDS in the Baltic Sea Region and Northwest Russia

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1. Introduction

The HIV epidemic continues to spread through injecting drug use but increasingly the infection is also spreading to other parts of the population. Significant change has taken place through the possibility to widely implement highly active antiretroviral treatment (ART) not only improving the situation of those infected but also by enhancing prevention efforts and reducing the stigma and discrimination known to drive the epidemic further. The future of the epidemic in the region is markedly shaped by the ability to use ART so that all vulnerable groups, injecting drug users (IDUs) and their partners in particular, can be reached. At the same time, the message of the importance of prevention should be kept renewable and fresh so that new generations are aware of the risks and empowered to make the correct choices for their future.

2. Recent epidemiological development in some countries

2.1. Northwest Russia

Northwest federal district of Russian Federation (NWFD) includes seven oblasts (Archangelsk, Vologda, Kaliningrad, Leningrad, Novgorod, Pskow) two republics (Komi and Karelia), Nenets national district and the city of St. Petersburg.

First case of HIV-infection in the region was registered in 1987. As of the 31 December 2006, 56,742 cases have been registered, of them 4,618 have died, 679 from AIDS. The dynamics of the epidemic is showed in table 1.

The epidemic is still driven by infections among injecting drug users although increasingly infections are also reported from people (often women) who report heterosexual transmission. The number of children born to HIV-infected mothers is quite high reflecting the high prevalence among pregnant women. The number of pregnant women receiving antiretroviral treatment has risen significantly during recent years thus reducing the number of children born with the infection (see annex 1).
Table 1: Number of reported new HIV cases in NW Russia in 1997-2007
(Source: Northwest District AIDS Centre, St Petersburg)

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<tbody>
<tr>
<td>St. Petersburg</td>
<td>70</td>
<td>73</td>
<td>387</td>
<td>3,735</td>
<td>10,119</td>
<td>5,757</td>
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<td>3,689</td>
<td>4,045</td>
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<td>4</td>
<td>49</td>
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<td>1,572</td>
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<td>363</td>
<td>484</td>
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<td>340</td>
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<td>414</td>
<td>454</td>
<td>501</td>
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<tr>
<td>Murmansk reg.</td>
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<td>19</td>
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<td>69</td>
<td>469</td>
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<td>206</td>
<td>163</td>
<td>241</td>
<td>371</td>
<td>416</td>
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<tr>
<td>Rep. of Komi</td>
<td>7</td>
<td>14</td>
<td>14</td>
<td>51</td>
<td>126</td>
<td>196</td>
<td>116</td>
<td>114</td>
<td>135</td>
<td>147</td>
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<tr>
<td>Novgorod region</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>42</td>
<td>239</td>
<td>166</td>
<td>93</td>
<td>93</td>
<td>77</td>
<td>96</td>
<td>134</td>
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<tr>
<td>Volgoda region</td>
<td>5</td>
<td>4</td>
<td>9</td>
<td>57</td>
<td>318</td>
<td>182</td>
<td>119</td>
<td>125</td>
<td>119</td>
<td>134</td>
<td>133</td>
</tr>
<tr>
<td>Rep. of Karelia</td>
<td>3</td>
<td>4</td>
<td>8</td>
<td>50</td>
<td>65</td>
<td>51</td>
<td>39</td>
<td>61</td>
<td>81</td>
<td>55</td>
<td>92</td>
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<td>Archangelsk reg.</td>
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<td>6</td>
<td>7</td>
<td>8</td>
<td>43</td>
<td>61</td>
<td>40</td>
<td>38</td>
<td>49</td>
<td>62</td>
<td>62</td>
</tr>
<tr>
<td>Pskov region</td>
<td>7</td>
<td>5</td>
<td>11</td>
<td>16</td>
<td>66</td>
<td>46</td>
<td>30</td>
<td>39</td>
<td>30</td>
<td>46</td>
<td>44</td>
</tr>
<tr>
<td>Nenetsk aut.dist.</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td>1,211</td>
<td>717</td>
<td>951</td>
<td>5,233</td>
<td>14,120</td>
<td>8,743</td>
<td>6,078</td>
<td>5,729</td>
<td>6,287</td>
<td>6,799</td>
<td>7,233</td>
</tr>
</tbody>
</table>

National or even regional statistics may not give the best possible picture of the current situation. Only part of the infections is registered (estimates vary from 30 to 60 per cent, WHO 2006). Another important issue is the geographic diversity. While in some cities and centres the rise may have levelled off indicating a stabile situation, other cities may witness explosive epidemics.

Kaliningrad, one of the first cities and regions to show a severe epidemic among the drug users in the region, is still marred by a rapidly spreading epidemic. The rate of new cases reported annually has remained high after the peak in the 1990s with a prevalence among the highest in the region (400/100,000 at the end of the year 2005).

The recent response to counteract the epidemic in Russia has significantly intensified. In 2008, 30,000 patients are estimated to become recruited to sustained antiretroviral treatment. In 2007, 6,239 pregnant HIV-positive women received full course of preventive medication. In addition, new preventive measures sponsored by the federal government were implemented including those targeted at vulnerable groups. Also the capacity of the laboratories, AIDS centers, sexually transmitted infection (STI) centers and other centers providing service to people infected or at risk for HIV, has been improved by state initiatives, supported by the Global Fund and the World Bank.

2.2. The Baltic Countries

The Baltic countries have shown different dynamics in their HIV epidemics. In Lithuania, the overall figures have remained relatively low, a major outbreak within a prison indicated that also there injecting drug users are a major risk group. In Latvia, the epidemic, also driven by drug use, started already in the 1990s. Comparatively, more cases are in advanced stages than in other countries. Estonia, having the highest number of infected persons demonstrates the greatest variation between different parts of the country. In the eastern region, and in particular in Narva city the prevalence and incidence is very high, possibly the highest in Europe, while some other regions are practically free of the disease. Reasons for this difference may include failures in prevention among Russian speaking population, links with high-endemic Leningrad region across the border and social conditions with high unemployment rate.
Very often injecting drug users contract the infection at a young age. Figure 1 demonstrates the difference in the distribution of transmission categories between the Baltic countries and the Nordic countries.

**Figure 1. Difference in the transmission routes between the Baltic and the Nordic countries**
(Source: Personal communication, Gedris Likatavicius, EuroHIV, 2006)

![Reported HIV cases by transmission mode in Nordic countries and Baltic States, 2005](image)

In all Baltic countries ART is available and through the assistance of the Global Fund a universal and non-discriminating access to treatment has been developed. Harm reduction aiming at a reduction of risk behaviour and thus vulnerability to HIV among drug users and their partners is gradually being implemented. In Latvia, low-threshold centres and outreach work is being developed providing counselling, needle exchange, and other necessary material, medical and social support and help in assistance for seeking treatment for drug addiction. In Estonia, similar structures are under development, while in Lithuania main focus has been on educational approaches (although outreach is available in many cities there, also). Methadone and buprenorphine (Subutex) as part of harm reduction is widely available in Estonia and Latvia through prescription of doctors. In Lithuania the attitudes towards maintenance therapy are more conservative.

### 2.3. Nordic Countries

Nordic countries have had a stable situation for many years now. Since the local outbreak among injecting drug users in Finland in the late 1990s significant outbreaks have not been observed. However, a continuous, if slow, rise in the annual numbers of reported cases is seen in all Nordic countries. Main risk factor seems to be increasing number of infections among men who have sex with men (MSM) but containment of spread among drug addicts needs continuous vigilance.

As in many European countries, the number of cases among individuals moving from endemic countries to the Nordic countries has increased. In most cases the infection has been acquired before immigration but prevention among migrant population calls for special attention and focused and culture-sensitive interventions.
3. Social and political impact, future

The political and social impact of HIV is and will be much more severe on the Southern and Eastern side of the Baltic Sea. If the HIV-prevalence is related to the purchasing power of the national domestic gross income (GNP) the difference is almost a hundred fold (table 2). The World Bank predicts a drop in GNP of 3-10% in the next couple of years (Source: UNAIDS: 2006 AIDS Epidemic Update. Eastern Europe and Central Asia).

Table 2

<table>
<thead>
<tr>
<th>Country/region</th>
<th>HIV-prevalence *</th>
<th>HIV-prevalence in proportion with the GNP**</th>
</tr>
</thead>
<tbody>
<tr>
<td>St.Petersburg</td>
<td>667</td>
<td>23,8</td>
</tr>
<tr>
<td>Leningrad oblast</td>
<td>452</td>
<td>16,1</td>
</tr>
<tr>
<td>Kaliningrad</td>
<td>402</td>
<td>14,3</td>
</tr>
<tr>
<td>Estonia</td>
<td>376</td>
<td>8,4</td>
</tr>
<tr>
<td>Murmansk</td>
<td>165</td>
<td>5,9</td>
</tr>
<tr>
<td>Latvia</td>
<td>144</td>
<td>3,6</td>
</tr>
<tr>
<td>Karjala</td>
<td>50</td>
<td>1,8</td>
</tr>
<tr>
<td>Lithuania</td>
<td>29</td>
<td>0,7</td>
</tr>
<tr>
<td>Sweden</td>
<td>27</td>
<td>0,26</td>
</tr>
<tr>
<td>Finland</td>
<td>25</td>
<td>0,25</td>
</tr>
</tbody>
</table>

*Cumulative number of reported HIV- cases /100 000 inhabitants, source: national and regional AIDS centres (2005)
**GNP adjusted with purchasing power. (Leinikki, Journal of Finnish Medical Association, 2007)

With the introduction of ART treatment, not only the quality of life but also life expectancy of those infected will improve dramatically. In order to achieve these benefits, a system to provide life-long drug therapy along with strong social support must be set up. In order to adjust to this, the national health policies may need to be revised frequently and social and health care will consume much more resources than what used to be the case only 5-10 years ago. Also, approaches that are used in other countries may not be appropriate. All this is a challenge not only to the health policies but to the entire political structure. Providing equal opportunities to infected people and avoiding discrimination will need political courage and advocacy.

Most experts believe that the future demographic development will be affected by HIV in the worst hit countries in the region. The disease may cause reduction in the population, reduce the working power and directly and indirectly snap off from the GNP several percent units. Since the infection is hitting hardest certain vulnerable groups, not often prioritised in the political dialogue, attention and advocacy is needed to reach necessary efficiency in the prevention and treatment. Special programmes for vulnerable groups such as prisoners and ex-prisoners, migrant populations, injecting drug users and socially marginalised young people are necessary to complement the services of the national health and social policies.

Recent increase in the infection rate among women in many countries reveals special problems; women may be vulnerable not only due to injecting drug use by themselves, but also as sexual
partners of men who use intravenous drugs and during commercial sex work. More often than men women are not able to use the available preventive and social interventions due to power imbalance within relationships and within society. In NW Russia the number of women learning about their HIV infection only when delivering a baby is strikingly high (WHO, Smolskaya et al, 2007).

Legal obstacles for effective prevention must be removed and all sectors of the society recruited to the work. Since the picture will change considerably in the forthcoming years with more individuals with more advanced disease, their life depending on successful implementation of continuous medication, the national AIDS policies must be regularly updated and receive sufficient political attention.

### 4. Regional collaboration and the role of the expert group on HIV/AIDS of NDPHS

Under the Northern Dimension Partnership on Health and Social issues (NDPHS) an Expert Group on HIV/AIDS has been working for several years (previously as part of the Task Force for Communicable diseases under the Council of Baltic Sea States and before that, as an unofficial “All-Baltic Union against AIDS”). National/Partner representatives in the group (EG) are senior experts participating actively in the shaping and implementation of national AIDS policies in their own countries. In its policy paper the EG has identified five priority areas:

1. Surveillance,
2. General awareness and policy development,
3. Legislation,
4. Prevention,
5. Treatment and care.

For each priority area, key recommendations for actions are given.

