Strategic Action Plan to Tackle Noncommunicable Diseases (NCD) in Brazil 2011-2022

Ministry of Health
Brasilia-DF
2011

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STRATEGIC ACTION PLAN TO TACKLE NONCOMMUNICABLE DISEASES (NCD) IN BRAZIL 2011-2022

MINISTRY OF HEALTH
Health Surveillance Secretariat
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STRATEGIC ACTION PLAN TO TACKLE NONCOMMUNICABLE DISEASES (NCD) IN BRAZIL 2011-2022

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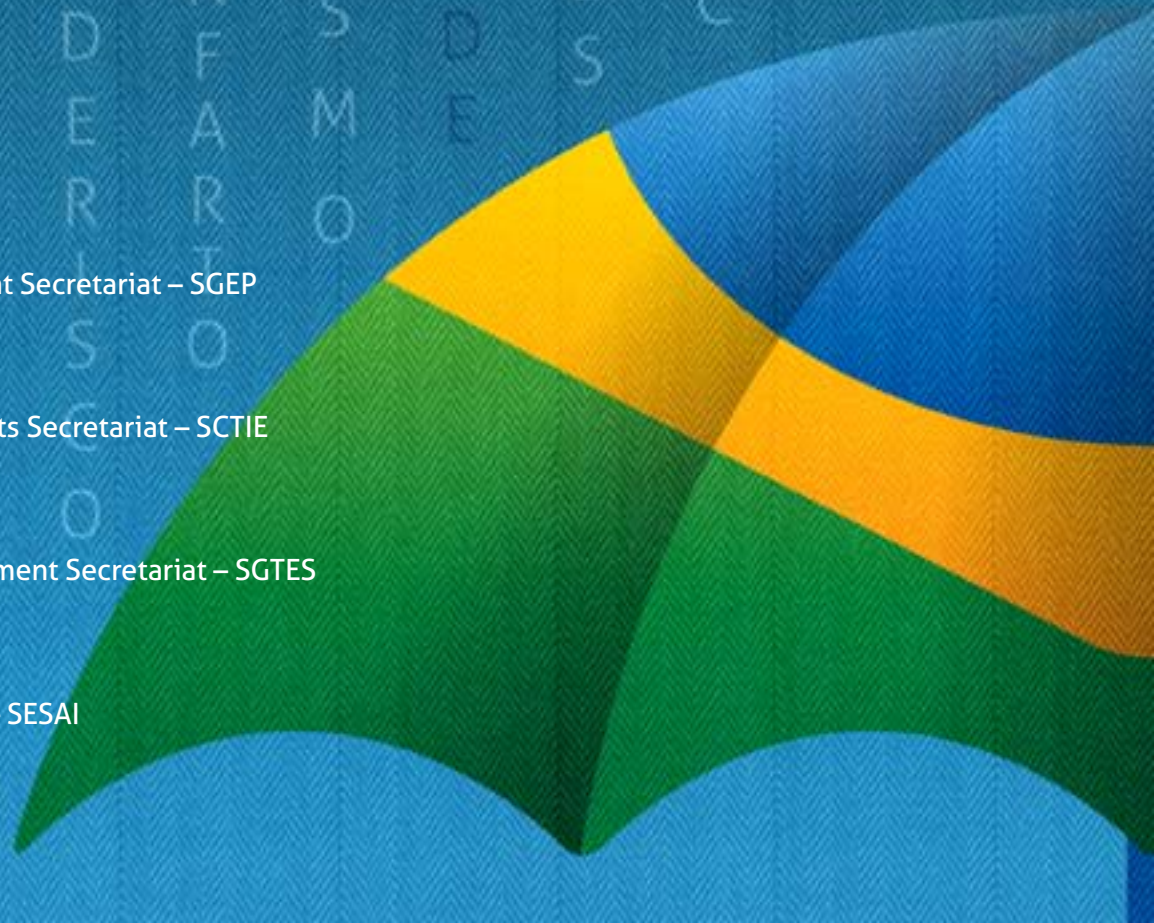

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STRATEGIC ACTION PLAN TO TACKLE NONCOMMUNICABLE DISEASES (NCD) IN BRAZIL, 2011-2022

PRESENTATION

This publication contains The Strategic Action Plan to Tackle Noncommunicable Diseases (NCD) in Brazil, 2011-2022, by the Ministry of Health (MoH). In order to design this Plan, the MoH counted on the collaboration of education and research institutions, several ministries of the Brazilian government, members of NGOs in the health field, medical entities, associations of chronic disease patients, among others. Five months of discussion were necessary including meetings, forums, and electronic inquiries, as an effort to gather suggestions from the different sectors of society to come up with intervention plans which enable the coping with NCD in the country. The Plan has also been presented to the Unified Health System (SUS), to be consolidated as a commitment made by all management levels.

The Plan aims at preparing Brazil to cope with and restrain, in the next 10 years, noncommunicable diseases (NCD), among which can be listed: stroke; heart attack; hypertension; cancer; diabetes; and chronic respiratory diseases. In Brazil, these diseases constitute the country's greatest health concern, accounting for nearly 70% of the causes of death and strongly affecting the underprivileged and most vulnerable groups of society, such as the low schooling and low income population. Over the last decade, a reduction of nearly 20% in the NCD-related mortality rates has been reported, which could be a result of the expansion of the Primary Care, improvement of health care, and a reduction in the consumption of tobacco since the 1990s. These data show remarkable progress in the health of the Brazilian population.

Social inequality, difference in access to goods and services, low schooling, and unequal access to information are determinants to NCD, as well as are modifiable risk factors such as smoking, alcohol abuse, physical inactivity, and unhealthy diet, which makes NCD prevention possible.

In response to the NCD challenge, the Brazilian Ministry of Health has implemented important policies to cope with these diseases, especially the NCD Surveillance Organization, getting information on distribution, magnitude, and noncommunicable diseases trends and their risk factors, as well as supporting health promotion public policies. The National Policy of Health Promotion (PNPS, in Portuguese) has been giving priority to several actions concerning healthy diet, physical activity, and prevention against tobacco and alcohol abuse. The Academia da Saude Program

(Health Academy) was established in April 2011, and aims at promoting physical activity. The goal of this program is to be expanded to 4,000 municipalities by 2015. As part of the plan to reduce smoking, it is worth mentioning the regulatory actions, such as prohibiting advertisement for cigarettes, warning messages about potential conditions to be printed on the packages, and adhesion to the Framework Convention on Tobacco Control, in 2006. In the field of healthy diet, fostering breastfeeding is an important initiative developed by the MoH, as are the Food Guide to the Brazilian Population, the food labeling regulation, and the agreements made with the industries to eliminate trans fat and, more recently, to reduce salt in food. Furthermore, Primary Health Care has been significantly expanded in the last few years and now has about 60% of the Brazilian population covered. The teams work in defined territory with its corresponding population, carrying out actions on promotion, health surveillance, prevention, and health care, not to mention the follow-up on users - a crucial element to improve response to the treatment of users with NCD. Another highlight is related to the expansion of pharmaceutical care and the free distribution of more than 15 drugs for hypertension and diabetes (anti-hypertensive, insulin, hypoglycemic agents, statin, among others.) In March 2011, the Farmácia Popular/ Saúde Não Tem Preço program (Popular Drugstore/Health is Priceless) started offering medicines for hypertension and diabetes and today more than 17,500 private pharmacies are registered and authorized to distribute these medicines free of charge. Moreover, in 2011 the Brazilian government launched the Brasil sem Miseria program (Brazil Free of Misery), which is intended to reduce poverty by pointing out measures to cope with chronic diseases such as hypertension and diabetes.

The Plan to Tackle NCD aims at promoting the development and implementation of public policies that are effective, integrated, sustainable and evidence-based to prevent and control NCD and their risk factors, as well as strengthening health services that deal with chronic diseases.

The Plan addresses the four main groups of diseases (cardiovascular, cancer, chronic respiratory, and diabetes) and their shared modifiable risk factors (smoking, alcohol abuse, physical inactivity, unhealthy diet, and obesity), while outlining guidelines and measures to be taken concerning: a) surveillance, information, evaluation, and monitoring; b) health promotion; c) Comprehensive Care.

That said, Brazil has been getting ready to take part in the UN High-Level Meeting, to be held in September 2011, in New York, joining global efforts and mobilization toward fighting NCD.

Alexandre Padilha
Minister of Health.

EXECUTIVE SUMMARY

1 - Introduction

The Strategic Action Plan to Tackle Noncommunicable diseases in Brazil, 2011-2022, lists and sets priorities for the measures and investments required to get the country ready to cope with and restrain NCD in the next 10-year period.

Guidelines have been established in order to enable the conduction of this Plan and to help define or redefine operational tools to implement it, such as measures, strategies, indicators, goals, programs, projects, and activities.

The first part addresses Brazil's current epidemiological situation concerning the four main groups of NCD (cardiovascular, cancer, chronic respiratory, and diabetes) and their shared modifiable risk factors (smoking, alcohol abuse, physical inactivity, unhealthy diet, and obesity). Joining efforts in dealing with these risk factors should benefit the four main groups of NCD as well as all the other NCD.

Following this first part, the Plan describes the interventions considered to be the most cost-effective, as well as those perceived as the "best buys", i.e., measures to be promptly taken in order to produce immediate results in terms of the number of lives saved, prevented diseases, and avoided high costs.

2 - Context

2.1. The UN High-Level Meeting

The United Nations (UN) General Assembly held on May 13, 2010, through its #265 Resolution, decided to assemble a High-Level Meeting on NCD in September, 2011, in New York, to be attended by the Heads of State. This is the third time that the UN assembles a high-level meeting to discuss health-related topics, giving room for State and Government leaders to engage in the fight against NCD, as well as to recognize its key role in achieving the Millennium Development Goals, especially those related to reducing poverty and iniquity (GENEAU et al, 2011).

2.2. Global context of the NCD

NCD are the main causes of death in the world, accounting for 63% of deaths in 2008. Nearly 80% of deaths caused by NCD occur in low and middle-income countries. One third of these deaths occur among people who are less than 60 years old. Most deaths caused by NCD are due to Cardiovascular Diseases (CVD), cancer, diabetes, and chronic respiratory diseases. Among the main causes of these diseases there are modifiable risk factors, such as smoking, alcohol abuse, physical inactivity, and unhealthy diet.

2.3. NCD in Brazil

Noncommunicable diseases constitute the country's greatest health concern, accounting for 72% of the causes of death. They have a strong impact on the underprivileged and the vulnerable groups of the population. In 2007, the NCD-related mortality rate in Brazil was of 540 deaths per 100,000 inhabitants (SCHMIDT, 2011). Although high, this rate has been reduced in 20% over the last decade, especially regarding cardiovascular and chronic respiratory diseases. However, mortality rates related to diabetes and cancer have increased over that same period. This decrease in NCD may be partly due to expansion of the primary care, improvement in health care, and smoking reduction over the last two decades, which decreased from 34.8% (1989) to 15.1% (2010).

Risk factors in Brazil: Leisure time physical activity in the adult population is low (15%), and only 18.2% eat fruit and vegetables five or more days a week. 34% eat food high in fat, and 28% have soft drinks five or more days a week. These numbers account for the high prevalence of overweight and obesity which reaches 48% and 14% of adults, respectively (BRASIL, 2011).

2.4. Key NCD policies in Brazil

– NCD Surveillance Organization: Over the last few years, Brazil has come up with measures to structure and run a specific surveillance system for noncommunicable diseases, in order to get information about the distribution, magnitude, and chronic diseases trends and their risk factors, supporting health promotion public policies.

The first household survey on risky behavior and self-reported morbidity caused by noncommunicable diseases was carried out in 2003, and served as a baseline to the monitoring of the main risk factors in the country.

In 2006, VIGITEL was implemented: A telephone survey which, based on 54,000 interviews a year, investigates the frequency of risk and protective factors for chronic diseases and self-reported morbidity among adults (≥18 years old) living at residences with landline phones in state capitals of Brazil and the Federal District.

In 2008, the National Household Sampling Survey (PNAD, in Portuguese) included, as part of the **Global Adult Tobacco Survey** (GATS) initiative, information on morbidity and some risk factors, as well as the Special Tobacco Survey (PETab).

In 2009, the First National on Students´Health Survey (PeNSE) was carried out with about 63,000 9th grade students from public and private schools in state capitals of Brazil and the Federal District. This survey is a partnership between the Brazilian Institute of Geography and Statistics (IBGE) and the Ministries of Health and of Education, and it will be conducted every three years.

The monitoring of NCD-related morbidity and mortality – a crucial surveillance element – is carried out through SUS' information systems and others.

Other activities in this process include capacity-building of health professionals in states and municipalities; establishing activities and strategies of prevention, promotion, and health care; defining adequate monitoring indicators and methodologies to both regional and local scenarios.

– The National Policy of Health Promotion: Having been approved in 2006, this policy gives priority to measures taken on healthy diets, physical activity, and prevention against tobacco and alcohol abuse, by transferring resources to states and municipalities in order to implement these goals in an integrated way.

– Physical Activity: On April 7, 2011, the Ministry of Health launched the Academia da Saude Program (Health Academy) to promote health through physical activity. It is expected that the program be expanded to 4,000 fitness centers by 2014. Since 2006, the Health Surveillance Secretariat (SVS) of the Ministry of Health has been supporting and financing physical activity programs. In 2011, there are over 1,000 ongoing projects throughout the country.

– Tobacco: The success of the anti-tobacco policy is extremely relevant to the reduction of NCD prevalence. The highlights are the regulatory measures such as prohibiting cigarettes advertisements; warning messages about the risk of health conditions printed on the packages; adhesion to the Framework Convention on Tobacco Control in 2006, among others. In 2011, the National Sanitary Surveillance Agency (Anvisa) consulted with the population in order to expand the messages on the packages, to increase control over advertisement, and to prohibit cigarettes' flavor additives.

– Food: The incentive to breastfeeding and healthy complementary diet is another relevant initiative of the MoH, as well as sending clear messages such as the Food Guide to the Brazilian Population, and partnerships such as the one with the Ministry of Social Development and Combat to Hunger (MDS) in the Bolsa Familia Program (a program of conditional financial aid). Brazil has also been doing an outstanding work when it comes to the food labeling regulation. Moreover, agreements have been established with the industries with the purpose to reduce trans fat and, recently, new voluntary agreements have been established in order to reduce salt in industrialized food at 10% a year.

– Primary Care Expansion: Primary Health Care covers nearly 60% of the Brazilian population. The teams work in defined territory with its corresponding population, carrying out actions on promotion, health surveillance, prevention, health care, not to mention the follow-up on users - a crucial element to improving response to the treatment of users with NCD. The Cadernos de Atencao Basica (Basic Care Handbooks) and guidelines have been published, addressing hypertension, diabetes, obesity, cardiovascular diseases, among others.

– Free distribution of medicines for hypertension and diabetes: Expansion of the pharmaceutical care and free distribution of 11 medicines for hypertension and diabetes. In March 2011, the Farmacia Popular Program (Popular Drugstore) started offering free medicines for hypertension and diabetes to more than 17,500 affiliated private drugstores. This measure has expanded access and has served - by July 2011 - 2.1 million individuals with hypertension and 788,000 with diabetes, which account for a 194% increase compared to January 2011.

– Expansion of access to preventive breast and cervical cancer exams: There has been an increase in coverage for the preventive exam for breast cancer (mammogram) in the last two years, going from 46.1% (2003) to 54.2% (2008) for 50 to 69-year-old women. As for the coverage for the preventive exam for cervical cancer, over the last three years, it has increased from 73.1% (2003) to 78.4% (2008) for 25 to 64-year-old women, according to PNAD 2008 (IBGE, 2010). Iniquities related to schooling and region still exist and need to be overcome. The number of mammogram exams conducted in the last two years increased from 68.3% (women with 0 to 8 years of education) to 87.9% (women with 12 or more years of education), according to VIGITEL 2010 (BRASIL, 2011).

3 – Strategic Action Plan to Tackle Noncommunicable Diseases (NCD) – healthy diet in Brazil, 2011 - 2022

The Plan addresses the four main diseases (cardiovascular, cancer, respiratory, and diabetes) and its risk factors (smoking, alcohol abuse, physical inactivity, unhealthy diet, and obesity).

Objective: To promote the development and implementation of public policies that are effective, integrated, sustainable, and evidence-based to prevent and control NCD and their risk factors, as well as to strengthen health services which assist individuals with chronic diseases.

Suggested national goals

- ✓ Reducing premature mortality rate (< 70 years old) caused by NCD at 2% a year.
- ✓ Reducing prevalence of obesity among children.
- ✓ Reducing prevalence of obesity among adolescents.
- ✓ Restraining obesity among adults.
- ✓ Reducing prevalence of alcohol abuse.
- ✓ Increasing leisure time physical activity levels
- ✓ Increasing fruit and vegetable consumption.
- ✓ Reducing the average salt consumption.
- ✓ Reducing prevalence of smoking.
- ✓ Increasing coverage for mammograms exams among 50 to 69-year-old women.
- ✓ Increasing coverage for cervical cancer preventive exam among 25 to 64-year-old women.
- ✓ Treating 100% of women diagnosed with precursory lesions of cancer.

Axes

The Plan is based on the outlining of guidelines and measures to be taken concerning: a) surveillance, information, evaluation, and monitoring; b) health promotion; c) Comprehensive Care.

a) Surveillance, information, evaluation, and monitoring.

The three core components to NCD surveillance are: a) monitoring of risk factors; b) monitoring of specific disease morbidity and mortality; and c) response by health systems, which also includes management, policies, plans, infrastructure, human resources, and access to essential health services, including medications.

Main measures:

I. **Conducting the National Health Survey – 2013 (in partnership with the IBGE):** Conducting survey on topics such as access to and use of services; morbidity; risk and protective factors for chronic diseases; elderly, women's and children's health; anthropometric and blood pressure measurements; and biological sample collection.

II. **Studies on NCD:** Analyzing and conducting surveys on morbidity-mortality focusing on health-related iniquities (vulnerable populations such as indigenous and the quilombolas), health intervention, and NCD costs.

III. **Portal to the NCD Plan:** Creating an Internet-based portal in order to monitor and assess the implementation of the National Plan to Tackle NCD, and to develop a NCD management system.

b) Health promotion

Considering the important role played by partnerships in overcoming the factors that determine the health-disease process, several courses of action have been defined involving various ministries (Education, Cities, Sports, Agrarian Development, Social Development, Environment, Agriculture/Embrapa, Labor and Planning), the Human Rights Special Secretariat, Public Security Secretariat, road traffic organizations, and others. Non-governmental organizations, corporations, and the civil society have also been involved with the purpose to enable interventions with positive impacts on the reduction of these diseases and their risk factors, especially regarding vulnerable populations.

Main actions:

Physical Activity

I. **Academia da Saude Program (Health Academy):** Building spaces designated for health promotion activities, physical activity, leisure, and instruction on healthy ways of living - integrated with Primary Health Care.

II. **Saúde na Escola Program – PSE (Health in School):** Generalizing access to PSE material and financial incentive for all Brazilian municipalities, making the commitment to develop plans in the scope of nutritional and anthropometric assessment, early diagnosis of high blood pressure, promotion of physical activities, promotion of healthy eating habits, and food security within the school environment.

III. **Aceleração do Crescimento Program (Accelerated Growth Program) Squares – PAC:** Strengthening of the PAC 2 component on building squares at the Citizen Community Center, as a tool to integrate activities and cultural services, sports and leisure, Social Work services, policies on prevention against violence and toward digital inclusion, covering all age groups.

IV. **Reformulation of healthy urban spaces:** Creation of the **National Program for Healthy Sidewalks** as well as building and reactivating bike lanes, parks, squares, and jogging trails.

V. **Communication campaigns:** Creation of campaigns to promote physical activities and healthy habits, integrated with major events such as the FIFA 2014 Soccer World Cup and the 2016 Olympic Games.

Healthy diet

I. **Schools:** Promoting healthy diets with the National Program of School Meals.

II. **Increased supply of healthy food:** Establishing partnerships and agreements with the civil society (family farmers, small associations, and others) in order to increase production and supply of **in nature** food, aiming at increasing access to proper, healthy food. Giving support to cross-sector initiatives with the purpose of increasing the supply of basic and minimally processed foods, in the context of production, supply, and consumption.

III. **Regulation of the nutritional composition of processed food:** Establishing an agreement with the production sector and a partnership with the civil society with the purpose of preventing NCD and promoting health, reducing salt and sugar in food.

IV. **Reduction of prices of healthy food:** Recommending and encouraging the adoption of fiscal measures, such as reducing taxes, charges, and subsidizing, in order to reduce the price of healthy foods (fruits, vegetables) thus increasing their consumption

V. **Cross-sector Plan for the control and prevention of Obesity:** Implementation of the Plan to reduce obesity during childhood and adolescence, and to restrain the expansion of obesity among adults.

VI. **Regulation of food advertisement:** Establishing specific regulation for the advertising of food, especially for children.

Tobacco and alcohol

I. Adjustment of federal legislation which **regulates smoking in shared spaces.**

II. Expansion of measures concerning smoking **prevention** and cessation, with special focus on the most vulnerable groups (youth, women, population with lower income and schooling, and indigenous and quilombola people).

III. Strengthening the implementation of the pricing policy, and increasing taxation on byproducts of tobacco and alcohol, in order to reduce consumption, as recommended by the World Health Organization (WHO).

IV. Supporting the intensification of surveillance measures related to the sale of alcoholic beverages to minors (younger than 18 years old).

V. Strengthening educational measures in the Saude na Escola Program (PSE) to prevent and reduce smoking and alcohol abuse.

VI. Supporting local initiatives to control the sale of alcohol by establishing a curfew for pubs, bars, and similar places.

Active ageing

I. Implementation of a model of Comprehensive Care for active ageing, favoring activities for health promotion, prevention, and Comprehensive Care.

II. Promotion of active ageing and complementary health actions.

III. Encouraging the elderly to engage in regular physical activity, through the Academia da Saude program.

IV. Training primary care professional teams to serve, welcome, and provide care for the elderly and people with chronic conditions.

V. Promoting autonomy and independence for self-care and the rational use of medicines.

VI. Creating programs to train caretakers for the elderly and for people with chronic conditions in the community.

c) Comprehensive Care

Activities shall be conducted with the purpose of strengthening the Brazilian Health System's capability of response and to expand a set of diversified interventions capable of providing a comprehensive health approach to prevent and control NCD.

Main actions:

I. **Line of NCD care:** Defining and implementing clinical protocols and guidelines to NCD, based on evidences of cost-effectiveness, connecting the patients to the caregivers and to the Primary Care team, ensuring the reference and counter-reference to the systems of specialties and hospitals, favoring care continuity and integrality. Developing NCD Management information system.

II. **Capacity-building and tele-medicine:** Training primary care teams, expanding tele-medicine resources, second opinion, and distance learning courses, qualifying the responses to NCD.

III. **Free medicines:** Expanding free access to medicines and strategic inputs foreseen in the Clinical Protocols And Therapeutic Guidelines for NCD and smoking.

IV. **Cervical and breast cancer:** Strengthening measures for prevention and qualification of early diagnosis and treatment of cervical and breast cancers; guaranteeing access to preventive exams and mammogram of screening quality to all women in the suggested age groups and periods, regardless of their income, race/color, thus reducing inequities; guaranteeing proper treatment for women diagnosed with precursory lesions; guaranteeing diagnostic assessment of mammograms with abnormal result; and guaranteeing proper treatment to women diagnosed with breast cancer or benign lesions.

V. Saude a toda Hora (Health all the time)

a. **Urgency Care:** Strengthening care for NCD patients within the urgency care system, integrated with units of health promotion, prevention, health care, expanding and qualifying humane and integral access to health services by users in urgent situations, in a quick and timely fashion.

b. **Home Care:** Expanded care for people with limited mobility or who need regular care, but no hospitalization, through a set of measures on health promotion, prevention, and treatment of diseases. Rehabilitation services conducted at home, with ensured continuity of care, integrated with the Health Care Systems.

c. **Line of Care to Acute Myocardial Infarction (AMI) and Cerebrovascular Accident (CA) at the Urgency Care System:** Qualification and integration of all health units belonging to the Urgency Care System with the purpose to enable care, diagnosis, and immediate treatment for patients with AMI and CA, so that they have easy access to the therapies established on the Clinical Protocols and Therapeutic Guidelines, ensuring users have timely access and proper treatment.

SUMMARY

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AAS – Acetylsalicylic Acid
Abia – Brazilian Association of Food Industries
Abima – Brazilian Association of Pastry Industries
ABIP – Brazilian Association of Bakeries and Candy Shops
Abitrigo – Brazilian Association of the Wheat Industry
ABS – Primary Health Care
ANS – Brazilian Health Agency
ANVISA – Brazilian National Health Surveillance Agency
APAC – Authorization of High-Complexity Procedures
Ascom – Public Affairs Office
BMI – Body Mass Index
BNDES – Brazilian Economic and Social Development Bank
Caisan – Cross-sector Chamber of Food and Nutritional Security
CDC - Center for Disease Control and Prevention
CGIAE – Information and Epidemiological Analysis General Coordination
CGMAC – General Coordination of Medium and High Complexity
CGUE – Urgency and Emergency Care General Coordination
Cies – Education and Health Integration Center
NCD – Noncommunicable Diseases
CNS – National Health Council
Conanda – National Council of Children and Adolescents' Rights
Conass – Brazilian Council of Health Secretariats
Condraf – Brazilian Council on Sustainable Rural Development
CONICQ – Brazilian Commission for the Implementation of the Framework Convention on Tobacco Control
Consea – Brazilian National Council for Food Security and Nutrition

COPD - Chronic Obstructive Pulmonary Disease
CQCT – Framework Convention on Tobacco Control
CVA – Cerebrovascular Accident
CVD - Cardiovascular Diseases
DAE – Specialized Care Department
DAF – Pharmaceutical Care Department
DALYs – Disability-Adjusted Life Years
DASIS – Health Situation Analysis Department
DC – Death Certificate
DECIT – Science and Technology Department
Denatran – Brazilian Road Traffic Department
DERAC – Regulation, Evaluation, and Control Department
Elsa – Longitudinal Study on Adult's Health
Elsi – Longitudinal Study on Elderly Health
Embrapa – Brazilian Agricultural Research Corporation
EMMA – Studies on Mortality and Morbidity caused by Cerebrovascular Accident
Endef – Brazilian Study on Family Budget
GATS - Global Adult Tobacco Survey
Hiperdia – Registration and Follow-up System on Hypertension and Diabetes
IBGE – Brazilian Institute of Geography and Statistics
IDC – International Disease Classification
Inan – Brazilian Food and Nutrition Institute
INC – Brazilian Cardiology Institute
Inca – Brazilian Cancer Institute
IPEA – Applied Economy Research Institute
MAI – Myocardium Acute Infarction
MCT – Ministry of Science and Technology

MDA – Ministry of Agrarian Development
MDG - Millennium Development Goals
MDS – Ministry of Social Development and Fight against Hunger
ME – Ministry of Sport
MEC – Ministry of Education
MinC – Ministry of Culture
MoH – Ministry of Health
MPA – Ministry of Fishing and Aquiculture
MPOG – Ministry of Planning, Budget, and Management
NCD – Noncommunicable Diseases
NGO – Non-Governmental Organization
Nucom/MS –Ministry of Health Communications Center
PAA – Food Purchase Program
PAC – Growth Acceleration Program
PAHO – Pan-American Health Organization
PeNSE – National Survey on Students'Health
PETab – Special Tobacco Survey
PNAD – National Household Survey
PNAEU – Brazilian School Meal Program
PNPS – Brazilian Health Promotion Policy
PNS – National Health Survey
PNSn – National Health and Nutrition Survey
POF – Family Budgets Surveys
pp – Percentage Point
PSE – Healthy School Program
RCBP – Cancer Registration on a Population Basis

Rename – Brazilian List of Essential Medicines
RF – Risk Factor
RHC – Hospital Cancer Registration
SAI – SUS – SUS'Outpatient Information System
Samu – Mobile Urgency Care Service
SCTIE – Science, Technology, and Strategic Inputs Secretariat
SDH - Social Determinants of Health
Secom/PR – Public Affairs Office of the Presidency of the Republic
SEDH – Special Human Rights Secretariat
Seppir – Racial Equality Promotion Policy Secretariat
SES – State Health Secretariat
Sesai – Special Indigenous Health Secretariat
SGEP – Strategic and Participatory Management Secretariat
SIM –Information System on Mortality
Siscolo – Cervical Cancer Information System
Sismama – Breast Cancer Information System
Sisvan – Food and Nutrition Surveillance System
SMS – Municipal Health Secretariat
SUS – Brazilian Health System
SVS – Health Surveillance Secretariat
UN - United Nations Organization
UPA – Emergency Care Unit
VIGITEL – Protective and risk factors for chronic diseases by telephone survey
WHO - World Health Organization
YPLL - Years of Potential Life Lost

STRATEGIC ACTION PLAN TO TACKLE NONCOMMUNICABLE DISEASES (NCD) IN BRAZIL, 2011-2022

1. Introduction

Noncommunicable Diseases (NCD) constitute the main cause of deaths in the world and account for a high number of premature deaths and loss of quality of life due to high levels of limitation for people during their work and leisure activities. Not to mention the economic impact they have on families, communities, and society at large, which aggravates iniquities and increases poverty.

Despite its quick expansion, NCD's impact could be reversed by a wide and cost-effective intervention on health promotion, aiming at reducing risk factors, improving health care, and providing an early diagnosis and timely treatment.

Out of 57 deaths in the world in 2008, 36 million – or 63% - were caused by NCD, especially cardiovascular diseases, diabetes, cancer, and chronic respiratory diseases (ALWAN et al, 2010). Nearly 80% of deaths caused by NCD occur in low or middle-income countries, where 29% are individuals less than 60 years of age. In high-income countries, only 13% are premature deaths (WHO, 2011).

As in other countries, noncommunicable diseases constitute great health concern in Brazil. They account for 72% of causes of death, especially cardiovascular diseases (31.3%), cancer (16.3%), diabetes (5.2%), and chronic respiratory disease (5.8%), victimizing individuals from all socio-economic layers and, even more widely, those who belong to vulnerable groups, such as the elderly and low-income and low-schooling individuals.

The main risk factors for NCD are: tobacco, unhealthy eating habits, physical inactivity, and alcohol abuse - which are also responsible for the overweight and obesity epidemics, high incidence of hypertension, and high cholesterol (MALTA et al, 2006).

Tobacco: About 6 million individuals die every year because of tobacco, be it due to direct or to second-hand smoking (WHO, 2010a). By 2020, this number is expected to have increased to 7.5 million, accounting for 10% of all deaths (MATHERS; LONCAR, 2006). Estimates show that smoking is accountable for 70% of lung cancer cases, 42% of chronic respiratory diseases, and nearly 10% of cardiovascular diseases (WHO, 2009a).

Insufficient physical activity: According to estimates, 3.2 million people die every year from insufficient physical activity (WHO, 2009a). People who are not active enough have an increased risk of mortality by 20% to 30% (WHO, 2010b). Regular physical activity reduces the risk of cardiovascular disease, including hypertension, diabetes, breast and cervical cancer, as well as depression.

Alcohol abuse: 2.3 million individuals die every year from alcohol abuse, accounting for 3.8% of all deaths in the world (WHO, 2009b). More than half of those deaths are caused by NCD, including cancer, cardiovascular diseases, and liver cirrhosis. Consumption per capita is higher in high-income countries (WHO, 2011).

