



Final Report

of the

**International Workshop on
Tuberculosis Control in Prisons**

**(San Pedro Sula, Honduras,
11-13 August, 2003)**



Dedicated to the memory of Dra. Nohemí Paz de Zavala,
Director of the National Tuberculosis Program of Honduras

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1. Introduction

Prisons represent a challenge for tuberculosis control authorities. They promote the transmission of the disease by sheltering a vulnerable population that often lacks access to timely diagnosis and appropriate treatment. Prisons have therefore been labeled as TB breeding grounds. Over the last decade, the problem of TB in prisons, as well as the need to control the disease in these settings, has been recognized. To control TB effectively and in a sustainable fashion, an integrated approach should be taken that includes health officials from both the civilian sector (National TB Programs, NTP) and the prison system.

In collaboration with the Honduran NTP, the Regional TB Program of the Pan American Health Organization (PAHO) and the Gorgas Tuberculosis Initiative of the University of Alabama at Birmingham (UAB) joined forces to promote the expansion of DOTS into the prison systems of Latin America through an international workshop, which took place 11–13 August 2003 in San Pedro Sula, Honduras. The meeting brought together NTP and prison health officials from Belize, Costa Rica, Dominican Republic, El Salvador, Guatemala, Guyana, Haiti, Honduras, Nicaragua, Panama, and Peru. Also invited were speakers from Brazil, Mexico, Colombia and Venezuela, and the International Committee of the Red Cross (ICRC). Regional NTP coordinators and prison medical directors from Honduras participated as well (see the List of Participants in Annex 2).

2. Workshop Objectives

1. Familiarize national TB officials and prison medical officials with TB control issues specific to prison settings.
2. Promote collaboration between national TB programs and the prison sector.

3. Synopsis

The meeting took place over two and a half days. The opening ceremony was attended by Fátima Valle Delgado from the PAHO mission in Honduras, Francisco Zamora of USAID/Washington, and Angel Coca of the USAID mission in Honduras. The Ministry of Health was represented by Nohemí Paz, Director of the National TB Program, and the Ministry of Security was represented by Federico Bonilla, Director of San Pedro Sula Prison. The sponsors of the workshop, Michael E. Kimerling, Director of the Gorgas TB Initiative at the University of Alabama at Birmingham, and Rodolfo Rodriguez, PAHO's Regional Advisor for TB, presided over the meetings.

The workshop included presentations by staff of the Gorgas TB Initiative, PAHO, the Honduran NTP, ICRC, and the NTP of Sao Paulo, Brazil. Presentations were also given on the status of TB in prisons in Mexico, Colombia and Venezuela. (The agenda can be found in Annex 1.)

On the second day of the workshop, a work session was held for NTP and prison health representatives to design an action plan to be implemented in each country. This document included the components for expansion of DOTS into prisons, and will serve as a method of measuring progress toward program success in these prisons.

On the third day, the international participants visited San Pedro Sula Prison to observe a functioning DOTS program. They then drafted an agreement (see Annex 3) that included elements necessary for successful implementation of TB control among this high risk population in their respective countries, such as political commitment, advocacy and intersectoral coordination.

It should be noted that among the points agreed upon was an evaluation of the progress made toward the implementation of each action plan. Gorgas and PAHO agreed to co-sponsor a follow-up meeting in one year to discuss this progress.

At the end of the workshop, the international participants filled out a questionnaire to evaluate the quality of the workshop. (A summary of the results can be found in Annex 4.)

The event closed with a dinner attended by the Honduran Minister and Vice-Minister of Health, Elias Lizardo and Fanny Mejia, respectively, as well as the Director of the Division of Infectious and Chronic Diseases, Luis Alberto Medina.

4. Reference Materials

A CD-ROM containing the workshop presentations in Power Point was distributed to all conference participants. The presentations are also available through the workshop website, <http://newweb.www.paho.org/Spanish/AD/DPC/CD/tb-prisons-hon-2003.htm> (Spanish), and <http://www.paho.org/english/ad/dpc/cd/tb-prisons-hon-2003.htm> (English). (Not all presentations are available in English.)

The primary reference for the workshop was *Tuberculosis Control in Prisons: A Manual for Programme Managers*, published by the World Health Organization and the International Committee of the Red Cross (WHO/CDS/TB/2000.281). Copies (in Spanish or English) were provided to the workshop participants. The manual may be accessed through the workshop website, or through the WHO site (<http://www.who.int/gtb/publications/prisonsNTP/index.html>)

Further information about the Gorgas-funded TB in Prisons project in Honduras can be found at www.gorgasinfo.org.



5. Conference Sessions

A. TB: Epidemiology, Diagnosis and Treatment

Rodolfo Rodriguez, Regional Advisor for TB, PAHO, Washington, DC

Dr. Rodríguez presented a brief outline of the epidemiology of tuberculosis, including a review of the causal agent, the natural history of the disease, transmission, and risk factors for contracting the disease. He emphasized the importance of diagnosis using sputum microscopy, which can be supplemented by radiology and tuberculin testing (PPD). He also presented the guidelines for ensuring treatment completion: free drugs, 100% of doses supervised, quality relationships between health staff and patients, and easy access to treatment.

