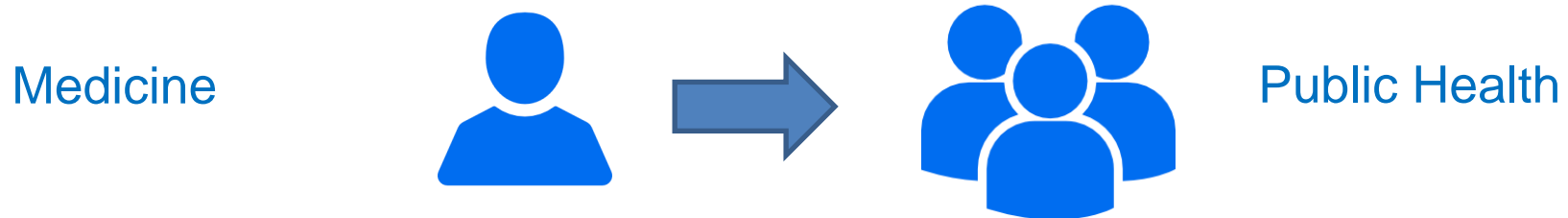




# Public Health Service model











## Background and definitions

- **Background:** «Densaulyk» 2016-2019 State healthcare development program: formation and development of the Public Health Service
- **WHO definition:** «Public health - the art and science of preventing disease, prolonging life and promoting health through the organized efforts of society»



- The list of **10 Essential Public Health Operations** was approved by Member States at the 62nd session of the WHO Regional Committee in 2012

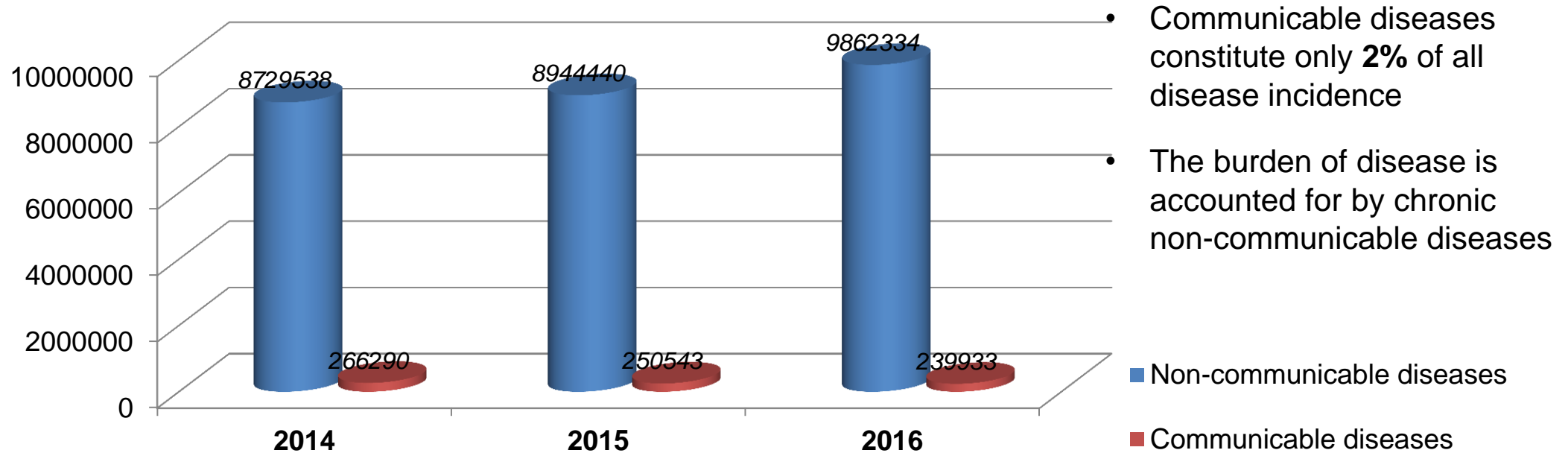
# Essential public health operations defined by WHO

-  **1:** Surveillance of population health and well-being
-  **2:** Monitoring and response to health hazards and emergencies
-  **3:** Health protection, including environmental, occupational and food safety and others
-  **4:** Health promotion, including action to address social determinants and health inequity
-  **5:** Disease prevention, including early detection of illness
-  **6:** Assuring governance for health
-  **7:** Assuring a competent public health workforce
-  **8:** Assuring organizational structures and financing
-  **9:** Information, communication and social mobilization for health
-  **10:** Advancing public health research to inform policy and practice

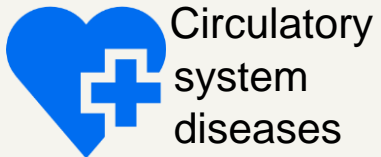
# Public Health Services worldwide

Страна	Название соответствующей службы	
	USA	United States Public Health Service
	England	Public Health England
	France	Santé publique France
	Canada	Public Health Agency of Canada
	Israel	Israel Center for Disease Control

