

# Background Paper and Action Plan Special Session on EUROPE Intensified Action to Control TB in Europe

## Summary

A recent planning process by the Stop TB Partnership shows that the targets of halving TB prevalence and death could be achieved by 2015 globally and in all regions of the world, except for in Africa and Eastern Europe.

To reach the targets for TB control in Eastern Europe, the death rate must be reduced by 15% per year. This rapid reduction has only previously been achieved in small populations without drug resistance. Similar rates of progress would be very hard to achieve on the scale of Eastern Europe, particularly in view of the severe multidrug resistant TB (MDR-TB) situation. The accelerated response needed in order to reach the targets in Eastern Europe, cannot be implemented unless all health providers implement sound TB and MDR-TB control immediately.

Although tuberculosis strikes hardest in the eastern part of Europe, not one western European country has managed to eliminate the disease. The majority of those suffering from TB and MDR-TB in western European countries are born in countries with high TB and MDR-TB prevalences. Tuberculosis does not respect borders. Thus, as long as tuberculosis remains a major health problem in large parts of the European region, TB control remains a shared responsibilities of all European countries.

The major part of this paper focuses on what steps are needed in Eastern Europe to enable the whole of Europe to first control and then move progressively towards the elimination of tuberculosis as a public health problem for all Europeans..

This paper calls for concerted action by all European countries to immediately ensure the implementation of sound TB and MDR-TB control strategies across the whole continent. Countries in Eastern Europe and CIS faced with a high TB and MDR-TB burden should increase their national expenditures and implement internationally recommended strategies to address TB, MDR-TB and TB/HIV and its accompanying social conditions. It is in the interest of the whole continent that wealthier countries in the WHO European Region<sup>1</sup>, and especially the European Union, pay more attention to the TB crisis in the Region and increase their financial contribution to TB control.

<sup>&</sup>lt;sup>1</sup> WHO European Region encompasses 52 Member States: Albania, Andorra, Armenia, Austria, Azerbaijan, Belarus, Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Georgia, Germany, Greece, Hungary, Iceland, Ireland, Israel, Italy, Kazakhstan, Kyrgyzstan, Latvia, Lithuania, Luxembourg, Malta, Monaco, Netherlands, Norway, Poland, Portugal, Republic of Moldova, Romania, Russian Federation, San Marino, Serbia and Montenegro, Slovakia, Slovenia, Spain, Sweden, Switzerland, Tajikistan, The former Yugoslav Republic of Macedonia, Turkey, Turkmenistan, Ukraine, United Kingdom and Uzbekistan.

To reach the targets in the Europe a major scale up of both DOTS and DOTS-Plus is required. The optimal scenario that comprises all interventions to reach this objective requires firm and continued political commitment at the country level and an investment of at least US\$11.7 billion.

# **Background**

# The TB epidemic in Europe

In 2003, WHO estimated that almost 450,000 new TB cases occurred in the WHO European Region and more than 67,000 people died from this curable disease. TB rates are generally 10 times higher in the countries of the former Soviet Union than in Western Europe.

MDR-TB is the most important threat to TB control in Europe. The countries of the former Soviet Union have the highest MDR-TB rates in the world. WHO estimates that 10% of new and 40% of previously treated patients in the countries of the former Soviet Union have MDR-TB. Annually, it is estimated that there are more than 55,000 MDR-TB cases in Eastern Europe.

Following China and India, the Russian Federation has the highest incidence of MDR-TB with more than 30,000 estimated MDR-TB cases per year. MDR-TB is difficult and much more expensive to treat than drug susceptible TB, but if left untreated or inadequately treated, it continues to spread. and may even become incurable.

HIV is rising faster in Eastern Europe than anywhere else in the world. High rates of TB overlap areas and population groups with high HIV incidence which creates the potential for a dangerous interaction. The HIV epidemic is most severe among intravenous drug users. An estimated 50-90% of HIV infections in Eastern Europe are caused by injecting drug use.

The potential for the joint impact of HIV and MDR-TB requires urgent attention. The combination of a rapidly increasing HIV epidemic, the extended hospitalization of MDR-TB patients in these settings, combined with poor infection control measures and high levels of TB, MDR-TB and HIV in prisons, could have a significant impact on the already severe MDR-TB situation.

