

SALUD

SECRETARÍA DE SALUD



Public Health Challenges In Mexico

Dr. Pablo Kuri Morales
***Undersecretary of Prevention
and Health Promotion***

September, 2016

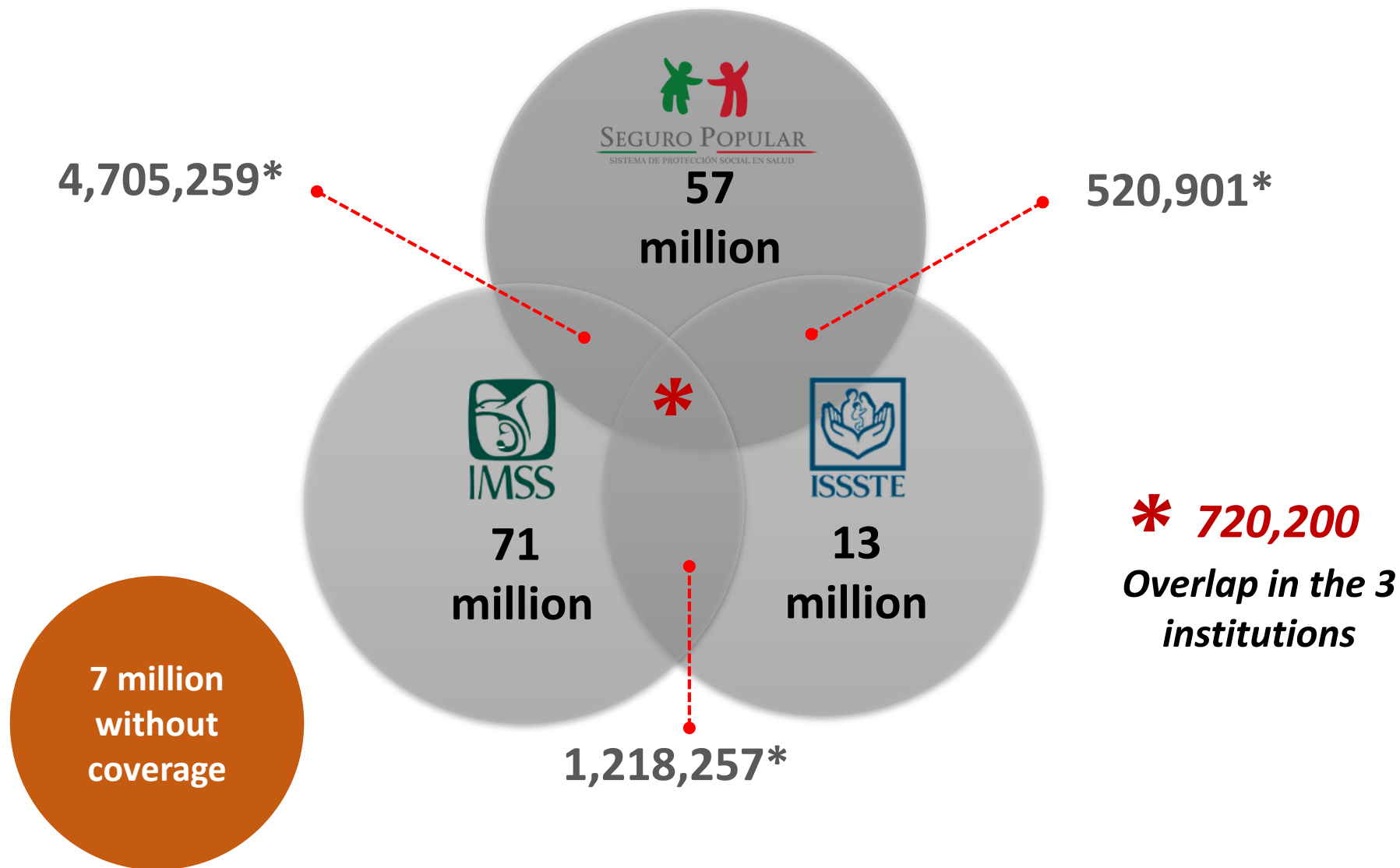
Federal Government



- Health States Services (SESAS)
- Private Health Services

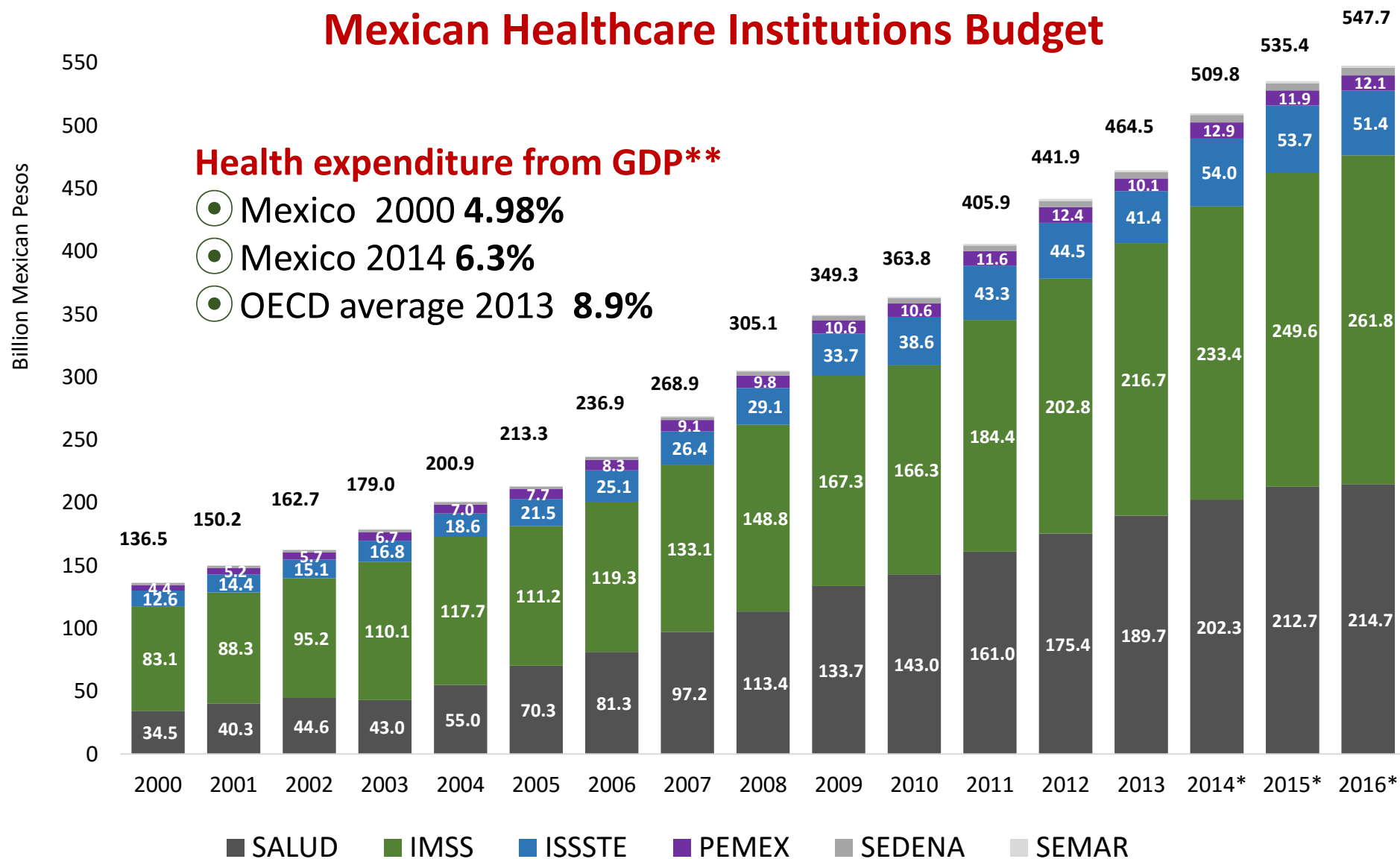


Health System Coverage Duplicity



Source: Institutional report and *Data from National Health Registry from march of 2016 considering latest IMSS data from July 2015.

Mexican Healthcare Institutions Budget



Healthcare Services Organization

Health Care Services (2015)

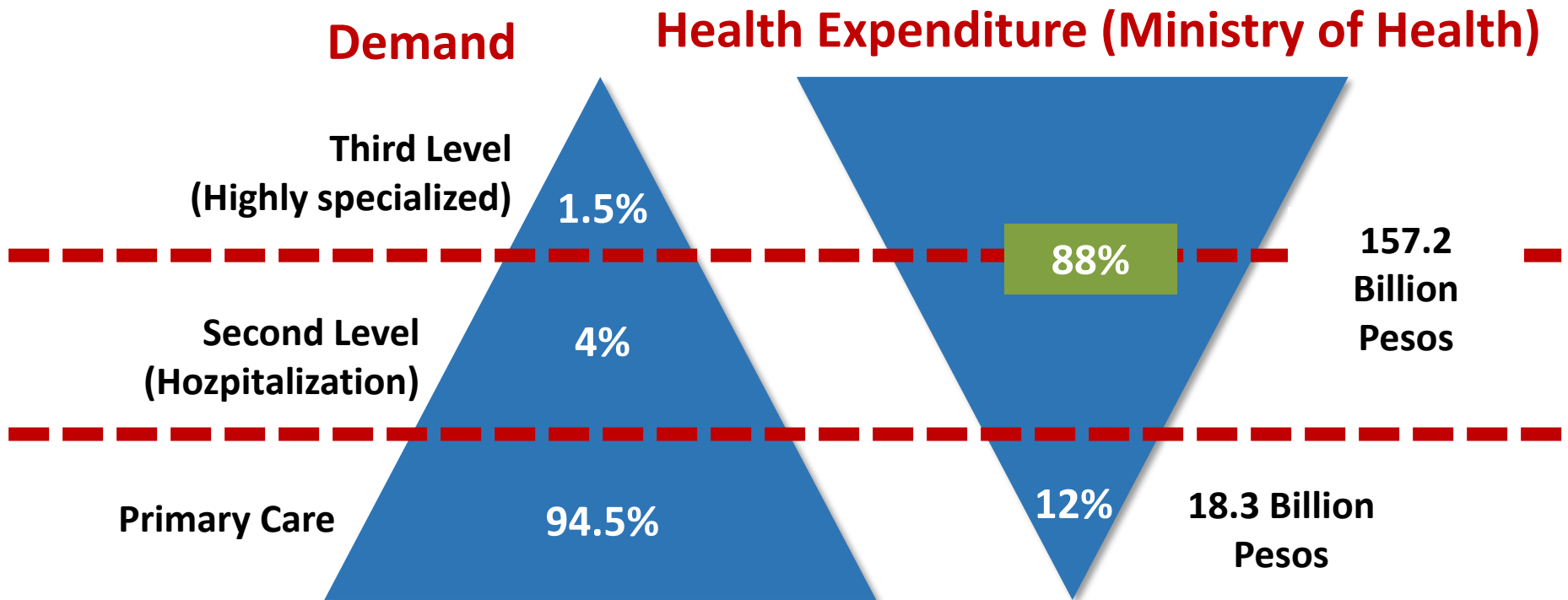
- More than 334 million consultations.
- More than 4.3 million surgical interventions.
- Almost six million hospital admissions.
- This means that daily 915,000 consultations were given; 11,841 surgical interventions were made and more than 16,000 patients were admitted in a hospital.

Health System Organization

Healthcare Resources

- More than 22,500 healthcare units; of which, 21,180 are primary care units and 1,366 are hospitals.
- More than 89,800 hospital beds. (*1.6 per 1000 population vs 4.8 OCDE average)
- More than 215,000 physicians (*2.2 per 1000 population vs 3.3 OCDE average)
- Almost 300,000 nurses. (*3.3 per 1000 population vs 9.1 OCDE average)

Health expenditure in the 3 levels of attention



- Primary care has been forgotten.
- Politicians think only in buildings.
- Health policy makers need to think in the population.

National Agreement for the Universal Coverage

Objective: reach the highest user satisfaction regards of the insurance institution.

Strategy:

- Clean registry avoiding duplication
- Promote rational and organized use of the existing and future infrastructure.
- Develop coordinated actions for the effective access to health-care services.