#### 4. 1. Surveillance

Surveillance is a key for adequate response. Information to politicians and lay people about the dynamics of the epidemic as well as the dynamics of the underlying risk factors and impact of interventions are necessary for making correct decisions. Good surveillance needs access to groups at high risk of infection. When dealing with HIV, they are often difficult to reach through traditional methods used in public health.

Ideally, surveillance should be linked with preventive interventions that are targeted to particular groups at risk such as injecting drug users (IDUs), commercial sex workers (CSW), migrant populations, certain young people and women. As an example, the rapidly growing rate of HIV-positive women giving birth to children in Russia who have not had contact with the health care during pregnancy and therefore not had admission to prophylactic treatment (WHO, 2006 AIDS Epidemic Update), should be mentioned.

Underreporting may also grow as many patients seek treatment in private clinics. Monitoring changes in the risk behaviour patterns that are associated with HIV spread (second generation surveillance) will become more and more important indicators for the development of the epidemic. Methodological challenges of risk behaviour monitoring in hard to reach and hidden population
subgroups include changes of the sample composition of surveyed populations over time. Significant improvements in the surveillance of sexually transmitted infections are also needed in almost all of the countries. In many instances, legal obstacles and discrimination are posing challenges to good surveillance. More extensive use of sentinel surveillance could in many instances provide the missing data and indicate trends.

Availability of effective treatment for HIV infection as well as for drug dependence could increase the willingness of people to seek for testing and other contacts with health care providers, improving the surveillance. Voluntary Counselling and Testing (VCT) is an important instrument, utilization of which should be enhanced by applying approaches that promotes reaching of vulnerable groups. One way to do this is through low-threshold service centres (LTSC) that are currently used for drug users and for commercial sex workers. Such centres can provide anonymous and free of charge access to medical and social support and essential means for prevention such as condoms and clean injecting equipment. Use of rapid tests also helps, repeated visits will not be needed to learn the result and waiting for the result is optimal time for counselling and advice. Epidemiological information can be obtained using non-invasive sample collection such as saliva samples.

Wide use of ART will bring along the problem of monitoring the efficacy and compliance among people receiving medication. This should become part of the basic surveillance of the epidemic. Data collection linked to outreach programs is feasible for second-generation surveillance.

**Recommendations:**

- Promote effective VCT with special emphasis on reaching the vulnerable groups. (low threshold centres, outreach approaches, anonymous testing, use of rapid tests)

- Target groups with special emphasis should include IDUs, CSWs and their clients, prisoners, ethnic minorities, foreign students, migrant populations, and adolescents. Special efforts have to be made not to overlook potential hidden epidemics e.g. among MSM, which may be difficult to detect with traditional surveillance methods due to the very strong social stigmatization of MSM in the region.

- Second generation surveillance according to standards set by UNAIDS and WHO should be promoted to receive relevant information about changes in risk behaviour.

**4.2. General awareness, policy development**

The World Bank and national authorities project significant economic, demographic and political consequences following the current level of HIV epidemic in some countries in the region. The impact will be hardest in Russia’s most affected regions, some of which border EU and the Northern countries. The possible outcomes to the Baltic countries have not yet been analysed in detail but will probably be as severe in Estonia and Latvia. Modelling of the outcome of HIV-epidemic in the Baltic region could be a fruitful field of international collaboration including NDPHS. Other, less pessimistic forecasts have also been published. Careful evaluation of the situation at regular intervals is warranted.

National policies should recognize the severity of the threat and raise the general political awareness of the situation. Measures to eliminate discrimination must be implemented, be it people living with the infection or people who need help because their behavioural patterns puts them at particular risk for the infection. National policies should also ensure that all people at risk get adequate information
about the risks and access to means to avoid it. HIV should also become an issue in all policies in order to create the necessary human and financial resources that are needed to change the course of the epidemic.

Human rights of people living with HIV/AIDS should be equal to those of non-infected people. People are more vulnerable to the effects of HIV infection when they do not have the respect and support of their community. Discrimination due to sexual orientation, drug abuse, ethnic background etc. make people also vulnerable to infection.

**Recommendations:**

- Promote general awareness about the impact of the emerging threat and available measures to control the situation on individual and societal level.

- Emphasize the importance of eliminating discrimination, and of providing adequate information about the risks and how to avoid them.

- Include HIV/AIDS in all sectors of national policies (labour, education, national security, economics, health, social support, foreign policy) to support effective planning and implementation of national response.

- Keep the issue of human rights high in the national agenda.

**4.3. Development of legislation and national policies**

Legislation should support the participation of the entire society in the fight against HIV. Preventive work is more effective if the authorities get full support from civil organisations (NGOs) and self help groups including people with the infection. Private business might have a significant role by reaching their employees in situations useful for preventive interventions. Employers also bear important responsibility in preventing discrimination in workplaces. Prisons are becoming more and more important in contributing to the national public health in general. Prisoners and ex-prisoners comprise a significant part of the national disease burden for many chronic diseases such as HIV, viral hepatitis and tuberculosis.

Modelling studies demonstrate that focusing preventive measures to IDUs in an epidemiological situation like present day NW Russia is the most effective way to prevent the infections at the entire population level also (Long, E.F. et al. AIDS, 20, 2207-2215, 2006). Scientific studies show that harm reduction is an essential element in effective HIV prevention among IDUs (WHO, Policy Brief: Reduction of HIV transmission through drug-dependence treatment. Geneva 2004). Legislation should not prevent effective, evidence-based prevention strategies. It should ensure equal and non-discriminating access to free, voluntary, anonymous or confidential HIV/AIDS counselling and testing, treatment and care to all members of the society including prisoners. Legislation should also ensure necessary education concerning prevention of sexually transmitted diseases and infections linked with drug use at all levels of education.

**Recommendations:**

- Develop legislation to promote partnership between NGOs, civil societies, private business and governmental agencies in their fight against HIV.
• Remove legal obstacles to ensure universal, non-discriminating access to anti-retroviral drug treatment to all infected people.

• Remove legal obstacles to develop policies that allow implementation of evidence-based prevention strategies among vulnerable groups such as drug users, other socially excluded groups, sexual minorities etc. The policies should combine harm reduction programs with medical and social rehabilitation.

4. 4. Prevention

HIV-prevention must be a joint effort shared by various sectors of administration such as education, health, justice, economy, defence and internal security. Politicians and the public administration are responsible for successful recruitment of NGOs and the civil society to work side by side with public bodies. Most affected countries need to scale-up their national HIV/AIDS prevention efforts to allow much broader coverage of at risk populations and other preventive measures to stop the epidemic.

Targeted interventions are necessary to initiate behavioural changes and diminish the risks for transmission. In vulnerable groups efforts should be focused as much to those already infected as those not yet infected. ART should be seen as an integral part of prevention. Extended case management should include elements such as early case finding, appropriate primary and secondary prevention and monitoring of compliance and treatment outcome. Involvement of members from the target population is essential for success. The ability to reach the target populations should be monitored carefully; it may take some time before an intervention becomes sufficiently accepted by the target population to achieve its goal.

Basic education at schools should give sufficient information and life skills to average children to be able to avoid HIV-infection. This means that the curricula at schools should be re-evaluated and restructured; also teachers need training to be able to communicate the necessary messages effectively. HIV must be integrated into a broader sexual health agenda. Young people themselves should participate in designing and delivering educational activities. A big challenge is to reach young people who are particularly vulnerable to HIV for various reasons.

Prevention of other sexually and parenterally transmissible diseases should be closely linked with HIV prevention. STI control projects should be able to reduce the rate of new infections in particular among young people. Proper surveillance of chlamydial infections based on proper laboratory diagnostics is a good indicator of the spread of STI:s among the population.

Several minority groups are often left outside proper information concerning HIV. This may be due to language problems but also to social marginalization. The status and needs should be investigated and appropriate intervention programs developed. Representatives of target populations should participate in the planning and deliverance of interventions.

Reduction of mother-to child transmission (MTCT) to very low levels is possible today with the help of ART. All infected pregnant women should have the possibility to get proper treatment free of charge. This should be integrated into comprehensive and non-discriminating antenatal services linked with necessary social and economic support. HIV infected women should have the same right to take reproductive choices as uninfected women. Projects to develop best practices and proper surveillance of this particular problem should be encouraged.
Overcrowded prisons pose a significant threat for the spread of communicable diseases in the region. Both behavioural risks (sexual and parenteral infections) and risks due to crowding (tuberculosis, other respiratory infections) contribute. At the same time prisons should also be seen as potential sites for successful preventive work both for HIV and for drug abuse. HIV testing should be made readily accessible to inmates of all prisons, discreetly and at their own request; it should always be voluntary and accompanied by counselling also in the case of negative test results. Needle exchange programs can be useful and integral parts of a general approach to drug and health services in prisons. They should be integrated into other health promotion measures, counselling and social rehabilitation. Continuation of medical treatment, preventive work and support after the inmates return to the civil society must be properly organised.

**Recommendations for actions/priorities**: 

- Promote networks of “low-threshold centres” (easy access sites for medical and social support) and outreach activities for hard-to-reach target groups.
- Work towards the acceptance of school education programs, with the main aim to increase knowledge, to encourage healthy attitudes, to develop essential life skills and to support non-risk-taking behaviour.
- “Youth clinics” supporting the development of important life skills to lessen the vulnerability of young people to HIV should be supported or equivalent services provided by other means.
- Enhance STI prevention and care in particular with reference to certain risk factors such as sex between men, work related migration, and international travel.
- Develop proper preventive programmes for ethnic minorities and migrants and monitor their ability to reach the target populations and induce behavioural change
- Prevent mother-to-child transmissions applying concrete national targets approaching zero transmission rate.
- Implement harm reduction strategies in prisons, including support and rehabilitation programmes for those having completed their sentence.
- Promote frequent and interactive evaluations of current interventions. Peer reviewing using international experts could be applied through the NDPHS.

**4.5. Treatment, care and support**

Anti-retroviral treatment has the promise to significantly enhance HIV prevention but it may also fail. Widespread unregulated access to anti-retroviral drugs could lead to rapid emergence and spread of resistant virus strains. To be successful, a universal and non-discriminating access to treatment based only to objective medical criteria is essential. Lowering the price for medicines, technical improvements for simpler dosage and development of new antiviral drugs through research are all necessary ingredients for future success.

Adherence to treatment seems to be the most important element for success. Delivery of ART should be linked with proper medical and social support organised in such a way that normal life is possible
 (“one-door delivery”). Since the need is life-long, it may become necessary to arrange the service outside the normal health services. When necessary, the services should also include harm reduction measures to keep the patients attached to the treatment. Monitoring should include among other things compliance and possible emergence of drug resistance.

Education of health care workers (HCW) in counselling and care of HIV infected people and AIDS patients become even more important in the future. Well-informed HCW will also help disseminate information and promote anti-discriminatory attitude into the society.

National recommendations for case management should, in addition to guidelines for medical care and treatment, include elements from early case detection and primary prevention to secondary prevention, harm reduction, social care and support to home care and terminal care. It is a challenge to regional collaboration to harmonise the national guidelines as much as feasible.

**Recommendations for actions/priorities):**

- Create national case management guidelines based on scientific evidence.
- Develop a network of properly equipped diagnostic laboratories to enable monitoring of disease progression, evaluation of treatment success and resistance testing in case of treatment failure.
- Strengthen local health care services and NGOs in their role in supporting care and clinical management of infected persons.
- Establish and develop effective education of health care workers in counselling and care of HIV-infected people and AIDS patients.

