8th National Tuberculosis Programme Managers Meeting and 13th Wolfheze Workshop

Wolfheze 2008: tuberculosis management, surveillance and evaluation in Europe with high rates or threat of multidrug resistant tuberculosis

The Hague, The Netherlands 1-2 June 2008

Jointly organized by the World Health Organization, Regional Office for Europe, KNCV Tuberculosis Foundation and the European Centre for Disease Prevention and Control
ABSTRACT

The WHO European Region has the highest rates in the world of drug-resistant tuberculosis and increasing rates of HIV/tuberculosis coinfection. Eighteen high-priority countries have been identified to urgently scale up tuberculosis control interventions: Armenia, Azerbaijan, Belarus, Bulgaria, Estonia, Georgia, Kazakhstan, Kyrgyzstan, Latvia, Lithuania, the Republic of Moldova, Romania, the Russian Federation, Tajikistan, Turkey, Turkmenistan, Ukraine and Uzbekistan. Five of these countries are members of the European Union. Migration and pockets of poverty increase vulnerability to tuberculosis in many western European countries. Related areas, such as the rapid detection of drug-resistant tuberculosis, contact tracing, infection control, health system strengthening and the review of national tuberculosis programmes, are of equal concern among eastern, central and western countries of the WHO European Region. While general awareness and political commitment were raised during the Ministerial Forum held in Berlin in October 2007, how to ensure the follow-up of the Berlin Declaration on TB and monitor its implementation is currently under discussion. The 8th National Tuberculosis Programme Managers Meeting and the 13th Wolfheze Workshop, jointly organized in June 2008 in The Hague, provided a forum for discussion on each of the aforementioned topics and facilitated the sharing of experiences between countries in the Region – which are very different from an epidemiological, organizational, cultural and wealth perspective.

Keywords

TUBERCULOSIS, PULMONARY – drug therapy – prevention and control
TUBERCULOSIS, MULTIDRUG-RESISTANT – drug therapy – prevention and control
NATIONAL HEALTH PROGRAMMES
HEALTH POLICY
DIRECTLY OBSERVED THERAPY
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### Abbreviations and acronyms

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<th>Abbreviation</th>
<th>Definition</th>
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<tr>
<td>DOTS</td>
<td>first component and pillar of the Stop TB Strategy recommended to control tuberculosis</td>
</tr>
<tr>
<td>ECDC</td>
<td>European Centre for Disease Prevention and Control</td>
</tr>
<tr>
<td>EU</td>
<td>European Union</td>
</tr>
<tr>
<td>FIND</td>
<td>Foundation for Innovative New Diagnostics</td>
</tr>
<tr>
<td>GLC</td>
<td>Green Light Committee</td>
</tr>
<tr>
<td>Global Fund</td>
<td>Global Fund to fight AIDS, Tuberculosis and Malaria</td>
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<tr>
<td>KNCV</td>
<td>Koninklijke Nederlandse Centrale Vereniging tot bestrijding der tuberculose (Dutch Tuberculosis Foundation)</td>
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<tr>
<td>IGRA</td>
<td>Interferon gamma release assay</td>
</tr>
<tr>
<td>LTBI</td>
<td>Latent tuberculosis infection</td>
</tr>
<tr>
<td>MDR-TB</td>
<td>Multidrug-resistant tuberculosis</td>
</tr>
<tr>
<td>NGO</td>
<td>Nongovernmental organization</td>
</tr>
<tr>
<td>NTP</td>
<td>National tuberculosis programme</td>
</tr>
<tr>
<td>PHC</td>
<td>Primary health care</td>
</tr>
<tr>
<td>TB</td>
<td>Tuberculosis</td>
</tr>
<tr>
<td>UNITAID</td>
<td>UnitAid, together to heal</td>
</tr>
<tr>
<td>UNION</td>
<td>International Union Against Tuberculosis and Lung Disease</td>
</tr>
<tr>
<td>WHO</td>
<td>World Health Organization</td>
</tr>
<tr>
<td>WHO Europe</td>
<td>World Health Organization Regional Office for Europe</td>
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<tr>
<td>XDR-TB</td>
<td>Extensively drug-resistant tuberculosis</td>
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Executive summary

The Ministerial Forum on TB was organized on 22 October 2007 in Berlin, Germany. It expressed the political commitment of all Member States to fight TB and address the threat of multidrug-resistant (MDR-) and extensively drug-resistant (XDR-) TB in the WHO European Region – the highest rates in the world. Four mechanisms are available to translate the commitment taken in Berlin into action:

- the Global Plan to Stop TB 2006–2015 and the Stop TB Strategy;
- the Plan to Stop TB in 18 High-priority Countries in the WHO European Region, 2007–2015;
- the Framework Action Plan to fight TB in the European Union; and
- the national Stop TB plans developed by countries.

In the meantime, there is a need to select input indicators covering political leadership, involvement of civil society and communities and the most efficient use of available resources to ensure follow-up after Berlin and reporting progress made to the WHO Executive Committee in 2009.

The Plan to Stop TB in 18 High-priority Countries in the WHO European Region, 2007–2015 was produced through a large consultation of countries and partners and should be seen as everybody’s plan to guide national planning. The Framework Action Plan to fight TB in the European Union is the first binding document for the control and elimination of TB within the European Union (EU). Countries can count on renewed assistance from international partners such as KNCV TB Foundation, ECDC and WHO.

Additional areas of interest to both low- and high-TB-incidence countries discussed in plenary sessions were TB control in immigrants and the rapid detection of MDR-TB. Migration is an important phenomenon observed in most of the EU Member States and in eastern Europe. Countries are currently using a number of different approaches to screen immigrants for TB, none of which have been clearly proven to be cost-effective. While more evidence should be produced through routine surveillance data, it is important that free diagnosis and treatment of TB are provided to immigrants, including those with undocumented residence.

Very recently, new laboratory tests have been made available at low cost and high specificity and sensitivity (line probe assays) that allow the rapid diagnosis of MDR-TB. Less developed countries now have the same opportunity to address MDR-TB more effectively as industrialized countries. For the new laboratory tests to be used effectively, it will be necessary to go through a careful reorganization of the national laboratory network and training of laboratory staff and to have access to additional resources likely to come from the Global Fund to fight AIDS, TB and Malaria and the Foundation for Innovative New Diagnostics (FIND).

Areas of specific interest were addressed in parallel sessions for countries with high TB incidence (scaling up MDR-TB interventions, TB/HIV coinfection, TB infection control and TB control strengthening health systems) and for countries with low TB incidence (TB contact tracing and external review of national TB programmes).
Specific recommendations to scale up MDR-TB interventions were developed by two separate working groups that widely recognized MDR-TB to be one of the top public health priorities for all countries in the Region and agreed on the need to ensure the full implementation of the Stop TB Strategy, including DOTS.

Delays were observed in implementing the international recommendations for establishing collaborative activities between the TB and the HIV/AIDS programmes, which should be overcome to effectively address TB/HIV coinfection.

New guidelines for TB infection control have been recently developed for the European Region, to prevent TB transmission in congregate settings (hospitals, prisons, etc.) from MDR-TB patients and to at-risk HIV-positive people.

Most of the national TB programmes in eastern Europe are currently challenged by a reforming health system and the need to preserve essential functions for TB control. While new ways of organization, management and delivery of TB services are required at primary health care level, the successful balance for effective TB control interventions is country specific. National TB programme managers should be aware of the health systems reform in their country and contribute to it.

In countries with low TB incidence, the investigation of TB contacts is of specific interest for the early detection of TB cases and preventive treatment – additional interventions needed to reach the target of TB elimination.

During a parallel session, consensus was reached on some technical aspects, such as priority classification of TB contacts, required diagnostic tools, definition of TB outbreak. The draft guidelines for TB contact investigations will be revised according to the new consensus and discussed by other audiences, including the International Union Against Tuberculosis and Lung Disease conference in Paris in October 2008.

The report on the external review of the national TB programme in the Netherlands and the following discussion in a parallel session created a consensus on the usefulness and appropriateness of undertaking the exercise in other low-TB-incidence countries in the Region and involving ECDC and WHO.
Introduction

Wolfheze is a workshop and a movement named after a small village near Arnhem in the Netherlands, where in 1990 Koninklijke Nederlandse Centrale Vereniging tot bestrijding der tuberculose (KNCV – Dutch Tuberculosis (TB) Foundation) organized the first workshop for national TB programme (NTP) managers of low-TB-prevalence countries in western Europe. The Wolfheze workshops have been organized annually in the Netherlands to develop policies, promote implementation and ensure monitoring and evaluation of TB control and elimination interventions. Technical and financial contributions have been provided by KNCV, WHO Headquarters and the WHO Regional Office for Europe (WHO Europe), the International Union Against Tuberculosis and Lung Disease (UNION) and EuroTB.