B. TB in Latin America

Rodolfo Rodriguez, Regional Advisor for TB, PAHO, Washington, DC

The total number of reported cases in the Region has remained stable at around 250,000 over the past 10 years, although there are large differences in incidence rates between the various countries in the Region. The prioritized countries for TB control are Brazil, Bolivia, Dominican Republic, Ecuador, Guyana, Haiti, Honduras, Mexico, Nicaragua and Peru. Limited data is available regarding drug resistance (MDR) thanks to various studies which have taken place since 1994.

In general, the rates of MDR-TB in the region are not very high, and in general countries with a well-functioning DOTS program have the lowest rates of MDR-TB. The percentage of the population covered by DOTS have increased since 1998, and it is hoped that the Region will reach WHO's targets for coverage, case finding and treatment success by 2005. Dr. Rodriguez ended his lecture by emphasizing the vulnerability of prison inmates to TB disease, and the challenge that prison settings present for TB control.

C. TB and HIV

David Zavala, Resident/Consultant, PAHO, Washington, DC

AIDS interferes with the natural balance that exists between *Mycobacterium tuberculosis* (MTB) and its host. The twin epidemics have resulted in a heavy impact on the epidemiology of TB due to HIV co-infection. TB infection is common among: close contacts of a smear-positive TB case; persons from areas or countries where TB disease is widespread; disadvantaged populations with poor access to health services; and other populations at high risk. However, TB infection can rapidly progress to disease in HIV-infected individuals; intravenous drug users; and persons with certain medical conditions.

Table 1: HIV Seroprevalence among Selected Prison Populations

Country	Year	HIV prevalence among inmates
Brazil (São Paulo)	1995	14.4%
Ethiopia (Dire Dawa)	1988	6.0%
India (Delhi)	N/A	1.2%
Scotland (Glasgow)	1994	0.9%
USA	1988–1999	4.1%

Table 2: HIV Seroprevalence among Prisoners with TB

Country	Year	HIV prevalence among inmates with TB
Brazil (Rio de Janeiro)	1998	16.6%
Côte d'Ivoire (Bouaké)	1992	30%
Spain (Madrid)	1994	84%
USA (New York)	1991	95%

Source: *Tuberculosis Control in Prisons: A Manual for Programme Managers* (WHO/CDS/TB/2000.281)

Prison-based studies have revealed a high prevalence of HIV among inmates, particularly in developing countries (Table 1). However, the prison population, regardless of the economic level of the country, is at very high risk of TB and VIH co-infection (Table 2).

Although few statistics exist, it is estimated that **the prevalence of HIV in the prison population is 75 times greater than in the general population**, due to the following risk factors:

- Disproportionate number of prisoners who come from environments with a high prevalence of HIV;
- Risky behaviors:
 - Sharing needles during intravenous drug use.
 - Tattoos.
 - Unsafe sex.
- Refusal of authorities to recognize risky behaviors (which impedes IEC activities).

To **improve the health of prisoners with TB-HIV co-infection**, it is important to

- Persuade prison authorities to recognize the existence of HIV/AIDS and TB and their interaction in the prison setting.
- Obtain support for case finding, diagnosis, treatment and contact investigation activities.
- Undertake IEC activities to prevent discrimination and stigmatization of prisoners with either disease.

It is important that National TB and HIV Programs coordinate their activities in prisons, by:

- Assigning responsibility and authority for TB and HIV control activities;
- Planning, implementing and evaluating on a separate and collaborative basis TB and HIV control activities; and
- Offering appropriate technical assistance at the national and local level.

D. The Basis of Anti-TB Therapy and Multi-Drug-Resistant TB (MDR-TB)

*Michael E. Kimerling, Director,
Gorgas TB Initiative at the University of Alabama at Birmingham (UAB)*

Dr. Kimerling reviewed the history of TB drug development. The discovery of streptomycin was followed almost immediately by resistance of *M. tuberculosis* to this single-drug therapy. As new drugs were developed, multiple-drug regimens became the norm. Multi-drug resistant (MDR) TB is defined as a strain of

MTB which is resistant to both Isoniazid and Rifampicin, two of the most powerful anti-TB drugs. Primary resistance is defined as drug resistance among new cases, and secondary (acquired) resistance can occur in a previously treated patient. Drug susceptibility testing is used to identify resistant strains and patterns of resistance.

MDR-TB is a man-made problem, resulting from: 1) not knowing the local MTB drug susceptibilities; 2) inadequate therapy (ineffective drug regimens, inadequate length of treatment, and sub-therapeutic drug levels; and 3) lack of patient monitoring. The treatment of an MDR-TB case with second or third line drugs can be much more expensive (US \$4,000-6,000) than the treatment of a simple TB case with first line drugs (\$20).

E. TB Control in Prisons: The Two Sides of the Wall

Michael E. Kimerling, Director, Gorgas TB Initiative at UAB

TB is common in prison settings because inmates are often drawn from population groups at high risk for the disease, and are housed under conditions conducive to TB transmission. Although prisoner profiles can be different from the general population, they come from civilian society and return there after incarceration. They interact with prison staff and visitors, therefore it is important for both the civil and penal sectors to undertake effective TB control programs. Prison and health authorities need to look beyond the barriers (cost, logistics, stigma, etc.) and recognize the basic human rights of prisoners: contracting TB and dying from TB is not part of a prisoner's sentence.