5. Gaps and problem areas

HIV/AIDS prevention has been pushed up high in national agendas for health promotion due to the severity of the threat: so far attempts to stop the epidemic have been successful in reducing the rate of new infections, but the number of infected individuals in all countries is still growing. New developments in treatment have led to some improvement in the quality of life of those infected but at the same time put pressure on developing proper life-long treatment services for growing number of individuals.

In the region, injecting drug use is the driving force for the epidemic accompanied by secondary spread through unprotected sexual contacts, mostly commercial. Most vulnerable people are socially and politically not prioritized in any way, they often suffer from severe discrimination and social exclusion that not only worsen their own life but also promotes spread of the infection among them and into the wider population.

Migrant populations, be it immigrants or people moving around in their own countries due to occupation or other reasons are also vulnerable to HIV in part because proper “culture-sensitive” information and preventive means are not always available.

Examples of other groups that need special attention are pregnant women. Today proper treatment can prevent transmission to the offspring very effectively but if such a treatment cannot be arranged, children with infection continue to be born in the region. Also, gender issue is relevant regionally,
Empowerment of women would certainly lead to more systematic use of condoms and thus slowing the spread of the epidemic. Another example is men who have sex with men (MSM). In Western countries MSM are a group highly vulnerable by HIV due to social and lifestyle factors. This has not been as visible in the Baltic countries or NW Russia but at the same time reliable information is difficult to obtain due to the harsh stigmatisation.

Even if particular target-specific preventive actions have been promoted in all countries, they still lack proper privilege in national priority evaluations. This has, in part, been supported by international organisations whose main focus has been in Africa, where optimal prevention strategies are different from those that are best in the Baltic Region. Recently, significant resources have been provided by the Global Fund in Estonia, and Russia is developing a large-scale programme to enhance health promotion.

In many countries, in particular in the Nordic countries, the role of NGOs in implementing important components of national AIDS policies has been very useful. However, in the Baltic countries and in Russia NGOs have not had similar resources or working environment leading to suboptimal performance. This is a pity, since their role in areas which are most difficult to official health and social care delivery, such as prevention among ex-prisoners, injecting drug users and like would be very pivotal.

Every country is updating their national AIDS-policies regularly instructed by UNAIDS. This process has also brought along some common goals and implementing structures such as national committees etc. In these policies the national gaps are evaluated and assessed and actions prioritised according to the resources that are available.

The following areas can be regarded as gaps common or characteristic to the countries in the region:

1. Lack of precise and up-to date information about the dynamics of the spread of the disease and the underlying risk factors. National figures, collected in a structured way give an understanding of the overall situation in the country, but actually the epidemic may follow very different courses and have different underlying risk factors in various parts of the country. In particular when injecting drug use is the main risk factor, local epidemics may be very explosive, which, after fading out, leaves a high number of people carrying the infection into the local society. Therefore it would be of great importance to take necessary steps in the right places in the right time.

Measures that should be prioritised are listed in section 4.1. Surveillance.

2. HIV is one disease among other diseases and must compete for resources and public attention not only when developing national policies for health care but also in people’s minds. Since the forecasts concerning the development of HIV in the countries have been and will remain uncertain, there has been some reluctance to accept forecasts of possible economic or political consequences. Another issue is that HIV has been often regarded as a separate health policy issue not included in other sectors of administration such as labour, economics, education etc. Inclusion of HIV “in all policies” would certainly make necessary adjustments easier and also contribute in diminishing discrimination, still an important risk factor not only for those infected but also to those who are at increased risk for transmission.

Measures that should be prioritised are listed in section 4.2. General awareness, policy development.

3. Legislative measures must not make optimal prevention and treatment unfeasible. Legal framework differs from one country to the next making proper comparison of outcomes very
difficult. This may also account for the lack of academic research in this field. Often representatives of certain vulnerable groups provide the information about the actual situation of diseased people or people at risk and universal indicators are not available. International collaboration in this field is an important tool to keep the dialogue open and make initiatives for necessary changes and adjustments. The big challenge of today is the provision of proper prevention and treatment to certain vulnerable groups such as injecting drug users. Harm reduction measures including substitution therapy has proven effective in many studies but implementation is still controversial in some countries of the region.

Measures that should be prioritised are listed in section 4.3. Development of legislation and national policies.

4. Success in prevention is a key to be able to stabilise the HIV situation in the region. Several formats have been applied and there is evidence that special prevention measures that include easy access, provision of social and medical support along with positive incentives such as rapid testing and that are tailored to specific target populations are successful. They have not been applied but in a limited number of places in the Baltic countries and NW Russia. By extending this to an interactive regional network of adequate resources members would bring significant added value in terms of experience, data and optimal use of resources.

Measures that should be prioritised are listed in section 4.4. Prevention.

5. Treatment and care is today able to improve quality of life for those infected, decrease the risk of spread of the infection and provide a positive incentive for prevention. Regional exchange of best practises, training visits etc. could enhance development of good practices. A common view of national guidelines and necessary practical steps would also eliminate the threat posed by infected people moving from one country to another in order to achieve, what they believe, better treatment than what is available at home.

Measures that should be prioritised are listed in section 4.5. Treatment, care and support.
6. Recommendations for project based activities

The projects should bring added value due to the regional aspect of the activity, they should support national policies and enhance available resources in critical and underdeveloped areas. Here are topics that should be covered by project based activities:

1. Regional coordination of activities with common goals. An example is the Barents HIV initiative which brings together various stakeholders and financing sources.

2. Joint cross border activities between two neighbouring areas/cities with similar epidemiological situation and risk factors. An example is the project between Narva and Ivango to develop preventive interventions towards injecting drug users which is currently under development. Similar “twinning projects” could be created elsewhere.

3. Projects to implement best practise that are ongoing in some places or countries but less developed in some others. “Low-threshold centres” for drug users in Murmansk with the support of experts in Finland, which is now being copied into new locations in Russia provide an example.


5. Collaboration between expert laboratories to implement monitoring of molecular typing and drug resistance.

6. Development of common guidelines and monitoring criteria for extended case management covering aspects from early diagnosis and prevention through medical and social support and care to terminal care and family support. Development of a database for this.

7. Management of HAART

8. Support to primary health care to identify and care of HIV-infected people.

9. Early detection of HIV cases in genitourinary medicine, antenatal care, pulmonary medicine and other relevant fields of medicine.

10. HIV prevention, care and treatment of infections in prison settings

11. Enhancement of surveillance of HIV/TB interactions in the region by creating a network of implementing agents including relevant NGO:s. The Baltic countries and NW Russia both have high prevalence and incidence of HIV and tuberculosis, including multiresistant strains. Projects should not only facilitate laboratory diagnostics but also focus on reliable and representative epidemiological investigation and sampling.

12. Development of criteria that could be applied in all countries in the region for evaluating economic and social impact of current HIV epidemic.

13. Regional collaborative projects for prevention and surveillance among MSM.

14. Comparison of national AIDS-policies and measures to harmonise them in appropriate issues.
15. Supporting activities of NGOs that are working along the recommendations described in section “Regional collaboration and the role of the expert group on HIV/AIDS of NDPHS.”

16. Development and evaluation of information material that take into account the mobility of people and cultural similarities of the region.

6.1. Priorities of project-based activities for the near future

Examples:

- Regional coordination programmes to enhance multisectoral and multilateral collaboration.
- Development and networking of “low-threshold service centres” for drug users and other hard-to-reach risk groups.
- Subregional/local collaborative and twinning projects between partners with similar epidemiological situation and risk factors.
- Surveillance and analysis of risk factors.
- Projects involving people with HIV.
- Development of common regional standards for case management.
- Integration of social and health care for HIV-infected individuals.
- Support to primary health care to enhance early detection of HIV cases and proper case management.
- Services for HIV-infected people with other medical conditions (mental, infections, malignancies etc)
- Pregnant women and HIV. Particular emphasis is access to women in risk groups.
- Gay men, surveillance of infections, risk behaviour and preventive interventions.
- Reducing stigma in work places or among general population.
- Prevention of social exclusion of PLWHA and their families.
- Collaboration with and training of media in HIV prevention and social impacts.
- HIV and risk behaviour surveillance in prisons with special emphasis on Tb/HIV interactions.
- HIV prevention in prisons.
- Specific training courses for “HIV-specialists”, i.e. for medical doctors, e.g. internists, dermatologists, neurologists, psychiatrists etc., who need special skills in meeting and caring of HIV-infected people.
- Links with teen-age sexual health projects and interventions.
• Promotion of early diagnosis of HIV

• Laboratory projects to support state-of-the art monitoring of drug resistance and molecular epidemiology of HIV.

• Care of families with HIV

Annexes

Annex 1  Mother-to-child transmission of HIV
Annex 2  Immigrants and HIV/AIDS in the Baltic Sea region and NW Russia
Mother-to-child transmission of HIV

Dr Marja Anttila, Senior Expert, International Development Collaboration at STAKES

1. General background

Pregnant women living with HIV are at high risk of transmitting HIV to their infants during pregnancy, during birth or through breastfeeding. Globally, over 90% of new HIV-infections among infants and young children occur through mother-to-child transmission (MTCT). Without any interventions, 20% to 45% of infants of HIV-positive mothers may become infected, with an estimated risk of 5-10% during pregnancy, 10-20% during labour and delivery, and 5-20% through breastfeeding. The overall risk of transmission can be reduced to less than 2% by an evidence-based package of interventions. This package is now the standard of care in most high-income countries, where its implementation has led to the virtual elimination of new HIV cases among children.

Prevention of mother-to-child transmission of HIV (PMTCT) requires a comprehensive set of interventions that include preventing primary HIV-infection in women of childbearing age, preventing unintended pregnancies in women living with HIV, preventing HIV transmission from a woman living with HIV to her infant, and providing care, treatment and support to women living with HIV and their children and families. Health systems need to be strengthened and resources allocated so that these services can be provided.

A comprehensive national response to tackle MTCT includes:

1. Improved availability, quality and use of **maternal, newborn and child health (MNCH) services**. Functioning and adequate MNCH services are the foundation for any intervention to prevent MTCT.

2. **Voluntary counselling and testing (VCT)** for HIV. In order to avoid or minimize negative consequences, HIV testing during pregnancy must be voluntary and confidential and be accompanied by quality counselling and subsequent referral to adequate delivery options and care. VCT is an important entry point to prevention and care services and a critical component to MTCT interventions as women have to know their HIV status to access to and benefit from these interventions.

3. **Antiretroviral therapy**. The administration of antiretroviral drugs during pregnancy and at the time of delivery has proved to significantly reduce the risk of MTCT.

4. **Infant feeding options**. Avoiding breastfeeding has proved to be an effective way to prevent postnatal MTCT. Mothers need advice and adequate resources to provide formula feeding for their infants, especially in resource-constrained communities.

5. **Caesarean section**. Elective caesarean section has been demonstrated to have a more protective effect against MTCT than vaginal delivery. However, the procedure must be performed in an adequately resourced health facility by skilled and experienced staff. There seems to be no additional benefit of caesarean section, if the viral load of the mother around birth is below the limit of detection.

6. **Care and support**. It is utmost important to provide care and support for mothers to help them maintain their health – both for their own and their children’s benefit. Identifying the available referral and support systems for the follow-up of both the mother and her infant
contributes to meeting the long-term prevention, care and support needs of the HIV-infected mother, her partner and their baby.

