PROFILE OF CAPACITY AND RESPONSE TO NONCOMMUNICABLE DISEASES AND THEIR RISK FACTORS IN THE REGION OF THE AMERICAS

COUNTRY CAPACITY SURVEY RESULTS, 2017
# Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>PREFACE</td>
<td>VIII</td>
</tr>
<tr>
<td>ABBREVIATIONS AND ACRONYMS</td>
<td>X</td>
</tr>
<tr>
<td>EXECUTIVE</td>
<td>XVI</td>
</tr>
<tr>
<td>SUMMARY</td>
<td>XVI</td>
</tr>
<tr>
<td>INTRODUCTION</td>
<td>1</td>
</tr>
<tr>
<td>METHODOLOGY</td>
<td>5</td>
</tr>
<tr>
<td>Questionnaire</td>
<td>6</td>
</tr>
<tr>
<td>Data collection and validation</td>
<td>7</td>
</tr>
<tr>
<td>Response rate</td>
<td>7</td>
</tr>
<tr>
<td>Analysis</td>
<td>9</td>
</tr>
<tr>
<td>Limitations</td>
<td>9</td>
</tr>
<tr>
<td>RESULTS</td>
<td>10</td>
</tr>
</tbody>
</table>
### MODULE I: PUBLIC HEALTH INFRASTRUCTURE, PARTNERSHIPS, AND MULTISECTORAL COLLABORATION FOR NCDs AND THEIR RISK FACTORS

- **Highlights**
  - Unit, branch, or department with responsibility for NCDs and their risk factors
  - NCD funding budgets and sources
  - Fiscal interventions
  - Multisectoral commissions

### MODULE II: STATUS OF NCD-RELEVANT POLICIES, STRATEGIES, AND ACTION PLANS

- **Highlights**
  - Inclusion of NCDs in the national agenda
  - Targets and indicators based on the Global Monitoring Framework (GMF)
  - Integrated policies, strategies, or action plans for NCDs and their risk factors
  - Specific policies, strategies, or action plans to address the main NCDs and their risk factors
  - Healthy diet policies and programs

### MODULE III: HEALTH INFORMATION SYSTEMS, MONITORING, SURVEILLANCE, AND SURVEYS FOR NCDs AND THEIR RISK FACTORS

- **Highlight**
  - Infrastructure, mortality information systems, and NCD registries
  - NCD population surveys
  - Surveys on adolescents
  - Surveys on adults

### MODULE IV: CAPACITY FOR NCD EARLY DETECTION, TREATMENT, AND CARE WITHIN THE HEALTH SYSTEM

- **Highlights**
  - Evidence-based national guidelines/protocols/standards for the management of NCDs
  - Availability of basic technologies for early detection, diagnosis/monitoring of NCDs in primary care facilities
  - Early detection and HPV vaccination
  - Availability of essential medicines
  - Basic procedures for treating NCDs in the public health system
  - Cancer diagnosis and treatment services in the public sector
  - Cardiovascular risk stratification for high-risk CVD patients
FIGURES

**Figure 1:** Distribution of countries according to the number of full-time technical/professional staff in their NCD units, Region of the Americas, 2017

**Figure 2:** Percentage of budget allocated by governments for activities to address NCDs and risk factors, Region of the Americas, 2017

**Figure 3:** Sources of funding for NCDs/risk factors, Region of the Americas, 2017

**Figure 4:** Percentage of respondents that reported having any fiscal intervention for the major risk factors, Region of the Americas, 2017

**Figure 5:** Status of the 28 multisectoral commissions, agencies, or mechanisms to oversee NCD engagement, policy coherence, and accountability of sector beyond health, Region of the Americas, 2017

**Figure 6:** Structure of the NCD multisectoral commissions, Region of the Americas, 2017

**Figure 7:** Inclusion of NCDs in the outcomes or outputs in national health plans and national development agenda, Region of the Americas, 2017

**Figure 8:** Distribution of the nine voluntary targets related to the WHO Global Monitoring Framework for the Region of the Americas, 2017

**Figure 9:** Distribution of integrated policies, strategies, or action plans for NCDs and their risk factors, Region of the Americas, 2017

**Figure 10:** Percentage of countries/territories with specific plans for the main NCDs and their risk factors, according to their implementation status, Region of the Americas, 2017

**Figure 11:** Percentage of countries/territories that reported having surveys of risk factors among adolescents, by category*, Region of the Americas, 2017

**Figure 12:** Percentage of countries/territories that reported having surveys of risk factors among adults, by category*, Region of the Americas, 2017

**Figure 13:** Percentage of countries that reported having surveys of risk factors that needed measurement (physical or biochemical), among adults by category*, Region of the Americas, 2017

**Figure 14:** Distribution of evidence-based national guidelines/protocols/standards for the management of NCDs, Region of the Americas, 2017

**Figure 15:** Availability of basic technologies to address NCDs in public and private health care facilities, Region of the Americas, 2017

**Figure 16:** Distribution of NCD screening programs among responding countries/territories of the Region of the Americas, 2017

**Figure 18:** Distribution of basic procedures for the treatment of NCDs in the public health system, Region of the Americas, 2017

**Figure 19:** Availability of cancer diagnosis and treatment services in the public sector, Region of the Americas, 2017

**Figure 20:** Proportion of primary health care facilities offering cardiovascular risk stratification, Region of the Americas, 2017
TABLES

Table 1: NCD selected risk factors: worldwide and the Region of the Americas 2

Table 2: NCDs selected risk factors, continued: worldwide and the Region of the Americas: 3

Table 3: List of countries that completed and validated the 2017 Country Capacity Survey, by PAHO subregion. 8

Table 5: Distribution and characteristics of cancer and diabetes registries, Region of the Americas, 2017 22

Table 6: Percentage of surveys of the NCD risk factors reported by the countries and territories, independently of the year of implementation, Region of the Americas, 2017 23

Table 7: Categories for classification of adult and youth population surveys 24
Noncommunicable diseases (NCDs) are the leading cause of death in the Americas, accounting for 81% of all deaths in the Region in 2016. Of the estimated 5.5 million NCD-related annual deaths, 39% of these are premature deaths (occurring between the ages of 30–70) and are largely a result of the four main NCDs: cardiovascular diseases, diabetes, cancers, and chronic respiratory diseases. NCDs and related premature deaths can be significantly reduced through government policies that prevent, treat, and control these diseases (1).

In September 2018, the United Nations held its Third High-Level Meeting on NCDs with heads of State and government to reinforce political commitments from 2011 and 2014, assess progress toward achieving the targets and indicators of the WHO Global Action Plan for the Prevention and Control of Noncommunicable Disease 2013–2020, and accelerate the global response to NCDs for the health and well-being of present and future generations. It was acknowledged that progress achieved to date is gravely insufficient to address the burden of NCDs and their risk factors. Immediate action is required to develop national multisectoral responses, strengthen political commitments, scale-up implementation of commitments from 2011 and 2014, and carry out cost-effective, affordable, and evidence-based interventions. At the same time, countries increase investments in universal health coverage, strengthen health systems, and facilitate access to treatment and care services (2).
To monitor countries’ capacities to address NCDs, including progress and trends over time, various tools are implemented, including the World Health Organization Country Capacity Survey (WHO-CCS). The survey captures information related to NCD infrastructure, policies, surveillance, and health systems. Conducted in 2001, 2005, 2010, 2013, and in 2017, this 6th edition of the CCS incorporates new validation processes to verify country responses through the submission of official policy documents and a data comparison to global health databases. These protocols were introduced to enhance data quality and provide an accurate reflection of country capacity to combat NCDs.

This report presents results of the 2017 CCS and offers an updated review of progress in the Region of the Americas including gaps and recommendations for improvement to strengthen countries’ capacities to address NCDs and their risk factors. While advancements have been made, without an acceleration of commitments and significant investments, it is anticipated that some countries in the Americas will not meet their global targets.

Nevertheless, it is important to recognize that for the first time in the Americas, 100% of the Member States (35 countries) and 76% of the Associate Members and Participating States (13 of 17 countries) completed the survey (see Table 3). As such, the 2017 CCS provides a comprehensive assessment of the entire Region and demonstrates the political commitment of the Americas to reduce the burden of NCDs. Sincere thanks and appreciation are extended to all focal points, in the national NCD programs and in PAHO country offices, for the support and effort dedicated to the collection, completion, and submission of the 2017 CCS.
### Abbreviations and Acronyms

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>ACE</td>
<td>Angiotensin-Converting Enzyme</td>
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<tr>
<td>CCS</td>
<td>Country Capacity Survey</td>
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<td>CRD</td>
<td>Chronic Respiratory Disease</td>
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<td>CVD</td>
<td>Cardiovascular Disease</td>
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<td>DM</td>
<td>Diabetes Mellitus</td>
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<tr>
<td>GISAH</td>
<td>Global Information System on Alcohol and Health</td>
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<tr>
<td>GSHS</td>
<td>Global School-based Student Health Survey</td>
</tr>
<tr>
<td>GTCR</td>
<td>World Health Organization Global Tobacco Control Report</td>
</tr>
<tr>
<td>GYTS</td>
<td>Global Youth Tobacco Survey</td>
</tr>
<tr>
<td>HbA1c</td>
<td>Glycated Hemoglobin</td>
</tr>
<tr>
<td>HBSC</td>
<td>Health Behavior in School-aged Children (survey)</td>
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<tr>
<td>HPV</td>
<td>Human Papillomavirus</td>
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<tr>
<td>MoH</td>
<td>Ministry(ies) of Health</td>
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<td>NCD</td>
<td>Noncommunicable Disease</td>
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<tr>
<td>PAHO</td>
<td>Pan American Health Organization</td>
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<tr>
<td>RF</td>
<td>Risk Factor</td>
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<tr>
<td>STEPS</td>
<td>Stepwise Approach to Surveillance</td>
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<tr>
<td>VIA</td>
<td>Visual Inspection With Acetic Acid</td>
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<tr>
<td>WHO</td>
<td>World Health Organization</td>
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<tr>
<td>WHO FCTC</td>
<td>World Health Organization Framework Convention on Tobacco Control</td>
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Because of the large number of people they affect, noncommunicable diseases (NCDs) represent a significant challenge both for the health of the population and the sustainability of health services. Furthermore, NCDs have an enormous economic impact due to their associated high health care costs, out-of-pocket expenses, and loss of productivity.

To address NCDs, countries throughout the world, including those in the Region of the Americas, have committed significant resources for the development of policies, programs, and strategies geared to address the four main NCDs—cardiovascular diseases, diabetes, cancer, and chronic respiratory diseases—as well as their risk factors: tobacco use, harmful use of alcohol, insufficient physical activity, and unhealthy diet.

To measure progress against these global commitments, the World Health Organization (WHO) established a set of 10 progress indicators that assess strategies, policies, plans, infrastructure, and health services for NCD prevention and control. A key tool used to measure 7 of the 10 progress indicators is the WHO Country Capacity Survey (CCS). This survey has been implemented six times since 2000, and the results of the 2017 survey are presented here. The CCS uses a standardized questionnaire, hosted on a web platform developed by the WHO and implemented through its Regional Offices, to gather information with representatives from the Ministries of Health providing responses to the questionnaire.
For the first time in CCS history, all 35 PAHO Member States responded to the survey. In addition, 13 of the 17 Associate Members and Participating States of the Region also responded, for a total of 48 countries/territories responding to the survey.

A summary of the CCS results, according to each module of the survey, is presented below. Results are also presented in the Country Capacity Survey Results Tool, an interactive website to see the results by region, subregion and at country level, available at the PAHO website (http://ais.paho.org/phip/viz/nmh_ccs_resultstool.asp).

