

“PAHO’s Pilot TB Program: Framework of TB Control in Large Cities”

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PAHO/WHO



**Organización
Panamericana
de la Salud**



**Organización
Mundial de la Salud**

OFICINA REGIONAL PARA LAS **Américas**

The Americas

Content

- **TB control achievements and challenges in the Americas**
- **TB control in cities - PAHO's initiative**

The Americas – Millennium Development Goals

Achieved before 2015

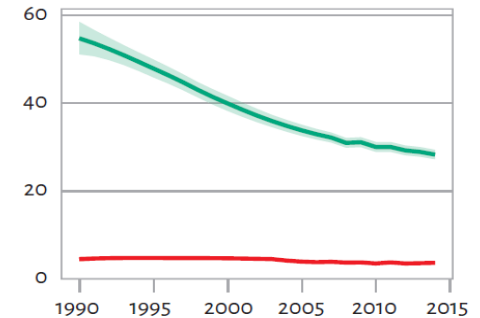
Objective 6:

- *Objective 6c: To halt and reverse the incidence of TB*
- *Indicator 6.9: Incidence, prevalence and death rates associated with TB*

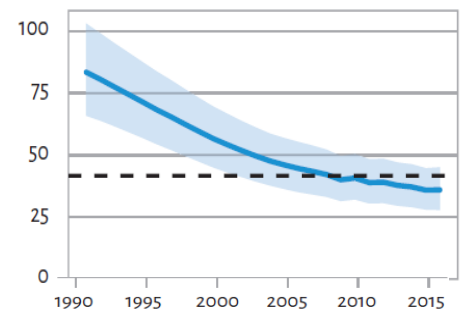
Partially achieved in 2015

- *Indicator 6.10: Proportion of TB cases detected and cured under DOTS*

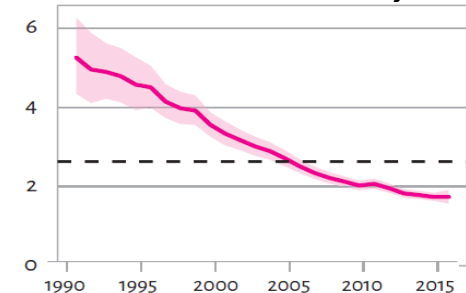
Estimated TB incidencia



Estimated TB prevalence



Estimated TB mortality



The Americas - Challenges in post 2015

In 2014

65,000 TB patients were not diagnosed or notified

17,000 TB patients die for this cause

75% of the 2013 cohort of TB new patients were treated successfully

54% of MDR-TB cases were diagnosed

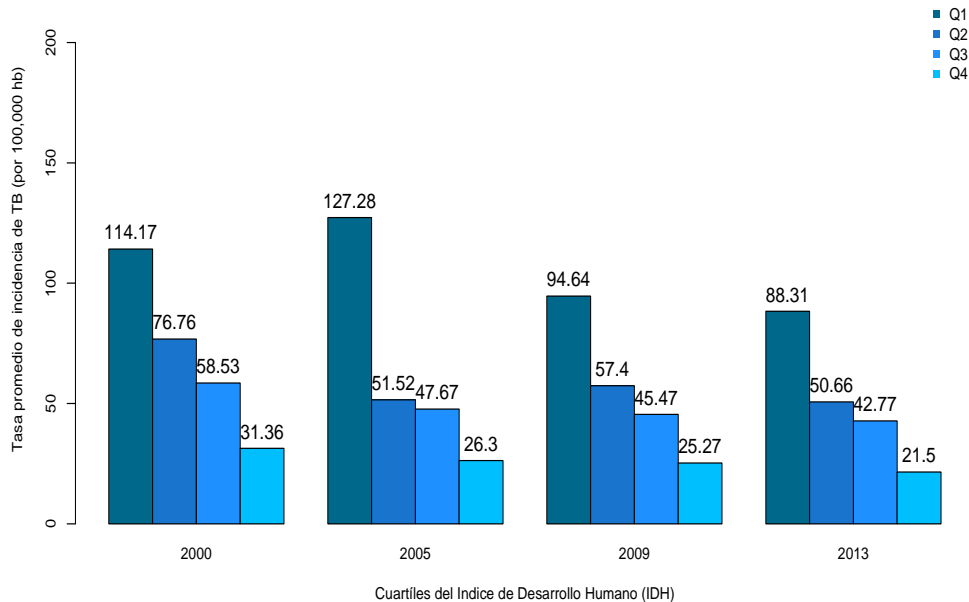
These figures reflect problems of health care access and quality

Solution: “Universal Health Coverage Strategy”