All countries in the world have committed, as part of the UNGASS 2001 declaration on HIV/AIDS, to "reduce the proportion of infants infected with HIV by 20% by 2005 and 50% by 2010". This is achieved by ensuring that at least 80% of pregnant women accessing antenatal care have information, counselling and other HIV-prevention services available to them, increasing the availability of and providing access for HIV-infected women and babies to effective treatment to reduce MTCT, as well as through effective interventions for HIV-infected women.

In July 2005, G81 leaders made a commitment to “develop and implement a package for a comprehensive HIV prevention, treatment and care, with the aim of as close as possible to universal access to treatment for all people who need it by 2010.” This promise was made global at the UN World Summit in September 2005, and in June 2006 all UN member states endorsed a commitment to “universal access to comprehensive prevention programmes, treatment, care and support by 2010”.

According to a survey performed by UNICEF in 63 countries2, in 2004 only about 11% of all pregnant women received PMTCT counselling through established PMTCT services – in most cases it was provided as an integral part of MNCH services. HIV-testing was done to 4.5% of pregnant women living in Asia and to 14.3% of those living in Southern Africa, whereas 65.4% of all pregnant women living in Eastern Europe were tested. About two third of HIV-positive pregnant women identified through PMTCT programmes received antiretroviral (ARV) prophylaxis. In Central and Eastern Europe 40% of countries provided ARV prophylaxis to more than 60% of HIV-infected pregnant women.

Globally, there is still a lot to be done to achieve the universal access to comprehensive prevention programmes, including PMTCT services. UNICEF and WHO have, together with an Interagency Task Team comprising of representatives from various UN and international nongovernmental organisations, developed a guidance document for scaling up the PMTCT services3. The document lists ten guiding principles for the adaptation and implementation of PMTCT programmes at the global, regional and country levels, e.g. the importance of family-centred longitudinal care and the importance of male involvement. The document also highlights the need for demonstrated government leadership, commitment and accountability and the necessity of the link between delivery of PMTCT and of sexual and reproductive health care. In addition, the importance of the active participation of people living with HIV in the implementation of policies is discussed, as well as policies and programmatic approaches to minimize the HIV-related domestic violence, stigma and discrimination in the context of PMTCT and HIV care for children.

2. MTCT in the Russian Federation

On the brink of generalised epidemic

Russia faces one of the world’s fastest growing HIV epidemics. The cumulative number of officially registered HIV cases was 417,715 (1 January 1987 through 31 December 2007). In 2006 Russian

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1 The “Group of Eight” or G8, is an international forum composed of 8 country members – Canada, France, Germany, Italy, Japan, Russian Federation, United Kingdom and the United States. A representative from the European Commission also participates. Together, these countries represent approximately 65% of the world’s economy.
authorities reported over 39,000 new HIV cases and in 2007 the number is over 43,000.\textsuperscript{4} However, the real number of PLWHA is higher than official statistics suggest.

In Russia, young people (aged 15-24) are disproportionately affected by HIV epidemic, constituting 53\% of the cumulative reported HIV cases. Overall, majority of PLWHA in Russia are between ages 18 to 35 years. The epidemic predominantly affects intravenous drug users (IDUs), sex workers (who are often also IDUs), and bridging populations. Among the newly reported HIV cases with an identified route of transmission 65\% were infected through injecting drug use.\textsuperscript{5}

The HIV epidemic in Russia is at the concentrated stage (HIV prevalence rate among one or more high-risk populations is higher than 5\%, but does not exceed 1\% among pregnant women in urban areas). However, in the last four years Russia has seen an increase in the percentage of HIV cases resulting from sexual contact; the majority of new infections among women of reproductive age are now sexually transmitted. This has resulted in the increasing numbers of HIV-positive pregnant women. Up to 30\% of HIV-positive women become pregnant and most HIV tests are done and most HIV cases discovered when women seek antenatal care. HIV is spreading fastest in the country’s economically developed regions. In 2005 the epidemic became generalised (HIV prevalence rate among pregnant women is consistently higher than 1\%) in five Russian regions: St. Petersburg, Samara, Sverdlovsk, Ulyanovsk and Chelyabinsk. Between 1\% and 1.8\% of all pregnant women in these regions are HIV positive. Furthermore, ten other regions are on the brink of a generalised epidemic, among them Kaliningrad and the city of Moscow.\textsuperscript{6}

\textit{Policy and registration of MTCT in Russia}

There are several specific characteristics in the issue of HIV-infection and pregnancy. First, the woman may not be aware of her HIV status prior the pregnancy, either because she does not think she is at risk of getting the infection from her partner, or she ignores the risk of the infection deliberately or she is unaware of these risks. Secondly, although the woman knows her risky behaviour (as an IDU or sex worker), she and her partner ignore the possibility of pregnancy. Thirdly, an HIV-positive woman may want to have a child and is seeking advice and prophylaxis to avoid MTCT and to get treatment and support for herself in order to take care of her offspring. All this makes PMTCT a complex issue, starting from the services targeted to prevent HIV-infection generally among young people and provision of youth-friendly reproductive health services, and ending to provision of individual medical and social support to the HIV-positive mother, her child and her family. PMTCT also includes adequate reproductive health services provided to PLWHA and, especially, to IDUs and sex workers.

Medical and social care for mothers and children in the Russian Federation is regulated through several laws, orders and decrees relating to general health protection and provision of medical care and to prevention of HIV-infection. Among these are Government Decree on providing free HIV medication to outpatients in Federal Specialised Medical Institutions, the Executive Order of the Ministry of Health on prevention and chemoprophylaxis of MTCT, and the Ministry of Health Directives on the standards of PMTCT and standards for medical care of children with HIV. These give health professionals detailed guidance on PMTCT in different situations.

\textsuperscript{4} Data obtained from http://www.afew.org/english/statistics/HIVdata-RF.htm
\textsuperscript{5} Data obtained from http://www.euro.who.int/aids/ctryinfo/overview/20060118_36
A policy briefing paper, published in 2007\textsuperscript{7}, lists the following as the key PMTCT measures in Russia:

- Improving guidelines on HIV prevention among women, on provision of medical and social care for HIV-positive pregnant women, on strengthening professional skills of staff that provides medical and social care for HIV-positive women and children, on integration of HIV/AIDS prevention into the regular obstetric, paediatric and social services, on improving family planning services for PLWHA, and on placing children with HIV into residential care;
- Applying medical care standards;
- Providing counselling to all pregnant women and informed voluntary HIV testing twice during pregnancy;
- Increasing triple HIV therapy coverage of HIV-positive pregnant women (during pregnancy and delivery and postpartum treatment of infants);
- Using optimum methods of delivery;
- Providing HIV-positive mothers with family planning advice;
- Introduction of modern approaches to outpatient monitoring of children born to HIV-positive mothers and to early diagnosis of newborns;
- Providing comprehensive medical examinations for HIV-positive women and children and providing full courses of treatment, including HAART, to those requiring it;
- Implementing birth certification system, which encourages early registration of pregnancies;
- Improving HIV epidemiological surveillance through good quality reporting and monitoring of HIV-positive pregnant women;
- Evaluating the reach and quality of PMTCT at both regional and national levels;
- Improving collaboration between agencies involved in epidemiological surveillance of HIV.

At present, antenatal and postpartum care for HIV-positive women and their infants, including ARV therapy, is provided by obstetric and paediatric services. Regional AIDS and infectious diseases centres provide specialised medical care (counselling, diagnostic, treatment and prevention services). However, pregnant mothers and young children are sometimes unable to access these services, either because of their far-out location or due to other factors, such as the health status of the mother during pregnancy. The reason for not using the PMTCT services might also be the unwillingness of the pregnant woman to attend regular MNCH services, or the late HIV diagnosis, or the lack of ARV drugs at these centres.

Since the beginning of 2004, registration of children, born to HIV-infected mothers is being conducted by the Russian Clinical Hospital of Infectious Diseases – Scientific and Practical Centre on Assistance Provision to HIV-infected Women and Children, in St. Petersburg. The registration is three-fold:

1. Report on a new-born child, born to HIV-infected mother;
2. Report on taking the child, born to HIV-infected mother, off the register;

The Centre also registers if any chemoprophylaxis against MTCT during pregnancy, in labour and to new-borns has been given. Also, data on mode of delivery (caesarean section), feeding of the child (breast-feeding or formula-feeding) and the amount of abandoned children is collected.

\textsuperscript{7} Policy Briefing Paper, MOHSD, Moscow 2007.
The reality of HIV-positive women in Russia

A recent study among the HIV-positive women in the Leningrad region surveyed the experiences and needs for psychological and social support of 63 women living with HIV\(^8\). The experiences on stigmatization and needs for family planning, as well as the knowledge and attitudes of 120 health professionals, who work with HIV-positive women, were also surveyed.

The HIV-positive women were mostly young, with secondary or lower level of education, and most of them were married or cohabiting. The women had a relatively high level of HIV awareness, but they still demonstrated a limited tolerance towards other PLWHA. Only 27.4% of those who were married had revealed her HIV-positive status to her partner. Drug experience was common; 56 % had used drugs during the year before the study.

Nearly two thirds of the respondents had been pregnant when the HIV-infection diagnosis was made. At the time of the survey, 27.4 % were currently planning to have a child. The respondents, however, talked about childbirth as one of the most problematic issues for HIV-positive women.

On average, the women were rather dissatisfied with the health care offered at non-specialised medical and preventive institutions; there had been experiences of negative attitudes and betrayal of confidence. About 42 % of women had been refused medical examination and/or necessary treatment at non-specialised medical and preventive institutions at least once in their life. The respondents, however, expressed their satisfaction with the medical care at specialised medical and preventive institutions, attitudes among doctors being better than those of nurses.

About 57 % of women reported to have received ARV therapy to prevent MTCT during pregnancy and 39 % had received ARV therapy during labour.

A considerable part of the medical staff respondents believed that all medical care for HIV-positive people should be provided at a specialised medical institution. The study also revealed that there is low awareness on how the pre- and post-test counselling should be conducted. The medical staff, despite their high general awareness of HIV-infection, demonstrated a limited tolerance towards PLWHA.

The study recommends that new forms of work with HIV-positive people should be implemented, e.g. self-help groups, meeting on "neutral territory" i.e. outside the specialised medical institutions, organising less formal type of support in the places of residence of HIV-positive women etc. Also training of medical and prevention staff in the methods of work with PLWHA is needed.

Another survey, conducted during 2004-2006 in five high prevalence areas (St. Petersburg, Kaliningrad, Yekaterinburg, Irkutsk and Tver) among 758 HIV-positive pregnant women, aimed at investigating behavioural risks among these women before and after HIV diagnosis\(^9\). The surveyed women were all diagnosed HIV-positive for the first time during the study period and sought antenatal care at medical facilities.

The study found that female vulnerability to HIV varied geographically: in St. Petersburg, Yekaterinburg and Kaliningrad HIV risks were present in the behaviour of women at the moment of diagnosis (e.g. drug use), whereas in Irkutsk and Tver much lower number of women reported practising risk behaviours. There was a link between reproductive behaviour and behavioural HIV

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\(^8\) Assessment of Social and Psychological Support Needs of HIV-positive Women. Survey results report. 2007

risks; the proportion of planned pregnancies as well as antenatal care was lower in Kaliningrad and St. Petersburg; in St. Petersburg 50 % of the HIV cases were not diagnosed until delivery.

Majority of the women (86 %) were pregnant when the HIV diagnosis was made. The pregnancies that were ongoing during HIV diagnosis resulted in childbirth in 55.6 % as an average for all five study sites, whereas this was the case for 77.3 % in St. Petersburg and 32.8 % in Kaliningrad.