**MODULE I: PUBLIC HEALTH INFRASTRUCTURE, PARTNERSHIPS, AND MULTISECTORAL COLLABORATION FOR NONCOMMUNICABLE DISEASES AND THEIR RISK FACTORS**

▶ Thirty-eight of 48 countries and territories (79.2%) have a unit, division, or department dedicated to NCDs and their risk factors (RFs) in the Ministry of Health. Of these, half (19/38, 50%) have 2 to 5 full-time technical or professional employees.

▶ Between 41 and 47 respondents (85% to 96%) reported having funding allocated in national budgets directed to tracking monitoring NCDs and their RFs: primary prevention; health promotion; early detection/screening; health care and treatment; and surveillance, monitoring, and evaluation. The activities with less budget allocated are capacity-building (33/48 countries and territories, 69%); palliative care (28/48, 58%); and research on NCDs (22/48, 46%).

▶ Thirty-nine out of 48 countries and territories (81%) reported that general government revenues were their largest regular funding for NCDs/RFs. The next largest sources of regular funding for NCDs were health insurance (15/48, 31%), followed by national and international donors (7/48, 15%).

▶ More than half of the respondents (28/48, 58%) reported having a multisectoral national commission, agency, or mechanism to monitor participation, policy coherence, and accountability for NCDs. Of these 28, 17 commissions are operational (17/48, 35%).

**MODULE II: STATUS OF NONCOMMUNICABLE DISEASES—RELEVANT POLICIES, STRATEGIES, AND ACTION PLANS**

▶ NCDs and their RFs are mentioned and considered in 83% of the National Health Plans (40/48), and in 69% of the countries and territories (33/48) they are included in their current National Development Agenda.

▶ Sixty percent of respondents (29/48) reported having national targets and indicators based on the nine global targets of the WHO Global Monitoring Framework for NCDs.

▶ Sixty percent of respondents (29/48) have a multisectoral, operational, and integrated policy, strategy, or action plan to evaluate the four main NCDs and their RFs.
Some countries and territories have operational strategies, policies, or action plans for NCDs individually and independently of the existence, or lack of, a comprehensive strategy:

a. Two respondents (4%) for cardiovascular diseases; 16 (33%) for cancer; 5 (10%) for diabetes; 8 (17%) for chronic respiratory diseases; and 18 (38%) for oral health.

The existence of operational strategies, policies, or action plans for the main risk factors was also reported in:

a. Twenty three percent of countries and territories (11/48) for alcohol consumption; 29% (14/48) against overweight and obesity; 31% (15/48) against insufficient physical activity; and 52% (25/48) against tobacco use;

b. Thirty-three percent of countries and territories (16/48) against unhealthy food; 29% (14/48) to reduce salt/sodium intake; 23% (11/48) to limit saturated fatty acids and eliminate trans-fats in the food supply; and 25% (12/48) to reduce the impact of marketing unhealthy diets on children.

MODULE III: HEALTH INFORMATION SYSTEMS, MONITORING, SURVEILLANCE, AND SURVEYS FOR NCDs AND THEIR RISK FACTORS

Nine of 48 respondents (19%) have an independent office for the surveillance of NCDs and their RFs within their ministries of health. In 13 countries and territories (27%), surveillance is shared among several departments or areas within the ministry of health. Only for one respondent does surveillance take place through external agencies.

Forty-seven of 48 respondents (98%) have a mortality registry that can collect data disaggregated by age and sex.

Seventy-one percent of respondents (34/48) have a cancer registry, of which 50% (17/34) are population-based records, and 44% (15/34) are hospital records.

Fourteen of 48 respondents (29%) keep a record of diabetes mellitus; of these, 79% (11/14) say this register is representative at the national level.

As for surveys of recent RFs (at least in the last 5 years) that are representative (national) and periodic (that is, a period of 3–5 years between one survey and the other) in adolescents, more surveys were conducted for tobacco use (31%), harmful use of alcohol (29%), and insufficient physical activity and low consumption of fruits and vegetables (15%).

Regarding overweight and obesity in adolescents, only 13% of the surveys were recent, representative, periodic, and with measurements (that is, it was not a “self-report” survey about the weight and height of adolescents).

In the case of surveys of RFs in adults, the most recent, representative, and periodic surveys were carried out to monitor harmful use of alcohol (27%), tobacco use (25%), insufficient physical activity (21%), and low consumption...
of fruits and vegetables (19%). For overweight and obesity in adults, only 19% of the surveys were recent, representative, periodic, and with measurements.

▸ Few surveys in adults performed biochemical measurements in addition to being recent, representative, and national; such is the case for high blood pressure (13%), total cholesterol and high blood glucose (both 10%).

MODULE IV: CAPACITY FOR NCD EARLY DETECTION, TREATMENT, AND CARE WITHIN THE HEALTH SYSTEM

▸ Seventy-five percent (36/48) of countries and territories have evidence-based guides, protocols, or standards for the management of the four main NCDs.

▸ Guidelines for the management of diabetes mellitus (DM) are the most frequently available (36/48, 75%), followed by guidelines for cardiovascular diseases (29/48, 60%), cancer (27/28, 56%), and chronic respiratory diseases (24/28, 50%).

▸ According to the data provided, the basic technologies available in primary care in the public sector are those of blood pressure (96%), as well as the technologies to measure weight (94%), height (90%), and blood glucose (90%). In the private sector, the most commonly available basic technologies were the same as in the public sector: weight measurement (96%), blood pressure measurement (94%), and blood glucose measurement (92%).

▸ Sixty-five percent (31/48) of respondents have a national program for the early detection of breast cancer; of these 31, 61% (19/31) perform mammograms.

▸ Regarding the detection of cervical cancer, 31 of the 48 respondents (65%) reported having a national screening program for this type of cancer, of which 84% (26/31) perform screening through the Papanicolaou test and 6% (2/31) test for the human papillomavirus (HPV).

▸ Only a quarter of those responding (12/48, 25%) have a national colon cancer screening program and 75% of these (9/12) do so through fecal testing.

▸ Sixty-seven percent (32/48) of respondents reported having a national HPV vaccination program.

▸ In 85% (41/48) of the responding countries and territories, six of the eight essential drugs for the prevention and treatment of cardiovascular diseases (CVDs), including DM, are generally available in primary care centers.
N oncommunicable diseases (NCDs) cause significant impacts on the health of the population, the sustainability of health systems, and national economies. NCDs lead to increased inequality, disproportionately affecting society's most vulnerable groups, and thus undermining social and economic development. In 2011, the Heads of State assembled at the United Nations Assembly to recognize the importance of the Government's responsibility to address NCDs and the urgent need for greater measures at global, regional, and national levels to prevent and control NCDs (3).

About 8 in every 10 deaths are due to NCDs, leading to 5.5 million deaths annually in the Americas. Additionally, 39% of all NCDs are premature deaths, occurring in people between 30–70 years of age (7).

Of all World Health Organization (WHO) regions, the Region of the Americas has the highest prevalence of overweight and obesity in adults among both men and women. In 5 out of 8 subregions of the Americas, women have the highest prevalence of overweight and obesity. Insufficient physical activity is also more prevalent in women than men in all subregions; Latin America and the Caribbean have the highest levels of inactivity among women worldwide (Tables 1 and 2).
### Table 1. NCD selected risk factors: worldwide and the Region of the Americas

<table>
<thead>
<tr>
<th>Region</th>
<th>Overweight and obesity in adults (%)</th>
<th>Insufficient physical activity in adults (%)</th>
<th>Prevalence of current tobacco use in adolescents (%)</th>
<th>Prevalence of current tobacco smoking in adults (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>MALE</td>
<td>FEMALE</td>
<td>MALE</td>
<td>FEMALE</td>
</tr>
<tr>
<td>Worlda</td>
<td>38.5</td>
<td>39.2</td>
<td>23.4*</td>
<td>31.7*</td>
</tr>
<tr>
<td>Region of the Americasb</td>
<td>63.7</td>
<td>61.0</td>
<td>33.0</td>
<td>44.6</td>
</tr>
<tr>
<td>North America</td>
<td>72.4</td>
<td>62.7</td>
<td>31.1</td>
<td>46.3</td>
</tr>
<tr>
<td>Mexico</td>
<td>63.6</td>
<td>66.0</td>
<td>25.5</td>
<td>32.2</td>
</tr>
<tr>
<td>Central American Isthmus</td>
<td>53.9</td>
<td>60.8</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Latin Caribbean</td>
<td>54.2</td>
<td>62.0</td>
<td>32.6</td>
<td>43.1</td>
</tr>
<tr>
<td>Andean Area</td>
<td>56.8</td>
<td>61.2</td>
<td>33.3</td>
<td>40.6</td>
</tr>
<tr>
<td>Brazil</td>
<td>57.6</td>
<td>55.4</td>
<td>40.4</td>
<td>53.3</td>
</tr>
<tr>
<td>Southern Cone</td>
<td>64.6</td>
<td>59.3</td>
<td>33.5</td>
<td>39.5</td>
</tr>
<tr>
<td>Non-Latin Caribbean</td>
<td>45.9</td>
<td>60.7</td>
<td>28.7</td>
<td>43.2</td>
</tr>
</tbody>
</table>

**Source:** WHO Global Health Observatory. Available at: [http://www.who.int/gho/ncd/risk_factors/en](http://www.who.int/gho/ncd/risk_factors/en)


*b*The estimated numbers for the Region of the Americas may differ slightly from the regional data in the Global Health Observatory.
### Table 2. NCDs selected risk factors, continued: worldwide and the Region of the Americas.

<table>
<thead>
<tr>
<th>Region</th>
<th>Alcohol consumption in adults (liters per person per year)</th>
<th>Prevalence of raised blood pressure, age-standardized (%)</th>
<th>Prevalence of raised fasting blood glucose/diabetes, age-standardized (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Annual per capita</td>
<td>Male</td>
<td>Female</td>
</tr>
<tr>
<td>World*</td>
<td>6.4</td>
<td>24.1</td>
<td>20.1</td>
</tr>
<tr>
<td>Region of the Americas*b</td>
<td>7.9</td>
<td>20.7</td>
<td>15.3</td>
</tr>
<tr>
<td>North America</td>
<td>9.7</td>
<td>15.3</td>
<td>10.5</td>
</tr>
<tr>
<td>Mexico</td>
<td>6.5</td>
<td>22.3</td>
<td>17.3</td>
</tr>
<tr>
<td>Central American Isthmus</td>
<td>4.0</td>
<td>21.8</td>
<td>19.2</td>
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<tr>
<td>Latin Caribbean</td>
<td>6.2</td>
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<tr>
<td>Andean Area</td>
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<tr>
<td>Brazil</td>
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<td>26.7</td>
<td>19.9</td>
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<tr>
<td>Southern Cone</td>
<td>9.5</td>
<td>26.9</td>
<td>17.6</td>
</tr>
<tr>
<td>Non-Latin Caribbean</td>
<td>6.0</td>
<td>25.4</td>
<td>20.7</td>
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</table>


*bWHO Global Status Report on Alcohol and Health 2018. Available at: [https://apps.who.int/iris/bitstream/handle/10665/274603/9789241565639-eng.pdf?ua=1](https://apps.who.int/iris/bitstream/handle/10665/274603/9789241565639-eng.pdf?ua=1).

The estimated number for the Region of the Americas may slightly differ from the regional data on the Global Health Observatory.