## **Status of TB control in Europe**

The European Region has the lowest level of DOTS (the internationally recommended TB control strategy) population coverage and DOTS case detection of all regions. Only about 40% of the population lives in areas implementing DOTS. Main reasons for the low DOTS case detection rate are the limited involvement of primary health care services in TB control, inadequate laboratory capacity and a focus on X-ray for the diagnosis of

TB. The regional treatment success rate of 76% is the second lowest compared to other regions, only slightly higher than that in the high HIV prevalence African region. Low treatment success rates are highly linked with the MDR-TB problem and the difficulties in keeping vulnerable groups, such as substance abusers and homeless people, on treatment.

# Constraints in controlling the TB epidemic

## **Health systems**

Sustainable and effective TB control is not possible without proper cooperation and mutual support with other sectors of the national health system. TB control services in many countries of Eastern Europe are provided through a specialized network of TB facilities staffed by TB doctors and nurses with limited involvement of the primary health care services. General practitioners, family doctors and communities do not consider TB control as their responsibility. This results in delay of diagnosis and prolonged transmission of the disease. Some aspects of health system organization, such as lack of political and financial commitment, rigid systems of budget planning based on occupation of hospital beds, ineffective human resource development policies, directly affect management of TB control. Special attention should be paid on ongoing health reforms to ensure an adequate place for TB control and to foresee impact and consequences of certain directions such as privatization in health care.

#### Political commitment: human and financial resources for TB control

The expansion of high quality TB diagnostic and treatment services in the Eastern European Region is severely limited by lack of political will which results in insufficient financial resources directed to the health system in general and TB control in particular . A weak public health infrastructure (particularly a lack of laboratory capacity to perform high quality bacteriological investigations), unsustainable specialized TB services and limited involvement of primary health care providers, has led to an insufficient pool of adequately trained professionals at community level, difficult access to care for many patients compounded by a lack of long-term national strategic plans for TB control and for reaching the TB related Millennium Development Goals (MDGs).

### TB and poverty

The majority of TB patients in the region belong to socially vulnerable groups, such as the homeless, the unemployed, migrants, alcoholics and ex-prisoners. Public health efforts to control TB would have greater impact if they were supported by efforts to alleviate poverty and improve living standards.

#### MDR-TB control

Although WHO and the Green Light Committee (GLC) have proven that the management of MDR-TB in resources limited countries is both feasible and cost-effective, only very limited areas of the countries of Eastern Europe implement sound MDR-TB control measures (DOTS-Plus). Outside DOTS-Plus areas, second-line drugs of unknown quality are widely misused leading to the development and circulation of incurable forms of TB. Successful MDR-TB control strategies as proven in Estonia, Latvia and parts of the Russian Federation, must urgently be scaled-up to the whole Region in order to avoid a public health crisis and circulation and migration of incurable TB strains.

#### TB/HIV coordination

Insufficient coordination and collaboration between TB and HIV/AIDS control programmes in the Region and a lack of an effective strategy to address HIV in vulnerable groups, such as intravenous drug users and commercial sex workers - in conjunction with the general constraints in TB control described above - could result in a large epidemic of HIV-related TB in the region.

## TB in prisons

Prisons in the former Soviet Union have been highlighted as a breeding ground for TB, and especially MDR-TB, which spreads among inmates due to overcrowding, inadequate ventilation, malnutrition and poor hygiene. The incidence of TB is approximately 50 times higher and the mortality rate approximately 28 times higher among prisoners than among the civilian population in these countries. Drug shortages and weak laboratory services resulting in late diagnosis and inadequate treatment have led to a high burden of MDR-TB in the penal system. TB control in prisons is poorly integrated with national TB control programmes which in turn results in many patients released from prison interrupting their treatment course.

#### **Immigration**

More than half of all TB cases in Belgium, Denmark, Israel, the Netherlands, Norway, Sweden, Switzerland and the United Kingdom, occur in foreign-born patients. In addition, studies from western European countries including Germany, the Netherlands and Italy and also Israel, show that the vast majority of MDR-TB patients are also of foreign origin. A study from Germany shows that 70% of MDR-TB cases were foreign-born and mainly coming from the countries of the former Soviet Union. In addition, a recent MDR-TB micro-epidemic in the Netherlands was caused by illegal immigrants from Eastern Europe. DNA fingerprint studies have illustrated transmission of MDR-TB strains from immigrants to the native population. These facts clearly illustrate that TB control is a shared responsibility of all European countries. Less affected countries will need to invest in controlling TB outside their borders in order to reach elimination of TB in their own settings. Therefore, they urgently need to offer technical and financial support to their fellow European countries in Central and Eastern Europe.