HIV was diagnosed most frequently at antenatal clinics (54 %) followed by AIDS Centres (16%). St. Petersburg was an exception from this; 46 % of the HIV diagnoses were done at the AIDS Centre. As an average in all five study sites, 37.2 % of respondents received pre- and post-test counselling. The number of women receiving no counselling was higher in St.Petersburg, reflecting the late reporting to antenatal services.

The percentage receiving ARV therapy was in the same order as in the study from Leningrad region: 55.7 % received therapy during pregnancy, 60.1 % during delivery and 60.3 % after delivery.

The study has shown the need for more accurate epidemiological history in newly infected HIV cases, as well as the need for regular screening and monitoring of the behaviour in general population in order to follow the epidemic patterns and ensure timely responses to any changes. The study results support the importance of informing the HIV-infected women about the attendance in reproductive health services in order to receive full prevention treatment. As important is to inform young women of reproductive age on the risks of HIV-infection and the benefits of voluntary testing even before planning their pregnancy.

**MTCT statistics**

The number of HIV-positive pregnant women in the Russian Federation is rising; there has been an almost 600-fold increase in the rate of new HIV diagnoses among pregnant women from 1995 to 2002.

In 2005, 12,836 pregnant women out of a total of 2.9 million were registered as HIV positive (0.44%) and more than half of all pregnancies among HIV-positive women resulted in births. Around 5,000 children are born to HIV-positive mothers annually. According to data at the end of 2006, the cumulative number of children born to HIV-positive mothers was 22,901 in the whole country.

In NW Russia regions, the cumulative numbers of children with verified HIV-infection at the end of 2006 were: St.Petersburg - 136; Leningrad region - 67; Kaliningrad region - 41; Vologda region - 10; Murmansk region - 7; Novgorod region - 6; Republic of Komi - 3; Archangelsk region - 2; and Republic of Karelia - 1. In Pskov region and Nenets autonomous district, no HIV-positive children have been registered.

Table 1 presents the detailed figures of those children born in 2004 and 2005 to HIV-positive mothers in Russian Federation. The figures also show that the percentage of pregnant woman and new-born children receiving ARV prophylaxis is slowly increasing. Also, the registration and data collection on MTCT and its prevention has improved with significant decrease in the "no data"

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10 Policy Briefing Paper, MOHSD, Moscow. 2007
11 Data received from North West District AIDS Centre, St.Petersburg, on January 2008
12 HIV-infection in North-West Federal District of Russian Federation in 2006; St-Petersburg. 2007
figures. In Table 2, the increase in percentage of those receiving ARV is also visible for the North West regions of the Russian Federation.

HIV-infection of a woman is very often diagnosed only when she becomes pregnant: in 2005 63 % of HIV-positive women who gave birth had been diagnosed HIV during pregnancy, while the remaining 37 % had been diagnosed in the preceding two to four years. The two studies cited in the previous chapter verify this. They also highlight the importance of antenatal services as the main entry point to HIV-diagnosis and – subsequently – to PMTCT services such as counselling, treatment, secondary prevention, family planning, child care, and psychological support.

Each year approximately 20 % of HIV-positive pregnant women do not register for antenatal care and by the time they attend a maternity facility, they are already in labour. This causes delays in the administration of ARV prophylaxis and puts the infant in increased danger of getting the infection during labour and through breastfeeding.

Table 1. Data on HIV-positive pregnant women and their infants in the Russian Federation, 2004-2005

<table>
<thead>
<tr>
<th></th>
<th>2004</th>
<th>2005</th>
<th>2004-2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>Registered HIV+ pregnant women</td>
<td>9,926</td>
<td></td>
<td></td>
</tr>
<tr>
<td>no antenatal care</td>
<td>2,044</td>
<td></td>
<td></td>
</tr>
<tr>
<td>under medical observation</td>
<td>7,104</td>
<td></td>
<td></td>
</tr>
<tr>
<td>no data</td>
<td>778</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chemoprophylaxis during pregnancy and labour</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>not carried out, %</td>
<td>17.3</td>
<td>14.4</td>
<td></td>
</tr>
<tr>
<td>carried out, %</td>
<td>70.0</td>
<td>82.6</td>
<td></td>
</tr>
<tr>
<td>no data, %</td>
<td>12.7</td>
<td>3.0</td>
<td></td>
</tr>
<tr>
<td>Children born to HIV+ women, annual numbers</td>
<td>5,148</td>
<td>4,847</td>
<td>9,995</td>
</tr>
<tr>
<td>Chemoprophylaxis to newborns</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>not conducted, %</td>
<td>8.8</td>
<td>7.1</td>
<td></td>
</tr>
<tr>
<td>conducted, %</td>
<td>79.9</td>
<td>88.7</td>
<td></td>
</tr>
<tr>
<td>no data, %</td>
<td>11.3</td>
<td>4.2</td>
<td></td>
</tr>
<tr>
<td>Children born to HIV+ mothers 2004-05</td>
<td>born in 2004</td>
<td>born in 2005</td>
<td></td>
</tr>
<tr>
<td>taken off the register, %</td>
<td>62</td>
<td>78</td>
<td></td>
</tr>
<tr>
<td>with confirmed diagnosis, %</td>
<td>6</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>under medical observation, %</td>
<td>32</td>
<td>20</td>
<td></td>
</tr>
</tbody>
</table>

NB: Moscow city on-line data is not sent to Russian Clinical Hospital of Infectious Diseases
Table 2. Data on HIV and PMTCT in North West Russia and Moscow region  

<table>
<thead>
<tr>
<th>Territory</th>
<th>Cumulative no. of HIV+ cases 1.1.87 - 31.10.07</th>
<th>HIV+ pregnant women, tot. number and % under medical observation 2004-05</th>
<th>Children born to HIV+ mothers 2004-05</th>
<th>Percentage of HIV+ mothers given ARV prophylaxis, 2004 / 2005</th>
<th>Percentage of newborns given ARV prophylaxis, 2004 / 2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>St. Petersburg</td>
<td>35,315</td>
<td>248* (79%)</td>
<td>906</td>
<td>89 / 89</td>
<td>92 / 94</td>
</tr>
<tr>
<td>Moscow Oblast</td>
<td>30,619</td>
<td>484 (69%)</td>
<td>488</td>
<td>52 / 65</td>
<td>52 / 63</td>
</tr>
<tr>
<td>Leningrad Oblast</td>
<td>12,293</td>
<td>409 (69%)</td>
<td>411</td>
<td>71 / 92</td>
<td>83 / 94</td>
</tr>
<tr>
<td>Kaliningrad Oblast</td>
<td>5,791</td>
<td>106 (66%)</td>
<td>108</td>
<td>87 / 87</td>
<td>87 / 90</td>
</tr>
<tr>
<td>Murmansk Oblast</td>
<td>2,243</td>
<td>67 (90%)</td>
<td>68</td>
<td>88 / 91</td>
<td>94 / 94</td>
</tr>
<tr>
<td>Komi Republic</td>
<td>962</td>
<td>23 (70%)</td>
<td>23</td>
<td>69 / 86</td>
<td>81 / 100</td>
</tr>
<tr>
<td>Novgorod Oblast</td>
<td>917</td>
<td>41 (78%)</td>
<td>41</td>
<td>81 / 80</td>
<td>76 / 95</td>
</tr>
<tr>
<td>Karelia Republic</td>
<td>438</td>
<td>13 (54%)</td>
<td>13</td>
<td>25 / 100</td>
<td>25 / 100</td>
</tr>
<tr>
<td>Pskov Oblast</td>
<td>354</td>
<td>16 (63%)</td>
<td>18</td>
<td>71 / 67</td>
<td>86 / 91</td>
</tr>
<tr>
<td>Arkhangelsk Oblast</td>
<td>256</td>
<td>5 (80%)</td>
<td>5</td>
<td>100 / 67</td>
<td>100 / 67</td>
</tr>
</tbody>
</table>

* note the discrepancy between the registered no. of HIV+ mothers and registered children born to HIV+ mothers

3. MTCT in the Baltic Countries

In Estonia, there was a drastic rise in the number of new HIV cases from the second half of 2000, continuing also during 2001. Starting from 2002, the number of officially registered cases has decreased, but Estonia still has the second highest estimated prevalence of HIV in Europe, over 1% of the adult population. By the end of 2006, 5,731 people have been diagnosed HIV-positive. The epidemic is concentrated in Tallinn and the surrounding Harjumaa County and in Ida-Virumaa County in the North-Eastern Estonia.

Since 2000, the infection has been mainly transmitted through the sharing of contaminated syringes. Although the data is incomplete, increased HIV spread through heterosexual intercourse has been detected since 2002. Thus, according to the AIDS counselling cabinets IDUs accounted for 90% of HIV-infected people, 66% in 2003 and only 48% in 2006. Although this data is not based on all new HIV-cases, it still may be claimed that the infection has started to spread from IDUs to other young people through sexual encounters.

The first childbirth with HIV-positive mother in Estonia took place in 1999. During 2000-2006 a total of 175,176 pregnant women have been tested; out of these 631 were HIV-positive. By the end of 2006, the total number of known childbirths to HIV-positive mothers has been 376. Altogether 23 HIV-positive children and 353 HIV-negative children have been born from HIV-positive mothers.13

The number of HIV-positive pregnant women in Estonia has remained stable in past years. All pregnant women in Estonia are covered by health insurance from the 12th pregnancy week and thus are guaranteed all health services free of charge (including prophylactic ARV treatment). All women who register their pregnancies are recommended already during their first visit to take the HIV-

13 Data from Tervise Arengu Institute (National Institute for Health Development), accessed on 4.2.2008 from http://www.tai.ee/?id=4043
infection test in addition to other tests. The corresponding test is also recommended to all women who decide to have an abortion. Problems related to MTCT start when the risk group women are not aware of their rights or their interests are limited only to a short-term economic income. Dealing with this vulnerable group the cooperation of local level specialists based on the case management principle is essential.

The HIV-epidemic in Latvia has followed the trends and patterns of other Eastern European countries. At an early stage the epidemic showed similarities with the initial epidemic in most Northern European countries with MSM as the major transmission route, but the rapid increase of IDUs since the end of 1990s increased also HIV-infection among drug users. As in Estonia, the HIV-incidence among IDUs peaked in 2001; since 2004 the reported number of newly diagnosed cases has been relatively stable. By the end of 2006, Latvia reported a cumulative total of 3,631 HIV cases.

The "feminisation" of the HIV epidemic has also increased the number of HIV-positive pregnant mothers. At the end of 2005 the number of registered HIV-positive women was 901 and HIV-positive pregnant women 171. At the end of November 2007, altogether 24 MTCT cases have been registered. As in Estonia, it is obligatory for the maternity services to offer VCT to all women during the 12th and 29/30th weeks of pregnancy and preventive ARV treatment is free of charge. In 2006 there were five and in 2007 seven new MTCT cases, showing that although preventive programmes are in place, the PMTCT services do not reach all who are in need of these services.

By the end of 2007, Lithuania has reported a cumulative total of 1,306 HIV cases and only one case of mother-to-child transmission. The HIV epidemic among IDUs peaked in 2002, about a year later than in Estonia and Latvia. In 2006, 77 % of the new cases were among IDUs. HIV testing is systematically offered to all pregnant women.

4. MTCT in Europe

Initially large numbers of paediatric HIV cases in Western Europe significantly decreased after 1995 with the large scale introduction of prevention techniques. The overall mother-to-child transmission rate was around 15 % before 1994, 7.9 % during 1994 to 1999 and in the past years the transmission rates have been 1.6 %.

But despite the knowledge of how to prevent MTCT, rapidly growing numbers of HIV-infected women in East European and CIS countries have caused sharp increase of MTCT since 1996. In the past five years the transmission rates have been 6.7 % in Eastern Europe. Most of the MTCT cases have been recorded in Ukraine and Russian Federation.

