PAHO STRATEGIC PLAN 2020-2025

"Equity at the Heart of Health"

Compendium of Outcome Indicators

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Pan American Health Organization

World Health Organization
REGIONAL OFFICE FOR THE Americas

Contents

INTRODUCTION

This compendium includes the technical specifications for the outcome indicators of the Strategic Plan (SP) of the Pan American Health Organization (PAHO) 2020-2025. The compendium provides definitions and measurement criteria for all indicators, in order to facilitate a systematic approach to monitoring and reporting on implementation of the Strategic Plan.

The compendium was prepared by the Pan American Sanitary Bureau (PASB), in collaboration with the Strategic Plan Advisory Group (SPAG) for the SP 2020-2025. This group was established by the 162nd PAHO Executive Committee. The SPAG had representation 21 Member States from all PAHO subregions: the Caribbean (Antigua and Barbuda, Bahamas, Dominica, Guyana, Saint Lucia, and Trinidad and Tobago); Central America (Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, and Panama); North America (Canada, Mexico, and the United States of America); and South America (Argentina, Bolivia, Brazil, Ecuador, Paraguay, and Venezuela). Panama was appointed Chair, and the Bahamas, Vice Chair.

The indicators below are subject to further revisions by the PASB in order to maintain alignment with both Sustainable Development Goals (SDG) indicators and Impact Framework indicators of the 13th General Programme of Work 2019-2023 of the World Health Organization (WHO). The PASB may also further clarify or refine the specifications for the measurement of the indicators, as needed. Baselines and targets are subject to validation with updated information from Member States and the PASB after the final assessment of the PAHO Strategic Plan 2014-2019.

The latest version of the compendium will be posted on the PAHO website under “About PAHO”, accessible here.

Code and title of the outcome	**Outcome 1:** Increased response capacity of integrated health services networks (IHSNs), with emphasis on the first level of care, to improve access to comprehensive, quality health services that are equitable, gender- and culturally sensitive, rights-based, and people-, family-, and community-centered, toward universal health
Code and title of the indicator	**Outcome indicator 1.a:** Number of countries and territories that show a reduction of at least 10% in hospitalizations for ambulatory care sensitive conditions
Definition of the indicator	This indicator expresses the number of countries and territories that have reduced hospitalizations for the following 20 ambulatory care sensitive conditions, expressed as a percentage of the total number of hospital discharges: 1. Vaccine-preventable diseases 2. Avoidable conditions including rheumatic fever, syphilis, tuberculosis, and pulmonary tuberculosis 3. Infectious gastroenteritis and complications 4. Anemia 5. Nutritional deficiencies 6. Ear, nose, and throat infections 7. Bacterial pneumonia 8. Asthma 9. Lower airway diseases 10. Hypertension 11. Angina pectoris 12. Heart failure 13. Cerebrovascular diseases 14. Diabetes mellitus 15. Epilepsy 16. Kidney and urinary tract infections 17. Infection of skin and subcutaneous tissue 18. Inflammatory diseases of female pelvic organs 19. Gastrointestinal ulcer 20. Diseases related to pregnancy, childbirth, and puerperium **Baseline 2019:** 8 **Target 2025:** 20
Purpose of the indicator	This is a proxy indicator. Ambulatory care sensitive conditions (ACSC) are conditions for which the first level of care, if provided with adequate response capacity, has the potential to prevent unnecessary hospitalizations. Accordingly, hospitalizations for ACSC have proven useful as an indirect measure of the functioning of the first level of care. A people- and community-centered model of care requires increased response capacity at the first level in order to adequately address health promotion, prevention, and timely management of health conditions. A robust first level can result in a reduction of preventable and unnecessary hospitalizations and can also provide rehabilitative and palliative services closer to the communities. The ACSC indicator evaluates response capacity at the first level in terms of

<table>
<tr><td></td><td>avoidable hospitalizations, under the logic that hospital admissions for conditions such as asthma, diabetes, or hypertension, for example, can be avoided or reduced with better health promotion programs and specific interventions for prevention and timely access to the first level of care. The assessment of ACSC may provide evidence of the technical quality, effectiveness, and continuity of care, and in this way inform the process of decision making about the configuration of integrated health services networks. It should be noted that the long-term sustainability of health systems is enhanced if the cost savings generated by reducing hospitalizations are transferred as incentives to strengthen the first level of care, creating a virtuous circle in which the combination of fewer hospitalizations, lower aggregate costs for hospitalization, and better-quality first-level care increases the efficiency of health services and the quality of health outcomes.</td></tr>
<tr><td>Technical note</td><td>The percentage of hospitalizations for ambulatory care sensitive conditions is calculated as follows:

(ACSC hospital discharges / total hospital discharges) * 100

The following conditions, designated by ICD-10 code, are the main ACSC. Their use as indicators is backed by extensive scientific evidence in the international literature.

<table>
<tr><td>No.</td><td>Pathology</td><td>Classification under ICD-10</td></tr>
<tr><td>1</td><td>Vaccine-preventable diseases</td><td>A33-A37, A95, B16, B05-B06, B26, G00.0, A17.0, A19</td></tr>
<tr><td>2</td><td>Avoidable conditions including rheumatic fever, syphilis, tuberculosis, and pulmonary tuberculosis</td><td>A15-A16, A18, A17.1-A17.9, I00-I02, A51-A53, B50-B54, B77</td></tr>
<tr><td>3</td><td>Infectious gastroenteritis and complications</td><td>E86, A00-A09</td></tr>
<tr><td>4</td><td>Anemia</td><td>D50</td></tr>
<tr><td>5</td><td>Nutritional deficiencies</td><td>E40-E46, E50-E64</td></tr>
<tr><td>6</td><td>Ear, nose, and throat infections</td><td>H66, J00-J03, J06, J31</td></tr>
<tr><td>7</td><td>Bacterial pneumonia</td><td>J13-J14, J15.3-J15.4, J15.8-J15.9, J18.1</td></tr>
<tr><td>8</td><td>Asthma</td><td>J45-J46</td></tr>
<tr><td>9</td><td>Lower airway diseases</td><td>J20, J21, J40-J44, J47</td></tr>
<tr><td>10</td><td>Hypertension</td><td>I10-I11</td></tr>
<tr><td>11</td><td>Congestive heart failure</td><td>I20</td></tr>
<tr><td>12</td><td>Heart failure</td><td>I50, J81</td></tr>
<tr><td>13</td><td>Cerebrovascular diseases</td><td>I63-I67, I69, G45-G46</td></tr>
<tr><td>14</td><td>Diabetes mellitus</td><td>E10-E14</td></tr>
<tr><td>15</td><td>Epilepsy</td><td>G40-G41</td></tr>
<tr><td>16</td><td>Kidney and urinary tract infections</td><td>N10-N12, N30, N34, N39</td></tr>
<tr><td>17</td><td>Infection of skin and subcutaneous tissue</td><td>A46, L01-L04, L08</td></tr>
<tr><td>18</td><td>Inflammatory diseases of female pelvic organs</td><td>N70-N73, N75-N76</td></tr>
</table></td></tr>
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	19	Gastrointestinal ulcer	K25-K28, K92.0, K92.1, K92.2
	20	Diseases related to pregnancy, childbirth, and puerperium	O23, A50, P35.0
Type of indicator	Relative		
Measurement units	Number of countries and territories		
Frequency of measurement	Every 2 years, at the end of the year		
PASB unit	Health Systems and Services / Health Services and Access (HSS/HS)		
Data source	Hospital discharges, statistical departments of ministries of health, and efficiency studies of health services.		
Limitations	The results of this indicator should be interpreted in relation to the situation in each country, because the demand for hospitalizations in some locations may be related to the availability of resources and the deficiencies of the health system. Therefore, in evaluating the indicator, it is important to consider other issues affecting the response capacity of the health service network.		
References	1. Alfradique ME, Bonolo PF, Dourado I, et al. Ambulatory care sensitive hospitalizations: elaboration of Brazilian list as a tool for measuring health system performance. Cad Saude Pública 2009;25(6):1337-49. 2. Aparicio Llanos A. Serie sobre hospitalizaciones evitables y fortalecimiento de la atención primaria en salud: el caso de Costa Rica. Washington, DC: Inter-American Development Bank; 2012. Available from: http://publications.iadb.org/handle/11319/5735 3. Arrieta A. Serie sobre hospitalizaciones evitables y fortalecimiento de la atención primaria en salud: el caso de Perú. Washington, DC: Inter-American Development Bank; December 11, 2012. Available from: http://publications.iadb.org/handle/11319/5734 4. Arrieta, Alejandro, and Ariadna García Prado. Series of avoidable hospitalizations and strengthening primary health care: the case of Chile. Washington, DC: Inter-American Development Bank; December 11, 2012. Available from: http://publications.iadb.org/handle/11319/5733 5. Caminal J, Sánchez E, Morales M, Peiró R, Márquez S. Avances en España en la investigación con el indicador "hospitalización por enfermedades sensibles a cuidados de atención primaria." Rev Esp Salud Pública 2002;76(3):189-96. 6. Caminal J, Casanova C. Primary care evaluation and hospitalization due to ambulatory care sensitive conditions. Conceptual 2003;31(1):61-5. 7. Caminal J, Mundet X, Ponsa JA, Sanchez E, Casanova C. Las hospitalizaciones por ambulatory care sensitive conditions: selección del listado de códigos de diagnóstico válidos para España. Framework. Aten Primaria 2003;31(1):6-14. 8. Caminal J, Starfield B, Sánchez E, Hermosilla E, Martín M. La atención primaria de salud y las hospitalizaciones por Ambulatory Care Sensitive Conditions. Rev Clin Esp 2001;201(9):501-7.		

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Linkage	• SHAA2030 target 1.5 • SP14-19 outcome indicator 4.2.1, adapted

Code and title of the outcome	**Outcome 1:** Increased response capacity of integrated health services networks (IHSNs), with emphasis on the first level of care, to improve access to comprehensive, quality health services[a] that are equitable, gender- and culturally sensitive, rights-based, and people-, family-, and community-centered, toward universal health
Code and title of the indicator	**Outcome indicator 1.b:** Number of countries and territories that have implemented strategies to strengthen the response capacity of the first level of care
Definition of the indicator	This indicator counts the number of countries and territories that have demonstrated advances in strengthening the response capacity of the first level of care by implementing all of the following eight basic strategic lines: 1. Adopt a model of care centered on people, families, and communities. 2. Assign basic health teams consisting of at least a doctor, a nurse, and a health promotion worker or health technician, based on criteria of equity, geographic accessibility, epidemiological profile, and health priorities. 3. Define goals and targets for the first level of care based on the needs of the population, the epidemiological profile, and health priorities in terms of coverage, equity, and people in conditions of vulnerability. 4. Establish the plan of benefits or portfolio of comprehensive health services to be provided by the first level of care (for people, families, and communities) according to the needs of the population, epidemiological profile, and health priorities. 5. Establish sectoral, intersectoral, and community plans for the first level of care directed toward health promotion, intervening social determinants, and health risk factors. 6. Maintain knowledge management platforms and programs for the development of managerial, clinical, and interdisciplinary competencies of human resources at the first level of care, based on the needs of the population, epidemiological profile, and health priorities. 7. Implement technological, communication, and information platforms at the first level of care that facilitate: *a)* coordination, communication, and referral systems; *b)* information about patients, families, and communities; *c)* programming and coordination of specialized diagnostic and treatment services and of the dispensing and delivery of medications; *d)* coordination and logistics of medicines and supplies; and *e)* implementation of public health functions (such as surveillance and the analysis of inequities and access barriers). 8. Establish mechanisms and processes that facilitate: *a)* empowerment of people regarding their health and self-care; *b)* social participation in the planning, management, monitoring, and evaluation of health plans and interventions; *c)* health promotion and surveillance, prevention, and control of diseases at the community level; *d)* social control and accountability.

[a] Comprehensive, appropriate, timely, quality health services are actions directed at populations and/or individuals that are culturally, ethnically, and linguistically appropriate, with a gender approach, and that take into account differentiated needs in order to promote health, prevent diseases, provide care for disease (diagnosis, treatment, palliative care, and rehabilitation), and offer the necessary short-, medium-, and long-term care.

	Baseline 2019: N/A **Target 2025:** 20
Purpose of the indicator	The first level of care is expected to be the articulating node of the health services network and the point of first contact with the health system for individuals, families, and communities. It provides comprehensive care to respond to most of the population's health needs and demands over time and throughout the life course. The configuration of the health team at the first level and its response capacity can vary according to the health situation and the social determinants and demographic characteristics of the territory and population assigned. The Strategy for Universal Access to Health and Universal Health Coverage defines response capacity as "the ability of health services to provide health care responses adapted to people's needs and demands, in line with current scientific and technical knowledge, resulting in improved health." The response capacity of the first level of care involves: *a)* compliance with the functions of the first level and with the set of actions and services defined as necessary to meet the health needs of the population; *b)* the ability to respond effectively to the demand for care, and the effect produced by actions at the first level across the continuum of care in a health services network; and *c)* compliance with goals that contribute to the achievement of desired results in relation to the health status of the population. Experience in the Region has shown that a great variety of strategic actions can improve the response capacity of the first level of care. These include: *a)* provision of human resources that are adequate in quantity, distribution, and required competencies; *b)* provision of adequate technological and financial resources; *c)* actions to ensure effective and timely availability of comprehensive health services that respond to the demands of the population; *d)* mechanisms to facilitate sectoral and intersectoral action; *e)* knowledge of the characteristics and needs of the population, and establishment of priorities and goals based on those characteristics and needs; *f)* empowerment of people and communities to participate in the protection and promotion of health; *g)* mechanisms and instruments to facilitate coordination, communication, information for health, and logistics of supplies and resources.
Technical note	This indicator is calculated by counting the number of countries and territories that have strengthened the first level of care by implementing interventions in all eight priority areas listed above. A self-assessment instrument, including means of verification, is under development by PAHO and will be made available to countries at the end of 2019. This tool will enable countries to establish baselines and targets for their plans to strengthen the first level of care, and to monitor implementation of those plans.
Type of indicator	Absolute
Measurement units	Number of countries and territories
Frequency of measurement	Every 2 years, at the end of the year
PASB unit	Health Systems and Services / Health Services and Access (HSS/HS)

Data source	Surveys completed by stakeholders in the countries and territories; administrative data provided by national authorities.
Limitations	The data are based on self-assessment surveys and may not include all the information needed to demonstrate that the first level of care has been effectively strengthened.
References	1. Caminal A, Martin-Zurro A. Sobre la contribución de la atención primaria a la capacidad resolutiva del sistema de salud y su medición. Atención Primaria 2005:456-461. 2. Pan American Health Organization. Renewing primary health care in the Americas: a position paper of the Pan American Health Organization/World Health Organization. Washington, DC: PAHO; 2007. Available from: http://iris.paho.org/xmlui/handle/123456789/31083 3. Pan American Health Organization. Integrated health service delivery networks: concepts, policy options and a road map for implementation in the Americas. Washington, DC: PAHO; 2010. Available from: http://iris.paho.org/xmlui/handle/123456789/31216 4. Pan American Health Organization. Strategy for universal access to health and universal health coverage. 53rd Directing Council of PAHO, 66th Session of the Regional Committee of WHO for the Americas; 2014 Sep 29-Oct 3; Washington, DC. Washington, DC: PAHO; 2014 (Document CD53/5). 5. Pan American Health Organization. Fortaleciendo el primer nivel de atención: elementos para la cooperación técnica desde la OPS. Washington, DC: PAHO; 2019. 6. López P, et al. Procedimiento para medir la capacidad resolutiva de los equipos básicos de salud. Revista Cubana de Salud Pública 2014;40(4):249-262.
Linkage	• SDG 3, various targets • SHAA2030 target 1.6

Code and title of the outcome	**Outcome 2:** Healthier lives promoted through universal access to comprehensive, quality health services for all women, men, children, and adolescents in the Americas, focusing on groups in conditions of vulnerability
Code and title of the indicator	**Outcome Indicator 2.a:** Proportion of women of reproductive age (15-49 years) who have their need for family planning satisfied with modern methods
Definition of the indicator	This indicator measures the percentage of women of reproductive age (15-49 years) who want no (more) children or want to postpone the next pregnancy and who are currently using a modern contraceptive method. **Baseline 2019:** 60% **Target 2025:** 68%
Purpose of the indicator	This indicator parallels SDG indicator 3.7.1 under SDG target 3.7, which calls for "universal access to sexual and reproductive health-care services, including for family planning, information and education, and the integration of reproductive health into national strategies and programmes." It also responds to the Global Strategy for Women's, Children's and Adolescents' Health 2016-2030, target 8: "Ensure universal access to sexual and reproductive health-care services (including for family planning) and rights." The indicator is useful for assessing overall levels of coverage of family planning programs and services. Access to and use of an effective means of contraception helps enable women and their partners to exercise their rights to decide freely and responsibly the number and spacing of their children and to have the information and means to do so. Meeting demand for family planning with modern methods contributes to maternal and child health by preventing unintended pregnancies and closely spaced pregnancies, which are at higher risk for poor obstetrical outcomes. Satisfying family planning needs is also one of the most cost-effective investments to alleviate poverty and improve health.
Technical note	**Numerator:** Number of women of reproductive age (15-49 years) who are currently using, or whose sexual partner is currently using, at least one modern contraceptive method.* **Denominator:** Total demand for family planning, defined as the sum of contraceptive prevalence (any method) and the unmet need for family planning.** Estimates are with respect to women who are married or in a union. * Modern methods of contraception, as defined by WHO, include oral contraceptive pills, the implant, injectables, patch and vaginal ring, intrauterine device (IUD), female and male sterilization, male and female condoms, lactational amenorrhea method, emergency contraception pills, standard days method, basal body temperature method, two-day method, and symptom thermal method.

	** Contraceptive prevalence is the percentage of women who are currently using, or whose sexual partner is currently using, at least one method of contraception, regardless of the method used. Unmet need for family planning is defined as the percentage of women of reproductive age, either married or in a union, who want to stop or delay childbearing but are not using any method of contraception.
Type of indicator	Relative
Measurement units	Percentage
Frequency of measurement	Annual
PASB unit	Family, Health Promotion and Life Course / Latin American Center of Perinatology, Women and Reproductive Health (FPL/CLAP)
Data source	United Nations, Department of Economic and Social Affairs, Population Division, World Contraceptive Use dataset.
Limitations	• Differences in survey design and implementation, as well as differences in the way survey questionnaires are formulated and administered, can affect the comparability of the data. The most common differences relate to the range of contraceptive methods included and the characteristics (age, sex, marital or union status) of the persons for whom contraceptive prevalence is estimated (the base population). The time frame used to assess contraceptive prevalence can also vary. In most surveys there is no definition of what is meant by "currently using" a method of contraception. • Sampling variability can also be an issue, especially when measuring contraceptive prevalence for a specific subgroup (according to method, age group, level of educational attainment, place of residence, etc.) or when analyzing trends over time. • Strict comparison must be avoided between estimates based on different definitions.
References	1. Pan American Health Organization. Plan of Action for Women's, Children's and Adolescents' Health 2018-2030. 56th PAHO Directing Council, 70th Regional Committee of WHO for the Americas; 23-27 September 2018; Washington, DC: PAHO; 2018 (Document CD56/9). Available from: https://www.paho.org/hq/index.php?option=com_docman&view=download&alias=46461-cd56-8-e-poa-wca&category_slug=56-directing-council-english-9964&Itemid=270&lang=en 2. United Nations Statistics Division – Sustainable Development Goals. Proportion of women of reproductive age who have their needs for family planning satisfied by modern methods (3.7.1) 3. Pan American Health Organization. Compendium of Impact and Outcome Indicators-Strategic Plan 2014-2019. October 2014. Outcome indicator 3.1.1. Unmet needs for family planning. 4. United Nations. World Contraceptive Use 2018 (POP/DB/CP/Rev2017), United Nations Publication. 5. Alkema, LA and others (2013). National, regional, and global rates and trends in contraceptive prevalence and unmet need for family planning between 1990 and 2015:

	A systematic and comprehensive analysis. The Lancet, Volume 381, Issue 9878, pp. 1642-1652. See also web appendix with technical details.
Linkage	• SHAA2030 target 1.4 • SDG indicator 3.7.1 • GPW13 Impact Framework

Code and title of the outcome	**Outcome 2:** Healthier lives promoted through universal access to comprehensive, quality health services for all women, men, children, and adolescents in the Americas, focusing on groups in conditions of vulnerability
Code and title of the indicator	**Outcome Indicator 2.b:** Fertility rate in women 10-19 years of age (disaggregated by 10-14 and 15-19 years) in Latin America and the Caribbean
Definition of the indicator	This indicator measures the annual number of births to adolescent girls aged 10-14 and 15-19 years per 1,000 female adolescents in these age groups. This indicator used to be applied only to the group 15-19 years old, but SDG indicator 3.7.2 now calls for its measurement in the group 10-14 years old as well. **Baseline 2010-2015:** 66.5 births per 1,000 adolescent girls **Target 2025:** 59.9 births per 1,000 adolescent girls
Purpose of the indicator	The indicator shows progress in improving the sexual and reproductive health of adolescents in a country, territory, geographic area, or subgroup in a specific time period. It is an important indicator from the life course perspective, as adolescent pregnancy profoundly affects the health and development trajectories of the mother and her children. Teen pregnancy contributes to poor health outcomes and elevated risk of maternal and infant mortality and morbidity. Many girls who become pregnant are no longer in school, or are obliged to abandon school, which has a major long-term impact on their educational and employment opportunities. As a result, adolescent pregnancy contributes to the persistence of intergenerational cycles of poverty, exclusion, and poor health outcomes. This indicator parallels SDG indicator 3.7.2: "Adolescent birth rate (aged 10-14 years; aged 15-19 years) per 1,000 women in that age group." It is also an indicator of the Global Strategy for Women's, Children's and Adolescents' Health 2016-2030.
Technical note	The age-specific adolescent fertility rate is computed as a ratio. The numerator is the number of live births to female adolescents aged 10-14 years and 15-19 years during a period of time, and the denominator is the number of female adolescents of the same age during the same period, multiplied by 1,000. The numerator and the denominator are established differently when using civil registration data, survey data, and census data, as explained below. *Civil registration vital statistics:* The numerator is the registered number of live births to women aged 10-19 years during a given year, and the denominator is the estimated or enumerated population of women aged 10-19 years. *Survey data:* The numerator is the number of live births obtained from retrospective birth histories of the interviewed women who were 10-19 years of age at the time of the births during a reference period before the interview. The denominator is person-years lived between the ages of 10 and 19 years by the interviewed women during the same reference period. The reported observation year corresponds to the middle of the reference period. For some surveys without

	data on retrospective birth histories, computation of the adolescent birth rate is based on the date of last birth or the number of births in the 12 months preceding the survey. *Census data:* The indicator is computed based on the date of last birth or the number of births in the 12 months preceding the enumeration. The census provides both the numerator and the denominator for the rates. In some cases, the rates based on censuses are adjusted for underregistration based on indirect methods of estimation. Global and regional estimates are regularly calculated by the UN Population Division, based on population-weighted averages, and are usually expressed as rates for a given period (e.g., 2010-2015). Potential disaggregation categories to consider, for the purpose of revealing inequities, include place of residence, race/ethnicity, education level, and income level.
Type of indicator	Relative
Measurement units	Ratio
Frequency of measurement	Annual if using civil registration data; every 5 years if using UN Population Division estimates.
PASB unit	Family, Health Promotion and Life Course / Healthy Life Course (FPL/HL)
Data source	Country civil registries; estimates from the United Nations Department of Economic and Social Affairs, Population Division.
Limitations	• For civil registration data, rates may be affected by the completeness of birth registration, the treatment of infants who were born alive but died before registration or within the first 24 hours of life, the quality of the reported information relating to age of the mother, and the inclusion of births from previous periods. The population estimates may suffer from age misreporting and incomplete coverage. • For survey and census data, both the numerator and denominator come from the same population. The main limitations concern age misreporting, birth omissions, misreporting of the child's birth data, and sampling variability in the case of surveys.
References	1. United Nations Statistics Division – Sustainable Development Goals. Adolescent Birth Rate (3.7.2). 2. World Health Organization. Global Health Observatory - Indicator Metadata Registry – Adolescent Birth Rate. 3. Pan American Health Organization. Compendium of Impact and Outcome Indicators - Strategic Plan 2014-2019. October 2014. Outcome indicator 3.1.6 – Specific fertility rate in women 15-19 years of age. 4. United Nations. Handbook on the Collection of Fertility and Mortality Data, United Nations Publication, Sales No. E.03.XVII.11. Available from:

	https://unstats.un.org/unsd/demographic/standmeth/handbooks/Handbook_Fertility_Mortality.pdf
Linkage	• SDG indicator 3.7.2 • SHAA2030 target 1.4 • SP14-19 outcome indicator 3.1.6, adapted • Regional Plan of Action for Women's, Children's, and Adolescents' Health 2018-2030

Code and title of the outcome	**Outcome 2:** Healthier lives promoted through universal access to comprehensive, quality health services for all women, men, children, and adolescents in the Americas, focusing on groups in conditions of vulnerability
Code and title of the indicator	**Outcome Indicator 2.c:** Proportion of births attended at health facilities
Definition of the indicator	This indicator measures the percentage of births that take place in a hospital or other health facility ("institutional births" or "institutional deliveries"). **Baseline 2016:** 93.7% **Target 2025:** 95.6%
Purpose of the indicator	To reduce maternal and infant mortality, the optimal long-term objective is that all births take place in (or very near to) health facilities in which obstetric complications can be treated if and when they arise. This indicator seeks to identify women's access to health institutions for deliveries. It should be noted that giving birth in a health facility does not necessarily ensure high-quality care or a good obstetric outcome. This indicator does not capture information on availability of equipment or skilled health personnel to provide care during childbirth. Therefore, additional information may be needed on quality of care.
Technical note	**Numerator:** Number of births registered in health facilities* in a given area and year. **Denominator:** Expected number of live births in same area and year. The denominator is calculated by multiplying the total population of the area by the crude birth rate of the same area. The national statistics offices tend to base population projections on the results of their most recent census or recent surveys such as Demographic and Health Surveys (DHS). When possible, estimates for the specific geographic area should be used rather than applying the national crude birth rate to all regions. This indicator is expressed as a percentage for the Region but may also be calculated for a given area. * Health facilities are defined as places that provide health care. They include hospitals, clinics, outpatient care centers, and specialized care centers such as birthing centers. For the purpose of this indicator, the numerator will be calculated considering only births in health facilities that have the necessary resources available to provide safe maternal care.
Type of indicator	Relative
Measurement units	Percentage
Frequency of measurement	Annual

PASB unit	Family, Health Promotion and Life Course / Latin American Center of Perinatology, Women and Reproductive Health (FPL/CLAP)
Data source	Data are provided by the national health authority, based on data collected systematically by the national information system (epidemiology, surveillance, or statistical units, departments, or institutes), or obtained through surveys.
Limitations	• The main limitations are the reliability and timely availability of data. • This indicator measures access to health facilities, but it does not adequately capture women's access to quality care.
References	1. Pan American Health Organization. Health situation in the Americas: core indicators 2018. Washington, DC: PAHO; 2018. Available from: http://iris.paho.org/xmlui/handle/123456789/49511
Linkage	• SDG indicator 3.1.2 • SHAA2030 target 1.3 • PAHO Core Indicator

Code and title of the outcome	**Outcome 2:** Healthier lives promoted through universal access to comprehensive, quality health services for all women, men, children, and adolescents in the Americas, focusing on groups in conditions of vulnerability
Code and title of the indicator	**Outcome Indicator 2.d:** Proportion of births attended by skilled health personnel
Definition of the indicator	This indicator measures the proportion of births attended by skilled health personnel who provide care during childbirth (according to the WHO definition), regardless of the site where these births occurred, expressed as a percentage of the total number of live births in a specific year and country/territory. Skilled personnel include medical obstetricians, physicians with training in delivery care, university-trained midwives, and nurses with training in delivery care. They do not include traditional birth attendants, whether trained or not. **Baseline 2016:** 96.4% **Target 2025:** 98.3%
Purpose of the indicator	To reduce maternal and infant mortality, the optimal long-term objective is that all births be assisted by skilled birth personnel who can safely handle normal deliveries, high-risk pregnancies, and severe complications that may arise during childbirth.
Technical note	**Numerator:** Number of births assisted by skilled birth personnel in a given area and year. **Denominator:** Expected number of live births in the same area and year. The denominator is calculated by multiplying the total population of the area by the crude birth rate of the same area. The national statistics offices tend to base population projections on the results of their most recent census or recent surveys, such as Demographic and Health Surveys (DHS). When possible, estimates for the specific geographic area should be used rather than applying the national crude birth rate to all regions.
Type of indicator	Relative
Measurement units	Percentage
Frequency of measurement	Annual
PASB unit	• Family, Health Promotion and Life Course / Latin American Center of Perinatology, Women and Reproductive Health (FPL/CLAP) • Evidence and Intelligence for Action in Health / Health Analysis, Metrics and Evidence (EIH/HA)
Data source	Data are provided by the national health authority, based on data collected systematically by the national information system or obtained through surveys.
Limitations	• The indicator is one measure of a health system's capacity to provide adequate care during birth, a period of elevated mortality and morbidity risk for both mother and newborn. However, it is not the only one. In itself, this indicator may not adequately capture women's access to good-quality care, particularly when complications arise. To effectively reduce maternal deaths, skilled birth attendants should have the necessary equipment and adequate

	referral options. It is unthinkable that an isolated attendant without access to such resources, even a professional with excellent technical skills, will be able to routinely achieve excellent results in case of serious obstetric complications. • Standardization of the definition of skilled health personnel is sometimes difficult because of differences in training of personnel in different countries. Although efforts have been made to standardize the definitions of medical doctors, nurses, midwives, and auxiliary midwives used in most household surveys, there may still be differences in classifications that may make comparison between countries difficult. • Recall error is another potential source of bias in the data. In household surveys, the respondent is asked about each live birth for a period up to five years before the interview. The respondent may or may not know or remember the qualifications of the delivery attendant. • Most countries use health facility data for reporting. However, these data may overestimate the proportion of deliveries attended by skilled health personnel because the denominator may not capture all women who deliver outside health facilities.
References	1. Economic Commission for Latin America and the Caribbean. Propuesta de fichas de metadatos de los indicadores para el seguimiento regional del Consenso de Montevideo sobre Población y Desarrollo. Grupo de trabajo ad hoc encargado de elaborar una propuesta de indicadores para el seguimiento regional del Consenso de Montevideo sobre Población y Desarrollo, 7 August 2017. Available from: https://repositorio.cepal.org/bitstream/handle/11362/42335/S1700724_es.pdf?sequence=1&isAllowed=y
Linkage	• SDG indicator 3.1.2 • SHAA2030 target 1.3 • SP14-19 outcome indicator 3.1.2, adapted • GPW13 Impact Framework

Code and title of the outcome	**Outcome 2:** Healthier lives promoted through universal access to comprehensive, quality health services for all women, men, children, and adolescents in the Americas, focusing on groups in conditions of vulnerability
Code and title of the indicator	**Outcome Indicator 2.e:** Number of countries and territories with capacity to implement and monitor national policies or strategies to improve the health and development of young children that are informed by the WHO/UNICEF framework Nurturing Care for Early Childhood Development
Definition of the indicator	This indicator counts the number of countries and territories with a national policy or strategy to improve the health and development of young children through the implementation and monitoring of multisector strategic actions consistent with those recommended in the WHO/UNICEF document Nurturing Care for Early Childhood Development: A Framework for Helping Children Survive and Thrive to Transform Health and Human Potential. This framework, informed by the experiences of countries in the Region, was presented to Member States during the World Health Assembly in May 2018. **Baseline 2019:** 19 **Target 2025:** 23
Purpose of the indicator	According to the WHO/UNICEF Nurturing Care Framework, a child's developmental status is an outcome achieved as a result of various context-specific inputs: adequate nutrition, responsive caregiving, security from environmental risks, protection against violence, opportunities for early learning, and services for disease prevention, treatment, and rehabilitation. Creating the conditions for every child to thrive implies coordinated actions by various sectors and levels of government as well as civil society, communities, and families. No sector acting alone can ensure that every child reaches his/her full developmental potential. The purpose of this indicator is to track the progress of countries in formulating or strengthening a national multisector response aiming to improve the health and development of young children. Countries in the Region are at different levels of progress in this area. Some countries already have national strategies or policies in place but face challenges in terms of quality of services and access for those most in need. Others have yet to decide on the right time for the formulation of this type of policy or strategy. For this indicator, young children are defined as those less than 5 years of age, including those still in utero. It is acknowledged that some countries may include children in additional age groups or not include the pregnancy period. For this reason, monitoring and reporting of this indicator will include a description of the characteristics of the target population as stated in the official documents.
Technical note	This indicator is calculated by counting the number of countries with a national policy or strategy that fulfills all of the following criteria: 1. The target population is young children and their families. 2. The policy/strategy is multisectoral: the health sector and at least one other governmental sector have defined a formal mechanism for coordination and collaboration.

	3. It is family-centered: the role of caregivers is explicitly recognized, services and support address both children's and caregivers' needs, and family and community participation is promoted. 4. It is equity-driven, with explicit targeting of those most vulnerable. 5. It is data-driven: targets and a mechanism to measure progress are defined. PAHO will collect official documents and review the content to ascertain the presence of the above characteristics. The technical unit responsible for implementation of the national policy or strategy will be contacted to provide information and confirm the final appraisal. PAHO will report on the number of countries with a national policy or strategy and a qualitative description of their core characteristics.
Type of indicator	Absolute
Measurement units	Number of countries and territories
Frequency of measurement	Annual
PASB unit	Family, Health Promotion and Life Course / Healthy Life Course (FPL/HL)
Data source	• In 2018, the fifth round of the WHO Global Reproductive, Maternal, Newborn, Child and Adolescent Health Policy Survey was conducted, and 30 countries from the Region participated and shared various official documents. This database will be used to gather the documents relevant for this indicator. The global policy survey database will be updated periodically by WHO. • Another data source will be the official websites of the relevant ministries. These websites will be reviewed periodically and official documents downloaded. • For those countries where previous data sources indicate that no national strategy or policy has been formulated, the technical units at relevant ministries will be contacted to confirm the information.
Limitations	None expected.
References	1. WHO/UNICEF Nurturing Care Framework: Available from: https://www.who.int/maternal_child_adolescent/documents/nurturing-care-early-childhood-development/en/ 2. World Health Organization. Maternal, newborn, child and adolescent health: Policy monitoring and action. Available from: https://www.who.int/maternal_child_adolescent/epidemiology/policy-monitoring-action/en/ 3. World Health Organization. 2018-2019 Global reproductive, maternal, newborn, child and adolescent health policy survey. Available from: https://www.who.int/data/maternal-newborn-child-adolescent/national-policies?selectedTabName=Documents
Linkage	• Not applicable

Code and title of the outcome	**Outcome 2:** Healthier lives promoted through universal access to comprehensive, quality health services for all women, men, children, and adolescents in the Americas, focusing on groups in conditions of vulnerability
Code and title of the indicator	**Outcome Indicator 2.f:** Number of countries and territories developing, implementing, and monitoring policies or strategies with an integrated approach to address men's health
Definition of the indicator	This indicator counts the number of countries and territories that have specific policies and/or strategies that support person-centered, integrated approaches to ensure that gaps in men's health are addressed. Men's health is defined as the health outcomes of men in the population. **Baseline 2019:** 5 **Target 2025:** 16
Purpose of the indicator	In some aspects of health, outcomes continue to be worse among males than among females. In order to improve men's health in the Region, it is important to understand the number of countries and territories that have addressed men's health using an integrated approach.
Technical note	A methodology for obtaining the inventory of financial, human (professional and nonprofessional), and infrastructure resources for men's health will be applied. This includes in-country consultations with government officials, policymakers, and primary care physicians to determine whether the infrastructure is available to provide males with adequate health care that increases their healthy life expectancy.
Type of indicator	Absolute
Measurement units	Number of countries and territories
Frequency of measurement	Every 5 years
PASB unit	Family, Health Promotion and Life Course / Healthy Life Course (FPL/HL)
Data source	Surveys completed by stakeholders in the countries and territories; administrative health information systems.
Limitations	• This indicator does not measure whether men's health is improving or not, only whether strategies and policies exist to target the gaps. • Data for this indicator will be based on responses from stakeholders in countries. Therefore, the data are subjective and may be incomplete.
References	1. World Health Organization. Global Health Observatory - Indicator Metadata Registry. 2. Baker P, Dworkin S, Tong S, Banks I, Shand T, Yamey G. (2013). The men's health gap: men must be included in the global health equity agenda. Bulletin of the World Health Organization 2014;92:618-620. Available from: https://www.who.int/bulletin/volumes/92/8/13-132795/en/
Linkage	• Not applicable

Code and title of the outcome	**Outcome 3:** Increased health system response capacity to provide quality, comprehensive, and integrated care for older people, in order to overcome access barriers, prevent care dependence, and respond to current and future demands
Code and title of the indicator	**Outcome Indicator 3.a:** Number of countries and territories with capacity to prevent care dependence
Definition of the indicator	This indicator counts the number of countries and territories that have demonstrated capacity to prevent care dependence. Care dependence is defined as an individual's constant need for partial or complete support from others in performing basic activities of daily living (such as eating, bathing, dressing, grooming, mobility, and toileting/continence) due to a decrease in function that results in a loss of capacity for independent self-care. Care may be provided in formal settings (e.g., residential care) or in the home, by professionals and/or family members. **Baseline 2019:** 6 **Target 2025:** 20
Purpose of the indicator	The indicator measures the progressive advances of PAHO Member States in increasing the capacity of health systems to respond to the needs of an aging population. The objective is to improve the functionality of older people (aged 65+) in order to reduce their dependence on others and ensure that their needs are met. Functionality is conceptualized as a dynamic interaction between an individual's health condition and relevant contextual factors (i.e., environmental and personal circumstances). Loss of functional capacity due to disability can prevent a person from performing basic activities of daily living and may result in the person becoming care-dependent. Care dependence increases the demand for long-term care, which in turn places increased stress on families, communities, and the social, economic, and health systems of the country. Strategies to prevent care dependence include expanding equitable access to quality health care and to social and community services that help people maintain functional capacity and their ability to autonomously interact with their community.
Technical note	To achieve the indicator, a country must have demonstrated a capacity to prevent care dependence by doing at least two of the following: 1. Implement a national policy to support comprehensive assessments of older people. 2. Collect data measuring the functionality of older people. 3. Establish evidence-based plans or policies to increase the functionality of older people. 4. Increase the number of trained professionals who address decreased functionality in older people. Trained professionals include, but are not limited to, rehabilitation professionals (e.g., physiotherapists, occupational therapists), social workers, and geriatricians.
Type of indicator	Absolute
Measurement units	Number of countries and territories

Frequency of measurement	Every 3 years
PASB unit	Family, Health Promotion and Life Course / Healthy Life Course (FPL/HL)
Data source	Data obtained from surveys and administrative health information systems.
Limitations	This indicator is not routinely measured and requires responses from countries.
References	1. Harwood RH, Sayer AA, Hirschfeld M. Current and future worldwide prevalence of dependency, its relationship to total population, and dependency ratios. Bull World Health Organ 2004;82(4):251-258. Available from: https://www.who.int/bulletin/volumes/82/4/251.pdf
Linkage	• Not applicable

Code and title of the outcome	**Outcome 4**: Increased response capacity of integrated health services networks (IHSNs) for prevention, surveillance, early detection and treatment, and care of communicable diseases, including vaccine-preventable diseases
Code and title of the indicator	**Outcome indicator 4.a:** Percentage of people with HIV who have been diagnosed
Definition of the indicator	This indicator measures the percentage of persons living with HIV who have accessed HIV testing services and have received a diagnosis of HIV infection. **Baseline 2017:** 82% **Target 2025:** 90%
Purpose of the indicator	The indicator measures progress toward increasing the proportion of people living with HIV who know their HIV status; it also reflects the efficacy of HIV testing interventions. Through HIV testing, people can learn their infection status and obtain necessary prevention and treatment services without delay.
Technical note	**Numerator:** Number of people living with HIV who know their HIV status in Latin America and the Caribbean. **Denominator:** Number of people living with HIV in Latin America and the Caribbean. For the numerator: In countries with well-functioning HIV case surveillance systems, the number of people living with HIV who know their status is equal to the number of people diagnosed with HIV and reported to the surveillance system who are still alive. (If the surveillance system does not capture updated vital status, then figures need to be adjusted by subtracting the estimated number of deaths.) For the denominator: Estimation models such as Spectrum are the preferred source for obtaining the number of people living with HIV.
Type of indicator	Relative
Measurement units	Percentage
Frequency of measurement	Annual
PASB unit	Communicable Diseases and Environmental Determinants of Health / HIV, Hepatitis, Tuberculosis, and Sexually Transmitted Infections (CDE/HT)
Data source	UNAIDS and WHO, and the Global AIDS Monitoring (GAM) country reports.
Limitations	Constraints include limited availability of data and poor quality of reported data if surveillance systems do not monitor vital status. Double counting of cases may occur. Modeled estimates of persons with HIV are subject to uncertainty derived from the estimates.
References	1. UNAIDS. Global AIDS Monitoring 2019: Indicators for monitoring the 2016 Political Declaration on Ending AIDS. Available from: http://www.unaids.org/sites/default/files/media_asset/global-aids-monitoring_en.pdf

Linkage	• SHAA2030 target 10.1 • Plan of Action for the Prevention and Control of HIV and Sexually Transmitted Infections 2016-2021 (CD55/14), adapted

Code and title of the outcome	**Outcome 4:** Increased response capacity of integrated health services networks (IHSNs) for prevention, surveillance, early detection and treatment, and care of communicable diseases, including vaccine-preventable diseases
Code and title of the indicator	**Outcome indicator 4.b:** Antiretroviral treatment (ART) coverage among persons living with HIV
Definition of the indicator	This indicator measures the coverage of access to antiretroviral treatment (ART) among all persons living with HIV. Coverage of 80% or higher is internationally defined as universal access and is in line with international HIV care and treatment targets (90-90-90). Since 2015, the World Health Organization recommends ART for all persons with HIV, regardless of CD4 count, under the "Treat All" policy. **Baseline 2017:** 66% **Target 2025:** 90%
Purpose of the indicator	The proposed indicator monitors access to and coverage of ART, a key element in the HIV prevention-treatment-care continuum. High coverage has a strong impact on public health outcomes, helping to reduce HIV-related morbidity and mortality and prevent transmission.
Technical note	Calculation at country level (expressed as a percentage): **Numerator:** Number of persons on antiretroviral therapy, derived from reports provided by the ministries of health. **Denominator:** Estimated number of persons with HIV in the country, irrespective of CD4 count. Country denominators are generated by UNAIDS, using standardized statistical modeling methods and tools. Calculation at regional level: Sum of country numerator values divided by sum of country denominator values, multiplied by 100.
Type of indicator	Relative
Measurement units	Percentage
Frequency of measurement	Annual
PASB unit	Communicable Diseases and Environmental Determinants of Health / HIV, Hepatitis, Tuberculosis, and Sexually Transmitted Infections (CDE/HT)
Data source	UNAIDS and WHO, and the Global AIDS Monitoring (GAM) country reports.
Limitations	• There are some uncertainties regarding the accuracy of the statistical modeling when it is applied to smaller countries with concentrated epidemics. • This indicator measures overall coverage of antiretroviral treatment. It does not measure inequities in coverage, particularly those related to gender and to key populations such as

	men who have sex with men (MSM), sex workers, and transgender persons. Local issues, such as the presence of undocumented immigrants, will also influence the accuracy of the indicator. It is critical to continue monitoring access to and coverage of ART from a gender and equity perspective, with focus on key populations and the quality of care they receive.
References	1. Pan American Health Organization. HIV continuum of care monitoring framework, 2014, addendum to meeting report: regional consultation on HIV epidemiologic information in Latin America and the Caribbean. Washington, DC: PAHO; 2014. Available from: http://www.paho.org/hq/index.php?option=com_docman&task=doc_view&gid=25746&Itemid 2. World Health Organization. Consolidated strategic information guidelines for HIV in the health sector. 2015. Available from: https://www.who.int/hiv/pub/guidelines/strategic-information-guidelines/en/ 3. World Health Organization. Consolidated guidelines on person-centred HIV patient monitoring and case surveillance. 2017. Available from: https://www.who.int/hiv/pub/guidelines/person-centred-hiv-monitoring-guidelines/en/
Linkage	• SHAA2030 target 10.1 • SP14-19 outcome indicator 1.1.1, adapted • Plan of Action for the Prevention and Control of HIV and Sexually Transmitted Infections 2016-2021 (CD55/14), adapted

Code and title of the outcome	**Outcome 4:** Increased response capacity of integrated health services networks (IHSNs) for prevention, surveillance, early detection and treatment, and care of communicable diseases, including vaccine-preventable diseases
Code and title of the indicator	**Outcome indicator 4.c:** Number of countries and territories with at least 95% coverage of syphilis treatment in pregnant women
Definition of the indicator	This indicator counts the number of countries and territories where at least 95% of women who tested positive for syphilis during pregnancy received appropriate treatment. Appropriate treatment for syphilis in pregnant women consists of at least one dose of intramuscular (IM) benzathine penicillin G. **Baseline 2017:** 20 **Target 2025:** 29
Purpose of the indicator	In 1995, PAHO Member States adopted the regional Plan of Action for the Elimination of Congenital Syphilis in the Americas (Resolution CD38.R8). This commitment was renewed in 2010 with the adoption of the Strategy and Plan of Action for the Elimination of Mother-to-Child Transmission of HIV and Congenital Syphilis (Resolution CD50.R12), and again in 2016 with the Plan of Action for the Prevention and Control of HIV and Sexually Transmitted Infections 2016-2021 (Resolution CD55/14). For purposes of this indicator, documentation of a single dose of penicillin is sufficient to establish treatment. Treating a pregnant woman positive for syphilis with a single injection of 2.4 million units of benzathine penicillin G before 24 weeks of gestational age is sufficient to prevent syphilis from being transmitted from mother to infant. However, three injections at weekly intervals are recommended to treat latent syphilis and prevent tertiary syphilis in the mother. This is also a process indicator for assessing the validation of elimination of mother-to-child transmission of HIV and syphilis.
Technical note	This indicator monitors the coverage of treatment in pregnant women who have tested positive for syphilis. Calculation at country level: **Numerator:** Number of pregnant women who tested positive for syphilis during pregnancy and who received appropriate treatment. This number is aggregated from health facility records. Treatment can be provided to syphilis-infected women at various sites (e.g., antenatal clinics or sexual and reproductive health clinics) during pregnancy. Women should not be counted in the numerator if they have not been tested or treated, and the data collection and reporting system should be cross-referenced to minimize the risk of double counting. **Denominator:** Total number of pregnant women with positive syphilis serology during pregnancy. This number is extracted from national program records aggregated from facility registers.