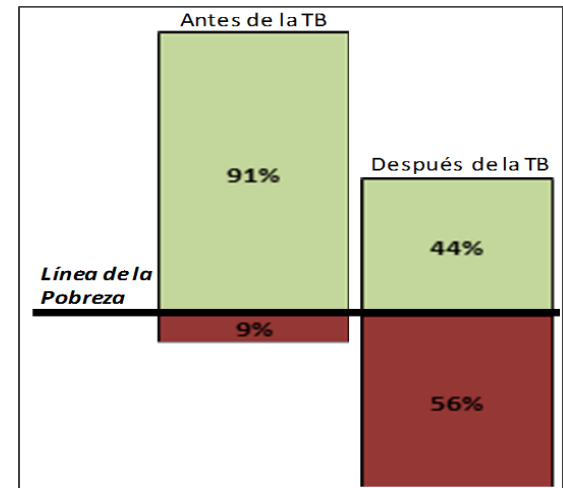
The Americas - Challenges in post 2015

Inequality and poverty

Gradients of inequality in TB incidence rate by quartiles of countries grouped according to HDI. The Americas: 2000, 2005, 2009, and 2013



% of TB patients above and below the poverty line. Dominican Republic**



TB inequality didn't change over time.....

** Mauch, R. Melgen, B. Marcelino, I. Acosta, E. Klinkenberg y P. Suarez, «Tuberculosis patients in the Dominican Republic face severe direct and indirect costs and need social protection,» Rev Panam Salud Publica, vol. 33, nº 5, p. 332-9, 2013.

The Americas - Challenges in post 2015

Epidemiological transition:

↑ of non transmissible diseases:

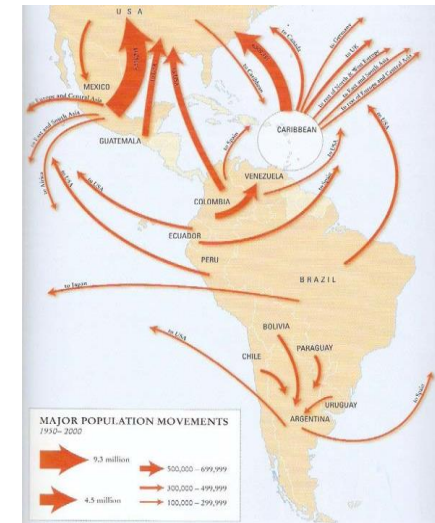
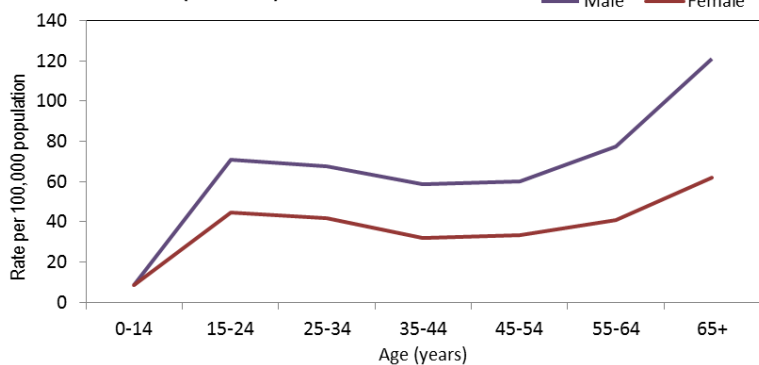
diabetes mellitus, alcoholism, drug addictions, smoking

MEXICO 2015	
Comorbidities	% of TB cases
HIV infection	6.3%
Alcoholism	4.8%
Diabetes	23.2%
Under nutrition	9.7%