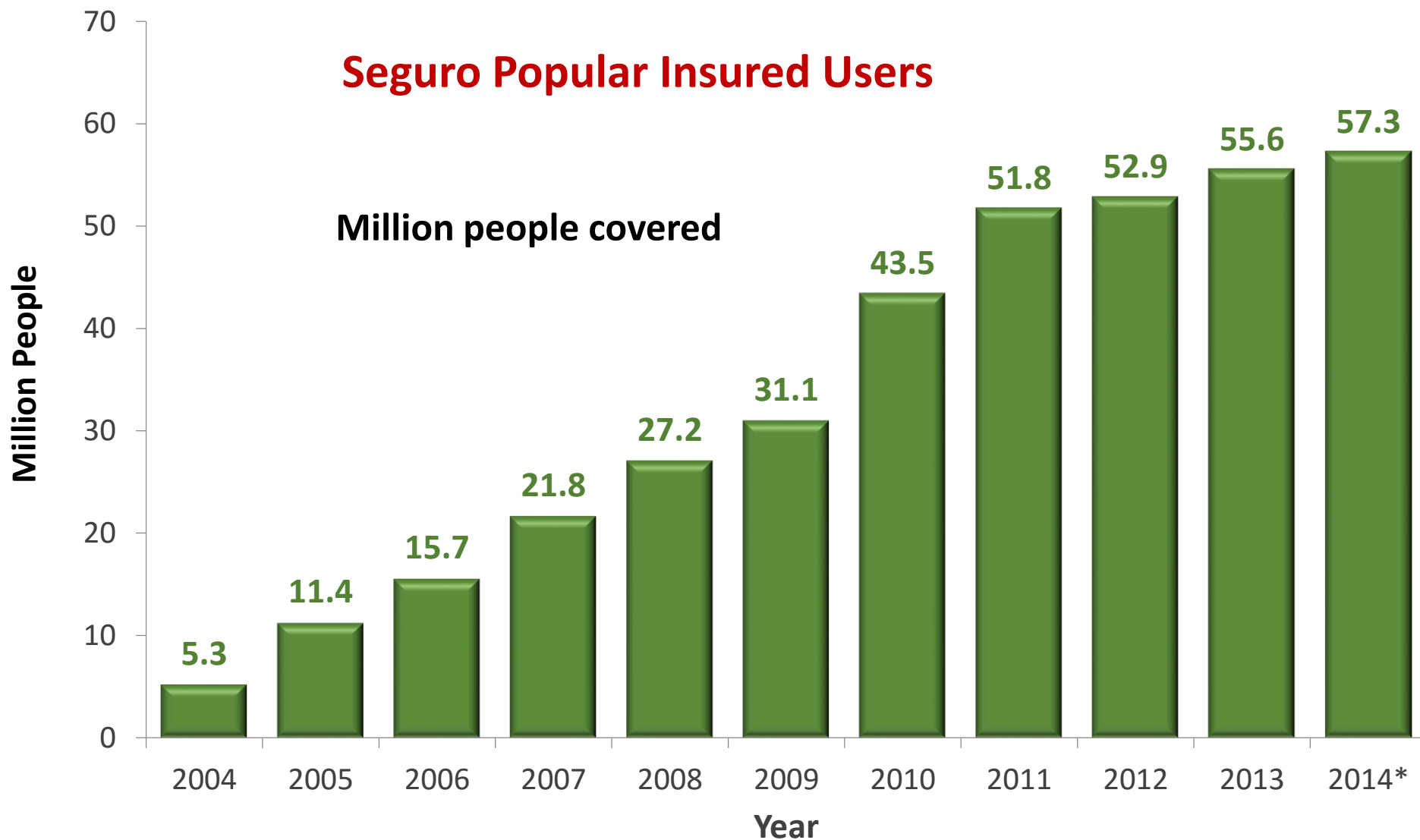
It is not: Privatization, portability nor institution fusion

Seguro Popular



- Created in 2004
- Non-contributory health insurance program for unprotected individuals.
- 287 Interventions
- + 61 Interventions in the Catastrophic Health Expenditures Fund (cover the cost of illnesses that would otherwise endanger the patrimony of the beneficiary families)

Seguro Popular



Source: Sistema de Protección Social en Salud. Informe de Resultados, 2007-2014.



Mexican Health System Challenges

● Budget reduction coming in 2017

- Public Pensions
- Petroleum price fall
- Public debt

● Healthcare cost increase

● Overlap in Health Registry

● Strengthening primary care

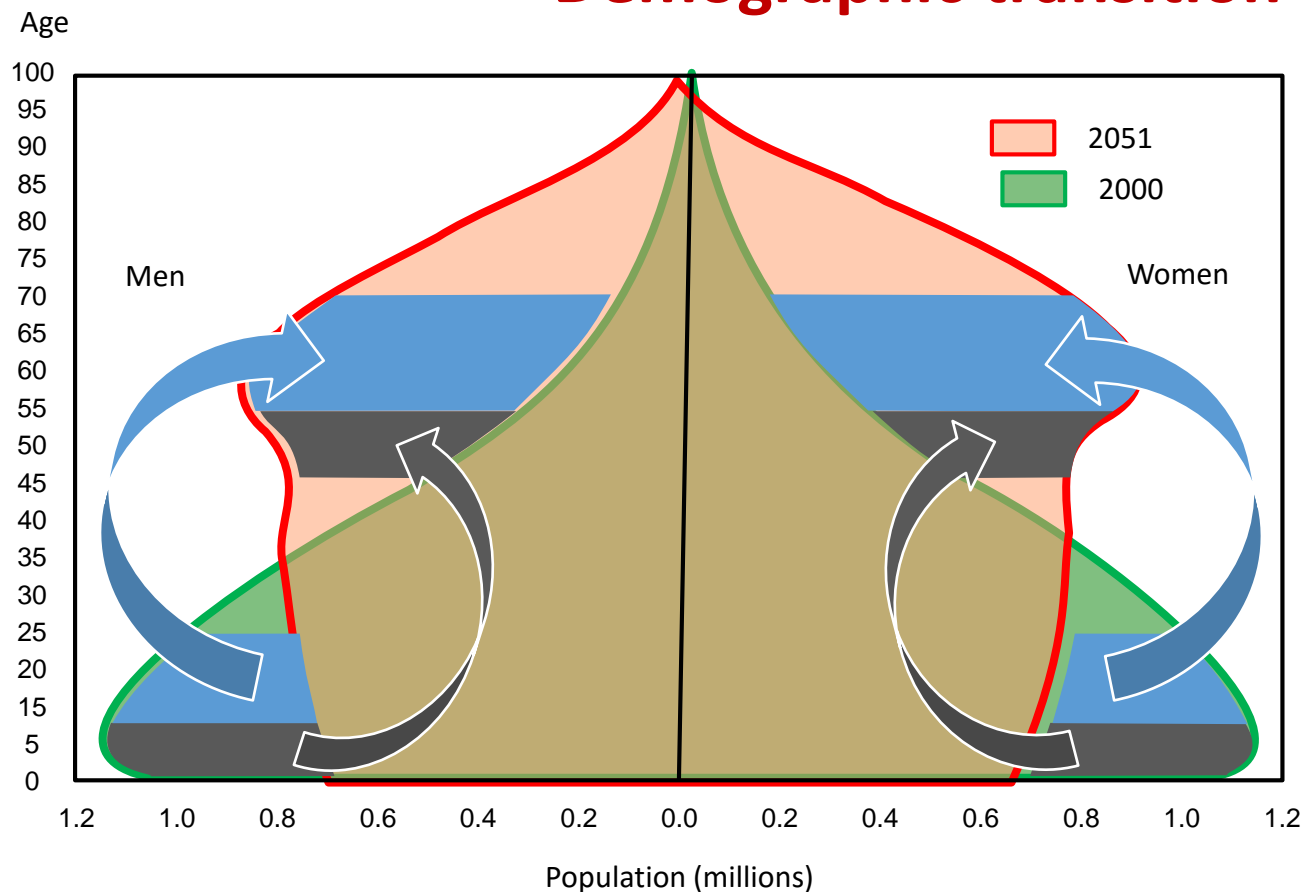
● Re-focus politicians priorities

Specific Health Challenges

Mechanisms of change

- ⊙ Social determinants of health have been shaped by four main processes of transformation