	Note: As an alternate method, population-based country coverage may be calculated using the number of syphilis-infected pregnant women who received appropriate treatment, divided by the expected number of seropositive pregnant women. The expected number of seropositive pregnant women can be estimated by multiplying the estimated number of women who gave birth over the past 12 months by the most recent national estimate of syphilis prevalence in pregnant women. Calculation at regional level: Once the coverage at country level has been calculated, the regional indicator is obtained by counting the number of countries and territories with 95% coverage or higher.
Type of indicator	Absolute
Measurement units	Number of countries and territories
Frequency of measurement	Annual, at the end of the calendar year
PASB unit	Communicable Diseases and Environmental Determinants of Health / HIV, Hepatitis, Tuberculosis and Sexually Transmitted Infections (CDE/HT)
Data source	National health authorities reporting to the Global AIDS Monitoring process.
Limitations	This indicator reflects coverage among pregnant women tested for syphilis and is therefore not a population-based indicator. Calculations based on high coverage of syphilis testing at antenatal clinics would approximate a population-based coverage.
References	1. Pan American Health Organization. Strategy and plan of action for elimination of mother-to-child transmission of HIV and congenital syphilis. Regional Monitoring Strategy, 3rd Edition. Washington, DC: PAHO; 2013. Available from: http://www.paho.org/Hq/index.php?option=com_content&view=article&id=7264%3Aelimination-mother-child-transmission-hiv-congenital-syphilis&catid=4679%3Acha-hiv-topics&Itemid=39600&lang=en (under "Resources"). 2. UNAIDS. Global AIDS monitoring 2019. Indicators for monitoring 2016 political declaration on ending AIDS. Geneva: UNAIDS; 2018. Available from: http://www.unaids.org/sites/default/files/media_asset/global-aids-monitoring_en.pdf
Linkage	• SHAA2030 target 10.3 • SP14-19 outcome indicator 1.1.3 • Plan of Action for the Prevention and Control of HIV and Sexually Transmitted Infections 2016-2021 (CD55/14)

Code and title of the outcome	**Outcome 4:** Increased response capacity of integrated health services networks (IHSNs) for prevention, surveillance, early detection and treatment, and care of communicable diseases, including vaccine-preventable diseases
Code and title of the indicator	**Outcome indicator 4.d:** Tuberculosis treatment coverage
Definition of the indicator	This indicator measures the number of new and relapsed tuberculosis cases that were notified and treated, divided by the estimated number of incident TB cases in a given year, expressed as a percentage for the Region. **Baseline 2017:** 81% **Target 2025:** 90%
Purpose of the indicator	The indicator is used to show progress on TB detection and treatment with a view to achieving the WHO End TB strategy target for 2025. This is one of the top 10 priority indicators of the strategy.
Technical note	**Numerator**: Number of TB patients diagnosed and treated in a given year. **Denominator**: Number of estimated TB cases in the same year. The resulting figure is multiplied by 100 to obtain the regional percentage.
Type of indicator	Relative
Measurement units	Percentage
Frequency of measurement	Annual
PASB unit	Communicable Diseases and Environmental Determinants of Health / HIV, Hepatitis, Tuberculosis, and Sexually Transmitted Infections (CDE/HT)
Data source	WHO's TB global data collection system.
Limitations	The number of TB patients diagnosed and treated is available only after one year.
References	1. World Health Organization. Global tuberculosis report 2018. Geneva: WHO; 2018. Available from: http://www.who.int/tb/publications/global_report/en/ 2. World Health Organization. Implementing the End TB Strategy: the essentials. Geneva: WHO; 2015. Available from: https://www.who.int/tb/publications/2015/The_Essentials_to_End_TB/en/
Linkage	• SHAA2030 target 10.2 • Plan of Action for the Prevention and Control of Tuberculosis (CD54/11, Rev. 1), adapted

Code and title of the outcome	**Outcome 4:** Increased response capacity of integrated health services networks (IHSNs) for prevention, surveillance, early detection and treatment, and care of communicable diseases, including vaccine-preventable diseases
Code and title of the indicator	**Outcome indicator 4.e:** Number of endemic countries and territories with >70% of malaria cases diagnosed and treated within 72 hours of the start of symptoms
Definition of the indicator	This indicator counts the number of malaria-endemic countries and territories that provide diagnosis and treatment to at least 70% of malaria cases within 72 hours after the start of symptoms. Malaria treatment is indicated only in people with parasitological diagnosis by microscopy or rapid test. **Baseline 2017:** 3 out of 19 countries **Target 2025:** 9 out of 19 countries
Purpose of the indicator	Early diagnosis and timely treatment is the principal means to prevent clinical complications of malaria. Early treatment is also the main action to reduce the human reservoir of the parasite and thereby reduce transmission. Treatment should be started immediately after the diagnosis. Access to diagnosis and early treatment depends on the organization of health services networks in the endemic areas. The indicator, therefore, seeks to evaluate the capacity of the health system to reach communities at risk of malaria.
Technical note	Information systems in malaria-endemic countries routinely record the dates of onset of symptoms and initiation of treatment. The management of malaria information in nominal databases indicates whether treatment was started within 72 hours of the onset of symptoms. The indicator is calculated by counting the number of cases that meet this condition in the numerator and the total number of cases reported in the denominator. **Numerator:** Number of malaria cases (autochthonous cases or all cases) diagnosed and treated within 72 hours of the onset of symptoms.* **Denominator:** Total number of malaria cases (autochthonous cases or all cases) reported.* * Cases imported from other countries are often difficult to detect in the first days after onset, a period when the infected person may have still been abroad. Therefore, it is expected that in situations where the majority of reported cases are imported cases (as in countries close to elimination), the indicator may be low, despite the presence of good surveillance processes. For this reason, whenever the information system allows it, especially in countries with few cases, the indicator will be limited to locally acquired cases of autochthonous transmission.
Type of indicator	Relative
Measurement units	Number of countries and territories
Frequency of measurement	Annual, at the end of the year

PASB unit	Communicable Diseases and Environmental Determinants of Health / Neglected, Tropical and Vector Borne Diseases (CDE/VT)
Data source	Annual malaria country reports.
Limitations	• In countries with a high proportion of imported cases, most of the cases may have detection delays due to persons being infected in another country. This affects the overall performance of the indicator, even in countries that have adequate surveillance processes. • In countries with a very small number of autochthonous cases, delay in the detection of even a few cases can negatively affect the indicator. • Systematic errors in the registration or notification of dates of onset or initiation of treatment in municipalities with a high load can significantly affect the measurement. • Intentional adjustment of dates to improve the performance of the indicator has been observed at subnational level in some countries.
References	1. World Health Organization. Malaria surveillance, monitoring & evaluation: a reference manual. Geneva: WHO; 2018. 2. Pan American Health Organization. Situation of malaria in the Region of the Americas, 2000-2015. Available from: https://www.paho.org/hq/dmdocuments/2017/2017-cha-report-situation-malaria-amer-00-15.pdf
Linkage	• SHAA2030 target 10.6

Code and title of the outcome	**Outcome 4:** Increased response capacity of integrated health services networks (IHSNs) for prevention, surveillance, early detection and treatment, and care of communicable diseases, including vaccine-preventable diseases
Code and title of the indicator	**Outcome indicator 4.f:** Number of countries and territories with capacity to conduct integrated surveillance of arbovirus cases
Definition of the indicator	This indicator counts the number of countries and territories that perform an integrated epidemiological surveillance of arboviral diseases. **Baseline 2019:** 0 **Target 2025:** 20
Purpose of the indicator	The indicator reflects the capacity of the country/territory to generate data to guide timely actions for prevention and control of arboviral diseases.
Technical note	The indicator is calculating by counting countries and territories that demonstrate that their arboviral surveillance programs are able to generate quality data to guide timely prevention and control actions.
Type of indicator	Absolute
Measurement units	Number of countries and territories
Frequency of measurement	Semiannual, at the middle and end of the year
PASB unit	Communicable Diseases and Environmental Determinants of Health / Neglected, Tropical and Vector Borne Diseases (CDE/VT)
Data source	Reports of monitoring visits and reports from PAHO/WHO focal points; epidemiological information sent to PAHO/WHO.
Limitations	• Countries and territories may decide not to share epidemiological information on arboviral diseases with PAHO/WHO or post that information in public domains. • Conducting integrated surveillance of arboviruses does not guarantee that the surveillance will be representative of the viruses in circulation.
References	1. Pan American Health Organization. IMS-arbovirus (publication expected in 2019). 2. Pan American Health Organization. Tool for the evaluation of IMS-arbovirus (publication expected in 2019). 3. Pan American Health Organization. Guidance/protocol for the integrated epidemiological surveillance of arboviral diseases (publication expected in 2019).
Linkage	• SHAA2030 target 10.10

Code and title of the outcome	**Outcome 4:** Increased response capacity of integrated health services networks (IHSNs) for prevention, surveillance, early detection and treatment, and care of communicable diseases, including vaccine-preventable diseases
Code and title of the indicator	**Outcome indicator 4.g:** Number of countries and territories reporting at least 95% coverage at the national level of the second dose of measles and rubella-containing vaccine (MRCV)
Definition of the indicator	This indicator counts the number of countries and territories reporting at least 95% national average coverage of the second dose of measles and rubella containing vaccine (MRCV). **Baseline 2017:** 6 **Target 2025:** 15
Purpose of the indicator	The indicator reflects progress toward high and uniform coverage of the second dose of MRCV, recommended as part of a two-dose series, in order to reduce the risk of measles and rubella outbreaks in adolescents and adults.
Technical note	The indicator is calculated by counting the number of countries and territories that have achieved at least 95% national average coverage of the second dose of MRCV. In addition, this information can also be compared to the total number of the countries in the Region that have included the second dose of MRCV in their programs.
Type of indicator	Absolute
Measurement units	Number of countries and territories
Frequency of measurement	Annual. The reported data correspond to the end of the year and are received in April of the following year.
PASB unit	Family, Health Promotion and Life Course / Comprehensive Family Immunization (FPL/IM)
Data source	Data are obtained from annual reports by countries to the PAHO Comprehensive Family Immunization Unit via the PAHO/WHO-UNICEF joint reporting form.
Limitations	The data reflect only administrative coverage, which can vary from year to year if population data are outdated or if there is a great deal of migration.
References	1. Pan American Health Organization. Plan of action for the sustainability of measles, rubella, and congenital rubella syndrome elimination in the Americas 2018-2023 [Internet]. 29th Pan American Sanitary Conference; 2017 Sep 25-29; Washington, DC. Washington, DC: PAHO; 2017 [cited 2019 Jan 15]. Available from: http://iris.paho.org/xmlui/bitstream/handle/123456789/34446/CSP29-8-e.pdf?sequence=1&isAllowed=y
Linkage	• SHAA2030 target 10.4 • GPW13 Impact Framework

Code and title of the outcome	**Outcome 4:** Increased response capacity of integrated health services networks (IHSNs) for prevention, surveillance, early detection and treatment, and care of communicable diseases, including vaccine-preventable diseases
Code and title of the indicator	**Outcome indicator 4.h:** Number of countries and territories reporting at least 95% coverage of 3 doses of diphtheria, pertussis, and tetanus-containing vaccine (DPT3) in 80% of municipalities
Definition of the indicator	This indicator counts the number of countries and territories reporting at least 95% coverage of three doses of DPT (diphtheria, pertussis, and tetanus) vaccine among children less than 1 year of age, for a specific year, expressed as a percentage of the corresponding midyear population, in at least 80% of municipalities, districts, or similar jurisdictions. **Baseline 2017:** 6 **Target 2025:** 20
Purpose of the indicator	The indicator demonstrates whether a country has a highly functioning immunization program as part of a properly functioning, comprehensive health system, with technically sound immunization plans that target hard-to-reach populations to increase vaccination coverage at all levels, including municipalities, districts, or similar jurisdictions.
Technical note	The coverage level is calculated by dividing the number of children under 1 year of age who have received three doses of the DPT vaccine by the total population of children under 1 year in a country, territory, or geographic area at a specific time. The indicator refers to subnational units at the second administrative level, such as municipalities, districts, or similar jurisdictions.
Type of indicator	Absolute
Measurement units	Number of countries and territories
Frequency of measurement	Annual. The reported data correspond to the end of the year and are received in April of the following year.
PASB unit	Family, Health Promotion and Life Course / Comprehensive Family Immunization (FPL/IM)
Data source	Data are obtained from annual reports by countries to the PAHO Comprehensive Family Immunization Unit via the PAHO/WHO-UNICEF joint reporting form.
Limitations	The data reflect only administrative coverage, which can present data quality problems and can vary if population data are outdated or if there is a great deal of migration.
References	1. Pan American Health Organization. Plan of action on immunization [Internet]. 54th Directing Council of PAHO, 67nd session of the Regional Committee of WHO for the Americas; 2015 Sep 28-Oct 2; Washington, DC. Washington, DC: PAHO; 2015 (Resolution CD54.R8). Available from: http://www.paho.org/hq /index.php?option=com_content&view=article&id=11087&Itemid=41537&lang=en
Linkage	• SHAA2030 target 5.2 • SP14-19 outcome indicator 1.5.1, adapted • Plan of action on immunization (CD54/7, Rev 2), adapted

Code and title of the outcome	**Outcome 4:** Increased response capacity of integrated health services networks (IHSNs) for prevention, surveillance, early detection and treatment, and care of communicable diseases, including vaccine-preventable diseases
Code and title of the indicator	**Outcome indicator 4.i:** Number of countries and territories reporting at least 95% coverage of 3 doses of pneumococcus-containing vaccine at national level
Definition of the indicator	This indicator counts the number of countries and territories reporting at least 95% coverage of three doses of pneumococcus conjugate vaccine among children less than 2 years of age, for a specific year, expressed as a percentage of the corresponding midyear population, in a given country, territory, or geographic area. **Baseline 2017:** 3 **Target 2025:** 20
Purpose of the indicator	Although new, safe, and effective vaccines are licensed and introduced to the international market every year, some of these vaccines have not yet become part of the official immunization schedule in many countries. In some countries that have introduced new vaccines, the coverage is not as high as it is for the "traditional" vaccines. This indicator contributes to monitoring the introduction of new vaccines into national immunization schedules as an important means to strengthen immunization programs in the Region of the Americas. The schedule for this vaccine calls for three doses in children less than 2 years of age.
Technical note	This indicator is calculated by dividing the number of children less than 2 years of age who have received three doses of the pneumococcus-containing vaccine (according to the national immunization schedule) by the total population of children at least 1 year of age and less than 2 years of age, in a specific territory or geographic area at a specific time. When data have been obtained from the countries, a weighted average of the population of children less than 2 years of age in the Region is calculated. Coverage of 100% or higher is reported as 99%.
Type of indicator	Absolute
Measurement units	Number of countries and territories
Frequency of measurement	Annual. The reported data correspond to the end of the year and are received in April of the following year.
PASB unit	Family, Health Promotion and Life Course / Comprehensive Family Immunization (FPL/IM)
Data source	Data are obtained from annual reports by countries to the PAHO Comprehensive Family Immunization Unit via the PAHO/WHO-UNICEF joint reporting form.
Limitations	For most of the countries and territories, the data reflect only administrative coverage, which can present data quality problems and can vary if population data are outdated or if there is a great deal of migration.
References	1. Pan American Health Organization. Plan of action on immunization [Internet]. 54th Directing Council of PAHO, 67nd session of the Regional Committee of WHO for the Americas; 2015 Sep 28-Oct 2; Washington, DC. Washington, DC: PAHO; 2015

	(Resolution CD54.R8). Available from: http://www.paho.org/hq /index.php?option=com_content&view=article&id=11087&Itemid=41537&lang=en
Linkage	• SHAA2030 target 10.4

Code and title of the outcome	**Outcome 4:** Increased response capacity of integrated health services networks (IHSNs) for prevention, surveillance, early detection and treatment, and care of communicable diseases, including vaccine-preventable diseases
Code and title of the indicator	**Outcome indicator 4.j:** Number of countries and territories that have incorporated HPV vaccines in their national vaccination program
Definition of the indicator	This indicator counts the number of countries and territories that have introduced human papillomavirus (HPV) vaccine in their regular vaccination program for at least one cohort of the target population (girls and adolescents aged 9-14). **Baseline 2017:** 29 **Target 2025:** 45
Purpose of the indicator	HPV is extremely common, and an estimated 90% of people will be infected at some time in their lives, putting them at risk for serious health problems like cervical cancer in women. As of 2017, WHO estimates that worldwide prevalence of HPV in women is 11.7%. Latin America and the Caribbean have a prevalence of 16.1%, the second-highest prevalence after Sub-Saharan Africa (24%). Three vaccines currently on the market can be used to prevent high-risk HPV types. Given the substantial health benefit of HPV vaccination, and in order to eliminate cervical cancer, WHO's Strategic Advisory Group of Experts on Immunization (SAGE) and PAHO's Technical Advisory Group on Vaccine-Preventable Disease (TAG) encourage Member States to introduce the vaccine into their routine immunization schedules if they have not yet done so. The HPV vaccine must be given to girls aged 9-14 years before they become sexually active.
Technical note	This indicator counts the number of countries and territories that have HPV vaccine in their vaccination schedules. All the vaccines against HPV are highly efficacious in preventing infection with virus types 16 and 18, which are together responsible for approximately 70% of cervical cancer cases globally. The vaccines are also highly efficacious in preventing precancerous cervical lesions caused by these virus types. Data from clinical trials and initial post-marketing surveillance conducted in several continents show all three vaccines to be safe.
Type of indicator	Absolute
Measurement units	Number of countries and territories
Frequency of measurement	Annual. The reported data correspond to the end of the year and are received in April of the following year.
PASB unit	Family, Health Promotion and Life Course / Comprehensive Family Immunization (FPL/IM)
Data source	Data are obtained from annual reports by countries to the PAHO Comprehensive Family Immunization Unit via the PAHO/WHO-UNICEF joint reporting form.
Limitations	For most of the countries and territories, the data reflect only administrative coverage, which can present data quality problems and can vary if population data are outdated or if there is a great deal of migration.
References	1. Pan American Health Organization. Plan of action on immunization [Internet]. 54th Directing Council of PAHO, 67th session of the Regional Committee of WHO for the

	Americas; 2015 Sep 28-Oct 2; Washington, DC. Washington, DC: PAHO; 2015 (Resolution CD54.R8). Available from: https://www.paho.org/hq/index.php?option=com_docman&task=doc_download&gid=31248&Itemid=270&lang=en 2. Pan American Health Organization. Reports of the Technical Advisory Group (TAG) on Vaccine-preventable Diseases. Available from: https://www.paho.org/hq/index.php?option=com_content&view=article&id=1862&Itemid=2032
Linkage	• SHAA2030 target 10.4 • Plan of Action for Cervical Cancer Prevention and Control 2018-2030 (CD56/9), adapted

Code and title of the outcome	**Outcome 5:** Expanded equitable access to comprehensive, quality health services for the prevention, surveillance, early detection, treatment, rehabilitation, and palliative care of noncommunicable diseases and mental health conditions
Code and title of the indicator	**Outcome Indicator 5.a:** Number of countries and territories that achieve the 2025 global NCD target to halt the rise in diabetes assessed by age-standardized prevalence of raised blood glucose/diabetes among adults aged 18+ years
Definition of the indicator	This indicator counts the number of countries and territories that have achieved the 2025 global NCD target to halt the rise in diabetes. At country level, this can be tracked by calculating the percentage of persons 18+ years who have raised blood glucose or diabetes or who are on medication for raised blood glucose, and comparing the data to the global NCD target baseline year of 2010. **Baseline 2019:** 0 **Target 2025:** 10
Purpose of the indicator	Diabetes is among the leading causes of premature death due to noncommunicable diseases. This indicator reflects the prevalence of raised blood glucose/diabetes in the adult population and changes over time. It indicates the magnitude of the problem in terms of the size of the adult population requiring health services and treatment to control their diabetes.
Technical note	Calculation at country level (expressed as a percentage): **Numerator**: Total number of persons 18+ years with measured fasting plasma glucose ≥7.0 mmol/L (126 mg/dL), or who report they are on medication for raised blood glucose. **Denominator**: Total size of population aged 18+ years. Countries and territories that have zero increase in adult prevalence of raised blood glucose/diabetes from baseline year to target year of 2025 are considered as having met this indicator.
Type of indicator	Absolute
Measurement units	Number of countries and territories
Frequency of measurement	Member States conduct population-based surveys (preferably nationally representative) that measure diabetes/raised blood glucose (e.g., STEPS surveys), typically every 4 to 5 years.
PASB unit	• Noncommunicable Diseases and Mental Health / Noncommunicable Diseases, Violence and Injury Prevention (NMH/NV)
Data source	National population-based health surveys. PAHO supports Member States in using the STEPS survey, which is a well-established and standardized WHO methodology for NCD risk factor surveillance.
Limitations	• National population-based surveys that measure NCDs and their risk factors are not conducted as frequently as recommended. Therefore, country and regional data for this indicator may be incomplete or several years old.

	• There are also potential limitations with measurement error, lack of fasting before blood glucose testing, or limited validity of measurement instruments.
References	1. Pan American Health Organization. Health situation in the Americas: core indicators, 2018. Washington, DC: PAHO; 2018. Available from: http://iris.paho.org/xmlui/handle/123456789/49511
Linkage	• SHAA2030 target 9.1 • SP14-19 outcome indicator 2.1.5, adapted • Plan of Action for the Prevention and Control of Noncommunicable Diseases (CD52/7, Rev. 1)

Code and title of the outcome	**Outcome 5:** Expanded equitable access to comprehensive, quality health services for the prevention, surveillance, early detection, treatment, rehabilitation, and palliative care of noncommunicable diseases and mental health conditions
Code and title of the indicator	**Outcome Indicator 5.b:** Number of countries and territories that reach a target of 35% prevalence of controlled hypertension at population level (<140/90 mmHg) among persons with hypertension 18+ years of age
Definition of the indicator	This indicator counts the number of countries and territories that have at least 35% prevalence of controlled hypertension at population level (<140/90 mmHg) among persons with hypertension who are 18 years of age and older. **Baseline 2019:** 4 **Target 2025:** 12
Purpose of the indicator	Hypertension is the main risk factor for suffering and dying from a cardiovascular event. This indicator measures the control of hypertension at the population level, utilizing STEPS or STEPS-like survey data, as a measure of the effectiveness and efficiency of health system performance.
Technical note	Calculation at country level (expressed as a percentage): **Numerator:** Number of persons with hypertension controlled (persons with systolic blood pressure <140 mmHg and diastolic blood pressure <90 mmHg (measured). **Denominator:** Total number of persons with hypertension (defined as persons who have measured systolic blood pressure ≥140 mmHg or diastolic blood pressure ≥90 mmHg), or who report currently taking medication for the treatment of high blood pressure prescribed by a health professional. Calculation at regional level: Once the prevalence of controlled hypertension in the countries has been obtained using STEPS or STEPS-like data, as outlined above, the regional indicator will be a count of the number of countries/territories that have reached the established target of 35% prevalence of controlled hypertension.
Type of indicator	Absolute
Measurement units	Number of countries and territories
Frequency of measurement	Every 4-5 years, coinciding with the risk factors survey (see data source below). It is expected that countries will be able to report data on this indicator 6 months after the end of the survey.
PASB unit	Noncommunicable Diseases and Mental Health / Noncommunicable Diseases, Violence and Injury Prevention (NMH/NV)
Data source	STEPS or STEPS-like national surveys. It is expected that countries will use the STEPs-wide approach, which is a WHO methodology for NCD risk factor surveillance. Countries may use

	another methodology for NCD risk factor surveillance, but it would require an additional review by PAHO.
Limitations	Based on the current Plan of Action for the Prevention and Control of Noncommunicable Diseases (CD52/7, Rev. 1), countries are expected to conduct surveys every four to five years, but this has not been done consistently in the past.
References	1. Pan American Health Organization. Noncommunicable diseases in the Region of the Americas: facts and figures. Washington, DC: PAHO; 2019. Available from: http://iris.paho.org/xmlui/handle/123456789/51483 2. Pan American Health Organization. Monitoring and evaluation framework for hypertension control programs. Washington, DC: PAHO; 2018. Available from: http://iris.paho.org/xmlui/handle/123456789/34877
Linkage	• SHAA2030 target 9.1 • GPW13 Impact Framework • SP14-19 outcome indicator 2.1.4, adapted

Code and title of the outcome	**Outcome 5:** Expanded equitable access to comprehensive, quality health services for the prevention, surveillance, early detection, treatment, rehabilitation, and palliative care of noncommunicable diseases and mental health conditions
Code and title of the indicator	**Outcome Indicator 5.c:** Number of countries and territories with cervical cancer screening programs that achieve at least 70% coverage of screening in women aged 30-49 years, or for the age group defined by the national policy
Definition of the indicator	This indicator counts the number of countries and territories that report having a cervical cancer screening program with at least 70% coverage among women aged 30-49 years of age, or for the age group defined by their national policy. Women are defined as screened if they have received a cervical cancer screening test at least once or more often in their lifetime, using any of the following methods: visual inspection with acetic acid (VIA), Pap smear, or human papillomavirus (HPV) test. **Baseline 2019:** 7 **Target 2025:** 11
Purpose of the indicator	Cervical cancer is among the leading cancer types in the Americas, and it can be prevented through vaccination against HPV, screening, and treatment of precancerous lesions. This indicator will measure population-level coverage of the screening program in the age group of women most at risk of developing cervical cancer, which is one of the indicators typically used to measure the quality of a screening program. PAHO/WHO recommends at least 70% screening coverage, followed by timely treatment, for cancer screening programs to be effective.
Technical note	Each country independently monitors its own cervical cancer screening coverage through the national program's information system or through population-based surveys that include measures on cervical cancer screening. There is no established systematic reporting system, and the quality and completeness of data on screening coverage vary widely by country. Member States provide information on the estimated screening coverage of their cancer program through the PAHO/WHO NCD Country Capacity Survey.
Type of indicator	Absolute
Measurement units	Number of countries and territories
Frequency of measurement	The PAHO/WHO NCD Country Capacity Survey, which is the main data source for this indicator, is conducted every 2 years.
PASB unit	Noncommunicable Diseases and Mental Health / Noncommunicable Diseases, Violence and Injury Prevention (NMH/NV)
Data source	PAHO/WHO NCD Country Capacity Survey; national population-based surveys that include measures on cervical cancer screening (where available).
Limitations	The main limitation is the quality and completeness of screening coverage data. This continues to be a challenge, as it requires an information system and a systematic and well-defined method to routinely capture information on women screened (versus tests performed).

References	1. PAHO Plan of action for cervical cancer prevention and control 2018-2030. Washington, DC: PAHO; 2018.
Linkage	• SHAA2030 target 9.1 • SP14-19 outcome indicator 2.1.7, adapted • Plan of Action for the Prevention and Control of Noncommunicable Diseases (CD52/7, Rev. 1) • Plan of Action for Cervical Cancer Prevention and Control 2018-2030 (CD56/9), adapted

Code and title of the outcome	**Outcome 5:** Expanded equitable access to comprehensive, quality health services for the prevention, surveillance, early detection, treatment, rehabilitation, and palliative care of noncommunicable diseases and mental health conditions
Code and title of the indicator	**Outcome Indicator 5.d:** Number of countries and territories that increase access to palliative care, assessed by increase in morphine equivalent consumption of opioid analgesics (excluding methadone)
Definition of the indicator	This indicator counts the number of countries and territories that increase consumption of morphine-equivalent strong opioid analgesics (excluding methadone), as a proxy for access to palliative care. **Baseline 2019:** 0 **Target 2025:** 7
Purpose of the indicator	Thousands of people with NCDs, especially cancer, require palliative care to relieve pain and suffering, and when curative treatment is not an option, to ensure the highest possible quality of life. Palliative care services are considered an integral part of universal health coverage and access, yet the majority of those who need it do not have access to adequate and appropriate palliative care and face unnecessary suffering as a result. This indicator measures the consumption of strong opioid analgesics as a proxy for access to palliative care services.
Technical note	Levels of consumption of groups of psychotropic substances are expressed for statistical purposes as defined daily doses (DDD) per 1,000 inhabitants per day. They are calculated by the International Narcotics Control Board (INCB) using statistics on manufacture and trade provided by PAHO Member States. Morphine equivalent is a metric to standardize doses of strong opioids and is taken from the ratios of the DDD. Opioid consumption data are taken from INCB annual reports.
Type of indicator	Absolute
Measurement units	Number of countries and territories
Frequency of measurement	Annual
PASB unit	Noncommunicable Diseases and Mental Health / Noncommunicable Diseases, Violence and Injury Prevention (NMH/NV)
Data source	International Narcotics Control Board annual reports on narcotics consumption.
Limitations	Potential limitations include poor quality of data reported to the INCB.
References	1. Report of the International Narcotics Control Board for 2017 (internet) Available from: https://www.incb.org/incb/en/publications/annual-reports/annual-report-2017.html
Linkage	• Plan of Action for the Prevention and Control of Noncommunicable Diseases (CD52/7, Rev. 1), indicator 3.2.2, adapted

Code and title of the outcome	**Outcome 5:** Expanded equitable access to comprehensive, quality health services for the prevention, surveillance, early detection, treatment, rehabilitation, and palliative care of noncommunicable diseases and mental health conditions
Code and title of the indicator	**Outcome Indicator 5.e:** Number of countries and territories whose surveillance systems have the capacity to report on key indicators of the Global Monitoring Framework on Noncommunicable Diseases
Definition of the indicator	This indicator counts the number of countries and territories that have set time-bound national targets for noncommunicable diseases, and that have surveillance capacity to monitor and report on these targets, in accordance with the targets and indicators in the WHO Global Monitoring Framework (GMF) for NCDs. **Baseline 2017:** 23 **Target 2025:** 35
Purpose of the indicator	NCD surveillance capacity is assessed by determining whether countries establish national targets for NCDs and produce quality data; analyze and report on NCD mortality; implement a population-based NCD survey in at least the past five years; have a cancer registry; and have a strong information system at the primary health care level. The purpose of this indicator is to track country capacity to monitor and report on a minimum set of nine targets and 25 indicators of the GMF. This indicator is aligned with indicator 1 of the United Nations indicators for monitoring progress on NCDs: "Member State has set time-bound national targets based on WHO guidance." The 10 UN progress monitoring indicators are used to monitor the implementation of policies and interventions presented in the WHO Global Action Plan for the Prevention and Control of Noncommunicable Diseases 2013-2020.
Technical note	The information needed to assess this indicator is collected every two years using the WHO NCD Country Capacity Survey (CCS). To achieve the indicator, a country must: *a)* respond "Yes" to the question "Are there a set of time-bound national targets for NCDs based on the nine voluntary global targets from the WHO Global Monitoring Framework for NCDs?"; and *b)* provide the needed supporting documentation. Targets must be time-bound, based on the nine global targets, and address NCD mortality, as well as key risk factors in the country and/or its health system. Countries are asked to submit a copy of their plans and targets and indicators when submitting their response to the NCD CCS. Where discrepancies are noted, these are referred back to the country for clarification and modification. The nine voluntary targets of the WHO Global Monitoring Framework are: 1. A 25% relative reduction in the overall mortality from cardiovascular diseases, cancer, diabetes, or chronic respiratory diseases

	2. At least 10% relative reduction in the harmful use of alcohol, as appropriate, within the national context 3. A 10% relative reduction in prevalence of insufficient physical activity 4. A 30% relative reduction in mean population intake of salt/sodium 5. A 30% relative reduction in prevalence of current tobacco use 6. A 25% relative reduction in the prevalence of raised blood pressure or contain the prevalence of raised blood pressure, according to national circumstances; 7. Halt the rise in diabetes and obesity 8. At least 50% of eligible people receive drug therapy and counselling (including glycaemic control) to prevent heart attacks and strokes 9. An 80% availability of the affordable basic technologies and essential medicines, including generics required to treat major noncommunicable diseases in both public and private facilities
Type of indicator	Absolute
Measurement units	Number of countries and territories
Frequency of measurement	Every 2 years
PASB unit	Noncommunicable Diseases and Mental Health / Noncommunicable Diseases, Violence and Injury Prevention (NMH/NV)
Data source	WHO NCD Country Capacity Survey
Limitations	• As the information is self-reported, data may be affected by bias or by misinterpretation of the questions. • Validity of survey instruments may vary.
References	1. WHO, 2013. Global action plan for the prevention and control of noncommunicable diseases 2013-2020. Available from: https://bit.ly/2Fnr6OR 2. PAHO, 2013. Plan of action for the prevention and control of noncommunicable diseases in the Americas 2013-2019. Available from: https://bit.ly/2M9XvZO 3. WHO, 2017 – Noncommunicable Diseases Progress Monitor 2017. Available from: https://bit.ly/2AIAHM0
Linkage	• WHO Global Action Plan for the Prevention and Control of Noncommunicable Diseases 2013-2020 • PAHO Plan of Action for the Prevention and Control of Noncommunicable Diseases in the Americas 2013-2019 • United Nations NCD progress monitoring indicators • WHO Global Monitoring Framework on NCDs

Code and title of the outcome	**Outcome 5:** Expanded equitable access to comprehensive, quality health services for the prevention, surveillance, early detection, treatment, rehabilitation, and palliative care of noncommunicable diseases and mental health conditions
Code and title of the indicator	**Outcome Indicator 5.f:** Number of countries and territories that have tertiary care centers that provide rehabilitation services with multi-disciplinary teams for complex injuries
Definition of the indicator	This indicator counts the number of countries and territories that have multi-disciplinary rehabilitation teams in 100% of their tertiary/third-level health facilities that manage complex injuries. **Baseline 2019:** 6 **Target 2025:** 15
Purpose of the indicator	This is a tracer indicator to monitor rehabilitation service coverage. All tertiary facilities that receive patients with complex injuries should have a rehabilitation team. It is assumed that if a country has any rehabilitation service, it will have rehabilitation for people with complex needs after injury. Achievement of this indicator may also indicate availability of services for other health needs at the tertiary level (e.g., stroke).
Technical note	Calculation at country level (expressed as a percentage): **Numerator:** Number of tertiary/third-level health facilities* that manage complex injuries** and that contain multi-disciplinary rehabilitation teams.*** **Denominator:** Total number of tertiary/third-level health facilities. Calculation at regional level: The number of countries and territories achieving 100% on the indicator is counted. * Tertiary or third-level facilities may be defined differently in different countries, but in all cases they are understood as able to provide highly specialized care. They typically have 300 to 1,500 beds, and may have teaching facilities; they are often referred to as national, central, or teaching hospitals. For this indicator, they are ones that admit or treat people with complex injuries, as defined below. ** Complex injuries are injuries that cause significant or multiple health conditions that have an impact on various domains of function. If measure of function are not routinely collected or available, the following injuries should be considered: spinal cord injury, traumatic brain injury, severe burns. *** Multi-disciplinary rehabilitation includes three or more of the following rehabilitation professions: rehabilitation medicine (physiatry), rehabilitation nursing, physiotherapy, occupational therapy, speech language therapy, prosthetics/orthotics, and psychology.

Type of indicator	Absolute
Measurement Unit	Number of countries and territories
Frequency of Measurement	Annual
PASB unit	Noncommunicable Diseases and Mental Health / Mental Health and Substance Use (NMH/MH)
Data source	Data from ministries of health and health facilities; rehabilitation service data including WHO STAR assessments; injury databases at regional and district levels.
Limitations	• This is an aspirational indicator; complete data have not been compiled. • The underlying assumption is that every person with complex needs after injury would have contact with a health care facility (probably tertiary-level). • Availability of services does not imply access to those services, and access would need to be monitored separately. • There is no global standard for rehabilitation professions, and in some places their roles may be carried out by other professions. • The indicator does not capture rehabilitation availability at secondary or primary level, which are also vital in achieving coverage of needs.
References	1. WHO (2018). Rehabilitation indicator menu: A Component of the Framework for Rehabilitation Monitoring and Evaluation (FRAME) Tool, Version 1. (not published) 2. WHO (2017). Rehabilitation 2030: A call to action. Available from: https://www.who.int/disabilities/care/rehab-2030/en/ 3. WHO (2019). Universal Health Coverage Index and Tracer Indicators 4. WHO (2017). Rehabilitation in health systems. WHO Press, Geneva.
Linkage	• SHAA2030 target 9.3

Code and title of the outcome	**Outcome 5:** Expanded equitable access to comprehensive, quality health services for the prevention, surveillance, early detection, treatment, rehabilitation, and palliative care of noncommunicable diseases and mental health conditions
Code and title of the indicator	**Outcome Indicator 5.g:** Number of countries and territories that have increased capacity to manage mental health disorders at the first level of care
Definition of the indicator	This indicator counts the number of countries and territories that have increased capacity to manage mental health disorders at the first level of care. **Baseline 2019:** 0 **Target 2025:** 20
Purpose of the indicator	The indicator measures the degree of integration of mental health into primary health care, which is aligned with the objectives of the PAHO Regional Plan of Action on Mental Health 2015-2020 and the WHO Global Mental Health Action Plan 2013-2020. The indicator is important for monitoring the transition from a highly centralized, specialist-based model of care for people with mental disorders to a decentralized, community-based model linked to primary health care services.
Technical note	Calculation at country level: To achieve the indicator, a country must report that its mental health plans of action are updated and that it has met both of the following criteria to show increased capacity: 1. Increased percentage of primary health personnel who have been trained in mental health according to the mhGAP-IG standard* 2. Increased number of persons with mental disorders who are attended at the first level of care** Sequential, annual evaluation of both criteria is required. * In accordance with the WHO Mental Health Atlas 2017, only in-service training is included (one day of training is equivalent to at least six hours). Training on the WHO Mental Health Gap Action Programme Intervention Guide (mhGAP-IG) is an example. ** First level of care refers to non-specialist providers, including physicians, nurses, and other health care workers, in non-specialized/general health care settings. Specialized mental health care services and workers are to be excluded from consideration. Calculation at regional level: The regional indicator is calculated by counting the number of countries and territories that meet the above criteria.
Type of indicator	Absolute

Measurement units	Number of countries and territories
Frequency of measurement	Biennial. PAHO will request information from countries every 2 years through the WHO Mental Health Atlas.
PASB unit	Noncommunicable Diseases and Mental Health / Mental Health and Substance Use (NMH/MH)
Data source	National health authority reports and the most current Atlas data will be consulted. Health in the Americas data will provide the total number of primary health care staff in each country.
Limitations	• There is a lack of systematic and reliable information in many countries on primary health care training processes. • There is limited monitoring and evaluation of mhGAP-IG and other mental health care training, and limited oversight of primary health care providers who have received such training. • PAHO and WHO suggest that countries update the WHO Mental Health Atlas every two years (some of the Region's countries already have done so). Nonetheless, this is a voluntary initiative that depends on the countries; PAHO promotes this periodic update but does not have decision-making power in this regard.
References	1. World Health Organization. (2017). Mental health atlas 2017. Geneva: World Health Organization. 2. World Health Organization. (2016). mhGAP Intervention Guide: Version 2.0. Geneva: World Health Organization.
Linkage	• SHAA2030 target 9.6 • WHO Mental Health Atlas 2017

Code and title of the outcome	**Outcome 5:** Expanded equitable access to comprehensive, quality health services for the prevention, surveillance, early detection, treatment, rehabilitation, and palliative care of noncommunicable diseases and mental health conditions
Code and title of the indicator	**Outcome Indicator 5.h:** Number of countries and territories that have increased the rate of persons admitted with mental disorders to general hospitals
Definition of the indicator	This indicator counts the number of countries and territories that have increased the ratio of admissions of persons with mental disorders to general hospitals as an alternative to psychiatric hospitals. **Baseline 2019:** 10 **Target 2025:** 25
Purpose of the indicator	Although community-based services are widely regarded as the best means of providing mental health treatment and care, many countries in the Americas allocate most of their mental health resources to psychiatric hospitals. This indicator is key for monitoring the status of countries' transition from mental health service delivery in centralized mental health inpatient units, such as psychiatric hospitals, to services provided by community-based general hospitals.
Technical note	Calculation at country level: Numerator: Rate of persons with mental disorders admitted to general hospitals over the past year. Denominator: Rate of persons with mental disorders admitted to psychiatric hospitals over the past year. Calculation at regional level: The regional indicator is calculated by counting the number of countries with a higher ratio of persons with mental disorders admitted to general hospitals over the past year as compared to psychiatric hospitals. General hospitals include both public and private nonprofit and for-profit facilities. The term may refer to a psychiatric ward or unit in a general hospital or to a community-based psychiatric inpatient unit for children and adolescents, or the elderly, or another specific group. Excluded from the definition are mental hospitals, community residential facilities, and facilities that treat only people with alcohol and substance abuse disorder or with intellectual disability.
Type of indicator	Absolute
Measurement units	Number of countries and territories
Frequency of measurement	Biennial. PAHO will request information from countries every 2 years through the Mental Health Atlas.