# **Opportunities**

## The Stop TB Strategy and Global Plan to Stop TB, 2006-2015

In May 2005, a resolution was endorsed by all WHO Members States "to ensure that all tuberculosis patients have access to the universal standard of care". This resolution is in line with the new Stop TB Strategy and the new International standards of TB care. The traditional TB control strategy, DOTS, has incorporated additional approaches to respond to TB/HIV and MDR-TB, contribute to health system strengthening, engage all care providers, empower patients and communities, and enable and promote research and development for new drugs, diagnostics and vaccines. If implemented adequately, the Stop TB Strategy will greatly accelerate the response to sound TB control in the Region.

The Stop TB Partnership has also developed a Global Plan to Stop TB for 2006-2015. The plan is a comprehensive assessment of the action and resources needed to expand, adapt and improve the Stop TB Strategy. It provides a roadmap for achieving the MDGs linked to TB globally, and also by different epidemiological regions of the world including Eastern Europe.

### The Global Fund to Fight AIDS, Tuberculosis and Malaria (GFATM)

Since the advent of the GFATM, 14 countries of Eastern Europe and the former Soviet Union have been granted a total of almost 170 million US\$ for TB control. The support by the GFATM has been a tremendous boost for TB control activities in these countries allowing for accelerated control measures. However, at the same time as more funds are available at country-level, more technical assistance is required to support countries to use the available funds in a rational way.

#### **International collaboration**

In 2002 the WHO European Member States recognized that TB was out of control in many countries of Central and Eastern Europe and adopted the resolution "Scaling up the response to TB in the European Region of WHO". In February 2005, the Regional Director of the WHO European Region wrote a letter to all 52 Members States stating that he considers TB to be a regional emergency and calling upon the increasing financing for its control.

A significant number of technical agencies and non-governmental organizations (NGOs) work across the Region to strengthen TB control. These include national TB control institutes, lung health organizations and NGOs.

Financial support for TB control in Europe comes mainly from Austria, the European Union, France, Germany, Italy, the Netherlands, Sweden, the United Kingdom and the United States. To date, for technical agencies, the largest single donor to TB control in

Europe is the United States. European donors, including the European Union, are called on to play a more significant role in furthering TB control in Europe and ensure that funding is in place to meet the demands of an urgent scale up of high quality TB control in Europe.

# The way ahead for controlling TB 2006-2015

The global targets for TB control in Europe could only be met if all components of the Stop TB Strategy are implemented immediately, including the introduction of new drugs and diagnostic tool when these become available. <sup>2</sup>

This 'optimal scenario' requires firm political commitment at country level, funds to cover all interventions and massive technical assistance. Recent costing exercised estimate that *at least* US\$11.7 billion will need to be invested by both governments and donors to be able to implement the necessary interventions.

Crucial conditions and activities include:

#### 1. Political commitment to sound TB control measures

Political commitment at the highest level will need to be systematically generated. To make TB control a high priority issue for European leaders the facilitation of consistent advocacy and communication campaigns, outreach and special events such as high-level missions and conferences will have to be incorporated into the activities of TB partners across Europe. These high-level activities will have to involve Heads of States in all countries. More generally, political commitment to address social development as a whole, including health care systems, is required. Critical health systems issues that will need to be addressed include methods for planning and allocating budgets and staff, and human resource development (covering, for example, salaries and other staff incentives which are currently inadequate and undermine staff motivation and job satisfaction, appropriate training and continuous education). Political commitment should also translate into more countries seeking grants from the GFATM for TB control and from the Global TB Drug Facility (GDF) for quality-assured first-line anti-TB drugs. In addition, commitment to sound TB and MDR-TB control should result in more countries receiving or purchasing quality-assured first-line anti-TB drugs from the GDF and quality-assured and reduced priced second-line drugs from the GLC.

## 2. Reaching high case detection rates and high cure rates

Symptomatic TB cases should have easy access to diagnosis and proper treatment, with adequate referral between different levels of the health care system. In addition periodic

<sup>&</sup>lt;sup>2</sup> According to the "WHO European Plan for DOTS expansion 2002-2006", 25 (out of 52) countries are in the TB elimination phase: the countries of Western Europe (except Spain and Portugal) plus Czech Republic, Slovakia and Slovenia. For the other 27 countries of the WHO European Region, the term "TB control" is applied, that is securing a decline in incidence adequate to reach the targets.

screening of high risk groups such as contacts of infectious TB cases, prisoners, people living with HIV/AIDS, and socially vulnerable and marginalized groups needs to be implemented. The X-ray diagnosis of TB needs to be confirmed by quality assured laboratory tests. This requires internal and external quality control of laboratories involved and introduction of rapid diagnostic tests fo the timely diagnosis and isolation of especially MDR-TB patients. Implementation of rapid diagnostic tests will need investment in infrastructure, equipment, training, reagents, supplies, safety measures and maintenance. HIV counseling and testing of TB patients and high risk groups including provision of antiretroviral therapy will need to be rapidly scaled-up.