Demographic transition

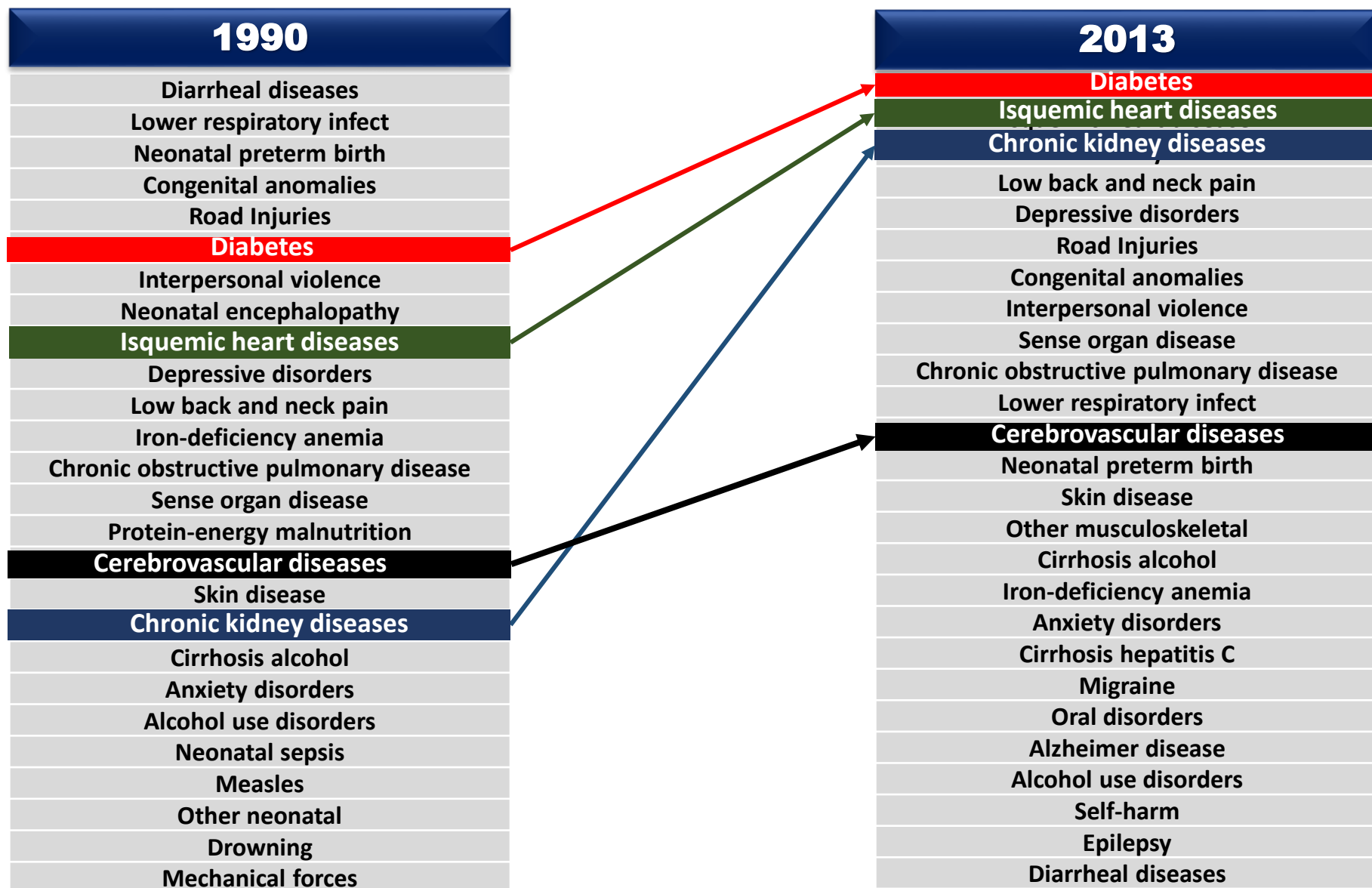


Population between 0-9 years old will be in the 45-59 age group in 2051

Population between 10-25 years old will be in the 55-70 age group in 2051.