Inadequate Eating Habits: Appropriate consumption of fruits and vegetables reduces the risk of circulatory system diseases, stomach cancer, and colorectal cancer (BAZZANO et al, 2003; RIBOLI; NORAT, 2003). Most populations consume more salt than what is recommended by the World Health Organization (WHO) to prevent diseases (BROWN et al, 2009). High consumption of salt is an important determinant to hypertension and cardiovascular risk (WHO, 2010c). High consumption of saturated fat and trans fatty acids is linked to heart conditions (HU et al, 1997). Unhealthy eating habits, including fat consumption, are more and more common among low-income populations (WHO, 2011).

High blood pressure: Estimates show that high blood pressure is accountable for 7.5 million deaths, i.e., 12.8% of all deaths (WHO, 2009a). This constitutes a risk factor for circulatory system diseases (WHITWORTH, 2003). The incidence of high blood pressure is similar in all income groups; however, it is typically lower among high-income populations (WHO, 2011).

Overweight and obesity: 2.8 million individuals die every year due to overweight and obesity (WHO, 2009a). Risks of having a heart condition, cerebrovascular accident (CVA), or diabetes provably increase with overweight (WHO, 2002). High Body Mass Index (BMI) also increases the risk of some types of cancer (AMERICAN INSTITUTE FOR CANCER RESEARCH, 2009). Overweight in children and adolescents has increased all around the world.

Increased cholesterol: Estimates show that high cholesterol causes 2.6 million deaths every year (WHO, 2009a). It increases the risk of heart conditions and CVA (EZZATI et al, 2002; MEYER et al, 2001). High cholesterol is more prevalent in high-income countries.

1.1 Impacts on development

The NCD epidemic has more impact on low-income groups, since these are more exposed to risk factors and have poorer access to health services. These diseases create a vicious circle which worsens poverty for these families (WHO, 2011).

There are strong evidences which link social determinants – such as education, occupation, income, gender, and ethnicity - to NCD prevalence and its risk factors (WHO, 2008). In Brazil, processes of demographic, epidemiological, and diet transition, as well as urban development and socio-economic growth, contribute to increasing the Brazilian population's risk of developing chronic diseases. In this context, privileged ethnical and racial groups such as indigenous and black populations, as well as the quilombolas, have unevenly participated in this increase in the incidence of chronic diseases (SCHMIDT et al, 2011).

The treatment for diabetes, cancer, cardiovascular diseases, and chronic respiratory diseases can last for a long period, burdening individuals, families, and health systems. A family budget with NCD reduces the amount of resources previously available for food, housing, education, and others. The World Health Organization estimates that every year 100 million individuals are sent to poverty in countries where people must pay for health services themselves (WHO, 2010c).

In Brazil, even though there is a free and universal Brazilian Health System (SUS), individual expenses with chronic diseases remain quite high due to added costs. This contributes to the impoverishment of families.

Furthermore, health system expenses with NCD represent an increasing impact. In Brazil, NCD are one of the main causes for hospitalization.

A recent analysis carried out by the World Bank estimates that countries such as Brazil, China, India, and Russia waste, every year, over 20 million years of productive life due to NCD (WORLD ECONOMIC FORUM, 2008).

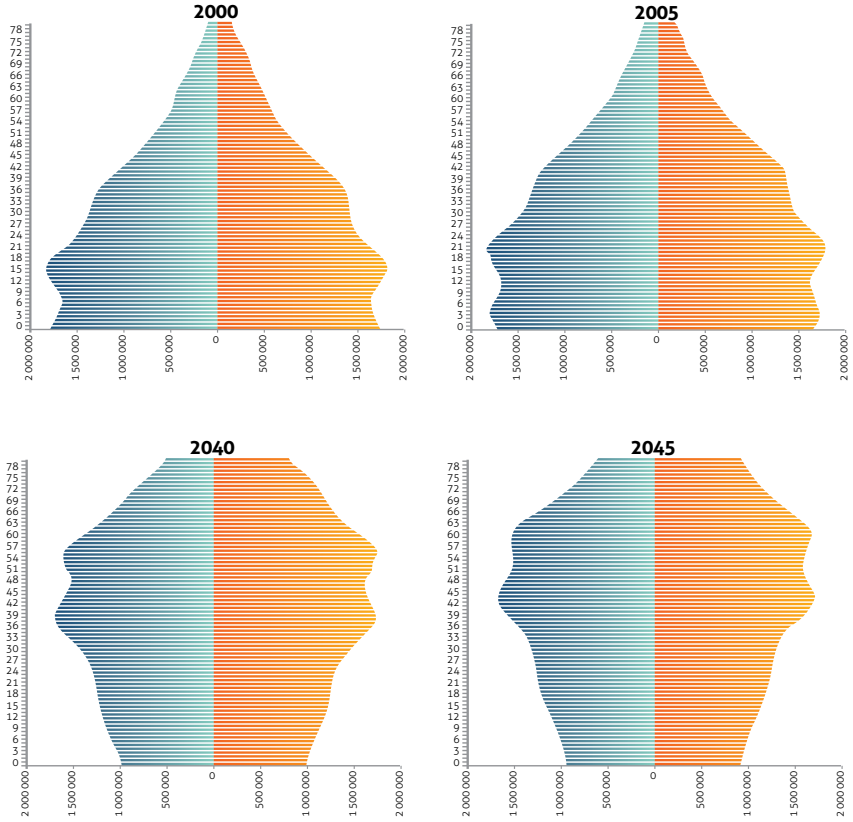
According to estimates, loss of work productivity and decrease in family income resulting from three of the NCD (diabetes, heart disease, and cerebrovascular accident) in Brazil should lead to losses of $4.18 billion for Brazilian economy in the 2006-2015 period (ABEGUNDE, 2007).

NCD's socio-economic impact is affecting the success of the Millennium Development Goals (MDG), which address health-related topics and social determinants (education and poverty). In most countries, the NCD epidemic and its risk factors have been affecting these accomplishments (WHO, 2011).

1.2 Demographic transition

Brazil is quickly changing its age structure, as it reduces the number of children and young people while increasing the number of elderly people and their life expectancy. This change takes place at a quick pace and Brazil's age pyramids should soon become similar to the European (IBGE, 2008). These changes pose challenges to all sectors, bringing about the need for re-thinking the supply of required services throughout the following decades. The increased number of elderly people in a population means an increased burden of disease, especially NCD.

Figure 1: Brazil age pyramids from 2000 and 2005 and future projections for 2040 and 2045



Source: IBGE, Research Board, Coordination of Population and Social Indicators, Projections on the Brazilian Population divided by Gender and Age regarding the period of 1980 – 2050 – Review 2008.

2. NCD Surveillance and Monitoring in Brazil

The three core components to NCD surveillance are: a) monitoring of risk factors; b) monitoring of morbidity and mortality rates specifically related to these diseases; and c) health systems responses which also include management, policies, plans, infrastructure, human resources, and access to basic health services, including medicines (WHO, 2011).

Strengthening surveillance is a national and global priority. There is the urgent need for investing in the improvement of coverage and quality of mortality-related data, as well as in the elaboration of regular surveys on risk factors at a national and global scale.

In Brazil, NCD surveillance enables familiarity with distribution, size, and incidence of these diseases and their risk factors among the population, identifying social, economic and environmental determinants to subsidize prevention and control planning, execution, and evaluation.

Preventing and controlling NCD and its risk factors is crucial in preventing an epidemical expansion of these diseases and the disastrous consequences to life quality and to the Brazilian health system. Aiming at monitoring behavior risks and protective factors, a survey system – population-based and conducted by telephone with specific groups – was established in 2003.

Monitoring NCD morbidity and mortality rates is a core component to the surveillance, and also to getting familiar with its characteristics and tendencies. There is no system to provide primary information on NCD morbidity, and there is no belief in the possibility of a registry system which identifies the number of cases. However, the Brazilian Health System is provided with systems which manage different care modalities enabling analyses of the behavior of these diseases' within a population.

The SUS Hospital Information System (SIH-SUS) provides a set of variables such as cause and date of hospitalization, disease development, direct costs, and another set of crucial data to obtain useful indicators to the monitoring of Noncommunicable Diseases – NCD, and to studies on the health system's expenses. Information obtained can be disaggregated up to the municipal level.

The Outpatient Information System (SAI-SUS) counts on a subsystem called Authorization for High-Complexity Procedures (APAC/SIA-SUS) which provides information on the disease of patients who have undergone treatments or exams considered to be highly complex in the fields of nephrology, cardiology, oncology,

orthopedics, ophthalmology, and others. This subsystem is founded on a consistent database which enables the analysis of NCD morbidity within outpatient populations.

Another set of useful systems for morbidity data acquisition are: Population-based Cancer Registries (RCBP) and Hospital-based Cancer Registries (RHC). These registries offer estimates on incidence, survival, and mortality rates related to several types of cancer. The Registry and Monitoring System of Hypertensive and Diabetic Patients (Hiperdia) provides detailed information on individuals with diabetes and high blood pressure, while the Food and Diet Surveillance System (Sisvan) is a tool for diagnosis support concerning nutritional status (incidence of malnutrition and obesity).

The Mortality Information System (SIM) keeps track of deaths occurring throughout the entire Brazilian territory, based on the filling out of a Death Certificate (DC), which is the document that works as input to the system. The data collected are of utmost relevance to the epidemiological surveillance and analysis, and it works as statistics on health and demography. This system provides highly relevant information for health managers, researchers, and society's entities for the priorities established for disease prevention and control. The last few years show gradual improvements on SIM's coverage and quality.

These sources of information enable the continuous monitoring of NCD incidence. Decision-makers are subsidized in the formulation for public policies for health promotion, surveillance, prevention, and care concerning these diseases within the Brazilian Health System.

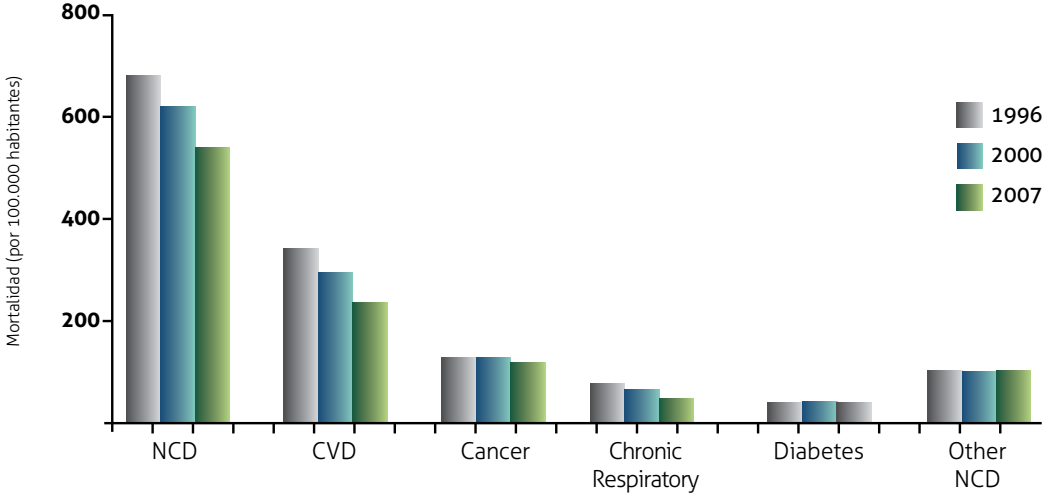
2.1 Epidemiological Data

In 1930, infectious and parasitic diseases accounted for 45% of deaths in Brazil. In 2009, cardiovascular diseases and neoplasias accounted for 48% of the Brazilian population's deaths. According to statistics from 1998, NCD accounted for 66% of Disability-adjusted Life Years (DALYs), compared to 24% of infectious, maternal and perinatal conditions, dietary deficiencies, and 10% of external causes. The following chronic diseases are worthy of special attention: neural-psychiatric disturbances (19%); cardiovascular diseases (13%); chronic respiratory diseases (8%); cancer (6%); musculoskeletal diseases (6%); and diabetes (5%) (SCHRAMM et al, 2004).

2.1.1 Mortality caused by NCD

According to Schmidt et al (2011), 58% of deaths in Brazil in 2007 were attributed to the four NCD listed as priorities in the WHO Action Plan for 2008 – 2013 (cardiovascular diseases, chronic respiratory diseases, diabetes, and cancer). Despite the assessment on NCD-related gross mortality showing a 5% increase from 1996 to 2007, going from 442 to 463 deaths per 100,000 inhabitants, when these rates are standardized according to WHO standard population age, and adjusted to sub-record with redistribution of ill-defined causes of death, analysis made throughout time shows that NCD-related mortality has decreased in 20% between 1996 and 2007 (Figure 2). In that period, there was a 31% reduction in cardiovascular diseases, and a 38% drop in chronic respiratory diseases (28% for chronic obstructive pulmonary disease and 34% for asthma); a 2% increase in diabetes, and a 2% decrease in other diseases (SCHMIDT et al, 2011).

Figure 2: Recent trends in NCD mortality for 1996 and 2007

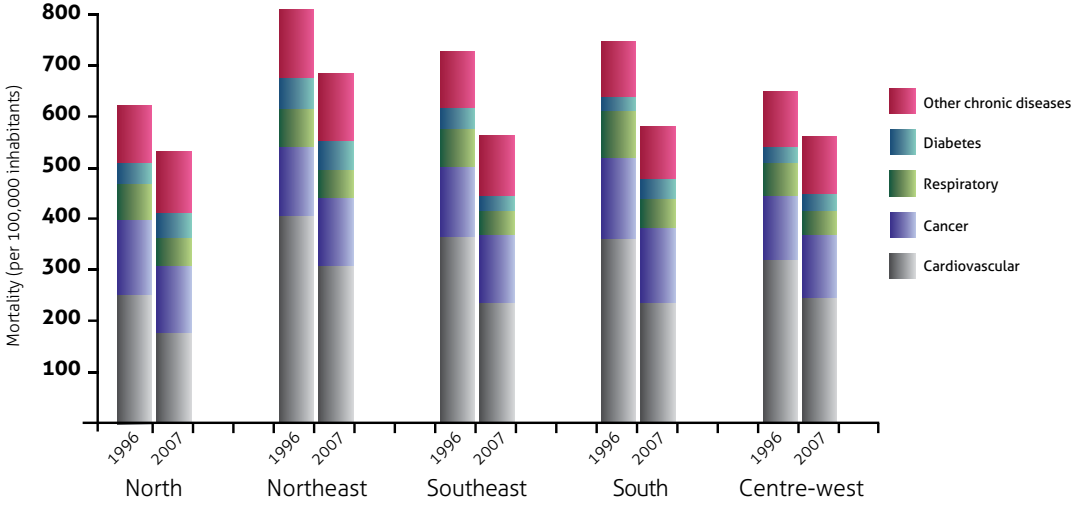


*Age-standardized to the WHO stantard population, corrected for under-reporting, with redistribution of ill-defined causes of death pro rata across non-external causes.

Source: Schmidt, M. I. et al, 2011.

Regional differences have also been found. In the poorest areas of Brazil's Northern and Northeastern regions, the decrease in NCD-related deaths from 1996 to 2007 was milder: the regions remained with the highest rates in Brazil (Figure 3). Moreover, there was an increase in mortality caused by diabetes and other chronic diseases in these regions.

Figure 3: Mortality rates for noncommunicable diseases by region for 1996 and 2007



* Age-standardised to the WHO standard population, corrected for under-reporting, with redistribution of ill-defined causes of death pro rata across non-external causes

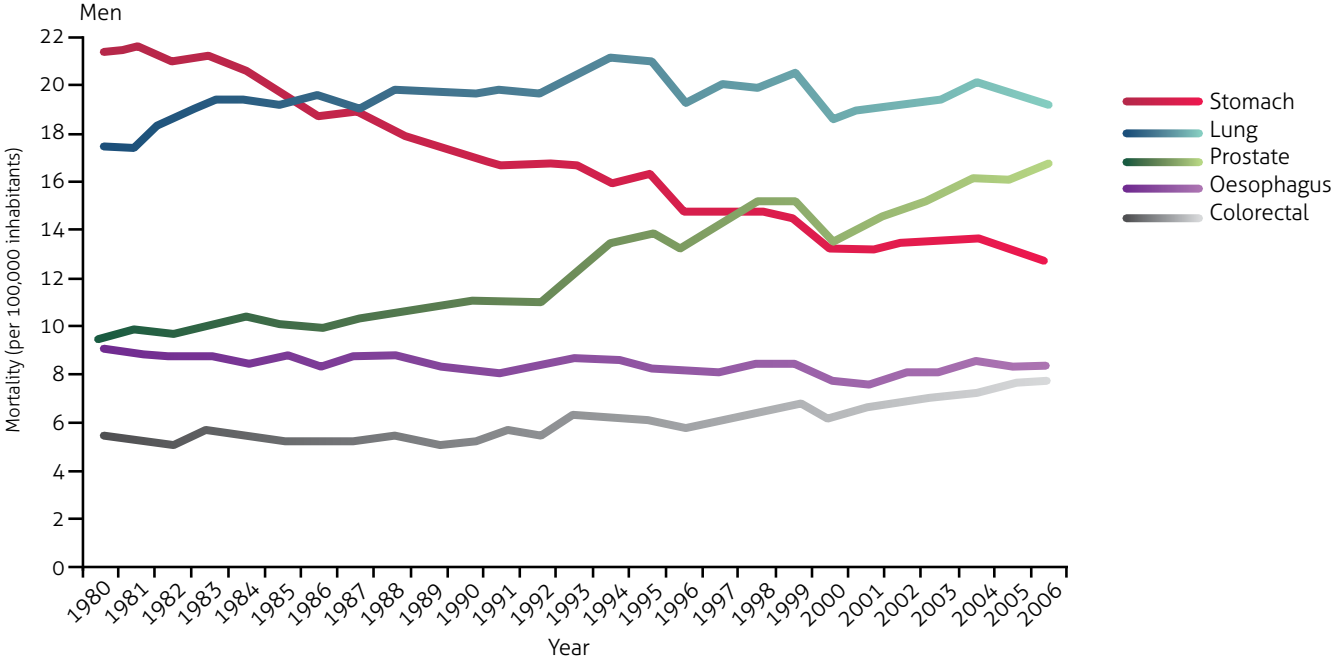
Source: Schmidt, M. I. et al, 2011.

Diabetes as basic cause of death increased in 11% from 1996 to 2000 and then decreased 8% in 2007, resulting in an increase of about 2% in the period (Figure 2). However, analyzing the disease as an associate cause of death, there is an 8% increase from 2000 to 2007. Besides the increasing mortality rates, diabetes is also worrisome due to the increase in its estimated incidence and due to the number of outpatient and hospital care services brought about by the disease and its associated conditions.

Cancer is another disease that needs to be addressed due to changes in its mortality rates. Analysis on mortality incidence from 1980 to 2006 shows that, among men, the age-adjusted rates according to the world standard lung,

prostate, and colorectal cancer populations are increasing. In contrast, rates for stomach cancer are decreasing, while those for esophageal cancer remain stable. Among women, mortality rates caused by breast, lung, and colorectal cancer have increased in that period, while those for cervical and stomach cancer have decreased (Figure 4). It is worth highlighting that the incidence of lung cancer among younger men - up until 59 years of age - has been declining, while for men and women at age 60 or over there is an increasing incidence. It could be a consequence of a reduced smoking habit among men over the last few decades (MALTA et al, 2007).

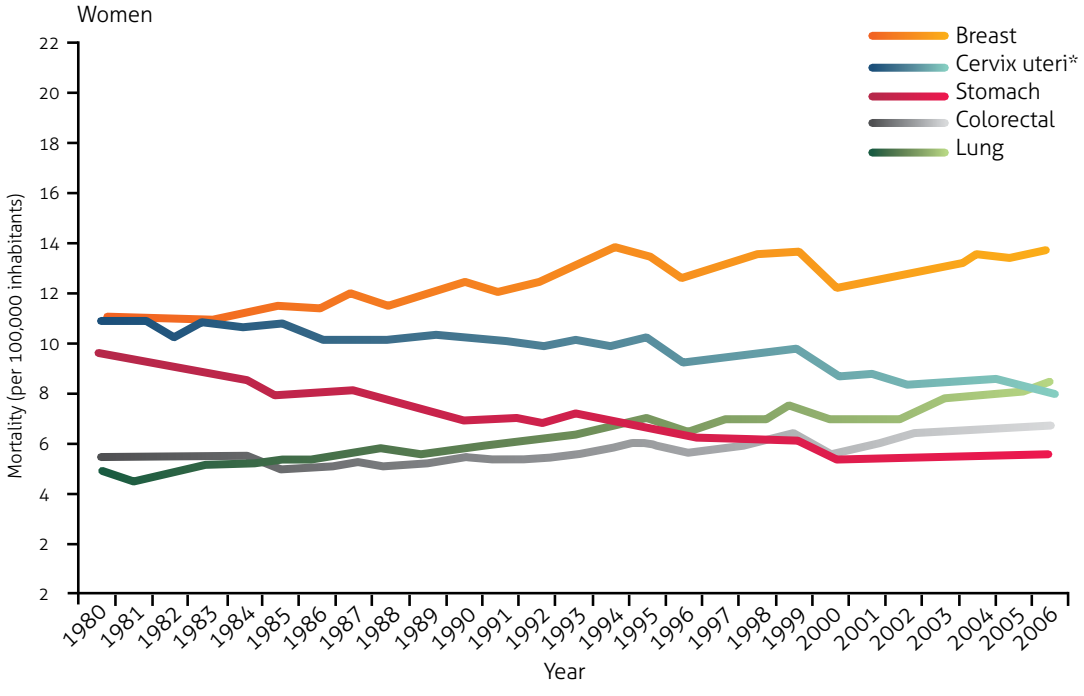
Figure 4: Mortality for main sites of cancer in men and women, 1980-2006



Age-standardised to the World Standard Population, with proportional redistribution of ill-defined deaths.

Adjusted with proportional redistribution of deaths classified as malign neoplasia of uterus, non-specified number.

Source: Schmidt, M. I. et al, 2011.



Age-standardised to the World Standard Population, with proportional redistribution of ill-defined deaths.

*Corrected with proportional redistribution of deaths classified as malignant neoplasm of uterus, part unspecified (ICD10 code C55)

Source: Schmidt, M. I. et al, 2011.

It is worth highlighting that the drop in cervical cancer mortality was observed mainly in state capitals and better developed regions, due to expanded access and improved quality of the cyto-pathological cervical exams. Nonetheless, the incidence of cervical cancer in Brazil remains one of the highest in the world. As for breast cancer, despite the recent increase in mammograms' self-reported coverage (IBGE, 2010a), mortality rates are higher in the Southeastern and Southern regions, but there is a tendency of increase in all state capitals and municipalities in Brazil.

Years of Potential Life Lost (YPLL)

In 2008, cardiovascular diseases and neoplasias were the main causes of years of potential life lost for both men and women, considering a standard life expectancy of 70 years. Men presented the highest rates for most of the diseases; for ischemic cardiomyopathy, rates were twice as high. Colorectal cancer, though, had higher incidence among women (Table 1).

Table 1: Years of Potential Life Lost (YPLL) for selected chronic diseases, among individuals who are under 70 years of age, according to sex, Brazil, 2008

		Total		Men		Women	
Cause	IDC-10	YPLL	Rate[1]	YPLL	Rate[1]	YPLL	Rate[1]
Cardiovascular diseases	I00 - I99	1909262	1072,5	1147288	1304,3	761896	845,9
Ischemic cardiomyopathy	I20-I25	622566	349,7	421799	479,5	200723	222,9
Cerebrovascular diseases	I60-I69	537678	302,0	288131	327,6	249532	277,1
Malign neoplasias	C00-C97	1536289	863,0	764324	868,9	771887	857,0
Cervical cancer	C53	n/c*	n/c*	n/c*	n/c*	73686	81,8
Breast cancer among women	C50	n/c*	n/c*	n/c*	n/c*	144870	160,9
Tracheal, bronchial, and lung cancer	C33-C34	140136	78,7	83689	95,1	56446,5	62,7
Stomach cancer	C16	95682	53,7	59797	68,0	35885	39,8
Cervical and rectal cancer	C18-C21	92750	52,1	45559	51,8	92750	103,0
Diabetes	E10-E14	278778	156,6	145513	165,4	133244	147,9
Chronic diseases of lower respiratory tract	J40-J47	140668	79,0	78579	89,3	62065	68,9

[1]Gross rate per 100,000 inhabitants <70 years old. n/c = not applicable. Romeder's Methodology, McWhinnie (1977).*

Source: SIM. CGIAE/DASIS/SVS/MS. Data for 2008.

2.1.2 Morbidity and risk factors

According to the National Household Survey (PNAD 2008), in Brazil, 59.5 million individuals (31.3%) claimed they had at least one chronic disease; 5.9% of the total population claimed they had three or more chronic diseases. These percentages have increased proportionally according to age (IBGE, 2010a). The number of individuals at age 65 or over who reported to have at least one chronic disease reached 79.1%.

Considering Brazil is home to one of the most rapidly aging populations in the world, the chronic disease burden in the country tends to increase, thus demanding that a new health care model be installed to serve this population.

Hospitalization

The SUS' Hospital-based Information System enabled the observance of about 80% of hospitalizations in the country.

As shown in Figure 5, cardiovascular diseases (CVD) are the main causes of hospitalization, generating the highest cost as far as this national health system component is concerned. In 2007, 12.7% of hospitalizations unrelated to pregnancy and 27.4% of hospitalizations of individuals at age 60 or over were due to cardiovascular diseases (SCHMIDT et al, 2011). Over the last few years (2000 – 2009), there has been a slight drop on the CVD-related hospitalization rates.

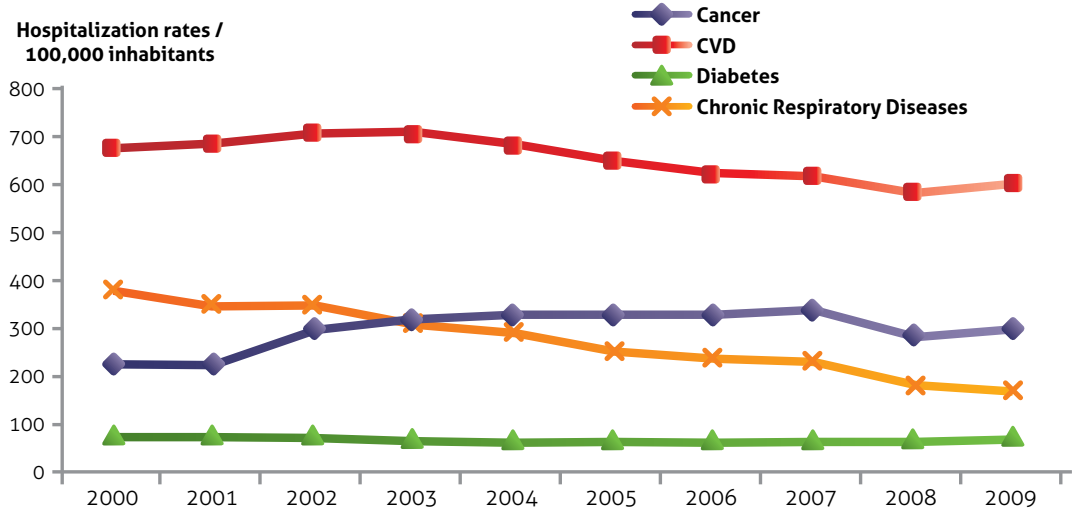
Neoplasia rates for hospitalization have increased in Brazil, jumping from 229/100,000 in 2000 to 301/100,000 in 2009 (Figure 5). Data from the Population-based Cancer Records reveals incidence of breast cancer in Brazil to be similar to those observed in first-world countries, while showing higher esophageal and cervical cancer rates (SCHMIDT et al, 2011).

Hospitalization rates for diabetes remained stable over the last few years, with 65 to 75/100,000 inhabitants/year.

Following the drop in mortality, hospitalizations due to chronic respiratory diseases had the sharpest reduction over the last few years, dropping from 383/100,000 in 2000 to 177/100,000 in 2009. From 2000

to 2007, adult hospitalization (age 20 or over) decreased to 32% for Chronic Obstructive Pulmonary Disease (COPD) and to 38% for asthma (SCHMIDT et al, 2011). The question of to what extent these tendencies are consequences of improving access to health care, reduced smoking, or other causes, is yet to be answered.

Figure 5: Hospitalization rates for selected chronic diseases, Brazil, 2000 to 2009



Source: SUS' Hospital-based Information System (SIH/SUS). Ministry of Health.

CVD = Cardiovascular Disease.

Risk Factors

The four chronic diseases with the highest global impact (cardiovascular diseases, diabetes, cancer, and chronic respiratory diseases) share four risk factors (smoking, physical inactivity, unhealthy food, and alcohol abuse). In terms of deaths caused, the main risk factors known worldwide are the following: high blood pressure (accountable for 13% of deaths worldwide); smoking (9%); high levels of blood sugar (6%); physical inactivity (6%); and overweight and obesity (5%) (WHO, 2009a).

In Brazil, these risk factors are monitored by performing a number of health surveys, especially the VIGITEL monitoring (Brazilian Population-based Survey conducted by Telephone on Chronic noncommunicable Diseases). Table 2 presents an analysis on incidence estimates for some of these risk factors concerning the period ranging from 2006 to 2010.

Table 2: Prevalence of selected risk factors for chronic diseases according to VIGITEL's estimates, population-based telephone survey conducted with adults residing in all Brazilian capital cities, 2006 and 2010

	2006	2010	Difference
Smoking			
Current smoker	16.2 % (15.4-17.0)	15.1% (14.2-16.0)	-1.1% (0.02)
Former smoker	22.1% (21.3-22.9)	22.0% (21.1-22.9)	-0.1% (0.81)
Physical Activity			
Leisure time physical activity	14.8% (14.2-15.5)	14.9% (14.1-15.8)	0.1% (0.78)
Dietary intake			
Fat meat intake	39.1% (38.8-39.7)	34.2% (33.0-35.3)	-4.9% (<0.001)
Regular consumption of fruits and vegetables	28.9% (28.6-29.6)	29.9% (28.9-30.9)	1% (0.03)
Harmful use of alcohol			
Excessive consumption in the last 30-day period	16.2% (15.5-16.9)	18.0% (17.2-18.9)	1.8% (<0.001)
Overweight/obesity			
Overweight	42.8% (41.8-43.8)	48.1% (46.9-49.3)	5.3% (<0.001)
Obesity	11.4% (10.8-12.0)	15.0% (14.2-15.8)	3.6% (<0.001)

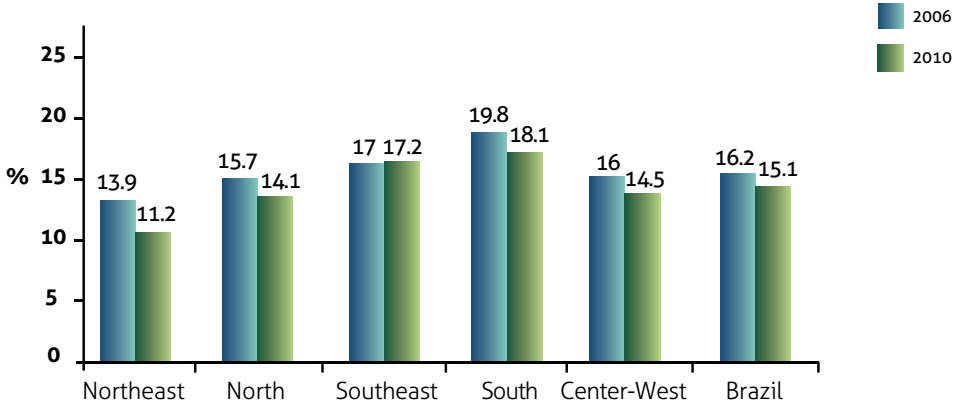
% (95%CI) or % (p-value) - p-value calculated by Poisson regression, comparing prevalences in 2006 and 2010.