Some of the issues dealt with in this lecture include: integration of the penal and civil TB control sectors; the importance of screening for TB at entry; the importance of completion of therapy (particularly after release from prison), and the risk of TB epidemics developing into MDR-TB epidemics in the prison setting.

Table 3: Rates of Active TB in the Prison and Civilian Population

Country	Year	Prison Cases per 100,000	Civilian Cases per 100,000 (all forms)
Brazil	1992–1993	5,714 (pulmonary TB) n=350	55.9 (1992)
Georgia	1997–1998	5,995 (smear/culture positive) n=7437	155 (1997)
Iran	N/A	122 (pulmonary TB) n=1634	17.7 (1997)
Malawi	1996	5,142 (pulmonary TB) n=914	209.5 (1996)
Rwanda	1996–1998	3,363 (all forms) n=57,961	79.3 (1997)
Spain (Madrid)	1993–1994	2,283 (all forms) n=9461	24 (1993)
China (Taiwan)	1997-8	259 (pulmonary TB) n=38,593	N/A
USA (New York)	1991	156.2 (all forms) n=109,475	10.4 (1991)

Source: Tuberculosis Control in Prisons: A Manual for Programme Managers (WHO/CDS/TB/2000.281).

Table 4: Reported Rates of MDR-TB among Imprisoned TB Patients

Country	Year	Rate of MDR-TB
Azerbaijan (n=131)	1997	23.0%
Georgia (n=276)	1997–1998	13.0%
Russian Federation (Mariinsk) (n=164)	1998	22.6%
Spain (Madrid) (n=203)	1994	5.9%
USA (New York) (n=116)	1991	32.0%

Source: *Tuberculosis Control in Prisons: A Manual for Programme Managers* (WHO/CDS/TB/2000.281).

F. Introduction to Implementing a TB Control Program in Prisons

Mayra Arias, Research Fellow, Gorgas TB Initiative at UAB

Dr. Arias presented the elements needed before a TB control program in prisons can be considered, such as:

- political will from both prison and public health authorities;
- a civilian TB control program (NTP) in place;
- acknowledgement of TB as a problem in the prison system;
- access of health officials to all detention centers;
- financial and institutional support.

She discussed the various aspects of implementing an effective TB control program in prisons, such as:

- early diagnosis of infectious cases, including screening at entry and case finding through contact investigation;
- effective, complete treatment using correct dosages, directly observed therapy, and treatment monitoring;
- integration of prison TB control services into the NTP, including strong referral system and reporting and recording systems;
- infection control measures.

The challenges presented by TB control in the prison setting include establishing the responsibilities of the prison staff vs. the civilian health center staff; obtaining additional funding; maintaining confidentiality; avoiding corruption; and dealing with the mobility of prisoners on treatment. The opportunities include the possibility of better case finding and management because of the “captive” population; the benefit to staff and the community at large; and the promotion of prisoners’ self-esteem through cure as well as innovative programming.

G. Taking the First Steps, Part 1: Gaining and Maintaining Political Commitment

Michael E. Kimerling, Director, Gorgas TB Initiative at UAB

The first component of a successful DOTS program is political commitment to sustained TB control activities at all levels: local, regional and national. Government commitment has the following components: policy formation, financial support, human resource support, and administrative support. Ongoing commitment from not one but two ministries (health and security/justice) is necessary to initiate a collaborative project for TB control in prisons.

In Honduras, funding for training and supervision came from the Gorgas TB Initiative, implementation costs were assumed by the NTP and the prisons themselves. Once prison directors and medical staff were trained and sensitized, they began to seek funding from their superiors (for additional health staff, isolation rooms, etc.) and from external sources such as local businesses, churches, NGOs, etc.

H. Taking the First Steps, Part 2: Defining the Problem (Situation Analysis)

*Hernán Reyes, Medical Coordinator for Prison Health,
Regional Delegation of the International Committee of the Red Cross for Peru, Bolivia and
Ecuador*

In order to convince health and prison authorities to initiate TB control programs for the incarcerated, a situational analysis should be performed. This analysis should include field visits, interviews, and the collection and analysis of data and documents, in order to understand the context in which both the NTP and the prison system operate; identify the obstacles for effective TB control in the prison setting; and plan for needed financial and human resources. Once this information is collected and analyzed, it can be used as baseline data to later evaluate program progress, and serve to gain political support for the program. Dr. Reyes went on to describe what type of data should be collected during the course of a situation analysis.

I. Estimating the Burden of TB Control in Prisons

*Vera Galesi, Director, TB Division, Center for Epidemiologic Surveillance,
Ministry of Public Health, São Paulo State, Brazil*