A patient-centered approach that includes extensive support measures is essential if high treatment success rates are to be achieved. These measures include enablers and incentives for delivery of TB drugs to ensure adherence. This may include nutritional supplementation; psychological and emotional support; education of patients, families and peers and free transportation to health care clinics for patients. For patients not able to attend health facilities, home-based treatment will be necessary, supported by special legal and social arrangements for released prisoners, the homeless and other socially marginalized groups of patients, as well as chronic and severely ill TB patients. Treatment of concomitant conditions, especially alcohol dependency, is also required to improve adherence to treatment and outcomes.

Achieving high treatment success rates requires the use of quality-assured anti-TB drugs. WHO and partners should collaborate closely with countries to develop national medicines policies, including stringent regulatory measures, and to ensure that these are implemented, monitored, and regularly updated in line with broader health and development objectives.

Access to new drugs may play a crucial role in TB control, especially as new regimens have the potential to shorten the TB treatment course. The timely introduction of highly effective and shorter treatment will be key to reduce default rates and address MDR-TB. International collaboration must ensure that once these drugs become available these are introduced without delay.

In order to improve access, TB control must be integrated within the general health care system (including primary health care and respiratory services). This brings benefits to the patient and moves away from the highly verticalized and specialized system of TB clinics and hospitals currently operating in much of Eastern Europe. A TB control programme that is mainstreamed into general health services should be supported, at national level, by a control unit ensuring proper management of the TB programme, such as drug-procurement, country-specific guidelines, policy development, supervision and training.

#### 3. Technical assistance

To achieve the targets, National TB Control Programmes will need substantially increased technical support. International experts on TB and MDR-TB control are needed in almost all Eastern European countries. Technical partners require additional resources

to enable delivery of quality-assured and preferentially priced first and second-line drugs at large scale as well to provide extensive technical support to assist countries in implementing the new comprehensive global TB control strategy.

4. Advocacy, communication and social mobilization

Improving advocacy, communication and social mobilization will contribute to:

- Improving case detection and treatment adherence
- Combating stigma and discrimination
- Empowering people affected by TB
- Political commitment and resources for TB.

Member States, donors and partners need to engage policymakers, local government officials, public and private health professionals, traditional and religious leaders, community leaders, NGOs and patients and their families in bringing about sustainable behavioral and social changes that will in turn contribute to a reduction in TB burden.

## PLAN OF ACTION FOR INTENSIFIED TB CONTROL IN EUROPE

# **Recommendations to Governments of Europe**

- 1. Make a comprehensive analysis of the TB situation in the country, taking into account specific challenges such as MDR-TB, risk-groups for tuberculosis, laboratory capacity and the overlap of the HIV /AIDS and TB epidemic
- 2. Develop country-specific TB control development plans that include all elements of the STOP TB strategy and the related budget
- 3. Immediately take action to limit the use of non-quality assured TB drugs
- 4. For EU member States to build political commitment within the EU
- 5. For high income, low TB prevalence countries to maintain an adequate level of TB control services and to offer both technical and financial support to high prevalence TB countries in Europe
- 6. Empowerment of communities and civil society in TB control

# **Recommendations to Technical agencies**

- 1. To prepare themselves to be able to deliver massive high quality Europe-specific technical assistance, covering all elements of the STOP TB strategy
- 2. To assist in fundraising, targeting existing and new donor agencies
- 3. To actively coordinate and collaborate in order to maximally benefit from each others specific expertise and comparative advantages

## **Recommendations to the Coordinating Board**

- 1. Increase awareness and commitment of donor agencies to the emergency of TB and MDR-TB in Europe
- 2. Support the development of a detailed blueprint for intensified action to control TB and MDR-TB in Eastern Europe and eliminate TB in Western Europe
- 3. Endorse the organization of a European high-level ministerial forum to ensure Regional collaboration in the fight against TB and MDR-TB and increased financial contributions
- 4. Facilitate and support the establishment of a Regional Stop TB Partnership.