The first WHO European NTP Managers meeting was held in Warsaw, Poland, in June 1994 and was organized by WHO Headquarters. Since then, these meetings have been held every second year, in a different country (1996 in Poland, 1998 in Kyrgyzstan, 2000 in Finland, 2002 in the Netherlands, 2004 in Romania, 2006 in Lithuania). Since 1996, the NTP managers meetings have been organized by WHO Europe with similar objectives to those of Wolfheze; however, they have focused more on management and the coordination of TB control efforts in the countries with high TB prevalence in central and eastern Europe and central Asia.

On 22 October 2007, at the Ministerial Forum organized in Berlin jointly by WHO Europe and the Ministry of Health of Germany, the Berlin Declaration on TB was endorsed as a sign of the renewed political commitment by all countries of the WHO European Region. This political commitment should become operational through the implementation of the Plan to Stop TB in 18 High-priority Countries in the WHO European Region, 2007–2015 and the Framework Action Plan to fight TB in the European Union launched by the European Centre for Disease Prevention and Control (ECDC). Moreover, at the end of December 2007, EuroTB and EuroHIV handed over all surveillance activities to ECDC and WHO Europe. Both organizations agreed to continue jointly the future surveillance of TB for the entire Region by sharing the data sent by the 53 Member States, the activities deriving from the collection, validation, analysis and dissemination of information and other tasks related to surveillance and monitoring of TB.

Considering the above, WHO Europe, KNCV and ECDC agreed to organize jointly, in 2008, the 8th NTP Managers Meeting, the 13th Wolfheze Workshop and the National TB Surveillance Correspondents Meeting under the heading ‘Wolfheze 2008: TB management, surveillance and evaluation in Europe with high rates or threat of MDR-TB’. The NTP Managers Meeting and the Wolfheze Workshop were held on 1–2 June and the National TB Surveillance Correspondents Meeting on 3–4 June 2008 in the same venue, the Van der Valk Hotel Nootdorp, a few kilometres from The Hague, the Netherlands.

This document reports only on the 8th NTP Managers Meeting and the 13th Wolfheze Workshop. The report of the National TB Surveillance Correspondents Meeting is being produced separately. The joint programme of the 8th NTP Managers Meeting and the 13th Wolfheze Workshop is in Annex 1. The list of participants is in Annex 2.
Objectives of the meeting

Wolfheze 2008 represented an excellent opportunity to have an extended forum for discussion on the challenges and opportunities shared by all countries in the Region to further the work to meet the targets of Millennium Development Goal 6, by the year 2015, through preventing multidrug-resistant (MDR-) and extensively drug-resistant (XDR-) TB.

The specific objectives of the 8th NTP Managers Meeting and the 13th Wolfheze Workshop were:

- To review the Berlin Declaration on TB and make recommendations on how to enhance its use as an advocacy tool;
- To review the Plan to stop TB in 18 High-priority Countries in the WHO European Region, 2007–2015 and identify the main steps towards its implementation at country, subregional and regional levels;
- To discuss the Framework Action Plan to fight TB in the European Union and make recommendations for its implementation and monitoring of implementation; and
- To review the most updated and controversial interventions for TB control and elimination in low-TB-prevalence settings.

The specific objective of the National TB Surveillance Correspondents Meeting was to understand the new organizational set-up for coordination and assistance of TB surveillance in the Region and agree on future actions.
Opening session

Title: Follow-up on the Berlin Declaration on TB  
Chair: Martien Borgdorff (KNCV)  
Rapporteur: Martin van den Boom (WHO Europe)

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<td>9:00 – 9:10</td>
<td>Welcome to Wolfheze 2008</td>
<td>Martien Borgdorff (KNCV)</td>
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<td>9:10 – 9:20</td>
<td>Special address</td>
<td>Sandra Elisabeth Roelofs (Stop TB Ambassador)</td>
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<tr>
<td>9:20 – 9:30</td>
<td>Scope and purpose of the workshops</td>
<td>Risards Zaleskis (WHO Europe)</td>
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<tr>
<td>9:30 – 9:40</td>
<td>Future of TB surveillance in Europe</td>
<td>Karoline Fernandez de la Hoz (ECDC)</td>
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The opening session started with the official welcome and opening of the meeting by Martien Borgdorff (KNCV), who summed up the history of the Wolfheze movement. He mentioned that this is the first meeting that unites the WHO NTP Managers Meeting, the Wolfheze Workshop and the National TB Surveillance Correspondents Meeting.

Sandra Elisabeth Roelofs (Stop TB Ambassador) highlighted key elements of the Berlin Declaration and their various implications. She pointed out that the Berlin Declaration is about public health, and as a consequence also about global security, since the well-being of people is one of the criteria for peaceful coexistence. She suggested that she would state this at the forthcoming United Nations General Assembly Special Session (UNGASS) and pre-UNGASS meetings in New York. The important role of governmental commitment was emphasized in the fight against TB. There is a need to constantly cultivate media coverage as an effective tool for advocacy, communication and social mobilization. The quality of TB prevention, treatment and follow-up would indirectly correspond to the quality of media coverage and the frequency and degree of TB discussion in interviews, meetings and conferences with officials. For the sake of valid figures, public health structures and its actors have to provide the best possible data available.

She also stressed the importance of the various challenges associated with the fight against TB, such as TB in marginalized groups of society, the need to strengthen laboratory networks, increasing measures against MDR/XDR-TB, research and the production and sufficient quality control of TB drugs locally.

Risards Zaleskis (WHO Europe) outlined the scope and purpose of the meeting and underlined the particular importance of the translation of political commitment expressed during the Ministerial Forum on TB in Berlin into sustainable action and activities on all levels. It was clearly stated that TB still represents a major public health threat, which needs to be appropriately addressed and adapted to the specific conditions of each country. To better combat TB, the European Region needs ‘one voice, as one Region and as one Europe’. To rectify the failure to implement internationally recommended TB services and the lack of awareness regarding TB requires the continuous dedication of stakeholders at all levels.
Karoline Fernandez de la Hoz (ECDC) expressed her appreciation to KNCV and WHO for their successful collaboration in the preparation of this meeting. The responsibility for TB surveillance in the European Region has recently been modified by the founding of ECDC, and subsequently surveillance functions will be shared by WHO and ECDC. The objective of the harmonization of both organizations and their structures is to keep the geographic coverage (53 WHO Member States), maintain completeness of data collection, provide Member States with a user-friendly and sustainable tool for data reporting and to ensure the implementation of new case definitions. A well-defined framework for the collaboration with Member States is crucial and should involve the network of national correspondent/contact points and all other relevant country representatives of cover laboratories. The ECDC Framework Action Plan to fight TB in the European Union and the Plan to Stop TB in 18 High-priority Countries in the WHO European Region also consider surveillance an important tool to improve TB control.
Plenary sessions

Plenary session 1: Follow-up on the Berlin Declaration on TB

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<td>09:45 – 09:50</td>
<td>Scope and purpose of the plenary</td>
<td>Chair</td>
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<td>09:50 – 10:00</td>
<td>WHO Regional perspective on follow-up of the Berlin Declaration</td>
<td>Risards Zaleskis (WHO Europe)</td>
</tr>
<tr>
<td>10:00 – 10:10</td>
<td>How can ECDC contribute to the follow-up of the Declaration?</td>
<td>Davide Manissero (ECDC)</td>
</tr>
<tr>
<td>10:10 – 10:20</td>
<td>How can KNCV contribute to the follow-up of the Declaration?</td>
<td>Peter Gondrie (KNCV)</td>
</tr>
<tr>
<td>10:20 – 10:30</td>
<td>Questions and answers on the presentations</td>
<td>Chair</td>
</tr>
<tr>
<td>10:30 – 10:40</td>
<td>Proposed process and framework for the follow-up of the Declaration</td>
<td>Lucica Ditiu (WHO Europe)</td>
</tr>
<tr>
<td>10:40 – 11:00</td>
<td>Interventions from the NTP managers</td>
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Walter Haas, the Chairperson, stated that the joint collaboration and significance of TB is very well demonstrated by the Berlin Declaration. Additionally, a so-called ‘whole society’ and multisectoral approach regarding TB was shown by the fact that TB experts and officials of other (public) health sectors were present at the Berlin Declaration. The timing of the current conference was very helpful to readdress the challenged and endangered set of TB goals in the European Region. An example of this is that 13 of the 18 high-priority countries have the highest rates of MDR-TB. The importance of joint efforts in the fight against TB was demonstrated by various nongovernmental organizations (NGOs) issuing partner documents during the time of the conference. The European Commission also emphasized a need for a revised TB policy.

Risards Zaleskis (WHO Europe) underlined the crucial importance of the fact that everyone – including individuals – should be involved in the fight against TB. An efficient fight against TB also involves strengthening health systems and ensuring financial commitment. While TB incidence has generally decreased in the European Region, there has been an increase of MDR- and XDR-TB in many countries.

The background for the implementation of the Berlin Declaration is primarily based on four mechanisms, namely: the Global Plan to Stop TB 2006–2015 and the Stop TB Strategy; the Plan to Stop TB in 18 High-priority Countries in the WHO European Region, 2007–2015; the Framework Action Plan to fight TB in the European Union; and the national Stop TB plans developed by countries. The commitment will be monitored consistently and reported on every two years.