Source: Protective and risk factors for chronic diseases by telephone survey (VIGITEL) 2006 – 2010. Ministry of Health.

By disaggregating data into regions, one can observe that the sharpest differences are related to alcohol abuse, overweight, obesity, and fat meat consumption, with similar standards for the several Brazilian regions (Figures 6 a-h).

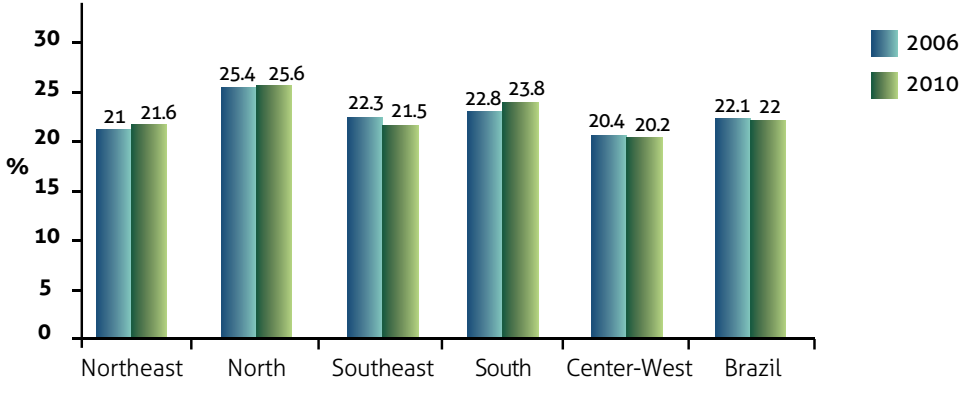
Figures 6a to 6h: Prevalence of risk and protective factors concerning chronic diseases in Brazil and its regions, according to VIGITEL estimates, phone survey done with adults living in the Brazilian capital cities, 2006 and 2010.

Figure 6a: Prevalence of smokers[a], Brazil and Geographic regions, 2006 and 2010



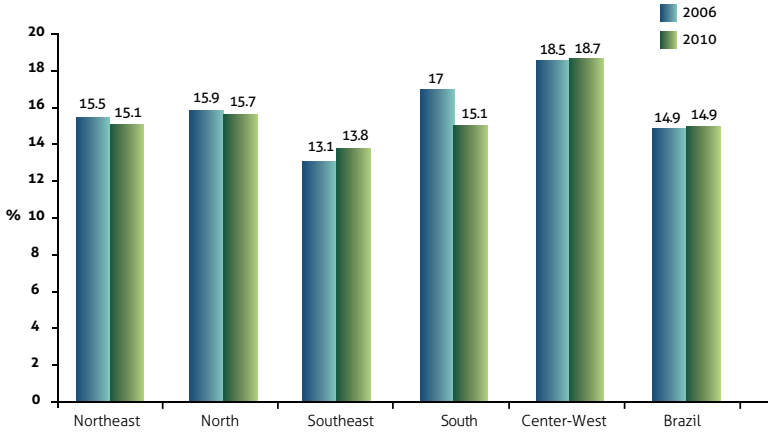
a – Percentage of adults who reported being smokers, regardless of the frequency and intensity.

Figure 6b: Prevalence of former smokers[b], Brazil and Geographic regions, 2006 and 2010



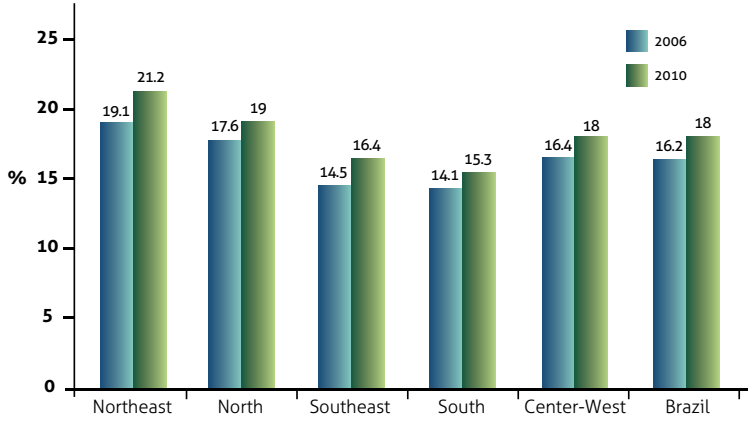
b – Percentage of non-smokers who reported having smoked in the past, regardless of how many cigarettes they used to smoke or how long they smoked for.

Figure 6c: Leisure time physical activity[c], Brazil and Geographic regions, 2006 and 2010



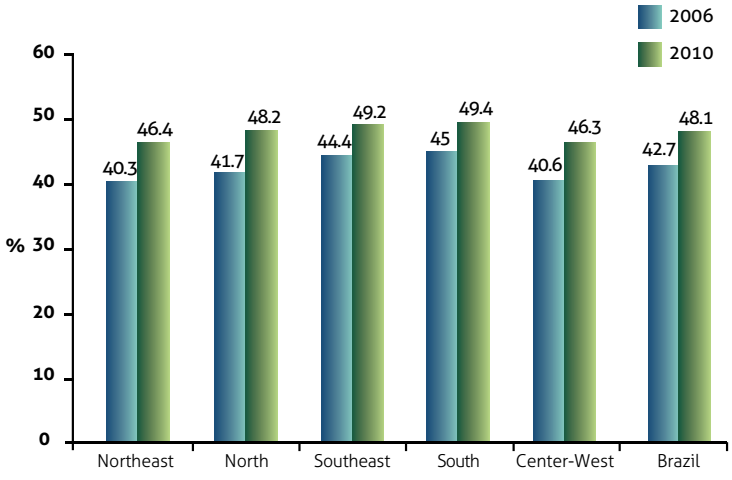
c – Percentage of adults who, in the past three months, have engaged in whether light or moderate physical activity (walking, swimming) for 30 min/day for ≥ 5 days a week, or in intense physical activity (jogging, soccer) for 20 min/day for ≥ 4 days a week.

Figure 6d: Prevalence of harmful use of alcohol[d], Brazil and Geographic regions, 2006 and 2010



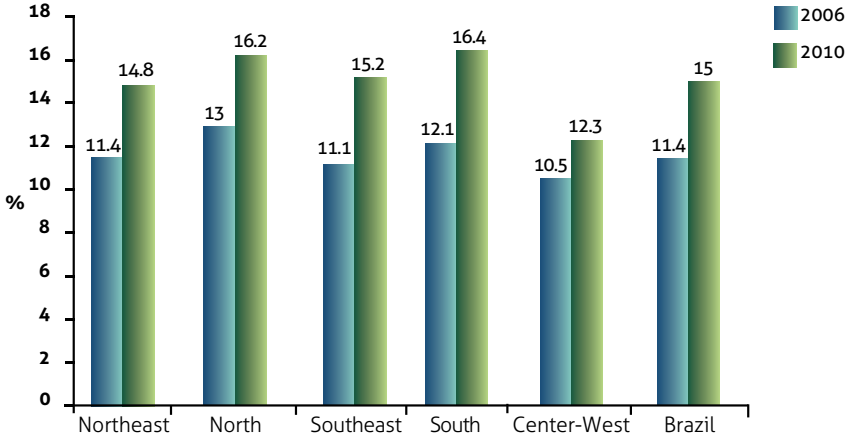
d – Percentage of individuals who, over the last 30 days, have consumed four or more doses (women) or five or more doses (men) of alcoholic beverage during one event. A dose of alcoholic beverage is considered to be either a dose of distilled beverage, a beer can, or a glass of wine.

Figure 6e: Prevalence of overweight[e], Brazil and Geographic regions, 2006 and 2010



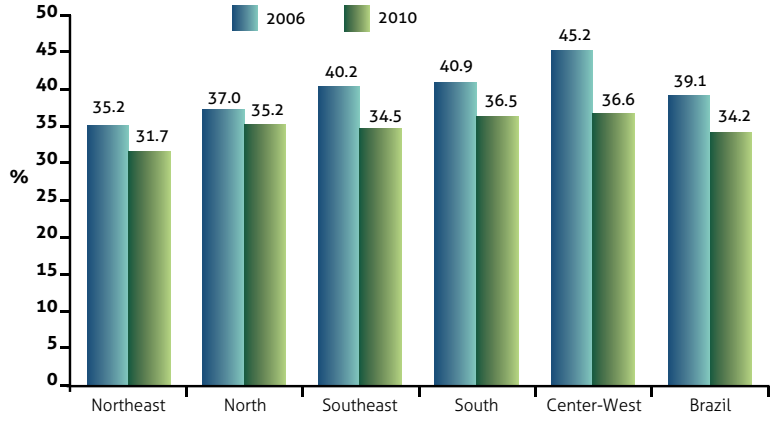
e – Percentage of adults who, according to their reported weight and height, presented a Body Mass Index (BMI) equivalent to or higher than 25 kg/m².

Figure 6f: Prevalence of obesity [f], Brazil and Geographic regions, 2006 and 2010



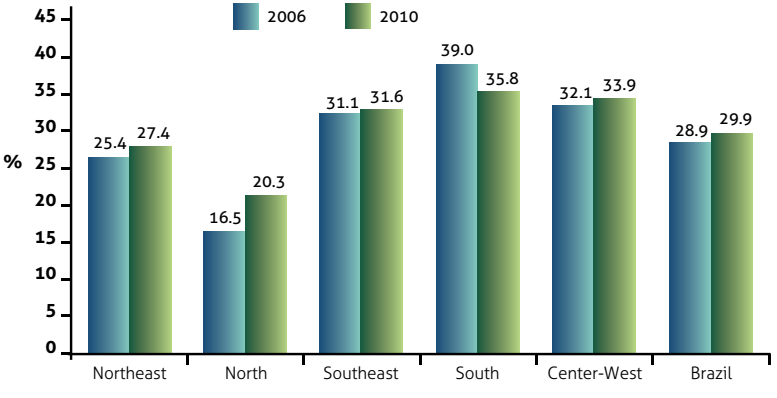
f – Percentage of adults who, according to their reported weight and height, presented a Body Mass Index (BMI) equivalent to or higher than 30 kg/m².

Figure 6g: Levels of fat meat intake[g], Brazil and Geographic regions, 2006 and 2010



g – Percentage of adults who are used to eating meat with fat (fat red meat or chicken with skin showing fat).

Figure 6h: Regular fruits and vegetables intake[h], Brazil and Geographic regions, 2006 and 2010



h – Percentage of adults who are used to eating fruits and vegetables five or more days a week.

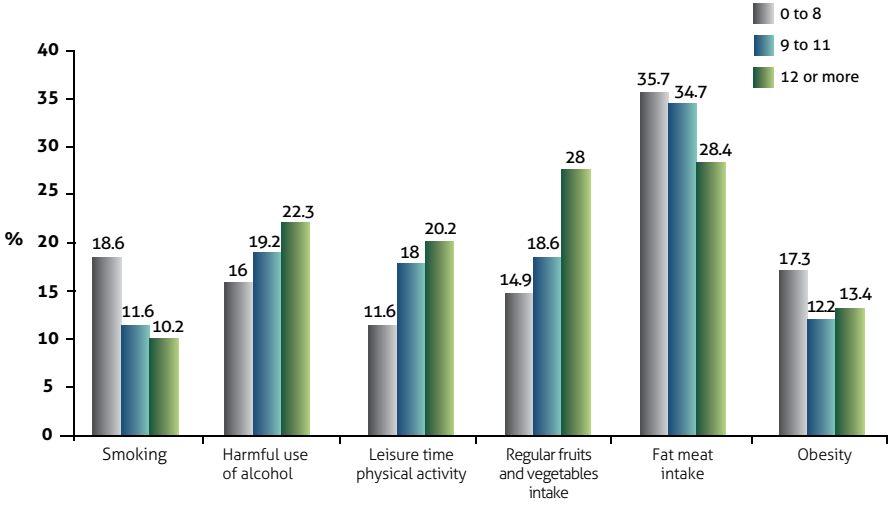
Source: Protective and risk factors for chronic diseases by telephone survey (VIGITEL) 2006 – 2010. Ministry of Health. The percentages were weighted to adjust for social-demographic distribution of VIGITEL to the adult population distribution of the 2000 Demographic Census.

As for smoking, the highest percentage reduction took place in the Northeastern (2.6%) and Southern (1.7%) regions, while the Southeast presented a slight increase (0.2%). Physical activity trend was not consistently standardized, having a 0.7% increase in the Southeast and a 1.9% drop in the South. The highest increase in alcohol abuse was observed in the Northeast (2.1%), exceeding the increase for the whole country (1.8%).

The highest increase for overweight was observed in the Northern and Northeastern regions (6.5% and 6.1%, respectively), while the increase for obesity was higher in the Southern and Southeastern regions (4.3% and 4.1%, respectively). Although all regions have reported a decrease in meat with visible fat consumption, the increase in fruit and vegetables consumption was not so sharp, even showing a reduction of 3.2% in the Southern region.

The distribution of risk and protective factors could also be observed within the context of social iniquities found in Brazil, through an analysis according to schooling, as shown in Figure 7. Generally speaking, risk factors such as smoking, meat with visible fat consumption, and obesity are more common within a less-educated population, while the levels of physical activity during leisure time and the recommended consumption of fruits and vegetables (five portions/day five or more times/week) are higher among the population with 12 or more years of schooling.

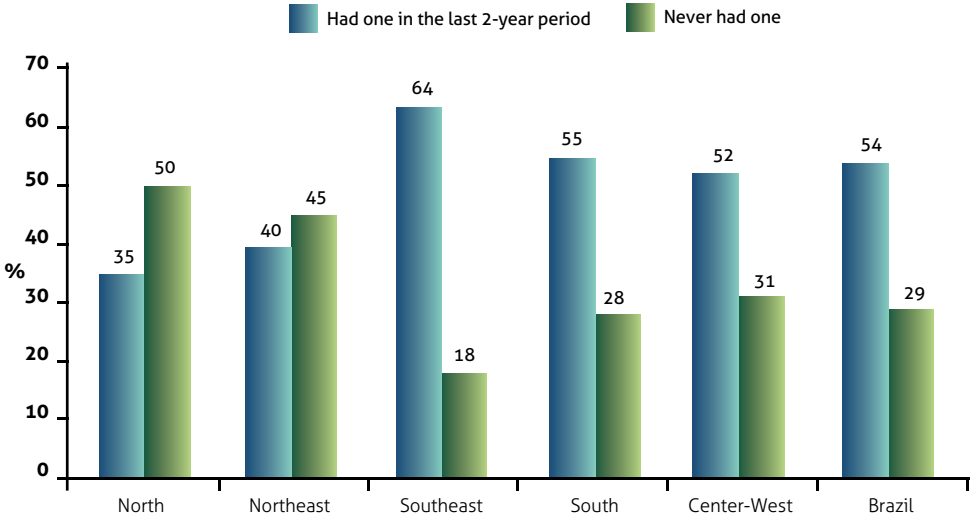
Figure 7: Prevalence of risk and protective factors for NCD in capital cities of Brazil, according to schooling, VIGITEL 2010



Source: Protective and risk factors for chronic diseases by telephone survey (VIGITEL) 2006 – 2010. Ministry of Health. The percentages were weighted to adjust the social-demographic distribution of VIGITEL to the adult population distribution of the 2000 Demographic Census.

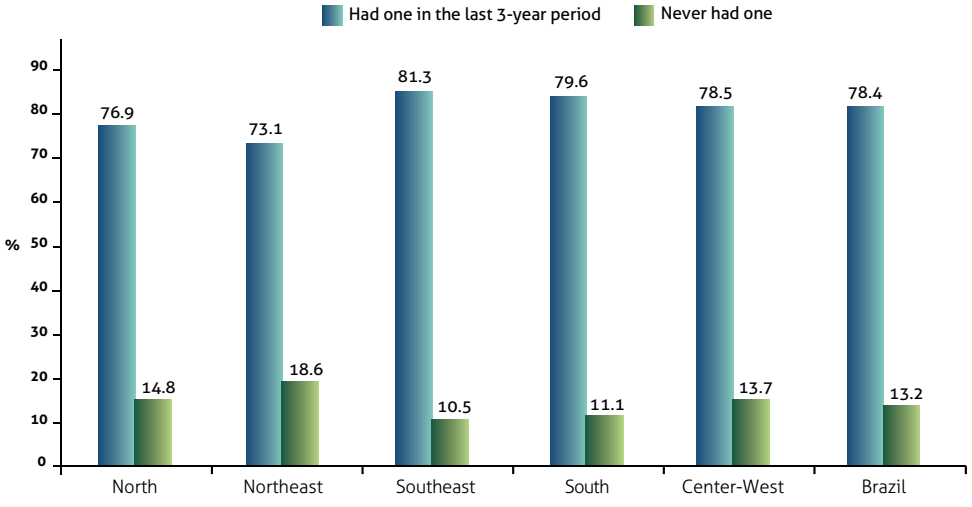
Regarding women's access to preventive cancer exams, it has been noticed that exam coverage – especially mammograms, which demand specific technology – is higher in the richest regions of the country (South and Southeast). The Northeastern and Northern regions present Pap smear test coverage below national average (Figures 8 and 9).

Figure 8: Proportion of women at age 50 to 69 who reported have had mammograms in the last two-year period, Brazil and Geographic regions, PNAD 2008



Source: National Household Sampling Survey (PNAD) 2008. Ministry of Planning, Budget, and Management (MPOG) and the Brazilian Institute of Geography and Statistics (IBGE).

Figure 9: Proportion of women at age 25 to 64 who reported having had the Pap smear test in the last three-year period, Brazil and Geographical regions, PNAD 2008



Source: National Household Sampling Survey (PNAD) 2008. Ministry of Planning, Budget, and Management (MPOG) and the Brazilian Institute of Geography and Statistics (IBGE).

Smoking

Brazil has been standing out as the country that reduced smoking incidence in the American continent. In 1989, the incidence of smokers was 34.8% (National Health and Nutrition Survey – PNSN) (INAN, 1990)); in 2003, it was 22.4%, according to the World Health Survey (WHO, 2004). Most recent data of national significance and acquired through the Special Tobacco Survey (PETab 2008) show an incidence of 17.2% in Brazil (21.6% among men and 13.1% among women) (IBGE, 2009). In reference to state capitals alone, VIGITEL found an incidence of 16.2% in 2006 and 15.1% in 2010 (BRASIL, 2011), showing a significant reduction among men. Between 2007 and 2010, the incidence of men smokers dropped, on average, 1.1 percentage point (pp) a year. For the same period, a 20-cigarette consumption a day among men dropped 0.4 pp a year, on average. In 2010, the incidence of second-hand smokers in the household environment was higher among women (13.3% versus 9.8%), whereas the incidence of second-hand smokers at the work environment was higher among men (16.7% versus 6.9%).

Among adolescents, data from the National Survey on Students´ Health (PeNSE, 2009) found that 6.3% of 9th grade students (age 13 to 15) claimed to have smoked in the 30-day period prior to the interview (IBGE, 2009; MALTA et al, 2010).

Insufficient physical activity

The Brazilian population's physical activity standards were only first surveyed sometime in the last few years. The VIGITEL telephone-based survey assesses physical activity in four domains: during free or leisure time; the way to and from work or school; working activities; household activity. The first one is the most susceptible to interventions. Engaging for at least 30 minutes in some sort of physical activity for at least five days a week has increased from 14.8% in 2006 to 14.9% in 2010 among adults living in state capitals of Brazil. Men, young people, and more educated individuals are the most active. In 2010, 14.2% of adults were considered to be inactive, while 28.2% claimed they watched three hours or more of TV a day (BRASIL, 2011).

According to the PeNSE survey, 43.1% of assessed young students were considered to be sufficiently active (at least 300 minutes of accumulated physical activity in the last seven-day period); however, 79.5% spend over two hours a day watching TV (IBGE, 2009; MALTA et al, 2010).

Inappropriate eating habits

Data gathered from four relevant surveys assessing the period ranging from the mid 70s to 2000s on food purchase by the Brazilian families suggest a reduction in the purchase of basic traditional food such as rice, beans, and vegetables. These data also show an increase in the purchase of processed food, resulting in increased consumption of saturated fats and sodium (LEVY et al, 2009. In: SCHMIDT et al, 2011). They ratify the information available on food products that are considered to be determinants of healthy and unhealthy eating habits, made available by the national inquiries. According to the 2010 VIGITEL survey, consumption of fruits and vegetables for five or more days a week has been reported by 29.9% and bean consumption has been reported by 66.7%, among the population aged 18 or over. In addition, the percentage of people eating meat with visible fat (334.2%) and drinking fat milk (56.4%) is rather high (BRASIL, 2011).

The PeNSE survey found that, in students' eating habits, most consumed healthy products (five or more days a week) as follows: beans (62.6%) and fruits (31.5%). As for unhealthy products, snacks (50.9%), soft drinks (37.2%), and canned goods (13%) are the most consumed (IBGE, 2009).

Alcohol abuse

In Brazil, alcohol abuse is also associated with deaths from violent causes and road traffic accidents. Age-adjusted mortality caused by mental and behavior disturbances due to alcohol abuse (IDC 10 code F10) increased 21% in 11 years, from 4.26/100,000 individuals in 1996 to 5.17/100,000 individuals in 2007 (SCHMIDT et al, 2011).

According to the 2010 VIGITEL survey, 18% of Brazilian adults reported abuse of alcohol (four or more doses for women and five or more doses for men in one single event over the last 30-day period). This rate is higher among men, young people, and the highly educated population. This percentage increased in 0.6 pp a year from 2006 to 2010, especially for women. (BRASIL, 2011).

Exposure to alcohol starts early in life: 71% of 9th grade students were assessed in the PeNSE survey and claimed they have tried alcohol, while 27% claimed they have consumed alcoholic beverages in the last 30-day period. Almost 25% of these students claimed they have gotten drunk at least once in their lives (MALTA et al, 2010).

High blood pressure

According to the 2010 VIGITEL survey, estimates show that 25.5% (IC 95% 24.3 – 26.7) of women and 20.7% (19.1 – 22.2) of men aged 18 or over, and about half of the men and over half of the women aged ≥55 reported previous diagnosis of hypertension (BRASIL, 2011). This incidence is even higher among less educated individuals (income proxy). Self-reported incidence has increased nearly 0.5% a year. The age-adjusted incidence of this condition among a low-income population in Sao Paulo was 6.5% (IC 95% 5.5 – 7.5) in women and 4.6% (IC 95% 3.5 – 5.7) in men (ABE et al, 2010a).

Increased cholesterol

In Brazil, 14.1% (IC 95% 13.0 – 15.3) of men and 19.3% (IC 95% 18.4 – 20.2) of women aged 18 or over reported clinical diagnosis of dyslipidemia in 2009, according to the 2009 VIGITEL survey (BRASIL, 2010).

The great challenge: the obesity epidemic

Brazil has been becoming more and more concerned about overweight and obesity. The number of adults who are overweight has gradually increased according to all surveys. In 1974/1975, according to the National Study on Family Budget (Endef) (IBGE, 1974), the incidence was 18.6% among men, while in 1989 this rate was 19.9%, according to the National Health and Nutrition Survey (PNSN) (INAN, 1990), reaching 41.4% in 2002/2003 and 50.1% in 2008, according to the Family Budget Surveys (POF) (IBGE, 2003; 2010c). Women reported similar incidence, reaching a 48% overweight in 2008 (IBGE, 2010c). Obesity in men, in turn, increased from 2.8% (IBGE, 1974) to 5.4% (INAN, 1990), and then to 9.0 (IBGE, 2004) and to 12.4% (IBGE, 2010c). In women, this incidence has increased from 2.8% (IBGE, 1974) to 13.5% (IBGE, 2003), reaching 16.9% in 2008 (IBGE, 2010c) (Figure 10).

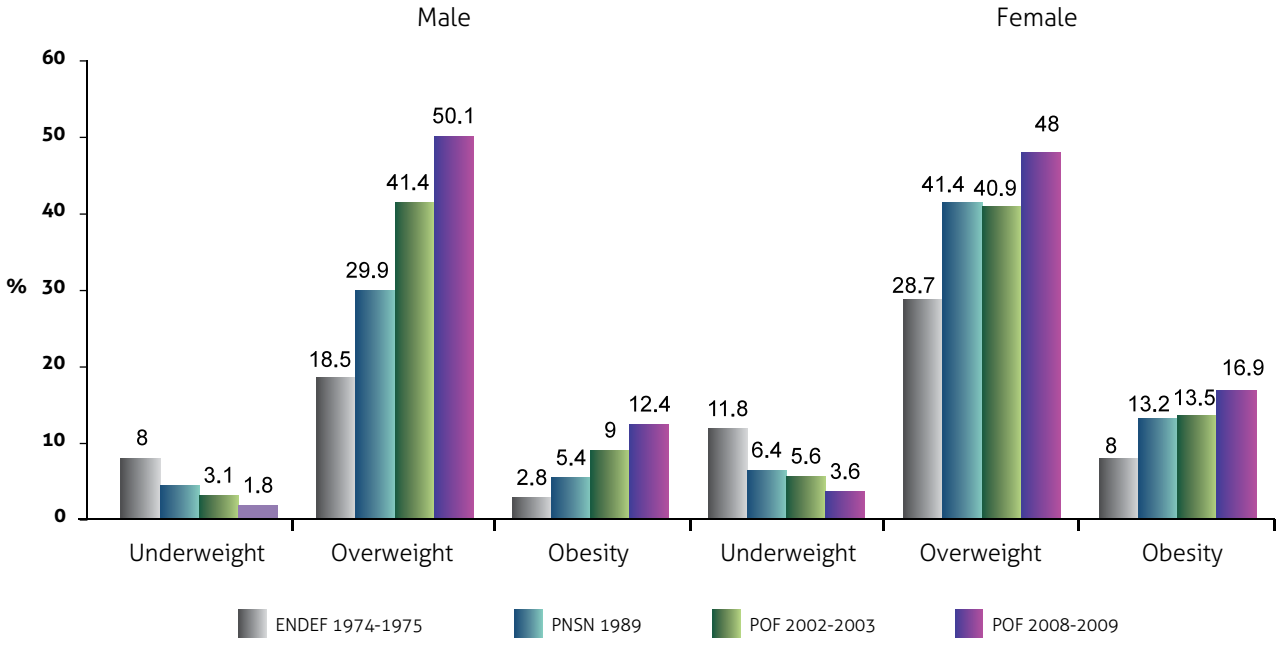
VIGITEL's recent data (2010) cause even more concern, as they point out an overweight incidence among adults living in state capitals of 48.1% (52.1% in men and 44.3% in women), while obesity has increased from 11.4% in 2006 to 15% in 2010. From 2006 to 2010, there was an increase in overweight of 1.2 pp a year in men, while the increase in women was of 2.2 pp a year. Obesity incidence has increased 1pp a year in women, on average, from 2006 to 2010 (BRASIL, 2011).

Overweight and obesity in youth and children is also cause for concern. The nutritional status assessment of children aged 5 to 9 carried out by the POF survey 2008 – 2009 showed that overweight and obesity already account respectively for 33.5% and 14.3% of that group.

In the population 10 to 19, age group overweight has been diagnosed in nearly 1/5 of adolescents (Figure 11), while obesity incidence was 5.9% in boys and 4% in girls. The highest incidences of overweight and obesity in all age groups detected inquired by the POF survey 2008 – 2009 were registered in the Southern and Southeastern regions for both genders (IBGE, 2010c).

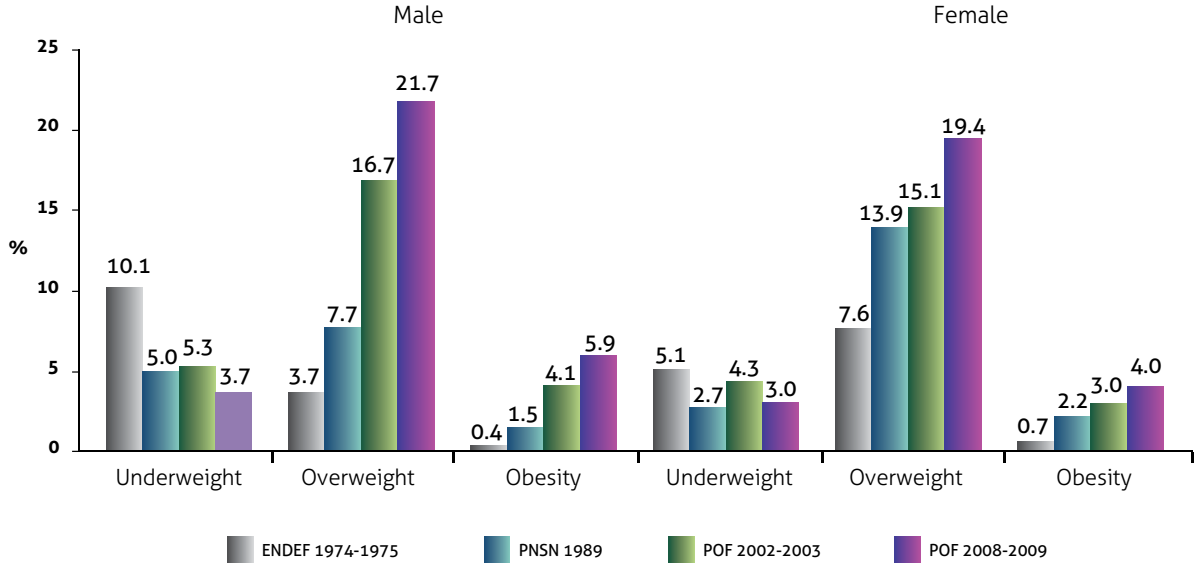
The PeNSE survey assessed the 9th grade students' BMI (age 13 to 15) in Brazilian state capitals, from both public and private schools. Overweight reached 16% and obesity incidence was 7.2%. The highest incidences of overweight and obese students were found in the Southern and Southeastern regions of Brazil, among students from private schools and especially boys (IBGE, 2009).

Figure 10: Underweight, overweight, and obesity prevalence among the population aged 20 and over, according to sex, Brazil - periods: 1974-1975, 1989, 2002-2003 and 2008-2009



Source: Family Budgets Survey (POF) 2008 – 2009. IBGE. Anthropometry and Nutritional Status of Children, Adolescents and Adults in Brazil, 2010.

Figure 11: Underweight, overweight, and obesity prevalence among the population aged 10 to 19, according to sex, Brazil - periods: 1974-1975, 1989, 2002-2003 and 2008-2009



Source: Family Budgets Survey (POF) 2008 – 2009. IBGE. Anthropometry and Nutritional Status of Children, Adolescents and Adults in Brazil, 2010.

3. Effective NCD Interventions

Interventions aimed at preventing and controlling NCD include a wide range of measures, which have been monitored and evaluated through different studies. The World Health Organization (WHO) has recently made public the list of interventions considered to be the most cost-effective, some of which are also considered to be the "best buys"(actions that should be promptly executed in order to reach immediate results in terms of lives saved, prevented diseases, and avoided high costs) (WHO, 2011).

Population-based interventions considered to be the best buys by the WHO are:

- ✓ Increasing prices and taxes on tobacco products (WHO, 2010, IARC, in press);
- ✓ Protecting people against cigarette smoke and prohibiting smoking in collective spaces (WHO, 2007; IARC, 2009);
- ✓ Warning about tobacco-related dangers (ITC, 2010);
- ✓ Enforcing prohibition on tobacco advertising, sponsoring, and promotion (JAMISON et al, 2006);
- ✓ Restricting retail sales of alcohol (ANDERSON et al, 2009);
- ✓ Reducing salt consumption and salt content in food (ASARIA et al, 2007; Murray et al, 2003);
- ✓ Replacing trans fats by polyunsaturated fats (WILLETT et al, 2006);
- ✓ Promoting awareness on diets and physical activity, taking advantage of mass media (CECCHINI et al, 2010).