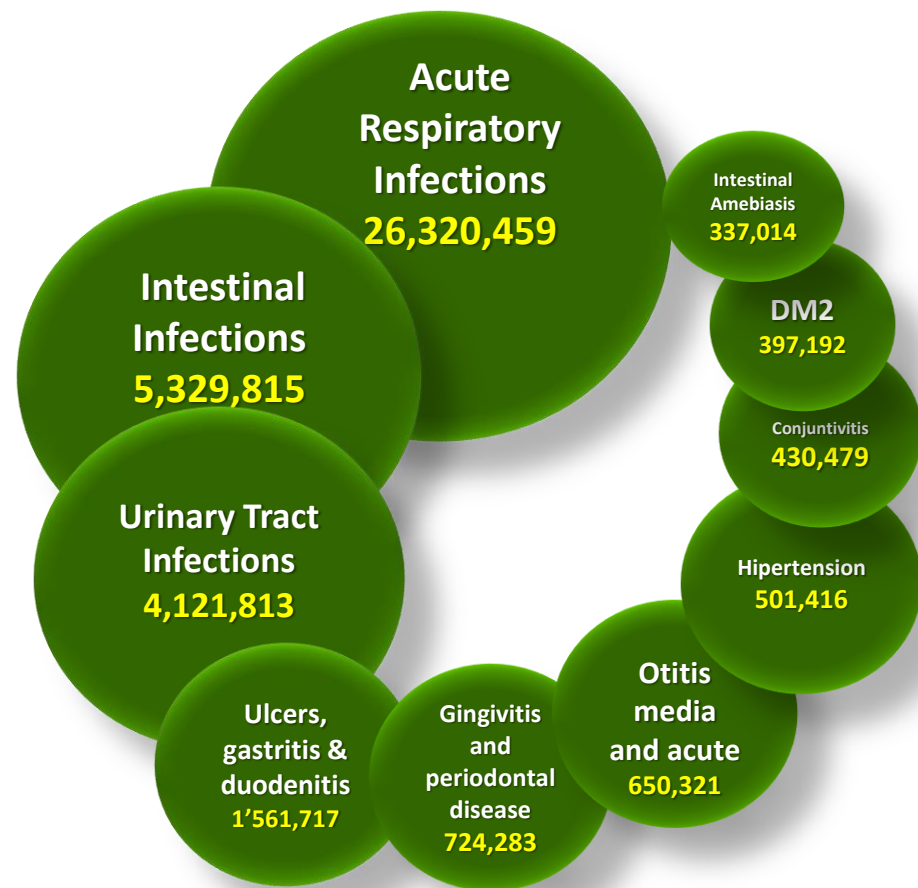


Mexico Burden of Disease DALYS per 100,000

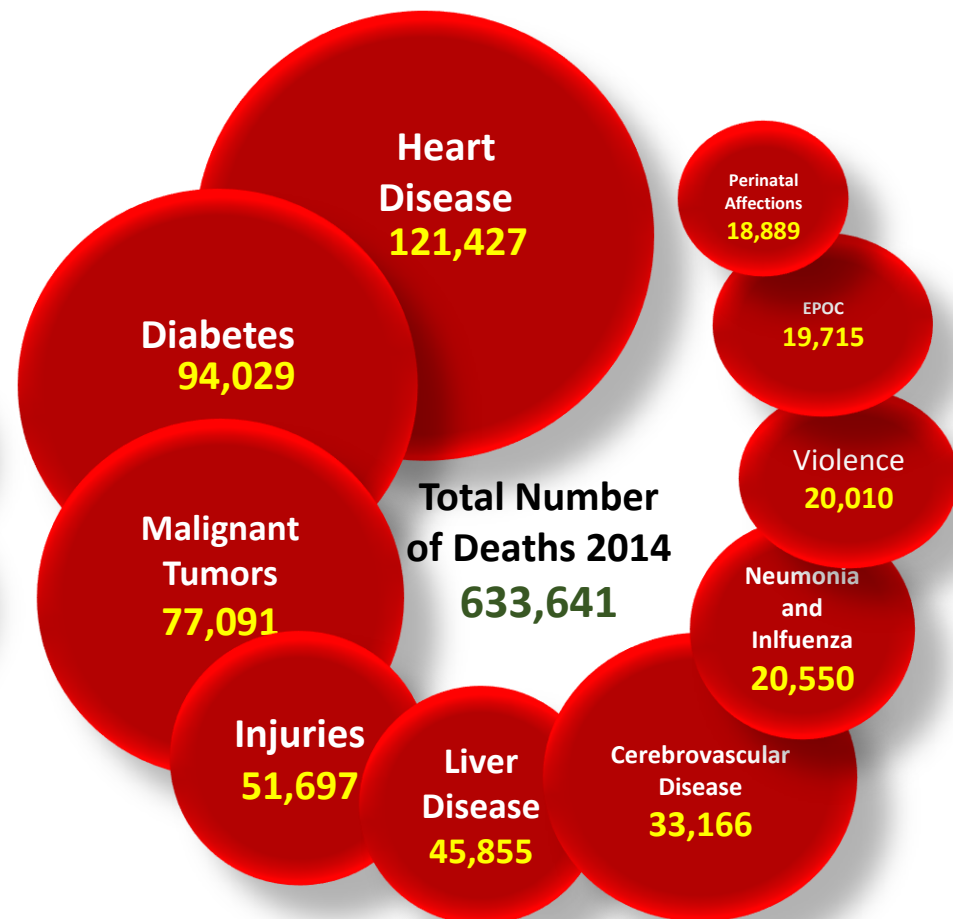


Main Causes of Morbidity and Mortality in Mexico

Morbidity



Mortality



More challenges in public health

Infectious diseases

- Dengue
- Chikungunya
- Zika
- Ebola
- Influenza
- AIDS
- MERS-CoV
- Poliomyelitis
- Measles
- Tuberculosis

Noncommunicable diseases (NCDs)

- Overweight, obesity and diabetes
- Childhood cancer
- Cardiovascular Diseases
- Malignant tumors
- Addictions
- Mental disorders

Additional challenges

- Teen pregnancy
- Maternal death
- Unintentional Injuries
- Climate Change
- Violence

Among others...

A photograph of four young women sitting in a row, likely in a classroom or waiting area. The woman on the far left is wearing a white tank top and has a visible pregnancy bump. The woman next to her is wearing a colorful patterned tank top. The woman in the center is wearing a white tank top and has her hands clasped in her lap. The woman on the far right is wearing an orange tank top. A semi-transparent green banner with the text "Teen Pregnancy" is overlaid on the right side of the image.

Teen Pregnancy

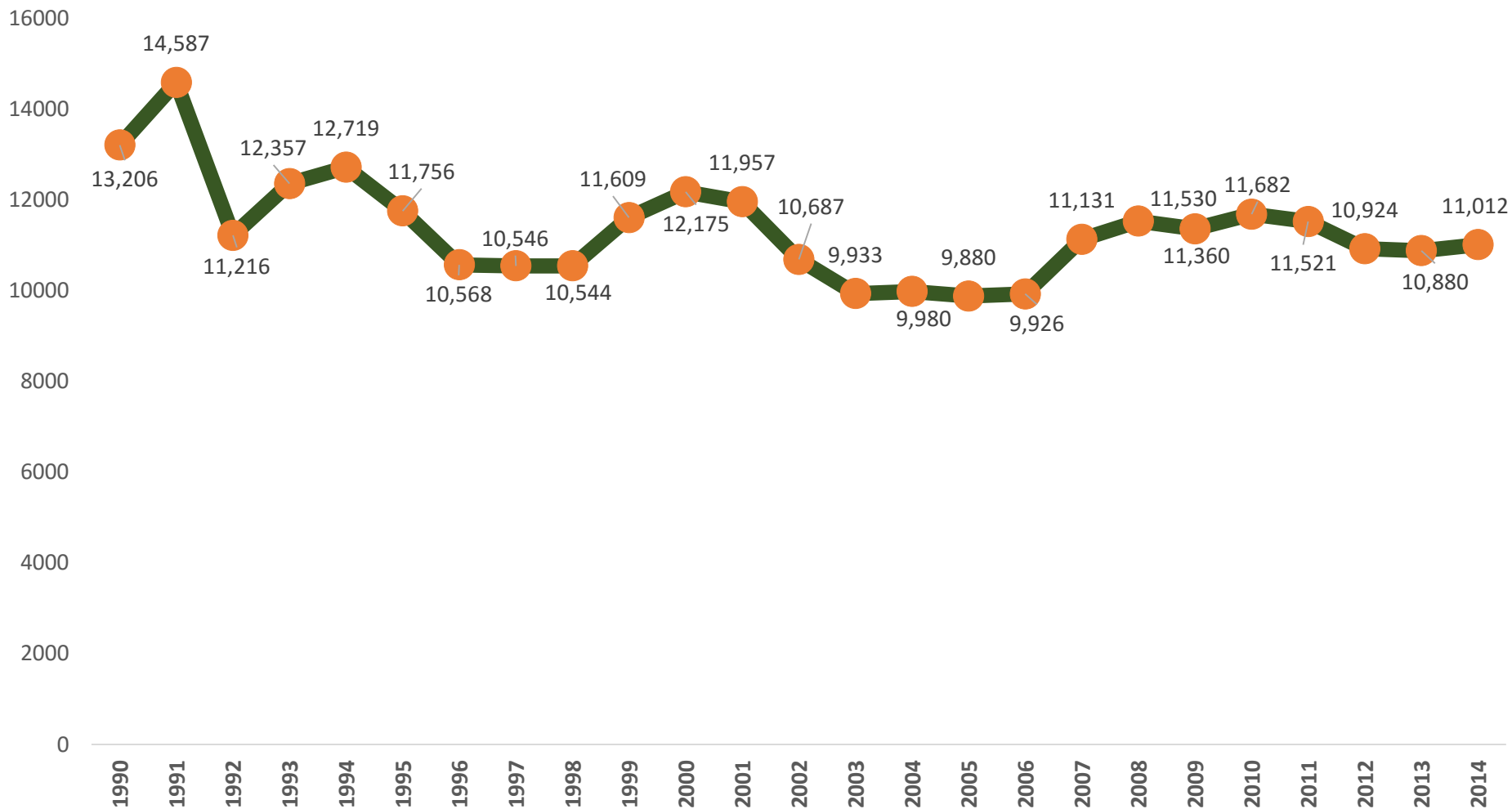
Teen Pregnancy México's Situation

- One of five newborn in Mexico are from a teenage mother.
- Daily we register 30 newborns from mothers between 10-14 year old.
- In **2014** from the 458,384 new born from a mother 10 to 19 years old, **11,012 were from a mother younger than 14 years old.**



Teen pregnancy form women younger than 15 years, 1990-2014

Number of Pregnancy



National Strategy for the Prevention of Teen Pregnancy (ENAPEA)

Objective: reduce the number of teenage pregnancy in Mexico, with absolute respect of human rights, especially sexual and reproductive rights.