HIV-testing of all pregnant women is performed in most of the European countries. EuroHIV survey 2006 reports the situation in the 53 countries participating in regular surveillance of HIV-epidemic. In 37 countries (84 %), HIV testing is routinely offered to pregnant women by health care providers. Estimates of the percentage of pregnant women routinely tested for HIV infection were provided by 23 countries (Figure), of which 11 estimated that more than 90 % were tested, nine estimated that between 50 % and 90 % were tested and three countries estimated that less than 50 % were tested.
In most European countries, HIV testing is accompanied by counselling (pre- and/or post-) when testing is initiated either by the provider or by the patient. In many health-care settings, an "opt-out" approach (consent is inferred unless the patient declines testing) for routine HIV testing may be proposed. Post-test counselling is still considered as an integral component of the HIV testing process in Europe and is viewed as essential for both those who test HIV-negative (prevention) and HIV-positive persons (psychosocial support). Counselling is important especially for young women in the countries with high prevalence among the young, since information on the ways to avoid MTCT is the only way of preventing unnecessary HIV-infection in infants. Naturally, after counselling, the health system needs to be able to provide the young woman the needed PMTCT treatment and care.
Information on MTCT in some WHO EURO Member States, as of December 2007
(Data obtained from [http://www.euro.who.int/aids/surveillance/20051114_1](http://www.euro.who.int/aids/surveillance/20051114_1) on 29.1.2008.

<table>
<thead>
<tr>
<th>Country</th>
<th>Cumulative total of reported HIV cases</th>
<th>Cumulative No. of MTCT, end of 2006</th>
<th>No. of infants born to HIV+ mothers in 2006</th>
<th>No. of MTCT cases in 2006</th>
<th>MTCT as % of known transmission routes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austria</td>
<td>3,705</td>
<td></td>
<td></td>
<td></td>
<td>0.3 %</td>
</tr>
<tr>
<td>Belarus</td>
<td>7,747</td>
<td></td>
<td></td>
<td></td>
<td>3 %</td>
</tr>
<tr>
<td>Belgium</td>
<td>18,890</td>
<td></td>
<td></td>
<td></td>
<td>0.9 %</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>689</td>
<td></td>
<td></td>
<td></td>
<td>&lt; 1 %</td>
</tr>
<tr>
<td>Cyprus</td>
<td>518</td>
<td></td>
<td></td>
<td></td>
<td>&lt; 1 %</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>920</td>
<td>4</td>
<td>9</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Estonia</td>
<td>5,731</td>
<td></td>
<td>105</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Finland</td>
<td>2,082</td>
<td>14</td>
<td>13</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>France*</td>
<td>20,677</td>
<td>180</td>
<td>1,500</td>
<td>34</td>
<td></td>
</tr>
<tr>
<td>Georgia</td>
<td>1,156</td>
<td></td>
<td></td>
<td></td>
<td>1.6 %</td>
</tr>
<tr>
<td>Germany</td>
<td>29,017</td>
<td>177</td>
<td>250-300</td>
<td>14</td>
<td></td>
</tr>
<tr>
<td>Greece</td>
<td>8,164</td>
<td>53</td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Hungary</td>
<td>1,366</td>
<td>5</td>
<td></td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Ireland</td>
<td>4,419</td>
<td>37</td>
<td>115</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Israel</td>
<td>4,999</td>
<td>144</td>
<td></td>
<td>13</td>
<td>3 %</td>
</tr>
<tr>
<td>Italy</td>
<td>57,375</td>
<td>77</td>
<td>450</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>Kazakhstan</td>
<td>7,402</td>
<td>37</td>
<td></td>
<td>&lt; 1 %</td>
<td></td>
</tr>
<tr>
<td>Kyrgyzstan</td>
<td>1,070</td>
<td>4</td>
<td></td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Latvia</td>
<td>3,631</td>
<td>17</td>
<td></td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Luxembourg</td>
<td>770</td>
<td>2</td>
<td></td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Moldova</td>
<td>3,464</td>
<td>42</td>
<td></td>
<td>14</td>
<td></td>
</tr>
<tr>
<td>Netherlands</td>
<td>7,188</td>
<td>142</td>
<td></td>
<td>7</td>
<td></td>
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<tr>
<td>Norway</td>
<td>3,496</td>
<td>45</td>
<td></td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Poland</td>
<td>103</td>
<td></td>
<td></td>
<td>14</td>
<td></td>
</tr>
<tr>
<td>Portugal</td>
<td>30,366</td>
<td>96</td>
<td></td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>Romania</td>
<td>6,613</td>
<td>9</td>
<td>0</td>
<td>0</td>
<td>9 %</td>
</tr>
<tr>
<td>Serbia</td>
<td>2,104</td>
<td>9</td>
<td></td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Slovenia</td>
<td>316</td>
<td>5</td>
<td></td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Sweden</td>
<td>7,477</td>
<td>107</td>
<td></td>
<td>6</td>
<td>2 %</td>
</tr>
<tr>
<td>Switzerland</td>
<td>29,353</td>
<td>160</td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>FYR Macedonia</td>
<td>96</td>
<td>5</td>
<td></td>
<td>0</td>
<td>5 %</td>
</tr>
<tr>
<td>Turkey</td>
<td>2,544</td>
<td>45</td>
<td></td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Ukraine</td>
<td>91,057**</td>
<td>1,367</td>
<td>2,822</td>
<td>168</td>
<td></td>
</tr>
<tr>
<td>United Kingdom</td>
<td>84,816</td>
<td>1,504</td>
<td></td>
<td>91</td>
<td></td>
</tr>
<tr>
<td>Uzbekistan</td>
<td>10,015</td>
<td>53</td>
<td></td>
<td>31</td>
<td></td>
</tr>
</tbody>
</table>

* Reporting from 2003 onwards only
** Excluding MTCT
References:


Migration and HIV/AIDS in the Baltic Sea Region and NW Russia

Simo Mannila, Senior Expert IDC at STAKES

1. Background

This paper summarizes some discourses and findings relevant when considering migration and HIV/AIDS in the Baltic Sea Region and North-Western Russia. Firstly, migrant populations are not homogeneous; they consist of many different ethnic groups and migration can be based on very varying motivations. Nevertheless, there are some general findings which can be used as a starting point when looking at immigration in the Baltic Sea Region and North-Western Russia and HIV/AIDS. Secondly, when we speak of emigrants vs. immigrants, we usually look at migrant flows between countries. Nevertheless, internal migration may also be relevant: in many countries such as the Russian Federation and Estonia, there seems to be wide regional variation in the prevalence of HIV/AIDS, and internal migration inside the Russian Federation could be of major importance also for the potential spread of HIV/AIDS. Finally, there may be national minorities, who by living conditions and life style may differ from the basic population as much or more than migrants. There may also be differentiation by health, and the minorities may be more vulnerable to ill-health incl. HIV/AIDS. These are some comments to define the subject matter of this paper. Internal migration and the status of ethnic minorities in relationship to HIV/AIDS are, however, not a key focus here.

In general, people who emigrate are healthier than those in the country of origin. This is called the healthy migrant hypothesis, and there is extensive, even if rather variable evidence for it (e.g. McKay & al. 2003). The hypothesis says that there is a health-based selection in migration: those who emigrate tend to be healthier than those who stay. One of the most dramatic findings in Finland in compliance with this hypothesis tells us that Russian and Estonian male immigrants in Finland are healthier than Finnish men. This result is based on the comparison of the findings of a separate survey to the results of the Finnish Health 2000 Study (Liebkind & al. 2004): a very unexpected finding knowing Russian men's tendency to "die too young" (World Bank 2004). The healthy migrant hypothesis is often supplemented or equaled to the "salmon" hypothesis: this refers to the fact that migration with all that goes with it requires somehow going upstream, and unsuccessful migrants tend to return more often than successful ones. There is less research into the salmon hypothesis - an epidemiologically interesting idea considering that migration may transmit health problems - than into healthy migrant hypothesis or immigrant health in general (cf. Abraido-Lanza & al. 1999).

Healthy migrant hypothesis refers, thus, to a selection into emigration rather than directly to the health status of immigrants, but it can explain some of surprising findings among immigrants. Nevertheless, the reasons to emigrate vary, which bears direct implications to immigrant health. We may say that there are two main reasons to emigrate vs. immigrate, sometimes combined with each other: poverty and persecution. Firstly a most typical form of migration is search for work or better life: health is an asset in the search for work and in order to go abroad for this a minimum of health is required. Secondly, major population movements are also caused by wars, various catastrophes or persecution, all leading to large-scale vulnerability and migration. Persons immigrating on these grounds - even if the healthy migrant hypothesis might be true for them as compared to those who will stay - may suffer from ill-health due to their life course. This is acerbated by the fact that countries vulnerable to wars, catastrophes and political turmoil, leading to emigration waves, usually have considerably higher morbidity and mortality than other countries. When looking at health of migrants, a key factor in hypothesizing health is the reason for migration.
An interesting case is constituted by some other emigration vs. immigration grounds such as that of ethnic origin. Some countries have built their immigration policy at least partly on ethnic favouritism giving a special status for some ethnic groups: these countries include in the European Union e.g. Germany (returning immigrants from Eastern Europe and CIS), Greece (Pontic Greeks) and Finland (Ingrian and other Russian Finns). How does this selection criterion potentially influence the health profile of immigrants? It is probable that the immigration into these countries has been more based on search for welfare than any ethnic factors: this interpretation is supported by e.g. the finding supporting healthy migrant -hypothesis referred to above. Ethnic origin as a reason for migration becomes important when there is a possibility to have a better life referring to it. However, there may be other background factors bearing an impact on the findings from persons migrating for ethnic reasons. There has been, for instance, higher morbidity of the Finnish minority in Estonia as compared to that of Estonians, interpreted as the lagged impact of repression during childhood and which may be presumed also among some persons of this group who immigrate to Finland (e.g. Katus & al. 2003).

The comparison of health between the basic population and immigrants may be complicated because the profiles of health and illness may be very different. Some forms of illness may be very common in the countries of origin, and uncommon in the target countries. This may lead into problems in diagnostics and inadequate health care for immigrants, if their health problems are not well recognized or their access to health care for various reasons (culture, finances) is limited. This may also lead into unfounded prejudices concerning the disease burden of immigrants. A key example here is HIV/AIDS, which is a major public health problem in many Sub-Saharan countries, with a prevalence of over 10 % or more, while in all European countries the prevalence is much lower.

2. Basic factors bearing an impact on HIV/AIDS spread by migration

In sum, the basic factors bearing an impact on HIV/AIDS spread on a certain region via internal or external migration could be defined as follows:

- **Prevalence of HIV/AIDS in the countries of the region and other countries**
- **Migration flows inside the region and between the region and other parts of the world**
- **Lifestyles of the people linked directly to transmission modes, and**
- **Schemes of early intervention and health care related to HIV AIDS in the region**

In the case of Baltic Sea Region and NW Russia we see major differences between the countries as to the prevalence of HIV-infection; migration flows (who; from where; flow sizes), and also as to the lifestyles and schemes to address HIV/AIDS in the region. The country-specific information is, however, very variable, and below we address the above topics on the basis of this information, some country cases and draw some more general conclusions. The key information sources are various websites of international organizations and the Barents HIV/AIDS Programme documents collecting a great deal of statistics and some individual country-specific studies. The point of the paper is to describe HIV/AIDS discourse in the Baltic Sea region and NW Russia in the context of the above general factors and what we know about them from our countries of interest.
3. Prevalence of HIV/ AIDS in the countries of the region and other countries

There are major differences in the prevalence and incidence figures of HIV-infection between the countries in the Baltic Sea region and in the NW Russia. However the information base varies by country: a good example of this is the number of tested persons. Administrative statistics very commonly reported in the HIV/AIDS discourse never cover the whole picture. The coverage is presumably better in the countries with high awareness concerning HIV/AIDS and well developed services including access to proper care, and worse in countries with less awareness of the problem and less developed care. This means that in the former case the administrative statistics capture a larger share of the whole picture. On the basis of project work carried out in NW Russia we may conclude, that Russian administrative statistics, in particular, are downwards biased, while the situation in the Nordic countries is better. There are estimates that the prevalence of HIV/AIDS in Russia could be at least 1 %, while the registered cases cover around 370,000. If the prevalence estimates are true - and they are done by the best qualified international organizations, the difference here is alarmingly over one million cases - some of them unaware of their health problem, some others maybe discouraged by the lack of information, lack of services and a possibility of discrimination.