In more than half of the subregions of the Americas, the prevalence of current tobacco use in adolescents is higher in young men than young women, according to the latest survey available in the countries. The same scenario can be seen for current tobacco smoking in adults: the prevalence of consumption is higher in men than in women for the Region. This is particularly important because the difference in tobacco use between young men and young women in the Region is low (approximately 1% regionally) compared to the difference between adult men and adult women, where the difference is higher (almost 10% higher for men). Although the prevalence in adults is standardized by age and the prevalence in adolescents is not, tobacco use among young people is almost the same for both sexes, and these current consumers will be potential consumers when they become adults.
The Region of the Americas has one of the highest consumption rates of alcohol per capita in the world (7.9 L per person per year), with especially high consumption in North America and the Southern Cone (9.7 L and 9.5 L, respectively). The prevalence of raised blood pressure at the regional level is lower than the number worldwide (17.6% vs. 22.1% for both sexes, respectively); nevertheless, by subregion, the Southern Cone, Brazil, and the Non–Latin Caribbean show higher prevalence in men than the prevalence in men worldwide. Finally, women in the Non–Latin Caribbean have the highest prevalence of raised fasting blood glucose/diabetes in the Region (13.6%).

Overweight and obesity, insufficient physical activity, tobacco use, alcohol consumption, raised blood pressure, and raised fasting blood glucose are all key, modifiable risk factors that contribute to NCDs.

During the Sixty-sixth World Health Assembly in 2013, Member States approved and adopted a comprehensive Global Monitoring Framework (GMF), consisting of 9 global targets and 25 indicators. The GMF aims to monitor the progress of Member States in the development and implementation of national strategies and plans to address the NCDs and their risk factors.

In 2013, the Global Action Plan for the Prevention and Control of NCDs 2013–2020 was also endorsed. The Global Action Plan provides a roadmap and a menu of policy options to aid progress toward meeting the global targets and indicators of the GMF to be achieved by the Member States by 2025.

Then, in 2014, ministries of health and representatives of the States committed to develop, enhance, or update, and implement at least 10 measures to strengthen the countries capacity to address the NCDs. The WHO developed a tracking mechanism of 10 indicators (hereafter referred to as the “progress indicators”) to inform the progress made by the Member States in the implementation of the measures adopted in 2011 and 2014 to address NCDs and their risk factors.

One of the most important tools developed to monitor the progress of countries in the assessment of national capacity for the prevention and management of NCDs is the Country Capacity Survey (CCS). The WHO conducts the CCS worldwide through its six regional offices. Although the survey was implemented in 2000, it was not until 2013 that it began to be carried out every 2 years to respond to the mandates of the World Health Assembly; to date, there have been six rounds of the survey.

This publication reports the results of the CCS implemented in 2017 in the Region of the Americas. It is divided into the following five modules:

▶ **Module I**: Public health infrastructure, partnership, and multisectoral collaboration for NCDs and their risk factors;

▶ **Module II**: Policies, strategies, and action plans;

▶ **Module III**: Health information systems, monitoring, surveillance, and surveys for NCDs and their risk factors;

▶ **Module IV**: Capacity for NCD early detection, treatment, and care within the health system; and

▶ **Module V**: Progress indicators.
The CCS is a global survey conducted to monitor countries’ capacity to implement policies and interventions NCDs and their risk factors. Six rounds of this survey have been performed by the WHO regions, in 2000, 2006, 2010, 2013, 2015, and 2017.

The results of this survey are used to report on several monitoring indicator frameworks established in global and regional commitments:

- Global Action Plan on NCDs 2013–2020
- Global Action Plan on NCDs 2013–2020 – Appendix 2
- Regional Action Plan on NCDs 2013–2019
- United Nations 2014 Outcome Document
- PAHO Strategic Plan 2014–2019
- Process indicators
- Global Monitoring Framework
- Regional indicators – output indicators
- Progress indicators
- Compendium of indicators – Category 2
The Monitoring Indicator Frameworks for the Prevention and Control of Noncommunicable Diseases are described in Annex 1.

**Questionnaire**

CCS data were collected using an online questionnaire. The questionnaire was answered by the respective focal point previously designated by the ministries of health. Every focal point was assigned a personalized ID and username to access the online questionnaire.

The 2017 CCS questionnaire was comprised of 4 modules with 45 main questions and several subquestions.

The four modules are structured as follows:

1. **Module I**: Public health infrastructure, partnerships, and multisectoral collaboration for NCDs and their risk factors.
2. **Module II**: Status of NCD-relevant policies, strategies, and action plans.
   a. Integrated policies, strategies, and action plans;
   b. Policies, strategies, action plans for specific key NCDs;
   c. Policies, strategies, action plans for NCD risk factors;
   d. Selected cost-effective policies for NCDs and related risk factors.
3. **Module III**: Health information systems, monitoring, surveillance, and surveys for NCDs and their risk factors.
   a. Data included in the national health information system;
   b. Risk factor surveillance.
4. **Module IV**: Capacity for NCDs early detection, treatment, and care within the health system.

For the 2017 version of the survey, the questionnaire was revised and the following modifications were made:

▶ Provision of supporting documentation for 31 of the 45 main questions (compared with 24 questions that needed supporting documents on the 2015 questionnaire);

▶ Elimination of questions and subquestions that did not provide essential information; and

▶ Some questions and subquestions were added that were deemed necessary to better understand the national capacity in assessing NCDs and their risk factors.

Despite these differences, the questionnaires are comparable to each other.
Data collection and validation

The data collection period took place between February and July 2017. The ministries of health designated a focal point to coordinate:

▶ Collecting information from different areas within the ministries of health;
▶ Gathering the supporting documentation required; and
▶ Completing the online questionnaire online.

The information provided by respondent was the responsibility of the national health authorities.

The validation process was carried out between April and July 2017 and followed the procedure established by the WHO.

This phase included verification of the information provided by the country against the following sources:

▶ WHO Global Health Observatory for alcohol and tobacco taxation; WHO Department of Health Statistics and Informatics; and surveys from the STEPS and Global School-based Student Health Survey (GSHS) websites;
▶ Cancer registries from the International Agency for Research on Cancer (IARC);
▶ Cancer data from the Cancer Atlas from the American Cancer Society; and
▶ Review of the supporting documents provided by country and territory (drafts were not considered).

As part of the validation process, some essential and new vital procedures were developed (compared to the 2015 validation): a) draft files were not considered valid documents; b) questions without supporting documents were treated as “no” answers for those questions; and c) reports with a validity timeframe from 2017 and onward were considered as valid only if they were operational at the time of the survey.

There was active communication with the national ministries of health for the validation process in order to ensure all questionnaires were fully answered with all the required documentation.

PAHO, with WHO, organized a workshop with the ministry of health focal points of 18 Caribbean countries, during which time the validation process was conducted. All questionnaires were reviewed and validated according to the WHO validation guidelines.

Response rate

For the first time in the history of the CCS, all 35 Member States responded to the questionnaire, as well as 13 of the 17 Associated Members and Participating States in the Region, for a total of 48 countries and territories (out of the total 52 total countries/territories in the Region). Table 3 shows the list of the countries/territories, categorized by PAHO subregions, that responded to the survey.
Table 3. List of countries that completed and validated the 2017 Country Capacity Survey, by PAHO subregion.

<table>
<thead>
<tr>
<th>Subregion</th>
<th>Country/territory</th>
</tr>
</thead>
<tbody>
<tr>
<td>North America</td>
<td>Bermuda, Canada, Mexico, United States of America</td>
</tr>
<tr>
<td>Central American Isthmus</td>
<td>Belize, Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, Panama</td>
</tr>
<tr>
<td>Latin Caribbean</td>
<td>Cuba, Dominican Republic, Guadeloupe, Haiti, Martinique, Puerto Rico</td>
</tr>
<tr>
<td>Andean Area</td>
<td>Bolivia (Plurinational State of), Colombia, Ecuador, Peru, Venezuela (Bolivarian Republic of)</td>
</tr>
<tr>
<td>Southern Cone</td>
<td>Argentina, Brazil, Chile, Paraguay, Uruguay</td>
</tr>
<tr>
<td>Non-Latin Caribbean</td>
<td>Anguilla, Antigua and Barbuda, Aruba, Bahamas, Barbados, British Virgin Islands, Cayman Islands, Dominica, Grenada, Guyana, Jamaica, Montserrat, Saba, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Sint Eustatius, Sint Maarten, Suriname, Trinidad and Tobago, Turks and Caicos Islands</td>
</tr>
</tbody>
</table>

Territories and associate countries that did not respond the survey: Curaçao, French Guyana, French Saint Martin, Bonaire.

¹The subregional distribution follows the categories used in the publication PAHO/WHO. Health Situation in the Americas: Core Indicators 2018. Washington, D.C.; 2018.
Analysis

After the validation process, WHO first “cleaned” the responses to verify consistency among answers. Additionally, a second review was made at the Regional Office to ensure that all questions were answered and supporting documents were provided.

Next, a descriptive analysis was completed for all the 48 countries/territories responding, and the calculations used 48 as the denominator. Although the 2017 questionnaire overlaps with previous surveys (2013, 2015), the statistical analysis did not compare the results between them.

Limitations

Although the CCS survey has been implemented over six rounds, it still presents some limitations that must be acknowledged:

▶ The survey does not capture specificity for each country. Some of the questions are general in nature about the existence of infrastructure, policies, strategies or plans without specifying the characteristics of each document.

▶ The depth of the consultation process may have an impact on the quality of the data collected.

▶ The survey does not allow for a comprehensive situation analysis of each subject/topic covered in the survey.

▶ The validation process is not applicable to all the questions. As part of the validation process, there is a request for supporting documents to be provided as proof of the answers for some questions. However, for others, no documentation is required.
RESULTS

MODULE I: PUBLIC HEALTH INFRASTRUCTURE, PARTNERSHIPS, AND MULTISECTORAL COLLABORATION FOR NCDs AND THEIR RISK FACTORS

Highlights

▶ Seventy-nine point two percent (38/48) of countries and territories have a unit, branch, or department responsible for NCDs and their risk factors. Of these, half (19/38, 50%) have 2 to 5 full-time technical or professional staff in the NCD units reported.

▶ Between 41 and 47 countries (85% to 96%) reported having a budget allocated in the governments directed to various activities for the following of NCDs and their RFs: primary prevention; health promotion; early detection/screening; health care and treatment; and surveillance, monitoring and evaluation.

▶ The primary source of funding for NCDs and their risk factors was general government revenue (81%); health insurance was a secondary source (31%); and national and international donations were tertiary sources (40% and 46%, respectively).

▶ The most frequent fiscal intervention was taxation on tobacco (88%), followed by taxation on alcohol (79%), and sugar-sweetened beverages (40%).

▶ More than half of respondents (28/48, 58%) reported having a national multisectoral commission, agency, or mechanism to oversee NCD engagement; of these 28, 61% were operational.

For the NCD agenda to move forward, infrastructure is needed to support the development and implementation of policies and programs related to NCDs and their risk factors. This infrastructure depends on the ministries of health to have a unit, branch, or department to oversee the national NCDs/risk factor action plans with funds assigned to implement, enforce, and monitor the
activities and policies needed. Another critical component is the establishment of a multisectoral commission to ensure a whole-government approach.

An analysis of country capacity regarding infrastructure is featured below.

**Unit, branch, or department with responsibility for NCDs and their risk factors**

Of those who responded, **38 of 48 (79.2%)** reported having a unit, branch, or department in the ministry of health or equivalent, who was responsible for NCDs and their risk factors.

Most respondents have more than two people working in their NCD units (Figure 1). Half of the respondents have between 2 to 5 full-time technical and professional staff in the NCDs unit and **13%** have 6 to 10 personnel. The remaining respondents have 11 or more staff (13 countries, **27.1%**). One respondent (3%) reported having just one person in the unit.

![Figure 1. Distribution of countries according to the number of full-time technical/professional staff in their NCD units, Region of the Americas, 2017](image)

It is important to mention that some respondents expressed uncertainty in measuring the number of people working as “full-time staff,” because many of them are also working in different areas, or they have many employees but not all are not assigned as full-time staff for NCDs. Further analysis of the NCD units/branches/departments must be realized with the information respondents provided.