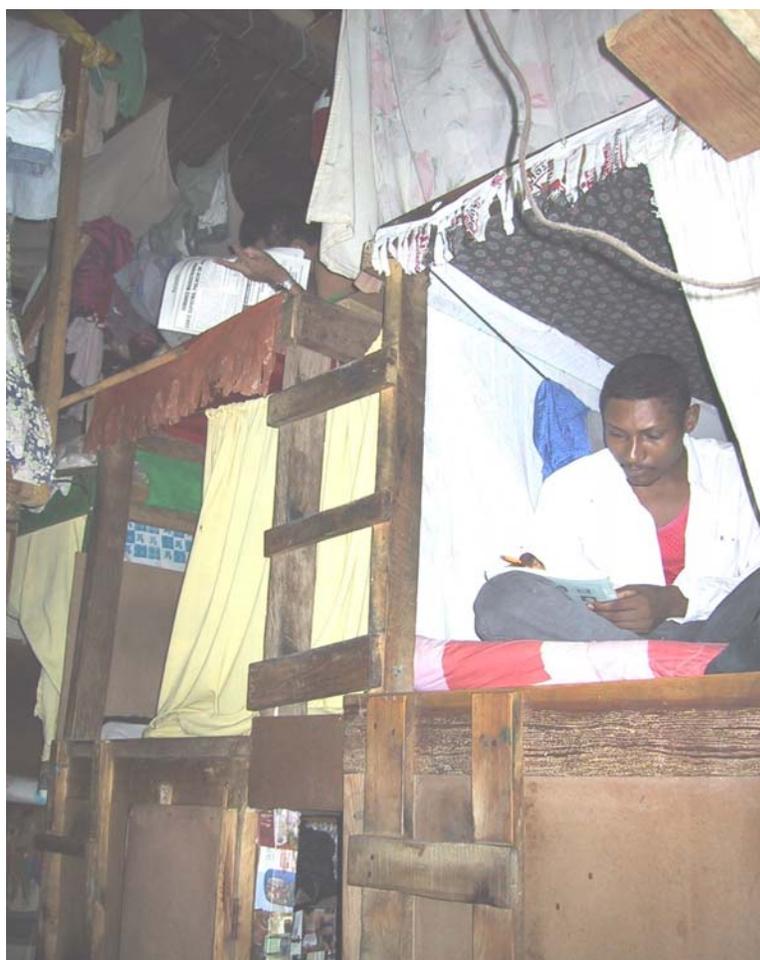
São Paulo State had about 107,000 prisoners in 2002, with an estimated TB incidence of 707/100,000 (vs. 50 in the general population of 37 million). The civilian TB authorities have been collaborating with the prison authorities on a limited basis since 1996. In April-May 2003, a project was undertaken to: educate health professionals in the prison system about the TB problem; and encourage active case finding as a routine activity in prisons.

Health workers as well as prisoner volunteers were trained to conduct a survey to detect and test respiratory symptomatics (RS's). Approximately 10% (N= 10,808) of the prison population was surveyed (in 10 prioritized health regions). 1557 RS were found (14.4% of total sample), 1428 sputum samples were tested, and 43 (3%) infectious TB cases were found.

J. Expansion of DOTS into the Prisons of Honduras

Nohemí Paz de Zavala, Director, National TB Program, Honduras

Honduras began DOTS implementation in the civil sector in 1998, and by 2002 had reached 100% coverage. In late 2000 the Gorgas TB Initiative offered to collaborate with the NTP on a prison project, and a preliminary evaluation of a sample of prisons was conducted. Despite the fact that local civilian health officials were supposed to be coordinating with prison officials to diagnose and treat prison TB cases, the evaluation found a lack coordination between the NTP staff and prison medical personnel; no evidence of DOTS being performed; weaknesses in recording and reporting; overcrowding; no infection control; passive case finding rather than screening; and no educational activities for prisoners or staff.



Barriers erected by prisoners for privacy prevent proper ventilation and lighting and promote TB transmission

Armed with this information, the National TB Program (Ministry of Health) approached the Directorate of Prisons (Ministry of Security) to initiate a collaborative project for TB control in prisons. The primary activities of the project are: training for prison medical and administrative personnel; implementation of the DOTS strategy in participating prisons; strengthening of the referral system between the prisons and civilian health centers; and supervision and evaluation.

Prisons were divided into three groups, based on prison population and estimated TB incidence. A 3-day training was held for each group of prison staff (and their civilian counterparts); staff from 8 prisons were trained in June 2001, 9 prisons in Feb. 2002, and the final 9 prisons in April 2003.

As a result of the training, participants improved their knowledge of TB and DOTS, committed themselves to implementing DOTS in their prisons, and developed action plans for each prison.

Regular monitoring visits are performed by the Gorgas-funded project coordinator (in collaboration with the NTP), and twice-yearly monitoring and evaluation meetings are held to collect and analyze data and discuss problems encountered and lessons learned.

Since the project began, diagnostic sputum tests, case detection and cure rates have increased dramatically. Other successes achieved by the project include:

- reinforcement/assignment of health personnel to prisons by the Ministry of Security
- training of additional medical and paramedical personnel in fixing sputum slides
- creation of isolation wards
- information, education and communication activities for staff and prisoners, including the celebration of World TB Day.

For more information about this project, see www.gorgasinfo.org.

K. Developing an Effective Action Plan

Erin Branigan, Global Coordinator, Gorgas TB Initiative at UAB

This session began with the presentation of an action plan matrix as used by the Honduran NTP.

Each prison in Honduras has its own action plan for the implementation of its TB control activities. This table includes the following elements: expected results, indicators, activities, time frame, cost and responsible party. Ms. Branigan emphasized that indicators should, whenever possible, be measurable, so programs can quantify their progress prior to, and during implementation.

Ideally, action plans should be developed with representatives of all concerned sectors/ departments; they should be reviewed frequently to plan activities for the next period, reviewed during supervisory visits, and used as a reference for writing progress reports.