# Communicable and non-communicable disease incidence



## Major non-communicable diseases



Circulatory system diseases



Malignant neoplasms



Trauma and injury

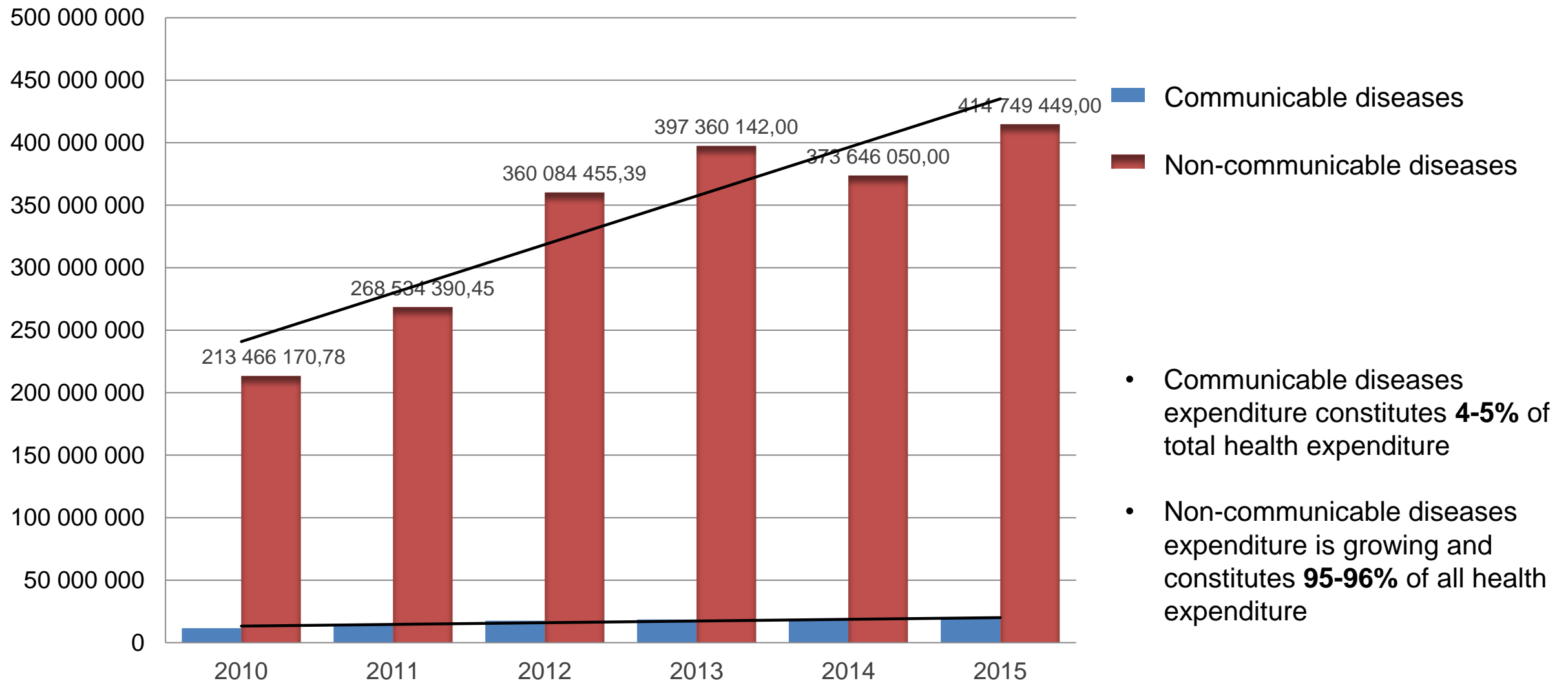


Diabetes

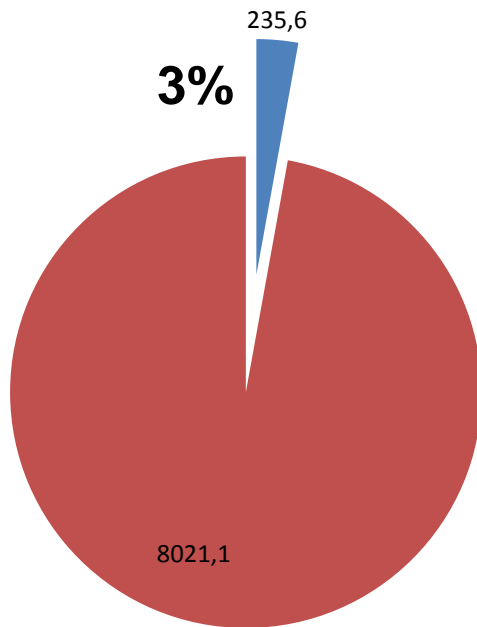


Chronic obstructive pulmonary disease

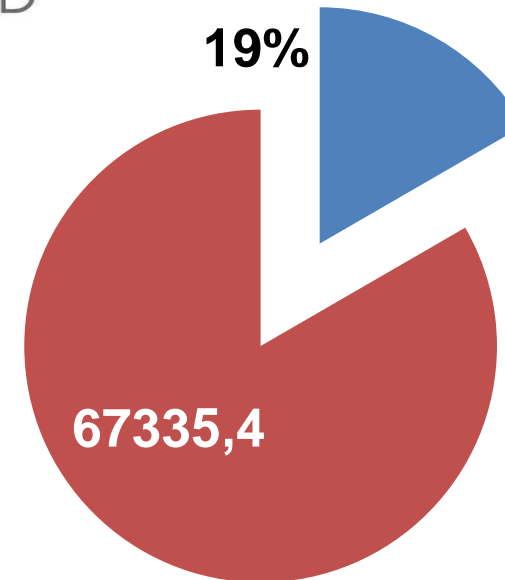
# Communicable diseases and non-communicable diseases expenditure



# Preventive measures expenditure



- Preventive measures expenditure (in thousands USD)
- Current health expenditure (in thousands USD)



- Preventive measures expenditure (in thousands USD)
- Current health expenditure (in thousands USD)













## Preventive measures include:

- Informative, educational and consultative programs
- Immunization programs
- Early disease detection/screening programs
- Communicable, non-communicable disease and injury surveillance
- Health environment programs

# Conceptual framework of the Public Health Service

**Mission: protection and promotion of health of the population of Kazakhstan through recognized measures**

Objective 1: Analytical evidence-based work	Objective 2: Implementation of health promotion measures	Цель 3: Institutional development of the Public Health Service
<p> Communicable and non-communicable disease surveillance</p> <p> Public health research</p>	<p> Advocacy and communication</p> <p> Monitoring and response to public health emergencies</p> <p> Health protection, including environmental, occupational, food safety and others</p> <p> Health promotion</p> <p> Disease prevention, including early detection of illness</p>	<p> Assuring a sufficient and competent public health workforce</p> <p> Assuring governance for health and wellbeing</p> <p> Assuring sustainable organizational structures and financing</p>

**10 EPHOs**



# Cross-sectoral implementation of principal areas of activity of Public Health Service



Coordinating body: **National Coordination Council on Health Protection under the Government of the Republic of Kazakhstan**



Operating body: **Ministry of Health of the Republic of Kazakhstan**

## Ministry of Information and Communications



- Publishing information materials on behavioral risk factor prevention

## Ministry of Agriculture



- Assuring food safety
- Soil and natural water reservoir contamination control