**NCD funding budgets and sources**

Most respondents have funds allocated in their government budget for activities to assess NCDs and their risk factors. Most allocate funds for health promotion (46/48, **95.8%**), primary prevention as well as health care and treatment (45/48, **93.8%**), and early detection and screening (44/48, **91.7%**); see Figure 2. Surveillance, capacity-building, and palliative care comprise between **90%** and **50%** of the budget, while the remaining funds are allocated for research activities (22/48, **45.8%**).
The primary sources of funding for NCDs and their risk factors in the Region of the Americas are government revenues (39/48 of respondents, 81%); the secondary source is health insurance (15/48, 31%), and the tertiary sources are international (22/48, 46%) and national donations (19/48, 40%). NOTE: Values do not total 100% because the multipart question in the questionnaire contains multiple answers for each respondent.

**Fiscal interventions**

The survey asked about the existence of fiscal interventions for the principal NCD risk factors: alcohol; tobacco; sugar-sweetened beverages; foods high in fat, sugar, or salt; subsidies for healthy foods; and incentives to promote physical activity.

Nevertheless, it is important to mention that the survey asked for any fiscal intervention; in the case of taxes, excises and special VAT or sales taxes were included. Therefore, the following results reflect a general existence of fiscal interventions in the Region.
As shown in Figure 4, 40% (19/48) of countries and territories have implemented a fiscal intervention on sugar-sweetened beverages (SSBs); price subsidies for healthy foods (7/48, 15%); taxation on foods high in fat, sugar, or salt (3/48, 6%); and taxation on incentives to promote physical activity (3/48, 6%). The remaining 23% corresponds to countries and territories with fiscal interventions on tobacco and alcohol; those taxation results are not published in this report because they are reported in the GTCR (for tobacco taxation) and GISAH (for alcohol taxation).

**Multisectoral commissions**

In the Region of the Americas, 28 of the 48 respondents (58%) have a national multisectoral commission, agency, or mechanism to oversee NCD engagement, policy coherence, and accountability of sectors beyond health. More than half of the 28 multisectoral commissions (17/28, 61%) were reported as “operational”, 32% (17/28) as “under development” and only 7% (2/28) are not in effect. (Figure 5).
The private sector was a member in 82% (14/17) of the operative multisectoral commissions; of these commissions, 86% (12/14) excluded the tobacco industry from consultations and the decision-making process (Figure 6).

Only two countries have multisectoral commissions with active participation of the tobacco industry (for further information regarding the composition of these Multisectoral Commissions, see CCS 2017 tool, available at: https://www.paho.org/en/noncommunicable-diseases-and-mental-health/noncommunicable-diseases-and-mental-health-data-13)
MODULE II: STATUS OF NCD-RELEVANT POLICIES, STRATEGIES, AND ACTION PLANS

Highlights

▶ NCDs and their risk factors are considered in national health plans in 83% (40/48) of the responding countries/territories; 69% (33/48) of the countries include NCDs and their risk factors in their current national development agenda.

▶ 60% (29/48) of respondents reported having a set of time-bounded national targets for NCDs, based on the GMF global targets form the WHO Global Monitoring Framework for NCDs.

▶ 60% (29/48) of the respondents have a multisectoral, operational, and integrated policy, strategy, or action plan to assess the four major NCDs and their risk factors.

▶ Less than 50% of respondents have specific policies/strategies/action plans for NCDs and their risk factors.

▶ 29% (14/48) have a policy to reduce the intake of salt/sodium consumption.

▶ 23% (11/48) have a national policy to limit saturated fatty acids and eliminate trans-fat in the food supply.

▶ 25% (12/48) have policies to reduce the impact of unhealthy diet marketing on children.

Inclusion of NCDs in the national agenda

It is of vital importance that the responsibility to assess NCDs and their risk factors includes the necessary legal, political, economic, and administrative support of the governments and ministries. This support will result in effective planning of activities, with targets and indicators, and enough funding. Therefore, the CCS 2017 asked if the countries have NCDs and their risk factors as part of their national development agenda, as well as in their national health plan.
Noncommunicable Diseases and Their Risk Factors in the Region of the Americas

Figure 7. Inclusion of NCDs in the outcomes or outputs in national health plans and national development agenda, Region of the Americas, 2017

<table>
<thead>
<tr>
<th>National Development Agenda</th>
<th>69% (33/48)</th>
</tr>
</thead>
<tbody>
<tr>
<td>National Health Plan</td>
<td>83% (40/28)</td>
</tr>
</tbody>
</table>

NCDs are included in the outcomes/outputs of the current national health plans of 40 respondents (40/48, 83%), while NCDs are included only in the national development agenda of 33 respondents (33/48, 69%).

Targets and indicators based on the Global Monitoring Framework (GMF)

The existence of time-bounded targets and indicators based on the nine voluntary global targets from the WHO Global Monitoring Framework (GMF) for NCDs is one of the progress indicators published by the WHO in the Progress Monitor report. Progress regarding this indicator was presented at the UN High-Level Meeting in 2018. Complete descriptions of the achievement criteria for this progress indicator are presented in the “Progress Indicators in the Region of the Americas” Section.

The present section presents information regarding the existence of targets and their distribution in the Region.

The following nine GMF voluntary targets were adopted by participating countries and territories in 2011:

1. 25% relative reduction in overall mortality from cardiovascular diseases, cancer, diabetes, and chronic respiratory diseases;

2. At least 10% relative reduction in the harmful use of alcohol;

3. A 10% relative reduction in the prevalence of insufficient physical activity;

4. A 30% relative reduction in mean population intake of salt/sodium;

5. A 30% relative reduction in the prevalence of current tobacco use in persons aged 15+ years;

6. A 25% relative reduction in the prevalence of raised blood pressure or contain the prevalence of raised blood pressure;

7. Halt the rise in diabetes and obesity;
8. At least 50% of eligible people receive drug therapy and counseling to prevent heart attacks and strokes;

9. An 80% availability of affordable basic technologies and essential medicines to treat major NCDs in both public and private sectors.

In the Region of the Americas, 29 countries and territories (29/48, 60%) reported having targets aligned with the GMF (Figure 8); of these, 26 had fully achieved the corresponding progress indicator, according to the achievement criteria (please see “Progress Indicators in the Region of the Americas” for further information).

Figure 8. Distribution of the nine voluntary targets related to the WHO Global Monitoring Framework for the Region of the Americas, 2017

- **Tobacco use**: 30% reduction, 23/29 countries
- **Harmful use of alcohol**: 10% reduction, 22/29 countries
- **Salt/sodium intake**: 30% reduction, 14/29 countries
- **Insufficient physical activity**: 10% reduction, 22/29 countries
- **25% reduction in premature mortality from NCDs**: 26/29 countries

- **Drug Therapy and counseling**: 50% eligible people coverage, 17/29 countries
- **Essential Medicines & basic technologies**: 80% reduction, 12/29 countries
- **Diabetes & obesity**: Halt the size, 24/29 countries
The target of 25% relative reduction in mortality from major NCDs was adopted by a majority of countries and territories (26/29, 90%), followed by the halt of diabetes and obesity (24/29, 83%), reduction in tobacco use (23/29, 79%), and reduction of alcohol and insufficient physical activity (22/29, 76%). Only 12 of 29 (41%) respondents have targets for affordable basic technologies and essential medicines, while 14 (14/29, 48%) have the target for reduction in salt/sodium intake.

**Integrated policies, strategies, or action plans for NCDs and their risk factors**

In total, 29 of the responding countries and territories (29/48, 60%) reported having a national NCD policy, strategy, or action plan that integrates several NCDs and their risk factors; 7 (7/48, 15%) have a national strategy under development and 12 do not have any national NCD strategy (12/48, 25%).

*Figure 9. Distribution of integrated policies, strategies, or action plans for NCDs and their risk factors, Region of the Americas, 2017*

All the 29 integrated strategies include three of the four main risk factors for NCDs: unhealthy diet, physical activity, and tobacco; while 26 of the 29 strategies (90%) consider the other NCD main risk factor (harmful use of alcohol) as part of their plans. Only 19 strategies (19/29, 66%) include palliative care for patients with NCDs.
Table 4. Content and characteristics of the policies/strategies/action plan to address the major NCDs and their risk factors, Region of the Americas, 2017

<table>
<thead>
<tr>
<th>Operational Strategy</th>
<th>29/48</th>
</tr>
</thead>
<tbody>
<tr>
<td>Harmful use of alcohol</td>
<td>26/29</td>
</tr>
<tr>
<td>Unhealthy diet</td>
<td>29/29</td>
</tr>
<tr>
<td>Physical activity</td>
<td>29/29</td>
</tr>
<tr>
<td>Tobacco</td>
<td>29/29</td>
</tr>
<tr>
<td>Cancer</td>
<td>27/29</td>
</tr>
<tr>
<td>Cardiovascular diseases</td>
<td>27/29</td>
</tr>
<tr>
<td>Chronic respiratory diseases</td>
<td>25/29</td>
</tr>
<tr>
<td>Diabetes</td>
<td>28/29</td>
</tr>
<tr>
<td>Palliative care</td>
<td>19/29</td>
</tr>
<tr>
<td>Is it a policy/strategy?</td>
<td>23/29</td>
</tr>
<tr>
<td>Is it an action plan?</td>
<td>25/29</td>
</tr>
<tr>
<td>Is it multisectoral?</td>
<td>27/29</td>
</tr>
<tr>
<td>Is it multi-stakeholder?</td>
<td>28/29</td>
</tr>
<tr>
<td>Recent implementation (2012 or later)</td>
<td>24/29</td>
</tr>
</tbody>
</table>

Finally, 83% (24/29) of the policies/strategies/action plans have been implemented since 2012 or later.

Specific policies, strategies, or action plans to address the main NCDs and their risk factors

Participants were asked if they had policies, strategies, or plans for specific NCDs, independent of an integrated, multisectoral, and operational policy/strategy/action plan to assess the major NCDs and their risk factors.
As shown in Figure 10, the proportion of respondents with operational specific policies, strategies, or action plans for both NCDs and risk factors is less than 50%. The exception is tobacco control, where 25 of 48 (52%) respondents reported having a policy/strategy/action plan to decrease tobacco use.

**Figure 10. Percentage of countries/territories with specific plans for the main NCDs and their risk factors, according to their implementation status, Region of the Americas, 2017**

<table>
<thead>
<tr>
<th>Category</th>
<th>Operational</th>
<th>Under development</th>
<th>Not in effect</th>
<th>Don't Know</th>
<th>No specific policy, strategy or action plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reducing unhealthy diet</td>
<td>33%</td>
<td>13%</td>
<td>48%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Decrease tobacco use</td>
<td>52%</td>
<td>4%</td>
<td>40%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reducing physical inactivity</td>
<td>31%</td>
<td>8%</td>
<td>50%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overweight and obesity</td>
<td>29%</td>
<td>15%</td>
<td>54%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Harmful use of alcohol</td>
<td>23%</td>
<td>13%</td>
<td>56%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oral health</td>
<td>38%</td>
<td>6%</td>
<td>46%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CRDs</td>
<td></td>
<td>15%</td>
<td>91%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DM</td>
<td>23%</td>
<td>4%</td>
<td>71%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cancer</td>
<td>33%</td>
<td>15%</td>
<td>42%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CVDs</td>
<td></td>
<td>13%</td>
<td>79%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Notes:** CVD: cardiovascular diseases; CRDs: chronic respiratory diseases; DM: diabetes mellitus.