PASB unit	Noncommunicable Diseases and Mental Health / Mental Health and Substance Use (NMH/MH)
Data source	The most recent WHO Mental Health Atlas data will be used. Additionally, ministries of health and country reports will be consulted.
Limitations	• Deficiencies in national health information systems represent a key limitation. • PAHO and WHO suggest that countries update the WHO Mental Health Atlas every two years (some of the Region's countries already have done so). Nonetheless, this is a voluntary initiative that depends on the countries; PAHO promotes this periodic update but does not have decision-making power in this regard.
References	1. World Health Organization. (2017). Mental health atlas 2017. Geneva: World Health Organization.
Linkage	• SHAA2030 target 9.6 • WHO Mental Health Atlas 2017

Code and title of the outcome	**Outcome 5:** Expanded equitable access to comprehensive, quality health services for the prevention, surveillance, early detection, treatment, rehabilitation, and palliative care of noncommunicable diseases and mental health conditions
Code and title of the indicator	**Outcome Indicator 5.i:** Number of countries and territories that have increased the rate of persons receiving treatment interventions (pharmacological, psychosocial, and rehabilitation and aftercare services) for substance use disorders in the health service network
Definition of the indicator	This indicator counts the number of countries and territories that have increased coverage of treatment interventions (pharmacological, psychosocial, and rehabilitation and aftercare services) for substance use disorders. Coverage is measured by the proportion of persons in need of treatment for substance use disorders who access treatment services. Note: Efforts were made to achieve the closest possible alignment with SDG indicator 3.5.1, which is currently being discussed. The updated methodology is expected to be available when the updated version of the Annual Report Questionnaire (ARQ) of the United Nations Office on Drugs and Crime (UNODC) is approved by Member States in the Commission on Narcotic Drugs (CND) in March 2020. **Baseline 2019:** To be determined **Target 2025:** To be determined
Purpose of the indicator	The effort to reduce the health impact of substance use disorders requires a strengthened health system response at all levels, including primary health care. This involves development of policies, guidelines, and legislation on alcohol and substance use; capacity building of health providers on evidence-based strategies and interventions to prevent substance use; and treatment of related disorders in the health services network, emphasizing groups in conditions of vulnerability. Most countries lack updated information about substance use and substance use disorders, which makes it almost impossible to obtain reliable data in a short time frame to establish a baseline for treatment needs. Treatment of substance use disorders is provided mainly by nongovernmental organizations and other independent providers, with few links to the health sector and poor oversight. The integration of treatment of these disorders into the public health care system at all levels of care, including first-level and community-based interventions, is a key step to improve its coverage and quality. Countries have been progressing in the process of regulating and controlling the provision of treatment for the population with substance use disorders. Many of them compile annual reports on population in treatment using databases managed by national drug observatories, depending on national drug control authorities. Most people with substance use disorders who seek care in the public health services network seek access through mental health services.
Technical note	Calculation at country level (expressed as a percentage):

	Numerator: Number of persons in contact with treatment services for substance use disorders over the past year. **Denominator:** Total number of persons in need of treatment for substance use disorders. Whenever possible, treatment coverage should be disaggregated by two groups of substances (illicit substances and alcohol and other psychoactive substances), as well as by type of treatment intervention (pharmacological, psychosocial, and rehabilitation/aftercare services).
Type of indicator	Absolute
Measurement units	Number of countries and territories
Frequency of measurement	Biennial. The data for the indicator are collected and reported at the end of the biennium and reported at the beginning of the next biennium.
PASB unit	Noncommunicable Diseases and Mental Health / Mental Health and Substance Use (NMH/MH)
Data source	UNODC Annual Report Questionnaire; ministries of health and country reports (from national drug observatories).
Limitations	Availability and quality of data may be affected by deficiencies in national health information systems on substance use disorders, as well as disparities between countries in the reporting of coverage and the quality of information that is provided.
References	1. Pan American Health Organization. Strategy on substance use and public health [Internet]. 50th Directing Council of PAHO, 62nd session of the Regional Committee of WHO for the Americas; 2010 Sep 27-Oct 1; Washington, DC. Washington, DC: PAHO; 2010 (Document CD50/18, Rev. 1). Available from: http://www2.paho.org/hq/dmdocuments/2010/CD50-18-e.pdf.
Linkage	• SDG indicator 3.5.1, adapted • GPW13 Impact Framework

Code and title of the outcome	**Outcome 6:** Improved response capacity for comprehensive, quality health services for violence and injuries
Code and title of the indicator	**Outcome Indicator 6.a:** Number of countries and territories that minimize the time interval between road traffic crashes and the provision of first professional emergency care
Definition of the indicator	This indicator counts the number of countries and territories that have set and achieved their targets for minimizing the time interval between a road crash resulting in serious injury and the provision of first professional emergency care. **Baseline 2019:** No data **Target 2025:** 10
Purpose of the indicator	The indicator aids in monitoring the number of countries and territories that provide appropriate services for victims of non-fatal injuries due to road traffic crashes.
Technical note	This indicator is provided by national coordination mechanisms for emergency care services.
Type of indicator	Absolute
Measurement units	Number of countries and territories
Frequency of measurement	The indicator is measured annually with information gathered from countries.
PASB unit	• Noncommunicable Diseases and Mental Health (NMH) • Health Systems and Services (HSS)
Data Source	Data gathered by the national coordination mechanisms for prehospital and emergency care services.
Limitations	A limitation is the difficulty of gathering data from all prehospital and emergency care services.
References	1. World Health Organization. Global road safety performance targets. Available from: https://www.who.int/violence_injury_prevention/road_traffic/12GlobalRoadSafetyTargets.pdf?ua=1 2. World Health Organization. Developing voluntary global performance targets for road safety risk factors and service delivery mechanisms. 2017. Available from: https://www.who.int/violence_injury_prevention/road_traffic/WHODiscussionPaper-DevelopingVoluntaryGlobalPerformanceTargetsForRoadSafety_second_revision_22August2017.pdf?ua=1
Linkage	• SHAA2030 target 9.5 • Global Road Safety Performance Targets

Code and title of the outcome	**Outcome 6:** Improved response capacity for comprehensive, quality health services for violence and injuries
Code and title of the indicator	**Outcome Indicator 6.b:** Number of countries and territories that provide comprehensive post-rape care services in emergency health services, consistent with WHO guidelines
Definition of the indicator	This indicator counts the number of countries and territories that have integrated post-rape care within emergency services, consistent with WHO guidelines. To achieve this indicator, a country must have emergency health services that include all five applicable criteria listed below (see technical note). **Baseline 2019:** 13 **Target 2025:** 18
Purpose of the indicator	This indicator measures whether countries and territories have integrated post-rape care within emergency services, consistent with international human rights standards and WHO guidelines, in order to measure changes in the availability of post-rape care within emergency services for survivors of sexual violence. The indicator uses post-rape care as a proxy for a comprehensive health services response to violence in all its forms, due to the availability of data. It is recognized that multiple forms of violence affect the Americas and often intersect. Therefore, PAHO will continue to support Member States' efforts to strengthen health service delivery in medical facilities for victims of all forms of violence, including violence against women, violence against children, youth violence, gun violence, and elder abuse, among others. The regional Strategy and Plan of Action on Strengthening the Health System to Address Violence against Women (CD54/9, Rev. 2), approved by PAHO Member States in 2015, outlines this area of work as a priority and uses this indicator to measure progress. The Global Plan of Action to strengthen the role of the health system within a national multisectoral response to address interpersonal violence, in particular against women and girls, and against children (A69/VR/8), proposes a similar indicator.
Technical note	In line with WHO guidelines and with the PAHO Strategy and Plan of Action approved by Member States, comprehensive post-rape care includes: 1. First-line support and psychological first aid 2. Emergency contraception for women who seek care within five days 3. Referral to safe abortion if a woman is pregnant as a result of rape, where such services are permitted by national law 4. STI and/or HIV post-exposure prophylaxis, per applicable protocols 5. Hepatitis B vaccination In 2013, WHO released a set of evidence-based guidelines on how the health sector should respond to survivors of intimate partner and sexual violence against women under the title Responding to Intimate Partner Violence and Sexual Violence against Women: WHO Clinical

	and Policy Guidelines. In 2014, WHO released Health Care for Women Subjected to Intimate Partner Violence or Sexual Violence: A Clinical Handbook, which provides additional guidance to health care providers. For further details and information, please refer to these documents (see references below).
Type of indicator	Absolute
Measurement units	Number of countries and territories
Frequency of measurement	Every 2 years
PASB unit	Noncommunicable Diseases and Mental Health / Noncommunicable Diseases, Violence and Injury Prevention (NMH/NV)
Data source	• PAHO has collected data on this indicator every three years (starting in 2015) as part of reporting requirements linked to the Strategy and Plan of Action on Strengthening the Health System to Address Violence against Women (CD54/9, Rev. 2). Additionally, provision of comprehensive post-rape care is included in progress reporting on WHO's HIV health sector response. • UNAIDS Global AIDS Monitoring collects a similar indicator that will contribute to reporting. • Additional information can be drawn from the forthcoming WHO Global Status Report on Preventing Violence against Children. • Efforts will also be made to strengthen information and data sources on improvements in health service delivery in medical facilities in every territorial and/or administrative unit for victims of all forms of violence.
Limitations	The existence of post-rape care services within emergency services does not ensure that the services are of good quality or that all survivors who need care are able to access it.
References	1. PAHO Strategy and Plan of Action on Strengthening the Health System to Address Violence against Women (2015) http://iris.paho.org/xmlui/handle/123456789/18386?locale-attribute=en 2. WHO Global Plan of Action to Strengthen the Role of the Health System Within a National Multisectoral Response to Address Interpersonal Violence, in Particular Against Women and Girls, and Against Children (2016) https://www.who.int/reproductivehealth/publications/violence/global-plan-of-action/en/ 3. WHO, 2013. Responding to Intimate Partner Violence and Sexual Violence against Women: WHO Clinical and Policy Guidelines. Available from: https://www.who.int/reproductivehealth/publications/violence/9789241548595/en/ 4. WHO, 2014. Health Care for Women Subjected to Intimate Partner Violence or Sexual Violence: A Clinical Handbook. Available from: https://www.who.int/reproductivehealth/publications/violence/vaw-clinical-handbook/en/
Linkage	• SHAA2030 target 9.4 • PAHO Strategy and Plan of Action on Strengthening the Health System to Address Violence against Women

	• WHO Global Plan of Action to Strengthen the Role of the Health System Within a National Multisectoral Response to Address Interpersonal Violence, in Particular Against Women and Girls, and Against Children

Code and title of the outcome	**Outcome 7:** Adequate availability and distribution of a competent health workforce
Code and title of the indicator	**Outcome Indicator 7.a:** Number of countries and territories that have reduced the density gap with respect to physicians, nurses, and midwives, achieving at least 25 health workers per 10,000 population in underserved areas, keeping in mind the global target of 44.5 by 2030
Definition of the indicator	This indicator counts the number of countries and territories that have reduced the density gap with respect to physicians, nurses, and midwives, achieving at least 25 health workers per 10,000 population in underserved areas. **Baseline 2019:** 7 **Target 2019:** 16
Purpose of the indicator	The density and distribution of health workers is critical to the capacity of health systems to provide health services to the population with quality and equity. Data on availability, distribution, quality, and performance of health personnel are essential inputs for developing national policies and plans on human resources for health (HRH). This indicator supports HRH strategic planning toward the global goal of 44.5 health workers per 10,000 population in 2030 and, more broadly, toward universal health in the Region.
Technical note	**Numerator:** Number of health workers,* defined by headcounts **Denominator:** Total population** in underserved areas The number of health workers is estimated per 10,000 population. Disaggregation is recommended by occupation, activity level, national level, and subnational level (i.e., region, province, department, municipality, depending on the country) * Health workers include: *a)* registered physicians (including generalist and specialist medical practitioners) in public and private settings in the country; *b)* registered professional nurses in public and private settings (including registered nurses and nursing technicians, but not auxiliary and unlicensed personnel); and *c)* registered professional midwives in public and private settings. A professional midwife is "a person who has successfully completed a training program in the midwifery practice recognized in the corresponding country and is based on the essential competencies for the basic practice of midwifery of the International Confederation of Midwives (ICM) and within the framework of the Global Standards for the formation of midwifery of the ICM; who has obtained the qualifications required to be registered or get a license to legally practice midwifery and use the title of 'midwife'; and that demonstrates competence in the exercise of midwifery." ** Total population as estimated by the UN Statistics Division. In cases where another methodology is used, PAHO/WHO recalculates densities according to the UN Statistics population data in order to harmonize the densities and ensure comparability.

	Note: Specifications of this indicator are in development with Member States as part of the implementation of the Plan of Action on Human Resources for Universal Access to Health and Universal Health Coverage 2018-2023.
Type of indicator	Absolute
Measurement units	Number of countries and territories
Frequency of measurement	Annual
PASB unit	• Health Systems and Services / Human Resources for Health (HSS/HR) • Evidence and Intelligence for Action in Health / Health Analysis, Metrics and Evidence (EIH/HA)
Data source	Data will be provided by ministries of health or health agencies of countries. Other possible data sources include health workforce registries or databases; aggregate data from health facilities (routine administrative records, health management information system, district health information system census and/or survey); professional council/chamber/association registers; labor force surveys; population census data; and United Nations Statistics Division population data.
Limitations	• In most countries, there is limited coverage and availability of information on the private sector health workforce that is up to date and available in the public domain. • Development of HRH information systems is limited in some countries. • Specialized personnel on HRH information systems are lacking in some countries. • There is insufficient investment in information technology systems and development.
References	1. Pan American Health Organization. Strategy on Human Resources for Universal Access to Health and Universal Health Coverage [Internet]. 29th Pan American Sanitary Conference of PAHO, 69th Session of the Regional Committee of WHO for the Americas; 2017 Sep 25-29; Washington, DC. Washington, DC: PAHO; 2017 (Document CSP29/10). Available from: https://www.paho.org/hq/index.php?option=com_docman&task=doc_download&gid=41531&Itemid=270&lang=en 2. Pan American Health Organization. Plan of Action on Human Resources for Universal Access to Health and Universal Health Coverage [Internet]. 56th Directing Council, 70th Session of the Regional Committee of WHO for the Americas; 23-27 September 2018; Washington, DC. Washington, DC: PAHO; 2018 (CD56/10) [cited 12 February 2019]. Available from: https://www.paho.org/hq/index.php?option=com_docman&view=download&category_slug=56-directing-council-english-9964&alias=45770-cd56-10-e-poa-hr-770&Itemid=270&lang=en 3. WHO (2016) National health workforce accounts: a handbook. Draft for consultation. https://www.who.int/hrh/documents/brief_nhwfa_handbook/en/ accessed 12 Feb 2019
Linkage	• SDG indicator 3.c.1 • SHAA2030 target 3.1

	• Plan of Action on Human Resources for Universal Access to Health and Universal Health Coverage 2018-2023 (CD56/10, Rev. 1), indicator 2.1.3 • PAHO Core Indicators • National Health Workforce Accounts, indicators 1-01 and 1-02 • GPW13 Impact Framework • SP14-19 outcome indicator 4.5.1, adapted

Code and title of the outcome	**Outcome 7:** Adequate availability and distribution of a competent health workforce
Code and title of the indicator	**Outcome Indicator 7.b:** Number of countries and territories that have an interprofessional health team at the first level of care, consistent with their model of care
Definition of the indicator	This indicator counts the number of countries and territories that have an official technical norm together with an established national model of care based on interprofessional teams at the first level of care, consistent with the country's model of care. **Baseline 2019:** 12 **Target 2025:** 21
Purpose of the indicator	The indicator promotes equitable distribution and retention of health workers through the development of a professional and economic incentives policy that considers the gender perspective and is consistent with the specific needs of each community, especially in underserved areas. The existence of norms, laws, and/or regulations is a critical criterion for assessing the capacity of health systems and services to deploy interprofessional teams in primary health care.
Technical note	Specifications for this indicator are in development with Member States as part of the implementation of the Plan of Action on Human Resources for Universal Access to Health and Universal Health Coverage 2018-2023. Proposed criteria: 1. Officially approved technical norms (or laws) defining the composition and scope of practice for interprofessional teams in primary health care. 2. Officially approved and established national models of care based on multidisciplinary teams working in primary health care and integrated networks.
Type of indicator	Absolute
Measurement units	Number of countries and territories
Frequency of measurement	Biannual
PASB unit	Health Systems and Services / Human Resources for Health (HSS/HR)
Data source	Data will be provided by ministries of health or health agencies of countries. Other possible data sources include health workforce registries or databases; aggregate data from health facilities (routine administrative records, health management information system, district health information system census and/or survey); professional council/chamber/association registers; labor force surveys; population census data; United Nations Statistics Division population data.
Limitations	The definitions of interprofessional teams (regarding composition and scope of practice), first level of care, and integrated networks vary between countries, depending the model of care adopted. This may affect the comparability of data obtained for this indicator.

References	1. Pan American Health Organization. Strategy on Human Resources for Universal Access to Health and Universal Health Coverage [Internet]. 29th Pan American Sanitary Conference of PAHO, 69th Session of the Regional Committee of WHO for the Americas; 25-29 September 2017; Washington, DC. Washington, DC: PAHO; 2017 (Document CSP29/10) [cited 12 February 2019]. Available from: https://www.paho.org/hq/index.php?option=com_docman&task=doc_download&gid=41531&Itemid=270&lang=en 2. Pan American Health Organization. Plan of Action on Human Resources for Universal Access to Health and Universal Health Coverage [Internet]. 56th Directing Council, 70th Session of the Regional Committee of WHO for the Americas; 23-27 September 2018; Washington, DC. Washington, DC: PAHO; 2018 (CD56/10, Rev. 1) [cited 12 February 2019]. Available from: https://www.paho.org/hq/index.php?option=com_docman&view=download&category_slug=56-directing-council-english-9964&alias=45770-cd56-10-e-poa-hr-770&Itemid=270&lang=en 3. WHO (2016) National health workforce accounts: a handbook. Draft for consultation. (https://www.who.int/hrh/documents/brief_nhwfa_handbook/en/ accessed 12 February 2019)
Linkage	• Plan of Action on Human Resources for Universal Access to Health and Universal Health Coverage 2018-2023 (CD56/10, Rev. 1) , indicator 2.2.1

Code and title of the outcome	Outcome 8: Increased equitable access to essential medicines, vaccines, and other health technologies that are safe, affordable, clinically effective, cost-effective, and quality-assured, and rational use of medicines, with strengthened regulatory systems that contribute to achieving universal access to health and universal health coverage
Code and title of the indicator	**Outcome Indicator 8.a:** Number of countries and territories that ensure that products listed on the essential medicines list are available without out-of-pocket expenditure at the point of care
Definition of the indicator	This indicator counts the number of countries and territories that have legal frameworks, strategies, and programs that ensure that the population has access to products included on the national essential medicines list without out-of-pocket expenditure at the point of service. **Baseline 2019:** 5 **Target 2025:** 11
Purpose of the indicator	This indicator helps assess critical components of access to medicines. Countries and territories that achieve the indicator make essential medicines available to the population and provide financial protection to prevent a financial burden that can be a barrier to access, in particular for populations living in conditions of vulnerability, patients suffering from chronic diseases, and patients whose treatments include high-cost products.
Technical note	To verify achievement of the indicator, the following types of documents will be considered: laws, decrees, resolutions, and other norms and regulations issued by governmental institutions in the exercise of delegated legislative functions.
Type of indicator	Absolute
Measurement units	Number of countries and territories
Frequency of measurement	Annual
PASB unit	Health Systems and Services / Medicines and Health Technologies (HSS/MT)
Data source	National legal frameworks; analysis of health system and services organization; and in some cases, access studies using tracer medicines.
Limitations	• The main limitation is that a legal framework does not guarantee implementation or the availability of medicines free of charge at the point of care; however, it is a good proxy indicator. • Another challenge will be to measure the indicator in fragmented health systems. Access studies are more informative and precise, but onerous to conduct.
References	1. Pan American Health Organization. Access and rational use of strategic and high-cost medicines and other health technologies. Washington, DC: PAHO; 2016 (Document CD55/10).
Linkage	• SDG indicator 3.b.1 • SHAA2030 target 5.1 • SP14-19 outcome indicator 4.3.1, adapted

Code and title of the outcome	**Outcome 8**: Increased equitable access to essential medicines, vaccines, and other health technologies that are safe, affordable, clinically effective, cost-effective, and quality-assured, and rational use of medicines, with strengthened regulatory systems that contribute to achieving universal access to health and universal health coverage
Code and title of the indicator	**Outcome Indicator 8.b:** Number of countries and territories with regulatory systems that reach level 3 under the WHO Global Benchmarking Tool (GBT)
Definition of the indicator	This indicator evaluates national capacities for regulation of health technologies by using the WHO Global Benchmarking Tool (GBT). The indicator counts the number of countries and territories with regulatory systems that reach level 3 under the GBT. **Baseline 2019:** 8 **Target 2025:** 16
Purpose of the indicator	Regulatory systems play a key role in assuring the quality, safety, and efficacy of medical products. Effective regulatory systems are an essential component of health systems and contribute to desired public health outcomes and innovation. This indicator is useful for measuring the capacities of national and subregional regulatory systems to ensure the quality, safety, and effectiveness of health technologies, including medicines and vaccines, throughout the entire product life cycle. Specific regulatory functions, indicators, and sub-indicators, according to context, are covered by the recommended tool.
Technical note	National regulatory authorities protect the safety, quality, and efficacy of medicines and other health technologies and play a crucial role in determining the pace at which new products are introduced. The pharmaceutical and health technology sector performs an essential function in health promotion and protection by ensuring that the products and technologies made available to the public through health systems meet international standards of quality and safety. The role of government, particularly the health ministry, together with other stakeholders, is to create a regulatory environment that guarantees quality throughout the useful life of a product, ensures patient safety, and optimizes health outcomes. At the 50th Directing Council in 2010, PAHO Member States reaffirmed their commitment to strengthening regulatory capacity for health technologies by adopting Resolution CD50.R9, Strengthening National Regulatory Authorities for Medicines and Biologicals. The Sustainable Health Agenda for the Americas 2018-2030, in document CSP29/6, Rev. 3 (2017), proposes 2030 as the target date for a national drug regulatory authority rated at level-3 capacity according to the WHO Global Benchmarking Tool. The GBT comprises all regulatory functions recommended to Member States. The tool and its benchmarking methodology enable the regulatory authorities to identify strengths and areas for improvement; facilitate the formulation of an institutional development plan (IDP) to build upon strengths and address the identified gaps; prioritize IDP interventions; and monitor progress and achievements. The assessment of regulatory capacities is performed by peers coming from other regulatory authorities and is led by WHO headquarters, regional, and country offices.

	For each regulatory function, the tool specifies a set of indicators and sub-indicators needed to achieve level 1, 2, 3, or 4. Country context and specificities are considered, and fact sheets are available to guide countries on how to achieve implementation of the indicators. The level of implementation of the indicators (non-implemented; implementation partial or ongoing; implemented) will define the maturity level achieved by the regulatory system.
Type of indicator	Absolute
Measurement units	Number of countries and territories
Frequency of measurement	The assessment of regulatory capacities should be performed by countries on regular basis as part of their quality management systems. When capacities are strengthened and level 3 is achieved, it is recommended that regulatory capacities be reassessed every three years to ensure that the regulatory system remains functional and demonstrates continuous improvement. Every year the regulatory country profile is updated and made available through the Regional Platform on Access and Innovation for Health Technologies (PRAIS).
PASB unit	Health Systems and Services / Medicines and Health Technologies (HSS/MT)
Data source	Regional and global platforms that collate results of the benchmarking of regulatory system strengthening; national data provided by the regulatory authorities through self-assessment processes and institutional development plans.
Limitations	• Although the Member States have endorsed regulatory system strengthening, the assessment of regulatory capacities is voluntary, and its performance requires a political commitment from each Member State. This may constrain the achievement and reporting of the indicator. • There are also limitations related to the product stream categories included in the current version of the GBT, namely medicines and vaccines. Future revisions are expected to also address blood products (including whole blood, blood components, and plasma-derived medicinal products) and medical devices, including diagnostics. Beta versions of these tools have been developed and are expected to be finalized in 2019 by WHO.
References	1. World Health Organization. Global Benchmarking Tool (GBT). Available from: https://www.who.int/medicines/regulation/benchmarking_tool/en/ 2. World Health Organization. WHA67.20, Regulatory system strengthening for medical products 3. Pan American Health Organization. CD50/20 and CD50.R9, Strengthening National Regulatory Authorities for Medicines and Biologicals 4. Pan American Health Organization. CD53/5 and CD53.R14, Strategy for Universal Access to Health and Universal Health Coverage 5. Pan American Health Organization. CD55.R12 and CD55/10, Rev. 1, Access and Rational Use of Strategic and High-cost Medicines and Other Health Technologies 6. Pan American Health Organization. CD42/15, Essential Public Health Functions

	7. Pan American Health Organization. CD42/13 and CD42.R11, Drug Regulatory Harmonization in the Americas
Linkage	• SHAA2030 target 5.3 • SP14-19 outcome indicator 4.3.2, adapted

Code and title of the outcome	**Outcome 8**: Increased equitable access to essential medicines, vaccines, and other health technologies that are safe, affordable, clinically effective, cost-effective, and quality-assured, and rational use of medicines, with strengthened regulatory systems that contribute to achieving universal access to health and universal health coverage
Code and title of the indicator	**Outcome Indicator 8.c:** Number of countries and territories that increase the number of units of blood available for transfusion per thousand inhabitants (UBAT) by at least 5% per year to reach the target of 30 UBAT
Definition of the indicator	The indicator counts the number of countries and territories that increase units of blood available for transfusion per thousand inhabitants (UBAT) by at least 5% per year. The target number of units for a country to reach is 30 UBAT. However, the indicator will be achieved when countries increase by 5% each year and reach at least 20 UBAT. **Baseline 2019:** 7 **Target 2025:** 16
Purpose of the indicator	The indicator measures the real availability of blood and components, taking into account not only the number of units collected but also the loss or waste of blood units due to causes such as transfusion-transmitted infections, quality problems, and blood expiration in storage. Real availability is a proxy for the efficiency of collection and blood services organization in a country. Tracking this indicator makes it possible to demonstrate the quality management and efficiency of blood services in the Region, as called for by PAHO's regional blood access plan for 2014-2019.
Technical note	To calculate the indicator, each country needs to calculate UBAT/1,000 inhabitants in a given year and then measure percentage variability of UBAT in the following year. $\left(\frac{\text{N* of units of blood collected} - \text{N* of units discarded}}{\text{Population (number of inhabitants)}}\right) \times 1{,}000 = \text{UBAT/1,000 inhabitants/year}$ UBAT: units of red blood cells and whole blood available in the country to meet the regular needs of 1,000 inhabitants in a given year N* of units of blood collected: total units collected by the country in that year N* of units discarded: units discarded for any of the following causes: • ITT: blood units discarded because of reactive screening results • Quality: blood units discarded because of faulty storage, a break in the cold chain, or other failures of the quality control system • Expiration: blood units discarded because they are past their expiry date Population: number of inhabitants in the country in that year
Type of indicator	Absolute
Measurement units	Number of countries and territories
Frequency of measurement	Annual

PASB unit	Health Systems and Services / Medicines and Health Technologies (HSS/MT)
Data source	Member States report these data yearly as part of their commitment to the Plan of Action for Universal Access to Safe Blood (CD53.R6).
Limitations	Countries may fail to report.
References	1. Pan American Health Organization. Plan of action for universal access to safe blood. Washington, DC: PAHO; 2014 (Resolution CD53.R6).
Linkage	• SHAA2030 target 5.6

Code and title of the outcome	**Outcome 8**: Increased equitable access to essential medicines, vaccines, and other health technologies that are safe, affordable, clinically effective, cost-effective, and quality-assured, and rational use of medicines, with strengthened regulatory systems that contribute to achieving universal access to health and universal health coverage
Code and title of the indicator	**Outcome Indicator 8.d:** Number of countries and territories that have regulations and oversight that ensure access to quality and safe radiological services
Definition of the indicator	This indicator counts the number of countries and territories that have a system of regulations and oversight capacity for radiological services based on the Radiation Protection and Safety of Radiation Sources: International Basic Safety Standards (BSS). These standards have been developed and endorsed by the European Community, Food and Agriculture Organization of the United Nations, International Atomic Energy Agency, International Labour Organization, Nuclear Energy Agency of the Organisation for Economic Co-operation and Development, World Health Organization, and UN Environment Programme, and by PAHO in Resolution CSP28.R15. **Baseline 2019:** 0 **Target 2025:** 11
Purpose of the indicator	To ensure the quality and safety of radiological services, it is necessary to implement the applicable requirements of the BSS. The indicator tracks the Region's progress toward compliance with these standards.
Technical note	While the BSS cover all radiation exposure situations, only the requirements applicable to all medical services that use ionizing radiation (radiological services) are to be considered for achievement of the indicator. As part of those requirements, each government must establish an authority or a system of authorities that is legally empowered to conduct the regulatory process, including by issuing authorizations of the services. This means that the country should be able to meet the BSS General Requirements (2.1 to 2.52), which mainly concern the responsibilities of the government and regulatory body, and the Planned Exposure Situations requirements (3.1 to 3.184), which concern the responsibilities of registrants and licensees regarding protection of health workers, patients, and members of the public.
Type of indicator	Absolute
Measurement units	Number of countries and territories
Frequency of measurement	Annual
PASB unit	Health Systems and Services / Medicines and Health Technologies (HSS/MT)
Data source	Country reporting systems; PAHO and IAEA information systems.
Limitations	Some countries do not have any formal system for regulation and oversight of radiological services. Other countries have a system, but the regulations and standards have not been updated to comply with the BSS, and/or the oversight capacity is limited. Many countries, during the process of building this capacity, will be rated as partially achieving the indicator.

	Only countries that demonstrate sufficient compliance with the above-mentioned requirements should be considered as having achieved the indicator.
References	1. International Atomic Energy Agency. Radiation protection and safety of radiation sources: international basic safety standards. Vienna: IAEA; 2014. https://www.iaea.org/publications/8930/radiation-protection-and-safety-of-radiation-sources-international-basic-safety-standards 2. Pan American Health Organization. Radiation protection and safety of radiation sources: international basic safety standards. Washington, DC: PAHO; 2012 (Resolution CSP28.R15). Available from: https://www.paho.org/hq/dmdocuments/2012/CSP28.R15-e.pdf 3. International Atomic Energy Agency. Radiation protection and safety in medical uses of ionizing radiation. Vienna: IAEA; 2018. https://www-pub.iaea.org/books/IAEABooks/11102/Radiation-Protection-and-Safety-in-Medical-Uses-of-Ionizing-Radiation
Linkage	• SHAA2030 target 5.5

Code and title of the outcome	**Outcome 8**: Increased equitable access to essential medicines, vaccines, and other health technologies that are safe, affordable, clinically effective, cost-effective, and quality-assured, and rational use of medicines, with strengthened regulatory systems that contribute to achieving universal access to health and universal health coverage
Code and title of the indicator	**Outcome Indicator 8.e:** Number of countries and territories that have regulations and oversight that ensure availability of quality pharmaceutical services
Definition of the indicator	This indicator counts the number of countries and territories that have provisions to ensure that pharmaceutical services are an integral part of health care services and that these services meet applicable standards and function under professional pharmaceutical supervision. **Baseline 2019:** 3 **Target 2025:** 8
Purpose of the indicator	The indicator is key to support development, collaboration, and integration of pharmaceutical services as part of health care services.
Technical note	To achieve the indicator, a country must have official provisions in place that mandate the role of and standards for integrated pharmaceutical services, functioning under pharmacist supervision, within the integrated health services network. Standards should follow the recommendations of global reference documents (see References, below). Legal provisions or official norms should establish or require all of the following: 1. Pharmaceutical services require the presence of, or are supervised by, a pharmacist. 2. Pharmaceutical services comply with national or local standards of practice regarding: *a)* mandatory procedures for the management of medical products; *b)* role of pharmaceutical services in prevention and promotion activities; *c)* information to the patient on medicines; *d)* participation in pharmacovigilance reporting; *e)* pharmacotherapy follow-up of patients; and *f)* interprofessional coordination of actions with the physician or other health care professionals when required.
Type of indicator	Absolute
Measurement units	Number of countries and territories
Frequency of measurement	Every 2 years
PASB unit	Health Systems and Services / Medicines and Health Technologies (HSS/MT)
Data source	Country legislation, norms, and regulations.
Limitations	A legal provision does not necessarily guarantee the quality of services, but it is taken as a proxy.
References	1. World Health Organization. WHO Technical Report Series, No. 961, 2011, Annex 8: Joint FIP/WHO guidelines on good pharmacy practice: standards for quality of pharmacy services. 2. World Health Organization. Developing Pharmacy Practice. A focus on patient care. WHO/FIP, 2006. https://apps.who.int/medicinedocs/documents/s14094e/s14094e.pdf

	3. Pan American Health Organization. Servicios farmacéuticos basados en la atención primaria de salud: documento de posición de la OPS/OMS. Washington, DC: PAHO; 2006. Available in Spanish from: https://www.paho.org/hq/dmdocuments/2013/SerieRAPSANo6-2013.pdf
Linkage	None

Code and title of the outcome	**Outcome 8**: Increased equitable access to essential medicines, vaccines, and other health technologies that are safe, affordable, clinically effective, cost-effective, and quality-assured, and rational use of medicines, with strengthened regulatory systems that contribute to achieving universal access to health and universal health coverage
Code and title of the indicator	**Outcome Indicator 8.f:** Number of countries and territories that have implemented institutional frameworks, strategies, and/or legal frameworks for the assessment, selection, and rational use of medicines and other health technologies including antibiotics
Definition of the indicator	This indicator counts the number of countries and territories that have implemented a framework and strategies that use evidence-based mechanisms for the assessment and selection of medicines and medical devices, their incorporation into the health system, and the development of clinical guidelines, as well as strategies for monitoring the use of medicines and medical devices, including antibiotics. **Baseline 2019:** 3 **Target 2025:** 9
Purpose of the indicator	The indicator supports the implementation of an integrated and comprehensive approach to the assessment and use of medicines and other health technologies, including pharmaceuticals, biologicals, medical devices, and diagnostics. The objective is to ensure access to cost-effective and effective health products as well as a rational allocation of resources that promotes sustainability of the health system and improved health outcomes.
Technical note	To achieve the indicator, a country must have official and valid decrees, resolutions, norms, or regulations in place that set forth structures and evidence-based mechanisms for the assessment and selection of medicines and other health technologies, their incorporation into the health system, and indicators for evaluation of their use in agreement with clinical guidelines.
Type of indicator	Absolute
Measurement units	Number of countries and territories
Frequency of measurement	Every 2 years
PASB unit	Health Systems and Services / Medicines and Health Technologies (HSS/MT)
Data source	Country legal frameworks and provisions.
Limitations	A legal provision does not necessarily guarantee effective implementation, but it is taken as a proxy.
References	1. World Health Organization. Resolution WHA60.16: Progress in the rational use of medicines http://apps.who.int/medicinedocs/documents/s21451en/s21451en.pdf 2. World Health Organization. Resolution WHA67.22: Access to essential medicines http://apps.who.int/medicinedocs/documents/s21453en/s21453en.pdf 3. Pan American Health Organization. Resolution CSP28.R9: Health Technology Assessment (HTA) and incorporation into health systems https://www.who.int/medical_devices/assessment/resolution_amro_csp28.r9.pdf

	4. Pan American Health Organization. Resolution CD55.R12: Access and rational use of strategic and high-cost medicines and other health technologies https://www.paho.org/hq/dmdocuments/2016/CD55-R12-e.pdf
Linkage	• SHAA2030 target 5.4 • GPW13 Impact Framework

Code and title of the outcome	**Outcome 9:** Strengthened stewardship and governance by national health authorities, enabling them to lead health systems transformation and implement the essential public health functions for universal health
Code and title of the indicator	**Outcome Indicator 9.a:** Number of countries and territories that have achieved, by 2025, a reduction of at least 10 percentage points in the population reporting access barriers to health services, as compared to 2020
Definition of the indicator	This indicator counts the number of countries and territories that have achieved, by 2025, a reduction of at least 10 percentage points in the population reporting access barriers to health services, as compared to 2020. Access barriers may be cultural, institutional, organizational, economic, and/or geographic in nature. **Baseline 2019:** N/A **Target 2025:** 15
Purpose of the indicator	Measuring this indicator will contribute to an understanding of the factors that influence access to health care in the Americas and the effectiveness of countries' efforts to make access more equitable. Achieving equity of access requires interventions to address modifiable determinants of access to health care; these include characteristics of the health system (e.g., institutional and organizational) as well as characteristics of individuals or populations (e.g., knowledge and communication). Health systems can increase health inequities if they do not take into consideration the needs and socioeconomic conditions of underserved populations.
Technical note	The percentage of the population reporting access barriers is defined as the percentage of people who report having a health problem in the previous 30 to 90 days and who do not seek formal health care services, in relation to the total number of people surveyed who report having a health problem in the same period. **Numerator:** Number of people who report having a health problem in the 30 to 90 days prior to the survey and who do not seek formal health care services due to cultural, institutional, organizational, economic, and/or geographic reasons. **Denominator:** Total number of people who report having a health problem in the 30 to 90 days prior to the survey. Access barriers fall into the following categories: • Institutional: long waiting times, lack of resolution of health problem, scarcity of resources (medication or health personnel), and stigma and discrimination • Geographic: lack of nearby health services • Economic: inability to pay for services • Cultural: language differences; preference for indigenous, homeopathic, or alternative medicine; interference by a member of the household to prevent access to health care
Type of indicator	Absolute

Measurement units	Number of countries and territories
Frequency of measurement	Every 2 years, at the end of the year
PASB unit	Health Systems and Services / Health Services and Access (HSS/HS)
Data source	Household surveys with a special module on health; administrative data from health facilities.
Limitations	Care-seeking behavior is related to individuals' overall perceptions about their health status, the severity of their illness, and the consequences of not treating a given condition. It may also reflect beliefs about the quality of health care services or ability to overcome perceived barriers to access. Understanding more about the reasons why people do not seek health care services is important to evaluate this indicator.
References	1. Báscolo E, Houghton N, del Riego A. Construcción de un marco de monitoreo para la salud universal. Rev Panam Salud Pública 2018;42:e81. https://doi.org/10.26633/RPSP.2018.81 2. Báscolo E, Houghton N, Del Riego A. Lógicas de transformación de los sistemas de salud en América Latina y resultado en acceso y cobertura de salud. Rev Panam Salud Pública 2018;42:e126. https://doi.org/10.26633/RPSP.2018.126 3. Penchansky R, Thomas JW. The concept of access: definition and relationship to consumer satisfaction. Medical Care 1981(19):127-140.
Linkage	• SHAA2030 target 2.1

Code and title of the outcome	**Outcome 9:** Strengthened stewardship and governance by national health authorities, enabling them to lead health systems transformation and implement the essential public health functions for universal health
Code and title of the indicator	**Outcome Indicator 9.b:** Number of countries and territories that have reached at least 60% of their capacity to implement the essential public health functions
Definition of the indicator	This indicator counts the number of countries and territories that have reached at least 60% of their capacity to exercise the following essential public health functions (EPHF): • Monitoring and evaluation of health and well-being, equity, social determinants of health, and performance of health systems • Public health surveillance, control, and management of health risks and emergencies; • Promotion and management of health research and knowledge • Formulation, implementation, and oversight of legislation, policies, and regulatory frameworks in health • Participation and social mobilization, including strategic actors and transparency • Development of human resources for health • Access and quality of medicines and other health technologies • Financing for health • Equitable access to quality health services • Equitable access to population and community interventions to promote health and prevent disease • Management and promotion of interventions to address the social determinants of health **Baseline 2019:** N/A **Target 2025:** 20
Purpose of the indicator	The indicator will assess progress toward strengthening health systems' capacity to deliver integrated and comprehensive public health actions. Improving performance of the essential public health functions has become a key strategy to enable health systems to address the complexity and multicausality of public health problems in the Americas.
Technical note	Capacity to deliver integrated and comprehensive public health actions will be considered acceptable when the country fulfills a set of indicators recommended by PAHO/WHO for each of the aforementioned essential public health functions. To verify that requirements are fulfilled, a questionnaire developed by PAHO will be applied to the countries. PAHO is currently updating the methodology for measurement of the EPHF, consistent with a review of the conceptual framework conducted in 2017-2018. This methodology includes two elements: first, mapping of the state structures responsible for implementation of the EPHF; and second, analysis of the performance of the 11 EPHF as outlined above, based on a mix of quantitative and qualitative methods. This methodology will promote the participation of various stakeholders, including academia, civil society, and state entities with responsibility for public health, and will have sufficient flexibility to be applied at both national and subnational levels. The methodology and tools will be finalized by the end of 2019, and PASB

	will facilitate orientation/training of Member States in their application. It is envisioned that countries will establish their baselines in 2020; develop a plan to improve performance, including defining targets; and conduct periodic reviews.
Type of indicator	Absolute
Measurement units	Number of countries and territories
Frequency of measurement	Every 2 years, comparing baseline status to the end of the evaluation period
PASB unit	Health Systems and Services / Health Services and Access (HSS/HS)
Data source	PAHO/WHO assessment tool for the essential public health functions (2019 version); Member States' assessment tools for the essential public health functions.
Limitations	Accuracy of the indicator relies on adequate coordination with the countries to perform the evaluation, as well as updated data collection and analyses.
References	1. Pan American Health Organization. Marco conceptual y metodológico de las funciones esenciales de salud pública. Working document. Washington, DC: PAHO; 2018.
Linkage	• SHAA2030 target 2.2

Code and title of the outcome	**Outcome 10**: Increased and improved sustainable public financing for health, with equity and efficiency
Code and title of the indicator	**Outcome Indicator 10.a:** Number of countries and territories that have increased public expenditure on health to at least 6% of GDP
Definition of the indicator	This indicator counts the number of countries and territories that have increased their domestic general government health expenditure (GGHE-D) to reach 6% of gross domestic product (GDP). **Baseline 2019:** 6 **Target 2025:** 12
Purpose of the indicator	The indicator reflects progress of the countries toward increasing public expenditure on health, with efficiency and equity, as a means to advance toward universal health. Evidence suggests that public expenditure on health should be at least 6% of GDP to ensure access to quality health services for the population.
Technical note	Public expenditure on health includes disbursements from institutional units at all levels of government (central, state, provincial, and local), plus mandatory social security expenses related to health. It is calculated using budgetary and administrative data. GDP represents a measure of the economic activity of a country in a given year. A country's public expenditure on health is calculated by dividing both components and multiplying by 100. The formula is: $$\text{GGHED as a \% of GDP} = \frac{\text{GGHED}}{\text{GDP}} * 100$$ where GGHE-D is domestic general government health expenditure, and GDP is gross domestic product. Countries and territories whose public expenditure on health reaches or exceeds 6% of GDP will be counted as having achieved the indicator.
Type of indicator	Absolute
Measurement units	Number of countries and territories
Frequency of measurement	The indicator is collected annually, with a lag of approximately 2 years (for example, in December 2018, the year 2016 was available).
PASB unit	Health Systems and Services / Health Services and Access (HSS/HS)
Data source	Data on health expenditure by central governments and by regional, provincial, state, local, and municipal governments of the Latin American and Caribbean countries come from the International Monetary Fund's online database on public finance statistics; from national budgets provided by the ministries of health; and from budgetary data and financial statements provided by social security institutions. Data on GDP and exchange rates come from the International Monetary Fund's online database on international finance statistics.