Other than the "best buys", there are many other population-based and cost-effective interventions capable of reducing NCD risk. These include:

- ✓ Treatment for nicotine dependence (WHO, 2011b);
- ✓ Promotion of proper breastfeeding and complementary diet (WHO, 2003);
- ✓ Enforcement of drinking and driving laws (WHO, 2010e);
- ✓ Restrictions on the marketing of food and beverage containing too much salt, fat, and sugar, especially for children (CECCHINI et al, 2010; WHO, 2010f);
- ✓ Taxes on food and subsidies for healthy food (LYNGBY, 2007).

There is also strong evidence to the interventions listed below, even though surveys have not shown cost-effective results yet.

- ✓ Healthy nutrition environments at schools;

- ✓ Nutrition information and health care counseling (WHO, 2004);
- ✓ National guidelines on physical education;
- ✓ School-based physical activity programs for children;
- ✓ Work place programs on physical activity and healthy diets;
- ✓ Community programs on physical activity and healthy food;
- ✓ Building environments aimed at promoting physical activity (WHO, 2009c).

There are also population-based interventions focused on cancer prevention which are effective in reducing the disease burden. Some examples are as follows: vaccination against Hepatitis B (WHO, 2007b) - which is the main cause of liver cancer; protection against environmental or occupational risk factors, such as asbestos and drinking water contaminants; and screening of both breast and cervical cancer (IARC 2002; 2005).

Group-oriented health care interventions

In addition to population-based measures, interventions on NCD patients, or people at great risk of developing such diseases, are also considered to be effective. These interventions tend to be cost-effective. If put together, both population-based and individual interventions could help save millions of lives and considerably reduce NCD-related human struggle (WHO, 2000; 2002).

Cancer treatment combined with early detection (tracking + early diagnosis) has increased survival rates for several types of cancer in high-income countries, while in low and middle income countries these rates remain quite low (SANKARANARAYANAN et al, 2010).

Individuals at high risk and those with cardiovascular diseases could be treated with low-cost generic drugs, significantly reducing the probability of death or vascular event.

The use of acetylsalicylic acid (AAS), statin, and anti-hypertension drugs can significantly reduce the occurrence of vascular events in individuals at high risk of developing cardiovascular diseases, and is considered to be the "best buy" (LIM et al, 2007). When developed in combination with other preventive measures, such as quitting smoking, the therapeutic benefits are increased (YUSUF, 2002). Another "best buy" is the administration of aspirin to people who develop myocardial infarction (JAMISON et al, 2006; ISIS-1, 1986),

In Brazil, the pharmaceutical care program has defined a list of basic medicines which have been distributed within SUS health units for some years. The list is updated on a regular basis according to the protocols issued by the Ministry of Health. The MoH transfers financial resources in order to purchase medicines based on the municipalities' number of inhabitants/year. These resources are supplemented by state and municipal resources. In 2004, the Ministry of Health established the Farmacia Popular Program (Popular Drugstore) on its own units, increasing access to a set of medicines at lower costs. In 2006, the program was expanded through agreements made with the private sector, through a campaign entitled"Aqui tem Farmacia Popular" (Here there is a Popular Drugstore). In 2001, through a campaign entitled"Saude Não tem Preço"(Health is Priceless), anti-hypertension and diabetes medicines started being broadly provided free of charge. Other drugs to treat other chronic diseases such as asthma, rhinitis, Parkinson's disease, osteoporosis, and glaucoma were distributed with discounts of up to 90% to nearly 17,500 private registered drugstores throughout Brazil. In April, this measure enabled 3.7 million treatments, as it increased sick people's access to these drugstores in 70%. This measure is expected to have positive impacts on the access to NCD medicines.

Cardiovascular diseases: These diseases constitute the major cause of morbidity and mortality in Brazil and in the world, especially cerebrovascular accidents, coronary diseases, and systemic high blood pressure. The Plan to Tackle NCD presents a wide range of measures aimed at promoting health and preventing and controlling these diseases. Systemic high blood pressure is highly prevalent in Brazil and in the world, causing extremely high social costs. Hypertension is an important risk factor, as it constitutes the main cause of other cardiovascular diseases. Hypertension is still associated with other chronic diseases and conditions such as chronic renal disease, diabetes, among others. Such evidence proves this disease to be worthy of attention, since it potentially worsens individuals' health condition, causing loss of quality of life, early lethality, high social costs, and expenses to the health system. Dealing with high blood pressure properly is primordial and requires combined planning, always taking into consideration the three axes that constitute the foundation for this Plan: hypertension surveillance; surveillance of co-morbidities and their determinants; Comprehensive Care; and health promotion. Investment in education and social mobilization intensifies and qualifies self-care and the fostering of healthy habits.

Cancer: There are cost-effective interventions in all areas of cancer prevention and control: primary prevention; early detection; and palliative treatment and care (WHO, 2002b). Early diagnosis, encouraged by warning policies for the first signs and symptoms, can lead to increased survival rates for breast, cervical, skin, mouth, and colorectal cancers, among others, especially in regions where cancer is usually detected later in time. Some treatment protocols for several types of cancer make use of generic drugs

so as to reduce costs. Community and home-based palliative cares can be successful and cost-effective (STJERNSWÄRD et al, 2007).

Brazil is in need of improving its early detection system, especially concerning cases of potential curable cancer, followed by diagnosis and treatment, as well as training for basic care teams with the purpose of providing palliative care to individuals at terminal stages (SCHMIDT et al, 2011).

Concerning early detection, the policy of tracking cervical cancer based on the Pap smear test deserves to be mentioned. This policy has been expanding access to this exam in the SUS service system since 1998 and, based on the Ministry of Health's recommendation, in 2004, it has started tracking breast cancer based on the annual clinical exam conducted after 40 years of age, and on mammograms – every two years – for the 50 to 69 age group. There has been an increase in the coverage of gynecological preventive exams over the last three years which, based on data gathered in national surveys (PNAD), has gone from 73.1% in 2003 to 7.4% in 2008, for the pre-established age group. Similarly, the reported mammogram coverage for the last couple of years has increased from 46.1% to 54.2% in 2008 (IBGE, 2003; 2010a). However, huge iniquities remain regarding access within different regions of the country. Therefore, it is crucial that it be guaranteed for women from areas at higher risk and those living in poorest areas to have access to these exams, making a follow-up available for those women whose exams show irregularities.

Diabetes: Managing blood sugar, blood pressure, and feet care are feasible and cost-effective interventions for diabetics (LI et al, 2010; WHO, 2010g). According to the WHO, at least three interventions aimed at preventing and managing diabetes were proved to have reduced costs and improved health. The National Plan of Reorganization of Hypertension and Diabetes Mellitus Care – a screening program held in Brazil in 2001 – detected and incorporated nearly 320,000 diabetic individuals into the health system. As a result, diagnosis and treatment were improved in Primary Care, through the implementation guidelines for diabetes care. In addition, basic medicines to control hypertension and diabetes are distributed free of charge, through the Farmacia Popular Program (SCHMIDT et al, 2011).

Chronic Respiratory Disease: The most promising measure for chronic respiratory disease prevention is tobacco control. This includes restricting advertisements; printing illustrative warning messages and pictures on cigarettes' packages; supporting smoking cessation through free programs; and enforcing legislation to support cigarette-free environments. Other measures, for instance, increasing prices, are still required (WHO, 2010g).

As for pharmaceutical care, inhalable steroids, and other medicines for the treatment of chronic respiratory diseases are listed on the National List of Essential Drugs (Rename), such as salbutamol, ipratropium, prednisolone, prednisone, among others. Antibiotics (for associated infections) are included in the basic component of the pharmaceutical care and are available at the SUS primary health units. Municipalities purchase these drugs through financial transfer, pursuant to the Legal Directive 4217, December 28, 2010 (Ministry of Health, 2010). Some of the main chronic respiratory diseases worth mentioning are asthma and the chronic obstructive pulmonary diseases (COPD) – which include chronic bronchitis, obstructive bronchiolitis, and pulmonary emphysema (JARDIM et al, 2004).

Asthma affects all age groups, ethnicities, and social classes. Nearly 20% of children and adults present asthma symptoms in Brazil (Sembajwe et al, 2010; Asher et al, 2006). From 1998 to 2006, 2,640 deaths a year were registered on average despite the effective options of treatment available. Asthma-related hospitalization rates have decreased over the last decade, probably due to expanded access to treatment with inhalable corticosteroids.

NCD constitute the 4th cause of hospitalization in groups of people aged 40 or over. According to the PLATINO study held in 2003 in five Latin American centers, including Brazil, NCD prevalence in adults at age 40 or over was 15.8% in Sao Paulo (JARDIM et al, 2004).

Other NCD: Chronic renal disease, rheumatic diseases, and mental diseases constitute significant causes of morbidity and mortality in Brazil and in the world. Mental and rheumatic diseases are determined by other risk factors and, therefore, have not been incorporated into this first global attempt to tackle NCD. Chronic renal diseases, in turn, are inevitably dealt with when dealing with high blood pressure, diabetes, and the reduction of salt consumption.

It is worth highlighting that the health system improvement, especially regarding primary health care should result in a better NCD management, taking into consideration the investments in human resources continued education, pharmaceutical care, and other strategic areas.

Some of the "best buys" and other cost-effective interventions worth mentioning are:

- ✓ Counseling and multi-drugs therapy, including diabetes blood sugar control for people aged 30 or older at the risk of, in a 10-year period, suffering fatal or non-fatal cardiovascular event;
- ✓ Acetylsalicylic acid therapy for acute myocardium infarction;

- ✓ Screening of cervical cancer (target population: 25 to 64 age group), guaranteeing follow-up to confirmed cases, making use of the "See and Treat" method whenever there is clinical indication;
- ✓ Early breast cancer detection through mammograms conducted at every two years (target population: age 50 to 69), followed by diagnostic confirmation to those exams with abnormal result, and timely treatment for 100% of confirmed breast cancer cases;
- ✓ Early detection of colorectal and oral cancer;
- ✓ Treatment of chronic asthma with inhalant corticosteroids and beta-2 agonists;
- ✓ Financing and strengthening health systems to provide individual cost-effective interventions through Primary Care.

Expanding intervention capability

Effective NCD interventions are mostly determined by the health system's capability. Therefore, strengthening governmental commitment with the purpose of prioritizing programs for chronic diseases is crucial to enhancing this capability.

Local and regional programs and policies should be combined with the National NCD Program, providing care for individuals with chronic diseases via the Brazilian Health System. The Plan should also be linked with actions to improve the Information System, the training of health professionals, proper financing, medicines, and essential technology.

4. Principles for NCD comprehensive Approach

Socio-environmental Health Determinants: The debate on Health Social Determinants (SDH) started in the 70s/80s, encouraged by the understanding that curative interventions and interventions oriented to the risk of getting sick were insufficient to providing any society with health and quality of life, taking into consideration that many social factors also influence people's health, such as birth, living, and working conditions, as well as ageing.

The link established between human beings and environment throughout life has always been crucial to determining the impacts caused by diseases on society. Rapid urban growth has caused huge environmental deterioration, in terms

of living conditions, health, and pollution. Poor air quality, for example, is the major cause of respiratory diseases. The way urban spaces are organized can have both positive and negative impacts on people's physical activities, leisure, and means of transportation. Some of the factors which can determine people's commitment to physical activities are crime, the existence and quality of sidewalks, public lighting, road safety, public transportation, and environments that ease the adoption and cultivation of an active routine. Also, the practice of physical activity as a replacement for any other mean of transportation could meaningfully contribute to environmental health, as it would help reduce the emission of pollutants (WOODCOCK et al, 2007). Pollution and shortage of drinkable water, poor access to basic sanitation and treatment of residues, soils contamination, lack of urban planning, and unhealthy working places are additional determinants of chronic diseases (violence, depression, alcoholism, respiratory diseases, cancer). Poverty, by definition, is not only the lack of access to material goods, but also lack of opportunities, options, and voice before the State and society. Poverty represents great vulnerability in face of chronic diseases and its risk factors.

In this context, DSS-oriented measures aimed at reducing exposure to risk are of utmost relevance to tackle NCD, especially for groups living and working under unhealthy conditions, unsafe environments, exposed to environmental contaminants, or experiencing nutritional deficiencies.

Cross-sector action: Measures of NCD prevention and control demand joint work and support from all governmental sectors, the civil society, and the private sector in order to successfully fight the NCD epidemic.

Sustainable Development: The NCD epidemic causes relevant and negative impacts on human and social development. Therefore, prevention should be considered priority among the initiatives oriented to development and investment. Strengthening NCD prevention and control should also be considered as an integral part of the programs for poverty reduction and other development assistance programs.

The Civil Society and the Private Sector: Civil society institutions and groups are different spaces where political mobilization, awareness, and support for efforts on NCD prevention and control take place. Civil society plays, therefore, a key role in program support. Advocacy is still required to fully acknowledge noncommunicable diseases as priority in the global development agenda. Corporations can make important contributions in relation to the challenges posed by NCD prevention, especially regarding the reduction of salt, saturated fats, and sugar content in food. A sector which avoids the advertising of unhealthy diets or other harmful behaviors, or which reformulates products in order to provide access to alternative healthy paths, should function as a role model to partners from the whole corporate sector. Governments are responsible for encouraging partnerships with the purpose to produce healthier food, and for monitoring agreements established between the parties.

Early and Comprehensive Approach: NCD risk factors are disseminated throughout society. Normally, they appear early in life and remain throughout the vital cycle. Evidences from countries that experienced sharp reduction in some NCD point out that prevention and treatment interventions are essential (WHO, 2000; WHO, 2011). For that reason, reversing the NCD epidemic requires a broad population-based approach, including interventions on prevention and care. The CVA-related mortality, for example, could be reduced by increasing preventive measures such as managing hypertension and acutely treating individuals suffering from cerebrovascular accident (LOTUFO; BENSEÑOR, 2009).

Evidence: Prevention and control measures should be founded on clear evidence of both effectiveness and cost-effectiveness. Population-based interventions should be supplemented by individual health care interventions.

Surveillance and Monitoring: NCD surveillance should be integrated with the information system and the adoption of measurable and specific indicators.

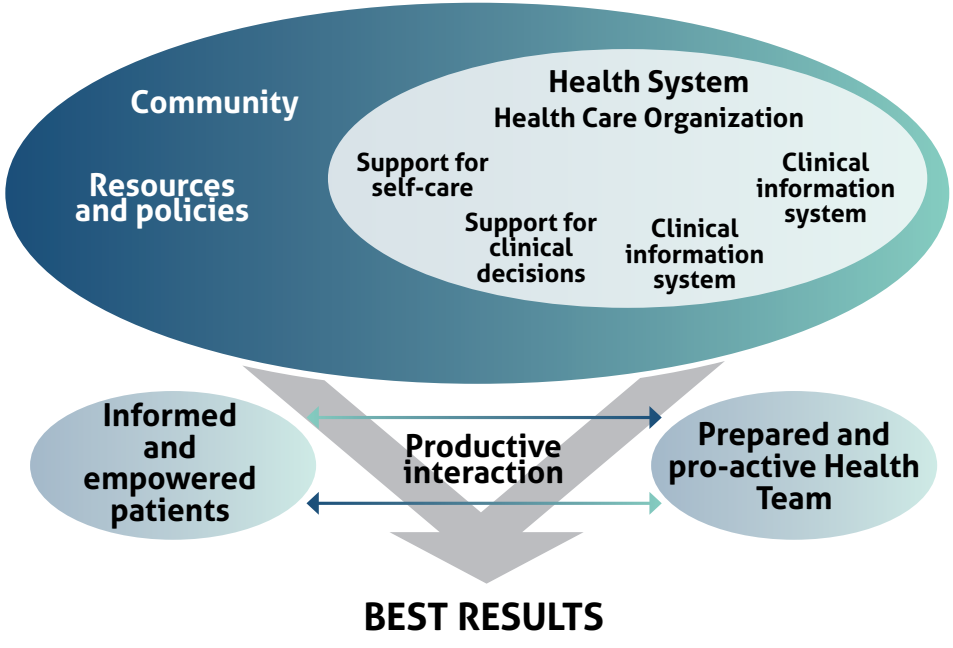
Service Network: Strengthening the health care system with the purpose of dealing with NCD includes strengthening Primary Care, combining it with other care levels and service systems.

Primary health care: The importance of Primary Care to carry out actions on promotion, health surveillance, prevention, and longitudinal follow-up on NCD patients is made clear when caregivers are linked to and become responsible for Primary Care users.

The line of NCD care: The integrated NCD approach includes acting on all levels (promotion, prevention, and Comprehensive Care), combining actions of the line of care with macro and micro-policies. The macro-policy field comprises regulatory actions, cross-sector articulations, and organization of service systems. Micro-policy, in turn, is about teamwork in the line of care, the caregiver becoming connected and accountable, and also about user's autonomy (MALTA; MEHRY, 2010).

Care Models for Chronic Disease Patients: This model has components of support for self-management (counseling, education, and information); the health system (multi-disciplinary teams); decision-making (evidence-based guidelines, practitioner training) and for the clinical information system (information on the patient). The core point in this model is the information generation within the services; patients' assessment; self-management; optimization of therapies; and follow-up (NOLTE; MCKEE, 2008) (Figure 12).

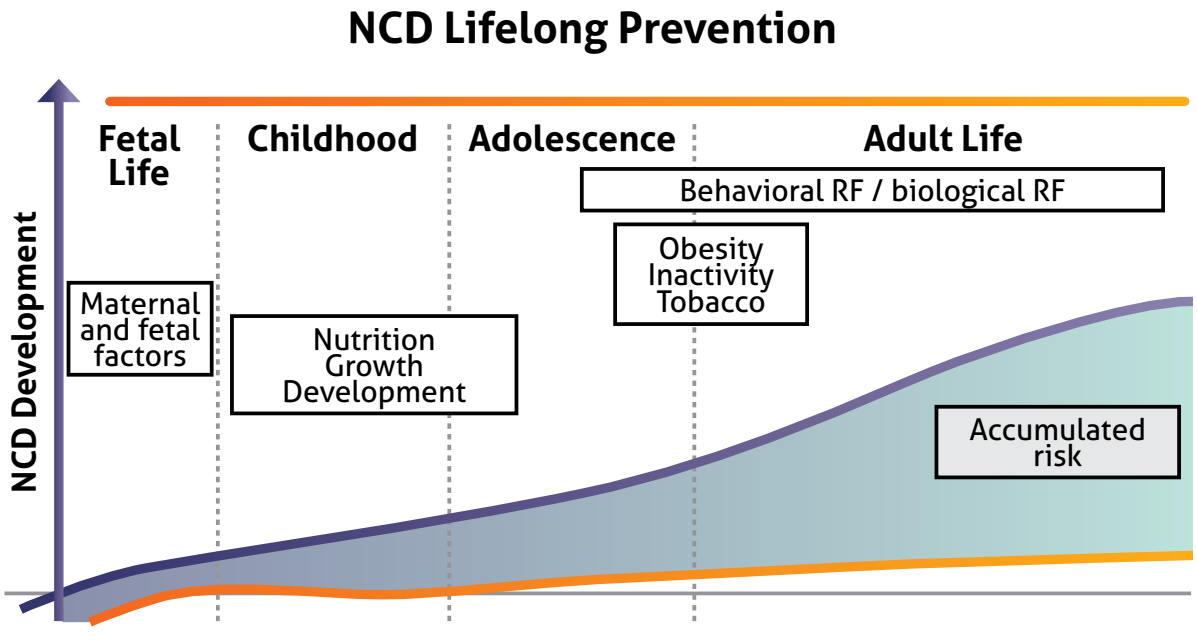
Figura 12: Integrated approach of the line of chronic diseases care



Source: Nolte; McKee, 2008 (adapted).

Acting throughout the entire Vital Cycle: The NCD approach should last throughout the entire life cycle. Health promotion actions and NCD prevention start during pregnancy, promoting pre-natal care and proper nutrition, then go to fostering breastfeeding, protecting children and adolescents from exposure to risk factors (alcohol, tobacco) and incentive to protective factors (healthy diets, physical activity), to be continued during adulthood and the rest of the life cycle (Figure 13).

Figure 13: Benefits of the work on environmental factors and healthy behavior throughout the life cycle



Source: WHO, 2003.

Box 1: Key messages

Noncommunicable diseases are the main cause of mortality worldwide. The most common ones are: cardiovascular diseases, cancer, diabetes, and chronic respiratory diseases. These accounted for 63% of all deaths in the world, i.e., 36 million individuals, in 2008. In Brazil, NCD are responsible for 72% of deaths.

Today, noncommunicable diseases are among the most fatal diseases in the world.

The NCD epidemic causes great burden in terms of human suffering, and causes serious damages to social and economic development. Death rates and disabilities have increased, and therefore immediate intervention is required.

NCD are relatable to four main risk factors: tobacco; alcohol abuse; insufficient physical activity; and unhealthy diets - which end up leading to high blood pressure, high levels of blood sugar, and overweight.

The burden by NCD is quickly increasing and has been accelerated by the negative effects of globalization, rapid urbanization, sedentary life, and food high in fat, in addition to the marketing of tobacco and alcohol.

NCD prevalence and the number of deaths are expected to significantly rise in the future, due to populations' growth and aging, combined with economic transitions and the resulting changes in behavior and in occupational and environmental risk factors.

Actions on health promotion produce results for NCD prevention. Preventing smoking and alcohol abuse while keeping healthy habits such as healthy eating and practicing physical activity reduce the risk of NCD.

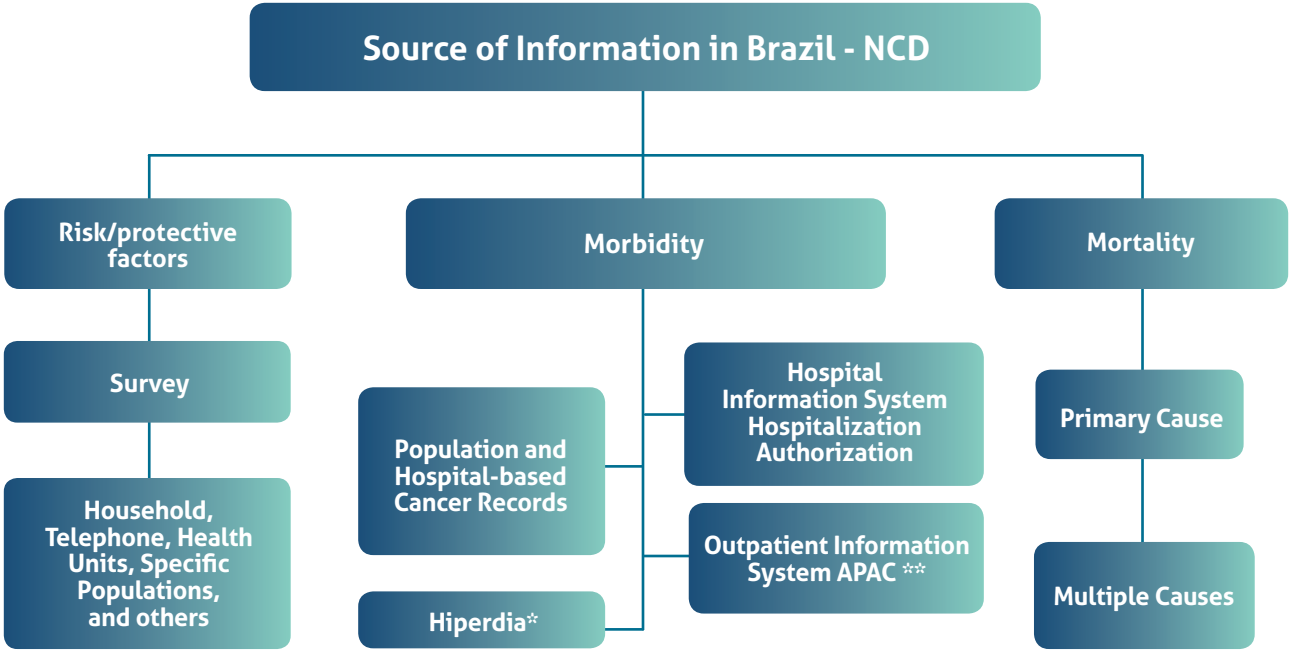
5. Highlights to NCD Control in Brazil

NCD-related mortality rates showed a tendency of decrease of nearly 20% from 1996 to 2007, with sharper reductions in cerebrovascular, ischemic, and chronic respiratory diseases. This reduction can be attributed to many reasons, but especially to the expansion of Primary Care (which covers over 60% of the population), improved access to health care, and an important reduction in tobacco prevalence in Brazil: in 1989, the prevalence of smokers was 34.8% (INAN, 1990); in 2010, the VIGITEL survey found a 15.1% prevalence (BRASIL, 2011).

Brazil's efforts towards organizing NCD surveillance, health promotion actions, and prevention and control of these diseases are well known. Therefore, among implemented actions, the following stand out:

NCD Surveillance Organization - Over the last few years, Brazil has organized actions to structure and run a specific surveillance system in order to get information on distribution, magnitude, and prevalence of chronic diseases and their risk factors, supporting public policies on health promotion. As part of the process, Brazil has designed an information-based system on risk factors, morbidity, and mortality (Figure 14).

Figure 14: NCD surveillance source of information



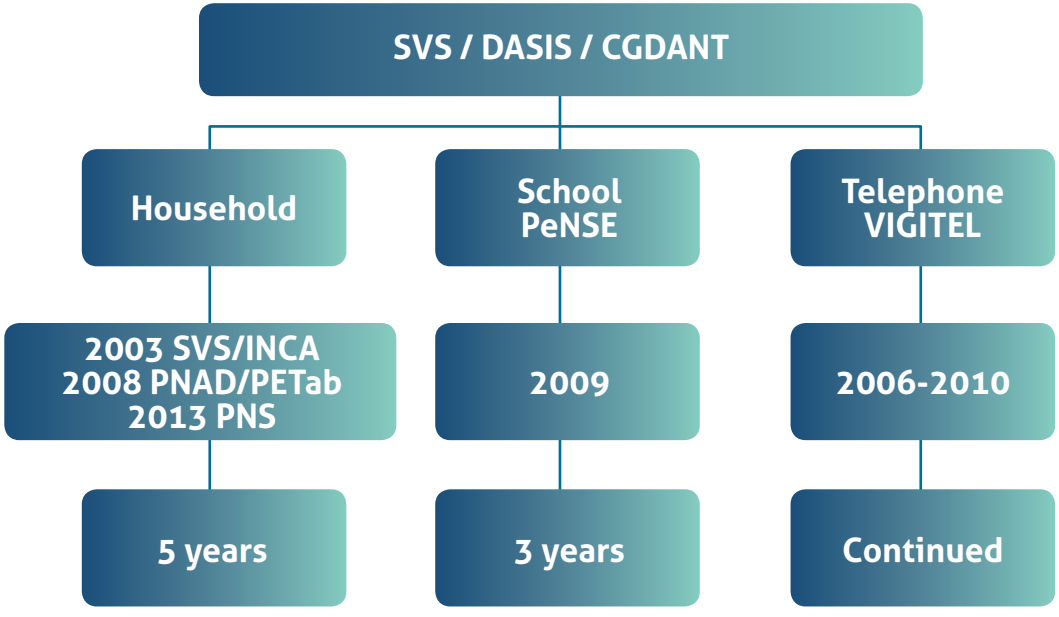
* Hiperdia: Hypertension and diabetes records and follow-up system.

** APAC: Authorization for High-Complexity Procedures

Source: CGDANT/SVS/MS.

In 2003, a surveillance system was designed, composed of household, population-based telephone survey conducted with specific groups (Figure 15).

Figure 15. Health survey regarding surveillance of NCD risk and protective factors



PNAD – National Household Sampling Survey, PETab – Special Tobacco Survey, PNS – National Health Survey and

PeNSE – National School Health Survey

Source: CGDANT/SVS/MS.

The first household survey on NCD's risk factors was carried out in 2003, through a partnership involving the National Cancer Institute (Inca) and the Health Surveillance Secretariat of the Ministry of Health (SVS/MS). The household survey on risk behavior and self-reported morbidity related to noncommunicable diseases included 17 Brazilian state capitals and the Federal District, and served as baseline to the monitoring of the main risk factors in Brazil. In 2006, the VIGITEL survey – which surveys risk and protective factors for chronic diseases and self-reported morbidity among adults (≥18 years old) residing in the state capitals of Brazil in homes with landline phones – was implemented. From 2006 to 2011, annual surveys were carried out with 54,000 interviews each year. In 2008, the National Household Sampling Survey (PNAD) included, as part of the Global Adult Tobacco Survey Initiative (GATS), information on morbidity and some risk factors, in addition to the Special Tobacco Survey (PETab). In 2009, the 1st National School Health Survey (PeNSE) was carried out in partnership with the IBGE, Ministry of Health, and Ministry of Education. This is a survey that covers about 63,000 9th grade students from public and private schools in Brazilian state capitals and the Federal District. Scheduled to be held every 3 years, the PeNSE survey monitors adolescents' health, as it gathers demographic data as well as data on food consumption, physical activity, alcohol, tobacco, violence, oral health, sexuality, among others. The National Health Survey will be held in 2013, in partnership with the IBGE, and will have as its purpose the generation of information and knowledge about the health-disease process and its social determinants in order to outline health policies in Brazil. The following topics will be surveyed: access to services and their usage; morbidity and NCD risk and protective factors; health of the elderly, women and children, as well as bio-chemical and anthropometric measurements. These inquiries enable the monitoring of risk and protective factors within the Brazilian population.

The surveillance system is being structured through the capacity-building of health practitioners in states and municipalities, with the outline of activities and strategies of prevention, promotion, and care and the establishment of suitable monitoring indicators and methodologies for both regional and local realities.

Policy of Health Promotion - The National Policy of Health Promotion was approved in 2006 and aims at promoting quality of life and at reducing vulnerability and risks to health, by prioritizing actions in the following axes: healthy diet, physical activity, sustainable environment, prevention against tobacco, alcohol and drug abuse, prevention against violence, and peace culture. Over the last few years, resources have been granted for promoting experiences in states and municipalities. Also, national mobilization campaigns have been held with the purpose of promoting engagement in physical activity and studies were developed to assess the

effectiveness of physical activity programs in municipalities. The Health in School Program (PSE) is also worth mentioning. It was established through a presidential decree in partnership with the Ministries of Health and Education. The PSE develops clinical actions and evaluates students' health by measuring blood pressure and performing nutritional assessment in order to facilitate early detection and diagnosis of hypertension and obesity, besides promoting actions in health promotion which end up leading to actions for a healthy diet and the regular practice of physical activity.

Academia da Saude Program (Health Academy) – This program was created in April 2011 and has its foundation based on ongoing municipal experiences throughout Brazil which seem to be effective at increasing frequency of physical activity within the population, such as the ones in Recife, Aracaju, Belo Horizonte, and Vitoria (SIMÕES, et al 2009). These activities seek to eliminate structural barriers to physical activity, such as the inexistence of public spaces for leisure, making an attempt to facilitate people's engagement in healthier habits. The Academia da Saude program should be implemented in partnership with municipalities in order to build physical spaces equipped with qualified infrastructure, equipment, and human resources for the guidance of physical and leisure activities. These spaces should comply with regional specificities and SUS's principles and guidelines, strengthening local actions to promote health in the population. This program intends to increase physical activity levels within the target population, while giving credit to local initiatives in the fields of culture, sports, and leisure with the purpose of promoting health and life quality. The Academia da Saude program is an innovative initiative from the current Brazilian government and it is expected to give new meaning to each target locality, always bearing in mind the main objective: to contribute to promoting health in the population.