A small percentage of respondents have their specific policies/strategies/action plans under development for all the main NCDs and their risk factors. Nevertheless, it should be noted that there are also a few respondents with documents not in effect for many risk factors, such as harmful use of alcohol, overweight and obesity, physical activity, and unhealthy diet.

Also of note is that 29 countries and territories reported having an operational integrated, multisectoral policy/strategy/action plan to assess the main NCDs and their risk factors, including unhealthy diet and physical activity policies, but only 5 have individual plans for each of the four major NCDs and the four main risk factors.

The remaining respondents (24 of 29) who have an operational integrated, multisectoral policy/strategy/action plan have at least one plan for any of the main NCDs and/or at least one plan for any of the main risk factors; only 2 respondents lack a plan in addition to the multisectoral policy.
Healthy diet policies and programs

Of the 48 responding countries and territories, only 14 (14/48, 29%) reported having a policy to support the reduction of salt/sodium intake among the population. The implementation of national policies that limit saturated fatty acids and virtually eliminate industrially produced trans-fats in the food supply was reported in 11 of 48 (23%) of the survey responses. The implementation of any policies to reduce the impact on children of marketing of foods and non-alcoholic beverages in high saturated fats, trans-fatty acids, free sugars, or salt was reported by one-quarter of respondents in the Region (12/48, 25%).

Finally, 26 respondents (26/48, 54%) reported having a national public awareness program on diet within the past 5 years, while 60% (29/48) have implemented a national public awareness program on physical activity within the past 5 years.

The aforementioned policies for healthy diet and physical activity were considered for the evaluation of the following progress indicators: 7a (implementation of national policies to reduce population salt/sodium consumption); 7b (implementation of policies to limit saturated fatty acids and eliminate trans-fats); 7c (implementation of policies to reduce the impact on children of marketing of foods and non-alcoholic beverages high in saturated fats, trans-fatty acids, free sugars, or salt); and 8 (implementation of recent national public awareness program on physical activity).

Further information and analysis of these results is presented in the “Progress Indicators” section.

MODULE III: HEALTH INFORMATION SYSTEMS, MONITORING, SURVEILLANCE, AND SURVEYS FOR NCDs AND THEIR RISK FACTORS

Highlights

▶ 98% (47/48) of countries/territories reported that the ministry of health is responsible for surveillance of NCDs (2% implement surveillance through external agencies).

▶ 98% (47/48) of respondents have a mortality system that can collect data disaggregated by age and gender.

▶ 71% (34/38) of respondents have a cancer registry; 76% (26/34) are national and 50% (17/34) are population-based.

▶ 29% (14/48) of respondents have a diabetes registry; 79% (11/14) are nationally representative.

▶ 27% (13/48) of respondents have recent, representative, and periodic surveys on harmful use of alcohol; 25% (12/48) on tobacco use; 21% (10/48) on insufficient physical activity; and 19% (9/48) on low consumption of fruits and vegetables.

▶ 31% (15/48) of respondents have recent, representative, and periodic surveys on tobacco use; 29% (14/48) on harmful use of alcohol; and 15% (7/48) on both insufficient physical activity and low consumption of fruits and vegetables.
Infrastructure, mortality information systems, and NCD registries

In 47 of 48 (98%) countries and territories, the ministry of health is responsible for surveillance of NCDs; the remaining respondent implements surveillance through an external agency. More than half of the respondents (25/48, 52%) reported that the responsibility of NCD surveillance is not dedicated exclusively to an office/department/administrative division within the ministry of health.

Regarding the existence of a system for collecting mortality data by cause of death on a routine basis, 47 of 48 (98%) respondents reported having such a system, and all these mortality systems can collect data disaggregated by age and gender.

Some 71% (34/48) of respondents reported having a cancer registry; 76% (26/34) of those registries are national and 50% (17/34) are population-based (Table 5).

Table 5. Distribution and characteristics of cancer and diabetes registries, Region of the Americas, 2017

<table>
<thead>
<tr>
<th>Cancer registry: 71% (34/48)</th>
<th>Population-based: 50% (17/34)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Hospital-based: 44% (15/34)</td>
</tr>
<tr>
<td></td>
<td>National: 76% (26/34)</td>
</tr>
<tr>
<td></td>
<td>Subnational: 24% (8/34)</td>
</tr>
<tr>
<td>Diabetes registry: 29% (14/48)</td>
<td>Population-based: 36% (5/14)</td>
</tr>
<tr>
<td></td>
<td>Hospital-based: 36% (5/14)</td>
</tr>
<tr>
<td></td>
<td>National: 79% (11/14)</td>
</tr>
<tr>
<td></td>
<td>Subnational: 21% (3/14)</td>
</tr>
<tr>
<td></td>
<td>Chronic complications updated: 43% (6/14)</td>
</tr>
</tbody>
</table>

Regarding a registry for DM, only 14 of 48 (29%) respondents reporting having one; 79% (11/14) of those registries are nationally representative.

The survey results show that 33 of 48 (69%) respondents have a system for recording patient information that includes NCD status, and of these, 21 (21/33, 64%) are either electronic medical record or health record systems. In 13 (13/21, 62%), this system has national coverage, and in 8 (8/21, 38%), the coverage is subnational.

Seven respondents (7/48, 15%) reported surveying facilities to assess service availability and readiness for NCDs; all the surveys were conducted within the last 5 years.
NCD population surveys

The CCS 2017 asked about the existence of surveys conducted for the monitoring of NCD risk factors in the countries, both among adolescents and adults. The following items were queried:

<table>
<thead>
<tr>
<th>Item</th>
<th>Adolescents</th>
<th>Adults</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alcohol</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fruits and vegetable</td>
<td></td>
<td></td>
</tr>
<tr>
<td>consumption</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physical inactivity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tobacco consumption</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overweight and obesity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blood glucose</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total cholesterol</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blood pressure</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Salt</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Physical activity, overweight and obesity, blood glucose, cholesterol, and blood pressure had the option for responses of “self-reported” or “measured.” This is particularly important because this is an achievement criterion considered for Progress Indicator 3, as well as the frequency of completion (see “Progress Indicators”). Therefore, the data reported in this chapter regarding the existence of surveys on NCD risk factors do not correspond with the results of the Progress Monitor 2017 indicators.

The general response rate for the conduction of risk factor surveys is listed in Table 6.

Table 6. Percentage of surveys of the NCD risk factors reported by the countries and territories, independently of the year of implementation, Region of the Americas, 2017

<table>
<thead>
<tr>
<th>Item</th>
<th>Adolescents</th>
<th>Adults</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alcohol</td>
<td>39/48</td>
<td>38/48</td>
</tr>
<tr>
<td>Blood glucose</td>
<td>–</td>
<td>38/48</td>
</tr>
<tr>
<td>Blood pressure</td>
<td>–</td>
<td>39/48</td>
</tr>
<tr>
<td>Fruits and vegetables</td>
<td>32/48</td>
<td>36/48</td>
</tr>
<tr>
<td>Overweight and obesity</td>
<td>34/48</td>
<td>40/48</td>
</tr>
<tr>
<td>Physical inactivity</td>
<td>35/48</td>
<td>36/48</td>
</tr>
<tr>
<td>Tobacco</td>
<td>44/48</td>
<td>39/48</td>
</tr>
<tr>
<td>Total cholesterol</td>
<td>–</td>
<td>35/48</td>
</tr>
<tr>
<td>Salt</td>
<td>–</td>
<td>22/48</td>
</tr>
</tbody>
</table>
For analytical purposes, the surveys were classified according to the measurement procedure, as shown in Table 7.

**Table 7. Categories for classification of adult and youth population surveys**

<table>
<thead>
<tr>
<th>Surveys with risk factors that do not require physical or biochemical measurements</th>
<th>Surveys with risk factors that need physical (weight, height, blood pressure) or biochemical (glucose, cholesterol, sodium) measurements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recent, representative and periodic</td>
<td>Recent, representative, with measures, periodic</td>
</tr>
<tr>
<td>Recent, representative and not periodic</td>
<td>Recent, representative, with measures, no periodic</td>
</tr>
<tr>
<td>Recent, not representative</td>
<td>Recent, representative, self-reported</td>
</tr>
<tr>
<td>No recent, representative</td>
<td>Recent, not representative</td>
</tr>
<tr>
<td>No recent, not representative</td>
<td>Not recent</td>
</tr>
<tr>
<td>No survey</td>
<td>No survey</td>
</tr>
</tbody>
</table>

To better understand the characteristics of the responses regarding adults and adolescents, the following classification and criteria were used:

1. **Recent survey**: data collected within the last 5 years;

2. **Representative**: nationally representative;

3. **Periodicity**: surveys carried out at least every 3 to 5 years;

4. **Measurement**: for those risk factors that require physical (weight, height, blood pressure) and biochemical measurement (glucose, cholesterol, sodium).

The adult surveys reported were mostly national health surveys, including STEPS surveys in some cases; the adolescent surveys include GSHS and special national surveys on adolescents.

**Surveys on adolescents**

A proportion of surveys on adolescents were conducted for tobacco use (15/48, 31%) and harmful use of alcohol (14/48, 29%). However, for all risk factors, less than 50% of the surveys were recent, representative, or periodic.
**Figure 11. Percentage of countries/territories that reported having surveys of risk factors among adolescents, by category*, Region of the Americas, 2017**

<table>
<thead>
<tr>
<th>Category</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Harmful use of alcohol</td>
<td>19%</td>
</tr>
<tr>
<td>Law fruit and vegetable consumption</td>
<td>33%</td>
</tr>
<tr>
<td>Tobacco use</td>
<td>8%</td>
</tr>
<tr>
<td>Insufficient physical activity</td>
<td>27%</td>
</tr>
<tr>
<td>Overweight and obesity</td>
<td>29%</td>
</tr>
</tbody>
</table>

* For the classification of categories, see Table 6.

Regarding overweight and obesity, only the 13% (6/48) of the surveys were recent, representative, or periodic and with measures taken at the time of the survey (not as self-reported).

**Surveys on adults**

In the case of surveys on adults for those risk factors that do not require measurement (harmful use of alcohol, low fruit and vegetable consumption, physical inactivity, tobacco use, and salt/sodium intake), less than 50% were recent, representative, or periodic.

The most frequent survey implemented was to monitor the harmful use of alcohol (13/48, 27%), followed by tobacco use (12/48, 25%), insufficient physical activity (10/48, 21%), and low fruit and vegetable consumption (9/48, 19%).
Figure 12. Percentage of countries/territories that reported having surveys of risk factors among adults, by category*, Region of the Americas, 2017

Figure 13 lists the risk factors that required measurement.

Figure 13. Percentage of countries that reported having surveys of risk factors that needed measurement (physical or biochemical), among adults by category*, Region of the Americas, 2017.

* For the classification of categories, see Table 6.
Less than 20% of all the risk factors were measured instead of self-reported (raised blood glucose/diabetes, raised cholesterol, raised blood pressure/hypertension, and overweight and obesity) with recent, representative, and periodic surveys (ranging from 13% to 19%). The data on overweight and obesity in adults (9/48, 19%) and raised blood pressure (6/48, 13%) are the most frequently collected. The salt/sodium intake information is less frequently collected. Of the total number of survey responses (22/48, 46%), none had a collection periodicity of every 3 to 5 years.

**MODULE IV: CAPACITY FOR NCD EARLY DETECTION, TREATMENT, AND CARE WITHIN THE HEALTH SYSTEM**

**Highlights**

- 75% (36/48) of countries/territories report availability of evidence-based guidelines, protocols, or standards for the management of the four main NCDs.

- 65% (31/48) of respondents have a national program of screening for breast and cervical cancer.

- 67% (32/48) of respondents reported having an HPV national vaccination program.

- In 85% (41/48) of survey responses, six of the eight essential medicines for the prevention and treatment of CVDs including DM are generally available in primary health facilities.