High rates of drug resistance and fundraising gaps in the European Region need to be addressed adequately. Health systems and human resource development in some countries are poorly developed or under reform. Additionally, the HIV epidemic, TB in prisons and migration are important issues.
Davide Manissero (ECDC) confirmed that, despite the fact that TB incidence is declining, it is far from being eliminated. One of the challenges is that the TB situation is highly heterogeneous and disproportionate in the European Region. The fight against TB is a common responsibility, which has to be shared by all countries, regardless of incidence, and stakeholders in an intersectoral approach. Implementation of both the framework action plan and the plan for high-priority countries should move quickly forward. Monitoring should be incorporated in the set of existing surveillance tools, and these tools need to be tailored according to country specificities.

Peter Gondrie (KNCV) pointed out that his organization has a long history related to TB and is currently operating in 45 countries worldwide. KNCV has developed a specific strategic approach for eastern Europe and the central Asian republics in line with the Berlin Declaration and the Plan to Stop TB in 18 High-priority Countries, 2007–2015. The points of entry are always the national TB programmes. KNCV believes in the importance of the governments and stakeholders in the countries carrying out the work against TB. KNCV intends to improve its contributions both financially and in human resources and to strengthen the advocacy-communication-social mobilization component. KNCV is convinced that patients and patient groups have to be more involved than they are currently. Technical assistance is still high on the agenda of KNCV, which is manifested by a multitude of projects and improved cooperation with various key partners, also aiming at better human resource development. Monitoring and evaluation will be enhanced and conducted in accordance with the objectives of the Berlin Declaration. Operational research would chiefly address MDR- and XDR-TB, TB/HIV coinfection, the development of new drugs and diagnostics and vaccine trials at the international level.

Lucica Ditiu (WHO Europe) stated that it is crucial to monitor the follow-up on the action points stated in the Berlin Declaration. This follow-up should be feasible and timely in order to report to the WHO Regional Committee in 2009. The principle criterion for choosing indicators for objective monitoring of the Berlin Declaration is that there should be no duplication and no complication of existing mechanisms. The focus should be on input indicators, covering political leadership, involvement of civil society and communities and the most efficient use of available resources. The collection of input indicators takes place already but is expected to become easier through the new form of combined WHO/ECDC templates/interfaces. The introduction of new indicators has to be accompanied by strong political leadership in order to guarantee correct implementation. A key question raised is how country commitment can be ensured in obtaining the complete set of data and indicators needed.

**Discussion and recommendations**

Responsibility and ownership can be achieved in various ways. An example would be to reach the higher political levels, which requires NTP managers to be knowledgeable on the existing network systems in their respective countries. NTP managers know which stakeholders are responsible and accountable for each area of work related to TB.
Unfortunately, there may be a lack of consistency at higher political levels, since there is a rather high turnover rate in political positions in some Member States. It was reiterated that suitable timing for the introduction of new indicators was crucial. Ideally, these indicators should help maintain the political momentum initiated by the Berlin Declaration in countries. To ensure efficiency, the number of indicators should be relatively low, to avoid a burden for the collection and processing of the data. It was also recommended that monitoring be started immediately.

An advantage of using the indicators for follow-up of the Berlin Declaration would be that through the participation of NTP managers, their position and role in their countries would be further strengthened. Indicators should be selected based on what questions they can answer. Their potentially beneficial impact should be as obvious as possible, so that they can motivate the people involved in TB dealing with them.

**Recommendations:**
1. To guarantee the highest degree of efficiency for the follow-up of the implementation of the Berlin Declaration, existing insight knowledge has to be used as much as possible (interaction and involvement of all stakeholders).
2. The flow of information must be accurate and bidirectional.
3. Indicators must be carefully selected and feasible.
4. Individual country conditions have to be taken into account to ensure efficiency of the follow-up.

### Plenary session 2: Strategic plans for TB high-priority countries and for the European Union

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<tr>
<td>11:30 – 11:35</td>
<td>Scope and purpose of the plenary</td>
<td>Chair</td>
</tr>
<tr>
<td>11:35 – 11:50</td>
<td>The Plan to Stop TB in 18 High-priority Countries in the WHO European Region</td>
<td>Pierpaolo de Colombani (WHO Europe)</td>
</tr>
<tr>
<td>12:05 – 12:20</td>
<td>Questions and answers on the presentations</td>
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<tr>
<td>12:20 – 12:35</td>
<td>Assistance by partners to countries in implementing the strategic plans</td>
<td>Masoud Dara (KNCV)</td>
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<tr>
<td>12:35 – 13:00</td>
<td>Interventions from the participants</td>
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Pierpaolo de Colombani (WHO Europe) outlined the main directions of the Plan to Stop TB in 18 High-priority Countries, 2007–2015. It was clearly stated that the nature of the document at hand is more related to technical components of the fight against TB than to political ones, but that those elements have to be employed in a complementary fashion. The plan has been devised as a guide for revising national plans by the countries themselves and proposes a number of different indicators to monitor the implementation of the activities under the Stop TB Strategy. It proposes the main interventions until 2010 and aims at achieving the TB targets in the Millennium Development Goals in eastern Europe by 2015 through the rapid
employment in the field of new TB diagnostics and drugs expected to be available by 2010. The plan was produced through the process of a wide consultation of countries and partners and must be seen as everybody’s plan. The crucial question is how all stakeholders can best collaborate to achieve the plan’s goals.

Davide Manissero (ECDC) outlined various challenges for TB control in the European Region, especially the discrepancy between the epidemiological situations of low- and high-incidence countries and its implications. Additionally, a great deal needs to be done to efficiently address the issue of MDR- and XDR-TB and TB in minorities in Europe. The Framework Action Plan to fight TB in the European Union represents the first binding document for TB control within the EU. All relevant EU institutions should act as catalysts in view of the action plan, particularly focusing on strengthening health systems, providing prompt and high-quality TB care for all, stimulating development and assessment of new tools, and building and improving partnerships and international collaboration. The dimension of monitoring and implementation has changed, since most countries in western Europe have had decreasing incidence rates for many years. TB control and elimination are two different issues but need to be addressed jointly.

Masoud Dara (KNCV) reaffirmed that strong and efficient partnerships have proven to be very important in the fight against TB, especially regarding community and resource mobilization. There is an immense need for partners’ assistance, in view of a financial gap of US$ 8 billion in the Plan to Stop TB in 18 High-priority Countries, 2007–2015. The added value of partnerships can be applied in technical assistance, advocacy, and development of multidisciplinary approaches to TB control, social mobilization and research.

Some of the expected outcomes of partnerships can be summarized as follows:

- increased national and international political commitment to TB control;
- development of evidence-based TB control policy;
- equitable access to high-quality diagnosis and treatment of TB, including drug-resistant TB and TB/HIV coinfection;
- strengthened human resource development in TB control; and
- the empowerment of patients and communities.

Major challenges requiring special attention are a lack of strong national partners and civil society representatives in many high-prevalence countries, ensuring sustainable human capital, and insecure financial resources and general coordination. Other potential bottlenecks have to be clearly identified and addressed appropriately.

Discussion and recommendations

An important question raised was how to benefit from health care system reforms, since they can also represent a threat for TB control when conducted improperly. In the European Region, health systems change constantly at varying paces in different directions. This may cause problems for NTP managers in maintaining TB control and elimination. NTP managers need to be aware of the non-negotiable aspects of TB programmes which must not be sacrificed for the sake of their smooth functioning.
Health system modifications should occur in compliance with international health care standards and have to be clearly articulated to all those involved. A suggested method of monitoring TB presence in the media is to count the number of articles focusing on TB over a given time, using certain newspaper indices. Adequate press and media presence would repeatedly remind people of the importance of TB and thus improve general understanding and awareness of the disease.

While contributing to health system reforms, we have to carefully anticipate any impact on TB control and elimination, since its effects can be complex and sensitive.

It was emphasized that TB goals and targets, particularly on MDR-TB, need to be both challenging on the one hand but realistic and feasible on the other, so that they motivate but do not discourage.

Although some goals, such as the Millennium Development Goal target set for 2015, may now seem difficult to attain, we should not aim any lower. Rather, set goals should be complemented by optimistic but achievable intermediate goals, resulting in increased dedication in the fight against TB. There is also a challenge in determining what can and cannot be realistically achieved regarding the MDR- and XDR-TB goals by 2015. This would depend on the speed of introducing the new tools in the field and their cross-cutting application. It would be advisable to develop standardized guidelines on the application of rules and procedures for Member States.

All partners need to pay more attention to adequate availability of human resources and appropriate salaries, to ensure that envy and inequality are avoided. Sometimes TB doctors and services are overlooked; human resources must reach the primary health care level. Long-term solidarity through sustained partnership work has to coincide with funding and the correct employment of financial means.