The demographic changes

- Aging population
- Increased rate of migration
- Rapid urbanization

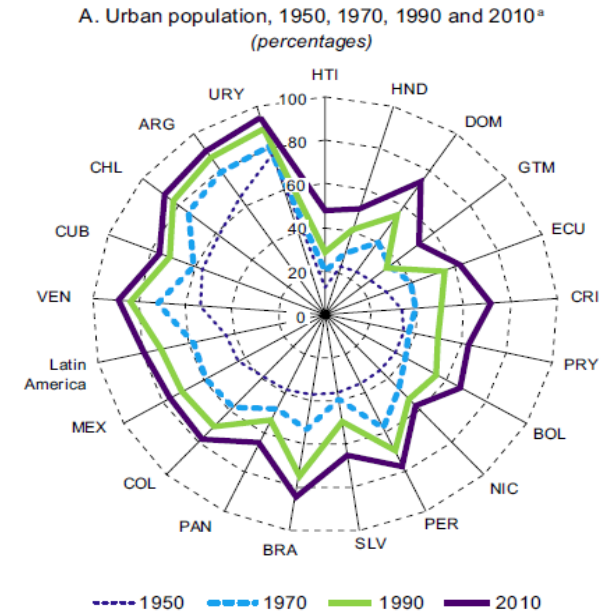
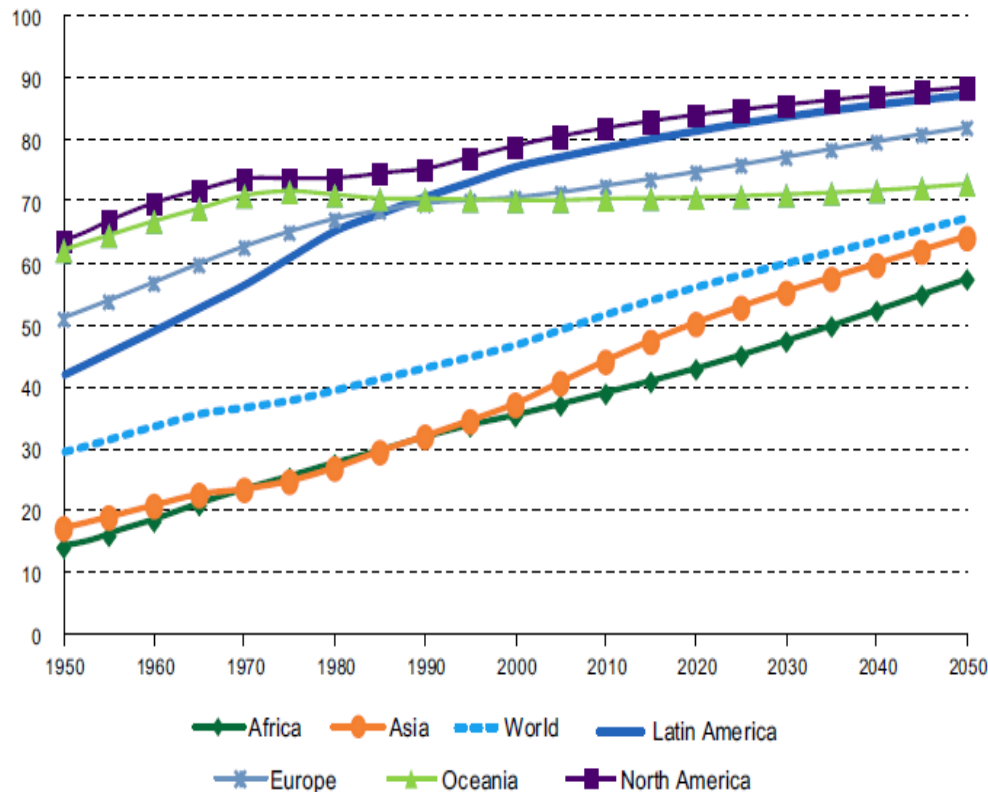
South America (Andean)



South- South migration is ↑
 • 57% (4 million)

The Americas - Challenges in post 2015

World and selected regions: urban population estimates and projections, 1950-2050
(Percentages)



Source: United Nations, *World Urbanization Prospects: The 2011 Revision* [online] <http://esa.un.org/unup/>, 2012 and Latin American and Caribbean Demographic Centre (CELADE)-Population Division of ECLAC, population estimates and projections, 2013 revision.

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The Americas - Challenges in post 2015

Rapid Urbanization

- *Economic activity is concentrated in the cities (60-80% of GDP)*
- *Relative incidence of urban poverty is ↓ but the absolute number of poor, is increasing (2012, 127 million were poor).*
- *One out of every four urban dwellers is poor.*
- *27% of the population lives in slums (117 million people).*
- *Cities of LAC are the most violent and inequitable in the world.*
- *The accelerated growth of slums:*
 - *invasion of agricultural and areas geographically unsuitable for human settlement*
 - *environmental and ecological changes that cause greater vulnerability to natural disasters and environmental pollution*
- *The provision of drinking water, sewerage, and electricity in LAC, don't cover all the poor population in cities.*



The Americas - Challenges in post 2015

TB and urbanization

Lima – Callao Metropolis PERU

<i>% of the total population:</i>	31%
<i>% of the total TB cases notified:</i>	59%
<i>% of the total MDR-TB cases notified:</i>	82%



Montevideo URUGUAY

<i>% of the total population:</i>	38%
<i>% of the total TB cases notified:</i>	60%
<i>% of the total MDR-TB cases notified:</i>	90%



The Americas – Response 2013 ...to now

Main barriers to TB control in large cities

- 1. Fragmentation and multiplicity of health providers:** (i) public sector providers - health ministries; (ii) services dependent on municipalities; (iii) social security providers; (iv) providers in the prison- justice or defense ministries; (v) not-for-profit health-care providers; and (vi) for-profit health-care providers.
- 2. Multiple health authorities:** health services that respond hierarchically to different authorities (ministry of health, social security institute, municipality, state government, etc.).
- 3. Lack of comprehensive health services:** marginalized populations are vulnerable to TB, diabetes mellitus (DM), HIV infection, malnutrition, obesity, alcoholism, illegal drug use.....
- 4. Diverse patient populations:** different ethnic (racial, religious, and linguistic) populations that have their own beliefs, habits, and customs.
- 5. Poverty and marginalization:** limited access to health care (TB diagnosis and treatment). Homeless, indigenous people, illegal immigrants, afro-descends, poor peoples can suffer discrimination.
- 6. The lack of an intersectoral approach to improving basic living and health conditions:** people living in slums should have access to water, sanitation, and electricity, etc., safe and healthy housing and living environments, and health services..
- 7. Violence in large cities of LAC:** secondary to the social pathologies that lead slum populations to crime, drug addiction, and alcoholism..