This module focuses on the capacity of health care installations for the detection, management, and availability of treatment with essential medicines, and for prevention of NCDs.

**Evidence-based national guidelines/protocols/standards for the management of NCDs**

The availability of evidence-based national guidelines/protocols/standards is greater than 50% for each of the main NCDs (Figure 14). The most frequently available guidelines were for diabetes (36/48, 75%), followed by guidelines for cardiovascular diseases (29/48, 60%), cancer (27/48, 56%), and chronic respiratory diseases (24/48, 50%).
The results reported above differ from the results for Progress Indicator 9, “Member State has evidence-based national guidelines/protocols/standards for the management of major NCDs through the primary care approach, recognized/approved by the government or competent authorities.” The discrepancy lies in the achievement criteria for this indicator. For further information, please see the chapter “Progress Indicators.”

Notes: CVD: cardiovascular diseases; CRD: chronic respiratory diseases.

Availability of basic technologies for early detection, diagnosis/monitoring of NCDs in primary care facilities

This section discusses the availability of basic technologies reported by countries in their primary care health facilities, in both the public and private sectors. Availability was defined as having the necessary technology in more than 50% of the primary health facilities.

Public primary health facilities

According to the provided data, the most available technologies in the public sector primary care facilities are for blood pressure (96%), as well as for measuring weight (94%), height (90%), and blood glucose (90%).

The less frequently available technologies in primary health facilities are those for diabetic patient follow-up: foot vascular status Doppler (19%), dilated fundus examination (33%), and foot vibration perception by tuning fork (38%). It is important to note the lack of capability for the glycosylated hemoglobin (HbA1c) test. It is a critical technology for monitoring the glucose control in diabetic patients, but only available in 52% of the public primary health facilities.
Figure 15. Availability of basic technologies to address NCDs in public and private health care facilities, Region of the Americas, 2017

- **CHRONIC OBSTRUCTIVE PULMONARY DISEASE**
  - Peak flow measurement spirometry: Private Sector 46%, Public Sector 40%
  - Urine strips for albumin assay: Private Sector 75%, Public Sector 69%
  - Total cholesterol measurement: Private Sector 77%, Public Sector 69%
  - Blood pressure measurement: Private Sector 96%, Public Sector 94%

- **CARDIOVASCULAR DISEASE**
  - Urine strips for glucose and ketone measurement: Private Sector 85%, Public Sector 69%
  - Foot vascular status by Doppler: Private Sector 29%, Public Sector 19%
  - Food vibration perception by tuning fork: Private Sector 52%, Public Sector 38%
  - Dilated fundus examination: Private Sector 54%, Public Sector 33%
  - HbA1 test: Private Sector 77%, Public Sector 52%
  - Oral glucose measurement: Private Sector 67%, Public Sector 50%
  - Blood glucose measurement: Private Sector 92%, Public Sector 90%

- **DIABETES MELLITUS**
  - Measuring of height: Private Sector 88%, Public Sector 90%
  - Measuring of weight: Private Sector 96%, Public Sector 94%
Private primary health facilities

The most available technologies in primary private healthcare facilities are those for the measurement of weight (96%), blood pressure (94%), and blood glucose (92%). As in the public primary health facilities, the less available technologies are those for monitoring diabetic patients; however, these technologies are more readily available in the private sector than in the public-sector health facilities. For example, HbA1c is available in 52% of the public health facilities, but available in 77% of the private health facilities.

Early detection and HPV vaccination

Regarding the early detection of NCDs, the most frequent detection method reported by the countries was breast and cervical cancer screening (31/48, 65% for both). For breast cancer screening, 61% (19/31) of respondents reported using mammography, and of these, 68% (13/19) of implemented mammography as a population-based program. However, in only 3 of these 19 responses (16%) was the coverage >70% (see Figure 16).
Figure 16. Distribution of NCD screening programs among responding countries/territories of the Region of the Americas, 2017

Breast cancer screening 31/48 (65%)
- Mammography (19/31, 61%) • population-based program: 13 • opportunistic program: 6 • coverage >70%: 3
- Clinical exam (11/31, 35%) • population-based program: 3 • opportunistic program: 8 • coverage >70%: 2
- No response (1/31, 3%)

Cervical cancer screening 31/48 (65%)
- Pap smear (26/31, 84%) • population-based program: 15 • opportunistic program: 11 • coverage >70%: 6
- Visual inspection (3/31, 9.7%) • population-based program: 2 • opportunistic program: 1 • coverage >70%: 0
- HPV test (2/31, 6%) • population-based program: 2 • opportunistic program: 0 • coverage >70%: 0

Colon cancer screening 12/48 (25%)
- Fecal test (9/12, 75%) • population-based program: 8 • opportunistic program: 1 • coverage >70%: 0
- Colon/sigmoidoscopy (3/12, 25%) • population-based program: 1 • opportunistic program: 2 • coverage >70%: 0

Other cancer screening 14/48 (29%)
- Prostate (11/14, 79%)
- Gastric (2/14, 14%)
For cervical cancer screening, the most frequent technique utilized was the Pap smear (26/31, 84%), for which 58% (15/26) implemented it as a population-based program. Only six respondents (23%) reported having a coverage >70%. It is also important to mention that just 2 of the 31 (6%) respondents that implement a cervical screening program reported having a population-based program using the HPV test.

Thirty-two survey responses (32/48, 67%) reported having a national vaccination program for HPV.

Availability of essential medicines

WHO has defined a list of essential medicines that should be available for patients in health care facilities and pharmacies to treat and control patients with NCDs. This list is used to measure the indicator “Essential medicines and basic technologies” of the Global Monitoring Framework.

The essential medicines are insulin, aspirin, metformin, thiazide diuretics, ACE inhibitors, calcium channel blockers, beta blockers, statins, steroid inhaler, and sulphonylureas.

The CCS asked whether these essential medicines (and some others) are “generally available,” meaning that the drugs are available in at least 50% of the health facilities.

As shown in Figure 17, nearly all the essential medicines are available for >85% of the respondents, except for statins (generally available in 73% of the countries/territories), steroid inhaler (generally available for 77% of those surveyed), and sulphonylureas (generally available for 75% of those surveyed).
Figure 17. Distribution of essential medicines among survey respondents, Region of the Americas, 2017

- **Isuline**: 85% Gen. available, 13% Gen. not available, 2% Don’t Know
- **Aspirin (100mg)**: 92% Gen. available, 6% Gen. not available, 2% Don’t Know
- **Metformin**: 92% Gen. available, 6% Gen. not available, 2% Don’t Know
- **Thiazide Diuretics**: 94% Gen. available, 4% Gen. not available, 2% Don’t Know
- **ACE Inhibitors**: 90% Gen. available, 8% Gen. not available, 2% Don’t Know
- **Calcium channel Blockers**: 88% Gen. available, 6% Gen. not available, 6% Don’t Know
- **Beta Blockers**: 90% Gen. available, 8% Gen. not available, 2% Don’t Know
- **Statin**: 73% Gen. available, 19% Gen. not available, 4% Don’t Know
- **Oral morphine**: 33% Gen. available, 54% Gen. not available, 13% Don’t Know
- **Steroid inhaler**: 77% Gen. available, 17% Gen. not available, 6% Don’t Know
- **Bhonchodilator**: 85% Gen. available, 10% Gen. not available, 5% Don’t Know
- **Sulphonylurea(s)**: 75% Gen. available, 13% Gen. not available, 13% Don’t Know
- **Benzathine penicillin injection**: 83% Gen. available, 15% Gen. not available, 10% Don’t Know
- **Nicotine Replacement Therapy**: 29% Gen. available, 52% Gen. not available, 17% Don’t Know

**Gen. available** = generally available (in 50% or more pharmacies); **Gen. not available** = generally not available (in less than 50% of pharmacies); **ACE inhibitors** = Angiotensin converting enzyme inhibitors.
The other medicines not designated as “essential” are nevertheless crucial for the control and prevention of chronic respiratory diseases (such as bronchodilators, generally available in 85% of the countries/territories or nicotine replacement therapy, generally available for 29% of respondents), and cardiac diseases as a result of infections (such as benzathine penicillin injection, available in 83% of the countries/territories surveyed).

**Basic procedures for treating NCDs in the public health system**

As part of the treatment of NCDs, the CCS 2017 asked about the availability of basic procedures in the public health system. Figure 18 illustrates the results.

**Figure 18. Distribution of basic procedures for the treatment of NCDs in the public health system, Region of the Americas, 2017**

Gen. available = generally available (in 50% or more patients in need); Gen. not available = generally not available (in less than 50% of patients in need).
Cancer diagnosis and treatment services in the public sector

Thirty-three respondents reported having one or more pathology laboratory in the public sector and approximately 21 in the private sector (Figure 19).

**Figure 19. Availability of cancer diagnosis and treatment services in the public sector, Region of the Americas, 2017**

Regarding the availability of palliative care for patients with NCDs, 44% (21/48) of the countries and territories reported that palliative care was generally available in the community or home-based care, and only 35% (17/48) said it was generally available in the primary health care level. “Generally available” means that the palliative care is available in more than 50% of the public health system.

Cardiovascular risk stratification for high-risk CVD patients

Key in determining the national capacity to assess the effect of NCDs is the prevention of these diseases through the detection of their risk factors. One method is to offer cardiovascular stratification for patients at risk to develop a stroke or myocardial disease.
In this case, 35% (17/48) of the respondents offer cardiovascular risk stratification in less than 25% of their primary care level. Only 17% (8/48) have more than 50% of health facilities offering cardiovascular stratification (Figure 20).
After the adoption of the political declaration of the High-level Meeting of the General Assembly on the Prevention and Control of Non-communicable Diseases, in 2014 the General Assembly published an Outcome report (3, 7). In this document, the Member States agreed on the development of a framework for the evaluation of countries’ progress in strengthening capacities to assess NCDs and their risk factors (7).

Please note that the results presented in this chapter may not match those published in the Progress Monitor 2017, especially the Progress Indicators 1, 3, 4, 7a, 7b, 7c, and 8–10. This is because the Progress Monitor only considered the UN Member States (35 countries); however, this report considered not just Member States but also 13 Associate and Participating countries and territories (for a total of 48). For further information regarding the list of responding countries and territories for CCS 2017, please see Table 3.

A total of 54% (26/48) of respondents have a set of time-bound national targets based on the nine voluntary global targets and the WHO GMF; these targets address NCD mortality, key risk factors, and health systems.
Progress Indicator 1: Number of Member States and Territories of the Region of the Americas that have a set of national NCD targets. The NCD-related targets should be time-bound and based on the nine voluntary global targets and the WHO Global Monitoring Framework.

**Achievement criteria:**

- **Fully achieved:** if the country has a set of time-bound national targets for NCDs based on the nine voluntary global targets from the WHO Global Monitoring Framework and these indicators cover the three areas addressed in the nine global targets (NCD mortality + key risk factors in the country and health systems).

- **Partially achieved:** if the country has a set of time-bound national targets for NCDs based on the nine voluntary global targets from the WHO Global Monitoring Framework, but the targets reported do not cover two of the three areas addressed in the nine global targets (mortality and/or risk factors, and/or health systems), OR they are not time-bound.
Progress Indicator 2: Number of Member States of the Region of the Americas that have a vital registration system that captures deaths and the causes of death routinely.