Other countries such as Poland and the Baltic States may be placed between these two extremes in the Baltic Sea region and NW Russia. The Estonian case is, however, interesting: the statistics show particularly high rates of testing among the population, i.e. there is a probability that the Estonian statistics will capture HIV/AIDS in rather real terms. The result is reflected in the record-high prevalence of HIV/AIDS found in Estonia.

Table 1 shows the estimated incidence of HIV cases in the Baltic Sea Region and Russia in 2004. This may serve as an illustration of the very variable situation in the countries of our interest.

*Table 1. Incidence of HIV in various countries of the Baltic Sea Region and Russia and prevalence by cases by the end of 2006 (Salminen 2007; EuroHiv 2007).*

<table>
<thead>
<tr>
<th>Country</th>
<th>New cases per million, 2004</th>
<th>All cases, 2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sweden</td>
<td>48</td>
<td>7,477</td>
</tr>
<tr>
<td>Finland</td>
<td>25</td>
<td>2,082</td>
</tr>
<tr>
<td>Denmark</td>
<td>54</td>
<td>4,746</td>
</tr>
<tr>
<td>Norway</td>
<td>n/a</td>
<td>3,496</td>
</tr>
<tr>
<td>Germany</td>
<td>24</td>
<td>29,017*</td>
</tr>
<tr>
<td>Poland</td>
<td>17</td>
<td>10,555</td>
</tr>
<tr>
<td>Lithuania</td>
<td>39</td>
<td>1,200</td>
</tr>
<tr>
<td>Latvia</td>
<td>141</td>
<td>3,631</td>
</tr>
<tr>
<td>Estonia</td>
<td>568</td>
<td>5,731</td>
</tr>
<tr>
<td>Russian Federation</td>
<td>239</td>
<td>369,187</td>
</tr>
</tbody>
</table>

* since 1993

The incidence data show the latest development of the problem, not its size. We see that in 2004 there were two groups of countries, the first one with a very high prevalence including Estonia, Russian Federation and Latvia, and the second one including all other countries. Measured by the absolute number of cases the end of 2006 there were almost 370,000 reported HIV cases in the Russian Federation, 3,631 cases in Latvia and 5,731 cases in Estonia. The absolute number of reported cases in Poland and Germany is also very high, over 10,000 vs. almost 30,000. Taking into account the abovementioned gap, the increase of registered cases may be also positive: it may also mean that the health care and other public services increasingly recognize the problem and are able to tackle with it. In any case, this also indicates that migration - and also commuting and tourism, since...
sometimes these can hardly be separated from migration - will bear an impact on the HIV-infection spread through migration between these countries. In any cases, when looking at prevalence or incidence data solely, we should focus on population movements between the three high incidence countries Estonia, Latvia and the Russian Federation, and other countries of our interest as a potential risk source.

It is also interesting to compare the HIV figures of various regions in NW Russia. In 2007 the prevalence per 100,000 in the Russian Federation was 268 according to statistics gathered for the Barents HIV/ AIDS programme. The situation of the NW Russian regions as compared to this average was as follows (Table 2).

**Table 2.** The prevalence per 100 000 and registered cases in the NW Russian regions until 11/ 2007 (comparison figure: Russian average).

<table>
<thead>
<tr>
<th>Region</th>
<th>Prevalence/100,000</th>
<th>Registered cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Saint Petersburg</td>
<td>736</td>
<td>35,315</td>
</tr>
<tr>
<td>Leningrad region</td>
<td>727</td>
<td>12,293</td>
</tr>
<tr>
<td>Republic of Karelia</td>
<td>63</td>
<td>438</td>
</tr>
<tr>
<td>Murmansk region</td>
<td>253</td>
<td>2,243</td>
</tr>
<tr>
<td>Archangelsk region</td>
<td>19</td>
<td>256</td>
</tr>
<tr>
<td>Pskov region</td>
<td>45</td>
<td>354</td>
</tr>
<tr>
<td>Kaliningrad region</td>
<td>460</td>
<td>5,791</td>
</tr>
<tr>
<td>Nenets autonomous district</td>
<td>225</td>
<td>1,284</td>
</tr>
<tr>
<td>Republic of Komi</td>
<td>90</td>
<td>936</td>
</tr>
<tr>
<td>Russian Federation</td>
<td>268</td>
<td>403,100</td>
</tr>
</tbody>
</table>

The table shows major variation inside the NW Russia. Saint Petersburg is hit worst, and it is also on the top of the problem list by the number of cases: there are over 35,000 registered HIV cases in Saint Petersburg. Leningrad region, which surrounds Saint Petersburg is by relative indicators almost at the same level, which is three times above the Russian average. Kaliningrad, Murmansk and Nenets autonomous district belong to the middle range of the regions. A great deal of transport industry and links with export business is concentrated in all these regions (Murmansk: shipping, military, Nenets: various raw materials) and Kaliningrad is one of the largest harbours in the Russian Federation, at the crossroads between Poland and Lithuania, and the region where the epidemic spread first. HIV prevalence is considerably lower in Karelia, Pskov and Komi - the two first regions being rather marginal in the Russian economic geography, while Komi similarly to e.g. Nenets today has major natural resources and figures quite high on the list of Russian gross regional product champions.

The Russian figures show considerable regional variation in the HIV prevalence inside the country. Considering the high figures of Saint Petersburg and Leningrad Oblast, we should not worry for Russian internal migration: the HIV prevalence in the NW Russia can hardly become higher because of that. Other, much smaller countries and regions show also considerable regional variation. Estonia is also here a typical example: the problem is concentrated in the Northeast Estonia and to a certain extent in Tallinn, while the prevalence of HIV in the Southern and Western parts of the country is very low. This may be related to accumulation of social problems as well as the links between the NE Estonia and high prevalence regions of Saint Petersburg and Leningrad oblast. In Finland, too, as probably in most countries, the capital region is worst hit, but the spread does not seem to be as concentrated as it is in Estonia or in the Russian Federation (Salminen 2007). In the Finnish case, the
geographical difference is hardly related to the accumulation of social problems, but it may be related to international links and the concentration of some ethnic minorities more typical of the capital region than other regions.

There are estimates that in all European scale Estonia and the Russian Federation may be worst hit by the HIV epidemic, and there are rather gloomy prognoses concerning the future impact of HIV on the demographic and economic development of these countries (Leinikki 2007; Plavinski & Baranova 2005). There are also estimations of more general character pointing out the detrimental impact of ill-health on the Russian economic development not including the potential impact of HIV/AIDS epidemic and pointing out very positive results of any improvement in health (Suhrcke & al. 2007). According to most recent information concerning e.g. the whole Russian Federation and Saint Petersburg, the gross national vs. regional product is developing very positively and the negative demographic development seems to be at least slowing down (e.g. BOFIT 2008). The economic development in Estonia has lately been less favourable than in the booming years some ten years ago, but we cannot speak about major problems.

> Theoretically, problems in economic and human development - potentially also related to HIV/AIDS - would mean an increasing impetus for emigration in search for better life from vulnerable regions or countries to other countries. However, we must bear in mind the selection into migration, and the variation between the groups of migrants. Labour migration in search for better life, supports the healthy migrant hypothesis, relevant also for the spread of HIV/AIDS.

4. Migration flows influencing the Baltic Sea region and NW Russia

Migration consists always of immigration and emigration, and as a result of these flows we have the migration balance. The countries of the Baltic Sea region showed e.g. in 2005 varying profiles (e.g. www.migrationinformation.org). While the migration balance was positive for Germany (1.2), Sweden (2.7), Norway (4.7), Denmark (1.4) and Finland (1.7), it was negative for Poland (-0.3), Estonia (-0.3), Latvia (-0.5) and Lithuania (-3.0). There is extensive discussion concerning the emigration of labour force from the new EU Member States to the old ones plus Norway: in the Baltic Sea region all Baltic countries and Poland are hit, while the Scandinavian countries and Germany receive immigrants. In Finland the labour immigration is somewhat lagged due to the fact that the restrictions in the Finnish labour market until May 2007. The profile of NW Russia may be rather close to a zero balance: while Saint Petersburg keeps attracting people from all Russia, many other regions such as the rural Leningrad and Arkhangelsk oblasts have a negative immigration balance (Zubarevich 2007). These figures show the main outlines of migration profiles in the Baltic Sea Region and NW Russia.

The population movements in the European Union are caused by the establishment of one labour market. There seem to be rather rough estimates concerning the size of this phenomenon, but it has been estimated, for instance, that in there are over 2 million Polish citizens in the UK only, plus some hundreds of thousands in Ireland. In general, the above migration balance coefficients make major changes in absolute numbers in all Baltic countries as well as in Poland. Inside the European Union/EEA there may, however, be other cases, where besides migration commuting and even tourism must be considered with a keener eye, since it is so easy both geographically and linguistically. This may be valid, for instance, for the relationship between Greater Helsinki Area and Estonia/Tallinn, due to the geographical proximity and difference in the living standards as well as in the HIV rate of the two regions. According to Rüütel (2007) the HIV incidence figure for Estonia 2005, referring to EuroHiv data, was 461, while the corresponding figure for Finland was 26 and for Sweden 43. Similar cases hardly exist between other countries in the Baltic Sea region: for instance, between some parts of Denmark and Sweden's Skåne district there is a very high level of cross-
border commuting and migration, but the difference in the living standard and HIV rate is insignificant (Sweden: 43, Denmark 53; Rüütel 2007). However, healthy migrant hypothesis is as valid for commuting as it is for migration. There is hardly reason to believe that persons looking for work or working in the neighbouring country would suffer from major ill-health.

There is also extensive legal and illegal migration into the Baltic Sea region and NW Russia from outside this region, which is may be of paramount interest for the spread of HIV-infection. There are, for instance, estimates that there are 5-15 million illegal immigrants in the Russian Federation, some of them in NW Russia. Although many of these persons may be Russians who have migrated from some parts of the previous Soviet Union (e.g. from Central Asian countries, Caucasus), there is still a large number of other people. If all immigrants in the Russian Federation should be of those countries of origin which are typical of legal immigrants, the immigrants would be from Ukraine and other CIS countries as well as from some Asian countries such as China and Vietnam. The prevalence of HIV by EuroHiv (2007) in these countries of origin is not higher than that in e.g. Estonia or the Russian Federation. On the basis of the healthy migrant hypothesis, there is, again, no reason to believe that the immigration from these countries would be a major risk for the spread of HIV-infection. However, in some cases a drug connection may be a confounding factor, as discussed in the next chapter.