Transparent communication between countries and supranational organizations is essential to ensure the feasibility of actions. Health care reforms do still struggle in some countries, since there are shortages of human resources and other tools for primary health care, let alone for specialized TB services. In addition, due to a lack of incentives for remaining staff, a sufficient level of staff motivation is very difficult to sustain.

It was agreed that the pursuit of TB elimination in low-TB-incidence countries must not be neglected. Therefore, constant and valid feedback is needed from Member States to assess which countries have national TB plans installed and to what degree they function. By doing so, partners can better advise on potential supplementary measures.

Any plan to fight TB should incorporate all participating stakeholders, addressing the needs and skills of not only TB specialists but also more generally oriented providers, patients and affected communities.

Recommendations:
1. While acknowledging the increased partnership for TB control at national and international levels, more collaborative efforts are required.
2. There is an essential need to adapt all plans specifically to country needs and settings.
3. NTP managers should be more involved in any health reform process and ensure delivery of TB services at primary health care level.

Plenary session 3: TB control in migrants

Chair: Peter Helbling (Switzerland)
Rapporteur: Connie Erkens (The Netherlands)

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<tr>
<td>09:30 – 09:35</td>
<td>Scope and purpose of session</td>
<td>Chair</td>
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<tr>
<td>09:35 – 09:55</td>
<td>ECDC migrant health report series: status report on planned and ongoing TB work and interim results on scientific assessment of TB screening in migrants</td>
<td>Davide Manissero (ECDC) Eveline Klinkenberg (KNCV)</td>
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<td>10:15 – 10:35</td>
<td>TB in undocumented persons</td>
<td>Delphine Antoine (France)</td>
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<td>10:35 – 11:00</td>
<td>Discussion</td>
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One of the major objectives of the ECDC work plan (supported by the European Council) is to enhance migrant health. For this purpose, ECDC is working on a report on three major communicable diseases (TB, HIV and measles). The report focuses on a scientific review of the major issues and the available evidence and identifying the gaps. The report should be a live document containing:

- a situation analysis on disease burden, control and interventions;
- a tool to forecast the impact and effect of interventions on disease burden, based on cost-effective models; and
- a systematic review of the effectiveness of TB interventions in migrants (10 to 15 years after entry).

The results of the systematic review of available evidence were presented. The review studied the effectiveness in terms of yield of active TB and latent TB infection (LTBI) of five different approaches to immigrant screening. Various forms of entry screening detected a prevalence of 0.20–0.36% active TB disease and 13–62% LTBI. Follow-up screening detected a prevalence of 0.12% TB cases, and occasional screenings had the highest yield of 1.72% active TB disease and 38.3% LTBI. The conclusion of the study was that there are a variety of different reporting methods, which makes aggregated analysis very difficult, and that there seems not to be any preferred screening strategy. The recommendations refer to:

- measures to enable better monitoring and evaluation of screening interventions and comparability of results;
- the need for cost-effectiveness studies;
- targeting of screening interventions to high-risk groups;
- providing access to TB care and screening of undocumented migrants;
- the need for better diagnostics, in particular for LTBI;
• improving treatment outcome results among migrants and improved follow-up;
• health education;
• integration of TB screening and control with other health care services; and
• most importantly, the best long-term strategy to improve TB health in migrants is to improve global TB control.

The situation analysis of TB health and screening practices among migrants in the Russian Federation illustrated the precarious situation of a large labour force of migrants from neighbouring countries with a high TB incidence and with restricted access to health care facilities. TB screening is mandatory to obtain a temporary resident permit, causing TB suspects to become illegal immigrants or to be deported within two weeks if diagnosed with TB. Proposed measures to improve this situation include the introduction of pre-entry screening, to improve health care services for immigrants and to learn from best practices in other countries.

The situation of illegal or undocumented persons is unknown. There is little knowledge on the population figures of undocumented persons and of the number of TB cases among them, nor on trends. Access to diagnosis and treatment is limited, and there is a high chance of deportation while on treatment, with serious consequences for the continuation of the treatment and the risk of resistance. The UNION will soon release a statement to raise awareness about the predicament of undocumented persons with TB and to advocate among health staff for confidentiality, free treatment and to ensure no deportation while on treatment. There is an urgent need for more information and surveillance and a universal policy for undocumented persons with TB.

Discussion and recommendations

In the discussion after the three presentations, important observations made were:

• The purpose of screening migrants for TB should be clarified. It could be:
  o (from a human rights perspective) to enhance the health of the individual migrant;
  o to protect the health of citizens of the host country; and
  o to avoid burdening the health care system of the host country.

• TB is not a single health problem; other diseases may be relevant for screening, and a combination of screening strategies may be more cost-effective.

• Immigration laws that foresee deportation of immigrants with TB may cause illegal stays, which should be prevented from both a human rights and a TB control perspective.

• Evidence for best practices for prevention of transmission should be sought, including evidence for the effectiveness and added value of screening practices compared to the promotion of early passive case finding and improving access to (TB) health services.
Recommendations:
1. There is an urgent need for more information from surveillance, further evidence and cost-effectiveness studies. Although screening of immigrants is widely practised in the European Region, little is known on the effectiveness of TB screening policies. The impact on TB incidence in the host country is likely to be small.
2. Access to free diagnosis and treatment for undocumented persons should be generally advocated. It is generally accepted that TB screening policies should not adversely affect the health situation of the migrant and cause illegality.

Plenary session 4: Role of rapid detection for drug-resistant TB

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<tr>
<td>11:30 – 11:35</td>
<td>Scope and purpose of session</td>
<td>Chair</td>
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<tr>
<td>11:35 – 11:50</td>
<td>Role of rapid detection for drug-resistant TB</td>
<td>Francis Drobniewski (United Kingdom)</td>
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<td>11:50 – 12:05</td>
<td>The demonstration projects and results on rapid detection</td>
<td>Rick O’Brien (FIND)</td>
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<td>12:05 – 12:15</td>
<td>Questions and answers on the presentations</td>
<td>Chair</td>
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<tr>
<td>12:15 – 12:30</td>
<td>Practical steps for country implementation of methods for rapid detection for resistant TB</td>
<td>Chair</td>
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<td>12:30 – 13:00</td>
<td>Discussion in plenary</td>
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The main questions to answer during the sessions were:
- do we already have relevant methods for rapid detection of MDR-TB?
- if we have them, can we implement them in all countries?; and
- do we need something else?

Francis Drobniewski (United Kingdom) clearly stated that there are reliable and easy-to-perform techniques for the rapid detection of MDR-TB. The results obtained with the rapid tests are extremely reliable, robust in defining rifampicin resistance (which is a very good indicator for MDR-TB) but less strong for isoniazid. The rapid tests are able to determine if the disease is TB or not (which is especially important due to the increase in HIV and, therefore, in atypical mycobacterium).

Rick O’Brien (FIND) made clear that the new methods can be implemented with very good results in resource-limited settings. The presentation on a project in Cape Town, South Africa, showed that the median time between the collection of the sputum and initiation of the treatment was five days.

Sabine Rüsch-Gerdes (Germany) underlined the importance of having rapid tests and, therefore, rapid results for the investigations related to MDR-TB. She presented an outline of the requirements for organizing an effective laboratory network in countries
that uses tests for rapid detection of MDR-TB and can be established under a Global Fund grant.

Discussion and recommendations

After the presentations, the discussion that followed focused on the additional costs to introduce rapid tests, which are marginal for a country already performing anti-TB drug susceptibility testing. Indeed, it is foreseen that the introduction of the new rapid tests will reduce the needs for culture and first-line drug susceptibility testing and the related costs.

At present, the cost of the rapid tests may vary by as much as 10 times between different distributors. The major cost increase is not coming from the producers but from the overhead applied by the distributors in different countries. There are ongoing discussions between WHO Headquarters and Beckton Dickinson to ensure reduced costs of laboratory equipment and consumables in 39 settings with high MDR-TB.

Countries need guidance on which producer they can apply to for procuring the rapid tests – but it is difficult to recommend one of the two available producers (at this moment). There will be some guidance from WHO on molecular line probe assays – but only in general. If numerous producers appear in future, WHO might consider producing pre-qualification terms.

Recommendations:
1. The rapid tests should be done directly on positive smears.
2. If the costs of the tests are too high, negotiations should be undertaken with the distributor, which should clarify its overhead.
3. For quality assurance, countries should purchase only one of the two already evaluated tests available on the market.
4. The rapid tests should be performed at national level, or at regional level in large countries. There is a need to have in place a procedure for decontamination of the sputum. It can be very easily implemented in any laboratory doing molecular testing for any other disease. Temperature, and maintaining it, is critical for the hybridization.
5. Training, quality control: it is easy to train the virologists for this activity.
Parallel sessions

Parallel session 1: How can MDR-TB interventions be scaled up in the 18 TB high-priority countries in the WHO European Region?