The international participants first went through a practical exercise on writing action plans, then broke into groups and each developed a plan for the implementation of TB control in prisons in their home country.

While the international participants were preparing their action plans, the Honduran participants met with representatives of the Honduran NTP and the Gorgas TB Initiative to review and comment upon a new data forms to be used for prisoner screening.

L. Documentation: The Essentials

*Mayra Arias, Gorgas TB Initiative at UAB;
Dr. Reniery España, Honduran NTP, Health Region #3*

This session consisted of a review of data forms used by the Honduran TB in Prisons program. The forms were adapted from those used by the Honduran NTP.

M. Using Program Data: Lessons from the National Honduras Prison Program

Michael E. Kimerling, Director, Gorgas TB Initiative at UAB

Dr. Kimerling outlined how data was used to improve TB control in Honduras. An assessment of TB control in Honduran prisons was made in late 2000 by Gorgas and the NTP. The weaknesses identified in this needs assessment were used to obtain political support for standardized TB control in the prison system, integrating prison sector into the NTP (civil sector). Data was also presented to prison staff and their civilian counterparts during a presentation meeting, and these individuals were actively involved in planning the

implementation of the project through the development of action plans for each prison. Every six months, prison and health staff meet to analyze data and monitor progress.

Some of the indicators that are routinely examined include:

- prison vs. national TB incidence rates,
- treatment results,
- HIV/TB co-infection,
- detection of respiratory symptomatics,
- sputum smears performed, etc.

While analyzing this data together, with the help of NTP officials and Gorgas technical advisors, prison and health center staff can identify indicators which have shown improvement (case detection and treatment outcomes, for instance), and those that are cause for concern. A widening ratio between RS investigated and cases diagnosed brought out the potential danger of a broad definition of RS: the large number of smears performed increased each laboratory's workload, increased staffing requirements, increased the need for microscopes, etc. Therefore project managers sought to refine the definition of RS in the prison context. In a related example, contact investigations skyrocketed, with a low number of cases identified among close contacts. This data lead to a revised definition of "close contact."

The Honduras TB in Prisons Program has demonstrated to prison staff and health officials that data can be used to measure progress and inform programmatic decisions. They have participated in a rudimentary form of Operations Research, which uses data to analyze and improve program effectiveness.

N. Strengthening TB Control Programs in Prisons through Information, Education and Communication (IEC) Campaigns

Joan Mangan, Educational Research Coordinator, Gorgas TB Initiative at UAB

This lecture highlighted the approach and impact of Tuberculosis IEC initiatives implemented by prison staff throughout Honduras to educate prisoners and their families. Also discussed were factors that affect community perceptions and patient adherence to treatment regimens. Special attention was paid to the most common problems and solutions to providing health education to low literacy populations. Finally relevant theoretical constructs from health education theories were reviewed so that attendees may incorporate these concepts into future educational campaigns within their respective programs.

In Honduras an educational flip chart was developed based on prisoner artwork.



O. Mexico's Experience with TB Control in Prisons

Martin Castellanos, NTP, Mexico

Mexico has a population of approximately 102,000,000, and an incidence of pulmonary TB of 15.2/100,000 (2002). However, as in many countries, prisons are thought to have much higher rates of infectious TB, due to a high-risk population, overcrowding, lack of ventilation, poor health care services, etc. Over the past three years (2000-2002), 13 states have undertaken active case finding in 26 prisons, with a total of 282 cases identified out of 23,998 prisoners examined. However, due to incomplete data, incidence rates can only be calculated for 104 cases, giving a 3-year cumulative pulmonary incidence rate of 491/100,000. The NTP estimates this rate to be closer to 616/100,000. Interestingly, the prisons in the northern part of the country showed higher rates than in the rest of the country.

The goals of the Mexican NTP regarding TB control in prisons are to:

- establish a coordinating mechanism between the prison authorities and health officials to plan and implement TB prevention and control activities, with integrated action plans;
- ongoing TB training for prison medical and administrative staff;
- participation of public health laboratories in the processing of sputum samples from prisons;
- introduce TB recording and reporting documents into prisons;
- promote IEC activities in prisons;
- perform visits to prisons by civilian health personnel;
- perform home visits for TB patients released from prison.
- incorporate prisons into the "White Flag" ("Bandera Blanca") program for educating the public about TB.

P. Colombia's Experience with TB Control in Prisons

Alfonso Tenorio Gnecco, Universidad del Cauca

In 2001, the United Nations High Commission on Human Rights' mission in Colombia released a study on Colombian prisons highly critical of the system and its treatment of prisoners, in particular depriving them of the right to health care. As a result, the prison system (INPEC) committed in its 2003 action plan to offering 4 levels of health services to 100% of prisoners who need them. According to INPEC, 96% of prisoners now have access to health care services, and agreements with civilian health institutions are in place to provide a variety of specialty care. INPEC is strengthening ties to the civilian health sector at all levels, however, there are still significant weaknesses in TB control in the prison system, such as follow up of prisoners who are released while on treatment; inadequate training for prison guards, health staff, and inmates; lack of isolation facilities for infectious cases/TB suspects, irregular lab supplies, etc.