![Map of the Americas with data representation](image)

**Number and percent of country per status category**

<table>
<thead>
<tr>
<th>Status Category</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fully achieved</td>
<td>22</td>
<td>46%</td>
</tr>
<tr>
<td>Partially achieved</td>
<td>12</td>
<td>25%</td>
</tr>
<tr>
<td>Not achieved</td>
<td>1</td>
<td>2%</td>
</tr>
<tr>
<td>Not applicable</td>
<td>13</td>
<td>27%</td>
</tr>
</tbody>
</table>

**Achievement criteria:**

- **Fully achieved:** if the country meets all the following criteria:
  
  a. Data from the five most recent reporting years are, on average, at least 70% usable.
  
  b. At least 5 years of cause-of-death data have been reported to the WHO in the last 10 years.
  
  c. The most recent year of data reported to the WHO is no more than 5 years old.

- **Partially achieved:** if the country does not meet all the above criteria but has submitted some vital registration data to WHO.
**Progress Indicator 3:** Number of Member States and Territories of the Region of the Americas that have a STEPS survey or a comprehensive health examination survey every 5 years.

**Achievement criteria:**

- **Fully achieved:** if the country responds “Yes” to each of the following for adults:
  
  a. Have surveys of risk factors (may be a single risk factor or multiple) been conducted in your country for all of the following: harmful alcohol use (optional for the Member States where there is a ban on alcohol); physical inactivity; tobacco use; raised blood glucose/diabetes; raised blood pressure/hypertension; overweight and obesity; and salt/sodium intake.
b. For the risk factors of raised blood glucose/diabetes, raised blood pressure/hypertension, and overweight and obesity, the data must be measured, not self-reported.

c. Additionally, for each risk factor, the country must indicate that the last survey was conducted in the past 5 years (i.e., 2012 or later for the 2017 CCS survey responses) and must respond “every 1 to 2 years” or “every 3 to 5 years” to the subquestion “How often is the survey conducted?” The country must also provide the needed supporting documentation.

▶ Partially achieved: if the country responds that at least three, but not all, of the above risk factors are covered, or the surveys were conducted more than 5 years ago but less than 10 years ago.
Progress Indicator 4: Number of Member States and Territories of the Region of the Americas that have an operational multisectoral national strategy/action plan that integrates the major NCDs and their shared risk factors.

Achievement criteria:

- **Fully achieved:** if the country responds “Yes” to the question “Does your country have a national NCD policy, strategy or action plan which integrates several NCDs and their risk factors?” and to the subquestion “Is it multisectoral?” Countries also have to respond “operational” to the subquestion “Indicate its stage” and “Yes” to all of the subquestions about the four main risk factors and four main NCDs: “Does it address one or more of the following major risk factors?: harmful use of alcohol (optional for the Member States where there is a ban on alcohol); unhealthy diet, physical inactivity, tobacco” (all four must be answered “Yes”); and “Does it combine early detection, treatment and care for: cancer; cardiovascular diseases; chronic respiratory diseases; and diabetes” (all four must be answered “Yes”). Country must also provide the needed supporting documentation.
**Partially achieved:** if the country responds “Yes” to the question “Does your country have a national NCD policy, strategy or action plan which integrates several NCDs and their risk factors?” and to the subquestion “Is it multisectoral?” Countries also have to respond “operational” to the subquestion “Indicate its stage” and “Yes” to at least two of the four main risk factors and at least two of the four main NCDs.
**Progress Indicator 5a**: Number of Member States of the Region of the Americas that have implemented measures to reduce affordability by increasing excise taxes and prices on tobacco products.

Achievement criteria:

- **Fully achieved**: if the country has total taxes more than 75% of the price of the most-sold brand of cigarettes.

- **Partially achieved**: if the country has total taxes from 51% up to 75% of the retail price of the most-sold brand of cigarettes.
Progress Indicator 5b: Number of Member States of the Region of the Americas that have implemented measures to eliminate exposure to second-hand tobacco smoke in all indoor workplaces, public places, and public transport.

Achievement criteria:

- **Fully achieved**: if all public places in the country are completely smoke-free (or at least 90% of the population covered by complete subnational smoke-free legislation).

- **Partially achieved**: if three to seven public places are completely smoke-free, or the law allows designated smoking rooms with strict technical requirements in five or more places.
**Progress Indicator 5c:** Number of Member States of the Region of the Americas that have implemented plain/standardized packaging and/or large graphic health warnings on all tobacco packages

![Map of Americas showing progress in packaging implementation](image)

**Number and percent of country per status category**

<table>
<thead>
<tr>
<th>Status Category</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fully achieved</td>
<td>16</td>
<td>(33%)</td>
</tr>
<tr>
<td>Partially achieved</td>
<td>6</td>
<td>(13%)</td>
</tr>
<tr>
<td>Not achieved</td>
<td>13</td>
<td>(27%)</td>
</tr>
<tr>
<td>Not applicable</td>
<td>13</td>
<td>(27%)</td>
</tr>
</tbody>
</table>

**Achievement criteria:**

- **Fully achieved:** if the country has plain/standardized packaging and/or large graphic health warnings, defined as covering on average at least 50% of the front and back of the package with all appropriate characteristics as detailed above.

- **Partially achieved:** if there are medium-size warnings, defined as covering on average between 30% and 49% of the front and back of the package with some or all appropriate characteristics, or that have large warnings that are missing some appropriate characteristics.
Progress Indicator 5d: Number of Member States of the Region of the Americas that have enacted and enforced comprehensive bans on tobacco advertising, promotion, and sponsorship

Achievement criteria:

- **Fully achieved**: if the country has a ban on all forms of direct and indirect advertising.
- **Partially achieved**: if the country has a ban on national TV, radio, and print media, but not on all other forms of direct and/or indirect advertising.
**Progress Indicator 5e:** Number of Member States of the Region of the Americas that have implemented effective mass media campaigns that educate the public about the harms of smoking/tobacco use and second-hand smoke

**Achievement criteria:**

- **Fully achieved:** if the country has a ban on all forms of direct and indirect advertising.

- **Partially achieved:** if the country has a ban on national TV, radio, and print media, but not on all other forms of direct and/or indirect advertising.
Progress Indicator 6a: Number of Member States of the Region of the Americas that have enacted and enforced restrictions on the physical availability of retailed alcohol (via reduced hours of sale)

Achievement criteria:

- **Fully achieved if:**
  
  a. a licensing system or monopoly exists on retail sales of beer, wine, and spirits;
  
  b. restrictions exist for on- and off-premise sales of beer, wine, and spirits regarding hours and locations of sales and restrictions exist for off-premise sales of beer, wine, and spirits regarding days of sales; and
  
  c. legal age limits for being sold and served alcoholic beverages are 18 years or above for beer, wine, and spirits.

- **Partially achieved:** if there are any, but not all, positive responses to the three indicators above.
**Progress Indicator 6b:** Number of Member States of the Region of the Americas that have enacted and enforced bans or comprehensive restrictions on exposure to alcohol advertising (across multiple types of media)

![Map showing country achievement levels](image)

**Achievement criteria:**

▶ **Fully achieved if:**

  a. restrictions exist on alcohol advertising for beer, wine, and spirits through all channels; and  

  b. a detection system exists for infringements on marketing restrictions.

▶ **Partially achieved:** if there are restrictions on at least public service/national TV, national radio, and billboards but no detection system exists for infringements.
Progress Indicator 6c: Number of Member States of the Region of the Americas that have increased excise taxes on alcoholic beverages

Achievement criteria:

► **Fully achieved if:**

  a. excise tax on all alcoholic beverages (beer, wine, and spirits) is implemented;

  b. there are no tax incentives or rebates for production of other alcoholic beverages; and

  c. adjustment of the level of taxation for inflation for beer, wine, and spirits is implemented.

► **Partially achieved:** if there is an excise tax on alcoholic beverages as specified above.
Progress Indicator 7a: Number of Member States and Territories of the Region of the Americas that have adopted national policies to reduce population salt/sodium consumption

Achievement criteria:

- **Fully achieved**: if the country responds “Yes” to the question “Is your country implementing any policies to reduce population salt consumption?” and to the subquestions “Are these targeted at: product reformulation by industry across the food supply; regulation of salt content of food; public awareness programme; nutrition labeling?” (must have “Yes” to product reformulation by industry across the food supply and/or regulation of salt content of food, and “Yes” to public awareness programme and nutrition labeling”). The country must also provide the needed supporting documentation.

- **Partially achieved**: if the country responds “Yes” to the question “Is your country implementing any policies to reduce population salt consumption?”, and “Yes” to at least one of the four subquestions “Are these targeted at: product reformulation by industry across the food supply; regulation of salt content of food; public awareness programme; nutrition labeling?”
Progress Indicator 7b: Number of Member States and Territories of the Region of the Americas that adopted national policies that limit saturated fatty acids and virtually eliminate industrially produced trans-fatty acids in the food supply

Achievement criteria:

- **Fully achieved**: if the country responds “Yes” to the question “Is your country implementing any national policies that limit saturated fatty acids and virtually eliminate industrially produced trans-fats (i.e., partially hydrogenated vegetable oils) in the food supply?” and provides the needed supporting documentation.
Progress Indicator 7c: Number of Member States and Territories of the Region of the Americas that have implemented the WHO set of recommendations on marketing of foods and non-alcoholic beverages to children

Achievement criteria:

- **Fully achieved**: if the country responds “Yes” to the question “Is your country implementing any policies to reduce the impact on children of marketing of foods and non-alcoholic beverages high in saturated fats, trans-fatty acids, free sugars, or salt?” and provides the needed supporting documentation.
**Progress Indicator 7d:** Number of Member States of the Region of the Americas that have legislation/regulations fully implementing the International Code of Marketing of Breast-milk Substitutes

<table>
<thead>
<tr>
<th>Status Category</th>
<th>Country Count</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fully achieved</td>
<td>8</td>
<td>17%</td>
</tr>
<tr>
<td>Partially achieved</td>
<td>13</td>
<td>27%</td>
</tr>
<tr>
<td>Not achieved</td>
<td>14</td>
<td>29%</td>
</tr>
<tr>
<td>Not applicable</td>
<td>13</td>
<td>27%</td>
</tr>
</tbody>
</table>

**Achievement criteria:**

- **Fully achieved:** if the country is assessed as having national legal measures categorized as “full provisions in the law,” whereby countries have enacted legislation or adopted regulations, decrees or other legally binding measures encompassing all or nearly all provisions of the Code and subsequent WHA resolutions.

- **Partially achieved:** if the country is assessed as having national legal measures categorized as “many provisions in law” or “few provisions in the law,” whereby countries have enacted legislation or adopted regulations, decrees, or other legally binding measures encompassing many or few provisions of the Code and subsequent WHA resolutions.
**Progress Indicator 8:** Number of Member States and Territories of the Region of the Americas that have implemented at least one recent national public awareness program and motivational communication for physical activity, including mass media campaigns for physical activity behavioral change.

<table>
<thead>
<tr>
<th>Country per status category</th>
<th>Number and percent of</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Fully achieved</td>
<td>28 (58%)</td>
<td></td>
</tr>
<tr>
<td>Not achieved</td>
<td>17 (35%)</td>
<td></td>
</tr>
<tr>
<td>Not applicable</td>
<td>3 (6%)</td>
<td></td>
</tr>
</tbody>
</table>

**Achievement criteria:**

- **Fully achieved:** If the country responds “Yes” to the following question: “Has your country implemented any national public awareness program on physical activity within the past five years?” and provides the needed supporting documentation.
Progress Indicator 9: Number of Member States and Territories of the Region of the Americas that have evidence-based national guidelines/protocols/standards for the management of major NCDs through a primary care approach, recognized/approved by the government or competent authorities.

Achievement criteria:

- **Fully achieved**: if national guidelines/protocols/standards exist for all four NCDs (cardiovascular diseases, diabetes, cancer, and chronic respiratory diseases), and the country provides the needed supporting documentation.