The Americas – Response 2013 ...to now

FRAMEWORK FOR TUBERCULOSIS CONTROL IN LARGE CITIES OF LATIN AMERICA AND THE CARIBBEAN

1. Strengthen **political commitment** at the national and local levels, and coordinate the different health authorities.
2. Conduct **epidemiological mapping of the TB situation** in cities and identify at-risk populations.
3. **Survey and map** the health system and existing **health-care providers**.
4. **Adapt health care** to the needs of the populations at risk.
5. Take an **interprogrammatic approach to TB** control to guarantee comprehensive patient care.
6. Take an **intersectoral approach** to TB control and include **TB in social protection programs**.
7. Promote **civil society engagement** in TB prevention and control activities.
8. Establish a routine **monitoring and evaluation system**.

Framework for tuberculosis control in large cities of Latin America and the Caribbean

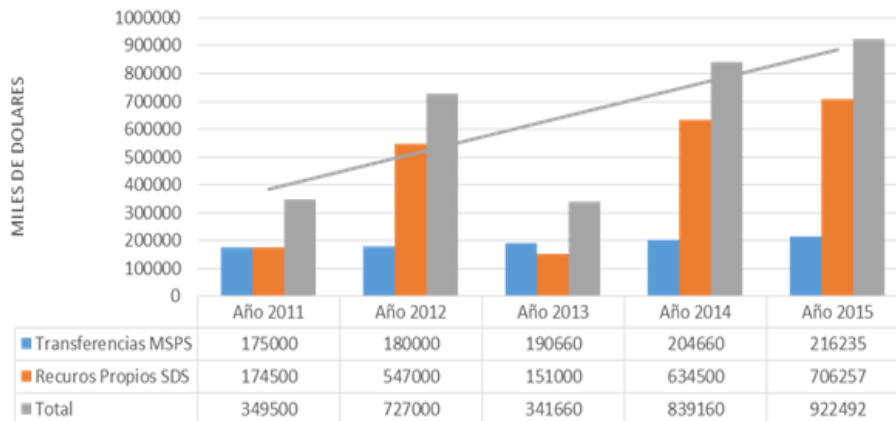
Steps for the implementation of the Framework

1. *Set up a **Committee for TB** control in the selected city of intervention.*
2. *Conduct a **situation analysis** to:*
 - a. *identify **health authorities** working in the city,*
 - b. *determine the TB situation (**epidemiological mapping**) to identify the intervention areas,*
 - c. *identify of **at-risk populations**,*
 - d. *map the **health system** and different **health-care providers**,*
 - e. *identify **the needs** of the populations at risk and the opportunities for **inter-programatic** work,*
 - f. *analyze the **plans** of the different sectors and **social protection programs**.*
 - g. *map the **community organizations** and determine how to involve them,*
3. *Introduce TB in the **intersectoral committees***
4. *Develop and implement a **Work Plan for TB** control in the city*

Framework for tuberculosis control in large cities of Latin America and the Caribbean

1. Strengthen **political commitment** at the national and local levels, and coordinate the different health authorities.

**Financial resources in US dollars
Bogota DC
2011 - 2015**



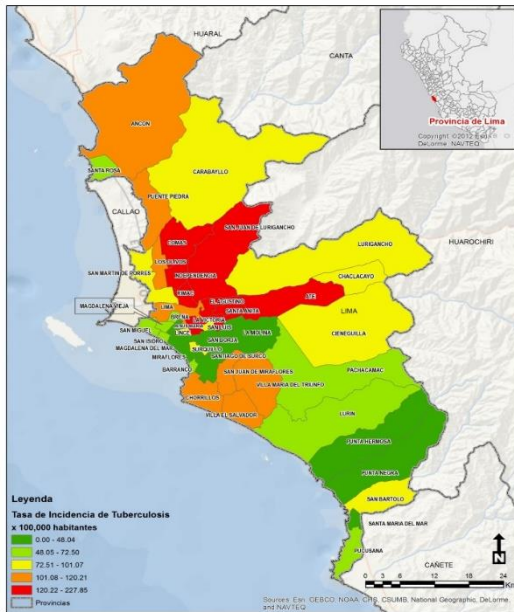
«PLAN PARA LA REDUCCIÓN DE LA TUBERCULOSIS EN EL DISTRITO DE SAN JUAN DE LURIGANCHO, LIMA 2013 – 2016»



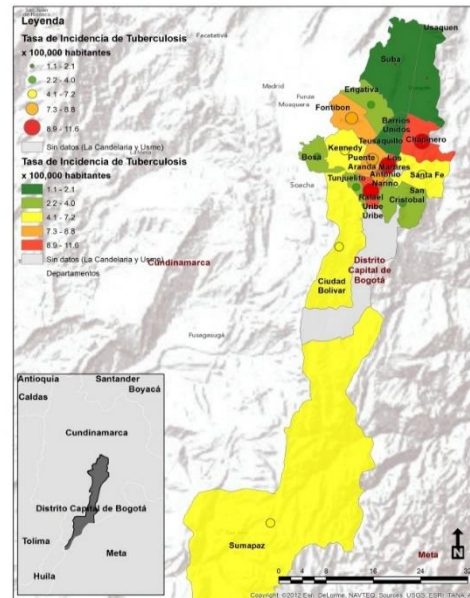
Framework for tuberculosis control in large cities of Latin America and the Caribbean