Tobacco – The success of the anti-tobacco policy is extremely relevant to the reduction of NCD prevalence, and it is related to the Brazilian government's multi-sector strategy. Under the leadership of the health sector and counting on a strong regulatory foundation, it involves other sectors such as economics, agrarian development, agriculture, education, and labor, as well as the decentralization of actions and resources initiated over 20 years ago through the SUS. Regulatory actions such as the forbiding of cigarettes advertising, promotion, and sponsoring (except at sale outlets) and the display of warning messages on tobacco products' packages, among others, are worth mentioning. Brazilian adhesion to the Framework Convention on Tobacco Control, in 2006, legally binding the country to the treaty, is a milestone in the process. In 2011, the National Sanitary Surveillance Agency (Anvisa) carried out public surveys with the purpose of expanding warning messages on the packages, increasing control on advertisements at sale outlets, and forbidding flavor additives to cigarettes.

Diet – There are countless advances in this field, starting with the National Policy of Healthy Diet, in 1999, breastfeeding, healthy complementation to diet, and the promotion of healthy diet in schools and work environments (which has increased in Brazil) then the Food Guide to the Brazilian population, the Sisvan organization (Food Surveillance System) and the labeling of foods, and finally trans fatty acid reduction. The partnership with the productive sector, industry, and marketing, involving the Ministry of Health, the Brazilian Association of Food Industries (Abia), the Brazilian Association of Pastry Industries (Abima), the Brazilian Association of Wheat Industry (Abitrigo), and the Brazilian Association of Bakery and Sweets Industry (ABIP), enabled the establishment of national goals to reduce sodium content in processed food in Brazil. This partnership resulted in the signature, on April 7, 2011, of an agreement with the industries to reduce salt in pastries, instant noodles, and bread. Soon enough, new food groups should also be incorporated into this effort toward reducing sodium in food. Human daily sodium needs are around 3g to 5g and most individuals, even children, take in levels of sodium beyond their needs. Excessive consumption, above 5g/day, is a great cause of hypertension and cardiovascular diseases, such as cerebrovascular accident and others. This agreement represents an advance for Brazilian public health.

Primary Care Expansion – Primary Care covers nearly 60% of the Brazilian population. Professionals work in defined territory, with the respective population, carrying out promotion, health surveillance, prevention, and health care actions, in addition to longitudinal monitoring of users. Family Health Teams have used the NCD handbook and other prevention educational material in order to assist health practitioners with cases of noncommunicable diseases within the community. The structure of Primary Care programs has also been used in public health surveys and made it possible for professionals and researchers to share knowledge on the behavior of these diseases among the population. A good example is found in the Studies on Mortality and Morbidity from Cerebrovascular Accident (EMMA), carried out in Sao Paulo (GOULART et al, 2010; ABE et al, 2010b) Also, courses have been implemented with the purpose of training Primary Care teams, through long-distance learning. Procedures such as the Telessaude (long-distance exchange of information through a digital process, about a clinical case, as a second clinical opinion) are being structured to help Primary Care teams to provide integral NCD care.

Free distribution of medicines for hypertension and diabetes: the Brazilian experience – Hypertension and diabetes are the main causes of hospitalization in the Brazilian public health system, and can be associated with the development of other chronic diseases and secondary conditions. According to data from the Chronic Diseases Risk and protective factors through Telephone Survey (VIGITEL), published in 2011, the prevalence of previous clinical diagnosis of diabetes and hypertension in the adult population

is estimated at 6.3% and 23.3%, respectively. In face of such high prevalence of these NCD in the country, the Ministry of Health has adopted different strategies and actions to reduce the burden caused by these diseases to the Brazilian population, especially actions in Primary Care. The free distribution of medicines in Brazil started in 1971, focusing on lower-income populations. Since 1999 the financing of medicines for these diseases has become three party (Federal Government/States/municipalities). However, actions on scheduling, purchase, and supply were decentralized to states and municipalities, even though from 2001 to 2005, in addition to the granting of financial resources to municipalities, the Ministry of Health also provided medicines to treat most prevalent NCD, such as hypertension, diabetes, asthma, and rhinitis. In 2006, Federal Law n. 11347 guaranteed to those registered at education programs for diabetic individuals in Primary Care the free distribution of medicines for diabetes and the required material to monitor capillary glycemia. In 2007, the Legal Directive n.3237 decided that the free medicines provided to diabetic individuals were pursuant to the Law. Even though the Legal directive defined the list of medicines, these had already been provided to SUS users, since they were part of the National List of Essential Medicines (Rename), and were thus entitled to specific three party financing since 1999. The unprecedented objects in this case were the inputs for diabetes (syringe with needle, lancet, and reagent strips), which were subject to a specific agreement, and financed by municipalities and states. The initial amount was R$ 0.30 per capita/inhabitant/year by federation unit, which increased to R$ 0.50 per capita/inhabitant/year in 2009. In 2009, the three government spheres agreed on the minimum values for the financing of Primary Care medicines, which include drugs for hypertension and diabetes. The amounts of R$ 5.10/inhabitant/year to be transferred by the Federal Government and R$ 1.86/inhabitant/year to be transferred by states and municipalities were established. In addition to this financing, the Ministry of Health purchases human NPH insulin and regular human insulin and distributes them to states and municipalities.

In 2004, the "Farmacia Popular do Brasil" (Brazil's Popular Drugstore) was established, in a partnership between the Federal Government and municipalities and states, with the purpose to expand the population's access to medications considered to be essential. In 2006, this strategy was expanded to private pharmacies and drugstores and was named Aqui tem Farmacia Popular (Here there is a Popular Drugstore). The Ministry of Health started subsidizing 90% of hypertension and diabetes medicines reference value (more prevalent diseases). In order to strengthen health Comprehensive Care, the list was extended to medicines for other diseases: asthma, rhinitis, Parkinson's disease, osteoporosis, dyslipidemia, and glaucoma, in addition to providing contraceptives and geriatric diapers. The Aqui tem Farmacia Popular campaign is present in over 2.8 thousand municipalities, and has served 3.1 million Brazilians in all 17,461 pharmacies

and drugstores registered in the Farmacia Popular do Brasil – Aqui Tem Farmácia Popular Program in July 2011.

In February 2011, the Brazilian government created the campaign Saude não Tem Preço (Health is Priceless) to expand access to medicines for individuals with diabetes and hypertension. In this campaign, pharmacies and drugstores registered in the Aqui tem Farmácia Popular program started to offer 11 free medicines to treat hypertension (captopril, enalapril maleate, propranolol hydrochloride, atenolol, hydrochlorothiazide, losartan) and diabetes (glibenclamide, metformin, and insulin), based on the fact that lower-income populations' expenses with medicines in Brazil represent 12% of their total income, while for higher-income population it represents 1.7%. In July 2011, 2.1 million individuals with hypertension and 788 thousand with diabetes were served, representing a 194% increase compared to January this year.

Expansion of preventive exams for breast and cervical cancers – Coverage rates found based on Pap smear test self-reported information from women aged 25 to 64 throughout the country, in the last three years, was 78.4% in 2008. In that same year, coverage on mammogram exams in the last two years was 54.2%, according to the PNAD (IBGE, 2010a). New efforts should be made in order to improve the quality of these exams and to guarantee sequence to cases in need of treatment.

Initiatives of incentive to the research line – The Ministry of Health has financed studies on NCD and its risk factors integrated control, such as the Longitudinal Study on Adult's Health (Elsa) - a multicenter cohort composed by 15,000 staff members at age 35 to 74, from six public higher education and research institutions in the Northeastern, Southern, and Southeastern regions. The main purpose of this research is to investigate chronic diseases prevalence and risk factors, especially cardiovascular diseases and diabetes. Since 2006, the Ministry of Health has supported the promotion of physical activity, pursuant to the National policies of Health Promotion. In order to facilitate the evaluation of these experiences, researches have been fostered through specific official edits with the purpose to assess the relevance of physical activities interventions as far as health is concerned.

Brazil, led by the Ministry of Health, plays a strategic role within the global context, in face of the huge progress made in the structuring and implementation of the Brazilian Health System based on the principles of universality, integrality, and equality. However, there are many challenges which need to be addressed concerning the qualification of actions and responses to NCD patients.

6. Strategic Action Plan to Tackle Noncommunicable Diseases (NCD) in Brazil, 2011-2022

In 2005, the Health Surveillance Secretariat, after consulting states and municipalities, published the Priorities agenda for the implementation of surveillance, prevention, and control of noncommunicable diseases. This was an important step toward organizing and structuring areas within the MoH, State Health Secretariats (SES), and Municipal Health Secretariats (SMS) (BRASIL, 2005). In 2008, the Guidelines to NCD Surveillance, Promotion, Prevention, and Care were created, integrating guidelines from different areas of the MoH (2008). In 2011, in articulation with global efforts, the MoH came up with the Strategic Action Plan to Tackle Noncommunicable Diseases (NCD) in Brazil, 2011-2022, which combines actions by the health sector with those by several other sectors. Many representatives from social sectors have participated in the preparation of this Plan, which constitutes another tool with the purpose of incorporating the issue of NCD prevention and control into the political and government agenda.

Guidelines, strategies, and actions to tackle noncommunicable diseases in Brazil are described below.

6.1 Objective of the Plan

To promote the development and implementation of effective, integrated, sustainable, and evidence-based public policies with the purpose of NCD prevention and control and their risk factors, besides strengthening health services which deal with chronic diseases. The plan aims at reducing morbidity, disability, and mortality caused by NCD, through a set of preventive actions and health promotion, combined with early diagnosis and timely treatment, and with the reorganization of health services within the Brazilian Health System (SUS), based on primary care and community participation.

6.2 Strategic Axes

I - Surveillance, information, evaluation, monitoring.

Objectives

- To promote and support the development and strengthening of NCD integrated surveillance and its modifiable protective and risk factors, shared by most NCD (tobacco, unhealthy diet, physical inactivity, and alcohol abuse) by improving tools aimed at monitoring these factors, based on national and local surveys.
- To evaluate and monitor the development of the National NCD Action Plan.

Strategies

1. Conducting population-based survey/inquiries on NCD incidence, prevalence, morbidity, mortality, and risk and protective factors.
2. Strengthening health information systems and performing analysis on NCD health status and related risk factors.
3. Consolidating a standardized and integrated national information system on incidence, survival, and mortality caused by cancer.
4. Strengthening NCD surveillance in states and municipalities.
5. Monitoring and evaluating NCD interventions and related costs.
6. Monitoring and evaluating the implementation of the National Plan to Tackle NCD.
7. Monitoring social equality taking into consideration risk factors, prevalence, mortality, and access to NCD Comprehensive Care.

II – Health Promotion

Objectives

- To promote cross-sector initiatives at public and private levels, aiming at developing linked interventions and actions to encourage and promote the adoption of healthy behavior and lifestyle - which should become priority at national, state, and municipal levels.
- To address social and economic conditions concerning the coping with NCD determinant factors.
- To provide the population with alternatives concerning the cultivation of healthy behaviors throughout life.

Strategies

1. Guaranteeing the commitment made by Ministries and Secretariats concerning actions on health promotion and NCD prevention.
2. Making use of advocacy in order to promote health and prevent noncommunicable diseases.
3. Establishing an agreement with the productive sector and a partnership with civil society with the purpose of preventing NCD and promoting health, complying with article 5.3 of the Framework Convention for Tobacco Control (Decree 5658/2006) and its guidelines.
4. Creating communication strategies addressing health promotion, NCD prevention, and related risk factors, as well as promotion of a healthy lifestyle.
5. Implementing actions on promotion of physical activity and healthy lifestyle aimed at the population, in partnership with the Ministry of Sports (Academia da Saude Program, Vida Saudavel (Healthy Life), and others).
6. Promoting the building of environmentally sustainable and healthy urban spaces.
7. Expanding and strengthening actions on healthy diet.
8. Promoting regulating actions aimed at promoting health.

9. Developing actions on implementation and internalization of legal measures mentioned in the Framework Convention for Tobacco Control.
10. Combining efforts on obesity prevention and control.
11. Strengthening actions on health promotion and prevention of alcohol abuse.
12. Implementing the model of Comprehensive Care aimed at active ageing.

III – NCD Comprehensive Care

Objective:

- Strengthening the Brazilian Health System's response capacity, aiming at the expansion of a set of diversified interventions capable of providing an integral health approach to prevent and control NCD.

Strategies

1. Defining a line of care to NCD patients, guaranteeing an appropriate therapeutic project, connections between caregivers and professionals, as well as follow-up integrality and continuity.
2. Strengthening the health productive complex which tackles with NCD.
3. Strengthening prevention, diagnosis, and treatment systems for cervical and breast cancers.
4. Expanding, strengthening, and qualifying oncologic care within the SUS.
5. Developing and implementing strategies aimed at professional and technical training with the purpose to qualify health teams concerning the NCD approach.
6. Strengthening the field of NCD health education.
7. Strengthening and qualifying services system management, aiming at improving numbers and responses to NCD patients.
8. Strengthening cardiovascular treatment within the urgency care system.

Box 2: NCD Plan on Surveillance, Information, Evaluation, and Monitoring main actions

Axis I	Surveillance, information, evaluation and monitoring.
National Health Survey - 2013	In partnership with the IBGE, survey on topics such as access to and use of services; morbidity; chronic diseases risk and protective factors; elderly, women's and children's health; anthropometric and blood pressure measurements; and biological sample collection.
NCD Studies	Conducting analyses and surveys on morbidity-mortality focusing on health-related imbalances (vulnerable populations such as the indigenous and the quilombolas), health interventions, and NCD costs.
Portal for the NCD Plan	Creating an Internet-based portal in order to monitor and evaluate the implementation of the National Plan to Tackle NCD and to develop a NCD management system.

Box 3: NCD Plan main actions aimed at Health Promotion

Axis II	Health Promotion
Physical Activity	Academia da Saúde (Health Academy) Program: Building healthy spaces with the purpose of fostering health promotion actions and leisure physical activities, and healthy ways of living, linked to Primary Care.
	Saude na Escola Program (Health in School): Universalization of access to PSE material and financial incentive to all Brazilian municipalities, with the commitment to developing actions in the scope of nutritional and anthropometric assessment, early diagnosis of high blood pressure, promotion of physical activities, promotion of healthy diet, and food safety in the school environment.
	PAC Squares: Strengthening of the PAC 2 component on building squares at the Citizen Community Center, as a tool to integrate activities and cultural services, sports and leisure, training, welfare services, policies on prevention against violence and toward digital inclusion, covering all age groups.
	Reformulation of healthy urban spaces: Creation of the National Program on Healthy Sidewalks as well as building and reactivating bike lanes, parks, squares, and jogging trails.
	Communication campaigns: Creation of campaigns to promote physical activities and healthy habits, integrated with major events such as the FIFA 2014 World Cup and the 2016 Olympic Games.

Box 3: NCD Plan main actions aimed at Health Promotion (continued)

Axis II	Health Promotion
Healthy Diet	Schools: Promoting healthy diets with the National Program of School Meals and the School Health Program (PSE).
	Increased supply of healthy food: Establishing partnerships and agreements with the civil society (family farmers, small associations, and others) in order to increase production and supply of in natura food. Giving support to cross-sector initiatives with the purpose to increase supply of basic and minimally processed food, in the context of production, supply, and consumption
	Regulation of the nutritional composition of processed food: Establishing an agreement with the production sector and a partnership with the civil society with the purpose to prevent NCD and promote health, reducing salt and sugar in food.
	Reduction of healthy food prices: Recommending and encouraging the adoption of fiscal measures, such as reducing taxes, charges, and subsidies, in order to reduce the price of healthy food (fruits, vegetables) thus increasing its consumption.
	Actions on food regulation: Revising and improving regulation on food labeling and promotion actions to guide advertising of food and non-alcoholic beverage, as well as eating habits throughout childhood.
	Cross-sector Plan on Controlling and Preventing Obesity: Implementing the Obesity Cross-Sector Plan aimed at reducing it among the Brazilian population's life cycles.
	Regulation on food advertisement: Establishing specific regulation to the advertising of food, especially for children.

Box 3: NCD Plan main actions aimed at Health Promotion (continued)

Axis II	Health Promotion
Tobacco and alcohol	Adjustment of federal legislation which regulates smoking in shared spaces.
	Expansion of measures concerning smoking prevention and cessation, with special focus on the most vulnerable groups (youth, women, population with lower income and schooling, and indigenous and quilombola people).
	Strengthening the implementation of the pricing policy, and increasing taxation on byproducts of tobacco and alcohol, in order to reduce consumption.
	Supporting the intensification of inspection measures concerning the sale of alcoholic beverages to minors (younger than 18 years old).
	Strengthening educational measures in the Saude na Escola Program (PSE) to prevent and reduce smoking and alcohol abuse.
	Supporting local initiatives to control the selling of alcohol by establishing a night curfew for pubs, bars, and similar spots.

Box 3: NCD Plan main actions aimed at Health Promotion (continued)

Axis II	Health Promotion
Active ageing	Implementation of a model of Comprehensive Care for active ageing, favoring activities on health promotion, prevention, and Comprehensive Care.
	Promotion of active ageing and supplementary health actions.
	Encouraging the elderly to engage in regular physical activity, through the Academia da Saude program.
	Training primary health care professional teams to serve, welcome, and provide care to the elderly and to people with chronic conditions.
	Fostering autonomy and independence to self-care and the rational use of medication.
	Creating programs to train caregivers for the elderly and for people with chronic conditions in the community.

Box 4: NCD Plan main actions on Comprehensive Care

Axis III	Comprehensive Care
Line of NCD care	Defining and implementing clinical protocols and guidelines to NCD, based on evidences of cost-effectiveness, connecting the patients to the caregivers and to the Primary Care team, ensuring reference and counter-reference to the systems of specialties and hospitals, favoring care continuity and integrality. Developing NCD management information system.
Capacity-building and tele-medicine	Training primary health care teams, expanding tele-medicine resources, second opinion, and distance learning courses, qualifying the responses to NCD.
Free medicines	Expanding free access to medication and strategic inputs foreseen in the Clinical Protocols and Therapeutic Guidelines for NCD and smoking.
Cervical and breast cancer	Strengthening measures on prevention and qualification of early diagnosis and treatment of cervical and breast cancers; guaranteeing access to preventive exams and mammography of screening quality to all women in the suggested age groups and periods, regardless of their income, race/color, thus reducing iniquities; guaranteeing proper treatment to women diagnosed with precursor lesions; guaranteeing diagnostic assessment of mammograms with abnormal result; and guaranteeing proper treatment to women diagnosed with breast cancer or with benign lesions

Box 4: NCD Plan main actions on Comprehensive Care (continued)

Axis III	Comprehensive Care
(Saude a toda Hora) Health All the Time	Urgency Care: Strengthening care for NCD patients within the urgency care system, integrated with units of health promotion, prevention, and care, expanding and qualifying humanized and integral access to health services by users in urgent situations, in a quick and timely fashion.
	Home Care: Expanded care to people with limited mobility or who need regular care, but no hospitalization, through a set of measures on health promotion, prevention, and treatment of diseases. Rehabilitation services conducted at home, with ensured continuity of care, integrated with the Health Care Systems.
	Line of Care to Acute Myocardial Infarction (AMI) and Cerebrovascular Accident (CA) at the Urgency Care System: Qualification and integration of all health units belonging to the Urgency Care System with the purpose to enable care, diagnosis, and immediate treatment for patients with AMI and CA, so that they have easy access to the therapies established on the Clinical Protocols and Therapeutic Guidelines, ensuring users have timely access and proper treatment

Box 5: Some actions of the Plan to Tackle NCD in Brazil, according to vital cycle

Life stage	Suggested actions
Pregnancy and intrauterine development	Cegonha System: Monitoring pregnancy, focusing on nutrition, hypertension, and glycemia control.
Childhood and adolescence	Healthy diet during childhood, incentive to breastfeeding and complementary diet. Providing healthy food at school and good manufacturing practices while promoting purchase of fresh food. Physical activity during school hours and during spare time. Actions to promote health in the School Health Program (PSE): healthy diet, physical activity, alcohol and drug abuse prevention. Regulation of food advertisement aimed at children.
Adults	Promoting healthy life habits such as diet, regular physical activity, smoking cessation, and prevention against alcohol abuse. Promoting the building of healthy spaces to practice physical activity and healthy diet at the workplace.

Box 5: Some actions of the Plan to Tackle NCD in Brazil, according to vital cycle (continued)

Life stage	Suggested actions
Elderly people	Promotion of physical activity to the elderly Training of caregivers within the community. Campaign to promote active ageing.
All ages	Education actions for healthy habits. Academia da Saude Program as an incentive to physical activity. Reduction of salt content in industrialized food and incentive to fruits and vegetables consumption. Regulatory measures concerning tobacco, alcohol, and unhealthy diet. Universal access to Primary Care. Free supply of medicines for NCD treatment.

Box 6: Cross-sector actions aimed at health promotion and NCD prevention.

The action plan is managed by the health sector, but NCD response demands a set of cross-sector actions, which confirms the importance of cross-sectoriality and the need for advance in dialogues. The box below shows how these actions are articulated.

Sector	Suggested actions
Ministry of Education (MEC)	Promoting leisure physical activities, and healthy lifestyle for children and young people, in partnership with the Ministry of Education, pursuant to Basic Law guidelines which provide for two physical education classes a week at schools. Strengthening actions on health promotion among students, in partnership with the MS/MEC (Saude na Escola Program). Promoting supply of healthy food to the National Program on School Meals. Outlining technical guidance for the purchase of food in accordance with the Administrative Rule which establishes that 30% of essential food, obtained through the Aquisicao de Alimento Program (Food Purchase - PAA), for the National Program on School Meal (PNAE), while monitoring safety. Strengthening, within the Saude na Escola Program (PSE), educational actions aimed at preventing and reducing smoking and alcohol abuse, while promoting healthy diet and physical activity.

Box 6: Cross-sector actions aimed at health promotion and NCD prevention. (continued)

Sector	Suggested actions
Ministry of Sport (ME)	Promoting leisure physical activities, and healthy lifestyle for the elderly, through partnerships between the MoH, ME, and the Human Rights Secretariat (SEDH). Promoting leisure physical activities, and healthy lifestyle targeted at children and young people, expanding actions on physical activity during leisure time before/after school. Joining other government sectors in the implementation of a guidance program for physical activity at leisure public spaces (already built or to be built).
Ministry of Social Development (MDS)	Formulating and implementing the Cross-sector Plan for Controlling and Preventing Obesity, in partnership with the Ministry of Health and other sectors represented in the Cross-Sector Chamber of Food and Nutrition Security (Caisan). Joining efforts with the purpose to promote healthy diet and lifestyle targeted at families registered in the Bolsa Familia Program (a program of financial aid supported by the Federal Government) to monitor families' eligibility. Supporting the Social Work Care Network (CRAS, CREAS) and practitioners with providing care to users who are addicted to alcohol.
Ministry of Foreign Affairs (MRE)	Preparing the Brazilian government to attend the High-Level Meeting on NCD, in New York, in September, 2011. Taking part in international cooperation mechanisms related to the FCTC implementation in Brazil.

Box 6: Cross-sector actions aimed at health promotion and NCD prevention. (continued)

Sector	Suggested actions
Human Rights Secretariat (SEDH)	Promoting leisure physical activities, and healthy lifestyle for the elderly, through partnerships between the MoH, ME, and SEDH.
Ministry of Culture (MinC)	Strengthening local food cultures aiming at promoting health through partnerships with the Ministry's Culture Sites.
Ministry of Agrarian Development (MDA)	Establishing partnerships and agreements with the civil society (family farmers, small associations, and others) with the purpose of increasing production and supply of in natura food, aiming at increasing access to proper, healthy food. Strengthening, in areas that grow tobacco, the integration of the health sector and other government sectors with the National Program for Diversification, with the purpose of minimizing conditions caused by the use and growing of tobacco. Promoting the work of the National Program for Diversification in tobacco areas in order to expand this program's coverage. Supporting communication initiatives on the topics of health promotion, NCD prevention and its risk factors, and promotion of a healthy life, providing room for the MoH in meetings with the 165 Territorial Collegiate Bodies and in the National Council on Sustainable Rural Development (Condraf).

Box 6: Cross-sector actions aimed at health promotion and NCD prevention. (continued)

Sector	Suggested actions
Ministry of Agriculture	Supporting cross-sector initiatives with the purpose to increase essential minimally processed food supply in the context of production, supply, and consumption.
Presidency of the Republic Public Affairs Office (SECOM/PR)	Developing communication strategies on the topics of health promotion, NCD prevention and its risk factors, and promotion of healthy lifestyle. Developing social marketing strategies, at national and local levels, with the purpose of promoting healthy lifestyle, combining efforts with the Presidency of Republic Public Affairs Office (Secom/PR), the Communications Office of the Ministry of Health (Ascom/MS), and the Communications Center of the Ministry of Health (Nucom/MS), as well as other partnerships. Disseminating programs on health promotion over the Internet, local and spontaneous media, radios, public televisions, and open television channels.

Box 6: Cross-sector actions aimed at health promotion and NCD prevention.(continued)

Sector	Suggested actions
Ministry of the Cities	Combining efforts with the Ministries of Education, Sport, and Defense with the purpose to build the National Plan on Active and Healthy Transportation, aiming at road traffic safety, public lighting, mobility, and accessibility. Recommending, in the Cities Master Plan, the provision of structures to provide organization and security in the safeguarding of private equipment such as bike-parking sites, in order to encourage the use of active transportation during leisure time and as an alternative to other means of transportation. Recommending competition for the building of structures which favor the practice of leisure and physical activity in municipalities. Supporting the intensification of inspection actions related to alcohol abuse and driving.
Ministry of Development, Industry, and Foreign Trade National Bank of Economic and Social Development (BNDES)	The BNDES and the Ministry of the Cities combine resources to implement the National Program on Healthy Sidewalks, and to build and reactivate bike lanes, parks, squares, and jogging trails.

Box 6: Cross-sector actions aimed at health promotion and NCD prevention. (continued)

Sector	Suggested actions
Ministry of Finances	Recommending and promoting the adoption of fiscal measures, such as reducing taxes, charges, and subsidies in order to reduce the price of healthy food (fruit, vegetables), thus increasing its consumption. Strengthening implementation of pricing policies and raising taxes on tobacco-derived products in order to reduce consumption. Strengthening cross-sector mechanisms to fight the illegal trading of tobacco-derived products, and ratifying protocol to eliminate the illegal trading of tobacco-derived products.
Chief of Staff	Strengthening regulation on food advertisement for children. Strengthening cross-sector management mechanisms of the National Policy on Tobacco Control (National Commission to Implement the Framework Convention on Tobacco Control – CONICQ) and those of sector-oriented management with the purpose to incorporate FCTC actions into the health agenda. Supporting rules that regulate publicity and advertisement of alcoholic beverages, especially beers. Supporting alcoholic beverage and tobacco tax increase.

Box 6: Cross-sector actions aimed at health promotion and NCD prevention. (continued)

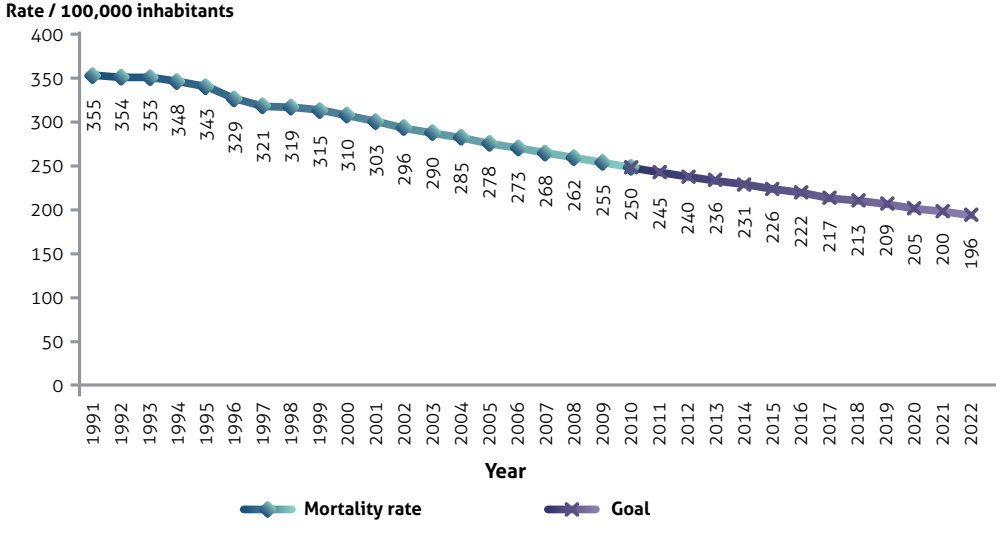
Sector	Suggested actions
Ministry of Fishing and Aquiculture (MPA)	Promoting cross-sector initiatives to rule and control quality and safety of fishery resources for human consumption. Organizing and promoting family aquiculture, aiming at increasing food production and supply (fishery products and seaweed) for healthy eating habits. Proposing physical measures: reducing taxes, charges, and subsidies in order to decrease healthy food prices (fishery products and seaweed) and encouraging consumption as a consequence. Designing the National Plan on Occupational Security and Health targeted at fishery and aquiculture workers. Encouraging increased consumption of fishery products, by expanding supply within the institutional market and promoting actions to acknowledge fishery products as high-quality sources of protein and, most importantly, ensuring healthy food supply (fishery products and seaweed) to the National Program on School Meals (PNAE), through aquiculture organization and promotion.
Shared by many sectors	Raising councils' awareness on the different social policies (Consea, Conanda, National Culture Council, National Council on Women's Rights, Environment Council, and others) concerning health promotion. Strengthening programs on healthy diet at the workplace. Establishing partnerships with the S System, Petrobras, trade unions, and others with the purpose to strengthen actions of health promotion at the workplace. Promoting the building of PAC squares, as a tool to integrate activities and cultural services, sports and leisure, training, welfare services, policies on prevention against violence and toward digital inclusion, covering all age groups.

6.3 Suggested national goals

- ✓ Reducing premature mortality rate (< 70 years old) caused by NCD at 2% a year.
- ✓ Reducing prevalence of obesity among children.
- ✓ Reducing prevalence of obesity among adolescents.
- ✓ Restraining obesity among adults.
- ✓ Reducing prevalence of alcohol abuse.
- ✓ Increasing physical activity levels during leisure time.
- ✓ Increasing fruits and vegetables consumption.
- ✓ Reducing the average salt consumption.
- ✓ Reducing prevalence of smoking.
- ✓ Implementing the National Program on Mammogram Quality within the services which conduct this exam.
- ✓ Implementing the Program on Cytopathology Quality Management within the labs which conduct this exam.
- ✓ Expanding and/or maintaining cervical cancer cytopathology exam coverage for women at age 25 to 64, in all regions of the country.
- ✓ Expanding mammogram coverage for women at age 50 to 69.
- ✓ Guaranteeing treatment for women diagnosed with precursor lesions of cervical cancer.

Figures 16 to 23: Projections for the suggested national goals for tackling NCD and its risk factors.