In response, the TB Study Group of Cauca, a consortium of academic institutions, local governmental health agencies, and non-governmental organizations (Anti-TB League of Colombia and Rotary Club), began a project in the local prisons. These organizations receive technical support from the Ministry of Social Protection as well as PAHO. The multi-disciplinary group has worked toward the implementation of DOTS in 8 local prisons and will advocate for reform of the Penal Code, guaranteeing access to health care to prisoners. The Study Group is undertaking research on topics such as a pilot network for TB telemedicine, and computerized educational material on TB. The Study Group participates in the National TB Network, www.tuberculosis.org.co

Q. Venezuela's Experience with TB Control in Prisons

Mercedes España, Ministry of Health and Social Development (MSDS), Venezuela

Venezuela, with a population of approximately 25 million, reported 5,971 new TB cases in 2002. Sixty-six cases were notified by the 32 prisons in the country. The MSDS provides drugs and sputum cups to the prisons, and the sputum samples are tested at the nearest health center, although 5 prisons are able to perform on-site sputum microscopy. The NTP's District Coordination Team supervises TB control activities; when a prisoner is released while still on treatment, he continues to receive treatment through the clinic nearest to his home.

The MSDS and the Ministry of Justice (MIJ) have collaborated through the training of the MIJ's Central Clinical Team in the technical and administrative aspects of TB control. At the regional level, NTP staff have trained 45 prison medical staff.

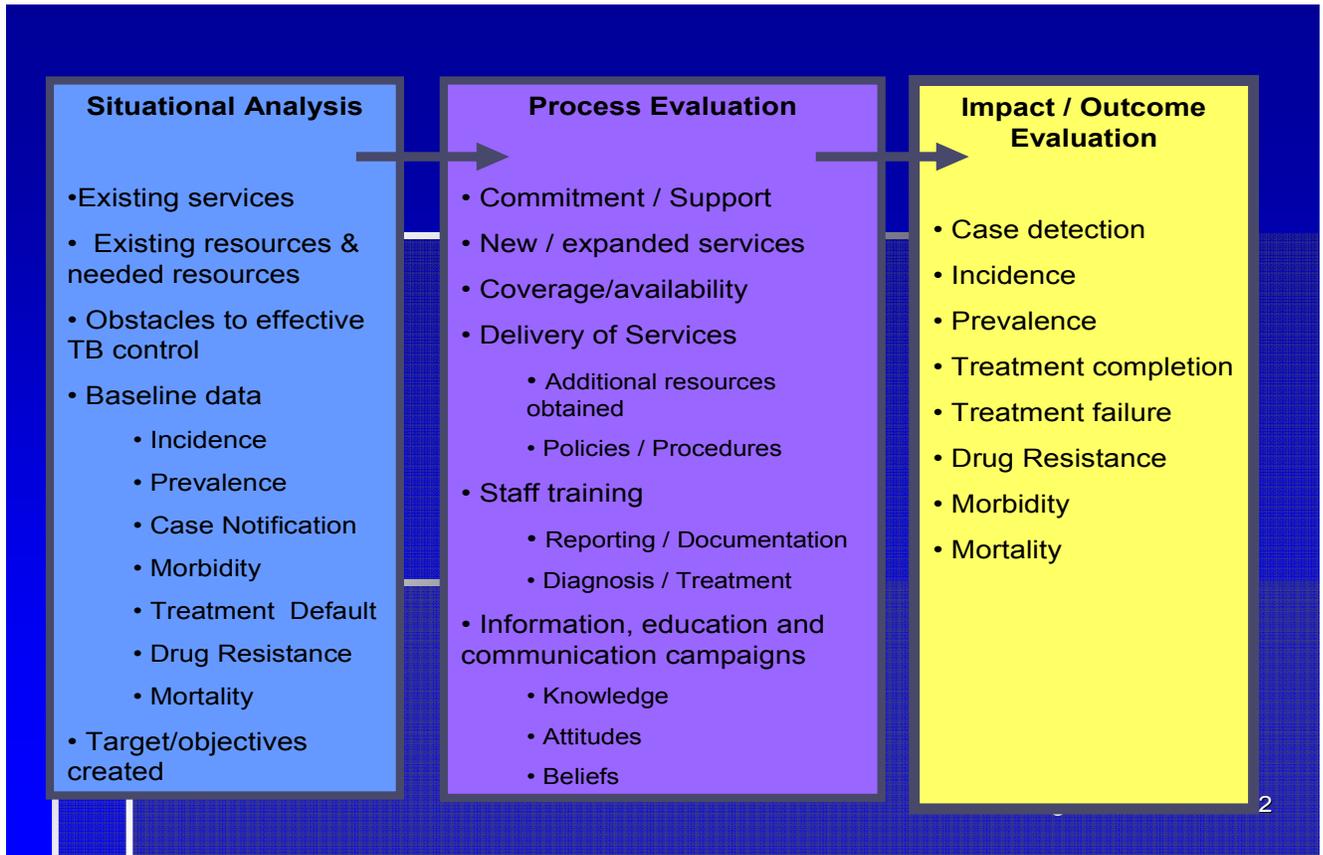
Despite such progress toward TB control in prisons, some problems remain, notably: overcrowding; poor nutrition; inadequate medical care and staff motivation; trafficking in sputum and TB drugs; patients transferred without notification; prisoners held in inaccessible areas; lack of screening during intake in some prisons; lack of knowledge about TB among prisoners, etc. As well, cure rates could be improved (60% for the period 1998-2002 vs. 66% for 1993-1997).