2. Conduct epidemiological mapping of the TB situation in cities and identify at-risk populations.

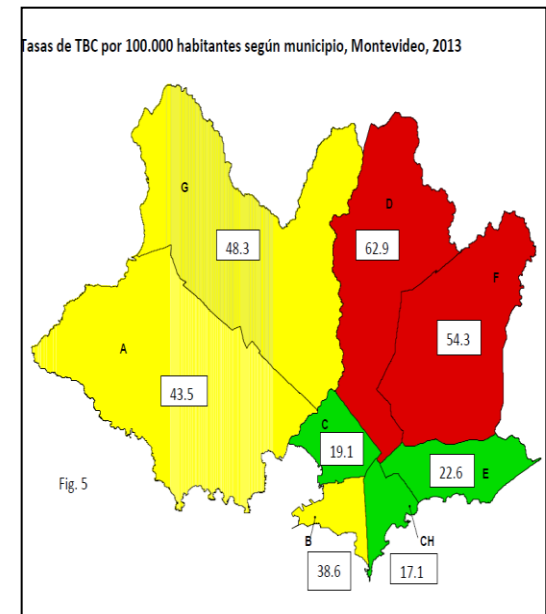
Lima - Perú



Bogotá - Colombia



Montevideo - Uruguay



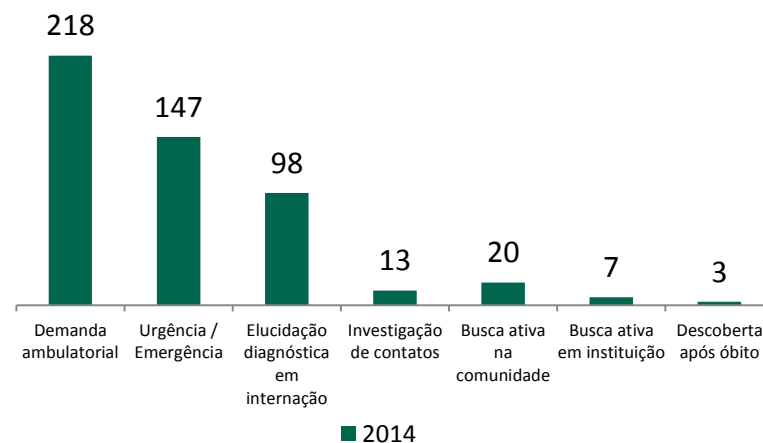
Framework for tuberculosis control in large cities of Latin America and the Caribbean

3. Survey and map the health system and existing health-care providers.

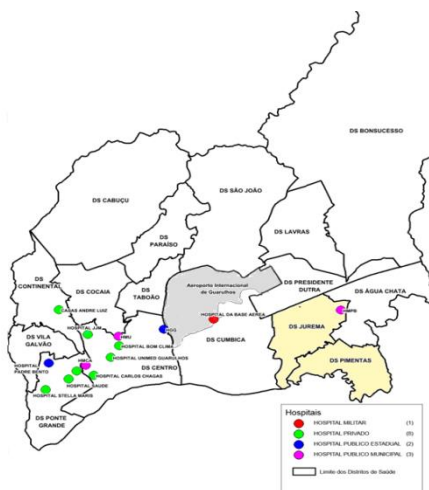
Guarulhos- Brazil

Health System Structure -Guaruhlos

2004	2015
64 Health Centers	70 Health Centers
8 Health Centers were treating TB	All Health Centers were treating TB



Hospitals' network



Health Centers



Framework for tuberculosis control in large cities of Latin America and the Caribbean