- **Partially achieved**: if the country has guidelines/protocols/standards for at least two of the four NCDs (cardiovascular diseases, diabetes, cancer, and chronic respiratory diseases), but not for all four.
**Progress Indicator 10:** Number of Member States and Territories of the Region of the Americas that have the provision of drug therapy, including glycemic control, and counseling for eligible persons at high risk to prevent heart attacks and strokes, with emphasis on the primary care level.

Achievement criteria:

- **Fully achieved:** if the country reports that more than 50% of primary health care facilities are offering cardiovascular risk stratification for the management of patients at high risk for heart attack and stroke and that all drugs listed above were generally available in the primary care facilities of the public health sector.

- **Partially achieved:** if the country reports that between 25% to 50% of primary health care facilities offer cardiovascular risk stratification for the management of patients at high risk for heart attack and stroke, and that all of the drugs listed above were generally available in the primary care facilities of the public health sector.
DISCUSSION

Public health infrastructure, partnerships, and multisectoral collaboration for NCDs and their risk factors

Most (79.2%) of the responding countries reported having a unit, branch, or department responsible for NCDs; nevertheless, for the majority of respondents, these units are dispersed throughout the ministry of health and do not have control or manage all the activities. Additionally, some countries reported having problems answering this part of the questionnaire because even when the staff is full-time, there are some staff who are responsible for more than just NCD activities.

Insufficient funding has been allocated by governments for capacity-building to address NCDs and even less funding is available for palliative care. This is particularly important because countries need a budget that allows them to strengthen their systems, particularly for addressing NCDs.

Notably, 85% of the countries have a budget for surveillance, monitoring, and evaluation; however, less than 30% of the countries have surveys for the main NCD risk factors that are recent (implemented in the last 5 years), representative (national), and periodic (implemented every 3–5 years). This limitation holds true for all the surveys for both adolescents and adults.

Regarding fiscal interventions, it is important to mention that the majority of countries reported having alcohol and tobacco taxes; though that analysis was not included in this report given that other tools collect more precise information for these items (Global Information System on Alcohol and Health, or GISAH, for alcohol and the WHO Global Tobacco Control Report, or GTCR, for tobacco). In terms of other taxable items asked in the CCS, less than half of the countries reported having a fiscal intervention for sugar-sweetened beverages, foods high in fat, sugar or salt, subsidies for healthy foods, and
incentives to promote physical activity. Past experience in tobacco and alcohol taxation shows that implementing fiscal interventions reduces consumption and, thus, helps prevent NCDs. It is important to take advantage of this experience and establish legislation to reinforce the implementation of taxes in the mentioned items. Addressing NCDs must be a joint effort by more areas than just the health sector; it needs to be a multidisciplinary intervention. As such, it is imperative that countries take the lead in forming (or re-activating in some cases) multisectoral commissions to support and generate the necessary actions to increase the capacity of countries to assess NCDs.

**Status of the NCD-relevant policies, strategies, and action plans**

For governments to implement all the actions needed to control and manage NCDs and their risk factors, they need political support. Only with such support will they have a guarantee of funding to ensure continuity of efforts. According to the CCS responses, less than three-quarters of the countries include NCDs in outcomes or outputs or their national development agendas. Even if more than 80% of countries address NCDs in their national health plans, it is still necessary to include NCD management at the highest governmental levels.

About 60% of the countries have an operational integrated national policy, strategy, or action plan that includes lines of action for addressing the four major NCDs and their main risk factors. Nevertheless, 25% of the countries still do not have an integrated national policy for NCDs. It is important for governments to develop, update, or finish their integrated national policies, strategies, or action plans; less than 40% of countries have specific policies or plans (except policies to decrease tobacco use, for which 52% have a policy, strategy, or action plan). Only five countries have an individual plan for each of the four major NCDs and their main risk factors.

The consumption of salt/sodium is a risk for developing or worsening hypertension and other cardiovascular diseases. However, only 29% of survey respondents have a specific policy or action plan to support the reduction of salt/sodium consumption. Countries should have policies or action plans to allow for intervention in these risk factors, which are as important as the four other major risk factors.

**Health information systems, monitoring, surveillance, and surveys for NCDs and their risk factors**

Although almost all the countries reported having a mortality system, only 22 countries have a system that has usable data from the last 5 years and data that have been reported to WHO, according to the Progress Indicator 2 of the Progress Monitor 2017.

Some 71% of the countries have a cancer registry, but only half of these countries have a population-based registry. It is essential for the countries to have a cancer registry that accurately represents the status of cancer in the population to ensure sufficient data quality to be able to compare the data both regionally and globally. Similarly, less than 30% of the countries reported having a diabetes registry. It is imperative for countries to improve and extend their registries to collect quality data for well-informed decision-making.
Regarding the population-based surveys, more than 70% of the countries have implemented surveys for alcohol consumption, tobacco use, fruit and vegetable consumption, overweight and obesity, physical inactivity, and tobacco for both adolescents and adults, and blood glucose, blood pressure, and total cholesterol for adults. For salt/sodium consumption, less than half of the countries have measured this item in their surveys for adults. Nevertheless, when an achievement criterion is applied, less than 30% of the countries have recent surveys (less than 5 years), representative (national level), and periodic (at least every 3–5 years).

The description above means that currently the data collected through population-based surveys is not conducted periodically and systematically. One challenge found is that for many governments their budget does not state periodicity to implement surveys, resulting in a lack of sustainability for this surveillance activity. It is imperative that countries dedicate funding for scheduled surveys allocated in their national financial plans to have quality data in a periodic, systematic, and standardized way. Without reliable data, countries cannot dependably use the information for decision-making.

**Capacity for NCD early detection, treatment, and care within the health system**

To address NCDs, countries need quality and reliable data obtained through the strengthening of their capacity building, the establishment of multisectoral commissions, the development of a national NCD integrated strategy or plan, and the strengthening of the surveillance and vital information systems. Countries must also have instruments available for the prevention, screening, early detection, diagnosis, and treatment of NCDs.

The percentage of countries that reported having evidence-based national guidelines, protocols, and standards for the management of NCDs is >50%; the most frequently available guidelines are for diabetes (75%), followed by CVDs (60%), cancer (56%), and chronic respiratory diseases (50%). However, not all countries use these guidelines in at least 50% of the public health facilities. It is essential that the countries utilize the guidelines in all of their health facilities (both public and private) to have standardized and adequate management of NCDs.

Regarding basic technologies for the detection and management of NCDs, the most widely available instruments are more available in the private sector than in the public sector (except for blood pressure and height measurement equipment, which are more available in the public sector than in the private sector).
The results of the Country Capacity Survey 2017 suggest that countries and territories of the Americas should implement the following actions to strengthen their capacities to address the NCDs and their risk factors:

1. Improve the capacity on human resources and establish a unit, branch, or department within the national system with responsibility for NCDs and their risk factors.

2. Develop or strengthen the legal framework to implement the fiscal interventions according to the WHO Framework Convention on Tobacco Control (FCTC), Global Information System on Alcohol and Health (GISAH), in addition to intervention for sugar-sweetened beverages and foods high in fat, sugar, or salt.

3. Establish national targets and indicators related to the nine voluntary targets of the WHO Global Monitoring Framework. Also, it is important to promote the formation of multisectoral commissions to support the multidisciplinary work needed to effectively address NCDs.

4. Develop or update a national integrated NCD policy, strategy, or action plan that includes at least the four main NCDs (cardiovascular diseases, diabetes, cancer, and chronic respiratory diseases) and their main risk factors (tobacco use, alcohol consumption, physical activity, overweight and obesity, and unhealthy diet).

5. Promote the development of policies and strategies to regulate marketing to children of foods and non-alcoholic beverages high in saturated fats, trans-fat acids, free sugars, or salt.
6. Enhance the national surveillance capacity to produce quality data on NCDs and their risk factors by establishing a system that collects data in a systematic, periodic, and standardized manner.

7. Reinforce the civil and vital registration systems for reporting quality mortality data and strengthen the capacity-building for cancer and diabetes registration.

8. Develop or update evidence-based national guidelines or protocols for the prevention, diagnosis, treatment, and referral of NCDs.

9. Extend and reinforce national screening programs for the detection of breast, cervical, and colon cancer.

10. Improve the availability in primary care facilities of essential medicines (insulin, aspirin, metformin, thiazide diuretics, ACE inhibitors, CC blockers, beta blockers, statins, and sulfonylureas), as well as the availability of essential test and procedures for the early detection, diagnosis, and monitoring of NCDs.

11. Bolster the mechanism to gain and utilize funds to guarantee palliative care in public health facilities.
REFERENCES


## ANNEXES

### Annex 1. Monitoring Indicators Framework

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>1</td>
<td>Number of countries with at least one operational multisectoral national policy, strategy, or action plan that integrates several NCDs and shared risk factors in conformity with the global/regional NCD action plans 2013–2020</td>
</tr>
<tr>
<td>2</td>
<td>Number of countries that have operational NCD unit(s)/branch(es)/department(s) within the Ministry of Health, or equivalent</td>
</tr>
<tr>
<td>3a</td>
<td>Number of countries with an operational policy, strategy or action plan to reduce the harmful use of alcohol, as appropriate, within the national context</td>
</tr>
<tr>
<td>3b</td>
<td>Number of countries with an operational policy, strategy or action plan to reduce physical inactivity and promote physical activity</td>
</tr>
<tr>
<td>3c</td>
<td>Number of countries with an operational policy, strategy or action plan, in line with the WHO Framework Convention on Tobacco Control, to reduce the burden of tobacco use</td>
</tr>
<tr>
<td>3d</td>
<td>Number of countries with an operational policy, strategy or action plan to reduce unhealthy diet and promote healthy diets</td>
</tr>
<tr>
<td>4</td>
<td>Number of countries that have evidence-based national guidelines/protocols/standards for the management of major NCD through a primary care approach recognized/approved by the government or competent authorities</td>
</tr>
<tr>
<td>5</td>
<td>Number of countries that have a national operational policy and plan on NCD-related research, including community-based research and evaluation of the impact of interventions and policies</td>
</tr>
<tr>
<td>6</td>
<td>Number of countries with NCD surveillance and monitoring systems in place to enable reporting against the nine voluntary global NCD targets</td>
</tr>
</tbody>
</table>
Noncommunicable diseases (NCDs) are the leading cause of death in the Americas, accounting for 81% of all deaths in the Region in 2016. Of the estimated 5.5 million NCD-related annual deaths, 39% of these are premature deaths (occurring between the ages of 30–70) and are largely a result of the four main NCDs: cardiovascular diseases, diabetes, cancers, and chronic respiratory diseases. NCDs and related premature deaths can be significantly reduced through government policies that prevent, treat, and control these diseases.

To monitor countries' capacities to address NCDs, including progress and trends over time, various tools are implemented, including the World Health Organization Country Capacity Survey (WHO–CCS). The survey captures information related to NCD infrastructure, policies, surveillance, and health systems. Conducted in 2001, 2005, 2010, 2013, and in 2017, this 6th edition of the CCS incorporates new validation processes to verify country responses through the submission of official policy documents and a data comparison to global health databases. These protocols were introduced to enhance data quality and provide an accurate reflection of the country capacity to combat NCDs. It is important to recognize that for the first time in the Americas, 100% of the Member States (35 countries) and 76% of the Associate Members and Participating States (13 of 17 countries) completed the survey. As such, the 2017 CCS provides a comprehensive assessment of the entire Region and demonstrates the political commitment of the Americas to reduce the burden of NCDs.

This report presents results of the 2017 CCS and offers an updated review of progress in the Region of the Americas including gaps and recommendations for improvement to strengthen countries' capacities to address NCDs and their risk factors. While advancements have been made, without an acceleration of commitments and significant investments, it is anticipated that some countries in the Americas will not meet their global targets.