R. Evaluation: A Systematic Approach

Joan Mangan, Educational Research Coordinator, Gorgas TB Initiative at UAB

This presentation focused on the three main reasons to evaluate TB control programs in prison settings: (a) for the design, implementation, and appraisal of the program, (b) to enable program administrators and staff to refine and increase program effectiveness, and (c) to assist administrators to satisfy the accountability requirements of program sponsors. The criteria for achieving program objectives were discussed, which included the need to specify measurable objectives, demonstrate links in program operations, and management by a person with the motivation, ability, and authority to manage the program. An overview of the three major classes of evaluation (situation analysis, process evaluation and impact/outcome evaluation) was provided. The benefits and approaches to a process evaluation were emphasized through a case study of an evaluation of I.E.C. activities in Honduras. Following the presentation attendees were invited to meet with Dr. Mangan to discuss this project in greater detail.

Figure 1: The Relationship between the 3 Major Classes of Evaluation



S. Visit to San Pedro Sula Prison



Workshop participants visited San Pedro Sula Prison to observe a functioning DOTS program. They were shown the various areas where TB control activities are conducted (examining room, laboratory, pharmacy) and the information system.

Dra. Nohemí Paz and workshop participants received a warm reception from prison staff and inmates, including prisoner volunteers who assist in DOTS implementation.

6. Conclusion

TB control in prison settings is starting to be recognized as a necessary element to achieve effective TB control in the population as a whole. This strategy should be implemented through the collaborative efforts of health officials (NTP) and prison officials. The development of an action plan with defined objectives, activities and responsible individuals will facilitate the implementation of a TB control program.

This workshop brought together NTP and prison health officials from Latin America and the Caribbean, in order to sensitize these officials about the problem of TB in prison settings, and to provide them with tools to advocate for and implement control programs. PAHO's Regional TB Program and the Gorgas TB Initiative at UAB agreed to sponsor a second workshop in 2004 to measure progress of participating countries toward the implementation of their action plans.



Annexes

1. Agenda
2. List of Participants
3. Agreements

Annex 1: Agenda



International Workshop on TB in Prisons (Hotel Intercontinental, San Pedro Sula, Honduras, 11–13 August 2003)

Monday, 11 August 2003

8:30	30min	Registration	Ela Márquez, Coordinator, Gorgas/Honduras
9:00	40min	Welcome	Dr. Nohemí Paz, <i>Director, NTP, Honduras</i> Dr. Michael Kimerling, <i>Director, Gorgas TB Initiative at UAB</i>
		Opening Remarks	Representatives of: <i>Ministries of Health and Security of Honduras;</i> <i>PAHO/Honduras; USAID/Honduras</i>
9:40	25min	Tuberculosis: epidemiology, diagnosis and treatment	Dr. Rodolfo Rodríguez, <i>Regional Advisor on TB PAHO/WHO-Washington</i>
		TB in Latin America	
10:05	25 min	TB and HIV	Dr. David Zavala, <i>PAHO/WHO-Washington</i>
10:30	15 min	Break	
10:45	60 min	The Basis of Anti-tuberculosis Therapy and Multi-drug Resistant TB	Dr. M. Kimerling, <i>Gorgas/UAB</i>
11:45	60 min	Tuberculosis in Prisons: The Two Sides of the Wall	
12:45	60 min	Lunch	
1:45	40min	Introduction to Implementing a TB Control Program in Prisons	Dr. Mayra Arias, <i>Gorgas/UAB</i>
14:25	25min	Taking the First Steps, Part 1: Gaining and Maintaining Political Commitment	Dr. M. Kimerling, <i>Gorgas/UAB</i>
14:50	40min	Taking the First Steps, Part 2: Defining the Problem (Situation Analysis)	Hernán Reyes, <i>ICRC, Peru</i>
15:30	25min	Estimating the Burden of TB in Prisons	Vera Galesi, <i>São Paulo State TB Program</i>
15:55	15 min	Break - <i>Video Vignettes</i>	
16:10	60min	DOTS Expansion into the Prisons of Honduras	Dr. Nohemí Paz, <i>NTP, Honduras</i>
17:10		Adjournment	Dr. Nohemí Paz, <i>NTP, Honduras</i>

Tuesday, August 12th

8:30	40 min	Developing An Effective Action Plan	Erin Branigan, Gorgas/UAB
9:10	90min	Development of action plans by country representatives (group work)	E. Branigan, Dr. R. Rodriguez and PAHO staff
10:40	25min	Break	
11:05	30min	Group discussion of action plans (2 countries present their action plans)	Country representatives (to be selected)
11:35	40min	Documentation: The Essentials <ul style="list-style-type: none"> ▪ Data collection instruments (cards, registries) ▪ Documentation Review Exercise (group work) 	Dr. M. Arias, Gorgas/UAB Dr. Reniery España, NTP, Health Region #3, Honduras
12:15	60min	Lunch	
13:15	40min	Using Program Data for Decision Making	Dr. M. Kimerling, Gorgas/UAB
13:55	45min	Strengthening TB Control Programs in Prisons through Information, Education and Communication (IEC) Campaigns	Dr. Joan Mangan, Gorgas/UAB
14:40	30 min	Mexico's experience with TB control in prisons	Dr. Martín Castellanos, NTP, Mexico
15:10	25min	Break - Video Vignettes	
15:35	30 min	Colombia's experience with TB control in prisons	Dr. Alfonso Tenorio, Colombia
16:05	30 min	Venezuela's experience with TB control in prisons	Dr. Mercedes España, Venezuela
16:35	40 min	Evaluation: A Systematic Approach	Dr. J. Mangan, Gorgas/UAB
17:15		Adjourn	