## Ministry of Internal Affairs



- Preventing road traffic accidents
- Assuring compliance with anti-tobacco & anti-alcohol legislation
- Narcotics control
- Preventing and responding to emergencies
- Preventing tuberculosis in the correctional system
- Control of import of contraband products

## Ministry of Culture and Sports



- Stimulating physical activity
- Sports propaganda
- Engaging children in sports

## Ministry of Energy



- Monitoring environmental media
- Waste management
- Preventing air contamination

## Ministry of Education and Science



- Educating children on healthy lifestyles
- Implementing behavioral risk factors and suicide prevention programs in schools

## Ministry of Finance










- Increasing excise duties on alcohol and tobacco products
- Control of alcohol and tobacco products trade

## Local executive bodies, NGOs, businesses



- Construction of bicycle lanes, common areas with sports grounds and exercise equipment
- Access to drinking water, sewerage, utilization of domestic waste, heating, power supply etc
- Implementation of the WHO Healthy City program

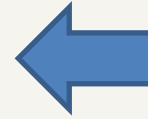
# Public Health Service structure

Republican level	Regional level
National Coordination Council on the protection of population's health 	Interdepartmental coordination councils on the protection of population's health
Ministry of Health 	Departments of Health
Committee for Protection of Public Health 	Departments of Committee for Protection of Public Health
Department of Strategic Development and Public Health of the Ministry of Health 	Public Health Divisions at the Departments of Health
Central executive bodies (Ministry of Culture & Sports, Ministry of Information & Communications, Ministry of Internal Affairs, Ministry of Education & Science, Ministry of Agriculture, Ministry of Investment and Development) 	Local executive bodies
National Center for Expertise 	Regional branches
Public Health Research Center 	Healthy Lifestyle Development Centers

# Creation of the National Public Health Center

**Mission** – strengthening the capacity of the public health service, disease control and prevention

Creation of the **NPHC** by merging the **National Center for Problems of Healthy Lifestyle Development** with the following enterprises (branches)



