World Health Organization

REGIONAL OFFICE FOR Europe

Regional consultation on targets and indicators for Health 2020 monitoring: Report of results

ABSTRACT

In 2012, Member States approved the Health 2020 policy, which includes targets in six areas. The policy also considers monitoring progress on targets to be a key element of accountability. As such, appropriate indicators needed to be identified and proposed to Member States.

Over the past year, WHO-convened technical expert groups have suggested sets of 20 core indicators and 17 additional ones for consideration by Member States. After those were presented to the Standing Committee of the Regional Committee, a web-based consultation was organized to enable Member States to provide feedback on the proposed sets of indicators, including comments on their feasibility, clarity, completeness, appropriateness and usefulness, and to give consideration for their approval.

A total of 30 Member States contributed to the consultation and their responses were anonymised and consolidated. Taken as a whole, a positive response to the core and additional indicators was attained, with over 90% of replies expressing consideration for approval and 2% for rejection of indicators in both sets. A number of comments from Member States indicated the need for some indicator adjustments and clarifications, including additional disaggregation, further specification or explanations, including on methodological aspects. WHO has therefore developed a revised table of the sets of indicators, provided some clarification in the report and prepared technical notes to guide data collection, monitoring and analysis of indicators.

Keywords

DELIVERY OF HEALTH CARE
HEALTH INDICATORS
HEALTH MANAGEMENT AND PLANNING
HEALTH POLICY
HEALTH SYSTEMS PLANS
PUBLIC HEALTH
REGIONAL HEALTH PLANNING

Address requests about publications of the WHO Regional Office for Europe to:
Publications
WHO Regional Office for Europe
UN City, Marmorvej 51
DK-2100 Copenhagen Ø, Denmark
Alternatively, complete an online request form for documentation, health information, or for permission to quote or translate, on the Regional Office web site (http://www.euro.who.int/pubrequest).

CONTENTS

Page

Introduction

In 2012, Member States approved the Health 2020 policy framework at the sixty-second session of the WHO Regional Committee for Europe (RC62) in Malta. The Health 2020 policy provides directions for work towards three strategic health goals, targeting six areas, namely, reducing burden of disease and risk factors; increasing life expectancy; reducing health inequities in Europe; enhancing the well-being of the European population; achieving universal coverage and the "right" to health; and the setting of national targets/goals by Member States. In addition, the policy considers the monitoring of progress towards the proposed health targets to be a leading element of accountability.[1]

In response to this requirement, the WHO Regional Office for Europe established two experts groups to advise on the development of indicators in the six areas.[2] The expert groups held a joint meeting in February 2013 to further discuss and agree on their proposals and learn about different national and international processes that may influence data collection and interpretation.[3] The groups identified sets of 20 core and 17 additional indicators, which were presented at the third session of the Twentieth Standing Committee of the Regional Committee (SCRC) in March 2013. Following this, the revised list was shared with Member States for a web-based consultation from 22 March to 26 April 2013. WHO provided a secure country-specific mechanism containing the questionnaire, the list of core and additional indicators and reference documentation on the process followed for selection of indicators. Member States were invited to provide feedback about the proposed set of indicators, including comments on their feasibility, clarity, completeness, appropriateness and usefulness and consideration for approval.

Results of the consultation

As recommended by the SCRC, the expert groups identified a minimum set of 20 core indicators. Of these, six are for monitoring Target 1 on the reduction of premature mortality in Europe by 2020, one is for Target 2 on increasing life expectancy in Europe, six are for Target 3 on reducing health inequities in Europe, two are for Target 4 on enhancing the well-being of the European population, three are for Target 5 on universal coverage and the "right" to health and two are for Target 6 on national target or goal setting by Member States. These indicators and the set of additional ones, their suggested data sources and the number of Member States with statistics in WHO, United Nations agencies' or other international organizations' databases are presented in Table 1, as used in the Regional Consultation. It should be noted that the absolute number of core indicators is actually 18, as two indicators, namely those on life expectancy and the proportion of children vaccinated against measles, poliomyelitis (polio) and rubella, appear in more than one target. The expert groups considered them useful for the monitoring of progress on life expectancy increases and on the reduction of inequities in the health status of populations; the achievement and sustainability of elimination of selected vaccine-preventable diseases (polio,

[1] World Health Organization. 2013. Health 2020 targets, indicators and monitoring framework. 63rd session of the WHO Regional Committee, Çeşme Izmir, Turkey, 16–19 September 2013, Document EUR/RC63/8.
[2] World Health Organization. 2012. Measurement of and target-setting for well-being: an initiative by the WHO Regional Office for Europe. First meeting of the expert group, Copenhagen, Denmark, 8–9 February 2012.
[3] World Health Organization. 2012. Joint meeting of experts on targets and indicators for health and well-being in Health 2020. Copenhagen, Denmark, 5–7 February 2013.

measles, and rubella) and the prevention of congenital rubella syndrome; and progress on universal health coverage.