Major immigration flows come also to the Baltic Sea region countries from non-European countries. This is more valid for Nordic countries and Germany than Poland, the Baltic states and NW Russia. The immigrants from the countries of Sub-Saharan Africa, in particular, are here of special interest, since the prevalence of HIV in these countries surpasses any European figures and we may speak about a genuine epidemic. Also the character of the illness is different in these cases: it cannot be directly linked to any life styles or life style minorities as is the case in many European countries, the HIV prevalence rates can be up to 10-40% of population in certain regions of the worst hit Sub-Saharan African countries.

Where do the immigrants come from, and what is the size of immigration from outside the European Union to the Baltic Sea region? The German data of rather recent years show a surplus balance of approximately 50,000 immigrants from the non-EU European countries (as compared to the number emigrants). In Finland, persons from Russia and Estonia are the key immigrant groups, amounting presently to a minority of approximately 50,000 Russian-speakers in Finland (e.g. Liebkind & al. 2004). Otherwise, the immigration to Finland consists of various groups and includes e.g. Somalis, Albanian-speakers (mainly from Kosovo), Arabic-speakers and Vietnamese (Jasinskaja-Lahti & al. 2002). In Sweden, the largest immigrant group consists of Finns (almost 200,000 by the country of origin). The following immigrant groups in Sweden in the order of size are persons from (ex) Yugoslavia, Iraq, Bosnia-Herzegovina, Iran and Norway. These immigrant profiles would, in general, indicate that the major immigrant groups usually come from the neighbouring countries or as refugees and asylum-seekers (e.g. persons from Kosovo, Vietnamese to Finland, Bosnia-Herzegovina, Irak to several countries). The immigration flows from Sub-Saharan Africa into any of the Baltic Sea region countries are modest. The main target of this immigration may be Germany, with approximately 32,000 Sub-Saharan African immigrants yearly, but with a net immigration balance of only 7,000. The immigration from e.g. Asian and South-Asian countries is considerably larger by size in Germany: there are over 100,000 immigrants from Asian countries yearly, with a positive immigration balance of over 30,000 (Marcus 2007). However, for instance, the list of 20 main immigrant groups to e.g. Sweden does not include immigrants from any South Asian countries (www.immi.se). The volume of immigration to any of the Baltic countries is modest as compared to the emigration figures.

The HIV estimates (Marcus 2007) for migrants from non-EU European countries do not show an alarming difference as compared to the German figures. This is in compliance with the healthy
migrant hypothesis. The key difference is between Sub-Saharan African immigrant and basic population (estimated incidence 3% vs. 0.1%), and also between South-East Asian and basic population (0.6% vs. 0.1%). In the overwhelming majority of the cases the HIV-infection has – according to information available – not been transmitted in the target country i.e. it was there before the immigration.

> We may state that considering population movements, the HIV problem in the Baltic Sea region is acerbated by the health status of immigrants from those regions of the world where the HIV epidemic is very common. This means, in particular, Sub-Saharan Africa. Considering the risks of social exclusion typical of many immigrant groups, potential cultural difference between the countries of origin and the target countries, as reflected in the understanding of health, demand for health services and cultural sensitivity of health services, this makes a major challenge to the combat against HIV/AIDS and functioning of health systems.

The information concerning e.g. immigrants (HIV-infection rates, transmission) in Finland is in compliance with this conclusion (e.g. Salminen 2007).

According to international information there are reasons to believe that the spread of HIV-infection in the Russian Federation has not been contained, and it entails an increasing risk to the whole Russian population. Does this risk spread to the countries of the Baltic Sea region?

> There does not seem to be adequate information to support this hypothesis, and additional research is needed here. The reasons for the fact that the hypothesis is presently hardly supported may be multifarious, e.g. EU visa policy, healthy migrant effect, also culturally induced scarcity of contacts between some neighbouring countries.

5. Lifestyles of the people linked directly to transmission modes

In the previous chapters we have discussed the spread of HIV-infection in the Baltic Sea region and NW Russia, with some comments concerning the situation in other parts of the world; we have also discussed the migration patterns inside the region of our interest as well as immigration into the Baltic Sea region and NW Russia. Here we highlight some lifestyle factors, which, according to our information concerning the transmission channels, bear a very important influence on the HIV epidemic and its development.

Looking at the HIV statistics based on administrative data from various countries collected in the Barents HIV/AIDS Programme and showing the channels of transmission we may see major differences between country profiles indicating that HIV is related to different life styles or life style problems in different countries of the Baltic Sea region and the NW Russia. Two most remarkable findings, based on the expert papers of the Barents HIV/AIDS Programme (e.g. Marcus 2007; Salminen 2007) are as follows:

- In the Baltic countries the problem seems to be largely related to drug abuse;
- In the Nordic countries and in Germany, the problem is still largely related to men having sex with men.

In all countries there is an awareness of the potential threat meaning that HIV-epidemic will become generalized so that it will be a sexually transmitted illness not contained in any of the minority segments of the population. There are various indications that this process is underway for instance in the Russian Federation and even Nordic countries (e.g. Blystad 2007). According to the administrative data, the problem in NW Russia has also continued to be related to drugs, but we may
state this with a certain reservation, due to the large difference between the registered HIV cases (350,000 cases by the end of 2005, presently over 400,000) and the estimated prevalence (up to 1.1% for the whole country by UNAIDS 2006). When speculating on the real significance of the gap between the registered cases and estimated prevalence, we must bear in mind that also drug abuse is rather widespread, and its links with more traditional Russian problems such as alcohol abuse are still widely unknown. This means, we do not know what the overlap between different social problems is and we have no clear picture to which extent the problem still is concentrated on persons with some special lifestyle. In fact, any increase in the registered number of HIV cases in the Russian Federation should at present be welcomed, since it would not necessarily indicate increased prevalence: it would most probably indicate that the diagnostic system, cure and care start to function. This said presuming that the internationally estimated HIV prevalence in the Russian Federation is not faulted. We must point out that the prevalence estimates are not very accurate: for 2006 the international estimate for Russia was between 560,000 and 1,600,000 (EFS 2006).

In addition to the issues of drug addiction and men having sex with men, we must pay special attention to prostitution and trafficking as key elements in the HIV transmission, also internationally. The information concerning this is rather scarce, and additional research would be needed. Major work in the field of trafficking is carried out by the International Organization of Migration, but the HIV problems are not a key focus (http://iom.fi/content/view/89/98). In the press there is also conflicting information concerning the input of foreigners (immigrants or tourists) in the sex business of the Baltic Sea region, and the significance of trafficking as a transnational social problem.

This means, related to migration, that the HIV risks related to migration are also related to the lifestyles of men having sex with men (cf. WHO 2007a), to the relationship of drug use, prostitution and trafficking with migration - taking into account the Schengen borders and their impact on the dissemination of drugs and more intense cross-border relations. In the present HIV policies, it is not clear that these factors of key importance have been addressed to an adequate extent, and it is clear that additional research would be needed.

> We see that a twin-track approach, focusing on both the general population and the special risk groups and their lifestyles is here needed - this goes for research as well as policy design. Any epidemiological models of general character must remain inaccurate, if the significance of the special factors - no doubt requiring targeted research, since the phenomena cannot be described by standard population surveys or administrative statistics, which can be considered socially constructed - is neglected.

As far as the immigrants from non-European countries are concerned, the issue of the abovementioned lifestyles is still valid and special attention must be paid on more general cultural issues. Medical anthropological knowledge accumulated in other countries may be here very useful. However, when HIV-infection is wide-spread in the general population, persons with no special lifestyle or no major social problems may suffer from the infection, which has not been diagnosed due to e.g. inadequate health services in the country of origin. This means that additional sensitivity is required in the health care of the target countries to understand the complexities of immigrant health.

> There is also a need of anti-discrimination approach in all HIV policies. It is important, in particular, to pay attention to the potential discrimination on the basis of ethnic origin: foreign nationals may be considered dangerous because of their origin, which is based on a misguided idea concerning what HIV/AIDS is and what it is not.

European Union attempts to fight discrimination by means of two directives (Racial Directive 2000/43/EC, and Employment Directive 200/78/EC), but it is clear that their implementation varies
by country. As far as the Russian Federation is concerned, there is evidence of xenophobic
tendencies in the civil service and misguided understanding of HIV-infection as an illness (e.g. WHO
2007b), which may cause difficulties in designing and implementing effective HIV/AIDS policy (e.g.
Open Society Institute 2007).

6. Schemes of early intervention and health care related to HIV/AIDS in the region

The schemes of early intervention and health care related to HIV/AIDS, and their variation by
countries, may be an intermediate factor looking at the link between migration and HIV/AIDS. There
are differences between societies concerning the extent how HIV-infection is diagnosed, treated, and
how the victims of the illness are supported by public or other (mainly NGO) services. This
difference exists also between the countries of the Baltic Sea region and NW Russia, as well as
between all countries of our interest and other countries of the world. We could think that the better
the awareness and services available are, the higher the healthy migration effect; however, there is
hardly any indication that there would be migration between countries induced by the difference in
the treatment and services available for persons with HIV/AIDS.

As far as ethnic minorities are considered, some of them may be considered new, some traditional: at
some point of history the difference between these two may become blurred. There is information
from e.g. Canada, showing increased vulnerability of some traditional ethnic populations to HIV (e.g.
Boulos 2007).

> This means that a special sensitivity of the public services (health care, social care, law
enforcement) is needed towards the needs of vulnerable ethnic minorities, both old and new. Their
access to e.g. health services is often not equal that of the basic population, and there may be socio-
cultural barriers from both sides in help-seeking and help-offering behaviour as well as in the
understanding of the severity of the HIV/AIDS problem. This is still another reason for a twin-track
approach: the combat against HIV/AIDS may also be considered a strand in more general social
inclusion and equal opportunity policies.

Thus, in the awareness raising concerning HIV & AIDS and designing and providing the public
services we must pay attention to the cultural minorities and their special needs. This request is
relevant to all countries of the Baltic Sea region and NW Russia. Risks of social exclusion, also
related to and potentially caused by ethnic discrimination, vary by country and ethnic groups, and we
must not increase them or let them accumulate by insensitive policies. Promotion of equal
opportunities for all and diversity management in public service - integral in some countries with
multicultural population, such as Canada - must be included in the repertoire of combat against HIV
and AIDS for the rights of the illness victims.

7. Summary of challenges and recommendations prepared by the HIV/AIDS Expert Group
submitted to Lisbon Meeting
Presented in the EU meeting "HIV and migrant populations", Lisbon, Oct 13 2007

Background
- Immigration and xenophobia are linked
- Immigration often linked with legal "irregularities" – poor access to health and social services
- Immigration linked with secularism – cultural communication problems - counselling
- Immigration linked with "different" disease patterns compared to main population
- Immigration linked with "different" disease patterns compared to main population
- Inaccurate surveillance and poor knowledge about the actual dynamics of HIV within migrant communities
- Poor understanding of the risk factors

Challenges
- Can we provide proper counselling and treatment in a cultural-sensitive way?
- Do we know what is actually going on? ("hidden populations", different groups)
- Can we handle the situation among illegal immigrants? (Cave discrimination!)
- How to meet challenges like xenophobia among the general population?
- Which strategy? 1.Integration 2. Separate services > "Twin-track approach"?

Recommendations
- Better definitions, more research and information is needed to fully understand the HIV problem among non-native populations,
- Legal and economic restrictions and obstacles vary from one EU-country to another, a need for "Ombudsman" at EU level
- Emphasis should be on human rights, and their practical implementation; access to proper cARV-treatment is a useful criterion
- In training, target populations must be involved in the implementation of training
References


WHO (2007a) HIV Prevalence and Risks among Men Having Sex with Men in Moscow and Saint Petersburg. WHO Regional Office for Europe, Copenhagen.