- Presented in January 2015.
- Inter-agency and intersectoral co-operation should also be strengthened.
- 8 lines of action lines and 90 inter-agency actions.

Goals 2030:

- 0 pregnancies in children between 10 to 14 years old.
- Reduce in 50% the specific fecundity rate in teenagers from 15 to 19 years old.

Next Steps Teen Pregnancy

- Inter-agency and intersectoral co-operation.
- Legal aspects analysis.
- Focus and reinforce the program of reproductive health, Specially in vulnerable areas.
- Work with schools and families.
- Information campaigns focus on teenagers.
- Universal health coverage.
- Strengthen health promotion and preventive actions.

Vector-Borne Diseases



Dengue, Chikungunya & Zika

Epidemiology overview of *Aedes spp* infections in Mexico

Aedes Albopictus
(regionally distributed)



Aedes Aegypti
(countrywide distributed)



Dengue (1978 – present)

- All 4 serotypes circulating in the country
- 30,000+ cases / year
- 10+ deaths/year
- Only two states disease – free

Chikungunya (mid 2014 – present)

- 2014: 222 confirmed cases
- 2015: 12,588 cases
- 2016: 469 cases (**Sep 16, 2016**)
- 28 states reporting cases

Zika (late 2015 – present)

- 3,015 confirmed cases

Epidemiological surveillance

Confirmed cases of Dengue Fever and Dengue Hemorrhagic Fever in Mexico, 2013 – 2016*

DATOS	2013	2014	2015+	2016**
DF cases	43,663	23,374	10,858	6,894
DHF cases	18,667	8,647	2,596	1,730
Total of cases	62,330	32,021	13,454	8,975**
Deaths	170	76	15	11
Lethality	0.56%	0.88%	0.58%	0.53%

- For the first time we have three consecutive year with decrease in the number of cases.
- A decrease of 33% of total Dengue cases is observed to the same week between 2015-2016

* Source: SINAVE/DGE/SALUD/Sistema 2016

+ Week 36 , 2015

** Week 36

Challenges for Public Health

SYMPTOMS	DENGUE	CHIKUNGUNYA	ZIKA VIRUS
Fever	++++	+++	+++
Myalgia/ Arthralgia	+++	++++	++
Upper and lower extremity edema	0	0	++
Maculopapular rash	++	++	+++
Retroocular pain	++	++	+++
Conjunctivitis	0	+	+++
Adenopathy	++	++	+
Hepatomegaly	0	+++	0
Leucopenia/thrombocytopenia	+++	+++	0
Hemorrhage	+	0	0

- Differential diagnoses is difficult due to **symptomatic & serological similarities**.

Considerations Vector-Borne Diseases

- A single measure is not enough for eliminating vector borne diseases.
- Ensure a strong prevention and control program before the introduction of a vaccine.
- To avoid severe cases and deaths will always be a Public Health concern.
- The vaccine introduction requires assertive actions of social communication and health promotion.
- Never before vector-borne Diseases topic was positioned like now.

Dengue vaccine introduction

- National Council of Vaccination (CONAVA) recommendations since June 2016 aligned with SAGE's.
- Today there is not enough budget to guarantee the purchase of the **three doses** for the vaccinated cohorts.
- Also we need to consider the financial capacity to ensure logistics, human and operational resources for the introduction of the vaccine.



SALUD

SECRETARÍA DE SALUD



Overweight, Obesity and Diabetes



Overweight, Obesity and Diabetes in Mexico

Prevalence of overweight and obesity	2006 (%)	2012 (%)
Women	71.9	73.0
Men	66.7	69.4
Children 5 to 11 years	34.8	34.4
Adolescents 12 to 19 years	33.2	34.9

35% of adolescents between 12 and 19 years are overweight or obese. One out of five adolescents are overweight and one out of ten is obese.

Prevalence of Diabetes	2006 (%)	2012 (%)
Women	7.3	9.67
Men	6.5	8.6
Total	7	9.17

It is estimated that **90% of the diabetes mellitus type 2 cases** are associated to **overweight and obesity** (WHO 2012).