Regarding replies to the consultation, a total of 30 (or 57%) Member States responded, 26 used the questionnaire, while another 4 preferred to answer in a document. Individual anonymised country responses for approval of core and additional indicators were consolidated and are shown in Figures 1 and 2, respectively. Regarding the 20 core indicators, out of the 520 possible answers for all responding countries (20 answers x 26 replies), 91% indicated approval, 7%, no decision and 2%, rejection. Likewise, of the 442 possible answers to the additional indicators (17 answers x 26 countries), 93% indicated approval, 6%, no decision and 2%, rejection. Overall, this indicates a positive response to the sets of core and additional indicators.

A summary of the results listed by targets and indicators is shown in Table 2. The highest combined total approval of 97% and 98% of core and additional indicators, respectively, was seen on reducing premature mortality in Europe by 2020. Similarly, indicators on universal coverage and the "right" to health showed relatively high approval response for both sets of indicators. In turn, a lower approval response was recorded for core and additional indicators on enhancing the well-being of the European population, but this was associated with a high proportion of "no decisions", a situation that reflected the apparent lack of clarity on which indicators would be included for monitoring. A similar situation of low approval response combined with a high number of "no decisions" was observed regarding national targets or goals set by Member States, an issue that suggested some misunderstanding on the spirit of the indicator, the aim of which is to learn more about country efforts and their alignment with the Health 2020 policy.

WHO response to the consultation replies

Member States also provided comments on the process and the indicators, which were analysed and grouped into different requirements and according to the list of indicators. The most common comments and the response by WHO are briefly summarized below.

On **data disaggregation** for the core indicators, Member States recommended using different strata to identify issues of gaps among population groups and potential inequalities, including age, sex, socioeconomic level and geography (urban/rural and by regions). The comments were related to overarching targets 1-4, particularly with regard to mortality-related indicators and risk factors and determinants. In this regard, WHO will make every effort to meet the recommendations, but it will also be dependent upon the data provided by Member States. For example, most Member States provide mortality data by age, sex and cause of death, and a few provide disaggregation by subregions that will enable the suggested assessments. Nevertheless the capacity to disaggregate data by other strata is rare in the European Region, despite multiple statements on the importance of indicators to assess inequity and measure social determinants made in the comments. A main finding of a web consultation on the Comprehensive Global Monitoring Framework and Targets for the Prevention and Control of Noncommunicable Diseases (NCDs) organized by the WHO Regional Office for Europe from 9 August to 21 September 2012 was that only four Member States assess themselves as having strong capacity to disaggregate NCD-related data.[4] In addition, many of the other requested disaggregated data

[4] World Health Organization. 2012. Web consultation on the Global Monitoring Framework for Noncommunicable Diseases http://www.euro.who.int/__data/assets/pdf_file/0006/176532/Web-Consultation-on-Global-Monitoring-Framework-for-Noncommunicable-Diseases-Eng.pdf.

are seldom available from routine sources and would require additional data collection efforts, which is contrary to the principles that were originally suggested by the SCRC.

Suggestions made by the Member States regarding **complementary indicators**, such as number 1.1a, with data on other significant causes of death (e.g. diseases of the digestive system or mental disorders) represent a very valid point. The WHO European Region has a much stronger capacity to report on all causes of death compared to the global context. However, 16% of European Region Member States declare that they do not have a registration system with population-based data; therefore expanding the indicator on other causes of death will lead to even more insufficient data collection. With this in mind, the proposed indicator should relate to the mortality risk of the four major lethal NCDs. Countries with good quality cause-of-death data, from a complete registration system may wish to establish more detailed national targets for specific NCD causes in accordance with paragraph 63 of the Political Declaration of the High-level Meeting of the General Assembly on the Prevention and Control of Non-communicable Diseases.[5,6]

Many comments provided by the Member States refer to the **proposed age range** (from 30 to under 70 years) for premature cause-specific mortality. The rationale for choosing such a range is that the age of 30 years represents a point in the life-course where the mortality risk for the four selected NCDs starts to increase, compared with very low levels at younger ages. In the WHO European Region, the average expected age of death for any individual that has reached 30 years of age, exceeds 70 years. In order to represent the real premature mortality rate, the upper limit was chosen to be less than 70 years. In addition, the estimation of cause-specific death rates becomes increasingly uncertain at older ages.