Facilitator of group A: Vaira Leimane (Latvia)
Rapporteur of group A: Risards Zaleskis (WHO Europe)
Facilitator of group B: Manfred Danilovits (Estonia)
Rapporteur of group B: Pierpaolo de Colombani (WHO Europe)
Rapporteur to plenary: Risards Zaleskis (WHO Europe)

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<tr>
<td>14:00 – 15:20</td>
<td>Challenges and opportunities in scaling up MDR-TB interventions. Same presentation by each group facilitator followed by discussion. Group A (Russian-speaking countries) Group B (English-speaking countries)</td>
<td>Vaira Leiman (Latvia) Manfred Danilovits (Estonia)</td>
</tr>
<tr>
<td>15:20 – 15:30</td>
<td>Preparation of the parallel session report by the two rapporteurs</td>
<td>Risards Zaleskis (WHO Europe)</td>
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Discussion and recommendations

Groups A and B met separately and received an introductory presentation (the same slides in English and Russian) by the group facilitators. The discussion in each of the two groups was noted by the group rapporteurs, consolidated in a comprehensive list of recommendations and reported to the plenary as follows:

Recommendations:

1. Enhance political commitment to control of drug-resistant TB at all levels, including the involvement of communities through information on drug-resistant TB and its consequences.
2. Prevent development of drug-resistant TB by strengthening DOTS (quality and coverage), strengthening the health system, and collaboration with the primary health care sector.
3. Give priority to strengthening laboratory resources:
   i) country laboratory network;
   ii) quality assurance and collaboration with supranational TB reference laboratory;
   iii) “rapid” introduction of methods for rapid detection of MDR-TB and molecular methods (need for operational guidelines);
   iv) control on the price of laboratory investigations; and
   v) diagnosis of MDR-TB in prisons.
4. Improve the quality of MDR-TB treatment:
   i) inpatient and outpatient;
   ii) DOT always;
   iii) an adequate number of hospital beds for the number of patients;
   iv) patient social support, appropriate facilities for socially vulnerable patients and for untreatable XDR-TB patients;
   v) collaboration with the Green Light Committee; and
vi) use of the Global Fund, UNITAID and other opportunities.

5. Consider involvement of the private sector:
   i) analysis of the level of involvement of the private sector in management of TB and MDR-TB patients;
   ii) capacity of the private sector to be involved; and
   iii) laws preventing private-sector involvement.

6. Ensure public-public collaboration/coordination (e.g. railways, army, etc.)

7. Clarify rules for forced isolation of MDR-/XDR-TB patients and “chronic defaulters”, considering legal and ethical issues and respecting the Siracusa principles.

8. Widely implement infection control measures in line with the existing guidelines.

9. Promote contact investigation of MDR-TB cases and treatment for those detected.

10. Improve supply and management of second-line anti-TB drugs:
    i) ensure quality standards of drugs imported and produced locally;
    ii) ban access to drugs without a prescription from a medical specialist;
    iii) proper management, distribution and reporting.

11. Ensure patient registration and information for ongoing control.

12. Give importance to the development of human resources:
    i) staff motivation (salaries, rotation);
    ii) training and retraining;
    iii) supervision, including of nurses to support their essential work and domiciliary support.

13. Ensure supervision of national TB programmes by international partners (WHO and others).

Parallel session 2: Discussion on the draft document ‘TB contact investigation in low-prevalence countries’

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<td>14:00 – 14:30</td>
<td>Scope and purpose of consensus document and questions to the working groups</td>
<td>Connie Erkens (KNCV)</td>
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<td>14:30 – 15:30</td>
<td>Group 1: Definitions, infectious case, priority contacts, timing, diagnostic tools</td>
<td>Margreet Kamphorst (The Netherlands)</td>
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<td>Group 2: Outbreak management and cluster surveillance</td>
<td>Walter Arrazola de Onate (Belgium)</td>
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<td>Group 3: Research recommendations</td>
<td>Jean-Pierre Zellweger (Switzerland)</td>
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<td>15:30 – 16:00</td>
<td>Tea/coffee break</td>
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<tr>
<td>16:00 – 17:30</td>
<td>Reporting from working groups and discussion on draft paper on contact tracing</td>
<td>Connie Erkens (KNCV)</td>
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The scope and purpose of this session was to reach consensus on important subjects of
a draft consensus document on contact investigation for low- and intermediate-incidence countries and to decide on the way to move forward to a guideline document. The initiative for the consensus document was taken by KNCV on recommendation of the Wolfheze Workshop in 2006. At that time, it was concluded that a common evidence-based policy on contact investigation would be useful both for countries moving towards elimination of TB and for countries in transition from intermediate to low incidence.

Discussion and recommendations

The main comment on definitions and criteria in the document was that the level of available evidence should be rated and recommendations in the guideline should be based on scientific evidence where possible. The definition of a TB infectious case, when to perform a contact investigation, and which priority contact groups should be examined, were discussed. No final consensus was reached on the definition of an infectious case, but participants agreed on the classification of contacts in priority rings according to the degree of exposure and susceptibility. The group agreed on tuberculin skin testing in combination with interferon gamma release assay (IGRA), and chest X-ray as the main diagnostic tools used in contact investigation. However, there are countries where IGRA is not used in all parts of the country. Participants recommended more research on IGRA as a diagnostic tool. Consensus was reached on the timing of the evaluation of contacts and when to expand the contact investigation. Issues not discussed were management of LTBI, preferred preventive treatment regimen and follow-up and management of susceptible contacts.

The working group agreed with the definition of an outbreak as: “the occurrence of two or more cases with an epidemiological and/or molecular link occurring within two to three years and outside the household setting”. The duration of the period was disputed in the plenary discussion, with a period of one year deemed more relevant for outbreaks. It was agreed that the definition should cover the need for further action. Further evidence is needed to determine the interval between cases associated with significant outbreaks. The participants recommended including definitions for molecular cluster and laboratory cross-contamination, the general principles of outbreak management and a guide to assess the risk of an outbreak. Participants agreed that cluster surveillance provides valuable information for contact investigations in low-incidence countries, and specifically those approaching elimination, for the reasons stated in the document.

The draft document has to be finalized, clearly indicating the points on which evidence is still lacking, to identify research priorities. The participants agreed that research is needed on:

- the relative importance of the factors influencing transmission, especially the degree of infectiousness of the index and the susceptibility and degree of exposure of the contact in terms of duration and intensity;
- cost-effectiveness studies on contact investigation strategies and target groups for preventive treatment;
- the positive predictive value of the IGRA in different populations and risk groups, and how to use this test in combination with the tuberculin skin test;
• the physiological behaviour of the IGRA test, including the lag time for and importance of test conversion;
• the management of contacts of MDR-TB cases; and
• the effectiveness of the different treatment regimes for LTBI.

There is also a need for systematic surveillance of contact and outbreak investigations, including the coverage and outcome of preventive therapy. The indicators for monitoring and evaluation in the document were agreed upon, but there is no evidence for the proposed target values.

In the discussion with all three groups, it was generally agreed that the draft consensus document was an important step in the development of guidelines for contact investigations and that we should use the evidence at hand to make rapid progress with the guidelines. However, there should be more emphasis on the assessment of the likelihood infectiousness of every TB patient as a first step, taking into consideration the microbiology, clinical presentation and epidemiology of the index-case, the susceptibility of the contacts, and the opportunity for exposure.

It will be easier to reach consensus on the proposed recommendations if the level of evidence for different strategies is rated and indicated. This will also identify areas where there is a need for further research, and these should be specified in the document. It was stated by some that, although these guidelines will apply for low- and intermediate-incidence countries, specific elements will be useful for high-incidence countries to target high-risk groups for active case finding and prevent further transmission of TB among susceptible contacts.

**Recommendations:**

1. **It was proposed that a new writing group will prepare a second draft of the consensus paper for discussion during or prior to the UNION conference in Paris in October 2008.** The writing group has already liaised with the group of researchers of the European Respiratory Society/TB Net, which is working on contact investigation policies in European countries. Country contacts will receive a digital version of the draft document as soon as possible. The country contact will be given the opportunity to send comments to the writing group until 1 August 2008.

2. **Members of the writing group are: Margreet Kamphorst (Netherlands), Connie Erkens (KNCV), Jean-Pierre Zellweger (Switzerland), Walther Haas (Germany), Ibrahim Abubakar (United Kingdom), Daniel Chemtob (Israel), Graham Bothamley (United Kingdom, TB Net), GB Migliori (Italy, TB Net).**

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**Parallel session 3: Scaling up TB/HIV interventions in the European Region**

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<td>Scope and purpose of session</td>
<td>Chair</td>
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<tr>
<td>16:05 – 16:20</td>
<td>The global and regional situation on TB/HIV</td>
<td>Lucica Ditiu (WHO Europe)</td>
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Discussion and recommendations

The two presentations generated active discussion among participants on the main obstacles to scaling up TB/HIV interventions and how to overcome them; experiences from the different countries were shared. WHO and KNCV have organized a series of subregional TB/HIV workshops in the last two years, and now it is time to monitor the progress and present the success story or reassess the bottlenecks at country level.