Wednesday, 13 August 2004: Site Visit to San Pedro Sula Prison

8:30	30min	Depart from Hotel, Travel to Prison in San Pedro Sula	
9:00	2 hrs	Welcome	Dr. Santiago Interiano, Medical Director, San Pedro Sula Prison
		Tour of Facilities <ul style="list-style-type: none"> ▪ Laboratory; sputum microscopy ▪ Registry in Health Clinic ▪ Isolation Room ▪ IEC activities ▪ Meet with program volunteers - the cough registry system 	Dr. R España, NTP, Region #3
11:00	30min	Depart Prison, arrive hotel	
11:30	60 min	Drafting of Agreements for the Implementation of TB Control in Prisons	Dr. R. Rodriguez, PAHO/Washington
12:30	30min	Closing Remarks, Mural and Photo Displays, -Video Vignettes	

Annex 2: List of Participants



International Workshop on TB in Prisons
(Hotel Intercontinental, San Pedro Sula, Honduras, 11–13 August 2003)

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Velásquez, Dania Y.	Regional TB Coordinator	Juticalpa

Annex 3: Agreements



International Workshop on TB in Prisons (Hotel Intercontinental, San Pedro Sula, Honduras, 11–13 August 2003)

1. Political support should be obtained for undertaking tuberculosis control within the prison system.
2. Each country will present its Action Plan for TB control in Prisons to health authorities, the social-security administration and prison authorities.
3. TB control in prisons and Action Plans should complement the components of the DOTS strategy in accordance with the national protocols of each country.
4. It is necessary to obtain support from NGOs, donor agencies and other institutions who participate in TB control at the country level, in order to carry out the Action Plans.
5. The TB problem in prisons, as well as its control, should be undertaken as a joint activity between the Ministries responsible for such activities (prison authorities and Ministry of Health) of each country.
6. A joint plan for periodic monitoring and evaluation of the Action Plan should be developed by prisons, the Ministry of Health, and other institutions.
7. Local projects should be developed at the municipal, provincial and state level in order to guarantee the execution of the Action Plan.
8. An IEC Plan should be a priority for the successful implementation and continuation of the Action Plan, guaranteeing the participation of health staff, prison staff, inmates, their families and the community.
9. The exchange of experience and information should be promoted between countries and through the efforts of the PAHO Regional Program and the Gorgas TB Initiative.
10. A Regional Meeting should be held once a year to evaluate the progress made towards the implementation of Action Plans developed in San Pedro Sula.
11. The location of the next meeting will be in the country that has demonstrated the most progress towards the implementation of its Action Plan.

Annex 4: Summary of Results of the Workshop Evaluation

There were 28 international participants, excluding the organizers; 21 completed evaluation questionnaire about the workshop:



Strengths

- The participants felt the workshop was informative and beneficial.
- The development and discussion of action plans as well as the direct observation of a functioning TB control program at San Pedro Prison seem to have been motivational for the participants.

Weaknesses

- Communication between the participants and the event organizers should have begun earlier.
- The late selection of participants and new visa restrictions imposed by the US government on travelers transiting through US airports lead to:
 - Higher plane ticket costs.
 - Longer travel times for participants.
- The time dedicated to the development of action plans was too short.
- Despite the availability of simultaneous translation, language problems made some participants remark that the presenters should have spoken more slowly.

Ways to improve the program (agenda) of a follow-up conference

- Dedicate ½ to 1 day of the agenda to:
 - Fine-tuning action plans.
 - Discuss the successes and failures in the implementation of the plans.
 - Evaluate the reasons for failure.
 - Exchange ideas for best practices (strategies).
- Include presentations on the following topics:
 - Obtaining external financing – elements of successful proposals – bring authors of proposals that have received financing to participate, and present how their proposals were developed in order to obtain financing, what they included in their proposals, how to write proposals.
 - Practical guidelines to initiate/reinforce cooperative agreements between the Ministries of Health and Security/Justice/Interior: we could invite a minister of health and or a representative of the ministry to present his/her perspective on decision-making and how to get MOH's workplans included in the plans of other ministries.
 - For those countries that have funds, practical guidelines for organizing an infrastructure for a prison program, human resources, and who prioritize activities for program implementation.
- Dedicate a half day of the program (agenda) for the participating countries to present information related to TB control in prisons in their countries.
 - The presentations could be standardized, for instance by:
 - Providing a standard format for each presentation, so that a part of the presentation would be standardized (epidemiology, DOTS implementation strategies) and one part of the presentation would be more individualized, to show specific/unique aspects of each country or program.

Threats

- How to sustain the motivation of participants to initiate/expand/improve TB control programs in prisons due to a lack of political commitment, or a lack of cooperation between government officials, and/or a lack of funding.
 - There is a necessity to evaluate ways in which we as "experts" can assist NTP personnel in countries where such problems exist.