- **Hygiene and epidemiology research center named after K. Zhumatov**
- **Kazakh research center for quarantine and zoonotic diseases named after M. Aikimbayev**

## Objectives and duties of the National Public Health Center



1. Coordination of the Public Health Service activities



2. Monitoring communicable and non-communicable diseases



3. Evaluating the risks of the effects of environmental factors on population health



4. Developing disease management programs



5. Training the Public Health Service workforce



6. Public health research and developing methods of influencing the population health

# Principal areas of activity of Public Health Service

## 1. Forming the legislative framework and budgetary programs

*1.1. Deregulation of control and supervision duties with refocusing on preventive activity*

## 2. Developing the List of services of the Public Health Service

*(similar to the List of guaranteed volume of free medical care)*

## 3. Strengthening the capacity of the Public Health Service

*3.1. Developing the infrastructure of the Public Health Service*

*3.2. Creating a unified IT-platform of the Public Health Service*

*3.3. Developing the workforce capacity of the Public Health Service*

## 4. Developing public-private partnership through involvement of business

# Stimulating business activity in the health industry



Fitness centers, sports clubs, swimming pools



Healthy (eco-) food: deliveries, production, restaurants



Active leisure and eco-tourism (infrastructure, accessories)



Occupational safety: manufacturing of safety products; private laboratories



IT-products, remote health monitoring solutions



Mass media: advertising, billboards, shows, programs (healthy lifestyle image)

# «Creation of the Public Health Service» project

## Intermediate results

Key timelines	Achievements	Measures
<b>«Swift victories – 100 days»</b> <b>June 2017</b>	<ul style="list-style-type: none"> <li>Public Health Service model</li> <li>Guidelines on evaluating the Service's activity based on international practice</li> <li>Amendment proposals for Code of Laws and other legal acts</li> </ul>	<ul style="list-style-type: none"> <li>Adopted structure, purpose, objectives of the Public Health Service</li> <li>Workforce capacity: candidate pool for employment within the institutions of the Public Health Service</li> <li>Adopted roadmap and project network (planning the Public Health Service activity)</li> </ul>
<b>«2017 victories»</b> <b>December 2017</b>	<ul style="list-style-type: none"> <li>Institutional basis of the Public Health Service (restructuring and merging of institutions)</li> <li>Legal framework for the operation of the Public Health Service</li> <li>List of services of the Public Health Service</li> </ul>	<ul style="list-style-type: none"> <li>Formation of Public Health Research Center; draft order «On introduction of amendments to Order «On introduction of nomenclature of healthcare organizations»»</li> <li>Development of a unified IT-platform of the Public Health Service</li> <li>Amendment draft for the «On public health and health care system» Code</li> <li>Public Health Service financing (budgetary program)</li> </ul>
<b>«500 days victories»</b> <b>July 2018</b>	<ul style="list-style-type: none"> <li>Public Health Service activity evaluation</li> <li>Creation of a Unified budgetary program to support the Public Health Service</li> </ul>	<ul style="list-style-type: none"> <li>Public Health Service operating on the basis of a unified public health service IT-platform</li> </ul>

# Public health service functions and expected results

Indicators	2016 KPI	2017 KPI	2018 KPI	2019 KPI
<b>Life expectancy</b>	71,8	72,2	72,6	73 года
<b>Reducing population mortality</b> (per 100 000) from: <ul style="list-style-type: none"> <li>diseases of the circulatory system</li> <li>malignant neoplasms;</li> <li>injuries &amp; accidents</li> </ul>	203,1 93,5 84,9	201,7 93,3 82,3	200,2 93,1 79,8	200,0; up to 92,9; up to 77,5
<b>Vaccination coverage</b> in accordance with the national schedule (%)	90	93	95	≤95
Reducing <b>obesity</b> prevalence (per 100 000)	256,5	243,6	231,4	220
Increasing the share of the population engaging in <b>physical training and sports</b> (%)	27,0	28,0	29,0	≤30
Access to high-quality <b>drinking</b> water for rural residents (%)	73	75	78	≤80
Access to primary care and <b>planned parenthood services</b> for women of reproductive age (%)	85	90	95	100
Reducing <b>alcohol</b> consumption level (equiv. liters of pure alcohol per person)	6	5,5	5	4
Reducing <b>tobacco smoking</b> prevalence (% of tobacco smokers aged ≥15)	22	20	19	≤18
Reducing the number of <b>road traffic accidents</b> with injuries (no of cases)	19570	19178	18794	18 418
<b>HIV</b> prevalence in people aged 15-49 (%)	0,26	0,33	0,41	0,51
Tuberculosis incidence (per 100 000)	63,1	61,5	59,9	57,0