The following main obstacles to scaling up TB/HIV interventions in the countries were identified:

- lack of coordination between the two (TB and HIV) programmes;
- lack of precise data on coinfection;
- separate services for the patients;
- discrepancy between TB and HIV doctors in the treatment strategy;
- legislative barriers to detect and provide care to coinfected patients (especially injecting drug users);
- stigma at different levels (public, patients and their families, health care providers);
- appropriate infection control measures are not in place; and
- antiretroviral drugs are not available for the detected coinfected patients.

Recommendations:
1. To establish a TB/HIV coordinating body in the countries.
2. To create an integrated TB/HIV control plan in the countries.
3. To create national coinfection treatment guidelines as a joint effort of TB and HIV doctors.
4. To work with legislators to ensure the legislative support to TB/HIV control and ask for the assistance of international organizations whenever it is needed.
5. To involve civil society to scale up TB/HIV interventions and combat stigma (to be creative).
6. To implement infection control measures.
7. To organize a regional workshop on TB/HIV.
Parallel session 4: Guidelines for TB infection control in the European Region

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<td>Scope and purpose of session</td>
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<td>14:05 – 14:20</td>
<td>Guidelines for TB infection control for the European Region</td>
<td>Kai Blondal (Iceland)</td>
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<td>14:20 – 14:30</td>
<td>Comments on the guidelines</td>
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<td>14:30 – 14:40</td>
<td>Addressing infection control in the European Region</td>
<td>Lucica Ditiu (WHO Europe)</td>
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<td>14:40 – 15:00</td>
<td>Discussions on how countries will implement TB infection control measures</td>
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The initiative of developing guidelines in TB infection control for the European Region started in 2005 at the Wolfheze Workshop, based on the fact that MDR-TB was increasing, particularly in 13 eastern European countries of the former Soviet Union. The aim and structure of the guidelines and the differences from previous guidelines were presented. The session endorsed the outline of the guidelines.

To promote TB infection control, WHO Europe has already undertaken a number of actions, and further actions are needed. A regional training course on TB infection control took place in Bucharest, Romania, from 13 to 19 May 2008 and was attended by 14 of the 18 TB high-priority countries of the Region. An advocacy document for health care staff, programme managers and policy-makers on 10 essential steps in TB infection control was introduced. The guidelines have been shared with national counterparts, and the first round of comments has been included. It was stressed that within a month the latest comments on the guidelines should be provided for finalization and publication by autumn 2008. Then the following actions should be undertaken:

- designate one responsible person in the countries for infection control;
- involve several partners, authorities, public health workers, engineers;
- organize subregional and national training courses; and
- support the development of national plans that include infection control measures.

**Discussion and recommendations**

During the discussion, countries such as the Russian Federation and Israel shared their experiences in TB infection control. A proposal was made to integrate TB infection control with other airborne infections.

**Recommendations:**

1. Further comments to finalize the TB infection control guidelines for Europe should be sent to the Core Group by 30 June 2008.
2. For the effective implementation of the guidelines and in addition to training, countries should develop their national plans for TB infection control.
Parallel session 5: (How) can country reviews contribute to TB control in a low-incidence country?

Facilitator of group A: Karoline Fernandez de la Hoz (ECDC)
Facilitator of group B: Risards Zaleskis (WHO Europe)
Chair: John Watson (United Kingdom)
Rapporteur: Brita Winje (Norway)

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<td>Contribution of a country review to performance of TB control:</td>
<td>Risards Zaleski (WHO Europe)</td>
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<td>14:15 – 14:30</td>
<td>Experience from a recently reviewed low-incidence country</td>
<td>Vincent Kuyvenhoven (KNCV)</td>
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<td>14:30 – 14:45</td>
<td>Country visits in low-incidence settings: ECDC prospects and</td>
<td>Davide Manissero (ECDC)</td>
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<td>14:45 – 15:00</td>
<td>Preparing for working group sessions</td>
<td>Vincent Kuyvenhoven (KNCV)</td>
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<td>15:00 – 15:30</td>
<td>Tea/coffee break</td>
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<td>15:30 – 16:30</td>
<td>Working in three separate groups</td>
<td>Maryse Wanlin (Belgium)</td>
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<td>Radmila Curcic (Republic of Serbia)</td>
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<td>16:30 – 17:00</td>
<td>Reporting and discussion about the usefulness of country</td>
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The priority in the Region has been to visit countries with high TB incidence or those that have so far not or only recently implemented the Stop TB Strategy. In the future, it is requested to visit countries with low TB incidence as well.

Vincent Kuyvenhoven (KNCV) reported the experience with a recent review of the NTP in the Netherlands. This was a follow-up visit after a first review in 2002.

Davide Manissero (ECDC) presented the ECDC perspective on country reviews. ECDC is planning three or four country visits in 2008, mainly to high-TB-incidence countries but also to one low-incidence country. ECDC has limited experience of country visits and review of NTPs but is gaining experience through the review of national influenza and HIV programmes in countries.

Representatives from Belgium and the Republic of Serbia presented the strengths and challenges in their TB control programmes as a basis for discussion.

Discussion and recommendations

The group concluded that a country review can contribute to the performance of the TB programme by helping to evaluate the TB control system, prioritize new tasks and identify blind spots, and as an eye-opener for undiscovered possibilities.

In addition, as experienced in the Netherlands, it can:
• unify structure and contribute to a more national approach (where appropriate);
• allow us to learn from international experiences and share best practices;
• serve as an advocacy tool;
• open plans and challenges to discussion; and
• help us to explore collaborations.

The group emphasized that:
• careful planning is needed to take into account organizational/structural differences;
• it is necessary for the country to want and need the review;
• recommendations following a programme review have to be accepted within the country to be effective;
• having a pool of trained reviewers would be helpful;
• follow-up of recommendations and their implementation is necessary; and
• sharing of and access to the outcome of the review should be discussed at the planning stage.

The possible role of European institutions in country reviews was discussed, since WHO and ECDC are planning collaborative reviews in high- and low-incidence countries within the EU. The collaboration and involvement of several institutions is a challenge, and the specific roles of WHO and ECDC in country reviews need to be clarified. The group found it useful to have WHO and ECDC involved in country reviews.

Recommendations:
1. The practice of having an external review of the national TB programme is recommended for almost every country with low or intermediate TB incidence in the future.
2. WHO and ECDC should be involved in country reviews and contribute to an environment in which reviews are regarded as best practice. The review teams should include people with different backgrounds, and reviewers should be trained (to build review teams).

Parallel session 6: TB control strengthening health systems

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<th>Time</th>
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<th>Speaker/facilitator</th>
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<tbody>
<tr>
<td>15:30 – 15:35</td>
<td>Scope and purpose of session</td>
<td>Chair</td>
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<tr>
<td>15:35 – 15:50</td>
<td>NTP contributing to health systems strengthening</td>
<td>Pierpaolo de Colombani (WHO Europe)</td>
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<td>15:50 – 16:05</td>
<td>Human resource development</td>
<td>Leopold Blanc (WHO HQ)</td>
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<td>16:05 – 16:50</td>
<td>Discussion in the group</td>
<td>Chair</td>
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<td>16:50 – 17:00</td>
<td>Preparation for reporting back for the plenary</td>
<td>Rapporteur</td>
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An overview was provided of the international discussion on health system strengthening and how it relates to TB control. Guidelines for NTP managers on health system strengthening were recently published by WHO.

The relationship between human resource development and health system strengthening was presented in more detail, underlining the possibilities offered by Global Fund grants.

Discussion and recommendations

A number of countries reported their experience during the discussion:

- Lithuania reported its positive experience in involving primary health care doctors in TB services – experience already consolidated in Latvia through an extensive training programme.
- Kyrgyzstan has successfully decentralized TB control at primary health care level in recent years and obtained a significant increase in TB case detection.
- In Israel, the management of MDR-TB, with high prevalence among immigrants, has been decentralized outside hospitals and involving nurses after negotiation with their unions.
- In Moldova, the management of TB patients at primary health care level would improve by introducing forms of incentives to staff.
- In Kazakhstan, the health system remains as it was when it was part of the Soviet Union, with budget allocation based on hospital bed occupancy and an extensive TB facility network, which is now difficult to maintain due to a shortage of TB doctors and low motivation among medical school students to specialize in TB.
- In Turkey, while the network of TB dispensaries was preserved after strong negotiations with the Ministry of Health, post-graduate education on TB has been incorporated into the Respiratory Diseases specialization, which is more likely to attract a new generation of doctors.
- In Portugal, there is even a lack of Respiratory Diseases specialists, which forces the Ministry of Health to carefully distribute them in higher numbers in regions with higher TB incidence.

Recommendations:
1. NTP managers should be aware of the reform in the health sector of their country and use all opportunities, while preserving essential functions, for TB control.
2. The balance between health systems and TB control challenges and opportunities differs between countries and also differs over time in the same country.
Closure

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<th>Time</th>
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<tr>
<td>17:30 – 17:40</td>
<td>Main conclusions from the countries with intermediate or low TB incidence</td>
<td>Martien Borgdorff (KNCV TB Foundation)</td>
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<tr>
<td>17:40 – 17:50</td>
<td>Main conclusions from the countries with high TB incidence</td>
<td>Risards Zaleskis (WHO Europe)</td>
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<td>17:50 – 18:00</td>
<td>Arrangements for the next day</td>
<td>Karoline Fernandez de la Hoz (ECDC)</td>
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Low-incidence countries
Martien Borgdorff (KNCV) gave comments on four selected issues relevant to the low-incidence countries: contact investigation, TB among immigrants, rapid tests for MDR-TB, and NTP reviews in countries with low/intermediate TB incidence.