	The process of data collection is led by WHO, which publishes the data yearly in its Global Health Expenditure Database. The same indicator is published by Organisation for Economic Co-operation and Development, which also collects the data. From those sources, all or some of the data are published in different formats by PAHO, the World Bank, and Economic Commission for Latin America and the Caribbean.
Limitations	The System of Health Accounts 2011 (SHA 2011) admits different interpretations in some specific cases with respect to what is public expenditure, which can cause different results in those cases.
References	1. Cid Pedraza C, Matus-López M, Báscolo E. Espacio fiscal para salud en las Américas: ¿es suficiente el crecimiento económico? Rev Panam de Salud Pública 2018;42:e86. https://doi.org/10.26633/ RPSP.2018.86 2. Cid Pedraza C, Pagano JP, Pescetto C, Prieto L. Espacio fiscal para el financiamiento sostenible de los sistemas de salud y la salud universal. Rev Panam Salud Pública 2018;42:e197. https://doi.org/10.26633/ RPSP.2018.197 3. Etienne CF. Investing in universal health in the Americas. Rev Panam Salud Pública 2018;42:e90. https://doi.org/ 10.26633/RPSP.2018.90 4. Matus-López M, Prieto Toledo L, Cid Pedraza C. Evaluación del espacio fiscal para la salud en Perú. Rev Panam Salud Pública 2016;40(1):64–69. 5. Matus-López M, Cansino Pozo D, Cid Pedraza C, Valdés Romero W. Evaluación del espacio fiscal para salud en Bolivia. Rev Panam Salud Pública 2018;42:e4. https://doi.org/10.26633/RPSP.2018.4 6. Pan American Health Organization. Strategic Plan 2014-2019. OD345. Washington, DC: PAHO; 2013. 7. Pan American Health Organization. Espacio fiscal para salud en América Latina y el Caribe. Serie Salud Universal. Washington, DC: PAHO; 2018. 8. Pan American Health Organization. Strategy for universal access to health and universal health coverage. 53rd Directing Council of PAHO, 66th Session of the Regional Committee of WHO for the Americas; 2014 Sep 29-Oct 3; Washington, DC. Washington, DC: PAHO; 2014 (Document CD53/5). 9. Pan American Health Organization. Health financing in the Americas. Health in the Americas 2017. Washington, DC: PAHO; 2017. 10. Prieto Toledo L, Montañez Ginocchio V, Cid-Pedraza C. Espacio fiscal para salud en Honduras. Rev Panam Salud Pública 2018;42:e8. https://doi.org/10.26633/RPSP.2018.8 11. Rathe M, Hernández P, Van Mosseveld C, Pescetto C, Van de Maele N. Health accounts from past to present for a political arithmetic. Rev Panam Salud Pública 2018;42:e89. doi: https://doi.org/10.26633/ RPSP.2018.8 12. WHO global health expenditure database. Available from: http://apps.who.int/nha/database/Select/Indicators/en 13. World Health Organization. The world health report: health systems financing: the path to universal coverage. Geneva: WHO; 2010.

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Linkage	• SHAA2030 target 4.1 • PAHO Core Indicator • SP14-19 outcome indicator 4.1.2 • GPW13 Impact Framework

Code and title of the outcome	**Outcome 10**: Increased and improved sustainable public financing for health, with equity and efficiency
Code and title of the indicator	**Outcome Indicator 10.b:** Number of countries and territories that have allocated at least 30% of the public expenditure in health to the first level of care
Definition of the indicator	This indicator counts the number of countries and territories that have allocated at least 30% of their public expenditure in health to the provision of interventions at the first level of care. The methodology to calculate the 30% value may vary according to the national context, given the structure of the first level of care in each country. **Baseline 2019:** N/A **Target 2025:** 12
Purpose of the indicator	Spending on primary care reflects the financial resources used to pay for all inputs and functions required to deliver services at the first level of care (human resources, medicines and health technologies, infrastructure, quality improvement, public health services, management and coordination, intersectoral action, etc.). The strategy for universal health proposes that in the process of increasing public expenditure on health to at least 6% of GDP, an equitable and efficient allocation of resources should prioritize the first level of care, seeking to improve its response capacity and its capacity to organize health service delivery in an integrated manner. There is consensus that strengthening the first level of care will improve health outcomes and the efficiency of health care spending. Spending on the first level of care is therefore a key parameter in the discussion of whether financial resources are allocated efficiently. Tracking the level of such spending is essential to inform policy making, decision making, and planning to improve health systems performance with equity, efficiency, and sustainability.
Technical note	To measure the percentage of a country's public expenditure in health that is allocated to the first level of care, further discussion with experts from Member States is needed. Expert consultations will be conducted by PAHO to develop a specific methodology based on the classifications of SHA2011. It will address the different health functions (individual and collective public health), public health care financing schemes, and first level of care providers. The indicator is under construction and needs to be further refined as part of this consultation process. The formula is: $$\text{PHPC as a \% of GGHED} = \frac{\text{PHPC}}{\text{GGHED}} * 100$$ where PHPC is public expenditure on health allocated to the first level of care, and GGHE-D is domestic general government health expenditure. Countries and territories whose PHPC reaches or exceeds 30% of GGHE-D will be counted as having achieved the indicator.
Type of indicator	Absolute

Measurement units	Number of countries and territories
Frequency of measurement	The data are collected yearly and are published in the WHO Global Health Expenditure Database (GHED) in the first half of December each year, with a lag of 2 years (t-2).
PASB unit	Health Systems and Services / Health Services and Access (HSS/HS)
Data source	The data are published in the WHO GHED.
Limitations	• The definition of primary care services presents a challenge, since countries might have different definitions according to their own model of care and the level of development of their health system. • The indicator is obtained using available health accounts (SHA 2011) data. However, currently up-to-date data on HC classification (spending by function) are only available for five countries in the Region; six others have it for various previous years. Countries need to be sensitized on the need to produce health accounts on a continuous basis, and technical support is required to develop national capacity for producing and maintaining national health accounts.
References	1. World Health Organization. WHO Global Health Expenditure Database. Available from: http://apps.who.int/nha/database/Select/Indicators/en. 2. World Health Organization. WHO, 2008. World Health Report 2008: primary health care (now more than ever). Geneva, 2008. 3. World Health Organization. WHO 2018. Measuring primary health care expenditure in low and middle-income countries. Conference paper 25-26 October 2018. Available from: https://improvingphc.org/sites/default/files/Measuring%20PHC%20expenditure%20in%20LMIC_Conference%20paper-small.pdf 4. OECD 2018. Deriving preliminary estimates of primary care spending under the SHA2011 framework. Available from: 5. Friedberg, M.W., Hussey P.S., and E.C. Schneider (2010). Primary care: a critical review of the evidence on quality and costs of health care. Health Affairs 29:766-72. Available from: https://www.healthaffairs.org/doi/10.1377/hlthaff.2010.0025
Linkage	• SHAA2030 target 4.1

Code and title of the outcome	**Outcome 11**: Strengthened protection against health-related financial risks and hardships for all persons
Code and title of the indicator	**Outcome Indicator 11.a:** Number of countries and territories that have decreased by 20% the percentage of population in households experiencing out-of-pocket catastrophic health spending
Definition of the indicator	This indicator counts the number of countries and territories that have decreased by 20% the percentage of population in households experiencing catastrophic health spending because of direct payments (out-of-pocket health expenditure) at the point of service. Household health spending is considered "catastrophic" when it represents a large share of household income or consumption. **Baseline 2019:** 0 **Target 2025:** 17
Purpose of the indicator	Access to health care should be granted based on need instead of on ability to pay. Lack of financial protection is considered one of the most important access barriers to health services and one of the main sources of inequities in health. Direct payments are considered the less equitable way to finance health care, given that they can limit the quality and extent of care received. Direct payments may also represent a source of inefficiency, since they deter access to health services when needed, which may cause individuals to delay seeking care until a condition is already serious and treatment is more expensive and/or less effective. The strategy for universal health proposes that increasing financial protection will reduce inequity in access to health, and that countries should progressively advance toward the elimination of direct payments at the point of service as a source of financing. A decreasing level of catastrophic payments is an indicator of financial protection, although not the only one.
Technical note	For the purposes of this indicator, health spending is defined as catastrophic when it exceeds 25% of household consumption. Household consumption is defined as equivalent to total household income. Ability to pay is defined as total household income minus non-discretionary spending needed to cover household basic needs (beyond food spending). The formula is: $$\text{OOPC as a \% of the TOTH} = \frac{\text{OOPC}}{\text{TOTH}} * 100$$ where OOPC is number of households experiencing catastrophic health expenditure, and TOTH is total number of households. The following is a more detailed explanation of the method: using the surveys, Wagstaff and van Doorslaer (2003) measure the catastrophic expenditure incidence as the percentage of population that incurs out-of-pocket health expenditures (OOP) that represent 25% or more of total household expenditure. They conceptually develop the measurement of catastrophic health expenditure as follows:

	$$O_i^x = \frac{T_i}{x_i} - z_{cat}^x$$ where: O_i^x: Household per capita OOP above the threshold of the person i T_i: Household per capita OOP of the household of the person i x_i: Per capita total expenditure of the household of the person i z_{cat}^x: Threshold of the catastrophic health expenditure in health (25%) Then the indicator of people who incurred catastrophic health expenditure is: $$E_i^x = \begin{cases} 1 & \text{if } O_i^x > 0 \\ 0 & \text{if } O_i^x \leq 0 \end{cases}$$ Finally, the percentage of people who incurred catastrophic health expenditure is calculated as: $$H_{cat} = \frac{\sum_{i=1}^{N} E_i^x}{N}$$ where N is the total number of people.
Type of indicator	Absolute
Measurement units	Number of countries and territories
Frequency of measurement	The data are obtained from household surveys regularly conducted every 5 to 10 years.
PASB unit	Health Systems and Services / Health Services and Access (HSS/HS)
Data source	Household surveys are usually conducted by national institutes of statistics in the countries.
Limitations	• The indicator does not capture forgone health care, that is, care that was needed but was not obtained because it was unaffordable. • The catastrophic expenditure incidence is sensitive to the methodology used, provided that the income and ability-to-pay thresholds used are different.
References	1. Cid C, Pescetto C, Pagano JP, Del Riego A, Fitzgerald J. Health Financing and Financial Protection in the Americas. Working Paper by the WHO Regional Office for the Americas, AMRO/PAHO. Geneva: WHO; 2017. 2. Deaton A, Zaidi S. Guidelines for constructing consumption aggregates for welfare analysis. Living Standards Measurement Study Working Paper 135. Washington, DC: World Bank; 2002. 3. Ferreira FHG. A global count of the extreme poor in 2012: data issues, methodology and initial results. Journal of Economic Inequality 2016;14(2):141-72. 4. Flores G, Krishnakumar J, O'Donnell O, van Doorslaer E. Coping with health-care costs: implications for the measurement of catastrophic expenditures and poverty. Health Econ 2008(12):1393-412. 5. Knaul FM, Wong R, Arreola-Ornelas H, Méndez O, Bitrán R, Campino AC, et al. Household catastrophic health expenditures: a comparative analysis of twelve Latin American and Caribbean countries. Salud Pública de México 2011;53:S85–S95. 22.

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Linkage	• SDG indicator 3.8.2 • SHAA2030 target 4.2

Code and title of the outcome	**Outcome 11:** Strengthened protection against health-related financial risks and hardships for all persons
Code and title of the indicator	**Outcome Indicator 11.b:** Number of countries and territories that have decreased by 10% the percentage of people in households experiencing impoverishment due to out-of-pocket health expenditure.
Definition of the indicator	This indicator counts the number of countries and territories that have decreased by 10% the percentage of people in households whose out-of-pocket health expenditures push them below the poverty line. **Baseline 2019:** 0 **Target 2025:** 17
Purpose of the indicator	The indicator measures the progress of the countries toward the elimination of direct payments for health care at the point of service. This is key because these payments serve as a barrier to access and a source of household impoverishment.
Technical note	The indicator is calculated by constructing a ratio between surveyed households that incur out-of-pocket health expenditures that push them below the poverty line (the numerator) and the total number of households that incur out-of-pocket health expenditures (the denominator). The formula is: $$\text{HIOP as a \% of THOP } = \frac{\text{HIOP}}{\text{THOP}} * 100$$ where HIOP is the number of households experiencing impoverishment due to out-of-pocket health expenditures, and THOP is the number of households that incur out-of-pocket health expenditures. More in detail, using the surveys, Wagstaff and van Doorslaer (2003) propose using the international absolute poverty line (or a set of them according to the country's classification in terms of income) as the international US$ 1.90 per capita per day (measured in adjusted international dollars) by parity of purchasing power, constants of the year 2011, from now on, $int, Purchasing Power Parity (PPP), 2011). Wagstaff and van Doorslaer (2003) define the number of poor people before payment as: $$H_{pov}^{pre} = \frac{\sum_{i=1}^{N} P_i^{pre}}{x_i} = \mu_{P^{pre}}$$ where: H_{pov}^{pre}: number of people below poverty line before payment $P_i^{pre} = \begin{cases} 1 & x_i < z_{pov}^{pre} \\ 0 & x_i \geq z_{pov}^{pre} \end{cases}$: indicator of poverty of the person i x_i: total household expenditure per capita of the person i z_{pov}^{pre}: poverty line before payment

	$$g_i^{pre} = x_i - z_{pov}^{pre}$$ where: g_i^{pre}: poverty gap before payment of the person i $$G_{pov}^{pre} = \frac{\sum_{i=1}^{N} g_i^{pre}}{N} = \mu_{g^{pre}}$$ where: G_{pov}^{pre}: average poverty gap before payment normalizing: $$NG_{pov}^{pre} = \frac{G_{pov}^{pre}}{z_{pov}^{pre}}$$ and the positive average poverty gap is: $$MPG_{pov}^{pre} = \frac{\sum_{i=1}^{N} g_i^{pre}}{\sum_{i=1}^{N} p_i^{pre}} = \frac{\mu_{g^{pre}}}{\mu_{P^{pre}}}$$ in such a way that: $$\mu_{g^{pre}} = \mu_{P^{pre}} \cdot MPG_{pov}^{pre}$$ $$PI^{H} = H_{pov}^{post} - H_{pov}^{pre}$$ $$PI^{G} = G_{pov}^{post} - G_{pov}^{pre}$$ considering poverty line of $int 1.90 per day: $$z_{pov}^{pre} = z_{pov}^{post} = \$int\ 1.90 \cdot 365\ days \cdot TC_{\$int\ (PPP,\ 2011)}^{MN} \cdot h_{size}$$ where: $TC_{\$int,PPP,2011}^{MN}$: exchange rate from national currency per $int (PPP, 2011) h_{size}: Size of houshold
Type of indicator	Absolute
Measurement units	Number of countries and territories
Frequency of measurement	The frequency of calculation of the data depends on the frequency with which surveys on household expenditure are conducted in the countries. Some countries conduct such a survey every year, while others do it every 3, 5, or even 10 years.
PASB unit	Health Systems and Services / Health Services and Access (HSS/HS)
Data source	The indicator can be calculated and provided by the country (ministry of health and/or institute of statistics).

Limitations	The indicator shows how many households fall into poverty due to health spending and how many are no longer living in poverty, but it does not provide information on already poor households that become even poorer due to health spending. It also does not provide information about those who do not access health services due to lack of money, and who therefore do not have impoverishing health expenditure.
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	15. Wagstaff A, Flores G, Smitz M-F, Hsu J, Chepynoga K, Eozenou P. Progress on impoverishing health spending: results for 122 countries: a retrospective observational study. 2017. DOI: http://dx.doi.org/10.1016/S2214-109X(17)30486-2. 16. Wagstaff A, Flores G, Hsu J, Smitz M-F, Chepynoga K, Buisman LR et al. Progress on catastrophic health spending: results for 133 countries: a retrospective observational study. Lancet Global Health 2017. DOI: http://dx.doi.org/10.1016/S2214- 109X(17)30429-1. 17. Wagstaff A, et al. Progress on catastrophic health spending in 133 countries: a retrospective observational study. Lancet 6 February 2018. Available from: https://www.thelancet.com/action/showPdf?pii=S2214-109X%2817%2930429-1 18. World Health Organization, WHO. The world health report: health systems financing: the path to universal coverage, Geneva, 2010. 19. World Health Organization and International Bank for Reconstruction and Development/The World Bank. Tracking universal health coverage: 2017 global monitoring report. Geneva, 2017. 20. Xu K, Evans DB, Kawabata K, Zeramdini R, Klavus J, Murray CJ. Household catastrophic health expenditure: a multicountry analysis. Lancet 2003;362(9378):111-7 21. Xu K, Evans DB, Carrin G, Aguilar-Rivera AM, Musgrove P, Evans T. Protecting households from catastrophic health spending. Health Aff (Millwood) 2007;26(4):972-83. 22. A measured approach to ending poverty and boosting shared prosperity: concepts, data and the twin goals. Policy Research Report. Washington, DC: World Bank; 2015.
Linkage	• SDG indicator 3.8.2 • SHAA2030 target 4.2

Code and title of the outcome	**Outcome 12:** Risk factors for communicable diseases reduced by addressing the determinants of health through intersectoral action
Code and title of the indicator	**Outcome Indicator 12.a:** Number of countries and territories reporting data on discrimination in health services experienced by men who have sex with men (MSM) in the past 12 months
Definition of the indicator	This indicator counts the number of countries and territories that report updated information via the Global AIDS Monitoring process on the percentage of gay men and other men who have sex with men (MSM) who have experienced discrimination in health services in the past 12 months. Countries that report information from the previous three years will be counted as fulfilling the indicator. **Baseline 2019:** 6 **Target 2025:** 12
Purpose of the indicator	In 2013, the Member States of PAHO recognized that the stigma and discrimination faced by LGBT persons often prevents them from accessing needed health care services, including mental health and a wide array of other services, and that this and other forms of social and cultural exclusion result in health inequity, inequality, and increased vulnerability to adverse health outcomes. Resolution CD52.R6, Addressing the Causes of Disparities in Health Service Access and Utilization for Lesbian, Gay, Bisexual, and Trans (LGBT) Persons, urged Member States to: *a)* promote the delivery of health services to all people; *b)* enact policies, plans, and legislation promoting equal access to services and tailored to the specific needs and barriers faced by LGBT persons; and *c)* collect data about this population's access to health care and health facilities. Furthermore, discrimination exacerbates risks and deprives people of their rights and entitlements, thus fueling the HIV epidemic, among other health conditions. HIV-related stigma refers to negative beliefs, feelings, and attitudes toward people living with HIV, groups associated with people living with HIV (e.g., their families), and key populations at higher risk of HIV infection, such as men who have sex with men. This indicator provides an important measure of how many countries are able to monitor the proportion of MSM who have reported experiencing discrimination in health care services, including HIV testing, medical care, and treatment.
Technical note	Countries are requested to report on the indicators for monitoring the 2016 United Nations Political Declaration on Ending AIDS. This is done on an annual basis. Countries that are monitoring indicator LAC2.3.1b (in the set of regional indicators for Latin American and Caribbean countries) and that report new data will be counted as fulfilling outcome indicator 12.a for the Strategic Plan.
Type of indicator	Absolute
Measurement units	Number of countries and territories

Frequency of measurement	Every 3 years
PASB unit	Communicable Diseases and Environmental Determinants of Health / HIV, Hepatitis, Tuberculosis, and Sexually Transmitted Infections (CDE/HT)
Data source	UNAIDS and WHO, and the Global AIDS Monitoring (GAM) country reports.
Limitations	This indicator is used as a proxy for countries' efforts to decrease stigma and discrimination in health services. As the data are based on surveys or exit interviews with MSM, the information is not regularly collected and may not be representative of the country.
References	1. UNAIDS http://www.unaids.org/sites/default/files/media_asset/global-aids-monitoring_en.pdf 2. UNAIDS http://www.unaids.org/sites/default/files/media_asset/gam-lac-progress-zero-discrimination_en.pdf 3. Pan American Health Organization. Report of the Director on addressing the causes of disparities in health services access and utilization for lesbian, gay, bisexual and trans (LGBT) persons. Document CD56/INF/11, Corr. https://www.paho.org/hq/index.php?option=com_docman&view=download&category_slug=56-directing-council-english-9964&alias=46078-cd56-inf-11-e-lgbt-078&Itemid=270&lang=en
Linkage	• Global AIDS Monitoring, indicator LAC 2.3.1.b

Code and title of the outcome	**Outcome 12:** Risk factors for communicable diseases reduced by addressing the determinants of health through intersectoral action
Code and title of the indicator	**Outcome Indicator 12.b:** Number of countries and territories where the entire endemic (by vector transmission) territory or territorial unit has a domestic infestation index (by the main triatomine vector species or by the substitute vector, as the case may be) of less than or equal to 1%
Definition of the indicator	This indicator counts the number of countries and territories that have reached a set index of domestic infestation by the implied vector, as an expression of a potential decline in vector transmission to humans. **Baseline 2019:** 17 **Target 2025:** 21
Purpose of the indicator	The indicator shows the progress achieved by the vector control program (anti-triatomine) in a Chagas-endemic country, territory, or geographic area during a specific period of time, where the domestic infestation index (by the main triatomine vector species or by a substitute vector, as the case may be) is less than or equal to 1% as a result of a reduction or arrest in vector transmission.
Technical note	Calculation at country level: The domestic infestation index (by the main triatomine vector species or by a substitute vector, as the case may be) is calculated for each country by dividing the number of dwellings infested by the number of dwellings surveyed in a given area and then multiplying by 100. Calculation at regional level: The regional indicator is obtained by counting the number of endemic countries where the domestic infestation index (by the main triatomine vector species or by a substitute vector, as the case may be) is equal to or less than 1%.
Type of indicator	Absolute
Measurement units	Number of countries and territories
Frequency of measurement	Annual
PASB unit	Communicable Diseases and Environmental Determinants of Health / Neglected, Tropical and Vector Borne Diseases (CDE/VT)
Data source	The data are obtained from annual country reports received for the Annual Chagas Subregional Initiative Meeting. Complementary data are also acquired through field evaluation reports conducted by international missions, along with the PAHO/WHO Chagas Regional Program.
Limitations	The data generally show situations reflected only in representative samples and complementary seroepidemiological entomological surveys.

References	1. Salvatella R, Irabedra P, Sánchez D, Castellanos LG, Espinal M. South-south cooperation for Chagas disease. Lancet 3 August 2013;382(9890):395-396. http://www.thelancet.com/journals/lancet/article/PIIS0140-6736(13)61671-2/fulltext 2. Salvatella R, Schmunis G. Chagas disease. In: Medcalf A, Bhattacharya S. Tropical diseases. Lessons from history. Ed. Orient Black Swan, Ed.I:88-90, Hyderabad, 2014. 3. Governments of El Salvador, Guatemala, Honduras, Japan, and Nicaragua. Buenas prácticas en el control de la enfermedad de Chagas en Guatemala, El Salvador, Honduras y Nicaragua. Tokyo: Ed. JICA; 2014. 4. Pan American Health Organization. Initiative of the countries of Central America for control of vector-borne and transfusional transmission and medical care for Chagas disease (IPCA). Historia de 12 años de una Iniciativa Subregional, 1998-2010. Washington, DC: PAHO; 2011 (OPPS/HSD/CD/005-11). Available from: http://www.paho.org/hq/index.php?option=com_content&view=article&id=6143&Itemid=4283 5. Salvatella R, Irabedra P, Castellanos, LG. Interruption of vector transmission by native vectors and "the art of the possible". Mem Inst Oswaldo Cruz, Rio de Janeiro, Vol. 109(1):122-125, February 2014. Available from:
Linkage	• SHAA2030 target 10.7 • SP14-19 outcome indicator 1.3.4, adapted

Code and title of the outcome	**Outcome 12:** Risk factors for communicable diseases reduced by addressing the determinants of health through intersectoral action
Code and title of the indicator	**Outcome Indicator 12.c:** Number of countries and territories with increased antimicrobial resistance (AMR) surveillance capacity to guide public health interventions for decreasing the risk and preventing the spread of multidrug-resistant infections through intersectoral action
Definition of the indicator	This indicator counts the number of countries and territories with a national antimicrobial resistance (AMR) surveillance system that provides quality data on the resistance profiles of bacteria, including epidemiological (sex, age, hospital- or community-acquired infection) information on the patient. The data are analyzed and reported to guide public health interventions aimed at decreasing the risk and preventing the spread of multidrug-resistant infections. **Baseline 2019:** 5 **Target 2025:** 20
Purpose of the indicator	The purpose of the indicator is to demonstrate progress in the implementation of AMR national action plans in countries and territories, specifically through efforts to "strengthen knowledge through surveillance and research," as called for by the 2nd Global Action Plan on Antimicrobial Resistance. Successful implementation of national action plans should lead to increased surveillance capacity to respond to and monitor the threat of AMR. Member States should set up or strengthen their AMR surveillance capacity, starting from solid laboratory capacity and including the collection of relevant epidemiological data. This will enable countries to use AMR surveillance data to guide and measure interventions, inform treatment guidelines, and support infection prevention and control programs, as well as enabling them to participate in the Global Antimicrobial Resistance Surveillance System (GLASS).
Technical note	The indicator is calculated by counting the number of countries and territories with the required AMR surveillance capacity, as defined above. A country has achieved the indicator if: • Data analysis and reports are available at national level to guide public health interventions, including both laboratory and epidemiological information • National external quality assessment (EQA) of antimicrobial susceptibility testing (AST) of laboratories participating in the national AMR surveillance network is performed on a yearly basis • Data are reported to PAHO through the enhanced AMR surveillance platform for bloodstream infections
Type of indicator	Absolute
Measurement units	Number of countries and territories

Frequency of measurement	Annual
PASB unit	Communicable Diseases and Environmental Determinants of Health (CDE) / Special Program on Antimicrobial Resistance
Data source	Data are obtained from annual collection forms submitted officially by countries to PAHO and/or from other sources such as surveys, published databases, and public domain reports.
Limitations	The data depend on the quality of the surveillance system and on laboratory capacity for AMR detection. In addition, alignment with GLASS will pose a challenge for the coordination at country level to ensure that the required epidemiological data and information systems are available.
References	1. Pan American Health Organization. AMR data published in PLISA https://www.paho.org/data/index.php/en/mnu-topics/antimicrobial-resistance.html 2. World Health Organization. Global antimicrobial resistance surveillance system: manual for early implementation. This manual addresses the early phase of implementation of GLASS, focusing on surveillance of resistance in common human bacterial pathogens. http://www.who.int/antimicrobial-resistance/publications/surveillance-system-manual/en/
Linkage	• SHAA2030 target 10.8 • SP14-19 outcome indicator 1.6.1, adapted

Code and title of the outcome	**Outcome 12**: Risk factors for communicable diseases reduced by addressing the determinants of health through intersectoral action
Code and title of the indicator	**Outcome Indicator 12.d:** Number of countries and territories that have adequate mechanisms in place to prevent or mitigate risks to food safety
Definition of the indicator	This indicator counts the number of countries and territories with adequate intersectoral food control mechanisms in place to prevent or mitigate risks to food safety. **Baseline 2019:** 5 **Target 2025:** 10
Purpose of the indicator	The indicator shows progress in the implementation of a risk-based approach to strengthen food safety in a country or territory.
Technical note	This indicator is calculated by counting the countries and territories that have in place, or under implementation, intersectoral mandatory risk-based regulatory mechanisms, food monitoring and foodborne surveillance systems, and any other practice intended to protect consumers from foodborne diseases by strengthening controls during production, handling, storage, processing, and distribution, considering the one health approach. Such mechanisms must include the following five components of a food safety program, as well as any other practice that may protect health from foodborne diseases: 1. Food safety laws, regulations, and policies 2. Competent authorities 3. Surveillance and control 4. Inspection 5. Education Special attention should be given to the risks associated with populations in conditions of vulnerability, particularly children, and high-risk situations, such as settings without formal inspection services.
Type of indicator	Absolute
Measurement units	Number of countries and territories
Frequency of measurement	Annual. The reported data correspond to the end of the year and are received in March of the following year.
PASB unit	Communicable Diseases and Environmental Determinants of Health / Pan American Foot-and-Mouth Disease Center – PANAFTOSA (CDE/AFT)
Data source	Data are obtained from annual reports submitted by national authorities in health and agriculture to PANAFTOSA using the Performance, Vision and Strategy tool, as well as from other sources such as surveys, legislation databases, etc.

Limitations	• The data reflect self-assessment reports of qualitative measurements. They need to be complemented by other performance measures, including the number of foodborne illnesses reported and consumer surveys on food safety issues. • The indicator also depends on different authorities, according to the national governance mechanisms.
References	1. PAHO/WHO and IICA. Desempeño, visión y estrategia (DVE) para los sistemas y servicios nacionales de control de inocuidad de alimentos. 3rd ed. 2012; PAHO/WHO and IICA, 2012. Available from: http://bvs1.panaftosa.org.br/local/file/textoc/DVE-inocuidad-2012.pdf
Linkage	• SHAA2030 target 10.9 • SP14-19 outcome indicator 1.7.1, adapted

Code and title of the outcome	**Outcome 13:** Risk factors for noncommunicable diseases reduced by addressing the determinants of health through intersectoral action
Code and title of the indicator	**Outcome Indicator 13.a:** Age-standardized prevalence of current tobacco use among persons aged 15 years and older
Definition of the indicator	This indicator measures the age-standardized prevalence of current tobacco use in the population 15+ years of age in the Region, based on self-reported use of any tobacco product (smoked or smokeless) during the 30 days prior to the survey, including daily and non-daily use. **Baseline 2016:** 16.9% * **Target 2025:** 13.0% ** * WHO, Global Health Observatory, Americas, age-standardized prevalence of current tobacco smoking among persons aged 15 years and older, 2016, both sexes (2018). ** WHO, Global Report on Trends in Prevalence of Tobacco Smoking 2000-2025, 2nd edition (2018).
Purpose of the indicator	This indicator allows for the monitoring of tobacco consumption in the population aged 15 years and older in the Americas.
Technical note	Calculation at country level (expressed as a percentage): **Numerator:** Total number of current tobacco users* aged 15+ years in the country/territory. **Denominator:** Total population aged 15+ years in the country/territory. Calculation at regional level: **Numerator:** Total number of current tobacco users* aged 15+ years in the Region. **Denominator:** Total standard population aged 15+ years in the Region. * Current tobacco users are defined as persons who report using any smoked or smokeless tobacco product during the 30 days prior to the survey, including daily and non-daily use. Smoked tobacco products include manufactured cigarettes, bidis, cigars, pipes, waterpipes (narghile, hookah, shisha), hand-rolled tobacco, kreteks, and any other form of smoked tobacco. Smokeless tobacco is tobacco that is not burned and can be chewed, applied, or snuffed. Smokeless tobacco products include chewed or oral tobacco, spit or spitting tobacco, snuff, snus, chimó, and dip.
Type of indicator	Relative
Measurement units	Percentage

Frequency of measurement	At least every 5 years
PASB unit	Noncommunicable Diseases and Mental Health / Risk Factors and Nutrition (NMH/RF)
Data source	Global Adult Tobacco Survey (GATS); national risk factors surveys (STEPS or similar); other national surveys including Tobacco Questions for Surveys (TQS), national health surveys, and national drug abuse surveys.
Limitations	• Most of the Region's countries do not have a national surveillance system in place to monitor, systematically and periodically, the tobacco epidemic among the adult population. • Different age ranges may be used in different surveys. • The survey sample may have limited representativeness (national, subnational). • Different survey methodologies (household surveys, telephone surveys) may be used. • Different survey questions may be used; not all surveys include all tobacco products, nor do all report daily and non-daily consumption. • There is limited availability of disaggregated data for producing standardized estimates. • As with all self-reported surveys, data are subject to bias, as respondents may under- or overreport their tobacco use.
References	1. U.S. Centers for Disease Control and Prevention. Global Tobacco Surveillance System. GTSS Data. Global Adult Tobacco Survey (GATS). Atlanta, GA: CDC. Available from: http://nccd.cdc.gov/gtssdata/Ancillary/Documentation.aspx?SUID=4&DOCT=1 2. U.S. Centers for Disease Control and Prevention. Global Adult Tobacco Survey Collaborative Group. Tobacco Questions for Survey: A Subset of Key Questions from the Global Adult Tobacco Survey (GATS), 2nd edition. Atlanta, GA: CDC; 2011. Available from: http://www.who.int/tobacco/publications/surveillance/tqs/en/ 3. Centers for Disease Control and Prevention. Global Adult Tobacco Survey Collaborative Group. Global Adult Tobacco Survey (GATS): Sample Design Manual, Version 2.0. Atlanta, GA: CDC; 2010. 4. Centers for Disease Control and Prevention. Global Adult Tobacco Survey Collaborative Group. Global Adult Tobacco Survey (GATS): Core Questionnaire with Optional Questions, Version 2.1. Atlanta, GA: CDC; 2014. 5. Centers for Disease Control and Prevention. Global Adult Tobacco Survey Collaborative Group. Global Adult Tobacco Survey (GATS): Indicator definitions. Atlanta, GA: CDC; 2012. 6. World Health Organization. Global Health Observatory. Available from: https://www.who.int/gho/en/ 7. U.S. Centers for Disease Control and Prevention. Global Adult Tobacco Survey Collaborative Group. Tobacco Question for Surveys: A subset of key questions from the Global Adult Tobacco Survey (GATS). 2nd Edition. Atlanta, GA: Centers for Disease Control and Prevention, 2011.

Linkage	• SDG indicator 3.a.1 • SHAA2030 target 9.2 • SP14-19 outcome indicator 2.1.2, adapted • GPW13 Impact Framework

Code and title of the outcome	**Outcome 13:** Risk factors for noncommunicable diseases reduced by addressing the determinants of health through intersectoral action
Code and title of the indicator	**Outcome Indicator 13.b:** Total (recorded and unrecorded) alcohol per capita (APC) consumption among persons 15+ years of age within a calendar year in liters of pure alcohol, adjusted for tourist consumption
Definition of the indicator	This indicator measures the total (recorded and unrecorded) alcohol per capita consumption among persons 15+ years of age within a calendar year in liters of pure alcohol, adjusted for tourist consumption. **Baseline 2016:** 8.0 L* **Target 2025:** 8.0 L** * WHO Global Information System on Alcohol and Health (GISAH), regional alcohol per capita (15+) consumption by WHO region, 2018. ** The WHO projection for 2025 is an increase in consumption if nothing is done. The target is zero increase, which would require policy changes by Member States.
Purpose of the indicator	Reducing the disease burden attributable to alcohol is a global public health priority, as affirmed by the WHO Global Strategy to Reduce the Harmful Use of Alcohol. The strategy defines harmful use of alcohol as drinking that causes detrimental health and social consequences for the drinker (harmful drinking), for the people around the drinker, and for society at large, as well as patterns of drinking that are associated with increased risk of adverse health outcomes (hazardous drinking). It is estimated that 2.3 million deaths annually, or 3.8% of all deaths worldwide, are attributable to alcohol consumption, and more than half of them are caused by NCDs, including cancers and cardiovascular diseases. The risk of most health conditions attributable to alcohol is correlated with the overall levels of alcohol consumption, with no evidence of a threshold effect for cancers and hypertension. Per capita alcohol consumption is an indicator that is sensitive to policy changes. It is correlated with overall mortality and with alcohol-specific mortality, depending on the prevalence of heavy episodic drinkers and dependent drinkers.
Technical note	Recorded adult per capita consumption is calculated as the sum of beverage-specific (beer, wine, spirits, and other) consumption of pure alcohol during a given calendar year, based on data from various sources. The priority in calculations is given to government statistics on sales of alcoholic beverages during a calendar year or data on production, export, and import of alcohol in different beverage categories. In countries where data on government sales or production are not available, calculations are based on country-specific and publicly available data from the private sector, including alcohol producers, or on country-specific data from the United Nations Food and Agriculture Organization statistical database (FAOSTAT), which also may include estimates of unrecorded alcohol consumption. For the main categories of alcohol beverages, “beer” includes malt beers, “wine” includes wine made from grapes, “spirits” include all distilled beverages, and “other” includes several other alcoholic beverages, such as fermented beverages made from sorghum, maize, millet, or rice, as well as cider, fruit

	wine, and fortified wine. Estimates of unrecorded alcohol consumption are largely based on survey data, FAOSTAT data, other sources such as customs or police reports, and expert opinions. The indicator is calculated by the total sum of recorded and unrecorded alcohol consumed in a population during a given calendar year, divided by the midyear resident population aged 15 years and older for the same calendar year. Unrecorded alcohol consumption is estimated as a percentage of total alcohol consumption. Country-level proportions of unrecorded alcohol consumption are estimated using a regression analysis, using expert judgments and STEPwise surveillance (STEPS) surveys. Estimates of tourist consumption are obtained from the Institute for Health Metrics and Evaluation (IHME), which bases its calculation on data from the World Tourism Organization (UNWTO). The estimate of liters of alcohol consumed by tourists in a country is based on the number of tourists who visit that country, the average time they spend in the country, and how much people drink on average in the tourists' countries of origin (estimated on the basis of per capita consumption of recorded and unrecorded consumption of alcohol in the home country). These estimations assume: *a)* that people drink the same amounts of alcohol when they are tourists as they do in their home countries, and *b)* that global tourist consumption is equal to 0 (and thus tourist consumption can be either net negative or positive). Total per capita consumption is then estimated by adding recorded and unrecorded alcohol consumption and adjusting for tourist alcohol consumption. WHO utilizes all the information available at regional and country levels to provide estimates of per capita consumption by country and for the Region.
Type of indicator	Absolute
Measurement units	Liters of pure alcohol (ethanol) per person aged 15+ years, per year
Frequency of measurement	Annual. WHO utilizes a 3-year average (for example, the estimate for 2016 is the average of data for 2014, 2015, and 2016) for global reports that include regional averages and country-by-country estimates.
PASB unit	Noncommunicable Diseases and Mental Health / Mental Health and Substance Use (NMH/MH)
Data source	Administrative reporting systems are used for recorded APC consumption; survey data are the preferred sources for unrecorded APC consumption. In their absence, data sets of the UN Food and Agriculture Organization (FAO) and the UN Statistics Division are used, as well as expert opinions on unrecorded alcohol consumption. WHO also uses public information sources from the alcohol industry and develops an estimate for each country, which is then sent for approval to the respective national health authority. WHO has estimates available for all countries in the Region in the Global Information System on Alcohol and Health (GISAH), which has an

	interface with the Regional Information System on Alcohol and Health (AMRISAH), the system for the Region of the Americas. The WHO Global Status Report on Alcohol and Health 2018 is the data source for this indicator's baseline; it is based on the last iteration with Member States in 2016 through a global survey to which the official focal points in each country responded. Population data for the report were obtained primarily from the United Nations Population Division and refer to the total population aged 15 years and older, with data for males and females shown separately whenever available.
Limitations	• Most countries in the Region do not currently provide sales data on alcoholic beverages; therefore, WHO prepares estimates using data from FAO and the alcohol industry. Information from alcohol industry sources may not be verifiable. Data on unrecorded alcohol consumption are largely based on empirical investigations and the judgment of experts using a regression model. • Administrative records are often incomplete. • Underestimation of consumption by survey respondents may affect the data. • Lack of sufficient data may impose methodological limitations.
References	1. World Health Organization. Global strategy to reduce the harmful use of alcohol. Geneva: WHO; 2010. Available from: http://www.who.int/substance_abuse/alcstratenglishfinal.pdf?ua=1 2. World Health Organization. Global Status report on Alcohol and Health, Geneva: WHO; 2018. 3. Rehm J, Baliunas D, Borges GL, Graham K, Irving H, Kehoe T, et al. The relation between different dimensions of alcohol consumption and burden of disease - an overview. *Addiction* 2010; 105(5): 817-843. 4. GBD 2016 Alcohol use and burden for 195 countries and territories, 1990-2016: a systematic analysis for the Global Burden of Disease Study 2016, Lancet 2018; 392: 1015-35. 5. WHO. Global Information System on Alcohol and Health (GISAH). Available from: http://apps.who.int/gho/data/view.main?showonly=GISAH 6. WHO. Global Information System on Alcohol and Health (GISAH) (Region of the Americas). Available from: http://apps.who.int/gho/data/?showonly=GISAH&theme=main-amro
Linkage	• SDG indicator 3.5.2 • SHAA2030 target 9.1 • SP14-19 outcome indicator 2.1.1a • GPW13 Impact Framework

Code and title of the outcome	**Outcome 13:** Risk factors for noncommunicable diseases reduced by addressing the determinants of health through intersectoral action
Code and title of the indicator	**Outcome Indicator 13.c:** Age-standardized mean population intake of salt (sodium chloride) per day in grams in persons aged 18+ years
Definition of the indicator	This indicator measures the average intake of salt (sodium chloride) in grams per day in the population aged 18 and older. **Baseline 2019:** 3.6 g of sodium/day (Canada/USA), 3.2 g of sodium/day (Latin America/Caribbean) **Target 2025:** <2.0 g of sodium/day
Purpose of the indicator	The average intake of salt/sodium in the population is directly related to the average blood pressure levels in the population. Reducing overconsumption of salt is the most cost-effective intervention for the prevention of high blood pressure, which is the main risk factor for suffering and dying from a cardiovascular event.
Technical note	The gold standard for estimating salt intake is 24-hour urine collection to determine the level of sodium/salt excretion in urine. However, other methods such as spot urine tests and food frequency surveys may be more feasible to administer at the population level. Calculation at country level (expressed in g/person/day): **Numerator**: The sum of all levels of sodium in 24-hour urine in the adult population aged 18+ years participating in the population study; OR the sodium in 24-hour urine level estimated using spot urine tests as described in the PanAm-STEPS protocol; OR the sodium intake estimated using food frequency surveys or multiple 24-hour recall, in grams. **Denominator**: All participants in the study. PAHO has a protocol for determining the levels of sodium in 24-hour urine, which is based on spot urine tests and the INTERSALT equation. This protocol is available to the countries to include in their national risk factor studies, mainly through PanAm STEPS. Calculation at regional level: To calculate the age-standardized mean population intake of salt (sodium chloride) per day in grams in persons aged 18 years and older requires the application of age-specific mean population salt intake to the WHO World Standard Population, summed over all ages. The process of age standardization will be done by PAHO at the regional level. Based on regional data provided by PAHO, WHO produces the estimates of the global percentage of mean population intake of salt.
Type of indicator	Absolute
Measurement units	Grams of salt per person per day, based on 24-hour urine sodium excretion, or based on spot urine, or based on food frequency surveys or multiple 24-hour recall.