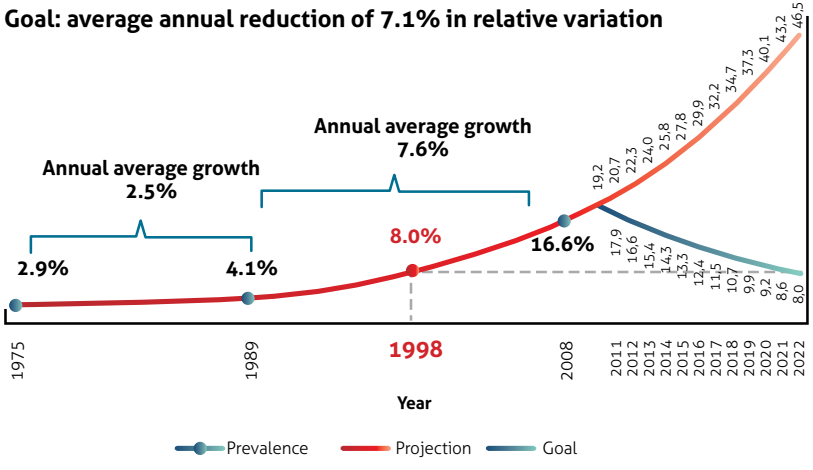
Figure 16: Projection for premature mortality rates (<70 years old) caused by the four main NCD in Brazil, 1991 to 2022. Goal: reduction in mortality rates at 2% a year– 196/100,000 inhabitants



*Cardiovascular diseases, cancer, diabetes, and chronic respiratory diseases.

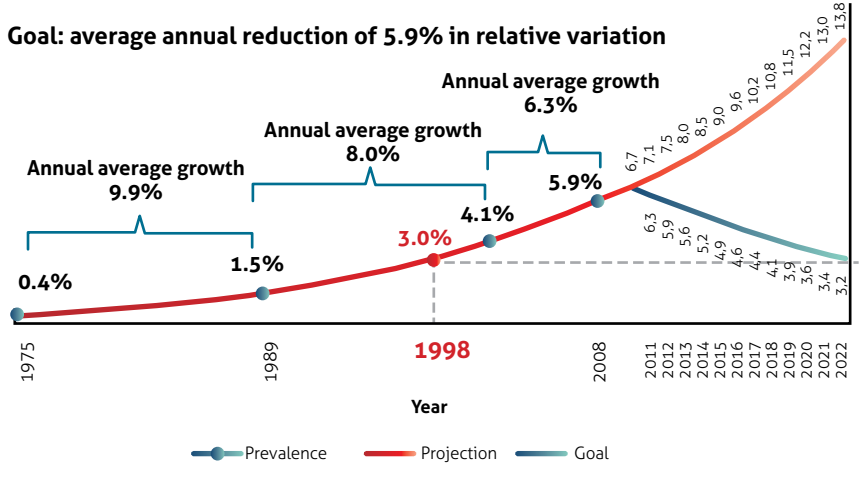
Source: CGDANT/SVS/MS.

Figure 17a: Projection for obesity among boys at the age 5 to 9, 1975 to 2022. Goal: to reach the 1998 level = 8.0%



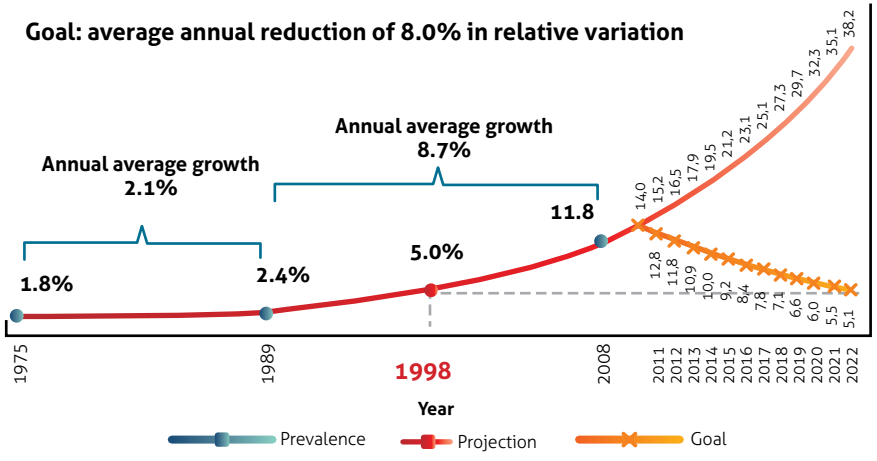
Source: CGDANT/SVS/MS.

Figure 17b: Projection for obesity among boys at the age 10 to 19, 1975 to 2022. Goal: to reach the 1998 level = 3.0%



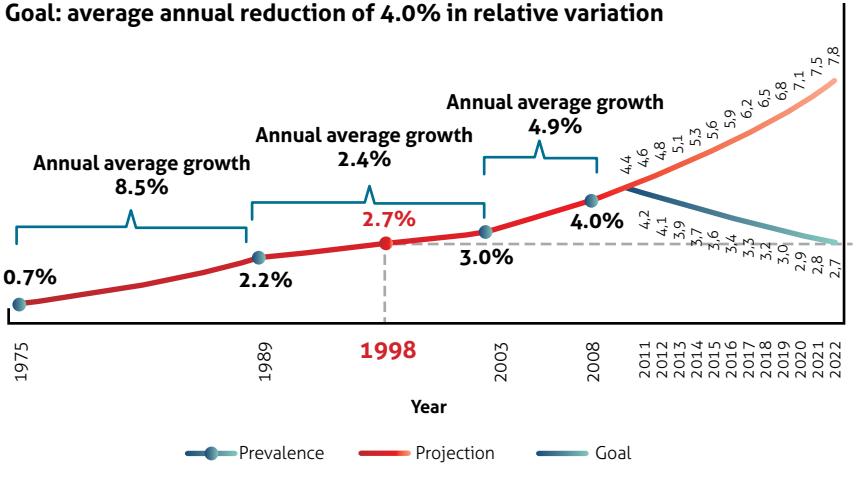
Source: CGDANT/SVS/MS.

Figure 17c: Projection for obesity among girls at the age 5 to 9, 1975 to 2022. Goal: to reach the 1998 level = 5.0%



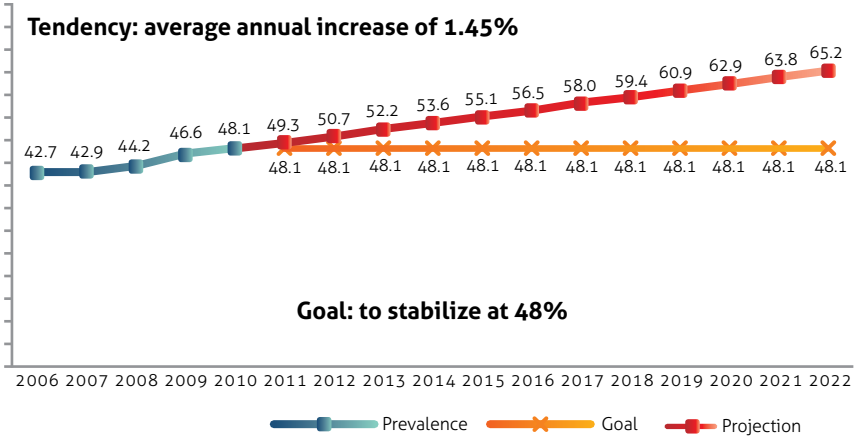
Source: CGDANT/SVS/MS.

Figure 17d: Projection for obesity among girls at the age 10 to 19, 1975 to 2022. Goal: to reach the 1998 level = 2.7%



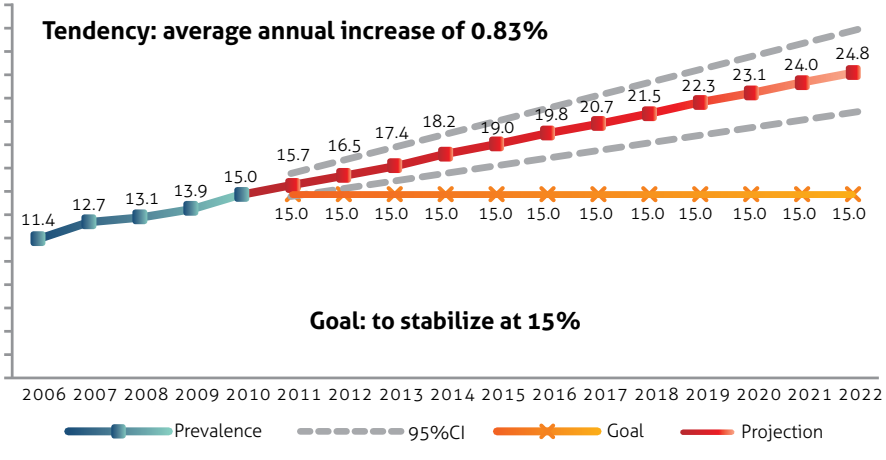
Source: CGDANT/SVS/MS.

Figure 18a: Projection for overweight (BMI ≥ 25 kg/m²) among adults in all 26 state capitals and the Federal District, 2006 to 2022



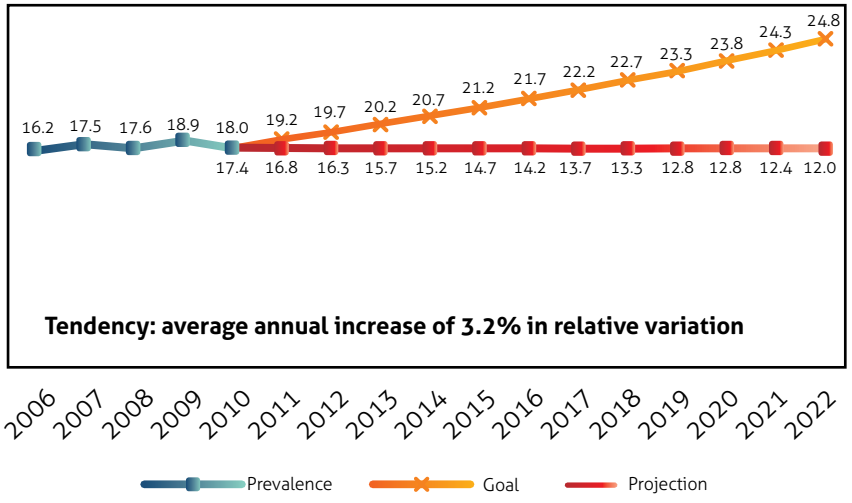
Source: CGDANT/SVS/MS.

Figure 18b: Projection for obesity (BMI ≥ 30 kg/m²) among adults in all 26 state capitals and the Federal District, 2006 to 2022



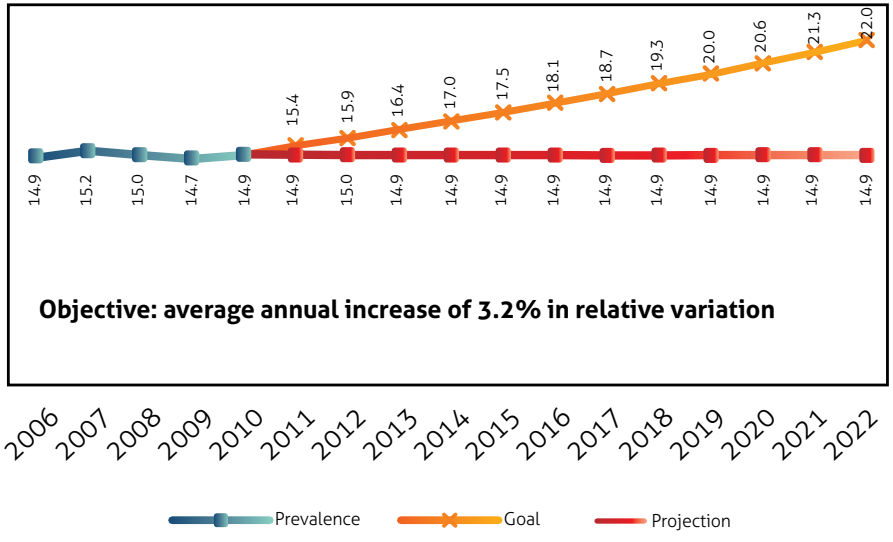
Source: CGDANT/SVS/MS.

Figure 19: Projection for harmful use of alcohol among adults in all 26 state capitals and the Federal District, 2006 to 2022



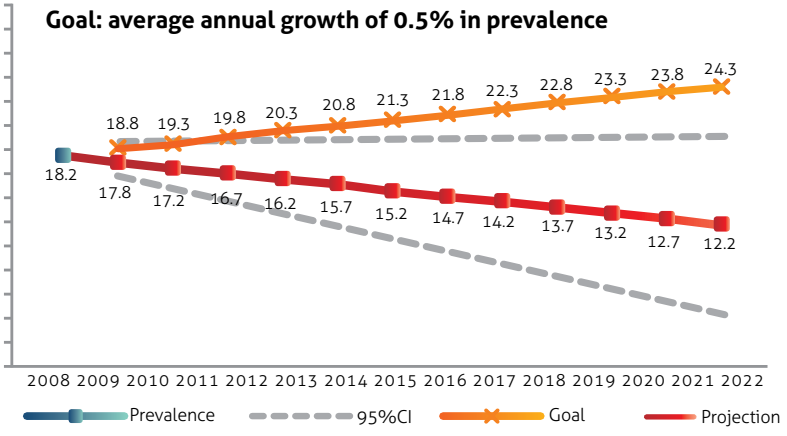
Source: CGDANT/SVS/MS.

Figure 20: Projection for levels of leisure time physical activity among adults in all 26 state capitals and the Federal District, 2006 to 2022



Source: CGDANT/SVS/MS.

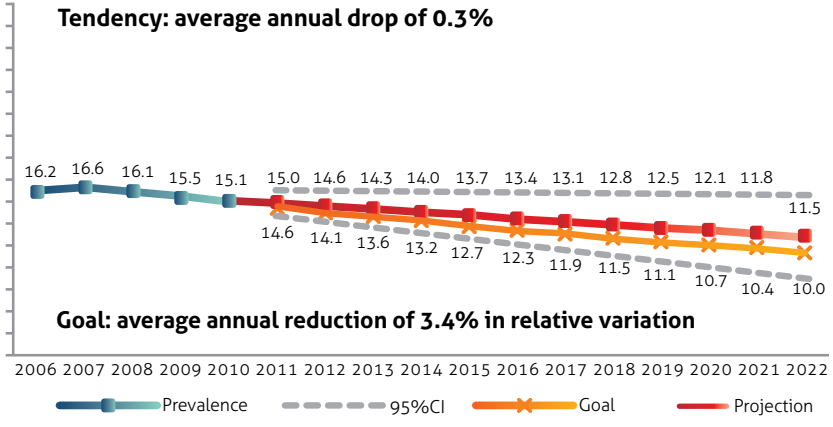
Figure 21: Projection for regular intake of fruits and vegetables among adults in all 26 state capitals and the Federal District, 2008 to 2022



*Consumption ≥ 5x/day for five or more days a week.

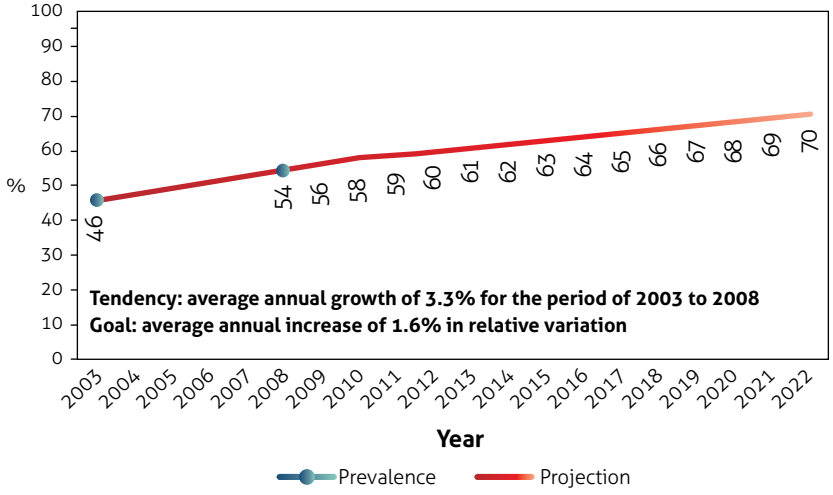
Source: CGDANT/SVS/MS.

Figure 22: Projection for smoking among adults in all 26 state capitals and the Federal District, 2006 to 2022



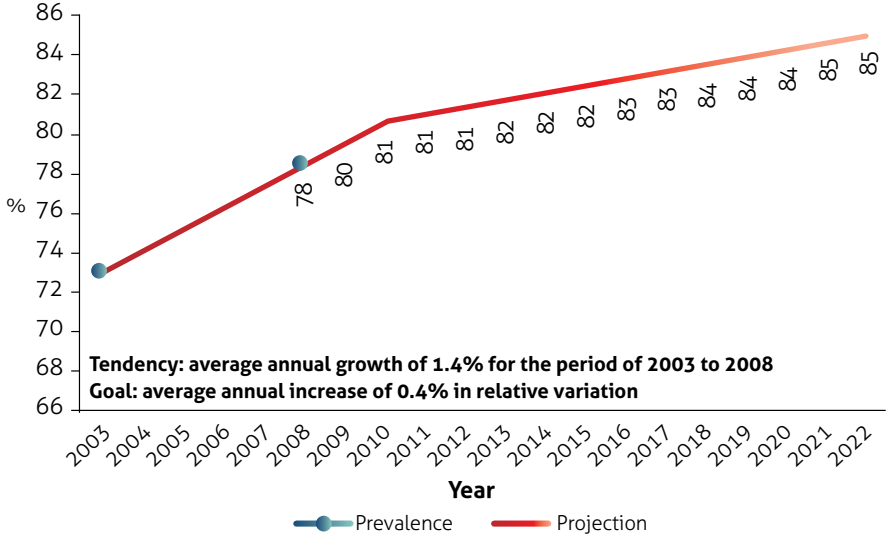
Source: CGDANT/SVS/MS.

Figure 23: Projection for mammogram coverage in the last two-year period among women at the age 50 to 69, Brazil, 2003 to 2022



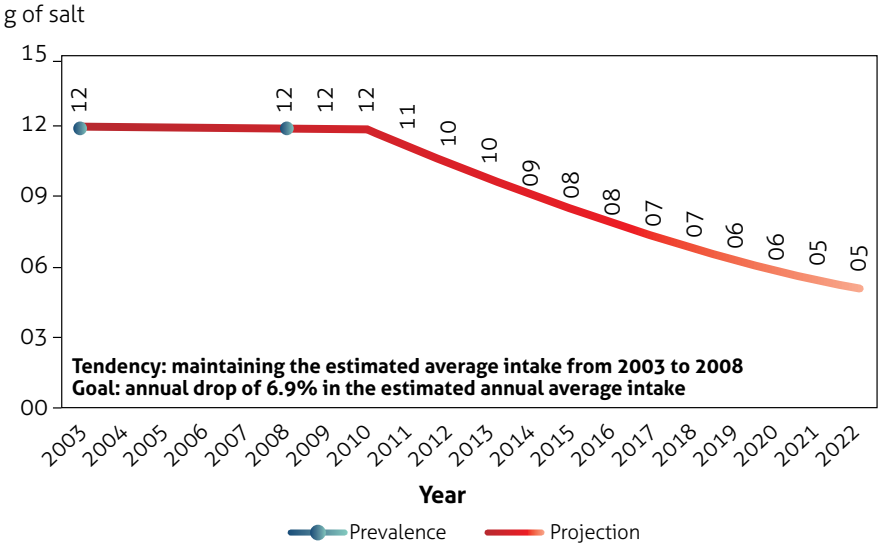
Source: CGDANT/SVS/MS.

Figure 24: Projection for Pap smear test coverage in the last three-year period among women at the age 25 to 64, Brazil, 2003 to 2022



Source: CGDANT/SVS/MS.

Figure 25: Projection for an estimated average salt intake, Brazil, 2003 to 2022



Source: CGDANT/SVS/MS

Remarks: 1g of salt equals 400mg of sodium. 12g of salt = 4700mg of sodium; 5g of salt = 2000mg of sodium

7. Detailed Plan: Axes, Strategies, and Actions

7.1 - AXIS I: SURVEILLANCE, INFORMATION, EVALUATION, AND MONITORING

1. STRATEGIC ACTION PLAN TO TACKLE NONCOMMUNICABLE DISEASES (NCD) IN BRAZIL, 2011-2022						
2. IN CHARGE OF THE PLAN: SVS						
3. INVOLVED IN THE PLAN	Ministry of Health (SAS, SCTIE, SEGETS, SGEP, ANS, Sesai, Inca, Anvisa)					
4. PLAN OBJECTIVE(S): To promote the development and implementation of public policies that are effective, integrated, sustainable, and evidence-based to prevent and control NCD and their risk factors, as well as to strengthen health services which deal with chronic diseases.						
AXIS I: SURVEILLANCE, INFORMATION, EVALUATION, AND MONITORING						
OBJECTIVES	Promoting and supporting the development and strengthening of NCD and its risk factors surveillance, as well as evaluating and monitoring the development of the National NCD plan.					
Strategy 1: Conducting population-based surveys and/or inquiries on incidence, prevalence, morbidity/mortality, and NCD risk and protective factors	In charge	Indicators/ 2011-2012 Goal	Indicators/ 2013 Goal	Indicators/ 2015 Goal	Indicators/ 2017/2019 Goal	Indicators/ 2022 Goal
	CGDANT/ DASIS/SVS, DECIT/SCTIE	Inquiry (ies) made	Inquiry (ies) made	Inquiry (ies) made	Inquiry (ies) made	Inquiry (ies) made
Actions						
1 - Conducting annual continued telephone survey with adults (VIGITEL)						
2 - Conducting the National Survey on Students' Health (PeNSE) in 2012, 2015, 2018, and 2021.						
3 - Conducting, in 2013 and 2018, the National Health Survey (PNS) including topics such as access to and use of services , morbidity, risk factors, elderly people, PETab, biochemical and anthropological measures, among others.						
4 - Conducting the Family Budget Survey (POF) in 2014 and 2019.						
5 - Updating studies on diseases burden.						

AXIS I: SURVEILLANCE, INFORMATION, EVALUATION, AND MONITORING						
Strategy 2: Strengthening health information systems and performing analysis on NCD health status and risk factors	In charge	Indicators/ 2011-2012 Goal	Indicators/ 2013 Goal	Indicators/ 2015 Goal	Indicators/ 2017/2019 Goal	Indicators/ 2022 Goal
	SVS, SAS	Publishing results of surveys made	Publishing results of surveys made	Publishing results of surveys made	Publishing results of surveys made	Publishing results of surveys made
Actions						
1 - Disseminating surveys' findings (PeNSE, VIGITEL, PNAD, POF, PETab/GATS), longitudinal studies (Elsa and Elsi), and others, through publications by the Ministry of Health, seminars, journals, and MoH websites.						
2 - Strengthening information systems (SIM, SIH, SIA/APAC, population and hospital-based cancer records, Hiperdia, Sinan, Products Information System, and others) and disseminating analyses of information on morbidity and mortality of NCD through publications such as Saude Brasil, journals, seminars, newsletters, and MoH websites.						
3 - Promoting surveys on morbidity/mortality and risk factors, through the Ministry of Health's databases, in partnership with education and research institutions, through bidding announcements issued by the Ministry of Health's Science and Technology Department (DECIT/MS).						
4 - Qualifying the Food and Nutritional Surveillance System (Sisvan) to monitor nutritional status in the scope of Primary Care and disseminating information analyses.						
5 - Improving APAC data collection, and performing analysis on NCD-related procedures.						
6 - Expanding notification of occupational diseases within Sinan.						
7 - Consolidating a monitoring and surveillance system on health safety and NCD.						

AXIS I: SURVEILLANCE, INFORMATION, EVALUATION, AND MONITORING							
	Budgetary Line	In charge	Indicators/ 2011 - 2012 Goal	Indicators/ 2013 Goal	Indicators/ 2015 Goal	Indicators/ 2017/2019 Goal	Indicators/ 2022 Goal
Strategy 3: Consolidating a national standardized and integrated information system on cancer	TREASURY	INCA and SVS	85% of RCBIP with consolidated information; 55% of RHC with base sent to RHC integrator	85% of RCBIP with consolidated information; 60% of RHC with base sent to RHC integrator	85% of RCBIP with consolidated information; 65% of RHC with base sent to the RHC integrator	90% of RCBIP with consolidated information; 80% of RHC with base sent to the RHC integrator	90% of RCBIP with consolidated information; 95% of RHC with base sent to the RHC integrator
Actions							
1 - Developing and implementing the update and distribution of Population-based Systems of Cancer Records and Hospital-based Cancer Records.							
2 - Providing technical advice to RCBP (implementation, quality improvement and information update).							
3 - Evaluating cancer records through performance indicators.							
4 - Updating technical and educational material on cancer surveillance and records.							
5 - Making information on cancer available in a timely fashion – at local, state, and national level – as consolidated data from Cancer Records (RCBP and RHC) and cancer mortality Atlas.							
6 - Performing information analysis on morbidity and mortality from cancer, through indicators suggested by the Cancer Records (RCBP and RHC) and cancer mortality Atlas in the form of reports, newsletters, journals, and technical publications.							
7 - Integrating the main databases on cancer morbidity/mortality in the country.							
8 - Performing analysis on Breast and Cervical cancers based on the Siscolo / Sismama database.							
9 - Acknowledging Population-based Cancer Records (RCBP) and Hospital-based Cancer Records (RHC) as official sources of information for cancer surveillance incorporated into their databases in the SUS.							
10 - Strengthening cancer surveillance in NCD Surveillance Departments at the SES and SMS.							
11 - Combining efforts with education and research institutions to carry out analysis on survival data.							

AXIS I: SURVEILLANCE, INFORMATION, EVALUATION, AND MONITORING						
	In charge	Indicators / 2011-2012 Goal	Indicators / 2013 Goal	Indicators / 2015 Goal	Indicators / 2017/2019 Goal	Indicators / 2022 Goal
Strategy 4: Strengthening NCD surveillance in states and municipalities	CGDANT/ DASIS/SVS	27 state capitals, 26 states, and the FD, 10% of municipalities up to 100,000 inhabitants with ND reference	50% of municipalities up to 100,000 inhabitants with ND reference	90% of municipalities up to 100,000 inhabitants with ND reference	40% of municipalities up to 100,000 inhabitants with ND reference	80% of municipalities up to 100,000 inhabitants with ND reference
Actions						
1 - Combining monitoring indicators for plan actions at municipal and state levels.						
2 - Developing tools to strengthen technical capacity within the SES and SMS.						
3 - Providing annual capacity-building course on NCD surveillance and health promotion for the SES and SMS.						
4 - Encouraging publications by the SES and SMS on NCD.						
5 - Strengthening the SES and SMS to carry out actions on NCD surveillance, promotion, and prevention, including environmental surveillance and monitoring of populations exposed to occupational and environmental contaminants.						
6 - Promoting the incorporation of topics related to ND surveillance and health promotion into municipal and state health plans.						
7 - Developing methodologies and tools to conduct surveys and studies on the evaluation of social programs for small and medium-sized municipalities.						

AXIS I: SURVEILLANCE, INFORMATION, EVALUATION, AND MONITORING						
Strategy 5: Monitoring and evaluating NCD interventions and related costs	In charge	Indicators / 2011-2012 Goal	Indicators / 2013 Goal	Indicators / 2015 Goal	Indicators / 2017/2019 Goal	Indicators / 2022 Goal
	CGDANT/DASIS, DECIT, MCT	Publishing studies on NCD costs	Publishing studies on NCD costs	Publishing studies on NCD costs	Publishing studies on NCD costs	Publishing studies on NCD costs
Actions						
1 - Conducting studies and surveys to evaluate: effectiveness of interventions to promote health, preventing NCD and its risk and protective factors; financial impact of chronic diseases, among others, by using different methodologies, including the WHO step stroke tool, financed through bidding announcements.						
2 - Conducting studies on NCD and their risk factors cost-effectiveness, together with the Health Economy Department, the Health Status Analysis Department, the Ministry of Science and Technology, the Ipea, universities, Centers for Disease Control and Prevention (CDC), Health Canada, and others.						
3 - Conducting studies to evaluate the effectiveness of programs to promote health and physical activity in the Academia da Cidade (City's Fitness Center) in Pernambuco and Academia da Saude (Health Academy) programs, among others.						
4 - Evaluating feasibility and fiscal impact of taxes and charges reduction on healthy food, as well as the impact on the increased taxation of unhealthy food.						
5 - Evaluating the association between tobacco growers' exposure to agro-chemicals and tobacco and impacts on their health.						
6 - Supporting tracking studies on exposure to occupational and environmental risks related to chronic diseases.						
7 - Building a baseline to evaluate structuring interventions on major events such as the 2014 FIFA World Cup and the 2016 Olympic Games, as well as their impacts on health.						

AXIS I: SURVEILLANCE, INFORMATION, EVALUATION, AND MONITORING						
Strategy 6: Monitoring and evaluating the implementation of the National Plan to Tackle NCD.	In charge	Indicators / 2011-2012 Goal	Indicators / 2013 Goal	Indicators / 2015 Goal	Indicators / 2017/2019 Goal	Indicators / 2022 Goal
	CGDANT/DASIS, DECIT, MCT	NCD monitored	NCD monitored	NCD monitored	NCD monitored	NCD monitored
Actions						
1 - Creating a monitoring panel with the main goals and indicators of the National NCD Plan's follow-up process.						
2 - Regularly re-evaluating goals and indicators of the plan.						

AXIS I: SURVEILLANCE, INFORMATION, EVALUATION, AND MONITORING						
Strategy 7: Monitoring social equality regarding risk factors, prevalence, mortality, and access to NCD Comprehensive Care.	In charge	Indicators / 2011-2012 Goal	Indicators / 2013 Goal	Indicators / 2015 Goal	Indicators / 2017/2019 Goal	Indicators / 2022 Goal
	CGDANT/DASIS, DECIT, MCT, and Seppir	Studies to monitor iniquities on developed NCD	Studies to monitor iniquities on developed NCD	Studies to monitor iniquities on developed NCD	Studies to monitor iniquities on developed NCD	Studies to monitor iniquities on developed NCD
Actions						
1 - Monitoring, for different indicators of this Plan, iniquities among regions as well as cross-state and intra-urban imbalances.						
2 - Monitoring socio-economic disparities (education, occupation) according to race/ethnicity (black, indigenous populations, and those in special conditions – quilombolas) and gender.						
3 - Incorporating socio-economic variables into the survey's database on morbidity/mortality with the purpose to broaden analyses on iniquities.						
4 - Promoting studies to develop methods and analyses of the monitoring of NCD iniquities.						
5 - Developing tools and courses to strengthen technical capacity to monitor NCD iniquities at the three governmental spheres.						

7.2 - AXIS II: HEALTH PROMOTION

1. PLAN OF STRATEGIC ACTIONS TO TACKLE NONCOMMUNICABLE DISEASES (NCD) IN BRAZIL, 2011-2022						
2. IN CHARGE OF THE PLAN: SVS						
3. INVOLVED IN THE PLAN: Ministry of Health (SAS, SCTIE, Sesai, SEGETS, SGEP, ANS, Inca, Anvisa), MEC, ME, MDA, MDS, MC, MD, MPA, SECOM/PR, MRE, MT, MAPA, Ipea, MTE, MP, MinC, and others						
4. PLAN OBJECTIVE(S): To promote the development and implementation of public policies that are effective, integrated, sustainable, and evidence-based to prevent and control NCD and their risk factors, as well as to strengthen health services which deal with chronic diseases.						
AXIS II: HEALTH PROMOTION						
OBJECTIVES	Addressing social and economic conditions to cope with NCD determinant factors and providing the population with alternatives to adopt healthy behaviors throughout life.					
Strategy 1: Ensuring the commitment made by Ministries and Secretariats to deal with action on health promotion and NCD prevention	In charge	Indicators / 2011-2012 Goal	Indicators / 2013 Goal	Indicators / 2015 Goal	Indicators / 2017/2019 Goal	Indicators / 2022 Goal
	CGDANT/DASIS, CGAN/DAB, MEC, MDS, ME, MPA, and Seppir	Implemented cross-sector programs	Implemented cross-sector programs	Implemented cross-sector programs	Implemented cross-sector programs	Implemented cross-sector programs
Actions						
1 - Establishing and strengthening partnerships with Ministries and Secretariats (Health, Education, Cities, Sports, Agrarian Development, Social Development, Environment, Agriculture (Embrapa), Labor, Planning, and Special Human Rights Secretariat) to cope with NCD socio-environmental determinants and to promote healthy behaviors.						
2 - Formulating and implementing the Cross-Sector Plan on Preventing and Controlling Obesity, in partnership with the sectors implemented in the Cross-Sector Chamber of Food and Nutritional Security (Caisan).						
3 - Promoting leisure physical activities and healthy lifestyle to the elderly people, through partnerships with the Ministry of Health, Ministry of Sport, and Special Human Rights Secretariat.						