Contact investigation
There is progress both with developing guidelines and with defining research priorities. There is apparently no final consensus yet on the definition of TB cases necessitating contact investigation, nor on outbreaks necessitating outbreak investigation. It is important to come to agreement on the definition of index cases, outbreaks, and on the role of tools such as IGRA and molecular typing. A stepwise approach may be needed: consensus-building as an intermediate step, documenting the level of evidence and the further development of evidence-based definitions as time goes on.

This raises the question: what is the evidence required exactly? For instance, there are gradients of infectiousness and exposure, suggesting perhaps that any definition of an index case is arbitrary. So, how to decide which action is recommended at which level of gradient? We know that contact investigations are most rewarding among household contacts of smear-positive index cases. What is the additional yield if the definitions of ‘index case’ and ‘at-risk contact’ are expanded? Is the additional intervention going to be cost-effective? Systematic evaluation of the yield and cost of contact investigation in various settings should provide the answers.

Similarly, there is a gradient of outbreaks. A recent study in the Netherlands suggests that two cases within three months constitute an outbreak that has an increased risk of becoming a large outbreak of more than four cases. Is that context specific? We need to do similar analyses in other settings. This suggests the need for systematic surveillance of contact and outbreak investigations, which should include the coverage and outcomes of the preventive therapy. It also suggests the need to involve health economists in evaluating these interventions. In the meantime, we should use the currently available evidence to make rapid progress with the guidelines.

TB among immigrants
It is excellent that ECDC has taken the initiative to systematically evaluate TB screening among immigrants. Immigrants represent the majority of TB cases in many of the low-incidence countries; therefore, TB control in this group is of prime importance. TB screening on entry to a country is an obvious procedure to be evaluated. Considerations of cost-effectiveness need to be included in the evaluation.
For instance, what is the cost of screening per disability-adjusted life year (DALY) gained as a function of prevalence at entry? It is very good to see the importance of undocumented immigrants being highlighted. The recommendations make a lot of sense, although it is clear that, unfortunately, this is an area for which there are no easy answers. In addition, we need to think about expanding the use of preventive therapy among immigrants: can we develop and try out cost-effective and feasible ways of doing this? Perhaps this may be discussed at a future Wolfheze workshop.

Rapid tests for MDR-TB
Solid progress was reported with the use of the Hain Test (Genotype MTBDRplus assay, Hain Lifescience GmbH, Germany) among sputum smear-positive TB patients. Reliable rapid results on MDR-TB can now be made available. This may also be a good impetus for the further development of laboratory capacity needed to address the threat of MDR- and XDR-TB.

NTP reviews
There was an enthusiastic response to the proposal of having NTP reviews in low- and intermediate-incidence countries. The recommendations of the group are practical and sensible. We look forward to hearing the results of some of this kind of review at the next Wolfheze workshop.

High-incidence countries
Risards Zaleskis (WHO Europe) gave comments on the following issues relevant for high-TB-incidence countries: follow-up of the Berlin Declaration on TB, strategic plans for TB in the WHO European Region, MDR(XDR)-TB and TB/HIV interventions, strengthening health systems, new techniques for TB control, and NTP reviews.

Follow-up of the Berlin Declaration
The plenary session on the follow-up of the Berlin Declaration was very effective in raising the commitment of the participants to closely monitor and evaluate the implementation of the actions outlined in the Berlin Declaration as well as the agreement to establish adequate fora and mechanisms that involve civil society, communities and the private sector to assess progress at regional level every two years from 2009. It was emphasized that strengthening multilateral partnerships (through high-level advocacy, national movements, civil society, etc.) is of high importance. Meanwhile, the NTP managers committed themselves to follow up with their ministries the decisions taken in Berlin towards strengthening political and financial commitment and strengthening health systems towards high-quality TB control. The process and timeline to follow up the Berlin Declaration were also endorsed.

Strategic plans for TB in the WHO European Region
There are two synergic plans for TB control and elimination in the Region. They are of particular importance for the high-priority countries where control of the TB situation still needs substantial improvement. The main challenge now is to focus all efforts on developing or updating the national strategic plans, especially in those countries eligible for the Global Fund grant. WHO and international partners are ready to provide support.
**MDR(XDR)-TB and TB/HIV interventions**

Scaling up interventions to control drug-resistant TB and TB/HIV is of great importance, and two parallel sessions were devoted to discuss each topic in the 18 TB high-priority countries. In these countries, poor adherence to accepted TB control practices has created high levels of man-made MDR(XDR)-TB, and TB/HIV coinfection rates are growing dramatically. However, drug-resistant TB is a real threat, not only for the high-priority countries, but also for countries with a low TB burden, taking into account the expansion of the EU, the internal and external migration of populations, the existence of high-risk populations, etc. This issue is emphasized in the Berlin Declaration as an important challenge for all 53 Member States of the WHO European Region.

**Strengthening health systems**

Participants showed great interest at the session dedicated to TB control strengthening health systems – a very important topic included in the new Stop TB Strategy as a separate component. Today, it is clear that good TB control has a positive influence on the health system, and a strong health system is a condition for further improving TB control in a country.

**New techniques for TB control**

Another special plenary session was devoted to new TB diagnostic techniques and, specifically, on the dramatic progress already achieved in the rapid detection of MDR-TB. We should also remember, however, the importance for countries with a high TB burden of improving the quality of the existing tools for TB diagnosis and control.

**NTP reviews**

It is clear from the discussion that country reviews play a significant role in raising awareness of the TB situation and in strengthening political commitment to TB control, possibly improving the effectiveness of the NTP and building partnerships, regardless of the country epidemiology (low, intermediate or high TB incidence).
### Annex 1: Programme

<table>
<thead>
<tr>
<th><strong>Saturday, 31 May 2008</strong></th>
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| 11.30 – 13.00 | **PLENARY SESSION 2: Strategic plans for high-priority countries and for the EU** | The Plan to Stop TB in 18 High-priority Countries in the WHO European Region  
*Pierpaolo de Colombani (WHO Europe)*  
The Framework Action Plan to fight TB in the European Union  
*Davide Manissero (ECDC)*  
Assistance by partners to countries in implementing the strategic plans  
*Masoud Dara (KNCV)*  
Discussion  
*Chair: Masoud Dara (KNCV)*  
*Rapporteur: Martin van den Boom (WHO Europe)*  |
| 13:00 – 14:00 | Lunch break |                                                                         |
| 14:00 – 15:30 | **PARALLEL SESSION 1: How can MDR-TB interventions be scaled-up in the 18 TB high-priority countries in the WHO European Region?** | Discussion in groups:  
**Group A:** Russian-speaking countries  
**Facilitator:** Vaira Leimane (Latvia)  
**Rapporteur:** Risards Zaleskis (WHO Europe)  
**Group B:** English-speaking countries  
**Facilitator:** Manfred Danilovits (Estonia)  
**Rapporteur:** Pierpaolo de Colombani (WHO Europe)  
Preparation of the parallel session report by the two rapporteurs  
**Rapporteur:** Risards Zaleskis (WHO Europe)  |
| 15:30 – 16:00 | Coffee break |                                                                         |
| 15:30 – 16:00 | **PARALLEL SESSION 2: Reaching consensus on a paper on TB contact tracing and outbreak management** | Purpose and scope of a consensus document on contact tracing and questions to the working groups  
*Connie Erkens (the Netherlands)*  
Working in groups:  
**Group A**  
**Facilitator:** Cristina Rius (Spain)  
**Presentation:** Margreet Kamphorst (the Netherlands)  
**Group B**  
**Facilitator:** Ibrahim Abubakar (United Kingdom)  
**Presentation:** Walter Arrazola de Onate (Belgium)  
**Group C**  
**Facilitator:** Connie Erkens (the Netherlands)  
**Presentation:** Jean-Pierre Zellweger (Switzerland)  |
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<th>16:00 – 17:30</th>
<th>PARALLEL SESSION 3: Scaling up TB/HIV interventions</th>
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<tr>
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<td>The global and regional situation on TB/HIV</td>
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<td><em>Lucia Ditiu (WHO Europe)</em></td>
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<td>Implementation of Interim</td>
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<td>*Masoud Dara (KNCV TB</td>
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<td>Brainstorming: What is keeping</td>
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<td><em>Lucia Ditiu (WHO Europe)</em></td>
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<td><em>Chair: Raquel Duarte (Portugal)</em></td>
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<td>PARALLEL SESSION 2: Consensus paper on TB contact</td>
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<td>Reporting from the working groups</td>
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<td><em>Chair: Delphine Antoine (France)</em></td>
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<td><em>Rapporteur: Margreet Kamphorst (the Netherlands)</em></td>
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| 18.00 – 19.00 | Wolfheze Programme Committee                     |
| 19.30         | Dinner                                            |