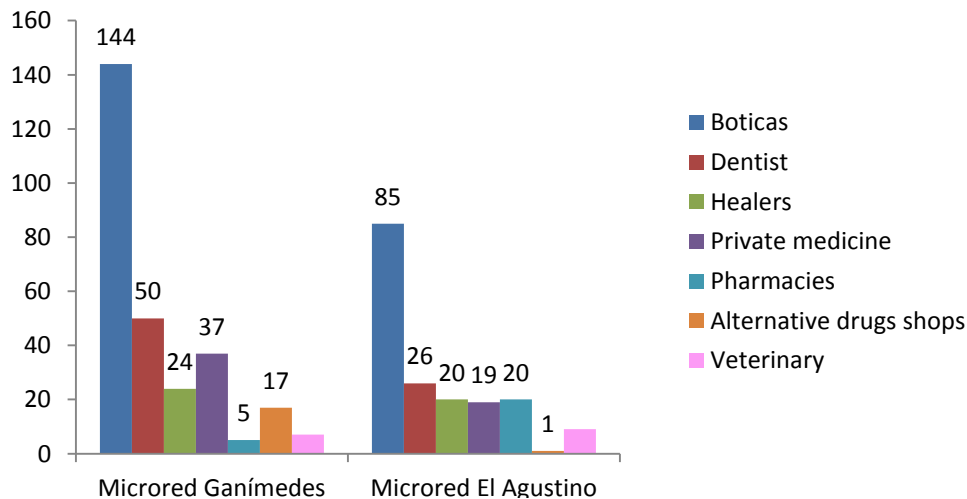
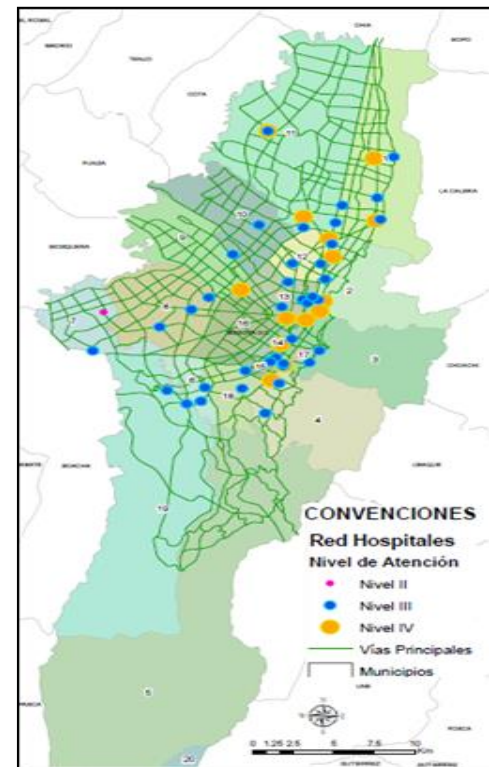
3. Survey and map the health system and existing health-care providers.

Lima - Perú



Bogota- Colombia

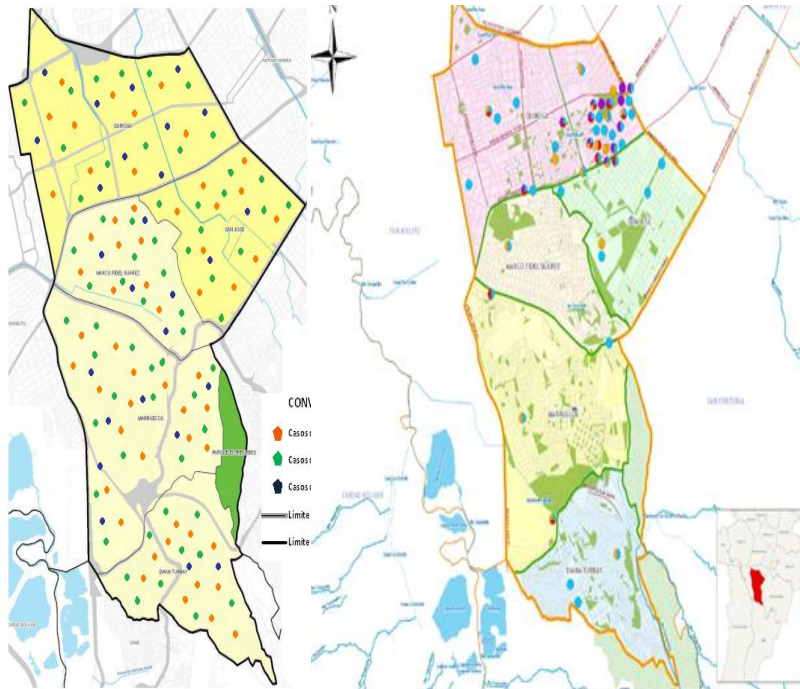
Hospitals' network



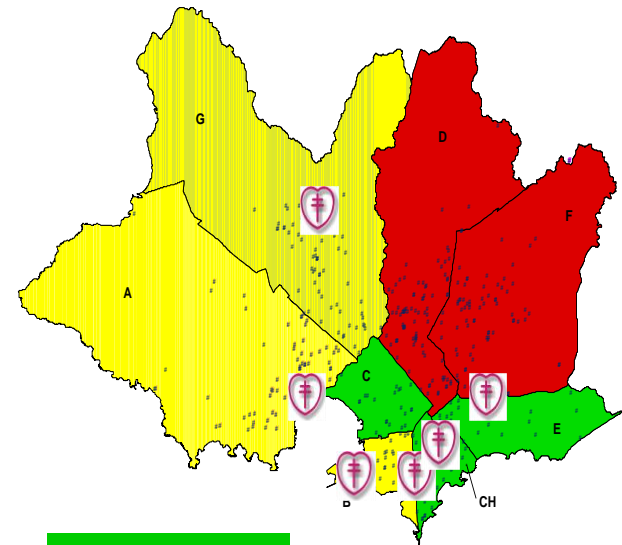
Framework for tuberculosis control in large cities of Latin America and the Caribbean

4. Adapt health care to the needs of the populations at risk.

Bogotá - Colombia



Montevideo - Uruguay



Low: $< 25 \times 10^5$

Medium: $\geq 25 \times 10^5$

High: $\geq 50 \times 10^5$

Framework for tuberculosis control in large cities of Latin America and the Caribbean

5. Take an **interprogrammatic approach to TB control** to guarantee comprehensive patient care.

COLOMBIA

CAMAD Centers of Health Care for Substance Abuse and Alcohol Abuse people.