Frequency of measurement	Every 4 to 5 years, coinciding with the risk factors survey.
PASB unit	Noncommunicable Diseases and Mental Health / Risk Factors and Nutrition (NMH/RF)
Data source	National surveys (PanAm STEPS or national nutrition surveys)
Limitations	Reporting on this indicator may be infrequent, approximately every four to five years, if the country completes its national survey.
References	1. World Health Organization. Creating an enabling environment for population-based salt reduction strategies: report of a joint technical meeting held by WHO and the Food Standards Agency, United Kingdom. Geneva: WHO; 2010. 2. World Health Organization. Prevention of cardiovascular disease: pocket guidelines for assessment and management of cardiovascular risk. Geneva: WHO; 2007. 3. Brown IJ et al. Salt intakes around the world: implications for public health. International Journal of Epidemiology 2009;38:791-813. 4. Cappuccio F et al. Policy options to reduce population salt intake. British Medical Journal 2011;343:d499 5. He FJ, MacGregor GA. A comprehensive review on salt and health and current experience of worldwide salt reduction programmes. Journal of Human Hypertension 2009;23:363-384. 6. World Health Organization. Strategies to monitor and evaluate population sodium consumption and sources of sodium in the diet. Report of a joint technical meeting convened by WHO and the Government of Canada, Canada. October 2010. Geneva: WHO; 2011. Available from: http://whqlibdoc.who.int/publications/2011/9789241501699_eng.pdf
Linkage	• SHAA2030 target 9.1 • SP14-19 outcome indicator 2.1.7

Code and title of the outcome	**Outcome 13:** Risk factors for noncommunicable diseases reduced by addressing the determinants of health through intersectoral action
Code and title of the indicator	**Outcome Indicator 13.d:** Number of countries and territories that have eliminated industrially produced trans fatty acids
Definition of the indicator	This indicator counts the number of countries and territories that have enacted mandatory legislation that limits the amount of industrially produced trans fatty acids (TFA) in oils and all foods to 2% of total fat, or that bans partially hydrogenated oils. In doing so, it also facilitates tracking the percentage of the population who are protected (the GPW13 Impact Framework indicator), as explained under Purpose. **Baseline 2019:** 6 **Target 2025:** 35
Purpose of the indicator	The purpose of the indicator is to track the percentage of the population in the Americas that lives in nations where there is mandatory regulation that limits the amount of industrially produced TFA in the food supply.
Technical note	Countries and territories are considered to have achieved this indicator if they have enacted mandatory legislation that limits the amount of industrially produced trans fatty acids (TFA) in oils and all foods to 2% of total fat, or that bans partially hydrogenated oils.
Type of indicator	Absolute
Measurement units	Number of countries and territories
Frequency of measurement	Every 2-3 years
PASB unit	Noncommunicable Diseases and Mental Health / Risk Factors and Nutrition (NMH/RF)
Data source	PAHO's internal monitoring system for the proposed Plan of Action for the Elimination of Industrially Produced Trans Fatty Acids.
Limitations	It may take a significant amount of time for regulations, once adopted, to be implemented; therefore, a population may not be protected as soon as a regulation is adopted.
References	1. WHO. Creating an enabling environment for population-based salt reduction strategies: report of a joint technical meeting held by WHO and the Food Standards Agency, United Kingdom. Geneva: WHO; 2010. 2. WHO. Prevention of cardiovascular disease: pocket guidelines for assessment and management of cardiovascular risk. Geneva: WHO; 2007. 3. Brown IJ et al. Salt intakes around the world: implications for public health. International Journal of Epidemiology 2009;38:791-813. 4. Cappuccio F et al. Policy options to reduce population salt intake. British Medical Journal 2011;343:d499 5. He FJ, MacGregor GA. A comprehensive review on salt and health and current experience of worldwide salt reduction programmes. Journal of Human Hypertension 2009;23:363-384.

	6. WHO. Strategies to monitor and evaluate population sodium consumption and sources of sodium in the diet. Report of a joint technical meeting convened by WHO and the Government of Canada, Canada. October 2010. Geneva: WHO; 2011. Available from: http://whqlibdoc.who.int/publications/2011/9789241501699_eng.pdf
Linkage	• SHAA2030 target 9.1 • GPW13 Impact Framework

Code and title of the outcome	**Outcome 13:** Risk factors for noncommunicable diseases reduced by addressing the determinants of health through intersectoral action
Code and title of the indicator	**Outcome Indicator 13.e:** Age-standardized prevalence of insufficiently physically active persons aged 18+ years
Definition of the indicator	This indicator measures the percentage of adults aged 18 years or older (age-standardized) attaining less than 150 minutes of moderate-intensity physical activity per week, or less than 75 minutes of vigorous-intensity physical activity per week, or equivalent. **Baseline 2016:** 39.3% **Target 2025:** 35.0%
Purpose of the indicator	The indicator serves to monitor each country's progress in improving levels of physical activity among adults. Physical activity provides fundamental health benefits, including greater cardiovascular fitness, a reduction in body fat, and a favorable cardiovascular and metabolic disease risk profile. Physical activity also reduces stress and symptoms of depression.
Technical note	Calculation at country level (expressed as a percentage): **Numerator:** Persons aged 18 years or older not meeting the recommended amount of physical activity. **Denominator:** Total number of persons aged 18 years or older surveyed. The estimates are based on self-reported physical activity captured using the Global Physical Activity Questionnaire (GPAQ), the International Physical Activity Questionnaire (IPAQ), or a similar questionnaire covering activity at work, in the household, for transport, and during leisure time. When necessary, adjustments are made for the reported definition (when it differs from the indicator definition), for known overreporting of activity, or for limitations in the survey's geographic coverage (as when a survey only covers urban areas) or age coverage (when the age range is narrower than adults 18+). No estimates are produced for countries with no data. A guide to the self-reported method using the standardized Global Physical Activity Questionnaire (GPAQ) is available from: http://www.who.int/chp/steps/resources/GPAQ_Analysis_Guide.pdf. The International Physical Activity Questionnaire (IPAQ) is available from: http://www.ipaq.ki.se/ipaq.htm. Standardization is done using the WHO World Standard Population.
Type of indicator	Relative
Measurement units	Percentage

Frequency of measurement	At least every 5 years, although it is desirable that measurements of physical inactivity be monitored every year using a phone survey methodology.
PASB unit	Noncommunicable Diseases and Mental Health / Risk Factors and Nutrition (NMH/RF)
Data source	The data are obtained from the WHO Global Health Observatory data repository. It contains nationally representative surveys conducted every 4 to 5years by the countries, which provide accurate measurements and representative national samples.
Limitations	• Limited representativeness affects some samples (national, subnational). • There is limited access to disaggregated data to produce the standardized estimates. • Estimates are based on self-reported data. • Some estimates contain uncertainty (reflected in wide confidence intervals) due to lack of quality data.
References	1. World Health Organization. Global recommendations on physical activity for health. Geneva: WHO; 2010. Available from: http://whqlibdoc.who.int/publications/2010/9789241599979_eng.pdf?ua=1 2. World Health Organization. Global recommendation on physical activity for health: 18-64 years old. Available from: http://www.who.int/dietphysicalactivity/physical-activity-recommendations-18-64years.pdf?ua=1 3. World Health Organization. Global strategy on diet, physical activity and health [Internet]. Geneva: WHO; 2004. Available from: http://www.who.int/dietphysicalactivity/strategy/eb11344/strategy_english_web.pdf
Linkage	• SHAA2030 target 9.1 • SP14-19 outcome indicator 2.1.3b • WHO Global Monitoring Framework on NCDs, target 3, indicator 7 • Global Action Plan on Physical Activity

Code and title of the outcome	**Outcome 14:** Malnutrition in all its forms reduced
Code and title of the indicator	**Outcome Indicator 14.a:** Prevalence of stunting in children under 5 years of age
Definition of the indicator	This indicator measures the percentage of children under 5 years of age who are affected by stunting, defined as height-for-age more than two standard deviations below the median established by the WHO Child Growth Standards. **Baseline 2018:** 6.5% **Target 2025:** 3.9% * * The target is for a 40% reduction.
Purpose of the indicator	This indicator belongs to a set of indicators whose purpose is to measure nutritional imbalance and malnutrition resulting in undernutrition (assessed by underweight, stunting, and wasting) and overweight in young children. Stunting, defined as low height-for-age, is the result of long-term nutritional deprivation. It is a risk factor for child mortality and often results in delayed mental development, poor school performance, and reduced intellectual capacity.
Technical note	The indicator is calculated using measurements of weight and height in children 0 to 59 months of age. Children's weight and height are measured using the WHO recommended methodology, that is, children younger than 24 months are measured in a supine position, and children 24 months and older are measured while standing. Children with height-for-age more than two standard deviations below the median of the WHO Child Growth Standards are considered stunted. Calculation at country level (expressed as a percentage): **Numerator:** Number of children 0-59 months of age whose height-for-age is more than two standard deviations below the median of the WHO Child Growth Standards. **Denominator:** Total number of children 0-59 months of age whose measurements were taken. Calculation at regional level: WHO maintains the Global Database on Child Growth and Malnutrition, which includes population-based surveys that meet a set of criteria. Data are checked for validity and consistency, and raw data sets are analyzed following a standard procedure to obtain comparable results. Prevalences below and above defined cut-off points for four indexes, namely weight-for-age, height-for-age, weight-for-height, and body mass index (BMI)-for-

	age, in preschool children are presented using z-scores based on the WHO Child Growth Standards. A detailed description of the methodology and procedures of the database, including data sources, criteria for inclusion, data quality control, and database workflow, is provided in a paper published in the International Journal of Epidemiology by de Onis and Blössner (2003). Predominant type of statistics: adjusted. A well-established methodology for deriving global and regional trends and forecasting future trends has been published by de Onis et al. (2004a, 2004b).
Type of indicator	Relative
Measurement units	Percentage
Frequency of measurement	Every 5 years
PASB unit	Noncommunicable Diseases and Mental Health / Risk Factors and Nutrition (NMH/RF)
Data source	WHO Global Health Observatory data repository. Joint child malnutrition estimates (UNICEF-WHO-World Bank) use data from population-based surveys such as national nutrition surveys, Demographic and Health Surveys (DHS), Multiple Indicator Cluster Surveys (MICS), and national surveillance systems.
Limitations	• Nationally representative surveys are not available for all countries. • While nationally representative surveys usually are carried out every five years, the frequency may vary depending on country policies and availability of funding. • National surveillance systems are generally not reliable because of weak data collection procedures. Natural disasters may prevent surveys from being completed. • There is a time lapse between data collection and publishing.
References	1. de Onis, M. and Blössner M. The World Health Organization Global Database on Child Growth and Malnutrition: methodology and applications; International Journal of Epidemiology 2003;32:518-26. Available from: http://www.who.int/nutgrowthdb/publications/methodology/en/ 2. de Onis, M. Garza, et al. For the WHO Multicentre Growth Reference Study Group (2004a): The WHO Multicentre Growth Reference Study: Rationale, Planning, and Implementation. Available from: http://www.sprs.com.br/templates/sprs/pdf/download/oms_curvas.pdf 3. de Onis, M. Garza, et al. For the WHO Multicentre Growth Reference Study Group (2004b): The WHO Multicentre Growth Reference Study: Planning, study design, and methodology. Available from: http://www.ingentaconnect.com/content/nsinf/fnb/2004/00000025/A00101s1/art00003 4. World Health Organization. Nutrition. Global targets 2025. To improve maternal, infant and young child nutrition. Geneva: WHO. [Internet.] Available from:

	http://www.who.int/nutrition/topics/nutrition_globaltargets2025/en/ 5. World Health Organization. Physical status: the use and interpretation of anthropometry : report of a WHO Expert Committee. Geneva: WHO; 1995. (Technical report series 854). 6. United Nations Children's Fund, World Health Organization, The World Bank. UNICEF-WHO-World Bank Joint Child Malnutrition Estimates. (UNICEF, New York; WHO, Geneva; The World Bank, Washington, DC; 2012). Available from: http://www.who.int/nutgrowthdb/jme_unicef_who_wb.pdf?ua=1 7. Joint child malnutrition estimates (UNICEF-WHO-WB): Global and regional trends by UN Regions, 1990-2025 Stunting: 1990-2025. Available from: http://apps.who.int/gho/data/view.main.NUTUNSTUNTINGv?lang=en 8. World Health Organization. Nutrition Landscape Information System (NLIS) country profile indicators: interpretation guide. Geneva: WHO; October 2012. Available from: http://apps.who.int/iris/bitstream/10665/44397/1/9789241599955_eng.pdf?ua=1
Linkage	• SDG indicator 2.2.1 • SHAA2030 target 9.7 • PAHO Core Indicator • SP14-19 outcome indicator 2.5.1 • GPW13 Impact Framework • WHO global nutrition target 1

Code and title of the outcome	**Outcome 14:** Malnutrition in all its forms reduced
Code and title of the indicator	**Outcome Indicator 14.b:** Prevalence of wasting in children under 5 years of age
Definition of the indicator	This indicator measures the percentage of children under 5 years of age who are affected by wasting, defined as weight-for-height more than two standard deviations below the median established by the WHO Child Growth Standards. **Baseline 2018:** 0.8% **Target 2025:** 0.8%
Purpose of the indicator	This indicator belongs to a set of indicators whose purpose is to measure nutritional imbalance and malnutrition resulting in undernutrition (assessed by underweight, stunting, and wasting) and overweight in young children. Wasting occurs when a child's weight falls significantly below the weight expected of a child of the same length or height, resulting from failure to gain weight or actual weight loss. It indicates current or acute malnutrition. Causes include inadequate food intake, incorrect feeding practices, diseases, and infections—or, more frequently, a combination of these factors.
Technical note	The indicator is calculated using measurements of weight and height in children 0 to 59 months of age. Children's weight and height are measured using the WHO recommended methodology, that is, children younger than 24 months are measured in a supine position, and children 24 months and older are measured while standing. Children with weight-for-height more than two standard deviations below the median of the WHO Child Growth Standards are considered to suffer from wasting. Calculation at country level (expressed as a percentage): **Numerator:** Number of children 0-59 months of age whose weight-for-height is more than two standard deviations below the median of the WHO Child Growth Standards. **Denominator:** Total number of children 0-59 months of age whose measurements were taken. Calculation at regional level: WHO maintains the Global Database on Child Growth and Malnutrition, which includes population-based surveys that meet a set of criteria. Data are checked for validity and consistency, and raw data sets are analyzed following a standard procedure to obtain comparable results. Prevalences below and above defined cut-off points for four indexes, namely weight-for-age, height-for-age, weight-for-height, and body mass index (BMI)-for-age, in preschool children are presented using z-scores based on the WHO Child Growth Standards. A detailed description of the methodology and procedures of the database, including data

	sources, criteria for inclusion, data quality control, and database workflow, is provided in a paper published in the International Journal of Epidemiology by de Onis and Blössner (2003). Predominant type of statistics: adjusted. A well-established methodology for deriving global and regional trends and forecasting future trends has been published by de Onis et al. (2004a, 2004b).
Type of indicator	Relative
Measurement units	Percentage
Frequency of measurement	Every 5 years
PASB unit	Noncommunicable Diseases and Mental Health / Risk Factors and Nutrition (NMH/RF)
Data source	National nutrition surveys, Demographic and Health Surveys (DHS), Multiple Indicator Cluster Surveys (MICS), and national surveillance systems.
Limitations	• Nationally representative surveys are not available for all countries. • While nationally representative surveys usually are carried out every five years, the frequency may vary depending on country policies and availability of funding. • National surveillance systems are generally not reliable because of weak data collection procedures. Natural disasters may prevent surveys from being completed. • There is a time lapse between data collection and publishing.
References	1. de Onis, M. and Blössner M. The World Health Organization Global Database on Child Growth and Malnutrition: methodology and applications; International Journal of Epidemiology 2003; 32:518-26. Available from: http://www.who.int/nutgrowthdb/publications/methodology/en/ 2. de Onis, M. Garza, et al. For the WHO Multicentre Growth Reference Study Group (2004a): The WHO Multicentre Growth Reference Study: Rationale, Planning, and Implementation. Available from: http://www.sprs.com.br/templates/sprs/pdf/download/oms_curvas.pdf 3. de Onis, M. Garza, et al. For the WHO Multicentre Growth Reference Study Group (2004b): The WHO Multicentre Growth Reference Study: Planning, study design, and methodology. Available from: http://www.ingentaconnect.com/content/nsinf/fnb/2004/00000025/A00101s1/art00003 4. World Health Organization. Nutrition. Global targets 2025. To improve maternal, infant and young child nutrition. Geneva: WHO. [Internet.] Available from: http://www.who.int/nutrition/topics/nutrition_globaltargets2025/en/ 5. World Health Organization. Physical status: the use and interpretation of anthropometry: report of a WHO Expert Committee. Geneva: WHO; 1995. (Technical report series 854). 6. United Nations Children's Fund, World Health Organization, The World Bank. UNICEF-WHO-World Bank Joint Child Malnutrition Estimates. (UNICEF, New York; WHO, Geneva; The World Bank, Washington, DC; 2012). Available from: http://www.who.int/nutgrowthdb/jme_unicef_who_wb.pdf?ua=1

	7. Joint child malnutrition estimates (UNICEF-WHO-WB): Global and regional trends by UN Regions, 1990-2025 Stunting: 1990-2025. Available from: http://apps.who.int/gho/data/view.main.NUTUNSTUNTINGv?lang=en 8. World Health Organization. Nutrition Landscape Information System (NLIS) country profile indicators: interpretation guide. Geneva: WHO; October 2012. Available from: http://apps.who.int/iris/bitstream/10665/44397/1/9789241599955_eng.pdf?ua=1
Linkage	• SDG indicator 2.2.2 • SHAA2030 target 9.7 • GPW13 Impact Framework • WHO global nutrition target 6

Code and title of the outcome	**Outcome 14:** Malnutrition in all its forms reduced
Code and title of the indicator	**Outcome Indicator 14.c:** Prevalence of childhood overweight (under 5 years of age)
Definition of the indicator	This indicator measures the percentage of children under 5 years of age who are overweight, defined as weight-for-height more than two standard deviations above the median established by the WHO Child Growth Standards. **Baseline 2018:** 7.2% **Target 2025:** 7.2%
Purpose of the indicator	This indicator belongs to a set of indicators whose purpose is to measure nutritional imbalance and malnutrition resulting in undernutrition (assessed by underweight, stunting, and wasting) and overweight in young children. Childhood overweight is associated with a higher probability of overweight in adulthood, which can lead to a variety of disabilities and diseases such as diabetes and cardiovascular diseases. Overweight children are at risk of being bullied and having low self-esteem.
Technical note	The indicator is calculated using measurements of weight and height in children 0 to 59 months of age. Children's weight and height are measured using the WHO recommended methodology, that is, children under 24 months of age are measured in a supine position, while children 24 months and older are measured while standing. Children with weight-for-height more than two standard deviations above the median of the WHO Child Growth Standards are considered overweight. Calculation at country level (expressed as a percentage): **Numerator:** Number of children 0-59 months of age whose weight-for-height is more than two standard deviations above the median of the WHO Child Growth Standards. **Denominator:** Total number of children 0-59 months of age whose measurements were taken. Calculation at regional level: WHO maintains the Global Database on Child Growth and Malnutrition, which includes population-based surveys that meet a set of criteria. Data are checked for validity and consistency, and raw data sets are analyzed following a standard procedure to obtain comparable results. Prevalences below and above defined cut-off points for four indexes, namely weight-for-age, height-for-age, weight-for-height, and body mass index (BMI)-for-age, in preschool children are presented using z-scores based on the WHO Child Growth Standards. A detailed description of the methodology and procedures of the database, including data sources, criteria for inclusion, data quality control, and database workflow, is provided in a paper published in the International Journal of Epidemiology by de Onis and Blössner (2003). Predominant type of statistics: adjusted.

	A well-established methodology for deriving global and regional trends and forecasting future trends has been published by de Onis et al. (2004a, 2004b).
Type of indicator	Relative
Measurement units	Percentage
Frequency of measurement	Every 5 years
PASB unit	Noncommunicable Diseases and Mental Health / Risk Factors and Nutrition (NMH/RF)
Data source	National nutrition surveys, Demographic and Health Surveys (DHS), Multiple Indicator Cluster Survey (MICS), and national surveillance systems.
Limitations	• Nationally representative surveys are not available for all countries. • While nationally representative surveys are usually carried out every five years, the frequency may vary depending on country policies and availability of funding. • National surveillance systems are generally not reliable because of weak data collection procedures. Natural disasters may prevent surveys from being completed. • There is a time lapse between data collection and publishing.
References	1. de Onis, M. and Blössner M. The World Health Organization Global Database on Child Growth and Malnutrition: methodology and applications; International Journal of Epidemiology 2003;32:518-26. Available from: http://www.who.int/nutgrowthdb/publications/methodology/en/ 2. de Onis, M. Garza, et al. For the WHO Multicentre Growth Reference Study Group (2004a): The WHO Multicentre Growth Reference Study: Rationale, Planning, and Implementation. Available from: http://www.sprs.com.br/templates/sprs/pdf/download/oms_curvas.pdf 3. de Onis, M. Garza, et al. For the WHO Multicentre Growth Reference Study Group (2004b): The WHO Multicentre Growth Reference Study: Planning, study design, and methodology. Available from: http://www.ingentaconnect.com/content/nsinf/fnb/2004/00000025/A00101s1/art00003 4. World Health Organization. Nutrition. Global targets 2025. To improve maternal, infant and young child nutrition. Geneva: WHO. [Internet.] Available from: http://www.who.int/nutrition/topics/nutrition_globaltargets2025/en/ 5. World Health Organization. Physical status: the use and interpretation of anthropometry: report of a WHO Expert Committee. Geneva: WHO; 1995. (Technical report series 854). 6. De Onis M, Onyango AW, Borghi E, Siyam A, Nishida C, Siekmann J. Development of a WHO growth reference for school-aged children and adolescents. Bulletin of the World Health Organization 2007;85:660–667. 7. United Nations Children's Fund, World Health Organization, The World Bank. UNICEF-WHO-World Bank Joint Child Malnutrition Estimates. (UNICEF, New York; WHO, Geneva; The World Bank, Washington, DC; 2012). Available from: http://www.who.int/nutgrowthdb/jme_unicef_who_wb.pdf?ua=1

	8. World Health Organization. Nutrition Landscape Information System (NLIS) country profile indicators: interpretation guide. Geneva: WHO; October 2012. Available from: http://apps.who.int/iris/bitstream/10665/44397/1/9789241599955_eng.pdf?ua=1
Linkage	• SDG indicator 2.2.2 • SHAA2030 target 9.7 • PAHO Core Indicator • SP14-19 outcome indicator 2.5.3 • GPW13 Impact Framework • WHO global nutrition target 4

Code and title of the outcome	**Outcome 14:** Malnutrition in all its forms reduced
Code and title of the indicator	**Outcome Indicator 14.d:** Prevalence of childhood and adolescent obesity (5-19 years of age)
Definition of the indicator	This indicator measures the percentage of children and adolescents 5-19 years old whose body mass index (BMI) is more than one standard deviation above the median established by the WHO Child Growth Standards. **Baseline 2016:** 33.6% **Target 2025:** 33.6%
Purpose of the indicator	The indicator monitors obesity trends in children and adolescents between 5 and 19 years of age. Childhood obesity is associated with a higher probability of obesity in adulthood, which can lead to a variety of disabilities and diseases such as diabetes and cardiovascular diseases. Children with obesity are at risk of being bullied and having low self-esteem.
Technical note	The indicator is calculated using BMI, which is based on measured height and weight. Calculation at country level (expressed as a percentage): Percentage of defined population with a body mass index (BMI) more than one standard deviation above the median of the WHO Child Growth Standards. Calculation at regional level: WHO maintains the Global Database on Child Growth and Malnutrition, which includes population-based surveys that meet a set of criteria. Data are checked for validity and consistency, and raw data sets are analyzed following a standard procedure to obtain comparable results. Prevalences below and above defined cut-off points for four indexes, namely weight-for-age, height-for-age, weight-for-height, and body mass index (BMI)-for-age, in preschool children are presented using z-scores based on the WHO Child Growth Standards. A detailed description of the methodology and procedures of the database, including data sources, criteria for inclusion, data quality control, and database workflow, is provided in a paper published in the International Journal of Epidemiology by de Onis and Blössner (2003). Predominant type of statistics: adjusted. A well-established methodology for deriving global and regional trends and forecasting future trends has been published by de Onis et al. (2004a, 2004b). Input data and methods are described in NCD-RisC (2017).
Type of indicator	Relative
Measurement units	Percentage

Frequency of measurement	Every 5 years
PASB unit	Noncommunicable Diseases and Mental Health / Risk Factors and Nutrition (NMH/RF)
Data source	The WHO Global Health Observatory has data from population-based surveys such as national nutrition surveys, Demographic and Health Surveys (DHS), Multiple Indicator Cluster Surveys (MICS), and national surveillance systems.
Limitations	• Nationally representative surveys are not available for all countries. • While nationally representative surveys usually are carried out every five years, the frequency may vary depending on country policies and availability of funding. • National surveillance systems are generally not reliable because of weak data collection procedures. Natural disasters may prevent surveys from being completed. • There is a time lapse between data collection and publishing.
References:	1. de Onis, M. and Blössner M. The World Health Organization Global Database on Child Growth and Malnutrition: methodology and applications; International Journal of Epidemiology 2003; 32:518-26. Available from: http://www.who.int/nutgrowthdb/publications/methodology/en/ 2. de Onis, M. Garza, et al. For the WHO Multicentre Growth Reference Study Group (2004a): The WHO Multicentre Growth Reference Study: Rationale, Planning, and Implementation. Available from: http://www.sprs.com.br/templates/sprs/pdf/download/oms_curvas.pdf 3. de Onis, M. Garza, et al. For the WHO Multicentre Growth Reference Study Group (2004b): The WHO Multicentre Growth Reference Study: Planning, study design, and methodology. Available from: http://www.ingentaconnect.com/content/nsinf/fnb/2004/00000025/A00101s1/art00003 4. World Health Organization. Nutrition. Global targets 2025. To improve maternal, infant and young child nutrition. Geneva: WHO. [Internet.] Available from: http://www.who.int/nutrition/topics/nutrition_globaltargets2025/en/ 5. World Health Organization. Physical status: the use and interpretation of anthropometry: report of a WHO Expert Committee. Geneva: WHO; 1995. (Technical report series 854). 6. De Onis M, Onyango AW, Borghi E,Siyam A, Nishidaa C, Siekmann J. Development of a WHO growth reference for school-aged children and adolescents. *Bulletin of the World Health Organization* 2007; 85:660–667. 7. United Nations Children's Fund, World Health Organization, The World Bank. UNICEF-WHO-World Bank Joint Child Malnutrition Estimates. (UNICEF, New York; WHO, Geneva; The World Bank, Washington, DC; 2012). Available from: http://www.who.int/nutgrowthdb/jme_unicef_who_wb.pdf?ua=1 8. World Health Organization. Nutrition Landscape Information System (NLIS) country profile indicators: interpretation guide. Geneva: WHO; October 2012. Available from: http://apps.who.int/iris/bitstream/10665/44397/1/9789241599955_eng.pdf?ua=1 9. NCD-RisC. Worldwide trends in body-mass index, underweight, overweight, and obesity from 1975 to 2016: a pooled analysis of 2416 population-based measurement studies with

	128.9 million participants. Lancet 2017. DOI: http://dx.doi.org/10.1016/S0140-6736(17)32129-3
Linkage	• SHAA2030 target 9.7 • GPW13 Impact Framework • WHO Global Monitoring Framework on NCDs, target 7, indicator 13

Code and title of the outcome	**Outcome 14:** Malnutrition in all its forms reduced
Code and title of the indicator	**Outcome Indicator 14.e:** Prevalence of overweight and obesity in persons 18+ years of age
Definition of the indicator	This indicator measures the percentage of the adult population (18+ years) that is overweight or obese, defined as having age-standardized body mass index (BMI) equal to or greater than 25.0 kg/m^2 (for overweight) or 30.0 kg/m^2 (for obesity). **Baseline 2016:** 62.5% for overweight and 28.6% for obesity **Target 2025:** 62.5% for overweight and 28.6% for obesity
Purpose of the indicator	The indicator monitors trends in overweight and obesity among adults 18 years of age and older. Overweight and obesity in adults are associated with increased prevalence of disability and diseases such as diabetes, cancer, and cardiovascular disease.
Technical note	The indicator is calculated using body mass index (BMI), defined by WHO as a person's measured weight in kilograms divided by the square of the height in meters (kg/m^2). Even though it has limitations, BMI is the easiest indicator to collect and is the most accepted one for measuring body fat. Overweight is defined as BMI ≥25.0 kg/m^2. Obesity is defined as BMI ≥30.0 kg/m^2. Calculation at country level (expressed as a percentage): **Numerator:** Number of men and women 18+ years of age with BMI equal to or greater than 25.0 kg/m^2. **Denominator:** Total number of men and women 18+ years of age whose measurements were taken. Calculation at regional level: Standardized WHO statistical methods. WHO maintains the Global Database on Body Mass Index, which includes population-based surveys that fulfill a set of criteria. Data are checked for validity and consistency, and raw data sets are analyzed following a standard procedure to obtain comparable results.
Type of indicator	Relative
Measurement units	Percentage
Frequency of measurement	Every 5 years
PASB unit	Noncommunicable Diseases and Mental Health / Risk Factors and Nutrition (NMH/RF)

Data source	The WHO Global Health Observatory uses data from population-based surveys such as national nutrition surveys, Demographic and Health Surveys (DHS), Multiple Indicator Cluster Survey (MICS), and national surveillance systems.
Limitations	• Nationally representative surveys are not available for all countries. • While nationally representative surveys usually are carried out every five years, the frequency may vary depending on country policies and availability of funding. • National surveillance systems are generally not reliable because of weak data collection procedures. Natural disasters may prevent surveys from being completed. • There is a time lapse between data collection and publishing.
References:	1. de Onis, M. and Blössner M. The World Health Organization Global Database on Child Growth and Malnutrition: methodology and applications; International Journal of Epidemiology 2003; 32:518-26. Available from: http://www.who.int/nutgrowthdb/publications/methodology/en/ 2. de Onis, M. Garza, et al. For the WHO Multicentre Growth Reference Study Group (2004a): The WHO Multicentre Growth Reference Study: Rationale, Planning, and Implementation. Available from: http://www.sprs.com.br/templates/sprs/pdf/download/oms_curvas.pdf 3. de Onis, M. Garza, et al. For the WHO Multicentre Growth Reference Study Group (2004b): The WHO Multicentre Growth Reference Study: Planning, study design, and methodology. Available from: http://www.ingentaconnect.com/content/nsinf/fnb/2004/00000025/A00101s1/art00003 4. World Health Organization. Nutrition. Global targets 2025. To improve maternal, infant and young child nutrition. Geneva: WHO. [Internet.] Available from: http://www.who.int/nutrition/topics/nutrition_globaltargets2025/en/ 5. World Health Organization. Physical status : the use and interpretation of anthropometry : report of a WHO Expert Committee. Geneva: WHO; 1995. (Technical report series 854). 6. De Onis M, Onyango AW, Borghi E,Siyam A, Nishidaa C, Siekmann J. Development of a WHO growth reference for school-aged children and adolescents. Bulletin of the World Health Organization 2007; 85:660–667. 7. United Nations Children's Fund, World Health Organization, The World Bank. UNICEF-WHO-World Bank Joint Child Malnutrition Estimates. (UNICEF, New York; WHO, Geneva; The World Bank, Washington, DC; 2012). Available from: http://www.who.int/nutgrowthdb/jme_unicef_who_wb.pdf?ua=1 8. World Health Organization. Nutrition Landscape Information System (NLIS) country profile indicators: interpretation guide. Geneva: WHO; October 2012. Available from: http://apps.who.int/iris/bitstream/10665/44397/1/9789241599955_eng.pdf?ua=1
Linkage	• SHAA2030 target 9.7 • PAHO Core Indicator • SP14-19 outcome indicator 2.1.6b • WHO Global Monitoring Framework on NCDs, target 7, indicator 14

Code and title of the outcome	**Outcome 14:** Malnutrition in all its forms reduced
Code and title of the indicator	**Outcome Indicator 14.f:** Percentage of infants under 6 months of age who are exclusively breastfed
Definition of the indicator	This indicator measures the percentage of infants under 6 months of age who are exclusively fed breastmilk. **Baseline 2019:** 27.8% **Target 2025:** 50.0%
Purpose of the indicator	This indicator belongs to a set of indicators whose purpose is to measure infant and young child feeding practices, policies, and programs. Infant and young child feeding practices directly affect the nutritional status and survival of children. Exclusive breastfeeding is the single most effective intervention to improve child survival. Improving infant and young child feeding practices is therefore critical to improved nutrition, health, and development of children.
Technical note	The percentage of infants 0-5 months of age who are fed exclusively with breastmilk is calculated from surveys that ask questions about liquids and foods given to an infant the preceding day, and number of milk feeds the preceding day. Demographic and Health Surveys (DHS) and Multiple Indicator Cluster Surveys (MICS) include such questions. **Numerator:** Number of infants 0-5 months of age who received only breastmilk during the preceding day. **Denominator:** Number of infants 0-5 months of age.
Type of indicator	Relative
Measurement units	Percentage
Frequency of measurement	Every 5 years
PASB unit	Noncommunicable Diseases and Mental Health / Risk Factors and Nutrition (NMH/RF)
Data source	PAHO Core Indicators, which use data from the WHO Global Health Observatory. WHO and UNICEF jointly collect data on infant and young child feeding, pooling information from national surveys. Many developed countries provide data referring to exclusive breastfeeding at 6 months, which provides lower estimates than the standard measure of exclusive breastfeeding averaged over the first six months. The two sources have been combined to display all available data on exclusive breastfeeding.
Limitations	• Nationally representative surveys are not available for all countries. • While nationally representative surveys usually are carried out every five years, the frequency may vary depending on country policies and the availability of funding.

	• National surveillance systems are generally not reliable because of weak data collection procedures. Natural disasters may prevent surveys from being completed. • There is a time lapse between data collection and publishing. • This indicator captures only behavior in the past 24 hours and sometimes in the past three days prior to the interview.
References	1. The WHO Global Data Bank on Infant and Young Child Feeding. Available from: http://www.who.int/nutrition/databases/infantfeeding/en/ 2. Indicators for assessing infant and young child feeding practices: conclusions of a consensus meeting held 6–8 November 2007 in Washington D.C., USA. Available from: https://www.who.int/nutrition/publications/infantfeeding/9789241596664/en/ 3. PAHO Core Indicators: Risk Factors. Available in http://www.paho.org/data/index.php/en/indicators/visualization.html 4. World Health Organization. Comprehensive implementation plan on maternal, infant and young child nutrition: Geneva: WHO; 2014.
Linkage	• SHAA2030 target 9.7 • PAHO Core Indicator • SP14-19 outcome indicator 3.1.4 • WHO global nutrition target 5

Code and title of the outcome	**Outcome 15**: Improved intersectoral action to contribute to the reduction of violence and injuries
Code and title of the indicator	**Outcome Indicator 15.a:** Number of countries and territories with an operational advisory committee or lead agency on road safety that supports the development and/or implementation of a national road safety strategy
Definition of the indicator	This indicator counts the number of countries and territories that have in place an advisory committee or lead agency responsible for multisectoral coordination of measures to promote road safety. **Baseline 2019:** 29 **Target 2025:** 32
Purpose of the indicator	This indicator reflects regional commitment to develop and implement road safety policies, as well as to minimize the duplication of efforts in preventing road traffic injuries.
Technical note	The information is provided by countries through their responses to the questionnaire for the WHO Global Status Report on Road Safety.
Type of indicator	Absolute
Measurement units	Number of countries and territories
Frequency of measurement	Data are collected every 3 years through a questionnaire at a national consensus meeting. The most recent data (2016) can be found in the Global Status Report on Road Safety 2018 at https://www.who.int/violence_injury_prevention/road_safety_status/2018/en/.
PASB unit	Noncommunicable Diseases and Mental Health / Noncommunicable Diseases, Violence and Injury Prevention (NMH/NV)
Data source	WHO Global Status Report on Road Safety; information gathered from national road safety questionnaires.
Limitations	National teams fill out the questionnaires based on their own perceptions, and the data may therefore be influenced by the backgrounds of the participants.
References	1. World Health Organization. World report on road traffic injury prevention. 2004. http://apps.who.int/iris/bitstream/handle/10665/42871/9241562609.pdf;jsessionid=EBC29908F67232806EE090C62F26BFDE?sequence=1
Linkage	• SHAA2030 target 9.5

Code and title of the outcome	**Outcome 15:** Improved intersectoral action to contribute to the reduction of violence and injuries
Code and title of the indicator	**Outcome Indicator 15.b:** Number of countries and territories that have a national or multisectoral plan addressing violence that includes the health system
Definition of the indicator	The indicator expresses the number of countries and territories that are implementing a national or multisectoral plan addressing violence against women and girls that includes the health system and at least one prevention strategy/intervention. **Baseline 2019:** 20 **Target 2025:** 25
Purpose of the indicator	Preventing violence requires multisectoral action. This indicator will measure the availability of a national or multisectoral plan that facilitates the coordination of efforts across multiple sectors within government and civil society. Violence against women and girls will be used as a proxy indicator, although countries and territories should strive to design and implement multisectoral plans to prevent multiple forms of violence, including violence against women, violence against children, youth violence, gun violence, and elder abuse, among others. The regional Strategy and Plan of Action on Strengthening the Health System to Address Violence against Women (CD54/9, Rev 2), approved by Member States in 2015, and the WHO Global Plan of Action to Strengthen the Role of the Health System Within a National Multisectoral Response to Address Interpersonal Violence, in Particular Against Women and Girls, and Against Children, approved by the World Health Assembly in 2016, highlight this area of work as a priority and propose the use of a similar indicator to measure progress.
Technical note	To achieve the indicator, a country must be implementing a national or multisectoral plan addressing violence against women and girls that includes the health system and that includes at least one prevention strategy/intervention. Multisectoral means that the roles of the health sector and at least one other governmental sector are explicitly recognized in the plan. A prevention strategy/intervention includes the seven strategies identified in "RESPECT Women: Preventing Violence against Women," developed by WHO and partners. These are: relationships skills strengthened, empowerment of women, services ensured, poverty reduced, environments made safe, child and adolescent abuse prevented, and transformed attitudes, beliefs, and norms. Further details are available in the document in the References section.
Type of indicator	Absolute
Measurement units	Number of countries and territories
Frequency of measurement	Every 2 years
PASB unit	Noncommunicable Diseases and Mental Health / Noncommunicable Diseases, Violence and Injury Prevention (NMH/NV)

Data source	• Countries already must provide information on a similar indicator as part of reporting requirements linked to the regional Strategy and Plan of Action on Strengthening the Health System to Address Violence against Women (CD54/9, Rev 2). • WHO's Maternal, Newborn, Child and Adolescent Health (MNCAH) Policy Indicators Surveys will start collecting data on this indicator, including for PAHO Member States. • Additional information can also be drawn from the forthcoming WHO Global Status Report on Preventing Violence against Children. • Efforts will also be made to strengthen information and data sources on national or multisectoral plans that address multiple forms of violence.
Limitations	• Existence of a national or multisectoral plan is just one step in the process of strengthening coordination across sectors and between government and civil society organizations. It does not necessarily mean that the actions proposed are being implemented effectively. • This indicator uses violence against women and girls as a proxy for the health system response to violence in all its forms, due to the availability of data. However, multiple forms of violence affect the Americas and often intersect. Therefore, PAHO will continue to support Member States' efforts to strengthen the development of national or multisectoral plans addressing multiple forms of violence.
References	1. Pan American Health Organization. PAHO strategy and plan of action on strengthening the health system to address violence against women (2015). Available from: http://iris.paho.org/xmlui/handle/123456789/18386?locale-attribute=en 2. World Health Organization. WHO global plan of action to strengthen the role of the health system within a national multisectoral response to address interpersonal violence, in particular against women and girls, and against children (2016) Available from: https://www.who.int/reproductivehealth/publications/violence/global-plan-of-action/en/ 3. WHO, in collaboration with UN Women, the UN Office of the High Commissioner for Human Rights (OHCHR), United Nations Development Programme (UNDP), United Nations Population Fund (UNFPA), United Nations Office on Drugs and Crime (UNODC), the Government of the Netherlands, Swedish International Development Cooperation Agency (SIDA), UK Aid, United States Agency for International Development (USAID) and the World Bank Group. RESPECT Women: preventing violence against women (2019). Available from: https://www.who.int/reproductivehealth/topics/violence/respect-women-framework/en/
Linkage	• SHAA2030 target 9.4 • Strategy and Plan of Action on Strengthening the Health System to Address Violence against Women (CD54/9, Rev. 2), indicator 4.1.1

Code and title of the outcome	**Outcome 16:** Increased promotion of mental health, reduction of substance use disorders, prevention of mental health conditions and suicide, and diminished stigmatization, through intersectoral action
Code and title of the indicator	**Outcome Indicator 16.a:** Number of countries and territories with ongoing collaboration between government mental health services and other departments, services, and sectors
Definition of the indicator	The indicator counts the number of countries and territories that have ongoing collaboration between government mental health services and other departments, services, and sectors. **Baseline 2019:** 15 **Target 2025:** 30
Purpose of the indicator	The indicator evaluates the existence of formal mechanisms of multisectoral collaboration for the promotion of mental health and prevention of mental health conditions and suicide.
Technical note	To demonstrate ongoing collaboration in mental health between government mental health services and other departments, services, and sectors, a country must fulfill all three of the following criteria: 1. There is a formal agreement or joint plan with the partner. 2. There is dedicated funding from or to this partner for service provision. 3. There are regular meetings with this partner (at least once per year). "Other departments" may include, but are not limited to, the ministry of social affairs/social welfare, ministry of education, ministry of justice, and ministry of the interior/home affairs. "Other sectors" may include, but are not limited to, the housing sector (government or nongovernmental agencies); the employment sector (government or nongovernmental agencies); the media; academic institutions; local or international nongovernmental organizations or private sector organizations that deliver or advocate for mental health services; professional associations; faith-based organizations or institutions; traditional/indigenous healers; as well as service users and their families.
Type of indicator	Absolute
Measurement units	Number of countries and territories
Frequency of measurement	Every 2 years, as part of data collection for the WHO Mental Health Atlas
PASB unit	Noncommunicable Diseases and Mental Health / Mental Health and Substance Use (NMH/MH)
Data source	WHO Mental Health Atlas.
Limitations	• Deficiencies in national health information systems represent a key limitation. • PAHO and WHO suggest updating the WHO Mental Health Atlas every two years (some of the Region's countries already have done so). Nonetheless, this is a voluntary initiative that depends on the countries; PAHO promotes this periodic update but does not have decision-making power in this regard.