**Monday, 2 June**

| 09:00 – 9:30 | Report from parallel sessions 1–3                 |
|             | *Rapporteur parallel session 1*                   |
|             | *Rapporteur parallel session 2*                   |
|             | *Rapporteur parallel session 3*                   |
|             | *Chair: Shahimurat Ismailov (Kazakhstan)*         |

| 9.30 – 11.00 | PLENARY SESSION 3: TB control in migrants         |
|             | 1 ECDC migrant health report series: status report on planned and ongoing TB work and interim results on scientific assessment of TB screening in migrants |
|             | *Davide Manissero (ECDC) and Eveline Klinkenberg (KNCV)* |
|             | 2 TB control in migrants: importance and activities in the Russian Federation |
|             | *Natalia Vladimirovna Frolova (Russian Federation)* |
|             | 3 TB in undocumented persons                      |
|             | *Delphine Antoine (France)*                       |
|             | Discussion                                         |
|             | *Chair: Peter Helbling (Switzerland)*              |
|             | *Rapporteur: Connie Erkens (the Netherlands)*      |

<p>| 11:00 – 11:30 | Coffee break                                      |</p>
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<td>11:30 – 13:00</td>
<td><strong>PLENARY SESSION 4: Rapid liquid culture for TB detection and other new techniques</strong></td>
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<td>Role of rapid detection for drug-resistant TB</td>
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<td>Francis Drobniewski (United Kingdom)</td>
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<td>The demonstration projects and results of rapid detection</td>
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<td>Rick O’Brian (FIND)</td>
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<td>Practical steps for country implementation of methods for rapid</td>
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<td>Sabine Rüssch-Gerdes (Germany)</td>
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<td><em>Chair: Sabine Rüssch-Gerdes (Germany)</em></td>
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<td><em>Rapporteur: Lucica Ditiu (WHO Europe)</em></td>
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<td>13:00 – 14:00</td>
<td>Lunch break</td>
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<td>14:00 – 15:00</td>
<td><strong>PARALLEL SESSION 4: Guidelines for infection control in Europe</strong></td>
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<td>Guidelines for TB infection control for the European Region</td>
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<td>Kai Blondal (Iceland)</td>
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<td>Addressing infection control in the WHO European Region</td>
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<td>Lucica Ditiu (WHO Europe)</td>
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<td><em>Chair: Masoud Dara (KNCV)</em></td>
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<td><em>Rapporteur: Dominica Chiotian (Romania)</em></td>
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<td>15:00 – 15:30</td>
<td><strong>PARALLEL SESSION 5: (How) can country reviews contribute to the performance of TB control</strong></td>
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<td>Contribution of a country review to performance of TB control: a long-term perspective</td>
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<td>Risards Zaleskis (WHO Europe)</td>
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<td>Experience from a recently reviewed low-incidence country</td>
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<td>Vincent Kuyvenhoven (the Netherlands)</td>
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<td>Country visits in low-incidence settings: ECDC prospects and expectations</td>
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<td>Davide Manissero (ECDC)</td>
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<td>Preparing for working group sessions</td>
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<td>Vincent Kuyvenhoven (the Netherlands)</td>
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<td>15:00 – 15:30 Coffee break</td>
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| 15:30 – 17:00 | PARALLEL SESSION 6: TB control strengthening health systems  
WHO  
NTP contributing to health systems  
Pierpaolo de Colombani (WHO Europe)  
Development of human resources  
Leopold Blanc (WHO HQ)  
Discussion  
Chair: Archil Salakaia (Georgia)  
Rapporteur: Pierpaolo de Colombani (WHO Europe) | PARALLEL SESSION 5: Session on country reviews (continued)  
Discussion in groups:  
Group A  
Facilitator: Karoline Fernandez de la Hoz (ECDC)  
Presentation: Maryse Wanlin (Belgium)  
Group B  
Facilitator: Risards Zaleskis (WHO Europe)  
Presentation: Nóra Szabó (Hungary)  
Group C  
Facilitator: Paul van Gerven (the Netherlands)  
Presentation: Radmila Curcic (Republic of Serbia)  
Reporting form the working groups  
Chair: John Watson (United Kingdom)  
Rapporteur: Paul van Gerven (the Netherlands) |
| --- | --- |
| 17:00 – 17:30 | Report from parallel sessions 4–6  
Rapporteur parallel session 4  
Rapporteur parallel session 5  
Rapporteur parallel session 6  
Chairperson: Masoud Dara (KNCV TB Foundation) |
| 17:30 – 18:00 | Closure  
Main conclusions from the countries with intermediate or low TB incidence  
Martien Borgdorff (KNCV)  
Main conclusions from the countries with high TB incidence  
Risards Zaleskis (WHO)  
Arrangements for the next day  
Karoline Fernandez de la Hoz (ECDC) |
| 18:15 | Transport by bus for dinner in Delft |
Annex 2: List of participants

Country representatives

**Austria**
Thomas Hirtl  
Public TB Service  
Vienna

Beatrix Schmidgruber  
Head of TB Department  
Federal Ministry of Health, Family and Youth  
Vienna

**Azerbaijan**
Natavan Alikhanova  
Manager National TB Register  
TB National Register  
Scientific Research Institute of Lung Diseases  
Baku

**Belarus**
Alena Skrahina  
Vice-Director,  
Scientific Research Institute of Pulmonology and Phthisiatry  
Minsk

**Belgium**
Maryse Wanlin  
Manager National TB Programme  
Fonds des Affections Respiratoires (FARES)  
Brussels

Wouter Arrazola de Onate  
Medical Director  
Flemish Association for Respiratory Care and TB control  
Brussels

**Croatia**
Aleksandar Simunovic  
Manager National TB Programme  
Croatian National Institute of Public Health  
Zagreb

**Cyprus**
Andreas Georgiou  
Manager National TB Programme  
Medical and Public Health Services  
Ministry of Health  
Nicosia

**Denmark**
Vibeke Østergaard Thomsen  
Director  
International TB Reference Laboratory  
Statens Serum Institut  
Copenhagen

**Estonia**
Manfred Danilovits  
Head, TB Department, Lung Clinic  
Tartu University  
Tartu

**Finland**
Rauni Ruohonen  
Chief Physician  
Helsinki

**France**
Delphine Antoine  
Manager National TB Register, Institut de Veille Sanitaire  
Saint Maurice

**Georgia**
Archil Salakaia  
Manager National TB Programme  
National Centre of TB and Lung Diseases  
Tbilisi

Levan Sharashidze  
Assistant to the Manager of the National TB Programme  
Tbilisi
<table>
<thead>
<tr>
<th>Country</th>
<th>Name</th>
<th>Position</th>
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<tr>
<td>Germany</td>
<td>Walter H. Haas</td>
<td>Manager National TB Programme</td>
<td>Robert Koch Institute</td>
<td>Berlin</td>
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<td>Hungary</td>
<td>Eleonora Szabo</td>
<td>Head, National TB Reference</td>
<td>Laboratory</td>
<td>Budapest</td>
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<td>Iceland</td>
<td>Thorsteinn Blöndal</td>
<td>Manager, National TB Programme</td>
<td>Department of TB and Lung Diseases</td>
<td>Reykjavik</td>
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<td>Israel</td>
<td>Daniel Chemtob</td>
<td>Manager, National TB Programme</td>
<td>Ministry of Health</td>
<td>Jerusalem</td>
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<tr>
<td>Kazakhstan</td>
<td>Shahimurat S. Ismailov</td>
<td>Manager, National TB Programme</td>
<td>National Center for TB Problems</td>
<td>Almaty</td>
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<td>Ministry of Health</td>
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<td>Kyrgyzstan</td>
<td>Myrzaliev Bakyt</td>
<td>Director, Republican Centre of TB</td>
<td>Bishkek</td>
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<td>Information and Epidemiology</td>
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<td>Latvia</td>
<td>Janis Leimans</td>
<td>Manager, National TB Programme</td>
<td>State Agency of TB and Lung Diseases</td>
<td>Riga</td>
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<tr>
<td>Lithuania</td>
<td>Edita Davidaviciene</td>
<td>Manager, National TB Register</td>
<td>Lithuanian Centre of Pulmonology and TB</td>
<td>Vilnius</td>
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<tr>
<td>Malte</td>
<td>Brian Farrugia</td>
<td>TB Specialist</td>
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<td>Moldova</td>
<td>Dimitri O. Sain</td>
<td>Manager, National TB Programme</td>
<td>Institute of Phtisiopulmonology</td>
<td>Chisinau</td>
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<tr>
<td>Montenegro</td>
<td>Vitalie Morosan</td>
<td>Coordinator</td>
<td>Medical Project Department</td>
<td>Chisinau</td>
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<tr>
<td>Netherlands</td>
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