4 - Promoting leisure physical activities and healthy lifestyle for children and young people, in partnership with the MEC and the MS, in accordance with the guidelines of the Primary Education Act, which provides for two physical education classes a week at schools, through a partnership between the ME, MEC, and MoH, actions on fitness practices, sports, and physical activity during spare time before/after school hours, through the Segundo Tempo program (Second Round).
5 - Developing, in partnership with the MEC, actions of the School Health Program's component on health promotion, aimed at healthy diet, sports, physical activity, and prevention against alcohol abuse, drug abuse, and tobacco.
6 - Promoting actions to encourage healthy diet and lifestyle targeted at families registered in the Bolsa Família Program, following-up families' eligibility.
7 - Expanding spaces and providing sport and leisure equipment, such as the Youth Squares, Sport and Culture Squares, and Health Academies, acknowledging them as healthy and sustainable environments capable of promoting lifelong engagement in sports and physical activities, and in healthy lifestyle.
8 - Formalizing mechanisms of cross-sector managerial support of NCD strategic action Plan and encouraging health promotion.
9 - Strengthening local eating cultures aiming at promoting health through partnerships with the Ministry of Culture's Culture Sites.
10 - Enhancing actions by the Culture and Health Network, agreements between the MoH and the MinC, with the purpose to expand and qualify health promotion processes and dialogues between health networks and cultural equipment.
11 - Enhancing sport-leisure-health partnership, through an agreement between the ME and MoH, in health promotion processes, through fitness practices, sports, and physical activity.
12 - Enhancing the ME/MoH partnership to promote sport, leisure, and health as a way of promoting health through fitness practices, sports, and physical activity, and as part of the Social Legacy of Big Events.
13 - Creating the National Plan on Occupational Security and Health for fishery products and aquiculture workers.
14 - Promoting increased consumption of fishery products, by expanding supply in the institutional market and promoting actions to disseminate fishery products as high-quality sources of protein and, most importantly, guaranteeing the supply of healthy food (fishery products and seaweed) to the National Program on School Meals (PNAE), through organization and promotion of aquiculture.

AXIS II: HEALTH PROMOTION						
Strategy 2: Conducting advocacy actions to promote health and prevent noncommunicable diseases	In charge	Indicators / 2011-2012 Goal	Indicators / 2013 Goal	Indicators / 2015 Goal	Indicators / 2017/2019 Goal	Indicators / 2022 Goal
	SGEP, SVS	Number of actions developed within the biennium	Number of actions developed within the biennium	Number of actions developed within the biennium	Number of actions developed within the biennium	Number of actions developed within the biennium
Actions						
1 - Raising awareness among members of the National, State, and Municipal Health Council to incorporate the health topic into national, state, and municipal agendas.						
2 - Developing partnerships with scientific and professional societies and also the organized civil society to develop actions on NCD promotion and prevention.						
3 - Encouraging opinion-makers and participants of social networks to disseminate NCD prevention and healthy lifestyle promotion.						
4 - Strengthening social control to protect health policies related to improved healthy diet (National Policy on Health Promotion, National Policy on Food and Nutrition, and National Policy on School Meals) and to control tobacco.						
5 - Supporting federal laws which prohibit smoking in shared closed environments, and other topics related to tobacco control.						
6 - Raising awareness within the councils about several social policies on health promotion (Consea, Conanda, National Culture Council, National Council on Women's Rights, Environment Council, and others).						
7 - Supporting self-regulation initiatives of food advertisement actions.						

8 - Mobilizing and raising awareness within social sectors and the media on the importance of active ageing and social inclusion of the elderly.
9 - Promoting the participation of the organized civil society in the implementation of the FCTC in Brazil.
10 - Encouraging the participation of the organized civil society in supporting the regulation of advertisements on food, tobacco, and alcohol.
11 - Combining efforts with the National Congress to support projects which promote health and healthy habits.
12 - Supporting the passing of laws in the National Congress aimed at ruling advertisement and food for children.

AXIS II: HEALTH PROMOTION						
Strategy 3: Establishing agreements with the productive sector and partnerships with the civil society to prevent NCD and promote health, complying with article 5.3 of the Framework Convention on Tobacco Control (Decree 5658/2006) and respective guidelines	In charge	Indicators / 2011-2012 Goal	Indicators / 2013 Goal	Indicators / 2015 Goal	Indicators / 2017/2019 Goal	Indicators / 2022 Goal
	DAB, Anvisa	Number of partnerships established	Number of partnerships established	Number of partnerships established	Number of partnerships established	Number of partnerships established
Actions						
1 - Establishing agreements with the industry and setting goals to reformulate processed food, by reducing sodium, fats, and sugar contents.						
2 - Implementing actions on health promotion at the workplace and at the productive sector through partnerships with the purpose to build healthy environments.						
3 - Disseminating and monitoring agreements and partnerships between the private sector and the civil society to reach the suggested national Goals on reduction of salt, trans fat, sugar, and others.						
4 - Establishing agreements with the productive sector to implement programs on physical activity, such as the Academia da Saude and others.						
5 - Strengthening programs on healthy diet at the workplace.						
6 - Establishing partnerships with the S System, Petrobras, trade unions, and others to strengthen actions to promote health at the workplace.						
7 - Establishing partnerships and agreements with the civil society (family farmers, small associations, and others) to increase production and supply of in natura food.						
8 - Promoting the development of programs on health promotion and NCD prevention in the field of private health plans.						
9 - Agreeing with social sectors of public interest on a code of ethics and conduct for public-private relation related to actions of health promotion / NCD prevention.						

AXIS II: HEALTH PROMOTION						
Strategy 4: Creating communication strategies on the topics of health promotion, NCD and their risks prevention, as well as promotion of healthy lifestyle	In charge	Indicators / 2011-2012 Goal	Indicators / 2013 Goal	Indicators / 2015 Goal	Indicators / 2017/2019 Goal	Indicators / 2022 Goal
	Ascom/SVS, SAS, SCTIE, ME	Monitoring the percentage of the population exposed to NCD campaigns and promotion	Monitoring the percentage of the population exposed to NCD campaigns and promotion	Monitoring the percentage of the population exposed to NCD campaigns and promotion	Monitoring the percentage of the population exposed to NCD campaigns and promotion	Monitoring the percentage of the population exposed to NCD campaigns and promotion
Actions						
1 - Developing social marketing strategies to promote healthy lifestyle at national and local levels, articulated with Secom/PR, Ascom and Nucom/MS, and other partnerships.						
2 - Planning, in a cross-sector way, educational campaigns and continued education on NCD promotion and prevention throughout the Brazilian territory, monitoring their effectiveness.						
3 - Training press offices of the Ministries and their regulatory agencies to disseminate, in major sport events, information on healthy lifestyle.						
4 - Implementing the Health Communication Plan to disseminate information on practices to promote health and prevent NCD, diversifying media and target audience.						
5 - Disseminating programs on health promotion on the Internet, local and spontaneous media, radios, and open television channels.						
6 - Promoting surveys to subsidize actions for special groups which are more vulnerable to NCD.						
7 - Developing and implementing methodology and strategies of education and risk communication on diseases resulting from human exposure to environmental contaminants, especially agro-chemicals.						
8 - Incorporating into the World Cup's and Olympic Games' topics related to healthy lifestyle and health promotion.						
9 - Conducting campaigns to raise awareness among professionals, Sisan agents, and the population on the preparation and consumption of regional food products, which are in compliance with socio-biodiversity, agro-ecologic and of higher nutritive value.						

AXIS II: HEALTH PROMOTION						
Strategy 5: Implementing actions to promote physical activity and healthy lifestyle for the population, in partnership with the Ministry of Sport (Academia da Saude, Vida Saudavel Programs, and others).	In charge	Indicators / 2011-2012 Goal	Indicators / 2013 Goal	Indicators / 2015 Goal	Indicators / 2017/2019 Goal	Indicators / 2022 Goal
	SVS, SAS, ME	1,000 Academias da Saude implemented in municipalities	3,000 Academias da Saude implemented in municipalities	4,000 Academias da Saude implemented in municipalities	4,500 Academias da Saude implemented in municipalities	5,000 Academias da Saude implemented in municipalities

Actions
1 - Financing implementation and adjustment of physical spaces to the Academia da Saude Program, with an appropriate due date for the use of these rooms, including professional guidance.
2 - Financing the maintenance of the Academia da Saude Program.
3 - Articulating, with other governmental sectors, the implementation of the guidance program to physical activities in leisure public spaces (built or to be built).
4 - Training and improving human and logistical resources for the Academia da Saude Program.
5 - Conducting a communication and education campaign to promote health through physical activity.
6 - Promoting actions on integrative practices in the Academia da Saude, Esporte e Lazer da Cidade Program, Youth Squares, and Sport and Culture Squares.
7 - Building strategies to promote healthy lifestyle by promoting leisure physical activity and healthy lifestyle related to the arrangements for the Soccer World Cup and the Olympic Games.

AXIS II: HEALTH PROMOTION						
Strategy 6: Promoting the construction of urban spaces that are environmentally sustainable and healthy	In charge	Indicators / 2011-2012 Goal	Indicators / 2013 Goal	Indicators / 2015 Goal	Indicators / 2017/2019 Goal	Indicators / 2022 Goal
	SAS, SVS, ME, MC, and others	Number of (PAC) Squares built	Number of (PAC) Squares built	Number of (PAC) Squares built	Number of (PAC) Squares built	Number of (PAC) Squares built
Actions						
1 - Articulating with the Ministries of the Cities, Education, Sport, and Defense the development of the National Plan on Active and Healthy Transportation, aimed at public and road traffic safety, public lighting, mobility, and accessibility.						
2 - Articulating, with the BNDES and the Ministry of the Cities, resources to implement a National Program on Healthy Sidewalks and building and reactivating bike lanes, parks, squares, and jogging trails, integrated to policies implemented by the Ministry of Sport.						
2 - Recommending, in the Master Plan of Cities, the provision of structures to ensure the organization and safe guard of private equipment, such as bike parking sports, in order to encourage the use of active transportation during leisure time and as an alternative to other transportation means.						
4 - Recommending to the Ministry of the Cities bidding announcements for the building of structures which favor the practice of leisure physical activity in municipalities.						
5 - Expanding spaces and providing sport and leisure equipment, such as the Youth Squares, Sport and Culture Squares, and Health Academies, acknowledging them as healthy and sustainable environments capable of promoting lifelong engagement in sports and physical activities, and in healthy lifestyle.						
6 - Encouraging the building of squares at the Citizen Community Center, as a tool to integrate activities and cultural services, sports and leisure, training, welfare services, policies on prevention against violence and toward digital inclusion, covering all age groups.						

AXIS II: HEALTH PROMOTION						
Strategy 7: Expanding and strengthening actions on healthy diet	In charge	Indicators / 2011-2012 Goal	Indicators / 2013 Goal	Indicators / 2015 Goal	Indicators / 2017/2019 Goal	Indicators / 2022 Goal
	SAS, SVS, Anvisa, MPA, PNAE/FNDE/ MEC	40% of schools with healthy food	50% of schools with healthy food	60% of schools with healthy food	70% of schools with healthy food	80% of schools with healthy food
Actions						
1 - Implementing food guides to promote, throughout all life cycles, healthy selections regarding food.						
2 - Supporting the implementation of nutritional standards set by the Worker's Food Program, focusing on healthy diet and NCD prevention at the workplace.						
3 - Promoting the purchase of healthy food for the National Program on School Meals, taking into consideration biological differences between age groups, and food conditions which require specialized care.						
4 - Articulating actions on capacity-building and permanent education for health professionals, especially within Primary Health Care, focusing on healthy diet promotion.						
5 - Formulating technical guidance to purchase food from family agriculture, pursuant to Art. 14, Law 11947/2009 – School Meal Care.						
6 - Promoting actions on food and nutritional education and healthy food environment at schools, within the Health at School Program.						
7 - Outlining and implementing programs on food and nutritional education, combining several sectors of society.						
8 - Promoting healthy diet during childhood through the expansion of healthy diet promotion networks targeted at children aged two or less (Amamenta Brasil Network and National Strategy of Healthy Complementary Food).						

9 - Strengthening the Educanvisa project as a strategy to promote healthy diet.
10 - Elaborating the Guide on Good Nutritional Practices to Eating Out, destined to provide guidance to small-scale commerce and services on the proper and healthier preparation and supply of food.
11 - Stimulating consumption of healthy food such as fruits, vegetables, and others.
12 - Organizing and promoting family aquiculture, aiming at increasing production and food supply (fishery products and seaweed) for healthy eating habits.
13 - Fostering the production of clean-base food (organic, agro-ecologic, etc.) combined with programs which facilitate production of healthy food, developed by the Ministry of Agrarian Development.
14 - Creating a protocol of actions on food and nutritional education to families registered in social and welfare programs, integrating public systems and public equipment with Sisvan institutions.

AXIS II: HEALTH PROMOTION						
Strategy 8: Regulatory actions to promote health	In charge	Indicators / 2011-2012 Goal	Indicators / 2013 Goal	Indicators / 2015 Goal	Indicators / 2017/2019 Goal	Indicators / 2022 Goal
	CGAN/SAS, Anvisa, MPA	Number of revised and improved rules on labeling	Number of revised and improved rules on labeling	Number of revised and improved rules on labeling	Number of revised and improved rules on labeling	Number of revised and improved rules on labeling
Actions						
1 - Recommending the review of Decree Law 986/1969 which deals with individual or collective health defense and protection, concerning food from its very acquisition to its consumption.						
2 - Reviewing and improving regulation of labeled packed food, meeting the criteria of legibility and visibility, facilitating consumers' comprehension.						
3 - Recommending and promoting the adoption of fiscal measures such as taxes and charges reduction and subsidies to reducing the price of healthy food (fruits, vegetables) with the purpose to encourage consumption.						
4 - Strengthening regulation on the advertisement of food targeted at children.						
5 - Strengthening regulation on the advertisement of food and non-alcoholic beverages.						
6 - Supporting the inclusion of warning messages about risks to health into any kind of publicity aimed at promoting processed food, according to specific regulation.						
7 - Monitoring the enforcement of regulation on food publicity.						
8 - Supporting regulation of chemical substances publicity, including health alerts, controlling exposure and forbidding asbestos.						
9 - Strengthening cross-sector mechanisms to support initiatives on the regulation of food publicity, which is object of judicial suits.						

10 - Promoting regulation on food and meals supply to both public and private sectors, such as university restaurants, public departments, working environments, and others, with the purpose to ensure compliance with recommendations regarding healthy diet.
11 - Fostering cross-sector initiatives to rule and control quality and safety of fishery resources for human consumption.
12 - Recommending measures such as reduction of taxes, charges and subsidies in order to reduce the price of healthy food (fishery products and seaweed), thus encouraging consumption.

AXIS II: HEALTH PROMOTION						
Strategy 9: Making progress in the actions to implement the Framework Convention on Tobacco Control – FCTC Decree 5.658/2006	In charge	Indicators / 2011-2012 Goal	Indicators / 2013 Goal	Indicators / 2015 Goal	Indicators / 2017/2019 Goal	Indicators / 2022 Goal
	Inca, SVS, Anvisa, and representatives of the Ministries and Secretariats belonging to the CONICQ	FCTC implemented and/or improved measures	FCTC implemented and/or improved measures	FCTC implemented and/or improved measures	FCTC implemented and/or improved measures	FCTC implemented and/or improved measures
Actions						
1 - Strengthening cross-sector governance mechanism of the National Policy on Tobacco Control (National Commission to Implement the Framework Convention on Tobacco Control – CONICQ) and that of the sector-oriented government to incorporate FCTC actions into the health agenda, pursuant to Art. 19 and complying with the guidelines of Art. 5.3.						
2 - Adjusting the national legislation which rules smoking in shared spaces, in accordance with the FCTC guideline which bans smoking in shared enclosed spaces, as well as the legislation on tobacco-derived products (advertisement, labeling, and others).						
3 - Expanding actions on smoking prevention and cessation among the population at large, with special focus on more vulnerable groups (youth, women, lower-income and low-educated population, indigenous, and quilombolas).						
4 - Strengthening the implementation of pricing policies and raising taxes on tobacco-derived products, in order to reduce consumption.						
5 - Strengthening cross-sector mechanisms to fight the illegal trading of tobacco-derived products, and ratifying protocol to eliminate the illegal trading of tobacco-derived products.						
6 - Strengthening regulation on tobacco-derived products.						
7 - Strengthening, in areas that grow tobacco, the integration of the health sector and other governmental sectors with the National Program on Diversification, with the purpose to increase this program's coverage.						

8 - Monitoring, evaluating, and developing surveys to subsidize the implementation of the FCTC in Brazil.
9 - Participating in mechanisms of international cooperation related to the FCTC implementation in Brazil.
10 - Monitoring strategies by the tobacco industry aimed at restricting the adoption of the FCTC measures, including at the Judiciary level.
11 - Strengthening actions on health promotion among students, through the MoH/MEC partnership (Health at School Program).

AXIS II: HEALTH PROMOTION						
Strategy 10: Combining actions to prevent and control obesity	In charge	Indicators / 2011-2012 Goal	Indicators / 2013 Goal	Indicators / 2015 Goal	Indicators / 2017/2019 Goal	Indicators / 2022 Goal
	CGAN/SAS, MEC, ME	Reducing obesity among children	Reducing obesity among children	Reducing obesity among children	Reducing obesity among children	Reducing obesity among children
Actions						
1 - Fostering food and nutritional surveillance through population-based surveys and/or inquiries on the prevalence of overweight, obesity, and associated factors.						
2 - Encouraging engagement in physical activity on an everyday basis and throughout life.						
3 - Supporting cross-sector initiatives with increasing supply of essential minimally processed food, in the context of production, supply, and consumption.						
4 - Supporting cross-sector initiatives on social communication, education, and advocacy to adopt healthy lifestyle.						
6 - Supporting cross-sector initiatives to promote healthy lifestyle within territories, including urban spaces (school, working environment, public equipment of food and nutrition, physical activity, and health and social/welfare networks) as well as rural spaces (line conservation units and national parks).						
6 - Structuring and implementing models of integral health care to overweight/obese people within the health system, especially Primary Care.						
7 - Promoting cross-sector initiatives to rule and control food quality and safety.						
8 - Suggesting and promoting cross-sector initiatives to adopt fiscal measures such as rates, subsidies, and simplified taxing in order to encourage consumption of healthy food such as fruits and vegetables.						

AXIS II: HEALTH PROMOTION						
Strategy 11: Promoting actions on health promotion and alcohol abuse prevention	In charge	Indicators / 2011-2012 Goal	Indicators / 2013 Goal	Indicators / 2015 Goal	Indicators / 2017/2019 Goal	Indicators / 2022 Goal
	SAS, SVS, Anvisa, MEC, Min. of the Cities / Denatran / Min. of Justice	Reducing alcohol abuse among adolescents	Reducing alcohol abuse among adolescents	Reducing alcohol abuse among adolescents	Reducing alcohol abuse among adolescents	Reducing alcohol abuse among adolescents
Actions						
1 - Supporting the intensification of inspection actions related to selling alcoholic beverages to minors (younger than 18 years old).						
2 - Supporting the intensification of inspection actions regarding alcohol abuse and driving.						
3 - Combining efforts with other sectors of the national and cross-federation governments toward the rehabilitation and reinsertion of alcoholics into society, through income generation and access to healthy housing.						
4 - Supporting local initiatives on reduction of damages caused by alcohol abuse, through free distribution of water in bars and nightclubs.						
5 - Strengthening, with the support of the Health at School Program, educational actions aimed at preventing alcohol abuse and reducing related costs.						
6 - Putting together the Social Care network (CRAS, CREAS) and supporting teams to provide care to users who are addicted to alcohol.						
7 - Supporting local initiatives on specific laws to monitor alcohol selling spots and to enforce a night curfew for pubs and similar locations.						
8 - Supporting laws which rule publicity and advertisement of alcoholic beverages.						
9 - Supporting increased taxation on alcoholic beverages.						
10 - Monitoring regulatory actions on publicity and advertisement of alcoholic beverages.						
11 - Expanding access, qualifying, and diversifying treatment for those addicted to alcohol and their family members, focusing on vulnerable populations such as adolescents, young adults, low schooling, low income, indigenous and quilombolas.						

AXIS II: HEALTH PROMOTION						
Strategy 12: Implementation of an Comprehensive Care model to active ageing	In charge	Indicators / 2011- 2012 Goal	Indicators / 2013 Goal	Indicators / 2015 Goal	Indicators / 2017/2019 Goal	Indicators / 2022 Goal
	SAS, SVS	Training caregivers for the elderly within the community. Trained caregivers for the elderly within the community	Training caregivers for the elderly within the community. Trained caregivers for the elderly within the community	Training caregivers for the elderly within the community. Trained caregivers for the elderly within the community	Training caregivers for the elderly within the community. Trained caregivers for the elderly within the community	Training caregivers for the elderly within the community. Trained caregivers for the elderly within the community

Actions
1 - Strengthening actions to promote active and healthy ageing within the Primary Health Care.
2 - Supporting strategies to promote active ageing within private health plans.
3 - Adjusting the structure of care units with the purpose to improve accessibility and the welcoming of elderly people.
4 - Expanding and ensuring quality access to care technology and services to elderly people and those with chronic conditions.
5 - Promoting higher autonomy, self-care, and the rational use of medications among elderly people.
6 - Organizing lines of care concerning priority chronic conditions and fragile elderly people, while expanding quality access.
7 - Expanding continued training for health professional teams to serve, welcome, and provide care to the elderly and to people with chronic conditions.
8 - Strengthening and expanding the training of caregivers for elderly people and people with chronic conditions within the community.

7.3 – AXIS III: COMPREHENSIVE CARE

1. STRATEGIC ACTION PLAN TO TACKLE NONCOMMUNICABLE DISEASES (NCD) IN BRAZIL, 2011-2022						
2. IN CHARGE OF THE PLAN: SVS						
3. INVOLVED IN THE PLAN:	Ministry of Health (SAS, SCIT, SEGETS, SEGEP, ANS, Inca, Anvisa, Sesai)					
4. PLAN OBJECTIVE(S): To promote the development and implementation of public policies that are effective, integrated, sustainable, and evidence-based to prevent and control NCD and their risk factors, as well as to strengthen health services which deal with chronic diseases.						
AXIS III: COMPREHENSIVE CARE						
OBJECTIVES	Strengthening the Unified Health System's response capacity, aiming at the expansion of a set of diversified interventions capable of providing an integral health approach to prevent and control NCD.					
Strategy 1: Defining the Line of Care for patients with NCD, providing proper therapeutic schedule, connecting the caregiver to the health team, guaranteeing continued and integral follow-up.	In charge	Indicators / 2011-2012 Goal	Indicators / 2013 Goal	Indicators / 2015 Goal	Indicators / 2017/2019 Goal	Indicators / 2022 Goal
	DAB/DAE/SAS/ DERAC, Inca	Connecting patients with chronic diseases to the Primary Care teams, continuing care within the Health Care System.	Connecting patients with chronic diseases to the Primary Care teams, continuing care within the Health Care System	Connecting patients with chronic diseases to the Primary Care teams, continuing care within the Health Care System	Connecting patients with chronic diseases to the Primary Care teams, continuing care within the Health Care System	Connecting patients with chronic diseases to the Primary Care teams, continuing care within the Health Care System

Actions
1 - Ensuring NCD patients are welcome and that they have expanded access and integrality of care.
2 - Updating and implementing clinical guidelines by the Ministry of Health, based on lines of care efficiency and cost-effectiveness concerning the main chronic diseases: hypertension, diabetes, cerebrovascular accident, cardiovascular diseases, cancer, chronic respiratory diseases and other NCD.
3 - Promoting and guaranteeing connection between NCD patients and Primary Care/Health Basic Unit, through their engagement and co-participation in the structuring of a therapeutic schedule.
4 - Implementing strategies to evaluate NCD global risk for users linked to Primary Care, aiming at the tracking and early detection of chronic diseases.
5 - Categorizing NCD patients according to risk, and outlining both customized and collective therapeutic schedules.
6 - Establishing actions on primary prevention to individuals at risk of developing NCD, aiming at the adoption of healthy lifestyle, implementing initiatives such as: Academia da Saude (Health Academy), healthy diet, operational groups, and others in order to support the development of healthy habits in life.

AXIS III: COMPREHENSIVE CARE						
Strategy 2: Strengthening and qualifying services system management, aiming at improving numbers and responses for NCD patients.	In charge	Indicators / 2011-2012 Goal	Indicators / 2013 Goal	Indicators / 2015 Goal	Indicators / 2017/2019 Goal	Indicators / 2022 Goal
	SAS	Home care implemented in the SUS	Home care implemented in the SUS	Home care implemented in the SUS	Home care implemented in the SUS	Home care implemented in the SUS
Actions						
1 - Building mechanisms to connect NCD patients to Primary Care/Health Basic Unit.						
2 - Qualifying Primary Care response						
3 - Defining reference and counter-reference flow between Primary Care and the network of specialties and hospital care, thus enabling continued care.						
4 - Intervening in the flow of the Network organization and in the health work process, guaranteeing that both acute and aggravated chronic conditions will be dealt with, as well as access and care to urgent cases.						
5 - Strengthening mechanisms to verify cost-effectiveness for the incorporation of new NCD technologies (Commission of Technologies Incorporation of the Ministry of Health).						
6 - Expanding offer of rather and high complex procedures for individuals with chronic diseases.						
7 - Implementing the National Policy of Home Care to serve people with chronic conditions, palliative care, and others.						
8 - Strengthening procedures for the monitoring of equipment, products, inputs, and medications, ensuring quality and safety of technologies.						
9 - Implementing the NCD clinical management system, reformulating the Hiperdia System with the purpose to support caregivers in the management of Primary Health Care.						
10 - Incentivizing health professionals to work with NCD.						

AXIS III: COMPREHENSIVE CARE						
Strategy 3: Strengthening the health productive complex which tackles with NCD.	In charge	Indicators / 2011-2012 Goal	Indicators / 2013 Goal	Indicators / 2015 Goal	Indicators / 2017/2019 Goal	Indicators / 2022 Goal
	DAF/SCTIE, SAS, Anvisa	Providing medications for NCD treatment	Providing medications for NCD treatment	Providing medications for NCD treatment	Providing medications for NCD treatment	Providing medications for NCD treatment

Actions
1 - Strengthening Pharmaceutical Care to ensure expanded access to medicines and strategic inputs provided for in the Clinical Protocols and Therapeutic Guidelines of the Ministry of Health aimed at providing care for NCD and tobacco use.
2 - Establishing strategies and mechanisms to increase adherence to NCD treatment and promoting the rational use of specific medicines.
3 - Expanding access to essential medicines to cope with NCD through the Farmacia Popular Program.
4 - Monitoring adverse reactions, inefficacy, and drug-drug interaction resulting from the use of medicines to cope with NCD.
5 - Strengthening the health productive complex to expand production of pharmaceutical inputs (medicines) to cope with NCD.
6 - Guaranteeing the supply of vaccinations to prevent hepatitis B, influenza among the elderly, pneumococcus, and other NCD co-morbidities.
7 - Establishing partnership with members of the Farmacia Popular program in order to provide access to medicines and to work as partners when referring patients to early diagnosis and self-care education (44 Resolution/Anvisa).

AXIS III: COMPREHENSIVE CARE						
Strategy 4: Strengthening prevention, diagnosis, and treatment systems for cervical and breast cancers.	In charge	Indicators / 2011-2012 Goal	Indicators / 2013 Goal	Indicators / 2015 Goal	Indicators / 2017/2019 Goal	Indicators / 2022 Goal
	Inca, SAS	Treating 100% of women diagnosed with precursor lesions of cancer	Treating 100% of women diagnosed with precursor lesions of cancer	Treating 100% of women diagnosed with precursor lesions of cancer	Treating 100% of women diagnosed with precursor lesions of cancer	Treating 100% of women diagnosed with precursor lesions of cancer
Actions						
1 - Enhancing detection of cervical cancer and avoiding the opportunistic model, giving preference to an organized model, ensuring diagnosis confirmation, treatment of precursor lesions, and referring confirmed cancer cases to the tertiary level.						
2 - Strengthening detection and early diagnosis of breast cancer, guaranteeing women with suspicious lesions the access to prompt diagnosis and clarification.						
3 - Expanding access of women at age 50 to 69 to mammogram exams.						
4 - Implementing the Cytopathology Quality Management Program.						
5 - Implementing the National Program on Mammogram Quality.						
6 - Training Primary and Secondary Care professionals to detect cervical cancer.						
7 - Training Primary and Secondary Care professionals to perform early detection of breast cancer.						
8 - Developing strategies to disseminate information and promote social mobilization related to the prevention and early detection of cervical and breast cancer.						

AXIS III: COMPREHENSIVE CARE						
Strategy 5: Expanding, strengthening, and qualifying oncologic care within the SUS.	In charge	Indicators / 2011-2012 Goal	Indicators / 2013 Goal	Indicators / 2015 Goal	Indicators / 2017/2019 Goal	Indicators / 2022 Goal
	Inca, SAS	Training primary care practitioners to provide palliative care	Training primary care practitioners to provide palliative care	Training primary care practitioners to provide palliative care	Training primary care practitioners to provide palliative care	Training primary care practitioners to provide palliative care
Actions						
1 - Ensuring access to diagnosis and oncologic care, strengthening and expanding the cancer treatment system within the SUS.						
2 - Strengthening, expanding, and qualifying radiotherapy treatment to reduce current deficit and social iniquities.						
3 - Using clinical guidelines to establish and qualify regional systems of oncologic care and reference services.						
4 - Training primary network practitioners on promotion, prevention, and early diagnosis of the most prevalent neoplasias, thus facilitating access to Training Centers.						
5 - Training primary network practitioners to provide support, palliative care, and assistance to oncologic pain, combining efforts with other treatment centers.						
6 - Disseminating actions on promotion, prevention and care, as well as epidemiological information on cancer within the community.						

AXIS III: COMPREHENSIVE CARE						
Strategy 6: Developing and implementing strategies aimed at practitioners and technical training with the purpose to qualify health teams concerning the NCD approach.	In charge	Indicators / 2011-2012 Goal	Indicators / 2013 Goal	Indicators / 2015 Goal	Indicators / 2017/2019 Goal	Indicators / 2022 Goal
	Inca, SAS	Implementing the Telessaude and "2a Opinião Formativa" (2nd Formative Opinion) aimed at Primary Care practitioners in 30% of municipalities	Implementing the Telessaude and "2a Opinião Formativa" (2nd Formative Opinion) aimed at Primary Care practitioners in 50% of municipalities	Implementing the Telessaude and "2a Opinião Formativa" (2nd Formative Opinion) aimed at Primary Care practitioners in 60% of municipalities	Implementing the Telessaude and "2a Opinião Formativa" (2nd Formative Opinion) aimed at Primary Care practitioners in 70% of municipalities	Implementing the Telessaude and "2a Opinião Formativa" (2nd Formative Opinion) aimed at Primary Care practitioners in 90% of municipalities
Actions						
1 - Strengthening teaching/learning strategies for multidisciplinary and cross-sector work, in order to expand actions on NCD health promotion within Primary Care.						
2 - Promoting permanent capacity-building of health practitioners within NCD clinical guidelines.						
3 - Training technicians and post-technicians to provide diagnostic support to NCD.						
4 - Using long-distance education technologies for permanent capacity-building and update of primary network practitioners, employing the Telessaude, 2a opinião Formativa, and Unassus.						
5 - Promoting bidding announcements for the PET Saude, focusing on actions on NCD surveillance, promotion, and Comprehensive Care.						
6 - Strengthening national curricular guidelines and cross-ministry policies of curricular change within undergraduate courses in the field of health (Pró-Saude) aiming at actions to cope with NCD.						