References	1. World Health Organization. (2017). Mental health atlas 2017. Geneva: WHO.
Linkage	• SHAA2030 target 9.6

Code and title of the outcome	**Outcome 17**: Health systems strengthened to achieve or maintain the elimination of transmission of targeted diseases
Code and title of the indicator	**Outcome Indicator 17.a:** Number of countries and territories that achieve 90% of viral suppression (viral load <1,000 copies/ml) in persons on antiretroviral therapy (ART)
Definition of the indicator	HIV can be suppressed by combination antiretroviral therapy (ART) consisting of three or more antiretroviral drugs. This indicator counts the number of countries and territories in which at least 90% of persons on ART have achieved viral suppression. **Baseline 2017:** 2 **Target 2019:** 15
Purpose of the indicator	Individual-level viral load is the recommended measure of antiretroviral therapy efficacy and indicates treatment adherence and the risk of transmitting HIV. A viral load threshold of <1000 copies/mL defines treatment success. Viral suppression among people living with HIV is one of the 10 global indicators in the 2015 WHO consolidated strategic information guidelines for HIV in the health sector. This indicator also helps monitor the Region's continued efforts to achieve the third 90 of the UNAIDS 90-90-90 target, namely that 90% of persons receiving antiretroviral therapy will have suppressed viral loads by 2020.
Technical note	The percentage of viral suppression in persons on ART is calculated as follows: **Numerator:** Number of people living with HIV in the reporting period with suppressed viral loads (<1000 copies/mL). **Denominator:** Number of people living with HIV who are on treatment and who are tested for viral load in the same period. Reporting countries will be evaluated for achievement of 90% viral suppression among persons with HIV on ART. Viral load suppression can be measured using three different data sources: *a)* clinical and program data; *b)* nationally representative surveys; or *c)* early warning indicators of HIV drug resistance surveys. Countries should report data from whichever source is most recent and nationally representative. Viral load testing data should be routine rather than episodic. For example, a person's results should not be included if testing was done prior to treatment initiation or when treatment failure was suspected.
Type of indicator	Absolute
Measurement units	Number of countries and territories
Frequency of measurement	Annual

PASB unit	Communicable Diseases and Environmental Determinants of Health / HIV, Hepatitis, Tuberculosis, and Sexually Transmitted Infections (CDE/HT)
Data source	UNAIDS and WHO, and the Global AIDS Monitoring (GAM) country reports.
Limitations	• A challenge arising from program data is that viral load testing may be performed selectively to determine when to initiate treatment or to identify possible treatment failures. The data reported from the viral load testing of persons suspected of treatment failure will underestimate viral load suppression levels. If the coverage of viral load testing is low, measured levels of viral suppression may overestimate the true value. • Another limitation is that this indicator does not reflect coverage of antiretroviral treatment. Thus, countries could have a small number of persons on treatment but a high percentage of persons with suppressed viral load among those on treatment.
References	1. UNAIDS http://www.unaids.org/sites/default/files/media_asset/global-aids-monitoring_en.pdf
Linkage	• SHAA2030 target 10.1 • Plan of Action for the Prevention and Control of HIV and Sexually Transmitted Infections 2016-2021 (CD55/14), indicator 3.2.2 • Global AIDS Monitoring, indicator 1.4

Code and title of the outcome	**Outcome 17.** Health systems strengthened to achieve or maintain the elimination of transmission of targeted diseases
Code and title of the indicator	**Outcome Indicator 17.b:** Number of countries and territories with >80% of malaria cases investigated and classified in areas targeted for elimination or prevention of reestablishment
Definition of the indicator	This indicator counts the number of countries and territories whose health systems have incorporated one of the key actions for the elimination of malaria: the investigation of cases. The aim of case investigation is to determine whether an infection was acquired locally and the likely location of infection, and therefore to determine whether it was due to indigenous malaria transmission and/or there are factors that may lead to onward transmission. The collection of a detailed history of an index case at a fixed point of care, during an encounter with a health facility or community health worker, aiming to classify the case, is the basis of initial case investigation. This indicator does not refer to that initial case investigation action, which should be part of routine care in all cases regardless of the level of endemicity; rather, it refers to a subsequent epidemiological investigation action at the patient's home or workplace. This should be done during the first week after case detection in countries or areas where the total case burden is very low (for example, no more than three cases per investigation team per week) or where there are few foci of transmission. In countries or areas that are targeted for elimination within endemic countries, all cases must be the object of such epidemiological investigation, which should be triggered by the detection of each case. **Baseline 2019:** 22 out of 34 countries **Target 2025:** 28 out of 34 countries
Purpose of the indicator	In countries or territories under malaria elimination, WHO recommends that all cases be investigated and classified. The investigation of cases should lead to conclusions regarding the existence of local transmission and should guide response measures intended to detect other possible cases and prevent further transmission. The measurement of this indicator will contribute to operationalization of the concept of "surveillance as an intervention" in elimination programs, promoted by the WHO Global Technical Strategy for Malaria 2016-2030. The evaluation of this indicator and the actions aimed at achieving the targets will seek to promote public policy measures and operational improvements in the key intervention to achieve the elimination of malaria and prevent the reestablishment of transmission.
Technical note	**Numerator:** Number of malaria cases with case investigation in areas targeted for elimination or prevention of reestablishment of transmission within the country. **Denominator:** Total number of confirmed malaria cases in areas targeted for elimination or prevention of reestablishment of transmission.

	In practice, case investigations should be done by a visit to the home or workplace of the case when the total case burden is very low (for example, no more than three cases per investigation team per week) or where there are few foci of transmission. For the purpose of measuring this indicator, it is understood that an area targeted for elimination is all or part of the national territory that is under such conditions. An investigated and classified case will have a case investigation form.
Type of indicator	Relative
Measurement units	Number of countries and territories
Frequency of measurement	Annual, measured at the end of the year
PASB unit	Communicable Diseases and Environmental Determinants of Health / Neglected, Tropical and Vector Borne Diseases (CDE/VT)
Data source	Annual malaria country report and PAHO/WHO technical missions; malaria case and case detection databases; verification at the local and/or national level.
Limitations	• In countries with significant endemicity, where not all cases should be investigated, the correct determination of the numerator and denominator will depend on an appropriate stratification of the territory. • The indicator that is currently reported by countries at the national level should now be reported by second-order administrative divisions (ADM2), i.e., by municipalities or districts. This change in the reporting level may mean some limitations at the beginning. • The indicator measures the coverage of case investigation, not the quality of the actions.
References	1. World Health Organization. Malaria surveillance, monitoring & evaluation: a reference manual. Geneva: WHO; 2018. 2. World Health Organization. WHO global technical strategy for malaria 2016-2030.
Linkage	• SHAA2030 target 10.6

<table>
<tr><td>Code and title of the outcome</td><td>Outcome 17: Health systems strengthened to achieve or maintain the elimination of transmission of targeted diseases</td></tr>
<tr><td>Code and title of the indicator</td><td>Outcome Indicator 17.c (a-g): Interruption of transmission of neglected infectious diseases (NID) in countries, following WHO criteria and guidelines</td></tr>
<tr><td>Definition of the indicator</td><td>This indicator measures the success of countries and territories in achieving the interruption of transmission of one or more of the neglected infectious diseases as established in PAHO's Plan of Action for the Elimination of Neglected Infectious Diseases and Post-elimination Actions 2016-2022, approved through PAHO Directing Council Resolution CD55.R9 in September 2016. Interruption of transmission is a step prior to elimination of NID.

<table>
<tr><th>Neglected Infectious Disease</th><th>Baseline 2019</th><th>Target 2025</th></tr>
<tr><td>a. Trachoma</td><td>1 out of 4</td><td>3 out of 4</td></tr>
<tr><td>b. Chagas disease</td><td>17 out of 21</td><td>21 out of 21</td></tr>
<tr><td>c. Dog-mediated human rabies</td><td>28 out of 35</td><td>35 out of 35</td></tr>
<tr><td>d. Human taeniasis/cysticercosis</td><td>0 out of 16</td><td>5 out of 16</td></tr>
<tr><td>e. Lymphatic filariasis</td><td>3 out of 7</td><td>6 out of 7</td></tr>
<tr><td>f. Onchocerciasis</td><td>4 out of 6</td><td>6 out of 6</td></tr>
<tr><td>g. Schistosomiasis</td><td>3 out of 10</td><td>5 out of 10</td></tr>
</table>

Baseline:
a. Trachoma: Mexico eliminated trachoma in 2017.
b. Chagas disease: 17 countries have interrupted transmission of Chagas disease in all or part of their territory.
c. Dog-mediated human rabies: By 2019, 32 of 35 countries or territories had established capacities and efficient processes to eliminate dog-mediated human rabies.
d. Human taeniasis/cysticercosis: None of the 18 known endemic countries in Latin America and the Caribbean has eliminated taeniasis/cysticercosis as a public health problem, and most of them do not have any control program.
e. Lymphatic filariasis: Trinidad and Tobago, Suriname, and Costa Rica were removed from the list of endemic countries in 2011.
f. Onchocerciasis: Colombia (2013), Ecuador (2014), Mexico (2015), and Guatemala (2016) have eliminated onchocerciasis. It is expected that Brazil and Venezuela will interrupt transmission by 2022 and eliminate the disease by 2025.
g. Schistosomiasis: There is some evidence that a few countries in the Caribbean have interrupted transmission of schistosomiasis (Antigua and Barbuda, Saint Lucia, and Suriname), but this has to be confirmed. At least two other countries are expected to achieve elimination of this disease as a public health problem by 2025.

Target:
a. Trachoma: Brazil, Colombia, and Guatemala can provide evidence by 2025 that they have reached a prevalence of trachomatous inflammation-follicular (TF) <5% in children 1-9 years old and that they have started post-mass drug administration surveillance in each of</td></tr>
</table>

	the endemic districts. The PAHO Disease Elimination Initiative calls for trachoma to be eliminated in 2022, according to WHO goals. However, countries in the Region will need more time as there have been some delays, and countries lack funding or capacity to accelerate efforts toward elimination. b. Chagas disease: The target is for 21 countries to have interrupted transmission of Chagas disease in all or part of their territory by 2025. c. Dog-mediated human rabies: The target is for 35 out of 35 countries or territories to have established capacities and efficient processes to eliminate dog-mediated human rabies. d. Human taeniasis/cysticercosis: The Elimination Initiative states that the goal is to eliminate deaths in children, morbidity in communities at risk, and disability in children by 2030. The outcome target is a step toward reaching the goals in the Elimination Initiative. e. Lymphatic filariasis: It is expected that Brazil and the Dominican Republic will very likely achieve interruption of transmission by 2022. f. Onchocerciasis: It is expected that Brazil and Venezuela will interrupt transmission by 2022. g. Schistosomiasis: The Elimination Initiative states that the WHO target for 2020 is elimination of transmission in all of Latin America and the Caribbean. This will not be achieved. Puerto Rico, the Dominican Republic, Antigua and Barbuda, Monserrat, and Guadeloupe are candidates for achieving interruption of transmission by 2022.
Purpose of the indicator	The goal of eliminating neglected infectious diseases has been established both through global mandates, e.g., World Health Assembly resolutions, and through regional mandates, e.g., PAHO Directing Council Resolution CD55.R9. It is also included in the Sustainable Development Goals, target 3.3: "By 2030, end the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases and combat hepatitis, water-borne diseases and other communicable diseases." The purpose of the indicator is to measure progress toward the achievement of these public health goals, considering that interruption of transmission is a step toward the elimination of NIDs.
Technical note	Calculation of the indicator is based on PAHO and WHO criteria and procedures for the verification or validation of elimination for each of the diseases.
Type of indicator	Absolute
Measurement units	Number of countries and territories
Frequency of measurement	• For human rabies transmitted by dogs and Chagas disease: once a year • For human taeniasis/cysticercosis, lymphatic filariasis, onchocerciasis, schistosomiasis, and trachoma: every 2 to 3 years
PASB unit	Neglected Infectious Diseases Program, Communicable Diseases and Environmental Determinants of Health / Neglected, Tropical and Vector Borne Diseases (CDE/VT)
Data source	Official data provided to countries by the national health authorities; results from surveys, surveillance studies, and regional surveillance systems such as SIRVERA (Regional Information System for the Epidemiological Surveillance of Rabies).

Limitations	For several of the diseases listed, such as schistosomiasis and human taeniasis/cysticercosis, guidelines have yet to be developed by PAHO/WHO for criteria and procedures for the verification or validation of elimination.
References	1. Pan American Health Organization. Plan of action for the elimination of neglected infectious diseases and post-elimination actions 2016-2022. 55th Directing Council. CD55/15 https://www.paho.org/hq/dmdocuments/2016/CD55-15-e.pdf 2. World Health Organization. Validation of elimination of lymphatic filariasis as a public health problem. Geneva: 2017. https://apps.who.int/iris/bitstream/handle/10665/254377/9789241511957-eng.pdf?sequence=1 3. World Health Organization. Validation of elimination of trachoma as a public health problem. Geneva: 2016. https://apps.who.int/iris/bitstream/handle/10665/208901/WHO-HTM-NTD-2016.8-eng.pdf?sequence=1 4. World Health Organization. Guidelines for stopping mass drug administration and verifying elimination of human onchocerciasis Geneva: 2016. https://apps.who.int/iris/bitstream/handle/10665/204180/9789241510011_eng.pdf?sequence=1 5. World Health Organization. WHO expert consultation on rabies: WHO TRS N°1012. Third report. Geneva: 2018 https://apps.who.int/iris/bitstream/handle/10665/272364/9789241210218-eng.pdf
Linkage	• SDG target 3.3 • SHAA2030 target 10.7 • PAHO Plan of Action for the Elimination of Neglected Infectious Diseases and Post-elimination Actions 2016-2022 (CD55.R9) • WHA66.12 Resolution on Neglected Tropical Diseases • GPW13 Impact Framework

Code and title of the outcome	**Outcome 17:** Health systems strengthened to achieve or maintain the elimination of transmission of targeted diseases
Code and title of the indicator	**Outcome Indicator 17.d:** Number of countries and territories with established capacity and effective processes to eliminate human rabies transmitted by dogs
Definition of the indicator	This indicator counts the number of countries and territories that have established capacity and effective processes to eliminate human rabies transmitted by dogs, from both a public health and animal health perspective, based on a model structure currently in development. In relation to public health, the model includes six capacities: risk analysis, pre-exposure prophylaxis, post-exposure prophylaxis, case-related control activities, education, and surveillance. Regarding animal health, the model also considers six capacities: risk analysis, vaccination, population control, import controls, surveillance, and case-related control activities. For each capacity there are up to three levels of performance to be assessed. The performance assessment in relation to each capacity takes place as part of regular country rabies program evaluations. **Baseline 2019:** 30 **Target 2025:** 35
Purpose of the indicator	This indicator demonstrates country progress in strengthening core capacities toward the elimination of human rabies transmitted by dogs. A country can use these results to inform the allocation of rabies program resources (e.g., investment in specific capacity when a function is underperforming). The tool is then able to provide the optimum investment profile.
Technical note	Calculation at country level: Improvements in capacity are assessed by reviewing the weighted capacity-specific scores by country resulting from the model, in order to obtain an overall country score. Calculation at regional level: The regional indicator is calculated by counting the countries that have improved their capacities and that have made a commitment to eliminate human rabies transmitted by dogs.
Type of indicator	Absolute
Measurement units	Number of countries and territories
Frequency of measurement	Annual, at the end of each calendar year
PASB unit	Communicable Diseases and Environmental Determinants of Health / Pan American Foot-and-Mouth Disease Center – PANAFTOSA (CDE/AFT)
Data source	National health authorities (results of rabies program evaluations).
Limitations	Not all countries report the required information with sufficient timeliness to be assessed for inclusion in the indicator calculation.

References	1. Del Rio Vilas VJ, Burgeño A, Montibeller G, Clavijo A, Vigilato MA, Cosivi O. Prioritization of capacities for dog mediated human rabies in the Americas: building the framework. Pathogens and Global Health 2013;107(7):340-345.
Linkage	• SHAA2030 target 10.4 • SP14-19 outcome indicator 1.4.8

Code and title of the outcome	**Outcome 17:** Health systems strengthened to achieve or maintain the elimination of transmission of targeted diseases
Code and title of the indicator	**Outcome Indicator 17.e:** Number of countries and territories in which endemic transmission of measles or rubella virus has been reestablished
Definition of the indicator	This indicator counts the number of countries and territories where a chain of transmission of a measles or rubella virus strain continues uninterrupted for >12 months in a defined geographic area. **Baseline 2018:** 1 **Target 2025:** 0
Purpose of the indicator	The indicator shows the capacity of the national immunization programs to sustain elimination of measles and rubella over time.
Technical note	The indicator is calculated as the number of countries and territories with reestablishment of endemic transmission of measles or rubella virus in a specific year, for a given country, territory, or geographic area.
Type of indicator	Absolute
Measurement units	Number of countries and territories
Frequency of measurement	Weekly
PASB unit	Family, Health Promotion and Life Course / Comprehensive Family Immunization (FPL/IM)
Data source	Data are obtained from weekly reports by countries to the PAHO Comprehensive Family Immunization Unit via MESS-ISIS.
Limitations	The data depend on the quality of the surveillance system as well as the lab capacity in each country.
References	1. Pan American Health Organization. Plan of Action on immunization [Internet]. 54th Directing Council of PAHO, 67nd session of the WHO Regional Committee for the Americas; 2015 Sep 28-Oct 2; Washington, DC. Washington, DC: PAHO; 2015 (Resolution CD54.R8) [cited 2017 Mar 3]. Available from: http://www.paho.org/hq/index.php?option=com_content&view=article&id=11087&Itemid=41537&lang=en
Linkage	• SHAA2030 target 10.4 • SP14-19 outcome indicator 1.5.2 • Plan of Action on Immunization (CD54/7, Rev 2), indicator 1.2.1

Code and title of the outcome	**Outcome 17:** Health systems strengthened to achieve or maintain the elimination of transmission of targeted diseases
Code and title of the indicator	**Outcome Indicator 17.f:** Regional average coverage of newborns with hepatitis B vaccine during the first 24 hours of life
Definition of the indicator	This indicator measures the coverage of newborns with hepatitis B vaccine during the first 24 hours of life, expressed as a regional weighted average. **Baseline 2017:** 76% **Target 2025:** 95%
Purpose of the indicator	Proper coverage of the vaccine in all newborns in the first 24 hours of life helps prevent hepatitis B perinatal infection. This indicator shows the vaccination status of the cohort of newborns in a certain year.
Technical note	This indicator is calculated by dividing the number of newborns that have received the hepatitis B vaccine during the first 24 hours of life by the number of children less than 1 year of age (midyear population) in a given country, territory, or geographic area at a specific time. When data have been obtained from the countries, a weighted average of the population of children less than 1 year of age in the Region is calculated.
Type of indicator	Relative
Measurement units	Percentage
Frequency of measurement	Annual. The reported data correspond to the end of the year and are received by April of the following year.
PASB unit	Family, Health Promotion and Life Course / Comprehensive Family Immunization (FPL/IM)
Data source	Data are obtained from annual reports by countries to the PAHO Comprehensive Family Immunization Unit via the PAHO/WHO-UNICEF joint reporting form.
Limitations	The data reflect only administrative coverage, which can vary if population data are outdated or if there is a great deal of migration.
References	1. Pan American Health Organization. Plan of action on immunization [Internet]. 54th Directing Council of PAHO, 67nd session of the Regional Committee of WHO for the Americas; 2015 Sep 28-Oct 2; Washington, DC. Washington, DC: PAHO; 2015 (Resolution CD54.R8) [cited 2017 Mar 3]. Available from: http://www.paho.org/hq/index.php?option=com_content&view=article&id=11087&Itemid=41537&lang=en
Linkage	• SHAA target 10.5 • Plan of Action on Immunization (CD54/7, Rev 2), indicator 1.3.3, adapted • Plan of Action for the Prevention and Control of Viral Hepatitis (CD54/13, Rev. 1), indicator 2.1.2, adapted

Code and title of the outcome	**Outcome 17:** Health systems strengthened to achieve or maintain the elimination of transmission of targeted diseases
Code and title of the indicator	**Outcome Indicator 17.g:** Number of countries and territories reporting cases of paralysis due to wild poliovirus or the circulation of vaccine-derived poliovirus (cVDPV) in the past year
Definition of the indicator	This indicator counts the number of countries and territories reporting cases of paralysis due to wild poliovirus or circulating vaccine-derived poliovirus (cVDPV) in the past year. **Baseline 2018:** 0 **Target 2025:** 0
Purpose of the indicator	The indicator demonstrates whether a country has notified, investigated, and confirmed cases of paralysis due to wild poliovirus or circulating vaccine-derived poliovirus as part of a properly functioning surveillance program.
Technical note	The surveillance of acute flaccid paralysis (AFP) in children less than 15 years of age makes it possible to identify the presence of cases of paralysis due to wild poliovirus or cVDPV in a country or territory. There are specific surveillance guidelines that are implemented in all countries and territories to identify, notify, investigate, and report a case of paralysis due to wild poliovirus or cVDPV.
Type of indicator	Absolute
Measurement units	Number of countries and territories
Frequency of measurement	Weekly
PASB unit	Family, Health Promotion and Life Course / Comprehensive Family Immunization (FPL/IM)
Data source	Data are obtained from weekly reports by countries to the PAHO Comprehensive Family Immunization Unit via PESS-ISIS.
Limitations	The data depend on the quality of the surveillance system as well the lab capacity in each country.
References	1. Pan American Health Organization. Plan of action on immunization [Internet]. 54th Directing Council of PAHO, 67nd session of the Regional Committee of WHO for the Americas; 2015 Sep 28-Oct 2; Washington, DC. Washington, DC: PAHO; 2015 (Resolution CD54.R8) [cited 2017 Mar 3]. Available from: http://www.paho.org/hq/index.php?option=com_content&view=article&id=11087&Itemid=41537&lang=en
Linkage	• SHAA2030 target 10.4 • Plan of Action on Immunization (CD54/7, Rev 2), indicator 1.1.1 • SP14-19 outcome indicator 1.5.4 • GPW13 Impact Framework

Code and title of the outcome	**Outcome 18**: Increased capacity of health actors to address social and environmental determinants of health with an intersectoral focus, prioritizing groups in conditions of vulnerability
Code and title of the indicator	**Outcome Indicator 18.a**: Number of countries and territories with capacity to implement and monitor policies to address social determinants of health
Definition of the indicator	This indicator counts the number of countries and territories that have demonstrated capacity to address the social determinants of health. To demonstrate this, countries will define the two most impactful social determinants of health according to their national context, targeting groups in conditions of vulnerability, and develop and implement policies to address those determinants. **Baseline 2019:** 6 **Target 2025:** 9 Countries in the Region are currently undergoing a process to develop indicator baselines and targets for the proposed Strategy and Plan of Action on Health Promotion. The baseline and target for this indicator will be updated when that process is complete.
Purpose of the indicator	The indicator will measure the progressive advances of PAHO Member States in the formulation and implementation of policies addressing priority social determinants of health.
Technical note	The social determinants of health are the conditions in which people are born, grow, work, live, and age, and the wider set of forces and systems shaping the conditions of daily life. These forces and systems include economic policies and systems, development agendas, social norms and policies, and political systems. These conditions can be highly inequitable and lead to differences in health outcomes. Important determinants of health include, among others, education, employment (decent work), income, social protection, violence, housing conditions, gender, ethnicity and race, and disabilities. It is up to each country to determine which social determinants have greatest impact in the national context, with a specific focus on groups in conditions of vulnerability, and to formulate and implement policies to address them. Most of those policies will require intersectoral action, but some are under direct responsibility of the health sector. Necessary conditions for demonstrating capacity to address the social determinants include: • Personnel and budget dedicated to addressing and monitoring the social determinants of health • At least one capacity-building training every three years for the development and implementation of policies to address the social determinants of health, with a monitoring and evaluation component • Functional coordination between the health sector and other sectors • Documented intersectoral actions addressing social determinants of health, taking into account monitoring and evaluation

Type of indicator	Absolute
Measurement units	Number of countries and territories
Frequency of measurement	Biennially, with a final assessment at the end of 2025
PASB unit	Family, Health Promotion and Life Course / Health Promotion and Social Determinants (FPL/PS)
Data source	The data will be obtained from different sources, such as: • Self-administered surveys • Observatories • Approved government health policies • Country reports submitted to the United Nations treaty bodies • Country reports submitted to PAHO's Health Promotion and Social Determinants Unit • Country reports on the Sustainable Development Goals
Limitations	• This indicator is not routinely tracked by the health systems. • Data will reflect the number of countries and territories that have implemented and monitored policies to address the determinants of health; the data will not, however, specify the impact and results of those policies.
References	1. World Health Organization. Social determinants of health [Internet]; 2017. Available from: http://www.who.int/social_determinants/en/ 2. World Health Organization. Rio Political Declaration on Social Determinants of Health [Internet]. World Conference on Social Determinants of Health; 19-21 Oct 2011; Rio de Janeiro (Brazil). Rio de Janeiro: WHO; 2011. Available from: http://www.who.int/sdhconference/declaration/Rio_political_declaration.pdf. 3. World Health Organization. WHA62.14. Reducing health inequities through action on the social determinants of health [Internet]. Geneva: WHO; 2009 [cited 21 Nov 2018]. Available from: http://apps.who.int/gb/ebwha/pdf_files/a62/a62_r14-en.pdf.
Linkage	• SHAA2030 target 11.1

Code and title of the outcome	**Outcome 18**: Increased capacity of health actors to address social and environmental determinants of health with an intersectoral focus, prioritizing groups in conditions of vulnerability
Code and title of the indicator	**Outcome Indicator 18.b**: Number of countries and territories with capacity to prevent key occupational diseases
Definition of the indicator	This indicator counts the number of countries and territories that are implementing occupational health services, training, and education programs, as well as occupational surveillance programs, focused on critical sectors of the economy (such as the informal, health, mining, and agriculture sectors), and that effectively increase activities to prevent, diagnose, and record occupational diseases from 2020 to 2025. **Baseline 2019:** 3 **Target 2025:** 7
Purpose of the indicator	The "invisible epidemic" of occupational diseases caused by the under-diagnosis and under-registration of these events calls for building capacity to ensure their timely detection, diagnosis, and registration; improving national workers' health information systems; and pursuing primary prevention through control of hazardous conditions at the workplace. Implementation of specific workers' health services, education, and training, along with occupational surveillance programs that focus on high-risk sectors and the adequate control of hazardous working conditions, should achieve decreases in the number, trends, and burden of occupational diseases, injuries, disabilities, and fatalities. Additionally, the implementation of primary prevention interventions (occupational risk assessments, engineering, and administrative controls) will prevent significant economic losses to workers, their families, and employers.
Technical note	Surveillance systems that incorporate training and education have proven to: a) be an effective method to detect, control, or eliminate hazardous working conditions; b) prevent occupational diseases, injuries, disabilities, and fatalities; and c) decrease the burden of mortality caused by them. By establishing such systems, countries contribute to individual, family, and national productivity. Chronic noncommunicable occupational diseases and hazards include silicosis, asbestos-related diseases, and chronic kidney disease of nontraditional causes (CKDnt), among others, as well as exposures to carcinogens. Risk assessment and hazard control interventions that apply a hierarchy of controls established by occupational hygienists (primary prevention) have long proven to be the best way to prevent these diseases and exposures and their health impacts. This helps decrease or avoid long-term care needs that cause high health and social costs, particularly for the health sector. These primary prevention interventions also make it possible to shift the cost of occupational risks to social security and workers' compensation schemes. Given the fact that workers' health has a natural intersectoral, multidisciplinary, and multipartite stakeholder approach, its practice calls for the involvement of the labor sector and other key sectors such as mining, agriculture, environment, industry, construction, and transportation, among others.

	The PAHO Plan of Action on Workers' Health 2015-2025 includes these activities in its second strategic line of action. Technical assistance and guidelines will be provided for collecting country reports that will provide data on the frequency and trends of occupational diseases, disability, and fatalities caused by key diseases, by age, gender, and economic sector. Countries will also report on surveillance, training, or educational programs that they have put in place. Since the health sector is responsible for protecting the life and health of all populations, the national health authorities are called upon to take lead in reporting on injuries, diseases, and fatalities caused by work. Particular attention should be given to conditions contributing to occupational noncommunicable diseases such as pneumoconiosis (asbestos-related diseases, silicosis), cardiovascular diseases, occupational cancers, and CKDnt in different workplace settings in the region.
Type of indicator	Absolute
Measurement units	Number of countries and territories
Frequency of measurement	Annual
PASB unit	Family, Health Promotion and Life Course / Health Promotion and Social Determinants (FPL/PS)
Data source	Data will be obtained from annual country reports using the templates defined by the Plan of Action on Workers' Health.
Limitations	• This indicator is not routinely tracked by the health systems. • Data will reflect the number of countries that have strengthened their capacities to prevent key occupational diseases through occupational surveillance systems and occupational health systems; the data will not, however, specify hazardous conditions or their effects on workers' health. In countries where occupational health data are collected by social security or other institutions, additional coordination is needed to obtain this information.
References	1. Pan American Health Organization. Resolution CD54.R6 (2015). Plan of action on workers' health 2015-2025. Available from: http://iris.paho.org/xmlui/handle/123456789/33986?show=full 2. Pan American Health Organization. Resolution CE52.25 (2013) Chronic kidney disease in agricultural communities in Central America. Available from: http://iris.paho.org/xmlui/bitstream/handle/123456789/4718/CE152-25-e.pdf?sequence=1&isAllowed=y 3. World Health Organization. Global plan of action on workers' health: baseline for implementation 2008-2017. Geneva: WHO; 2008. Available from: https://www.who.int/occupational_health/who_workers_health_web.pdf 4. Pan American Health Organization. Plan of action for the prevention and control of non-communicable diseases in the Americas 2013-2019 Available from:

	https://www.paho.org/hq/dmdocuments/2015/action-plan-prevention-control-ncds-americas.pdf
Linkage	• SHAA2030 target 11.5 • SP14-19 outcome indicator 3.5.4

Code and title of the outcome	**Outcome 18**: Increased capacity of health actors to address social and environmental determinants of health with an intersectoral focus, prioritizing groups in conditions of vulnerability
Code and title of the indicator	**Outcome Indicator 18.c**: Proportion of population using safely managed drinking water services
Definition of the indicator	This indicator measures the proportion of population using an improved drinking water source (piped water into dwellings, yards, or plots; public taps or standpipes; boreholes or tube wells; protected dug wells; or protected springs and rainwater) that is located on premises and available when needed, and that is free of fecal and priority chemical contamination. **Baseline 2019:** 57.5% in 8 countries and territories **Target 2025:** 75%
Purpose of the indicator	This indicator builds on the Millennium Development Goals indicator "proportion of population using an improved drinking water source." "Improved source" was used as a proxy for safe water, due to lack of data on drinking water quality. The Strategic Plan indicator also incorporates aspects of quality ("safe," "free of contamination"), accessibility ("located on premises"), and availability ("available when needed") to further address the normative criteria of the human right to water. With the analysis of all these aspects, policy makers and decision makers can decide what to prioritize in their interventions: for example, treatment to improve quality, expansion of distribution networks to improve accessibility, or rehabilitation of the existing distribution network to improve availability and preserve quality. Disaggregating the data by geographic criteria and socioeconomic strata makes it possible to identify which segments of the population are lagging in their access to improve sources.
Technical note	According to the WHO/UNICEF Joint Monitoring Programme for Water Supply, Sanitation and Hygiene (JMP), in order to meet the threshold for a "safely managed" service, the improved source must meet three conditions: • Accessibility: the source should be located on premises (within a dwelling, yard, or plot); • Availability: water should be available when needed; and • Quality: water supplied should be free from fecal and priority chemical contamination. These criteria are defined as follows in the JMP methodology document. *Accessibility:* Drinking water is located on premises, or collection time from another source does not exceed 30 minutes. *Availability:* Water is "available continuously and in a sufficient quantity to meet the requirements of drinking and personal hygiene, as well as of further personal and domestic uses, such as cooking and food preparation, dish and laundry washing and cleaning. Supply

	needs to be continuous enough to allow for the collection of sufficient amounts to satisfy all needs, without compromising the quality of water." "Availability of water when needed" is complex and depends on the quantity of water needed, the quantity of water available, the continuity and reliability of supplies, and the capacity for in-home storage. Where available, the JMP uses data from population-based sources and a variety of questions that have been included in national household surveys to date. In cases where household respondents report either having access to sufficient water when needed or having water available at least 50% of the time (i.e., at least 12 hours per day or four days per week), the JMP classifies them as having drinking water services that are available when needed. In the absence of data from population-based sources, data from administrative sources have also been used. Piped water systems that provide water for at least 12 hours per day or four days per week are categorized by the JMP as "available when needed," although it is recognized that this may fall short of full realization of the human right. *Quality:* For drinking water to be considered safe, it must be free from pathogens and elevated levels of harmful substances at all times. For the purpose of global monitoring, the microbiological standard applied is that no *E. coli* should be detected in a 100 mL sample. Thermotolerant coliform counts are another commonly used fecal indicator and are considered as an acceptable alternative to *E. coli*. Data on compliance with residual chlorine standards, while valuable for operational monitoring and surveillance, are not considered by the JMP as demonstrating compliance with microbiological standards. At the global level, the priority chemical contaminants are arsenic and fluoride. The JMP collects data on compliance with relevant national standards, and where possible uses compliance with the WHO guideline values (10 µg/L and 1.5 mg/L, respectively). **Numerator:** Population using an improved drinking water source (piped water into dwellings, yards, or plots; public taps or standpipes; boreholes or tube wells; protected dug wells; or protected springs and rainwater) that is located on premises and available when needed, and that is free of fecal and priority chemical contamination. **Denominator:** Total population of the country according to official yearly estimate.
Type of indicator	Relative
Measurement units	Percentage
Frequency of measurement	Annual
PASB unit	Communicable Diseases and Environmental Determinants of Health / Climate Change and Environmental Determinants of Health (CDE/CE)
Data source	Data will be obtained from annual JMP reports available at https://washdata.org/.

Limitations	• Data on availability and accessibility of drinking water are increasingly available through a combination of household surveys and administrative sources including regulators, but definitions have yet to be standardized. • Data on quality (fecal and chemical contamination), drawn from household surveys and regulatory databases, will not cover all countries immediately and need to be built.
References	1. Sustainable Development Goal 6 and its targets and indicators http://www.sdg6monitoring.org/indicators/ 2. JMP Methodology 2017 Update and SDG Baselines (March 2018) https://washdata.org/sites/default/files/documents/reports/2018-04/JMP-2017-update-methodology.pdf
Linkage	• SDG indicator 6.1.1 • SHAA2030 target 11.3 • SP14-19 outcome indicator 3.5.1, adapted • GPW13 Impact Framework

Code and title of the outcome	**Outcome 18**: Increased capacity of health actors to address social and environmental determinants of health with an intersectoral focus, prioritizing groups in conditions of vulnerability
Code and title of the indicator	**Outcome Indicator 18.d**: Proportion of population using safely managed sanitation services, including a hand-washing facility with soap and water
Definition of the indicator	This indicator measures the proportion of population using an improved sanitation facility at the household level, one that is not shared with other households and where excreta are safely disposed of in situ or transported and treated off-site, and that includes a handwashing facility with soap and water in the household. Improved sanitation facilities include flush or pour-flush toilets that discharge to sewerage systems, septic tanks, or pit latrines; improved pit latrines (pit latrines with a slab or ventilated pit latrines); and composting toilets. A handwashing facility is a device to contain, transport, or regulate the flow of water to facilitate handwashing. **Baseline 2019:** 38% in 11 countries and territories **Target 2025:** 50%
Purpose of the indicator	This indicator builds on the MDG indicator "proportion of population using an improved sanitation facility," and incorporates aspects of accessibility (at the household level), acceptability, and safety (not shared with other households) to further address the normative criteria of the human right to water. To ensure public health beyond the household level, this indicator incorporates the safe management of fecal waste along the entire sanitation chain, from containment to final treatment and disposal, and thus serves as a multipurpose indicator contributing to SDG indicator 6.3.1 on wastewater treatment. Handwashing with soap is widely agreed to be the top hygiene priority for improving health outcomes, and the presence of handwashing facilities with soap and water available is used as a proxy for handwashing behavior. This indicator is included as a standard element in many household surveys and is recorded by field team observation rather than self-reporting by survey respondents. By incorporating the analysis of all these aspects, SDG indicator 6.2.1 focuses the attention of policy makers and decision makers on areas that require more investment to obtain results in terms of health, gender equality, and the environment. Disaggregating the data by geographic criteria and socioeconomic strata makes it possible to identify which segments of the population are lagging in access to safe sanitation services.
Technical note	The definition of the indicator "safely managed sanitation services" is informed by the excreta flow diagram concept, in which fecal wastes from different types of sanitation facilities are tracked through stages of containment, emptying, transport, treatment, and reuse or final disposal. The WHO/UNICEF Joint Monitoring Programme for Water Supply, Sanitation and Hygiene (JMP) methodology document describes these stages as follows:

	Containment: This refers to the extent to which the sanitation facilities that people use ensure that excreta are safely separated from human contact at the household and community levels. In cases where data exist on the proportion of people using improved sanitation systems that do not effectively contain fecal waste (e.g., sewer lines, latrines, or septic tanks that leak feces into the environment), the JMP adjusts estimates of safely managed sanitation accordingly. *Emptying of on-site storage facilities:* The JMP seeks data on the proportion of people using on-site sanitation storage facilities (septic tanks or latrines) that have ever been emptied. These data may come either from population-based data sources such as household surveys or from administrative records. Information on the time since most recent emptying, the way excreta were emptied, or the use of protective equipment to prevent occupational exposure during emptying may be collected from such datasets, but it has not been used in calculating estimates. *Treatment and disposal of excreta from on-site storage facilities:* This refers to the proportion of excreta emptied from on-site storage facilities (septic tanks or latrine pits) that is either buried on premises; transported, usually by cart, truck, or tanker, to treatment plants (regardless of the type of treatment plant); or discharged into sewer networks. Some household surveys and administrative sources collect information on the frequency and method of emptying on-site sanitation systems and whether excreta are delivered to treatment or unsafely discharged. Excreta from on-site sanitation facilities may be transported to wastewater treatment plants or to specially designed fecal sludge treatment plants. Excreta delivered to wastewater treatment plants providing at least secondary treatment are classified as safely managed. Excreta delivered to fecal sludge treatment plants are classified as safely managed if both the liquid and solid fractions are treated. *Wastewater transported to treatment:* This refers to the proportion of excreta flushed into sewer systems that is transported along with wastewater and delivered to treatment plants (regardless of the type of treatment plant). Wastewater may not be transported to treatment due to exfiltration, pump failure, or breaks or blockages in the sewer network system, or it may discharge directly to open drains, water bodies, or open ground. Data on the proportion of wastewater lost in transportation are rare. *Wastewater treated:* This refers to the proportion of wastewater reaching wastewater treatment plants that receives at least secondary (biological) treatment. Wastewater that receives primary treatment is not considered safely managed unless the effluent is discharged in a way that precludes further human contact (e.g., through a long ocean outfall). If data are available for conventional classes (primary, secondary, tertiary, advanced) as well as for ambiguous categories (e.g., “other”), the ambiguous categories are generally not considered as safely managed. Where the only available information on treatment is ambiguous (e.g., “treated”), the JMP assumes at least secondary treatment but seeks clarification during country consultations. **Numerator:** Population using safely managed sanitation services, including a hand-washing facility with soap and water.

	Denominator: Total population of the country according to official yearly estimate.
Type of indicator	Relative
Measurement units	Percentage
Frequency of measurement	Annual
PASB unit	Communicable Diseases and Environmental Determinants of Health / Climate Change and Environmental Determinants of Health (CDE/CE)
Data source	Data will be obtained from annual JMP reports available at https://washdata.org/.
Limitations	Data on safe disposal and treatment are not available for all countries. Data for rural sanitation systems are also limited.
References	1. Sustainable Development Goal 6 and its targets and global indicators: http://www.sdg6monitoring.org/indicators/ 2. JMP methodology 2017 update & SDG baselines (March, 2018) https://washdata.org/sites/default/files/documents/reports/2018-04/JMP-2017-update-methodology.pdf
Linkage	• SDG indicator 6.2.1 • SHAA2030 target 11.3 • SP14-19 outcome indicator 3.5.2, adapted • GPW13 Impact Framework

Code and title of the outcome	**Outcome 18**: Increased capacity of health actors to address social and environmental determinants of health with an intersectoral focus, prioritizing groups in conditions of vulnerability
Code and title of the indicator	**Outcome Indicator 18.e**: Proportion of population with primary reliance on clean fuels and technology
Definition of the indicator	This indicator measures the proportion of population with primary reliance on clean fuels and technology. It is calculated as the number of people using clean fuels and technologies for cooking, heating, and lighting divided by total population reporting any cooking, heating or lighting, expressed as a percentage. "Clean" is defined by the emission rate targets and specific fuel recommendations (i.e., against unprocessed coal and kerosene) included in the WHO Guidelines for Indoor Air Quality: Household Fuel Combustion. **Baseline 2019:** 87% * **Target 2025:** 89% * This considers the following 23 countries: Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Cuba, Dominican Republic, Ecuador, El Salvador, Guatemala, Guyana, Haiti, Honduras, Jamaica, Mexico, Nicaragua, Panama, Paraguay, Peru, Suriname, Uruguay, and Venezuela.
Purpose of the indicator	Household air pollution is one of the main causes of disease and premature death in the developing world (see the WHO Household Energy Database), and is an avoidable health risk. In the Americas, WHO estimates that around 82,000 deaths occurred in 2016 in low- and middle-income countries as a result of cooking, heating, and lighting with polluting fuels and technologies (WHO 2018). Health problems linked to household air pollution from solid fuel uses include acute lower respiratory infections in children under 5 years and ischemic heart disease, stroke, chronic obstructive pulmonary disease, and lung cancer in adults (Lim et al. 2012). The WHO Guidelines for Indoor Air Quality: Household Fuel Combustion (2014) warns of the risks of using solid fuels and kerosene and sets goals to reduce emissions of harmful pollutants from open fires, stoves, and lighting for domestic use. Poor access to clean energy is concentrated in marginalized populations. This indicates the need to design policy interventions that can reduce exposure to household pollutants, taking into consideration their effects on health and their contribution to health inequalities. Accelerating the transition to clean energy for all is an urgent and necessary public health intervention in the Region of the Americas, and the health sector must be involved in the search for solutions that produce the best result. Strengthening the capacity of WHO Member States to address household air pollution goes hand in hand with the WHO and PAHO road map approved by the 69th World Health Assembly. WHO is the custodian agency that oversees the global monitoring of Sustainable Development Goal (SDG) 7, target indicator 7.1.2: "Proportion of population with primary reliance on clean fuels and technology." SDG 3 also includes the indicator 3.9.1, "Mortality rate attributed to household and ambient air pollution." PAHO is committed to contributing to global efforts to achieve these objectives.

	Additionally, reducing the use of polluting fuel and technologies for household cooking, heating, and lighting contributes to reducing emissions of black carbon, a pollutant that contributes to climate change. Hence, there are benefits for both health and the environment, and these benefits include contributing to the achievement of SDG 13 and to implementation of the Paris Agreement on climate change.
Technical note	The indicator is calculated with household survey data compiled by WHO. The information on cooking fuel use and cooking practices comes from about 800 nationally representative surveys and censuses. Sources include Demographic and Health Surveys (DHS), Living Standards Measurement Surveys (LSMS), Multiple Indicator Cluster Surveys (MICS), the World Health Survey (WHS), and other surveys developed and implemented at national level. Estimates of primary cooking energy for the total, urban, and rural population for a given year are obtained separately, using a multilevel model. The model only accounts for regions, countries, and time as a spline function, and estimates are restricted to values ranging from zero to one. More details on the model are published elsewhere (Bonjour et al. 2013). Estimates for countries with no available surveys are obtained as follows: • When survey data are not available for a country, the regional population-weighted mean is used to derive aggregate estimates at a regional or global level, but no country point estimate is given for that country. • Countries classified as high-income, with a gross national income of more than US$ 12,746 per capita, are assumed to have made a complete transition to using clean fuels and technologies as the primary domestic energy source for cooking. For these countries, the primary reliance on polluting (unclean) fuels and technologies is reported as less than 5% and is taken as zero for the purpose of regional and global estimates. • To estimate the fraction of the population relying on clean fuels and technologies for heating and lighting, the same methodology will apply, using survey data to derive country estimates for a particular year, with the same above-mentioned assumptions. • Disaggregation of data on access to clean fuel and technologies for cooking by rural or urban place of residence is possible for all countries. • Gender-disaggregated data on the main user of cooking energy (i.e., the cook) will be available with expected improvements in household surveys. • Gender-disaggregated data on the head of household is available for cooking, lighting, and heating. At country level: • There is no reporting for low- and middle-income countries with no data. • High-income countries with no data are assumed to have transitioned to clean fuels and technologies and are therefore assumed to have >95% of their population using clean fuels and technologies.

	At regional and global levels: • For low- and middle-income countries with no data, population-weighted regional averages are used to derive the regional and global estimates. • High-income countries with no data are assumed to have transitioned to clean fuels and technologies and are therefore assumed to have >95% of their population using clean fuels and technologies.
Type of indicator	Relative
Measurement units	Percentage
Frequency of measurement	Annual
PASB unit	Communicable Diseases and Environmental Determinants of Health / Climate Change and Environmental Determinants of Health (CDE/CE)
Data source	Data on primary household fuels and technologies, particularly for cooking, are routinely collected at national level in most countries, using censuses and surveys. Household surveys used include Demographic and Health Surveys (DHS), supported by the United States Agency for International Development; Multiple Indicator Cluster Surveys (MICS), supported by UNICEF; World Health Surveys, supported by WHO; and other reliable and nationally representative country surveys. The World Health Organization has compiled a database of statistics on access to clean and polluting fuels and technologies, harvested from the full global body of household surveys on cooking, heating, and lighting. The WHO Household Energy Database is updated regularly and publicly available. For cooking energy, the database covers 157 countries and one territory for the period 1970-2015; for lighting, 76 countries for the period 1963-2014; and for heating, 16 countries for the period 1986-2012. WHO is currently working with national survey agencies, country statistical offices, researchers, and other stakeholders to enhance multipurpose household survey instruments so that they gather data on fuels and technologies used for heating and lighting. The proportion of population with primary reliance on clean fuels and technology is estimated by WHO every two years.
Limitations	First, national energy authorities are usually responsible for improving access to energy services, including clean fuels and technologies for lighting, cooking, and heating. National health authorities may not be involved in the decision-making process for the solutions that are implemented. This indicator may only reflect the capacity of the country to improve access to clean energy; it does not necessarily gauge the role of the country's health sector in promoting clean energy solutions, such as for cooking, as a major public health intervention. It may reflect the efforts of WHO to include this indicator as an SDG indicator linked to health (WHO is the custodian agency for SDG indicator 7.1.2, which is needed to estimate SDG indicator 3.9.1).