Active TB detection among these people.



MEXICO

Integrated care of TB and Diabetes Mellitus.



Framework for tuberculosis control in large cities of Latin America and the Caribbean

6. Take an **intersectoral approach** to TB control and include **TB in social protection programs**.



MULTISECTORAL COMMITTEE – El Agostino



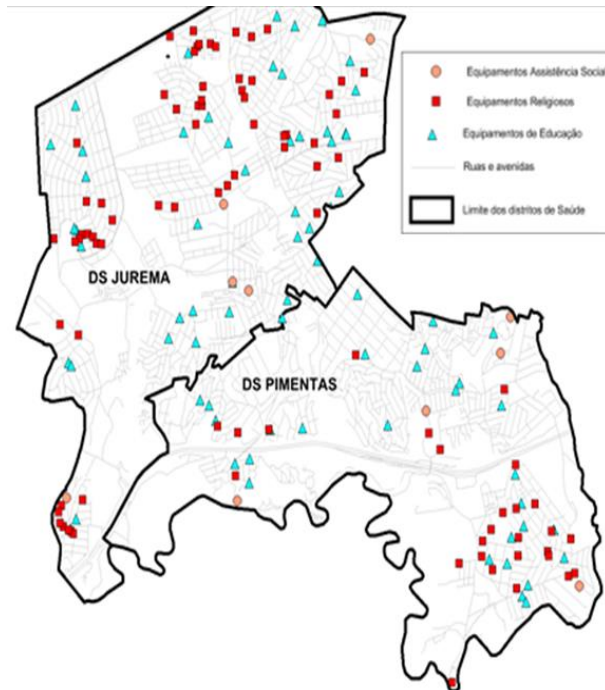
MULTISECTORAL COMMITTEE – SJ de Lurigancho

Framework for tuberculosis control in large cities of Latin America and the Caribbean

7. Promote *civil society engagement* in TB prevention and control activities.

LIMA - PERU

GUARULHOS – BRAZIL
Social Groups



ASPAT-Perú (ex-patients Association Lima)
International Prix "Kochon de TB" 2015



Framework for tuberculosis control in large cities of Latin America and the Caribbean

8. Establish a routine *monitoring and evaluation system*.

GUARULHOS - BRAZIL



Set up Committees of TB Mortality :

To investigate all TB deaths,

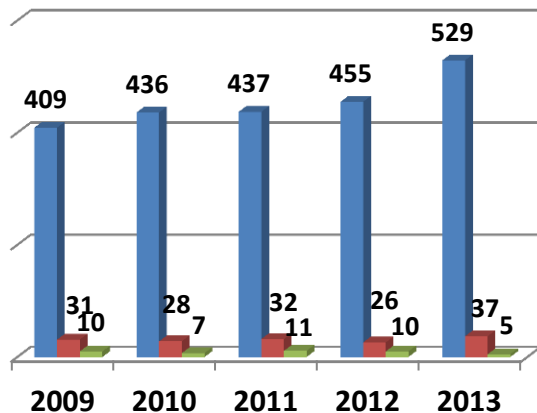
To evaluate the quality of care,

Improve coordination with other institutions

BOGOTA - COLOMBIA

LOCALIDADES	2012				2013			
	Confirmados	Incidencia	Fallecidos EEVV	Letalidad	Confirmados	Incidencia	Fallecidos EEVV	Letalidad
SUBA	121	11,06	9	7%	133	11,87	7	5%
KENNEDY	95	9,22	9	9%	106	10,17	12	11%
CIUDAD BOLIVAR	82	12,58	6	7%	80	12,06	13	16%
BOSA	59	9,87	5	8%	65	10,61	3	5%
ENGATIVA	86	10,10	15	17%	119	13,85	10	8%
SAN CRISTOBAL	87	21,26	6	7%	79	19,34	7	9%
USAQUEN	75	15,63	6	8%	82	16,92	5	6%
RAFAEL URIBE	62	16,43	10	16%	72	19,11	5	7%
FONTIBON	32	9,04	2	6%	38	10,49	2	5%
USME	34	8,49	3	9%	44	10,58	4	9%
PUENTE ARANDA	64	24,79	2	3%	46	17,82	4	9%
BARRIOS UNIDOS	19	8,09	1	5%	21	8,88	1	5%
ANTONIO NARIÑO	34	31,35	2	6%	42	38,67	1	2%
SANTA FE	44	40,02	4	9%	43	39,11	4	9%
TUNJUELITO	28	13,89	2	7%	24	11,93	3	13%
CHAPINERO	15	11,10	1	7%	18	13,20	1	6%
MARTIRES	25	25,46	3	12%	29	29,46	4	14%
TEUSAQUILLO	15	10,14	0	0%	26	17,43	1	4%
LA CANDELARIA	12	49,67	2	17%	11	45,53	3	27%
SUMAPAZ	0	0,00	0	0%	0	0,00	0	0%
Bogota sin direccion	11	0,00	12	0%	0	0,00	0	0%
TOTAL	1000	13,20	100	10%	1078	14,05	90	8%