7 - Including a theoretical-methodological approach of popular health capacity-building in the training processes of Primary Care.
8 - Fostering NCD approach in post-graduation courses (sensu strictu and sensu lato) in health fields and associated areas.
9 - Incentivizing health professionals to work with NCD.
10 - Implementing permanent capacity-building procedures for SUS practitioners and workers, through CIES articulation, research institutions, and experts associations.

AXIS III: COMPREHENSIVE CARE						
Strategy 7: Strengthening the field of NCD health education.	In charge	Indicators / 2011-2012 Goal	Indicators / 2013 Goal	Indicators / 2015 Goal	Indicators / 2017/2019 Goal	Indicators / 2022 Goal
	SAS, SEGETS, SGP	Training caregivers to provide support for communities in 20% of municipalities	Training caregivers to provide support for communities in 40% of municipalities	Training caregivers to provide support for communities in 60% of municipalities	Training caregivers to provide support for communities in 80% of municipalities	Training caregivers to provide support for communities in 90% of municipalities
Actions						
1 - Implementing educational and communication strategies related to health aimed at strengthening autonomy and self-care for NCD patients.						
2 - Strengthening multidisciplinary and cross-sector strategies with the purpose to expand actions on NCD health promotion within the Primary Health Care.						
3 - Training caregivers to support communities.						
4 - Developing and providing educational supporting material to NCD patients, valuing the participation of users and the dialogue with community's experiences						
5 - Following and monitoring NCD educational actions through the interaction between health and other educational agents involved in care.						
6 - Implementing continued health education and communication strategies on NCD and associated risk factors within the scope of services and the community, in articulation with community associations, NGOs, and popular movements.						

AXIS III: COMPREHENSIVE CARE						
Strategy 8: Strengthening cardiovascular treatment within the urgency care system.	In charge	Indicators / 2011- 2012 Goal	Indicators / 2013 Goal	Indicators / 2015 Goal	Indicators / 2017/2019 Goal	Indicators / 2022 Goal
	DAE/SAS/INC	Building CVA and AMI care units	Building CVA and AMI care units	Building CVA and AMI care units	Building CVA and AMI care units	Building CVA and AMI care units
Actions						
1 - Implementing protocols for treatments and also for the acceleration of transferring and transportation procedures of acute coronary syndrome and cerebrovascular accident patients.						
2 - Utilizing Tele-medicine methods to early and accurate electrocardiographic diagnosis of Acute Myocardium Infarction (AMI) and CVA approach. Expansion of TeleECG within the Medical Urgency Care Service (Samu) at Emergency Care Units (UPAs), emergency rooms, and CVA units.						
3 - Qualifying care for myocardium acute infarction in pre-hospital urgent cases (Samu and UPAs) and promoting integration between pre-hospital diagnosis and hospital conduct.						
4 - Creating care units for cerebrovascular accident in well-known hospitals, aiming at providing qualified care (multi-professional care) and at training other practitioners from the Network in post-hospitalization care.						
5 - Creating financing mechanisms and expanding the number of beds at CVA and AMI units for hospitals registered to participate in the Network.						
6 - Expanding access to primary angioplasty.						
7 - Improving communication and articulation between the Medical Regulation Central, Coronary Units, and CVA Units, aiming at providing immediate care.						
8 - Ensuring supply of essential medicines for AMI and CVA treatment.						

9 - Ensuring access to qualified rehabilitation for CVA patients.
10 - Defining protocols and rules to perform thrombolysis in cases of cerebrovascular accident and acute myocardium infarction.
11 - Expanding the number of beds to the treatment of acute myocardium infarction.
12 - Qualifying professionals who provide pre-hospital, urgency, and emergency care so that they are able to identify and deliver CVA and AMI services.
13 - Implementing Telessaude within well know AMI and CVA care units and other Network units.
14 - Facilitating access to hospital beds for socially vulnerable people and for those with chronic conditions.
15 - Promoting secondary AMI and CVA prevention.
16 - Increasing effectiveness in the care of people who present complex clinical profiles at CVA and AMI care units.
17 - Training practitioners in early diagnosis, treatment, and post-hospitalization follow-up of CVA and AMI.
18 - Ensuring continued care and use of proper therapeutic resources to post- AMI and post-CVA periods.
19 - Disseminating knowledge on AMI and CVA early detection to the population.
20 - Creating AMI and CVA records, including pre-hospital care units.

8. References

ABE, I. M.; LOTUFO, P. A.; GOULART, A. C.; BENSEÑOR, I. M. Stroke prevalence in a poor neighbourhood of São Paulo, Brazil: applying a stroke symptom questionnaire. International Journal of Stroke, 2011, v. 6, n. 1, p. 33-9.

ABE, I. M.; GOULART, A. C.; Junior, W. R. S.; LOTUFO, P. A.; BENSEÑOR, I. M. Validation of Stroke symptom questionnaire for epidemiological surveys. São Paulo Medical Journal, 2010, v. 128, n. 4, p. 225-31.

ABEGUNDE, D. O.; MATHERS, C. D.; ADAM, T.; ORTEGON, M.; STRONG, K. The burden and costs of chronic diseases in low-income and middle-income countries. Lancet, 2007, n. 370, p. 1.929-38.

AHMAD, O. B.; BOSCHI-PINTO, C.; LOPEZ, A. D.; MURRAY, C. J. L.; LOZANO, R.; INOUE, M. Age standardization of rates: a new who standard – GPE. Discussion Paper Series, n. 31. Available at: <http://www.who.int/healthinfo/>.

ALWAN, A. et al. Monitoring and surveillance of chronic noncommunicable diseases: progress and capacity in high-burden countries. The Lancet 2010, n. 376, p. 1861-68.

ANDERSON, P.; CHISHOLM, D.; FUHR, D. Effectiveness and cost-effectiveness of policies and programmes to reduce the harm caused by alcohol. The Lancet, 2009, n. 373, p. 2234-46.

ASARIA, P. et al. Chronic disease prevention: health effects and financial costs of strategies to reduce salt intake and control tobacco use. The Lancet, 2007, n. 370, p. 2044-53.

ASHER, M. I.; MONTEFORT, S.; BJÖRKSTÉN, B.; LAI, C. K.; STRACHAN, D. P.; WEILAND, S. K.; WILLIAMS, H. ISAAC, Phase Three Study Group. Worldwide time trends in the prevalence of symptoms of asthma, allergic rhinoconjunctivitis, and eczema in childhood: ISAAC Phases One and Three repeat multicountry cross-sectional surveys. Lancet, 2006, v. 368, n. 9537, p. 733-43.

BARRETO, M. L.; CARMO, E. H. Determinantes das Condições de Saúde e Problemas Prioritários no País. Minutes of the XI National Health Conference. Brasília, December 16 to 19 2000.

BAZZANO, L. A.; SERDULA, M. K.; LIU, S. Dietary intake of fruits and vegetables and risk of cardiovascular disease. Current Atherosclerosis Reports, 2003, n. 5, p. 492-9.

BRASIL. Ministério da Saúde. VIGITEL Brasil 2006-2009. Available at: <http://portal.saude.gov.br/portal/saude/profissional/area.cfm?id_area=1521>.

BRASIL. Ministério da Saúde. Organização Pan-Americana da Saúde. A Vigilância, o Controle e a Prevenção das Doenças Crônicas Não Transmissíveis: DCNT no contexto do Sistema Único de Saúde Brasileiro. Brasília, 2005.

Brasil. Ministério da Saúde. Secretaria de Vigilância à Saúde. Secretaria de Atenção à Saúde. Diretrizes e recomendações para o cuidado integral de doenças crônicas não transmissíveis: promoção de saúde, vigilância, prevenção e assistência, 2008.

BRASIL. Ministério da Saúde. Secretaria de Vigilância em Saúde. Secretaria de Gestão Estratégica e Participativa. VIGITEL Brasil 2009: vigilância de fatores de risco e proteção para doenças crônicas por inquérito telefônico. Brasília: Ministério da Saúde, 2010.

BRASIL. Ministério da Saúde. Secretaria de Vigilância em Saúde. Secretaria de Gestão Estratégica e Participativa. VIGITEL Brasil 2010: vigilância de fatores de risco e proteção para doenças crônicas por inquérito telefônico. Brasília: Ministério da Saúde, 2011.

BROWN, I. J. et al. Salt intakes around the world: implications for public health. International Journal of Epidemiology, 2009, n. 38, p. 791-813.

BUSS, P. M.; PELLEGRINI FILHO, Alberto. Iniquidades em saúde no Brasil, nossa mais grave doença: comentários sobre o documento de referência e os trabalhos da Comissão Nacional sobre Determinantes Sociais da Saúde. Caderno de Saúde Pública, 2006, v. 22, n. 9, p. 2005-2008.

CECCHINI, M. et al. Tackling of unhealthy diets, physical inactivity, and obesity: health effects and cost effectiveness. The Lancet, 2010, n. 376, p. 1.775-84.

DOLL, R.; PAYNE, P.; WATERHOUSE, J. Cancer Incidence in Five Continents: A Technical Report. Berlin: Springer-Verlag (for UICC), 1966.

EZZATI, M. et al. Selected major risk factors and global and regional burden of disease. The Lancet, 2002, n. 360, p. 1.347-60.

GOULART, A. C.; Bastos, I. R.; ABE, I. M.; PEREIRA, A. C.; FEDELI, L. M.; BENSEÑOR, I. M.; LOTUFO, P. A. A stepwise approach to stroke surveillance in Brazil: the EMMA (Estudo de Mortalidade e Morbidade do Acidente Vascular Cerebral) Study. International Journal of Stroke, 2010, v. 5, n. 4, p. 284-9.

HU, F. B. et al. Dietary fat intake and the risk of coronary heart disease in women. New England Journal of Medicine, 1997, n. 337, p. 1.491-99.

IARC, 2002. Breast cancer screening. Lyon: International Agency for Research on Cancer, 2002 (IARC Handbooks of Cancer Prevention, v. 7).

IARC, 2005. Cervix Cancer Screening. Lyon: International Agency for Research on Cancer, 2005 (IARC Handbooks of Cancer Prevention, v. 10).

IARC, 2009. Evaluating the effectiveness of smoke-free policies. Lyon: International Agency for Research on Cancer, 2009 (IARC Handbooks of Cancer Prevention, v. 13).

INSTITUTO BRASILEIRO DE GEOGRAFIA E ESTATÍSTICA. Coordenação de população e indicadores sociais, projeções da população do Brasil por sexo e faixa etária. Revisão 2008. Rio de Janeiro: IBGE, 2010b.

INSTITUTO BRASILEIRO DE GEOGRAFIA E ESTATÍSTICA. Estudo Nacional da Despesa Familiar (Endef) 1974-1975.

INSTITUTO BRASILEIRO DE GEOGRAFIA E ESTATÍSTICA. Pesquisa de Orçamentos Familiares (POF) 2002-2003, primeiros resultados: Brasil e grandes regiões. 2003. Available at: <http://www.ibge.gov.br/home/estatistica/populacao/condicaodevida/pof/2002/pof2002.pdf>.

INSTITUTO BRASILEIRO DE GEOGRAFIA E ESTATÍSTICA. Pesquisa de Orçamentos Familiares (POF) 2008-2009. Antropometria e estado nutricional de crianças, adolescentes e adultos no Brasil. Rio de Janeiro: IBGE, 2010c.

INSTITUTO BRASILEIRO DE GEOGRAFIA E ESTATÍSTICA. Pesquisa Nacional por Amostra de Domicílios (PNAD) 2008. Pesquisa Especial de Tabagismo (PETab). Rio de Janeiro: IBGE, 2009.

INSTITUTO BRASILEIRO DE GEOGRAFIA E ESTATÍSTICA. Pesquisa Nacional de Saúde do Escolar (PeNSE) 2009. Rio de Janeiro: IBGE, 2009.

INSTITUTO BRASILEIRO DE GEOGRAFIA E ESTATÍSTICA. Pesquisa Nacional por Amostra de Domicílios – um panorama da Saúde no Brasil: acesso e utilização dos serviços, condições de saúde e fatores de risco e proteção à saúde (PNAD 2008). Rio de Janeiro: IBGE, 2010a.

INSTITUTO NACIONAL DE ALIMENTAÇÃO E NUTRIÇÃO. Pesquisa Nacional sobre Saúde e Nutrição (PNSN) 1989. Arquivo de dados da pesquisa. Brasília, 1990.

ISIS-1 (First International Study of Infarct Survival) Collaborative Group. Randomized trial of intravenous atenolol among 16,027 cases of suspected acute myocardial infarction: ISIS-1. The Lancet, 1986, n. 2, p. 57-66.

JAMISON, D. T. et al. Disease control priorities in developing countries. 2. ed. New York: Oxford University Press, 2006.

JARDIM, J. R.; OLIVEIRA, J. A.; NASCIMENTO, O. II Consenso Brasileiro de DPOC. Jornal Brasileiro de Pneumologia, 2004, n. 30, p. S1-S42.

LEVY, R. B., CLARO, R. M. , MONTEIRO, C. A. Sugar and total energy content of household food purchases in Brazil. Public Health Nutrition, 2009, n. 12, p. 2.084-91.

LI, R. et al. Cost-effectiveness of interventions to prevent and control diabetes mellitus: a systematic review. Diabetes Care, 2010, n. 33, p. 1.872-94.

LIM, S. S. et al. Prevention of cardiovascular disease in high-risk individuals in low-income and middle-income countries: health effects and costs. The Lancet, 2007, n. 370, p. 2.054-62.

LOTUFO, P. A.; BENSEÑOR, I. M. Stroke mortality in Brazil: one example of delayed epidemiological cardiovascular transition. International Journal of Stroke, 2009, v. 4, n. 1, p. 40-1.

LYNGBY. Economic nutrition policy tools–useful in the challenge to combat obesity and poor nutrition? Lyngby, Danish Academy of Technical Sciences, 2007.

MALTA, D. C.; MOURA, L.; SOUZA, M. F. et al. Lung cancer, cancer of the trachea, and bronchial cancer: mortality trends in Brazil, 1980-2003. J. Bras. Pneumol., 2007, n. 33, p. 536-43.

MALTA, D. C.; LEAL, M. C.; COSTA, M. F. L.; NETO, O. L. M. Inquéritos Nacionais de Saúde: experiência acumulada e proposta para o inquérito de saúde brasileiro. Revista Brasileira de Epidemiologia, 2008, n. 11 (Supl. 1), p. 159-67.

MALTA, D. C.; SARDINHA, L. M. V.; MENDES, I. et al. Prevalência de fatores de risco e proteção de doenças crônicas não transmissíveis em adolescentes: resultados da Pesquisa Nacional de Saúde do Escolar (PeNSE), Brasil. Ciência e Saúde Coletiva, 2010, n. 15 (Supl. 2), p. 3.009-19.

MALTA, D. C.; MERHY, E. E. O percurso da linha do cuidado sob a perspectiva das doenças crônicas não transmissíveis. Interface (Botucatu). v. 14, p. 593-605, 2010. Available at: <http://www.scielo.br/pdf/icse/2010nahead/aop0510.pdf>.

MALTA, D. C.; CEZÁRIO, A. C.; MOURA, L.; MORAIS NETO, O. L.; SILVA JÚNIR, J. B. Construção da vigilância e prevenção das doenças crônicas não transmissíveis no contexto do sistema único de saúde. Epidemiologia e Serviços de Saúde, 2006, n. 15, p. 47-64.

MATHERS, C. D; LONCAR, D. Projections of global mortality and burden of disease from 2002 to 2030. PLoS Medicine, 2006, n. 3, p. e442.

MCCALLY, M; HAINES, A.; FEIN, O.; ADDINGTON, W.; LAWRENCE, R. S.; Cassel, C. K. Poverty and ill health: physicians can, and should, make a difference. Ann. Intern. Med., 1998, n. 129, p. 726-33.

MEYER, K. A. et al. Dietary fat and incidence of type 2 diabetes in older Iowa women. Diabetes Care, 2001, n. 24, p. 1.528-35.

Ministério da Saúde. Administrative Rule 4.217, of December 28, 2010. Approves the rules for financing and delivering the Basic Component of Pharmaceutical Care. Official Gazette, Executive Power, Brasília, DF, Dec. 29 2010. Section 1.

MONTEIRO, C. A; CONDE, W. L.; Popkin, B. M. Income-Specific Trends in Obesity in Brazil: 1975 2003. American Journal of Public Health 2007, n. 97, p. 1.808-12.

MONTEIRO, C. A; D'Aquino, B. M. H.; LUN ES, R.; GOUVEIA, N. C; TADDEI, J. A. A. C.; CARDOSO, M. A. A. Endef and PNSN: Trends in Physical Growth of Brazilian Children. Cadernos de Saúde Pública, 1993, n. 9 (Supl. 1), p. 85-95.

MONTEIRO, C. A; MOURA, E; CONDE. W. L.; POPKIN, B. M. Socioeconomic status and obesity in adult populations of developing countries: a review. WHO Bull, 2004, n. 82, p. 940-6.

MURRAY, C. et al. Effectiveness and costs of interventions to lower systolic blood pressure and cholesterol: a global and regional analysis on reduction of cardiovascular-disease risk. The Lancet, 2003, n. 361, p. 717-25.

Policy and action for cancer prevention. Food, Nutrition, and Physical Activity: a Global Perspective. Washington, DC, World Cancer Research Fund/American Institute for Cancer Research, 2009.

RIBOLI, E.; NORAT, T. Epidemiologic evidence of the protective effect of fruit and vegetables on cancer risk. American Journal of Clinical Nutrition, 2003, n. 78 (Supl.), p. 559S-569S.

SANKARANARAYANAN, R. et al. Cancer survival in Africa, Asia, and Central America: a population-based study. The Lancet Oncology, 2010, v. 11, n. 2, p. 165-73.

SCHMIDT, M. I.; DUNCAN, B. B.; SILVA, G. A.; MENEZES, A. M.; MONTEIRO, C. A.; BARRETO, S. M.; CHOR, D.; MENEZES, P. R. Health in Brazil 4. Chronic non-communicable diseases in Brazil: burden and current challenges. The Lancet, 2011, n. 377.

SCHRAMM, J. M.; OLIVEIRA, A. F.; LEITE, I. C. Transição epidemiológica e o estudo de carga de doenças no Brasil. Ciência Saúde Coletiva, 2004, n. 9, p. 897-908.

SEMBAJWE, G.; CIFUENTES, M.; TAK, S. W. et al. National income, selfreported wheezing and asthma diagnosis from the World Health Survey. European Respiratory Journal, 2010, n. 35, p. 279-286.

SIMÕES, E. J.; HALLAL, P.; PRATT, M. et al. Effects of a community-based, professionally supervised intervention on physical activity levels among residents of Recife, Brazil. American Journal of Public Health, 2009, v. 99, n. 1, p. 68.

STJERNSWÄRD, J.; FOLEY, K. M; FERRIS, F. D. The public health strategy for palliative care. Journal of Pain and Symptom Management, 2007, n. 33, p. 486-93.

STUCKLER, D. Population causes and consequences of leading chronic diseases: a comparative analysis of prevailing explanations. Milbank Quarterly, 2008, n. 86, p. 273-326.

TOBACCO ADDICTION. In: JAMISON, D. T. et al. Disease control priorities in developing countries. 2. ed. Washington: The World Bank, 2006.

WHITWORTH, J. A. World Health Organization/International Society of Hypertension statement on management of hypertension. Journal of Hypertension, 2003, n. 21, p. 1983-1992.

WILLETT, W. C. et al. Prevention of chronic disease by means of diet and lifestyle changes. In: JAMISON, D. T. et al. Disease control priorities in developing countries. Washington: The World Bank, 2006.

WHO 2000. Global strategy for the prevention and control of non-communicable diseases. Geneva: World Health Organization, 2000.

WHO 2002a. The World health report 2002: Reducing risks, promoting healthy life. Geneva: World Health Organization, 2002.

WHO 2002b. National cancer control programmes, policies and managerial guidelines, 2nd ed. Geneva: World Health Organization, 2000.

WHO 2003. Global strategy for infant and young child feeding. Geneva: World Health Organization, 2003.

WHO/Fiocruz. Pesquisa Mundial de Saúde 2003. O Brasil em números. RADIS Comunicação em Saúde. 2004.

WHO 2004. Nutrition labels and health claims: the global regulatory environment. Geneva: World Health Organization, 2004.

WHO 2005. Preventing chronic diseases: a vital investment. Geneva: World Health Organization, 2005.

WHO 2007. Protection from exposure to second-hand tobacco smoke: policy recommendations. Geneva: World Health Organization, 2007.

WHO 2007b. Cancer control: knowledge into action: WHO guide for effective programmes module 2. Geneva: World Health Organization, 2007b.

WHO 2008. Closing the gap in generation health equality through action on the social determinants of health. Commission on Social Determinants of Health Final Report. Geneva: World Health Organization, 2008.

WHO 2009a. Global health risks: mortality and burden of disease attributable to selected major risks. Geneva: World Health Organization, 2009.

WHO 2009b. The global burden of disease: 2004 update. Geneva: World Health Organization, 2009.

WHO 2009c. Interventions on diet and physical activity: what works? Summary report. Geneva: World Health Organization, 2009.

WHO 2010a. Global estimate of the burden of disease from second-hand smoke. Geneva: World Health Organization, 2010.

WHO 2010b. Global recommendations on physical activity for health. Geneva: World Health Organization, 2010.

WHO 2010c. Creating an enabling environment for population-based salt reduction strategies: report of a joint technical meeting held by WHO and the Food Standards Agency, United Kingdom. Geneva: World Health Organization, 2010.

WHO 2010d. The World Health Report 2010 - Health Systems financing: the path to universal coverage. Geneva: World Health Organization, 2010.

WHO 2010e. Global strategy to reduce the harmful use of alcohol. Geneva: World Health Organization, 2010.

WHO 2010f. Marketing of food and non-alcoholic beverages to children. Resolution WHA63.14 of the Sixty-third World Health Assembly. Geneva: World Health Organization, 2010.

WHO 2010g. Package of essential noncommunicable disease interventions for primary health care in low-resource settings. Geneva: World Health Organization, 2010.

WHO 2011. Global status report on noncommunicable diseases 2010. Geneva: World Health Organization, 2011.

WHO 2011b/TFI Smoking cessation. Geneva: World Health Organization, 2011.

WHO 2011b/TFI Smoking cessation. Geneva: World Health Organization, 2011.

Working towards wellness. The business rationale. Geneva: World Economic Forum, 2008.

YUSUF, S. Two decades of progress in preventing vascular disease. The Lancet, 2002, n. 360, p. 2-3.

WATERLOO, C. A. International Tobacco Control Policy Evaluation Project, 2010.

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ATTACHMENT

BRAZILIAN DECLARATION ON PREVENTION AND CONTROL OF NONCOMMUNICABLE DISEASES

We, the undersigned representatives of the Government and the organized civil society, ratify the Plan to Tackle Noncommunicable Diseases in Brazil,

Considering:

I. Cardiovascular diseases, cancer, diabetes, and chronic respiratory diseases, the main Noncommunicable Diseases (NCD) in Brazil, are accountable for a high number of premature deaths, loss of quality of life, high levels of limitation for people during their work and leisure activities, constituting the cause of negative economic impacts to the families, communities, and society at large, thus resulting in the aggravation of social iniquities and poverty;

II . The NCD constitute the country's greatest health concern, accounting for nearly 70% of the causes of death in Brazil, especially cardiovascular diseases (30%) and cancer (15.6%), impacting mainly low schooling and low income population, not to mention the vulnerable groups, such as the elderly;

III. Overweight and obesity resulting from the lack of healthy diets and from physical inactivity, smoking, and alcohol abuse are the most preventable risk factors when it comes to NCD. Managing these factors has significant impact on the reduction of premature deaths and disabilities caused by cancer, chronic respiratory diseases, cardiovascular diseases, and diabetes;

IV. Increasing care costs to people with NCD threatens the sustainability of public health systems and the economies of the countries;

V. There are significant differences, regional ones and also in gender, between ethnical-racial groups, life cycles, and socio-economic layers concerning NCD prevalence and access to its prevention and control in Brazil which clearly bring losses to people in condition of higher social vulnerability, creating a serious issue of health-related inequality in need of a solution;

VI. Public health interests should prevail over any other interests in the adoption of measures to reduce morbidity and mortality caused by NCD,

Decide to:

1. Strengthen the development and implementation of public policies for the prevention and control of NCD addressing the population at large and specific population groups, giving priority to the commitments established in the Framework Convention on Tobacco Control (2003), Global Strategy to Food, Physical Activity and Health (2004), Guidelines and Recommendations for the Comprehensive Care of Noncommunicable Diseases (2006), and the Regional Strategy for Chronic Diseases of the Pan-American Health Organization (2007), with the purpose to minimize the consequences to the economic and social development of the country which arise from the high prevalence of these diseases.

2. Foster and strengthen the incorporation of such public policies to the government's sector-based agendas, at national, state, and municipal levels, as well as to the supplementary health plans agenda, guaranteeing integrated actions, access to the necessary resources, and broadened community participation as strategies to promote overall health and reduction in poverty - which is expected to be aggravated in families living with NCD.

3. Foster cross-sector initiatives, at public and private levels, in order to unfold articulated educational and regulatory interventions and measures, promoting healthy eating habits and regular practice of physical activity, while discouraging tobacco consumption and alcohol abuse and encouraging the adoption of a healthy behavior, lifestyle, and environment.

4. Strengthen integrated surveillance of the main modifiable protective and risk factors shared by most of the NCD (smoking, unhealthy diets, physical inactivity, and alcohol abuse) through the improvement of monitoring tools that enable following-up on prevalence and assessing the impacts of the adopted policies.

5. Work together toward reducing morbidity, disability, and mortality caused by NCD, through a set of preventive measures aimed at health promotion, associated with early diagnosis and timely treatment, and toward re-ordering health services of the Brazilian Health System (SUS), based on primary care and community participation.

6. Unfold and strengthen national, regional, and local synergic measures in order to facilitate the implementation of sustainable strategies on NCD prevention and control, rationalizing costs and establishing follow-up and assessment procedures.

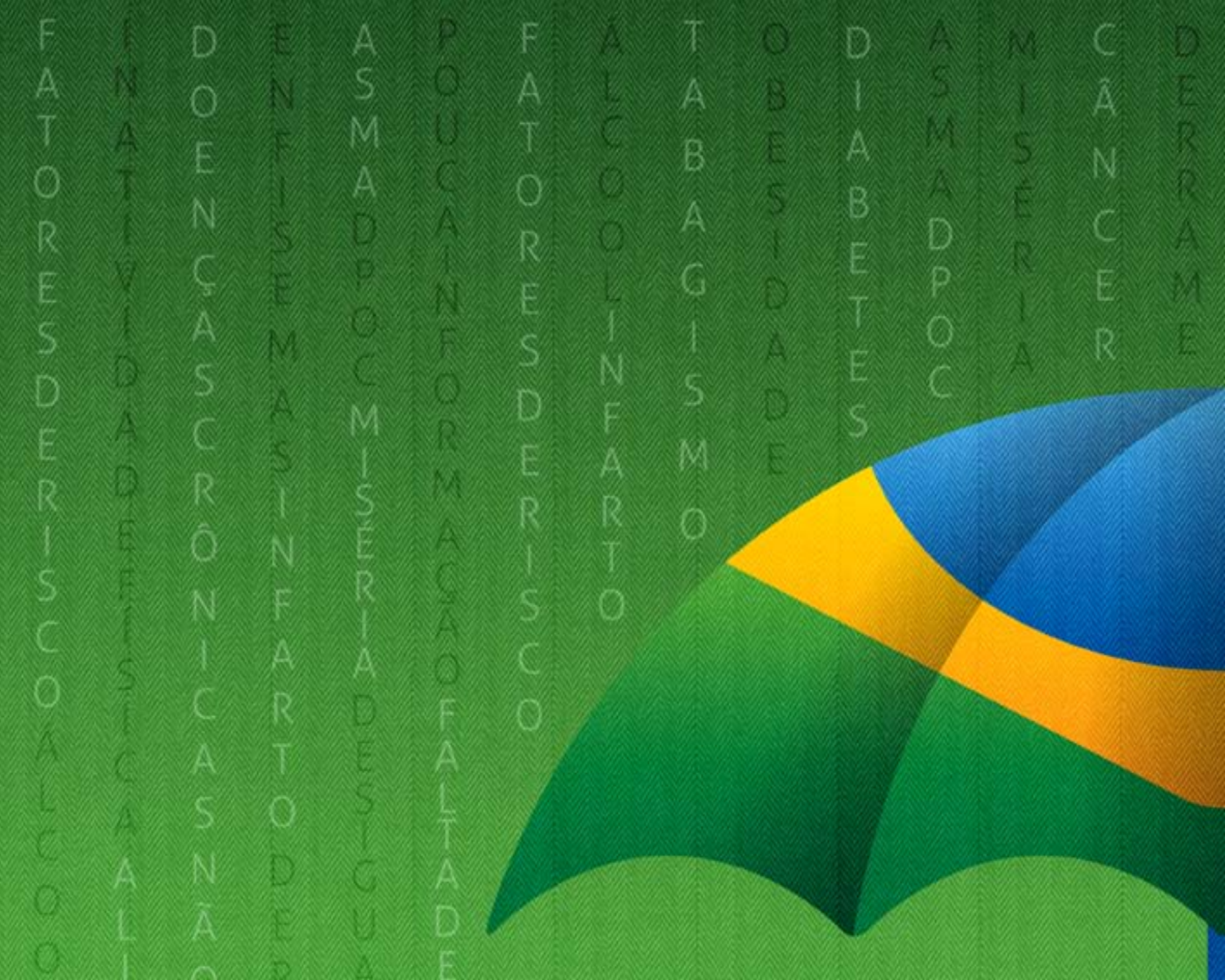
7. Conduct technological evaluation with the purpose to incorporate equipment, products, and processes within the SUS and supplementary health plans, guaranteeing higher cost-effectiveness to interventions.

8. Implement articulated public policies to guarantee reduction in costs and extended access to therapies aimed at preventing and controlling NCD.

9. Work on social determinants which influence NCD risk factors, through governmental policies that create appropriate physical and social environments to reduce risks, enabling the adoption of a healthy behavior by the Brazilian population, be it in school, at work, or during leisure time, within urban spaces or others.

10. Provide the society at large, communication means, non-governmental organizations, class entities, associations of health services users, patients, and others with information that promotes co-responsible action in improving and maintaining citizens' health and quality of life.

11. Implement the Strategic Action Plan to Tackle NCD in Brazil, which contains measures to be incorporated into the Government's sector-oriented agendas, with the purpose to promote the development and implementation of effective, integrated, and sustainable public policies, based on scientific evidence of prevention and control of the main NCD and shared risk factors, and to contribute to the strengthening of the Brazilian Health System.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