	Second, there may be discrepancies between internationally reported and nationally reported figures, for several reasons: • Modelled estimates may be used in some cases, and survey data points in others. • Different calculations may use different definitions of "polluting" (or previously, "solid") fuels (wood only, or wood and any other biomass, e.g., dung residues; kerosene included or not as a polluting fuel). • Calculations may use different estimates of total population. • Estimates may be expressed as percentage of population using polluting (or solid) fuels as per the SDG 7 indicator, or as percentage of households using polluting (or solid) fuels as assessed by surveys such as DHS or MICS. • Values above 95% polluting fuel use are reported as >95%, and values below 5% are reported as <5%.
References	1. Lim, S. S. et al., 2012. A comparative risk assessment of burden of disease and injury attributable to 67 risk factors and risk factor clusters in 21 regions, 1990-2010: a systematic analysis for the Global Burden of Disease Study 2010. Lancet 380(9859):2224-2260. 2. United Nations. UN Sustainable Development Goals 2015-2030. SDG Indicators. Available from: https://unstats.un.org/sdgs/indicators/indicators-list/ 3. World Health Organization. Health and the environment: draft road map for an enhanced global response to the adverse health effects of air pollution: report by the Secretariat. 69th World Health Assembly. 2016. Available from: http://apps.who.int/iris/handle/10665/252673 4. World Health Organization. 2018. WHO Household Energy Database. Available from: (https://www.who.int/airpollution/data/household-energy-database/en/). 5. World Health Organization, 2014b. WHO Guidelines for Indoor Air Quality. Household Fuel Combustion. Geneva: WHO. Available from: https://www.who.int/airpollution/publications/household-fuel-combustion/en/ 6. Bonjour S, Adair-Rohani H, Wolf J, Bruce NG, Mehta S, Prüss-Ustün A, Lahiff M, Rehfuess EA, Mishra V, Smith KR. Solid fuel use for household cooking: country and regional estimates for 1980-2010. Environ Health Perspect 2013;121(7). doi:10.1289/ehp.1205987
Linkage	• SDG indicators 3.9.1 and 7.1.2 • SHAA2030 target 11.2 • GPW13 Impact Framework

Code and title of the outcome	**Outcome 18**: Increased capacity of health actors to address social and environmental determinants of health with an intersectoral focus, prioritizing groups in conditions of vulnerability
Code and title of the indicator	**Outcome Indicator 18.f**: Number of cities with population ≥500,000 inhabitants (or at least the major city of the country) in each country and territory that are within or making progress toward meeting the WHO Air Quality Guidelines for the annual mean of fine particulate matter (PM2.5)
Definition of the indicator	This indicator counts the number of major cities in the Region that are meeting or making progress toward meeting WHO air quality guidelines for fine particulate matter. The mean annual concentration of fine suspended particles of less than 2.5 microns in diameter (PM2.5) is a common measure of air pollution and a good indicator of air quality. PM2.5 can also be estimated based on measurements done for PM10. The annual mean is an area-weighted average for urban air quality based on daily measurements in one or more monitoring sites or modelling estimates, and is expressed in micrograms per cubic meter (µg/m3). **Baseline 2019:** To be determined based on a calculation for 44 cities* **Target 2025:** A 20% reduction in the mean annual concentration of PM2.5, as compared to 2019, in at least 35 of the 44 cities * The baseline for the mean annual concentration of fine suspended particles of less than 2.5 microns in diameter (PM2.5) will be calculated for the following cities of the Region that measure PM2.5 or PM10 in 2019: Argentina (Buenos Aires, Córdoba, Rosario), Bolivia (Cochabamba, La Paz, Santa Cruz), Brazil (Belém, Belo Horizonte, Brasília, Curitiba, Fortaleza, Goiânia, Guarulhos, Manaus, Porto Alegre, Recife, Rio de Janeiro, São Paulo, Salvador de Bahía), Chile (Santiago), Colombia (Barranquilla, Bogotá, Cali, Manizales, Medellín), Costa Rica (San José), Cuba (La Habana), Dominican Republic (Santo Domingo), Ecuador (Guayaquil, Quito), El Salvador (San Salvador), Guatemala (Guatemala), Honduras (San Pedro Sula, Tegucigalpa), Mexico (Ciudad de México, Guadalajara, Juárez, León, Monterrey, Tijuana), Panama (Cd. de Panamá), Peru (Lima-Callao), Uruguay (Montevideo), and Venezuela (Caracas).
Purpose of the indicator	This indicator reflects the Region's efforts to meet SDG target 11.6: "By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management." It is also necessary to estimate the country mean annual level, weighted by area and population distribution, that will be used to measure SDG indicator 3.9.1, "Mortality rate attributed to household and ambient air pollution." Through the UN's adoption of the 2030 Agenda for Sustainable Development in 2015 and the World Health Assembly's endorsement of the air pollution road map in 2016, the Region of the Americas has shown its commitment to reducing the adverse health impact of air pollution. To meet these commitments, a key challenge will be to reinforce regional, national, and local responses through the inclusion of health in air quality management.

	Specific actions include expanding and ensuring accessibility of regional information and evidence on the health impacts of air pollution, as well as on the effectiveness of policies and interventions to address these impacts; enhancing regional efforts to monitor and report on trends associated with human exposure to air pollution, in particular PM2.5 and PM10; engaging health actors in coordinated action with relevant stakeholders to enable an appropriate response to reduce the adverse health effects of air pollution in the Americas while ensuring synergies; and strengthening the capacity of responsible sectors. The Region of the Americas is highly urbanized. Stressing the need to control the air quality in major cities as a public health objective will link the indicator directly to the actions needed to reduce exposure to air pollution and will help follow up on the progress made in this direction. Expressing the indicator in terms of the WHO air quality guidelines and not as a specific parameter allows for possible changes to the WHO guidelines in the period during which the indicator will be used.
Technical note	Calculation at regional level: This indicator counts the number of cities with population ≥500,000 inhabitants that are within or making progress toward meeting the WHO air quality guidelines for the annual mean of fine particulate matter (PM2.5). If a country or territory does not have a city with ≥500,000 inhabitants, the indicator will assess the situation of the major city or capital city. Calculation at country level: • Computation method: The annual urban mean concentration of PM2.5 is estimated based on ground-level air quality monitoring stations, using improved modelling that integrates data from satellite remote sensing, population estimates, topography, and ground measurements (WHO 2016; Shaddick et al. 2016) • Disaggregation: When not estimated at ground level, the indicator is available by 0.1° x 0.1° grid size for the world on the WHO Global Platform on Air Quality and Health. • Treatment of missing values at country level: missing values are left blank. • Sources of discrepancies: The source of differences between global and national figures are the modelled estimates versus annual mean concentrations obtained from ground measurements. • Methods and guidance available to countries for compilation of the data at national level: Countries that have air quality monitoring networks in place in urban areas can use the annual mean concentrations from the ground measurements and the corresponding number of inhabitants to derive the population-weighted exposure to particulate matter in cities. • Quality assurance: Data inputs to the model are official or published data on air quality or other relevant topics. Modelled estimates are carefully cross-checked and compared with official ground measurements. • Consultation/validation process for adjustments and estimates with countries: Data inputs, methods and final estimates are shared with countries prior to publication through WHO official communication channels with WHO Member States.

Type of indicator	Absolute
Measurement units	Number of cities
Frequency of measurement	Annual or biannual (depending on the frequency with which the information is reported and made available in the WHO Global Ambient Air Quality Database).
PASB unit	Communicable Diseases and Environmental Determinants of Health / Climate Change and Environmental Determinants of Health (CDE/CE)
Data source	In Latin America and the Caribbean, only 37 out of 100 cities with 500,000 inhabitants or more have had any measurement of air pollution done in recent years (Riojas et al. 2016). Therefore, sources of data will include ground measurements from monitoring networks, but also satellite remote sensing, population estimates, topography, information on local monitoring networks, and measures of specific contributors to air pollution. The data collection process for ground measurements includes official reporting from countries and web searches. Measurements of PM10 and PM2.5 are from official national/subnational reports and websites or are reported by regional networks or data from UN agencies, development agencies, articles from peer-reviewed journals, and ground measurements compiled in the framework of the Global Burden of Disease Study.
Limitations	This indicator is not routinely monitored by all countries. Data come from country monitoring systems and WHO modeling, which may restrict the frequency with which the indicator can be measured.
References	1. Shaddick G et al (2016). Data integration model for air quality: a hierarchical approach to the global estimation of exposures to ambient air pollution. Royal Statistical Society, arXiv:1609.0014. 2. United Nations. SDG Indicators. Available from: https://unstats.un.org/sdgs/indicators/indicators-list/ 3. World Health Organization. Health and the environment: draft road map for an enhanced global response to the adverse health effects of air pollution: report by the Secretariat. 69th World Health Assembly. 2016. Available from: http://apps.who.int/iris/handle/10665/252673 4. World Health Organization. Ambient air pollution: a global assessment of exposure and burden of disease. 2016. Available from: http://www.who.int/phe/publications/air-pollution-global-assessment/en/ 5. World Health Organization. WHO Global Ambient Air Quality Database. Available from: https://www.who.int/airpollution/data/en/ 6. Riojas-Rodríguez, H; Soares da Silva A; Texcalac-Sangrador JL; Moreno-Banda GL. Air pollution management and control in Latin America and the Caribbean and implications for climate change. Rev Panam Salud Pública 2016.
Linkage	• SDG indicators 3.9.1 and 11.6.2 • SHAA2030 target 11.2 • GPW13 Impact Framework

Code and title of the outcome	**Outcome 18**: Increased capacity of health actors to address social and environmental determinants of health with an intersectoral focus, prioritizing groups in conditions of vulnerability
Code and title of the indicator	**Outcome Indicator 18.g**: Number of countries and territories with capacity to address health in chemical safety (including human health exposure to metals and/or pesticides)
Definition of the indicator	This indicator counts the number of countries and territories that are developing policies and implementing programs to address health in chemical safety, including health sector staff training, health services and surveillance, and health promotion targeting exposed people, especially those in vulnerable conditions. **Baseline 2019:** 7 **Target 2025:** 22
Purpose of the indicator	Chemical safety requires a multisectoral approach in which the health sector is a key participant, given the need for sound management to prevent health effects that contribute to the burden of disease and to demands for health services. Development of policies and implementation of programs, compatible with different chemicals-related agreements and frameworks, is necessary to strengthen the health sector's participation in chemical safety.
Technical note	The WHO Chemicals Road Map has been implemented to follow up on WHA Resolution 69.4 (2016), Role of the Health Sector in the Strategic Approach to International Chemicals Management towards the 2020 Goal and Beyond. The Road Map also contributes to achievement of the 2030 Agenda for Sustainable Development, targets 3.9, 6.3, and 12.4. Action areas in the Road Map include risk reduction, knowledge and evidence, institutional capacity, and leadership and coordination, under the responsibility of WHO Member States and the WHO Secretariat. For implementation, additional documents include a workbook to help countries prioritize and plan their work on actions outlined in the Road Map. The workbook can be used to prepare a high-level plan for implementation, with the identification of areas of focus and opportunities for collaboration, as well as highlighting where support is needed. Poison control centers, clinical services and surveillance, and public education are some of the areas that fall directly within the health sector's remit. This indicator is calculated by counting the number of countries and territories that have implemented activities related to chemicals exposures included in the four action areas of the WHO Road Map: risk reduction, knowledge and evidence, institutional capacity, and leadership and coordination (within the health sector and with other sectors). To achieve the indicator, a country must have taken at least one activity related to chemical exposures in each of the four action areas.
Type of indicator	Absolute
Measurement units	Number of countries and territories
Frequency of measurement	Annual, combined with ongoing reports specific to health sector activities

PASB unit	Communicable Diseases and Environmental Determinants of Health / Climate Change and Environmental Determinants of Health (CDE/CE)
Data source	Data will be obtained from country reports regarding participation in chemical safety activities, including health sector training and international, regional, and national meetings on chemical safety, such as activities and meetings related to the Minamata Convention on Mercury and the Strategic Approach to International Chemicals Management (SAICM).
Limitations	It is possible that countries may be engaged in chemical safety activities, often in collaboration with other sectors and institutions, but are not reporting these activities, which are addressed in the several tools available under the Chemicals Road Map.
References	1. World Health Organization. WHO Chemicals Road Map. Available from: https://www.who.int/ipcs/saicm/roadmap/en/
Linkage	• SDG targets 3.9, 6.3, and 12.4 • SHAA2030 target 11.2

Code and title of the outcome	**Outcome 18:** Increased capacity of health actors to address social and environmental determinants of health with an intersectoral focus, prioritizing groups in conditions of vulnerability
Code and title of the indicator	**Outcome Indicator 18.h:** Number of countries and territories with capacity to address the health-related effects of climate change
Definition of the indicator	This indicator counts the number of countries and territories that demonstrate capacity within the national health authority to address the health-related effects of climate change. At country level, this capacity is defined by political inclusion of the health sector in the national climate change debate and by existence of a designated focal point for climate change who has received PAHO-approved training. **Baseline 2017:** 13 **Target 2025:** 25
Purpose of the indicator	This indicator reflects the capacity of the Region's health sector to develop and implement intersectoral strategies and programs to address health impacts of climate change.
Technical note	To achieve the indicator, a country must have both *a)* a representative of the national health authority participating in a national inter-ministerial climate change committee, and *b)* a focal point who is responsible for coordinating the health sector response to the health-related effects of climate change and who has the required competencies. The creation of a national inter-ministerial committee is a strong indicator that a country has identified public policy priorities for climate change mitigation and adaptation. The representation of the health sector in inter-ministerial committees on climate change enhances the coordination of policies with other sectors, facilitates the implementation of actions that benefit health, and contributes to preparedness of the health sector for the impacts of climate change. In addition, an inter-ministerial committee can ensure that health considerations are included in national climate change reports to the United Nations Framework Convention on Climate Change (UNFCCC), such as the National Communication, National Inventory Report, Nationally Determined Contributions, Nationally Appropriate Mitigation Actions, and National Adaptation Plans. Countries are encouraged to designate a named official to represent the national health authority on the inter-ministerial committee, thus providing continuity, stewardship, and representation of the national health authority within national climate change activities. A designated focal point also enhances the coordination of inter-programmatic work across departments and units within the national health authority, and serves as a point person to receive, collect, and disseminate relevant information, including among other sectors and stakeholders.

	To strengthen their participation, this designated focal point should also receive PAHO-recognized trained on climate change, its connection to health, and opportunities for mitigation and adaptation strategies. The trainings that are considered applicable for achievement of this indicator are: • PAHO virtual course on climate change and health • PAHO-led trainings on developing National Adaptation Plans for the health sector (H-NAPs) • UNFCCC/UNEP/UNDP trainings on National Adaptation Plans where there is a component on sectoral plans • Green Climate Fund (GCF) trainings on accessing GCF funds through the National Designated Authorities • WHO/UNITAR course on Human Health and Climate Change
Type of indicator	Absolute
Measurement units	Number of countries and territories
Frequency of measurement	Annual
PASB unit	Communicable Diseases and Environmental Determinants of Health / Climate Change and Environmental Determinants of Health (CDE/CE)
Data source	Data will be obtained from PAHO country surveys on health and climate change, certification lists of courses, and participation lists from trainings.
Limitations	While not actively monitored by all countries, reliable data should be available for accurate tracking by PAHO. As a result, no limitations are identified in being able to track progress toward this indicator.
References	1. Pan American Health Organization. 2019. Caribbean action plan on health and climate change. http://iris.paho.org/xmlui/handle/123456789/38566 2. World Health Organization. 2015. Operational framework for building climate resilient health systems. https://apps.who.int/iris/bitstream/handle/10665/189951/9789241565073_eng.pdf?sequence=1
Linkage	• SDG indicators 13.2.1 and 13.3.2 • SHAA2030 target 11.2 • Caribbean Action Plan on Health and Climate Change, indicator I.1.1

Code and title of the outcome	**Outcome 19**: Health promotion strengthened and inequities reduced, using the Health in All Policies approach, health diplomacy, and intersectoral action
Code and title of the indicator	**Outcome Indicator 19.a**: Number of countries and territories that implement the Health in All Policies framework to improve health equity as well as health and well-being
Definition of the indicator	This indicator counts the number of countries and territories that implement the Health in All Policies framework to improve health equity as well as health and well-being. **Baseline 2019:** 6 **Target 2025:** 16 Countries in the Region are currently undergoing a process to develop indicator baselines and targets for the proposed Strategy and Plan of Action on Health Promotion. The baseline and target for this indicator will be updated when that process is complete.
Purpose of the indicator	The indicator measures the advances of PAHO Member States toward improving health and health equity through intersectoral implementation of the Health in All Policies framework.
Technical note	As defined in the 2013 Helsinki Statement, Health in All Policies (HiAP) is "an approach to public policies across sectors that systematically takes into account the health implications of decisions, seeks synergies, and avoids harmful health impacts in order to improve population health and health equity." The interface between health, well-being, and economic development has been elevated to the political agenda of countries in the Region, recognizing the need for coordinated government action through the HiAP approach. Municipalities and cities are particularly well positioned to apply the HiAP framework to promote health and health equity. Countries should establish mechanisms such as intersectoral committees, roundtables, and social cabinets to engage with other sectors on promotion of health and well-being. Coordination and evaluation of intersectoral action, using the HiAP framework, can be led by the health sector, though it does not necessarily have to be. To achieve the indicator, a country must: • Establish an intersectoral coordination mechanism with terms of reference, regular meetings, and reports; • Develop national, subnational, and local health policies or strategies applying the Health in All Policies framework to promote health and address health inequities; and • Conduct regular evaluations of the health impact of intersectoral policies, plans, programs, and projects.
Type of indicator	Absolute
Measurement units	Number of countries and territories

Frequency of measurement	Biennial, with a final assessment at the end of 2025
PASB unit	Family, Health Promotion and Life Course / Health Promotion and Social Determinants (FPL/PS)
Data source	The data will be obtained from different sources such as observatories, case studies, and country reports submitted to PAHO's Health Promotion and Social Determinants Unit.
Limitations	This indicator is not routinely tracked by the health systems or other sectors.
References	1. World Health Organization. The Ottawa charter for health promotion. First International Conference on Health Promotion [Internet]. 1986 Nov 21; Ottawa, Canada. Geneva: WHO; 1986. Available from: http://www1.paho.org/hiap/images/stories/PDFs/1986-OttawaCharterEN2.pdf. 2. Pan American Health Organization. Plan of action on health in all policies [Internet]. 53rd Directing Council of PAHO; 2014 Sep 29-Oct 3; Washington, DC. Washington, DC: PAHO; 2014. CD/53/10, Rev 1. Available from: http://iris.paho.org/xmlui/bitstream/handle/123456789/28299/CD53-10-e.pdf?sequence=1&isAllowed=y. 3. World Health Organization. The Helsinki statement on health in all policies [Internet]. 8th Global Conference on Health Promotion; 2013 Jun 10-14; Helsinki. Geneva: WHO; 2013. Available from: http://www.healthpromotion2013.org/images/8GCHP_Helsinki_Statement.pdf 4. World Health Organization. Rio Political Declaration on Social Determinants of Health [Internet]. World Conference on Social Determinants of Health; 2011 Oct 19-21; Rio de Janeiro. Rio de Janeiro: WHO; 2011. Available from: http://www.who.int/sdhconference/declaration/Rio_political_declaration.pdf. 5. World Health Organization. The Shanghai declaration on promoting health in the 2030 agenda for sustainable development [Internet]. Ninth Global Conference on Health Promotion; 2016 Nov 21-24; Shanghai. Geneva: WHO; 2016 [cited 21 Nov 2018]. Available from: http://www.who.int/healthpromotion/conferences/9gchp/shanghai-declaration.pdf.
Linkage	• SHAA2030 target 2.5 • Plan of Action on Health Promotion (for approval in 2019)

Code and title of the outcome	**Outcome 19**: Health promotion strengthened and inequities reduced, using the Health in All Policies approach, health diplomacy, and intersectoral action
Code and title of the indicator	**Outcome Indicator 19.b**: Number of countries and territories that have integrated health promotion into health services based on the principles of primary health care
Definition of the indicator	This indicator counts the number of countries and territories that integrate health promotion into health services with an emphasis on primary health care. **Baseline 2019:** 7 **Target 2025:** 14 Countries in the Region are currently undergoing a process to develop indicator baselines and targets for the proposed Strategy and Plan of Action on Health Promotion. The baseline and target for this indicator will be updated when that process is complete.
Purpose of the indicator	The indicator measures the progressive advances of PAHO Member States toward integration of health promotion strategies and actions into health services, in line with primary health care principles. Health promotion is a very cost-effective approach, keeping people healthy and avoiding the enormous burden of disease and cost of treatment. This was highlighted in the Alma Ata Declaration of 1978 and more recently in the Astana Declaration on Primary Health Care of 2018, and is an essential component of the Strategy for Universal Access to Health and Health Coverage.
Technical note	To achieve the indicator, a country must meet at least three of the following four criteria. The country: 1. Is developing and implementing national guidelines for incorporation of health promotion into the planning and delivery of health services, based on the principles of primary health care, with a component for monitoring and evaluation. 2. Has at least 30% of staff trained on health promotion and social determinants of health for upstream thinking and community engagement. 3. Has integrated health promoters into a multidisciplinary institutional team. 4. Carries out community-based assessments that analyze the impact of health promotion policies on addressing inequities and achieving active community engagement.
Type of indicator	Absolute
Measurement units	Number of countries and territories
Frequency of measurement	Every 2 years
PASB unit	Family, Health Promotion and Life Course / Health Promotion and Social Determinants (FPL/PS)
Data source	Observatories; reports on progress toward universal health and primary health care; country reports.

Limitations	This indicator is not routinely tracked by the health systems.
References	1. World Health Organization. Declaration of Alma-Ata [Internet]. International Conference on Primary Health Care; 6-12 Sep 1978; Alma-Ata (USSR). Geneva: WHO; 1978. Available from: http://www.who.int/publications/almaata_declaration_en.pdf 2. World Health Organization. The Ottawa charter for health advance. First International Conference on Health Promotion [Internet]. 21 Nov 1986; Ottawa, Ontario, Canada. Geneva: WHO; 1986. Available from: http://www1.paho.org/hiap/images/stories/PDFs/1986-OttawaCharterEN2.pdf. 3. Pan American Health Organization. Strategy for universal access to health and universal health coverage. 53rd Directing Council of PAHO, 66th Session of the Regional Committee of WHO for the Americas; 2014 Sep 29-Oct 3; Washington, DC. Washington, DC: PAHO; 2014 (Document CD53/5, Rev. 2). Available from: http://iris.paho.org/xmlui/bitstream/handle/123456789/28276/CD53-5-e.pdf?sequence=1&isAllowed=y 4. World Health Organization. Astana Declaration on Primary Health Care: From Alma-Ata towards Universal Health Coverage and the Sustainable Development Goals. [Internet]. Global Conference on Primary Health Care; 26-28 October 2018; Astana, Kazakhstan: WHO; 2018. Available from: https://www.who.int/docs/default-source/primary-health/declaration/gcphc-declaration.pdf
Linkage	• SHAA2030 targets 2.1 and 2.5 • Plan of Action on Health Promotion (for approval in 2019)

Code and title of the outcome	**Outcome 19**: Health promotion strengthened and inequities reduced, using the Health in All Policies approach, health diplomacy, and intersectoral action
Code and title of the indicator	**Outcome Indicator 19.c**: Number of countries and territories that are implementing policies or strategies based on regional guidance for healthy schools
Definition of the indicator	This indicator counts the number of countries and territories that are implementing policies or strategies based on regional guidance for healthy schools. **Baseline 2019:** 8 **Target 2025:** 13 Countries in the Region are currently undergoing a process to develop indicator baselines and targets for the proposed Strategy and Plan of Action on Health Promotion. The baseline and target for this indicator will be updated when that process is complete.
Purpose of the indicator	This indicator measures the advances of countries and territories in adopting regional guidance for healthy schools by implementing policies or strategies that create and maintain settings in which the health of children and adolescents is promoted. There is much to be gained in population health by ensuring that children and adolescents spend time in settings that are conducive to health. The purpose of health-promoting schools is to create enabling environments for future generations, allowing children and adolescents to maintain and improve their health as well as the health of their families and communities by applying the principles of health promotion.
Technical note	To achieve the indicator, a country must apply policies or strategies with features that relate to at least five of the following six areas: 1. Healthy schools (e.g., leadership, institutional capacity, healthy food) 2. Physical school environment (e.g., safe playgrounds, safe clean gender-separate latrines, access to drinking water) 3. Social school environment (e.g., anti-bullying environment, equity) 4. Health skills and education (e.g., life skills education) 5. Links with parents and community (e.g., community involvement mechanisms) 6. Access to health services (e.g., school-based health service, linkage between school and primary health care)
Type of indicator	Absolute
Measurement units	Number of countries and territories
Frequency of measurement	Every 3 years
PASB unit	Family, Health Promotion and Life Course / Health Promotion and Social Determinants (FPL/PS)
Data source	WHO Global School Health Initiative; national reports of health-promoting schools.

Limitations	This indicator is not usually tracked by the health sector and will require collaboration with the education sector.
References	1. World Health Organization. WHO's Global School Health Initiative. Health-Promoting Schools: A healthy setting for living, learning and working. Available from: http://www.paho.org/hq/index.php?option=com_docman&task=doc_view&Itemid=270&gid=33407&lang=en 2. World Health Organization. What is a health promoting school? Available from: https://www.who.int/school_youth_health/gshi/hps/en/ 3. World Health Organization. Resources and tools for assessment and monitoring. Available from: https://www.who.int/school_youth_health/assessment/en/ 4. Pan American Health Organization. FRESH: a comprehensive school health approach to achieve EFA. Available from: http://www.paho.org/hq/index.php?option=com_docman&task=doc_view&Itemid=270&gid=33390&lang=en 5. World Health Organization. Global Standards for Health Promoting Schools: Concept Note. Available from: http://origin.who.int/maternal_child_adolescent/adolescence/global-standards-for-health-promoting-schools.pdf
Linkage	• SHAA2030 target 2.5 • Plan of Action on Health Promotion (for approval in 2019)

Code and title of the outcome	**Outcome 20:** Integrated information systems for health developed and implemented with strengthened capacities in Member States and the Pan American Sanitary Bureau
Code and title of the indicator	**Outcome Indicator 20.a:** Number of countries and territories that implement integrated interoperable information systems for health that include subnational disaggregation
Definition of the indicator	This indicator counts the number of countries and territories that implement integrated interoperable information systems for health (IS4H) that include subnational disaggregation. **Baseline 2019:** 7 **Target 2025:** 18
Purpose of the indicator	This indicator shows progress toward the adoption of new technologies for digital health and the implementation of governance mechanisms at national and subnational levels for improved data and information management. These changes better enable countries and territories to formulate, implement, monitor, and assess policies at the national and subregional levels. The framework for information systems for health contributes to the efforts of countries and territories to achieve universal access to health and universal health coverage by strengthening interconnected and interoperable health-related information systems that ensure effective and efficient access to quality data, strategic information, and information and communication technology (ICT) tools for decision making and well-being. This is complementary to interventions proposed under the current Plan of Action for the Strengthening of Vital Statistics 2017-2022 (CSP29.R4). Interventions to achieve these criteria will be included in regional, subregional, and national road maps and action plans with scheduled activities, tasks, objective and key results (OKRs), and key performance indicators (KPIs) that are part of the IS4H monitoring and evaluation framework.
Technical note	To achieve this indicator, a country must have in place all three of the following IS4H governance mechanisms: 1. Policies (open data, data sharing agreements, and/or legislation that allows for freedom of information) 2. Adopted standards for interoperability* 3. Implemented plan of action These criteria have been defined with Member States following three high-level consultations. They reflect efforts to strengthen actions by Member States that allow implementation and monitoring of the SDGs through the management of information systems for health, ensuring that these systems function in an interconnected and interoperable manner. The IS4H Maturity Assessment Tool will be used to collect and analyze critical information, including information on legal frameworks, memoranda for inter-institutional exchange of data,

	governance and leadership models and mechanisms for data collection, data use dictionaries with standardized health data, and other indicators. This also entails standards and processes that permit the measurement, monitoring, and ongoing improvement of high-quality information and informed policy and decision making. This assessment tool is designed to ensure that data are disaggregated by income, sex, age, race, ethnicity, migratory situation, disability, geographic location, and other characteristics relevant to the national context, given the need for data down to the subnational level. It remains challenging to ensure that health-related data, and data on other matters that affect health, are readily available, and that they are used in an ethical and evidence-based manner for decision making, policy formulation, monitoring, and evaluation, and to produce intelligence that guides action. * Interoperability is defined as the exchange of data among systems, databases, and devices. For two systems to be interoperable, they must be able to exchange data and subsequently present the data in a way that is understandable to the user (definition adapted from the Healthcare Information and Management Systems Society).
Type of indicator	Absolute
Measurement units	Number of countries and territories
Frequency of measurement	Annual. The reported data correspond to the application of the IS4H Maturity Assessment Tool that was previously discussed with Member States.
PASB unit	Evidence and Intelligence for Action in Health / Information Systems and Platforms for Health (EIH/IS)
Data source	Countries' IS4H Maturity Assessment reports; monitoring reports for the regional Plan of Action and national road maps.
Limitations	• Countries may not achieve interoperability between technological applications. • Human resources capacities for adopting new technologies for information systems, data management, and health analysis may be insufficient. • The additional challenge and opportunity created by the revolution of mass data accessible on the internet, used ethically, will bring benefits for public health in the Member States, as never before in the history of humankind.
References	1. PAHO's online information platform on information systems for health. Available from: https://www.paho.org/ish/index.php/en/ 2. Final Meeting Report from consultations held with Member States from the Caribbean Region (7-9 November 2016) 3. Final Meeting Report from consultations held with Member States from Central America (11-12 December 2017) 4. Final Meeting Report from consultations held with Member States from South America (17-19 July 2018)

	5. "HIMSS 2013 Definition." HIMSS, 5 April 2013. Available from: https://www.himss.org/library/previous-himss-interoperability-definitions (accessed: 26 April 2019) 6. PAHO Plan of Action for the Strengthening of Vital Statistics 2017-2022 (CSP29.R4), available at this link.
Linkage	• SHAA2030 goals 6 and 7, and specifically targets 6.1, 6.2, and 7.3 • PAHO Plan of Action for Strengthening Information Systems for Health (CE164), for approval by the 57th Directing Council • PAHO Plan of Action for the Strengthening of Vital Statistics 2017-2022 (CSP29.R4) • This indicator contributes to the availability of data used to measure health and health-related indicators under SDG 3 and SDG indicator 17.18.1 ("Proportion of sustainable development indicators produced at the national level with full disaggregation when relevant to the target, in accordance with the Fundamental Principles of Official Statistics") and indicator 16.10.2 ("Number of countries that adopt and implement constitutional, statutory and/or policy guarantees for public access to information")

Code and title of the outcome	**Outcome 21**: Increased capacity of Member States and the Pan American Sanitary Bureau to generate, analyze, and disseminate health evidence and translate knowledge for decision making at national and subnational levels
Code and title of the indicator	**Outcome Indicator 21.a**: Number of countries and territories with functional governance for generating and using evidence integrated into health systems
Definition of the indicator	This indicator counts the number of countries and territories with at least one of the following: 1. Established national programs to develop evidence-informed guidelines for public health 2. Established formal national mechanisms for evidence for policy **Baseline 2019:** 7 **Target 2025:** 15
Purpose of the indicator	The indicator measures key aspects of evidence-informed governance within a health system. Functional governance consists of a formal institutional structure with defined priorities, requirements, and standards, along with mechanisms to deliver them, for the production, dissemination, and use of evidence. Therefore, a formal and standardized knowledge translation process needs to be in place so that the country can scale up the systematic integration of evidence into policy, systems, and practice at the national level. The generation and use of evidence for policy making and decision making in health systems, programs, and practices works through various standardized mechanisms established in different structures within the health system (for example, in national guidelines and norm programs, health technology assessment agencies, health benefit plan decision, regulatory agencies for medicines and other technologies, etc.) and at different levels (national, regional, and municipal). The concept of functional governance recognizes the need to articulate these mechanisms of knowledge translation to address fragmentation and segmentation of evidence-informed governance in health systems.
Technical note	Working definitions for each element of the indicator: 1. Established national programs to develop evidence-informed guidelines for public health must include: *a)* a formal national institutional structure; *b)* defined priorities for guidelines or policy development at the national level; *c)* requirements and standards (defined methods for developing evidence-informed products, including the GRADE system); *d)* number of evidence-informed guidelines publicly available in BIGG (International Database of GRADE Guidelines). 2. Established formal national mechanisms for evidence for policy must include: *a)* a formal institutional structure; *b)* defined priorities for policy development; and *c)* requirements and standards (methods for developing evidence briefs). To achieve the indicator, a country must meet all criteria described under either 1 or 2.

Type of indicator	Absolute
Measurement units	Number of countries and territories
Frequency of measurement	Data are collected and reported at the end of each year, in November.
PASB unit	Evidence and Intelligence for Action in Health (EIH) / Knowledge Translation and Evidence Program
Data sources	National health authorities, updated with PASB support with information from Member States; PAHO/WHO International Database of GRADE Guidelines (BIGG).
Limitations	Functional evidence-informed governance in health presupposes a complex adaptive system that might fail to be measured by the two elements of the indicator (e.g., if priorities or standards are not followed).
References	1. Pan American Health Organization. Strengthening national evidence-informed guideline programs: a tool for adapting and implementing guidelines in the Americas. Washington, DC: PAHO; 2018. Available at [link] 2. World Health Organization. WHO handbook for guideline development. 2nd ed. 2014. 3. World Health Organization. EVIPNet in action: 10 years, 10 stories. Geneva: WHO; 2016. WHO/HIS/IER/REK/16.02
Linkage	• SHAA2030 target 6.3 • SP14-19 outcome 4.4 • Program and Budget 2018-2019, output 4.4.6

Code and title of the outcome	**Outcome 21**: Increased capacity of Member States and the Pan American Sanitary Bureau to generate, analyze, and disseminate health evidence and translate knowledge for decision making at national and subnational levels
Code and title of the indicator	**Outcome Indicator 21.b**: Number of countries and territories that generate, analyze, and use data and information according to health priorities, disaggregated by geopolitical and demographic strata, as appropriate to the national context
Definition of the indicator	This indicator counts the number of countries and territories that generate, analyze, and use data and information according to health priorities, disaggregated by geopolitical and demographic strata, as appropriate to the national context. **Baseline 2019:** 8 **Target 2025:** 51
Purpose of the indicator	Health analysis is linked strategically to the decision-making process in the management of policies, programs, and interventions in health, as well as in other sectors that have an impact on health. This indicator aims to drive capacity building in health analysis, data analysis and interpretation, knowledge translation, producing evidence for impact, and communication. The capacity to produce and use reliable country data is founded on a national evaluation system and framework capable of producing comprehensive and robust analyses to assess national health priorities, their determinants, and the impact of health programs. Countries can use disaggregated data at national and subnational levels to monitor and assess their needs and develop appropriate strategies and methodologies to meet those needs. This process also includes a routine dissemination and feedback system to identify progress and gaps in programs. The knowledge generated by such analyses helps decision makers select and prioritize the best possible interventions and assess their impact, leading to a positive impact on health outcomes.
Technical note	The indicator is calculated by counting the number of Member States that produce and disseminate comprehensive health analyses on a routine basis. To achieve the indicator, a country must generate reports that meet either of the following two criteria: 1. At least two reports within the 2020-2025 period that encompass all key aspects of the country's health situation (demographic, epidemiological, socioeconomic, etc.). Member States may produce reports that meet this criterion as part of a routine process for the development of their national health strategic plans and corresponding monitoring and evaluation frameworks, or they may produce stand-alone reports to support decision making for health programs. 2. At least six reports within the 2020-2025 period, each of which addresses a specific health priority (e.g., Zika, influenza, HIV/AIDS) in line with the country's national strategic plan or country cooperation strategy, or that addresses an emerging public health threat. These reports should discuss relevant determinants, health needs, current and expected disease burden, health system performance, and the country's capacity to effectively address its health

	needs. It is expected that countries will conduct the analyses using data disaggregated by geopolitical level and by demographic strata that include, but are not limited to, gender, age, and ethnicity. It is recognized that Member States do not necessarily produce all the information or resources needed to generate thorough and detailed health situation analyses. It is expected that countries will continue to increase their capabilities to fulfill this commitment in the coming years.
Type of indicator	Absolute
Measurement units	Number of countries and territories
Frequency of measurement	Data are collected and reported annually, at the end of the year.
PASB unit	Evidence and Intelligence for Action in Health / Health Analysis, Metrics and Evidence (EIH/HA)
Data source	Publications and official country reports on the national or subnational situation of specific health priorities.
Limitations	Limited technical competency and high instability of human resources are among the major challenges to the systematic production of health analysis reports.
References	1. Pan American Health Organization. EIH/HA Web portal
Linkage	• This indicator contributes to the availability of data for use in measuring health and health-related indicators under SDG 3. It also contributes to SDG indicator 17.18.1 ("Proportion of sustainable development indicators produced at the national level with full disaggregation when relevant to the target, in accordance with the Fundamental Principles of Official Statistics") • SHAA2030 targets 6.2 and 6.3 • PAHO Plan of Action for the Strengthening of Vital Statistics 2017-2022 (CSP29.R4) • PASB Resolution CD7.R23, calling for the delivery of a health reports every four years at the Pan American Sanitary Conference (precursor to Health in the Americas), October 1953 • Regional Core Health Data and Country Profiles Initiative (CD40/19) • SP14-19 outcome 4.4 • Program and Budget 2018-2019, output 4.4.1

Code and title of the outcome	**Outcome 21**: Increased capacity of Member States and the Pan American Sanitary Bureau to generate, analyze, and disseminate health evidence and translate knowledge for decision making at national and subnational levels
Code and title of the indicator	**Outcome Indicator 21.c**: Number of countries and territories with established mechanisms on knowledge management, multilingualism, open access, and publishing
Definition of the indicator	This indicator counts the number of countries and territories that have established policies, plans, standards, guidelines, methodologies, and/or tools that consider the following elements: • Production of scientific and technical information following international standards, based on open access and open source approaches • Visibility and availability of multilingual scientific and technical health information in support of multilingualism at the regional and global levels • Interoperable platforms to facilitate the access, dissemination, and circulation of scientific and technical literature and knowledge in health • Horizontal collaboration, partnerships, and strategic networks that facilitate knowledge sharing and effective collaboration, especially among countries and territories, in the spirit of Pan Americanism • Capacity building and organizational learning based on communities of practice, lessons learned, and best practices • Preservation of scientific and technical literature as part of the cultural heritage of public health in the Americas **Baseline 2019:** 11 **Target 2025:** 26
Purpose of the indicator	The regional Strategy and Plan of Action on Knowledge Management and Communications, 2013-2018, affirms that the Region of the Americas has shown significant advances in the area of knowledge and communications. It identifies the Region as a pioneer in "implementing new paradigms related to the generation, circulation, preservation, and dissemination of public health information." The report encourages PASB and PAHO Member States to continue to invest in these objectives beyond the time frame of the strategy. This indicator continues efforts toward that end, and also supports the achievement of goals 6 and 7 of the Sustainable Health Agenda for the Americas 2018-2030. It aims to reduce the persistent gaps in access to scientific and technical information due to language barriers and costs, and to strengthen capacity to publish literature that meets international standards and raises the visibility of scientific and technical publications in the Region.
Technical note	To achieve the indicator, a country must have in place at least two of the following: 1. Programs, policies, methodologies, and/or tools on knowledge management or knowledge sharing (including organizational learning, best practices, lessons learned, and communities of practice) 2. Frameworks fostering the availability of multilingual technical and scientific information and literature, including scientific journals in public health and related areas, which will

	contribute to the exchange of multilingual information among countries and territories at regional and global levels 3. Platforms to disseminate, preserve, and provide access to local production of scientific and technical literature in health (including the Virtual Health Library, Research4Life program, institutional repositories, and similar initiatives) 4. Active intersectoral networks (among governments, international organizations, academic institutions, civil society, etc.) that participate in policy-making processes, generation of standards, and dissemination of best practices on technical cooperation and innovation in health 5. Road maps toward open access and open source platforms, especially for literature financed with public funds PASB will conduct assessments with the support of PAHO/WHO Representatives and focal points in the countries and territories. Information will be updated in the country profiles on knowledge management and information access and will be made available on PAHO's website.
Type of indicator	Absolute
Measurement units	Number of countries and territories.
Frequency of measurement	Data are collected at the end of the year.
PASB unit	Office of Knowledge Management, Publications, and Translations (KMP)
Data source	Annual assessments will be conducted with national authorities in the countries and territories (national health authorities, institutes of health, academic institutions, scientific editors and aggregators) and updated with PASB support. Information to be gathered should include, but is not limited to, the following: • Institutions from eligible countries/territories registered and active in the Research4Life-HINARI program • National, thematic, and institutional Virtual Health Library in the countries and territories • Scientific and technical literature indexed in LILACS and similar databases and resources • Scientific journals in health and related areas that provide multilingual information (e.g., full-text papers and/or abstracts available in more than one language) and apply open access/open source policies • Digital repositories from academia and/or institutions in public health • Availability of distribution lists, communities of practice, and repositories on lessons learned
Limitations	The indicator measures progress on the establishment of road maps (policies, plans, standards, guidelines, methodologies, and/or tools) on knowledge management, multilingualism, open access, and publishing. However, it does not necessarily capture implementation at country level. Low implementation may reflect local capacity constraints, lack of resources, or a decision not to prioritize this area.