■ casos notif ■ óbito notif ■ óbitos hiv



2013:

TB web – 37 deats notified

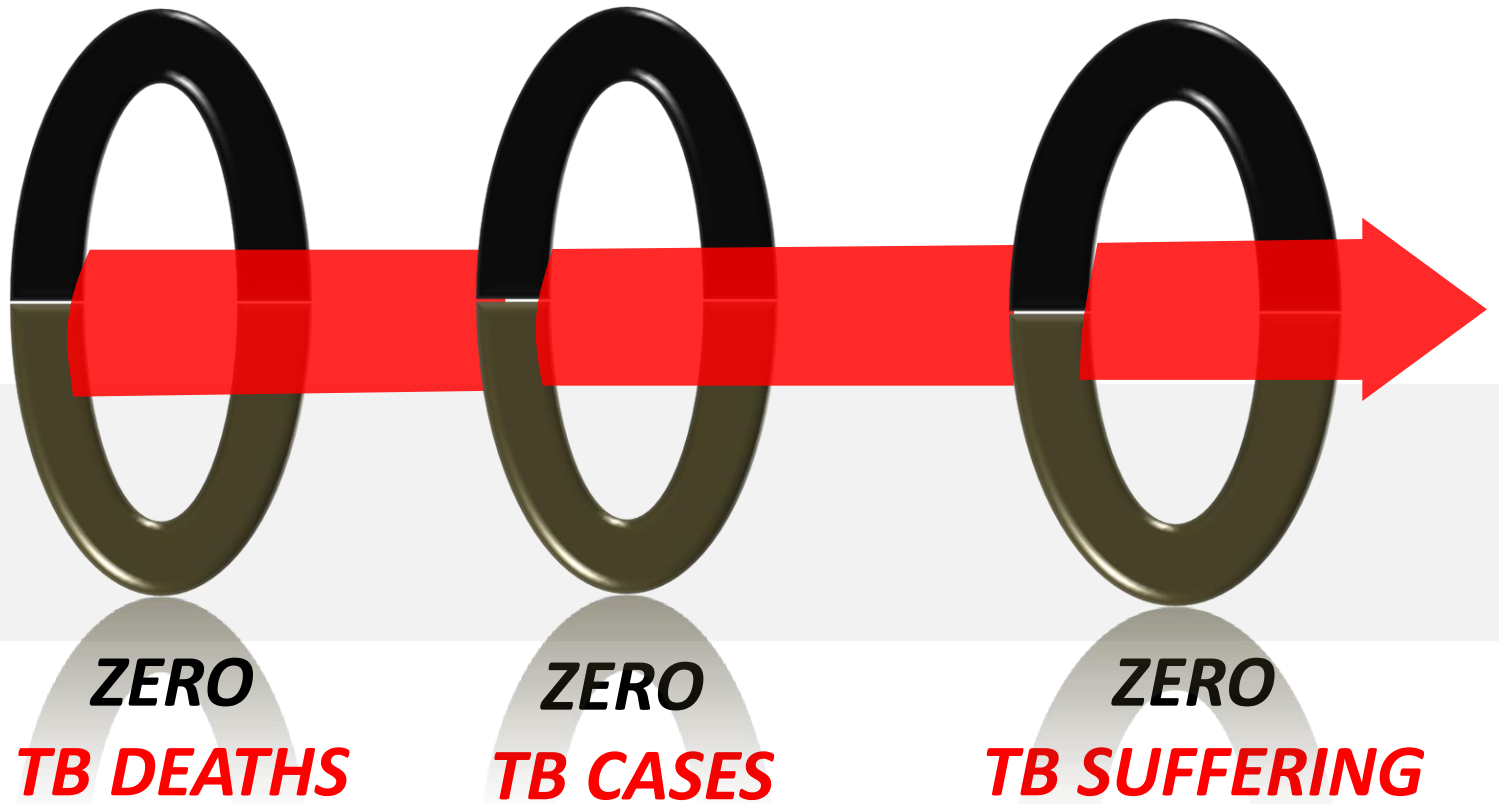
SIM– 67 deats notified

TB control in cities – Lessons learned so far

- 1. TB control in cities is now an important part in the agenda of the Ministry of Health and of the local governments,***
- 2. The intersectoral work in TB control is an essential aspect in the plans of TB control in cities,***
- 3. The initiative has been owned by national and local governments of the 8 counties of the Region and it has now expanded to other cities in pilot countries like Colombia,***
- 4. The initiative could contribute to eliminate the TB catastrophic costs in cities,***
- 5. Community involvement facilitates the implementation of the initiative and gives it more ownership.***

Vision

A WORLD FREE OF TB



La **TB** está aún presente
en nuestras comunidades.



THANK YOU