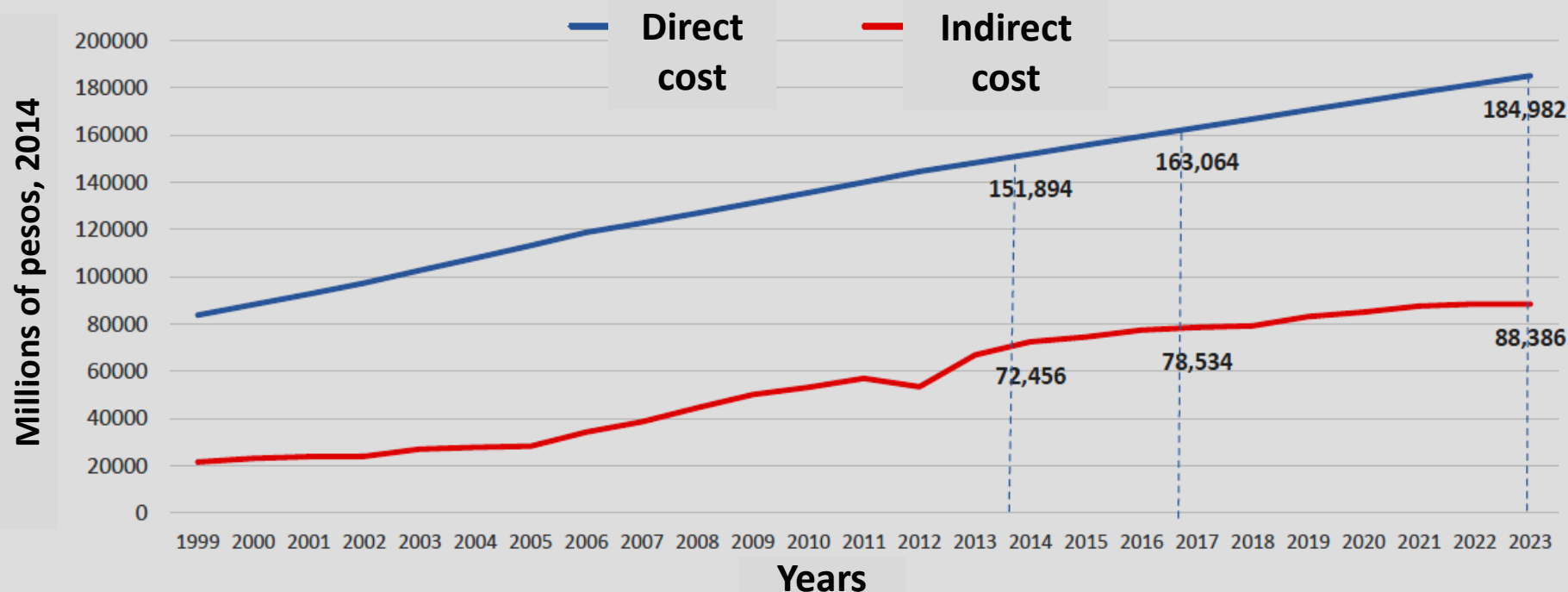
Overweight and Obesity costs

- **Direct cost:** 151,894 mdp equivalent to the 45% of the total expenditure in medical care (0.9% of the Gross Domestic Product 2014).
- **Indirect cost:** 72,456 mdp equivalent to the 0.4% of the Gross Domestic Product 2014.

TOTAL cost:
224,350 mdp

(*11,217.5 millions of dollars)

*1 Dollar = 20 mexican pesos





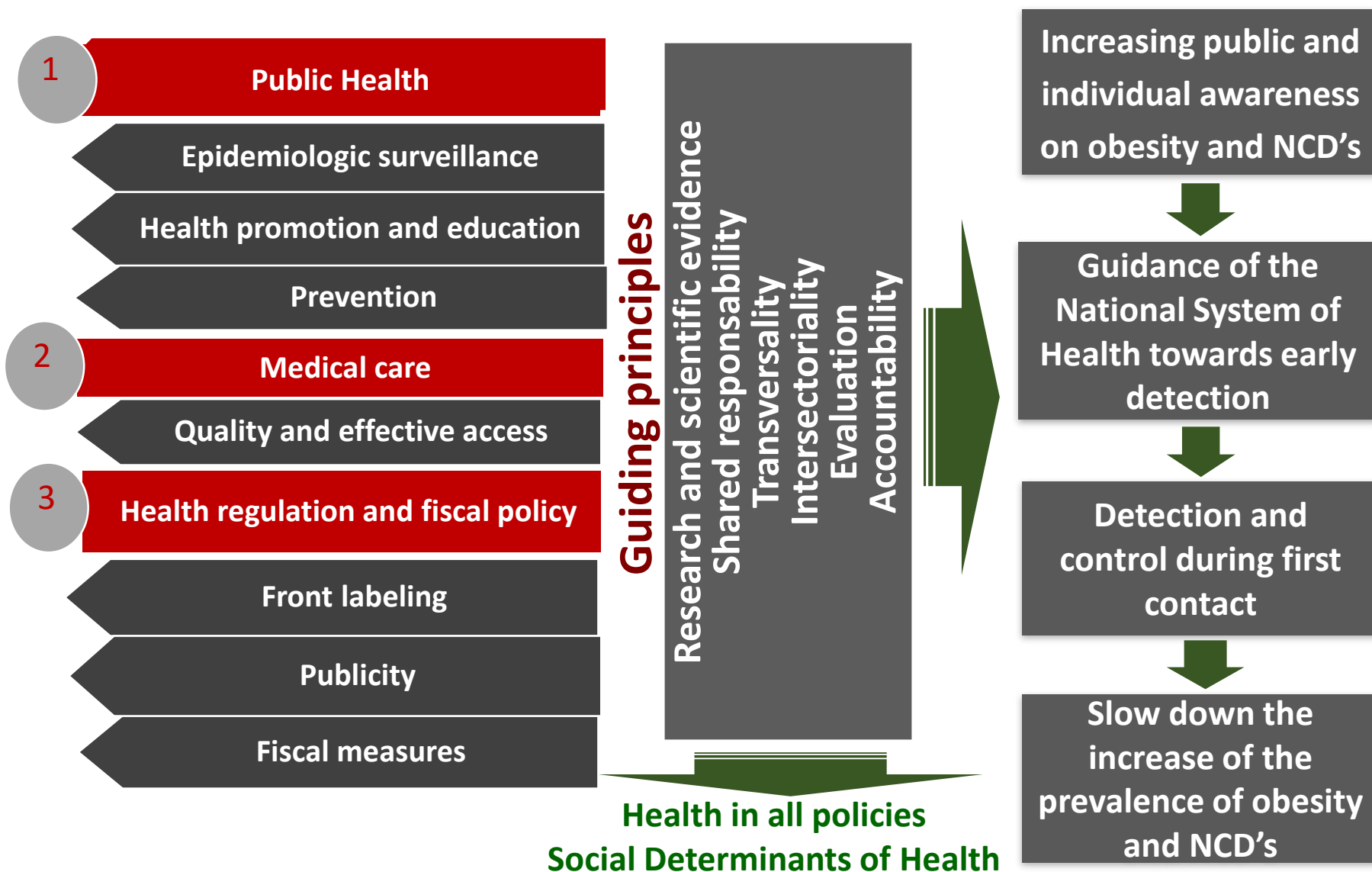
National Strategy for the prevention and control of overweight, obesity and diabetes



National Strategy for the prevention and control of overweight, obesity and diabetes

- The National Strategy was launched on October 31, 2013 by the Mexican President.
- To improve the wellbeing of the Mexican population by slowing down the increasing prevalence of overweight and obesity, reverting the epidemic of non-communicable diseases, particularly type 2 diabetes mellitus, through public health interventions, a comprehensive health care model and intersectorial public policy.

National Strategy



“Chécate, Mídete y Muévete”

(Check yourself, limit yourself and move yourself)

Mass communication & Social Marketing Campaign

“Check yourself, limit yourself and move yourself”

Campaign results:

- 85% of remembrance was obtained.
- About 90% of respondents said that the campaign encourages people to improve eating habits and physical activity.
- 61% of respondents agreed that the campaign has changed their behaviour and perception related to overweight/obesity.



CHÉCATE



MÍDETE



MUÉVETE

SALUD

SECRETARÍA DE SALUD



The Mexican Observatory of Noncommunicable Diseases (OMENT)

- The OMENT is coordinated by the Autonomous University of Nuevo Leon for the measurement and evaluation of the impact of public policy for the National Strategy.

- Online impact:

JANUARY-JUNE 2016

Network interactions	152,405
Users	23,055
Average pages per session	2.46
Mobile device visits	9,817

- Visitors from: Mexico, USA, UK, Brazil, Russia, Argentina, Colombia, among others.

The OMENT is independent from the Government.

<http://oment.uanl.mx>

SISTEMA DE INDICADORES PARA MONITOREAR LOS AVANCES DE LA ESTRATEGIA NACIONAL PARA LA PREVENCIÓN Y EL CONTROL DEL SOBREPESO, LA OBESIDAD Y LA DIABETES

Advances in Medical Care



Chronic Diseases Information System (SIC)

SIC

Chronic Diseases Information System (SIC)

This System allows healthcare personnel to register the health treatment provided to patients that live with chronic diseases.