References	1. São Paulo Declaration for the Democratization of Scientific Knowledge to Achieve the Goals of Sustainable Development [Intranet]. 10th Regional Congress on Health Information (CRICS10); 2018 4-6 Dec, São Paulo, S.P.: BIREME; 2018. Available from: https://www.crics10.org/en/sao-paulo-declaration-for-the-democratization-of-scientific-knowledge-to-achieve-the-goals-of-sustainable-development/. 2. World Health Organization. Multilingualism: Report by the Director-General [Internet]. 144th Session of the Executive Board of WHO; 2018 Nov 23 ; Geneva. Geneva: WHO; 2018 (Document EB144/38). http://apps.who.int/gb/ebwha/pdf_files/EB144/B144_38-en.pdf. 3. Pan American Health Organization. Strategy and plan of action on knowledge management and communications: final report [Internet]. 56th Directing Council of PAHO, 70th Session of the Regional Committee of WHO for the Americas; 2018 Sep 23-27; Washington, C. Washington, D.C: PAHO; 2018 (Document CD56/INF/18). Available from: http://iris.paho.org/xmlui/handle/123456789/49703. 4. World Health Organization. Multilingualism: respect for equality among the official languages. 71st World Health Assembly, 2018 26 May, Geneva. Geneva: WHO; 2018 (Document WHA71.15). Available from: http://apps.who.int/gb/ebwha/pdf_files/WHA71/A71_R15-en.pdf. 5. United Nations. Knowledge management in the United Nations system [Internet]. General Assembly, Seventy-second Session of the General Assembly of the United Nations; 2017 Sep 12-25; New York, NY. New York, NY: UN; 2017 (Document A/72/325). Available from: https://digitallibrary.un.org/record/1301102/files/A_72_325-EN.pdf. 6. Pan American Health Organization. Strategy and plan of action on knowledge management and communications [Internet]. 28th Pan American Sanitary Conference, 64th Session of the Regional Committee of WHO for the Americas; 2012 Sep 17-21; Washington, DC. Washington, DC: PAHO; 2012 (Document CSP 28/12 Rev. 1). Available from: http://iris.paho.org/xmlui/handle/123456789/4455. 7. Pan American Health Organization. Sustainable health agenda for the Americas 2018-2030: a call to action for health and well-being in the region. Washington, DC: PAHO; 2017 (Document CSP29/12 Rev. 1). Available from: http://iris.paho.org/xmlui/handle/123456789/49170.
Linkage	• The wider availability of knowledge contributes to all health and health-related indicators, particularly for SDGs 3, 16, and 17. • SHAA2030 goals 6 and 7, particularly target 7.2 (“Develop institutional capacities, infrastructure, technology, and qualified human resources for public health research and its dissemination, in accordance with national health policy”) • Regional Strategy and Plan of Action on Knowledge Management and Communications, 2013-2018 • WHO, Multilingualism: Report by the Director-General [Internet]. 144th Session of the Executive Board of WHO, 2018

Code and title of the outcome	**Outcome 22**: Strengthened research and innovation to generate solutions and evidence to improve health and reduce health inequalities
Code and title of the indicator	**Outcome Indicator 22.a**: Number of countries and territories implementing a funded policy, strategy, and/or agenda on research and innovation for health
Definition of the indicator	This indicator counts the number of countries and territories that are implementing a funded policy, strategy, and/or agenda on research and innovation for health to improve health and reduce health inequalities. **Baseline 2019:** 7 **Target 2025:** 17
Purpose of the indicator	The indicator assesses the number of countries and territories that report having allocated funding to address their published national agenda on research and innovation for health, in a manner that is sustainable.
Technical note	The indicator counts the total number of countries and territories with financing mechanisms for national priorities on health research and development. To achieve the indicator, a country must have fulfilled both of the following criteria: 1. Official publication of defined, valid national research priorities for health (Health Research Web and Policy on Research for Health (CD49/10). These defined national research priorities or agendas need to be up to date, publicly available at the national level, and have sustainable financing mechanisms for research and development (R&D). 2. Defined funding (e.g., sectoral funds) allocated to the national research and innovation agenda for health (PAHO Policy on Research for Health and WHO Global Observatory on Health R&D).
Type of indicator	Absolute
Measurement units	Number of countries and territories
Frequency of measurement	Annual. Data are collected at the end of year and in annual surveys.
PASB unit	Health Systems and Services / Health Services and Access (HSS/HS)
Data source	Surveys conducted periodically by PASB, reaching out to relevant stakeholders; WHO Global Observatory on Health R&D; national authorities for health and science/technology; national institutes of health; Health Research Web platform of the Council on Health Research for Development (COHRED), with updates by PASB and Member States; Organization of American States (OAS); RIMAIS Network.
Limitations	• Funding for research may have been withdrawn or diverted. • Funded health research agendas may not be fully implemented, kept current, updated as they evolve, or developed in inclusive ways. • The development of agendas may not have included all relevant stakeholders and disciplines needed to address public health priorities and neglected conditions.

	• The assessment may not consider the robustness of research capacities and outputs. • Research agendas may evolve and expire for valid reasons (e.g., national priorities changed, new issues emerged, epidemiological profile or other circumstances changed, new solutions/technologies became available, issues became irrelevant, research questions were answered). • Implementation may be hindered by insufficient capacity; lack of investment in dashboards integrating real-time information on national investments, outputs, and capacities; limited use of machine learning; or automatization and search algorithms that perpetuate cumbersome processes, data quality problems, and variations in criteria and standards. • Research governance may be fragmented, so that priorities and funding are developed with insufficient coordination among institutions (e.g., science and technology, health, public health research). • Accountability and reporting may be poor, and there may be failure to adhere to good practices or procedures that increase the value of research and reduce research waste.
References	1. Pan American Health Organization. Policy on research for health. 49th Directing Council of PAHO, 61st Session of the Regional Committee of WHO for the Americas. Washington, DC: PAHO; 2009 (Document CD49/10). Available from: http://www1.paho.org/hq/dmdocuments/2009/CD49-10-e.pdf 2. World Health Organization. 63rd World Health Assembly. WHO strategy on research for health; WHO roles and responsibilities on health research: document WHA63.21 and Resolution. Geneva, 2010. Accessed 9 Jul 2015 at: http://apps.who.int/gb/e/e_wha63.html 3. Pan American Health Organization. 46th Session of the Advisory Committee on Health Research. (Washington, DC, 28-30 November 2016). Washington, DC: PAHO; 2017. (e.g. item 5.1) Available from: http://iris.paho.org/xmlui/handle/123456789/34305 4. Bernake BS. Promoting research and development: the government's role. Issues in Science and Technology 2011;27(4). Available from: https://issues.org/bernanke/. 5. Salicrup LA, Cuervo LG, Cano Jiménez R, Salgado de Snyder N, Becerra-Posada F. Advancing health research through research governance. BMJ 2018;362:k2484. https://www.bmj.com/content/362/bmj.k2484 6. Reveiz L, Elias V, Terry RF, Alger J, Becerra-Posada F. Comparison of national health research priority-setting methods and characteristics in Latin America and the Caribbean, 2002-2012. Rev Panam Salud Pública 2013 Jul;34(1):1-13. 7. World Health Organization. Indicator Global Observatory on Health R&D: 9.5.1 Research and development expenditure as a proportion of GDP https://www.who.int/research-observatory/indicators/en/; Gross domestic expenditure in the health and medical sciences (health GERD) as a proportion of gross domestic expenditure on R&D.
Linkage	• This indicator contributes to the availability of research that enables the measurement of health and health-related indicators under SDG 3. The topic also contributes to SDG indicator 9.5.1 ("Research and development expenditure as a proportion of GDP") in terms of the investment in R&D for health.

	• The indicator also supports measurement of the indicator for gross domestic expenditure on health and medical sciences (health GERD) as a proportion of gross domestic expenditure on R&D, which is tracked by WHO. • SHAA2030 target 7.1 • SP14-19 outcome 4.4 • Program and Budget 2018-2019, output 4.4.1

Code and title of the outcome	**Outcome 22**: Strengthened research and innovation to generate solutions and evidence to improve health and reduce health inequalities
Code and title of the indicator	**Outcome Indicator 22.b**: Number of countries and territories that have ethical standards for conducting research with human subjects
Definition of the indicator	As defined in the International Compilation of Human Research Standards, standards for research with human subjects include laws, regulations, and national guidelines aimed at ensuring that all research participants are adequately protected. This indicator counts the number of countries and territories that have enacted such standards. **Baseline 2019:** 15 **Target 2025:** 23
Purpose of the indicator	Research is essential to improve the health and well-being of populations, but it must be conducted ethically. Ethical standards for the conduct of research with human subjects are an essential component of a research ethics system. They should align with international ethical standards, which implies requiring ethics review by an independent committee.
Technical note	To achieve the indicator, a country must have in place legislation, regulations, or national guidelines aimed at ensuring that research with human subjects is ethical. Mere references to research with human subjects in a country's general health law or its constitution will not be considered sufficient. Ethical standards must govern all health research with human subjects, which means that standards focused only on a subset of research with human subjects (e.g., clinical trials) will be not considered sufficient for the purpose of the indicator. The number of countries and territories that meet the indicator criteria will be totaled.
Type of indicator	Absolute
Measurement units	Number of countries and territories
Frequency of measurement	Data are collected at the end of the year.
PASB unit	Health Systems and Services / Regional Program on Bioethics
Data source	• International Compilation of Human Research Standards, published yearly by the Office for Human Research Protections, US Department of Health and Human Services, and updated with PASB support, using information from Member States. • National health authorities, updated with PASB support.
Limitations	The existence of ethical standards for research with human subjects does not necessarily imply that such research is always conducted ethically. In order to achieve that, additional components of a research ethics system are necessary: namely, a national body tasked with oversight of ethics review committees, policies that support research ethics training for investigators and committees, prospective registration of clinical trials, and policies on responsible conduct of research.
References	1. Pan American Health Organization. Bioethics: towards the integration of ethics in health. 28th Pan American Sanitary Conference, 64th Session of the Regional Committee of WHO for the Americas; 2012 Sep 17–20; Washington, DC. Washington, DC: PAHO; 2012

	(Document CSP28/14, Rev. 1). Available from: http://iris.paho.org/xmlui/bitstream/handle/123456789/4457/CSP28-14-e.pdf?sequence=1&isAllowed=y (Accessed September 12 2019). 2. Pan American Health Organization. Bioethics: towards the integration of ethics in health. 28th Pan American Sanitary Conference, 64th Session of the Regional Committee of WHO for the Americas; 2012 Sep 17–20; Washington, DC. Washington, DC: PAHO; 2012 (Resolution CSP28.R18). Available from: https://www.paho.org/hq/dmdocuments/2012/CSP28.R18-e.pdf (Accessed September 12 2019). 3. Pan American Health Organization. Bioethics: towards the integration of ethics in health: final report. 56th Directing Council, 70th Session of the Regional Committee of WHO for the Americas; 2018 Sep 23–27; Washington, DC. Washington, DC: PAHO; 2018 (Document CD56/INF/21). Available from: http://iris.paho.org/xmlui/bitstream/handle/123456789/49706/CD56-INF-21-e.pdf?sequence=1&isAllowed=y&ua=. (Accessed September 12 2019). 4. Council for International Organizations of Medical Sciences (CIOMS). International ethical guidelines for health-related research involving humans.4th ed. Geneva: 2016. Available from: https://cioms.ch/wp-content/uploads/2017/01/WEB-CIOMS-ethicalguidelines.pdf (Accessed September 12 2019). 5. Office of Human Research Protections, U.S Department of Health and Human Services. International Compilation of Human Research Standards. 2019 Edition. Washington, DC: 2019 (Accessed September 12 2019).
Linkage	• SHAA2030 goal 7, target 7.2 • Resolution CSP28.R18 and accompanying concept document CSP28/14, Rev. 1: Bioethics: Towards the Integration of Ethics in Health • Final report CD56/INF/21: “Bioethics: Towards the Integration of Ethics in Health” • SP14-19 outcome 4.4, outcome indicator 4.4.2 • Program and Budget 2018-2019, output 4.4.4

Code and title of the outcome	**Outcome 23:** Strengthened country capacity for all-hazards health emergency and disaster risk management for a disaster-resilient health sector
Code and title of the indicator	**Outcome Indicator 23.a:** Number of countries and territories that meet or exceed minimum capacities to manage public health risks associated with emergencies
Definition of the indicator	This indicator counts the number of countries and territories reporting to PAHO that they have a health disaster program in place with full-time staff and a specific budget to implement disaster preparedness and response plans. Emergency preparedness and response plans should be based on a hazard and vulnerability assessment, be gender-sensitive, and consider groups and communities in conditions of vulnerability. **Baseline 2019:** 26 **Target 2025:** 40
Purpose of the indicator	The indicator shows the progress of the Region's countries toward self-sufficiency and nationally led all-hazard disaster preparedness and response.
Technical note	The indicator is calculated from data collected with a PAHO-endorsed all-hazard disaster preparedness and response capacity assessment tool. Among the tools already available or in the pipeline is the Preparedness Index for Health Emergencies and Disasters, the PAHO Plan of Action on Disaster Risk Reduction Monitoring Survey, and the Health Sector Self-Assessment Tool for Disaster Risk Reduction (DRR). These seek to determine the status of key benchmarks for emergency and disaster risk management in the health sector. The health disaster coordinator meetings, held every two years, can also provide valuable information for this indicator. The PAHO Plan of Action on Disaster Risk Reduction Monitoring Survey is implemented every two years, the Preparedness Index for Health Emergencies and Disasters at least every two years, and the Health Sector Self-Assessment Tool for DRR every three to five years. A Health Sector Multi-Hazard Response Framework and a health emergencies response operative model (multi-hazard plan) are also available for countries.
Type of indicator	Absolute
Measurement units	Number of countries and territories
Frequency of measurement	Every 2 years, by the end of the year
PASB unit	Health Emergencies / Country Preparedness & IHR (PHE/CPI)
Data source	The Survey Report from countries and territories; self-assessment tools; health disaster coordinator meeting.
Limitations	• Although the Health Sector Self-Assessment Tool for DRR is available, it is only available in English at this point. • Assessment fatigue in many countries may affect the process of data collection, including the response rate.

References	1. Pan American Health Organization. 2006 Progress Report on Health: Disasters: Preparedness and Response. Washington, DC: PAHO; 2006. Available from: www.paho.org/disasters/index.php?option=com_docman&task=doc_download&gid=1958&Itemid 2. Pan American Health Organization. Health Sector Self-Assessment Tool for DRR. Washington, DC: PAHO; 2010. Available from: http://www.paho.org/disasters/index.php?option=com_content&view=article&id=1375&Itemid=1 3. Pan American Health Organization. Health Emergency and Disaster Preparedness Index. Washington, DC: PAHO; 2019. Available from: Link to be provided soon. 4. Pan American Health Organization. Multi-Hazard Health Response Framework: Health Emergencies Response Operative Model (multi-hazard plan). Washington, DC: PAHO; 2019. Available from: Link to be provided soon.
Linkage	• SHAA2030 targets 8.2, 8.3, and 8.4 • SP14-19 outcome indicator 5.2.1

Code and title of the outcome	**Outcome 23:** Strengthened country capacity for all-hazards health emergency and disaster risk management for a disaster-resilient health sector
Code and title of the indicator	**Outcome Indicator 23.b:** Number of States Parties meeting and sustaining International Health Regulations (IHR) requirements for core capacities
Definition of the indicator	This indicator counts the number of IHR States Parties reporting to WHO that they have developed and sustained the core capacities as described under Articles 5 and 13 and Annex 1 of the IHR. **Baseline 2019:** Not applicable **Target 2025:** 35
Purpose of the indicator	PAHO's 35 Member States (defined as States Parties in the IHR) are bound by the IHR (through Resolution WHA58.3) to have or develop and maintain core capacities, as described in Articles 5 and 13 and Annex 1 of the Regulations. The purpose and scope of these Regulations is to prevent, protect against, control, and provide a public health response to the international spread of disease in ways that are commensurate with and restricted to public health risks, and that avoid unnecessary interference with international traffic and trade. This indicator aims to show the progress of States Parties in the Region toward the application of and compliance with the IHR.
Technical note	The indicator is fully aligned with WHO's global measurement and is calculated using the core capacities scores, expressed in percentages, in the States Parties Annual Report to the World Health Assembly (WHA). To achieve this indicator, a State Party must have improved its scores, or maintained them (where the score is higher than 0%), **for at least 10 of the 13 core capacities**. This is consistent with Decision WHA71(15) and takes into account Resolution WHA68.5 endorsing Document A68/22, Add.1 ("The work to develop, strengthen and maintain the core capacities under the IHR should be viewed as a continuing process for all countries"). The core capacities scores for a State Party that fails to submit its State Party Annual Report to the WHA in any given year will be regarded as 0%. The core capacities scores of that state's subsequent submission will be assessed against its most recent prior submission. As a result of a formal global consultative process held in 2018, a revised version of the proposed tool for submitting the State Party Annual Report to the WHA was introduced in 2019. It includes 13 revised capacities comprising 24 indicators (http://www.who.int/iris/bitstream/10665/272432/1/WHO-WHE-CPI-2018.16-eng.pdf?ua=1). Therefore, no "Baseline 2019" is available.
Type of indicator	Absolute
Measurement units	IHR States Parties in the Region of the Americas
Frequency of measurement	Annual; deadline coincides with the WHA

PASB unit	Health Emergencies / Country Preparedness & IHR (PHE/CPI)
Data source	The information contained in the States Parties Annual Reports submitted to the WHA is systematically summarized in the IHR progress report to WHO and PAHO Governing Bodies (updated yearly and available at the WHO and PAHO websites: http://apps.who.int/gb/ and http://www.paho.org/hq/index.php?option=com_content&view=article&id=42&Itemid=189&lang=en).
Limitations	• Differences in States Parties' intrinsic capacity, governance mechanisms, organizational structures, level of awareness about the scope and purpose of the IHR, and technical expertise present challenges for the implementation of the IHR at the national level. • Similarly, at the regional level there is work to be done to enhance intra- and intersectoral collaboration, optimize the use of resources already available to enhance application of and compliance with IHR, and to ensure the sustainability of attained core capacities.
References	1. World Health Organization. International Health Regulations (2005), 3rd edition. Geneva: WHO; 2016. Available from: http://apps.who.int/iris/bitstream/10665/246107/1/9789241580496-eng.pdf?ua=1
Linkage	• SDG indicator 3.d.1 • SHAA2030 targets 8.2, 8.3, and 8.4 • SP14-19 outcome indicator 5.2.2 • GPW13 Impact Framework

Code and title of the outcome	**Outcome 24:** Countries' capacities strengthened to prevent and control epidemics and pandemics caused by high-impact and/or high-consequence pathogens
Code and title of the indicator	**Outcome Indicator 24.a:** Number of countries and territories with capacity to effectively respond to major epidemics and pandemics
Definition of the indicator	This indicator counts the number of countries and territories with installed capacity to effectively respond to epidemics and pandemics. This is defined as having strong national public health systems that can maintain active surveillance of diseases and public health events, rapidly investigate detected events, report and assess public health risk, share information, and implement public health control measures. **Baseline 2019:** Not applicable **Target 2025:** 35
Purpose of the indicator	This indicator aims to measure and track the capacity of countries and territories to respond to major epidemics and pandemics and to ensure a rapid exchange of information about impending public health threats and, as a result, to increase confidence and trust among all parties.
Technical note	The indicator is fully aligned with WHO's global measurement and is calculated using the core capacities scores, expressed in percentages, in the States Parties Annual Report to the World Health Assembly (WHA). To achieve this indicator, a State Party must have improved its scores, or maintained them (where the score is higher than 0%), **for at least 8 out of the following 11 core capacities, considered critical for epidemic/pandemic prevention and control:** legislation and financing, IHR coordination and national IHR focal point functions, zoonotic events and the human-animal interface, food safety, laboratory, surveillance, human resources, national health emergency framework, health service provision, risk communication, and points of entry. This is consistent with Decision WHA71(15) and takes into account Resolution WHA68.5 endorsing Document A68/22, Add.1 ("The work to develop, strengthen and maintain the core capacities under the IHR should be viewed as a continuing process for all countries"). The core capacities scores for a State Party that fails to submit its State Party Annual Report to the WHA in any given year will be regarded as 0%. The core capacities scores of that state's subsequent submission will be assessed against its most recent prior submission. As a result of a formal global consultative process held in 2018, a revised version of the proposed tool for submitting the State Party Annual Report to the WHA was introduced in 2019. It includes 13 revised capacities encompassing 24 indicators (http://www.who.int/iris/bitstream/10665/272432/1/WHO-WHE-CPI-2018.16-eng.pdf?ua=1). Therefore, no "Baseline 2019" is available.
Type of indicator	Absolute
Measurement units	Number of countries and territories

Frequency of measurement	Annual; deadline coincides with the WHA
PASB unit	Health Emergencies / Infectious Hazard Management (PHE/IHM)
Data source	The State Parties report on their IHR implementation status to the WHA, summarized in the IHR progress report to the WHA (updated yearly and available at PAHO's Governing Bodies website: http://www.paho.org/hq/index.php?option=com_content&view=article&id=42&Itemid=189&lang=en
Limitations	• The diverse nature of each epidemic and pandemic presents new challenges for countries and territories, and thus there is an ongoing need to strengthen sensitive surveillance systems and to train human resource in outlying/emerging public health threats. • Each county's or territory's intrinsic characteristics and funding for achieving and maintaining installed capacity also could constitute limitations on the attainment of this indicator.
References	1. World Health Organization. International Health Regulations (2005), Second edition. Geneva: WHO; 2008. Available from: http://whqlibdoc.who.int/publications/2008/9789241580410_eng.pdf
Linkage	• SHAA2030 targets 8.2, 8.3, and 8.4 • SP14-19 outcome indicator 5.1.1

Code and title of the outcome	**Outcome 24:** Countries' capacities strengthened to prevent and control epidemics and pandemics caused by high-impact and/or high-consequence pathogens
Code and title of the indicator	**Outcome Indicator 24.b:** Number of endemic countries and territories with ≥80% coverage for yellow fever vaccine
Definition of the indicator	This indicator counts the number of countries and territories that achieve and maintain the ≥80% threshold for cumulative vaccination coverage among all age groups in yellow fever-endemic areas by the end of the specific follow-up year. Vaccination coverage is calculated based on immunization and census data specific to the endemic areas. **Baseline 2019:** 0 **Target 2025:** 5
Purpose of the indicator	This indicator will track progress toward reducing the risk of urban yellow fever. With a ≥80% vaccine coverage, the risk of urban yellow fever (large outbreaks with transmission of yellow fever virus from person to person via *Aedes* vector species) in endemic areas is minimalized.
Technical note	Endemicity for yellow fever is defined as the confirmation of human cases within the past 20 years due to autochthonous exposure. Risk of yellow fever transmission is defined as yellow fever having been reported in the past along with presence of vectors and animal reservoirs representing a potential risk of infection and transmission. As of 2019, eight countries in the Americas are considered endemic for yellow fever (Argentina, Bolivia, Brazil, Colombia, Ecuador, Paraguay, Peru, Venezuela), and five countries and territories are considered at risk for yellow fever transmission (French Guyana, Guyana, Panama, Suriname, Trinidad and Tobago). To define the baseline and target, only endemic countries are considered. Calculation at country level (expressed as a percentage): **Numerator:** Number of persons aged <60 years who live in areas endemic for yellow fever and who have received at least one vaccine dose at any time during their life. **Denominator:** Number of persons aged <60 years who live in areas endemic for yellow fever during the year of evaluation. Calculation at regional level: Count of countries or territories with ≥80.0% cumulative vaccine coverage.
Type of indicator	Absolute
Measurement units	Number of countries and territories endemic for yellow fever
Frequency of measurement	Annual. The reported data correspond to the end of the year and are received in April of the following year.
PASB unit	• Health Emergencies / Infectious Hazard Management (PHE/IHM)

	• Family, Health Promotion and Life Course / Comprehensive Family Immunization (FPL/IM)
Data source	Countries and territories calculate vaccination coverage based on national immunization records and census estimates at subnational level. The national cumulative coverage for the endemic areas is then reported by countries and territories to the PAHO Health Emergencies program with the PAHO/WHO-UNICEF joint reporting form and more detailed reports at subnational level.
Limitations	• Calculation of vaccination coverage depends on the availability, accuracy, and systematization of immunization records and census data at national and subnational levels. For youth and adults, vaccination records going back several decades may not be available, or their accuracy may be limited. Census estimates that are either outdated or unreliable at subnational level, as well as migration, can bias the estimation of administrative vaccination coverage. In some countries, surveys may be needed to establish historical coverage in adults. • Achievement of coverage improvement depends on the global availability of sufficient vaccine stock. During the follow-up period, countries and territories of the Americas are expected to compete for vaccine availability with African countries, where large vaccination campaigns are planned. Also, vaccine acceptance varies among countries and population groups and depends on their perception of risk. • Yellow fever endemicity and transmission risk can vary over the follow-up period. The baseline and target are based on endemic countries as of 2019, although other countries and territories may become endemic in later years.
References	1. WHO/UNICEF/GAVI, 2018. Eliminate Yellow Fever Epidemics (EYE): a global strategy, 2017–2026. Available from: http://apps.who.int/iris/bitstream/handle/10665/272408/9789241513661-eng.pdf (01/04/2019) 2. PAHO, 2005. Control of yellow fever: field guide. Available from: http://www.paho.org/immunization/toolkit/resources/paho-publication/field-guides/Control-of-Yellow-Fever.pdf (01/04/2019). 3. WHO, 2019. Countries with risk of yellow fever transmission and countries requiring yellow fever vaccination. Available from: https://www.who.int/ith/ITH_Annex_I.pdf (01/04/2019) 4. Gavi, the Vaccine Alliance, 2018. Immunization's key role in achieving 14 of the 17 Sustainable Development Goals. Available from: https://www.gavi.org/about/ghd/sdg/ (01/04/2019) [Under SDG13 on climate action, "vaccines are critical to building people's resilience to and mitigating the risk of outbreaks of diseases tied to climate change, such as yellow fever and cholera, particularly in urban or post-disaster settings."]
Linkage	• SHAA2030 targets 8.2, 8.3, 8.4, and 10.10 • GPW13 Impact Framework

Code and title of the outcome	**Outcome 25:** Rapid detection, assessment, and response to health emergencies
Code and title of the indicator	**Outcome Indicator 25.a:** Percentage of acute public health events for which a risk assessment is completed within 72 hours
Definition of the indicator	This indicator measures the percentage of acute public health events for which a risk assessment is completed within 72 hours of detection. **Baseline 2019:** 75% **Target 2025:** 100%
Purpose of the indicator	PAHO supports IHR States Parties to fulfill the commitment to prevent, protect against, control, and provide a public health response to the international spread of disease. The indicator measures organizational capacity at PAHO to identify and assess public health events of potential international concern and to guide decision making on preparedness for, response to, and recovery from outbreaks and emergencies.
Technical note	This indicator is calculated using the events recorded in the WHO Event Management System (EMS), which is used to identify, document, and manage acute public health events that may constitute a potential public health emergency of international concern. Each event is designated as one of the following: • Substantiated, when the presence of a hazard is confirmed or the number of human cases exceeds normal thresholds. • Discarded, when there is no international risk and no international risk is expected (these events are closed accordingly). • No outbreak, when the number of human cases or hazard reported is within normal limits of occurrence. • Unverifiable, when no information is forthcoming from the IHR National Focal Point (NFP) or responsible national authority to substantiate its occurrence, despite best efforts to obtain such information. This indicator is calculated by counting the number of events assessed within 72 hours designated as substantiated, divided by the total number of substantiated events. **Numerator:** Total number of events assessed within 72 hours after designation. **Denominator:** Total number of substantiated events.
Type of indicator	Relative
Measurement units	Percentage
Frequency of measurement	Annual. The estimate will be updated annually, based on data gathered from January to December in the EMS, and will be available by June of the following year.

PASB unit	Health Emergencies / Health Emergency Information and Risk Assessment (PHE/HIM)
Data source	The Event Management System (EMS), a password-protected WHO system consistently used by PAHO/WHO for managing and sharing information about public health risks in a collaborative manner across the three levels of the Organization.
Limitations	Not all core variables for the proper measurement of an event are recorded.
References	1. World Health Organization. WHO event management for international public health security. Operational Procedures – working document. Available from: http://www.who.int/csr/HSE_EPR_ARO_2008_1.pdf. 2. World Health Organization. International Health Regulations (2005). Available from: http://www.who.int/csr/ihr/en/. 3. World Health Organization. EMS instructional guide. Available from: http://ems.who.int.
Linkage	• SHAA2030 targets 8.2, 8.3, and 8.4 • SP14-19 outcome indicator 5.3.1, adapted

Code and title of the outcome	**Outcome 25:** Rapid detection, assessment, and response to health emergencies
Code and title of the indicator	**Outcome Indicator 25.b:** Percentage of countries and territories providing an essential package of life-saving health services in all graded emergencies
Definition of the indicator	This indicator measures the percentage of countries and territories that have provided essential health services to emergency-affected populations in all Grade 2 and Grade 3 emergencies (per the WHO Emergency Response Framework). **Baseline 2019:** 75% **Target 2025:** 85%
Purpose of the indicator	The indicator shows the capacity of countries to adequately provide populations affected by health emergencies with access to essential life-saving health services and public health interventions. It measures the reach of health services in selected countries for which data are currently available.
Technical note	This indicator measures the percentage of countries and territories that have provided essential health services to emergency-affected populations in all Grade 2 and Grade 3 emergencies. It is a percentage indicator because the number of countries with graded emergencies cannot be predicted. It is calculated by counting the number of countries and territories that provide emergency-affected populations with essential health services in ALL Grade 2 and Grade 3 emergencies (defined per WHO's Emergency Response Framework), based on the assessment of the emergency. These may include outpatient consultations and any of the following services, as applicable: • General clinical services and trauma care • Child health care • Communicable diseases • STI and HIV/AIDS • Maternal and newborn health • Sexual violence • Noncommunicable diseases • Mental health • Specific hospital care A Grade 2 emergency is a single or multiple-country event with moderate public health consequences that requires a moderate PAHO/WHO country office response and/or moderate international WHO response. A Grade 3 emergency is a single or multiple-country event with substantial public health consequences that requires a substantial PAHO/WHO country office response and/or substantial international WHO response.

	Numerator: Total number of countries and territories that provided emergency-affected populations with outpatient consultations and ANY OF the above-listed services, as applicable, in ALL Grade 2 and Grade 3 emergencies that impacted them. **Denominator:** Total number of countries and territories impacted by one or more emergencies or disasters during the year.
Type of indicator	Relative
Measurement units	Percentage
Frequency of measurement	Annual
PASB unit	Health Emergencies / Emergency Operations (PHE/EMO)
Data source	Post-disaster reports from national health authorities, national emergency management agencies, United Nations Office for the Coordination of Humanitarian Affairs (UNOCHA), and PAHO/WHO.
Limitations	Monitoring the availability of health services during an emergency is not easy. Uncertainties around access, security, and time limitations frequently prevent systematic information gathering.
References	1. Pan American Health Organization. Health Emergencies Program www.paho.org/disasters 2. WHO. Health Resources Availability Monitoring System (HeRAMS) https://www.who.int/hac/herams/en/
Linkage	• SHAA2030 targets 8.2, 8.3, and 8.4 • SP14-19 outcome indicator 5.4.1

Code and title of the outcome	**Outcome 26**: Strengthened country leadership and capacity to advance health equity and gender and ethnic equality in health, within a human rights framework
Code and title of the indicator	**Outcome Indicator 26.a:** Number of countries and territories with institutional responses and accountability mechanisms that are advancing health equity, gender and ethnic equality in health, and human rights
Definition of the indicator	This indicator counts the number of countries and territories in the Region that have established and/or strengthened institutional responses and accountability mechanisms that are contributing to the achievement of health equity and gender and ethnic equality in health, within a human rights framework. **Baseline 2019:** Not applicable **Target 2025:** 18 * * The target will include the countries that participated in the PAHO Commission on Equity and Health Inequalities in the Americas, plus three others to be identified later.
Purpose of the indicator	The indicator aims to measure advances that the PAHO Member States have made in relation to health equity, gender and ethnic equality in health, and human rights by assessing the degree of installed institutional responses and mechanisms that promote leadership and accountability in these areas.
Technical note	To achieve the indicator, a country must meet two of the following three criteria: 1. Existence of institutional architecture at a leadership level for decision making and accountability for equity, gender and ethnic equality, and human rights in health 2. National observatories and reports on equity, gender and ethnic equality, and/or human rights in health 3. Inclusion of at least one high-level transformative result on health equity, gender and ethnic equality, and human rights in a main strategic planning document at the highest level for the health sector "Institutional architecture" relates to bodies and mechanisms whose design and institutional status enhance a country's capacity to undertake change in relation to health equity, gender and ethnicity equality, and human rights. This involves the existence of: • An organizational body at the highest level of decision making inside the national health authority, as structure allows in the national context. • An institutionalized mechanism or body inside the national health authority that coordinates with, reports to, and participates in relevant commissions, intersectoral cabinets, and other external bodies including, but not limited to, high-level commissions on human rights, national human rights institutions, women/gender equality, equity, indigenous peoples, and/or other populations living in conditions of vulnerability. • Participatory mechanisms for civil society with decision-making capability for policy and accountability.

	• Designation, implementation, and monitoring of specific dedicated budget(s) for equity, gender and ethnic equality, and/or human rights in health. "High-level transformative results" are outcomes or expected accomplishments that guide strategic orientation. Such results must be included in the main strategic planning document at the highest level in the national health authority. Transformative results contribute to changes in the root causes of inequalities and discrimination in relation to health by shifting norms, values, and power structures within and beyond the health sector.
Type of indicator	Absolute
Measurement units	Number of countries and territories
Frequency of measurement	Data will be collected after the end of every biennium and will be assessed in the established years of the Strategic Plan to adjust the baseline (2022, 2024, and 2026).
PASB unit	• Office for Equity, Gender and Cultural Diversity (EGC) • Office of the Legal Counsel (LEG)
Data source	Information is provided through a qualitative survey to health authorities in Member States, to be developed by the responsible units. Other sources include national reports and other official reports, such as those from United Nations conventional and extra conventional mechanisms (e.g., treaty bodies, special rapporteurs, and universal periodic review).
Limitations	• This is a combined indicator with intersectoral responsibility. • Monitoring and evaluation of the four cross-cutting themes may be constrained by limited information and a lack of political will. • All three criteria will be measured in accordance with the national context. • Quantitative information will also be used as available.
References	1. UN Women. UNSWAP 2.0 Framework and Technical Guidance. Available from: https://bit.ly/2LKylEg
Linkage	• SDG targets 3.1, 3.7, 3.8, 5.1, 5.2, 5.4, 5.6, 5.C, 10.2, 10.3, and 17.18 • SHAA2030 target 11.1 • WHO Programme Budget 2020-2021, output 4.2.6 • Gender Equality Policy (CD46.R16) • Policy on Ethnicity and Health (CSP29/7) • Health and Human Rights (CD50/12 and CD50.R8)

Code and title of the outcome	**Outcome 27**: Strengthened PASB leadership, governance, and advocacy for health
Code and title of the indicator	**Outcome Indicator 27.a:** Proportion of countries and territories where the national health authority reports satisfaction with PAHO/WHO's leading role on global and regional health issues
Definition of the indicator	This indicator counts the number of countries and territories where the national health authority reports satisfaction with PAHO/WHO's leading role on global and regional health issues, expressed as a percentage of the countries and territories that respond to the assessment of this indicator via the end-of-biennium assessments every two years. **Baseline 2019:** No data **Target 2025:** 100%
Purpose of the indicator	This indicator measures the perception of national health authorities about the work of the Organization and its role in engaging countries in the regional and global public health agenda at the highest level (politically, strategically, and technically).
Technical note	During the end-of-biennium assessment, each country/territory will be asked to respond to this indicator. The indicator is calculated as the percentage that report satisfaction as a share of the total number that respond.
Type of indicator	Relative
Measurement units	Percentage
Frequency of measurement	Every 2 years
PASB unit	Department of Planning and Budget (PBU)
Data source	Data are obtained from the joint end-of-biennium assessment.
Limitations	Use of the joint assessment with Member States to conduct a survey of this type has not yet been tested.
References	1. Pan American Health Organization. PAHO Strategic Plan 2020-2025.
Linkage	• SP14-19 outcome indicator 6.1.1, adapted

Code and title of the outcome	**Outcome 27**: Strengthened PASB leadership, governance, and advocacy for health
Code and title of the indicator	**Outcome Indicator 27.b:** Number of countries and territories for which there is alignment between the national health policy, strategy, or plan and the outcomes defined in the PAHO Strategic Plan 2020-2025
Definition of the indicator	This indicator counts the number of countries and territories with national health policies, strategies, or plans that are consistent with the outcomes defined in the PAHO Strategic Plan 2020-2025. **Baseline 2019:** 20 **Target 2025:** 51
Purpose of the indicator	This indicator seeks to monitor the alignment between national health priorities established by countries in their national health policies, strategies, or plans and the PAHO Strategic Plan 2020-2025 in order to assess the leadership and advocacy role of PASB.
Technical note	The alignment will be established based on the following criteria: 1. Countries have national health policies, strategies, or plans. 2. All 26 technical outcomes in the PAHO Strategic Plan are reflected in said policies, strategies, or plans. PASB will conduct a review of national health policies, strategies, and plans to determine whether they are aligned with the PAHO Strategic Plan. An Excel spreadsheet has been developed to monitor the alignment for each of the 26 technical outcomes of the SP across Member States to ensure consistency in the review and analysis of the available information.
Type of indicator	Absolute
Measurement units	Number of countries and territories
Frequency of measurement	Every 2 years, as part of the end-of-biennium Program Budget assessment
PASB unit	Office of the Director / Office of Country and Sub-Regional Coordination (D/CSC) in collaboration with all PAHO/WHO Country Offices.
Data source	National health policies, strategies, or plans.
Limitations	Limited uniformity in content and variation in life cycles of national planning processes.
References	1. Pan American Health Organization. Strategic Plan 2020-2025
Linkage	• SP14-19 outcome indicator 6.1.2

Code and title of the outcome	**Outcome 27**: Strengthened PASB leadership, governance, and advocacy for health
Code and title of the indicator	**Outcome Indicator 27.c**: Proportion of corporate risks with an approved mitigation plan implemented
Definition of the indicator	This indicator measures the percentage of corporate risks that have been identified, assessed, and prioritized, with mitigation plans established to lessen those risks. **Baseline 2019:** 50% **Target 2025:** 100%
Purpose of the indicator	The indicator serves to identify the steps that the Organization is taking to assess and mitigate the impact of programmatic and operational corporate risks in order to ensure an effective and efficient implementation of PAHO's technical cooperation. This will contribute to achievement of the results set out in PAHO Program Budgets and in the Strategic Plan 2020-2025.
Technical note	An annual review of actions will be implemented in accordance with the corporate risk mitigation plans to assess the degree of their implementation. This will be done following PAHO's Enterprise Risk Management (ERM) policy.
Type of indicator	Relative
Measurement units	Percentage
Frequency of measurement	Annual
PASB unit	Office of the Director of Administration (AM)
Data source	Corporate Risk Committee Reports.
Limitations	There may be limited acceptance by some managers of Enterprise Risk Management as a useful tool that should be maintained and updated.
References	1. Pan American Health Organization. PAHO's Enterprise Risk Management Policy (internal).
Linkage	• SP14-19 outcome indicator 6.2.1

Code and title of the outcome	**Outcome 27**: Strengthened PASB leadership, governance, and advocacy for health
Code and title of the indicator	**Outcome Indicator 27.d**: Percentage of approved PAHO (not AMRO) budget funded for each biennial Program Budget
Definition of the indicator	This indicator measures the availability of financial resources to fund the PAHO Program Budget, excluding the AMRO portion. It includes only flexible funds and voluntary contributions that support the implementation of the Program Budget. **Baseline 2019:** To be determined **Target 2025:** 100%
Purpose of the indicator	The indicator shows the degree of success in funding the PAHO-approved Program Budget for each biennium – a key measure of how the Organization is able to mobilize resources to deliver on Member State priorities and agreed results.
Technical note	The indicator is calculated as the percentage of the approved PAHO (not AMRO) budget for each biennium that is funded. **Numerator:** total available PAHO (not AMRO) funds **Denominator:** total approved PAHO (not AMRO) budget
Type of indicator	Relative
Measurement units	Percentage
Frequency of measurement	Annual
PASB unit	Department of Planning and Budget (PBU)
Data source	End-of-biennium assessments of the Program Budgets, using information extracted from the PASB Management Information System.
Limitations	• The performance of the indicator may be affected by fluctuations in the flow of voluntary contributions to the Americas Region and PAHO. Nonetheless, PAHO will continue its efforts toward the achievement of fully funded Program Budgets. • This indicator does not measure funding of the budget for specific outcomes, the degree of success in attracting voluntary contributions to Member State priorities, or implementation of resources. However, this information will be tracked and reported as part of the budget analysis for end-of-biennium assessments.
References	1. Pan American Health Organization. Approved Program Budget documents.
Linkage	• SP14-19 outcome indicator 6.3.1, adapted

Code and title of the outcome	**Outcome 27**: Strengthened PASB leadership, governance, and advocacy for health
Code and title of the indicator	**Outcome Indicator 27.e**: Percentage of PAHO Strategic Plan 2020-2025 outcome indicator targets achieved
Definition of the indicator	This indicator measures progress toward the achievement of the Strategic Plan 2020-2025 outcome indicator targets, expressed as a percentage of the targets achieved. **Baseline 2019:** To be determined, based on final assessment of the Strategic Plan 2014-2019 **Target 2025:** 90%
Purpose of the indicator	The indicator will gauge progress in the achievement of the Organization's approved outcome indicator targets, as detailed in the Strategic Plan 2020-2025, and indicate where corrective actions are required as the period progresses.
Technical note	For the end-of-biennium assessments of Program Budgets 2020-2021 and 2022-2023, the achievement rate for outcome indicator targets is calculated by dividing the total number of outcome indicator targets achieved and in progress at the end of the biennium by the total number of outcome indicators approved in the PAHO Strategic Plan. Most indicators will likely be in progress, to be achieved by the end of the Strategic Plan period. For the end-of-biennium assessment of Program Budget 2024-2025, which comes at the end of the period, the rate is calculated by dividing the total number of outcome indicator targets achieved or partially achieved by the total number of indicators. The assessment of outcome indicator targets requires joint monitoring and reporting by Member States and PASB. Monitoring and assessment of the outcome indicators will be done through the PAHO Strategic Plan Monitoring System (SPMS). The following criteria will be used for rating the performance of the outcome indicators: • Achieved: 90%-100% of the target value has been achieved • In progress (for biennia 20-21 and 22-23): Progress has been made over the baseline value, but is less than 90% of the target value. • Partially achieved (for biennium 24-25): Progress has been made over the baseline value, but is less than 90% of the target value. • No progress: There is no progress above the baseline, or a reduction below the baseline.
Type of indicator	Relative
Measurement units	Percentage
Frequency of measurement	Biennial
PASB unit	Department of Planning and Budget (PBU)

Data source	Data are obtained from the assessment of outcome indicators conducted for the end-of-biennium reports. Indicators subject to the joint assessment with Member States are reported through the SPMS.
Limitations	• The achievement of the indicators depends upon the joint efforts of PASB and Member States. For indicators subject to joint assessment with Member States, experience has shown a tendency toward underrating by Member States, which may not reflect the true level of achievement in some cases. • All indicators are assessed based on established data sources. Gaps in these data sources can make it difficult to report on some indicators.
References	1. Pan American Health Organization. PAHO Strategic Plan 2020-2025. 2. Pan American Health Organization. End-of-Biennium Assessments of the Program Budgets. 3. Pan American Health Organization. Final Report of the PAHO Strategic Plan 2020-2025 (forthcoming).
Linkage	• SP14-19 outcome indicator 6.3.2, adapted

Code and title of the outcome	**Outcome 28:** Increasingly transparent and efficient use of funds, through improved PASB management of financial, human, and administrative resources
Code and title of the indicator	**Outcome Indicator 28.a:** Proportion of total human resource costs expended on management and administrative functions
Definition of the indicator	This indicator measures the proportion of total human resource costs expended on management and administration functions, expressed as a percentage. **Baseline 2019**: US$69M of $192M (36%) **Target 2025**: 10% reduction
Purpose of the indicator	This indicator seeks to measure the efficiency and effectiveness of the management and administrative support.
Technical note	This indicator calculates the percentage of the fixed term staff costs that are linked to the management and administration functions, as follows: **Numerator:** cost of fixed-term positions linked to management and administration functions (Strategic Plan 2020-2025 outcome 28 and Program Budget 2020-2021 output 27.2) **Denominator:** total cost of fixed-term positions
Type of indicator	Relative
Measurement units	Percentage
Frequency of measurement	Semiannual
PASB unit	Office of the Director of Administration (AM)
Data source	The data is obtained from the PASB Management Information System (PMIS)
Limitations	• Accuracy of data.
References	N/A
Linkage	• None