In the SIC, you can record all the clinical information of the patient, as well as all the clinical visits, all the metabolic measures, laboratory results and medical treatment.

**12,538 Primary Healthcare Facilities
in 32 states**

A blue circular logo with the letters "SIC" in white.

SIC

Chronic Diseases Information System (SIC)

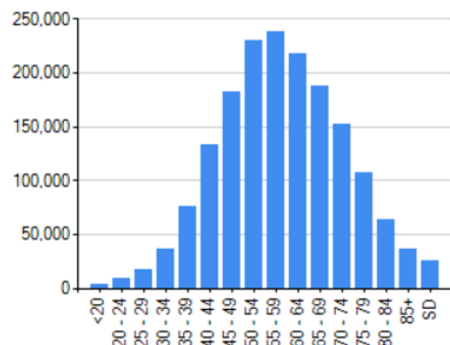
Main results

1,736,334 in **12,538**
Patients with at least one medical consultation Primary Healthcare facilities

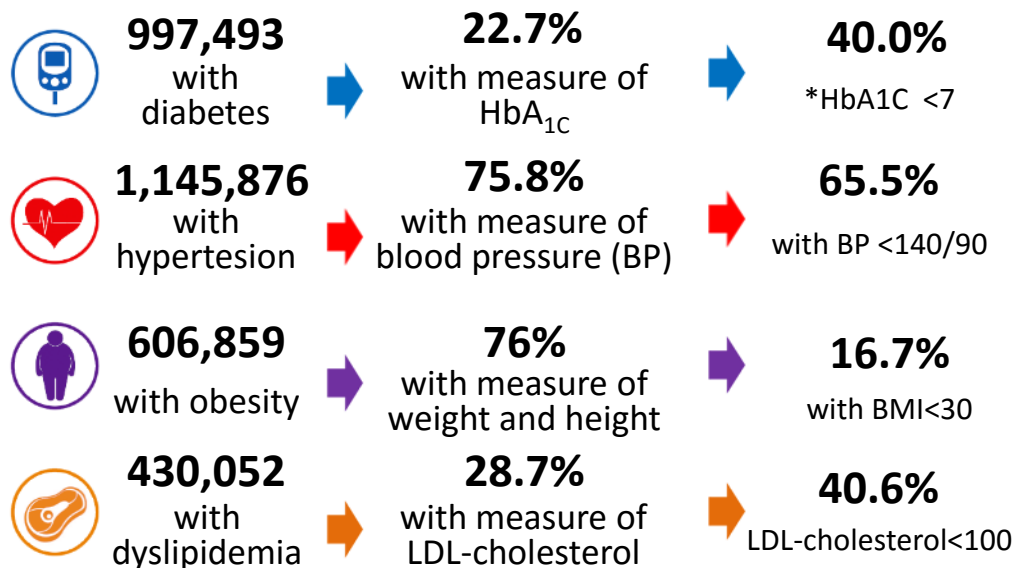
Distribution by sex:



Distribution by age:



Of the total patients registered in the Chronic Diseases Information System:



*HbA_{1c} is an test what shows the average of glucose blood level during the last three months and also reflects the diabetes control



Advances in Public Policy and Regulation

Guidelines for the Sale and Distribution of Food and Beverages in Schools

- **Amendment to the 3rd. Constitutional Article** whereby foods and drinks that do not contribute to the health of students are banned from schools.
- **Amendment of the Articles 7, 11 and 19** of the General Law of Educational Physical Infrastructure, related to the installation of water drinking fountains in elementary schools.
- Update to the nutritional guidelines for the sale and distribution of food and drinks in schools within the National Education System.
 - Applies to all levels of education.
 - Ban of prepared food and beverages during the break periods.
 - Promotes consumption of natural foods (vegetables and fruits).
 - Promotes drinking plain water.

Front-of-Package labelling and targeted advertising to young audiences

Amendments to the Regulation on Sanitary Control of Products and Services published in the Official Gazette on February 14, 2014.



- **Mandatory front-of-package labelling** of food and non-alcoholic beverages.
- **Nutritional quality seal** on foods with low caloric density.
- **Restrictions on advertising** high caloric density food and beverages in open and paid tv as well as movie theaters.

Impact: Front-of-Package labeling and targeted advertising to young audiences

Ban on junk food advertising in media 2014-2015:

- **Decrease of 26.9% in advertising (27,500 advertisements)**
- **Equivalent to 145.3 hours of TV programming.**

Food products with nutritional quality seal request: 798

- **Granted: 126**
- **In process: 16**
- **Denied: 358**
- **Cancelled: 1**
- **Under review: 297**

Tax on Sugary Drinks and Products with High Energy Density and Low Nutritional Value

In December 2013, as part of the federal budget, the Mexican Congress passed a tax on sugar sweetened beverages and a sales tax on several high energy foods.

* Tax Beverages:

- **Energy drinks
Flavored and
sugar sweetened
beverages is 1
peso per liter.**

*** The products that are listed below, with a caloric density of 275 kcal per 100 grams or greater, 8%:**

1. Salty and sweet snacks.
2. Chocolate and other cocoa products.
3. Custards and puddings.
4. Sweet fruit and vegetables.
5. Peanut and hazelnut creams.
6. Milk based candies products.
7. Foods prepared from cereals.
8. Ice cream and popsicles.

Impact of taxation on beverage purchases from stores in Mexico

- **Mexico had the world's largest per capita (163 liters) intake of soft drinks in 2011.**
- In January 2014 a tax was implemented to sugar sweetened beverages, after one year of the these taxes, **the first results** of an observational study showed that **purchases of taxed beverages decreased by an average of 6%.**
- **At the same time consumption of plain water increased 4%.**

Next Steps Chronic Diseases

- In accordance to evidence presented we need to asses the health impact of the measures implemented.
- **ENSANUT mid-term 2016 survey is being conducted**, this will allow us to have a first approach of the assessment of “The National Strategy for the Prevention and Control of Overweight, Obesity and Diabetes”.
 - 11,328 households are being surveyed, in 32 states.

- There are enormous challenges ahead:
 - Overlapped registry
 - Budgetary cuts
 - Fragmented Health System
 - Insufficient human resources
 - Specific challenges
- Strengthen primary health care
- Reinforce successful strategies
- Re-evaluate strategies in challenging topics

Acknowledgment:

- National Center for Gender Equity and Reproductive health.
- National Center for disease control and prevention.
- Health Promotion General Direction.
- Mexican Regulatory Agency (COFEPRIS)
- Autonomous University of Nuevo Leon.
- Sonia López, Jan Gutiérrez , Andrés Castañeda.

SALUD

SECRETARÍA DE SALUD



Public Health Challenges In Mexico

Dr. Pablo Kuri Morales
***Undersecretary of Prevention
and Health Promotion***

September, 2016