Member States were also concerned about the **validity and comparability** of indicators, particularly for those on some risk factors. WHO maintains consistency between the Health 2020 indicators and those contained in the Comprehensive Global Monitoring Framework and Targets for the Prevention and Control of Noncommunicable Diseases that was recently adopted by the Member States at the Sixty-sixth World Health Assembly. This is illustrated below for the example of tobacco use.

There are two Global Monitoring Framework indicators: age-standardized prevalence *of current tobacco use* among persons *aged 18 years and over* and *prevalence of current tobacco use* among adolescents. In turn, the two Health 2020 indicators originally proposed were: age-standardized prevalence of *current tobacco smoking* among persons *aged 15 years and over* and prevalence of *weekly tobacco smoking* among school-aged children. Leading up to the Sixty-sixth World Health Assembly, the Global Monitoring Framework indicators were subject to an extensive consultation process with Member States in the WHO European Region. In this context, the Global Monitoring Framework indicators were updated from *tobacco smoking* (as in the Health 2020 targets) to *tobacco use*. Tobacco use is of paramount importance and is on the rise in many countries. Including all forms of tobacco use in the indicator definition conveys the clear message that no form of tobacco use should be ignored in surveys and tobacco control

[5] World Health Organization. 2012. Follow-up to the Political Declaration of the High-level Meeting of the General Assembly on the prevention and Control of Non-communicable Diseases http://apps.who.int/gb/ebwha/pdf_files/WHA66/A66_R10-en.pdf.

[6] World Health Organization. 2012.Information on questions raised during the 'Informal consultation with Member States and UN Agencies on a comprehensive global monitoring framework and voluntary global targets for the prevention and control of NCDs http://www.who.int/nmh/events/2011/consultation_dec_2011/Information_on_questions_raised_31.01.12.pdf.

policies. This view is also supported in Member States' comments on the Health 2020 indicators and those indicators will be aligned accordingly.

In addition, the comments from Member States on the need for harmonization of tobacco survey tools is very well taken and a priority of the Regional Office. In contrast to the adolescent surveys (elaborated on below), a comprehensive adult surveillance system is lacking. Seven countries (namely, Greece, Kazakhstan, Poland, Romania, the Russian Federation, Turkey and Ukraine) have or are in the process of embarking on the Global Adult Tobacco Survey (GATS) for those above 15 years of age. The GATS will enable comparisons across this group of countries, and measures tobacco smoking and tobacco prevalence. As the GATS is a resource-intensive survey, a relatively recent initiative has been launched called Tobacco Questions for Surveys (TQS). This consists of a subset of questions from the GATS that countries or surveillance systems are encouraged to integrate into existing surveys, building on the harmonization of survey tools and thus allowing a certain level of comparability (methodologies would vary). Some funding from the WHO may be available for Member States to consider its application. In addition, as part of the regular collection of data for the WHO Report on the Global Tobacco Epidemic, WHO/Europe requests updates on surveys and prevalence estimates from the national focal points. Data are adjusted using a regression model to improve comparability across countries (more information on this method will be included in the technical notes for this indicator to be provided by WHO). It is requested that all data received and calculated for adjustment/standardization are validated and signed-off by the appropriate individual representing the Ministry of Health.

In the case of school-aged children/adolescents, the primary source for the indicator on weekly tobacco use is the Global Youth Tobacco Survey (GYTS) as it measures not only tobacco smoking but other tobacco products. The GYTS is a single-risk factor survey targeting 13-15 year olds and is a long-standing surveillance system since 1999. Two other sources (for the indicator on tobacco smoking) are the Health Behaviour School Children Survey (HBSC) and the European School Survey Project on Alcohol and Other Drugs (ESPAD). The HBSC is a multirisk factor survey that targets 11, 13 and 15 year olds and the ESPAD is a multirisk factor survey targeting 16 year olds. The HBSC and the ESPAD are both long-standing surveillance systems that have been in place since 1985 and 1995, respectively. These surveys share a common methodology, enabling comparison within the Region in 50 out of the 53 countries. Additionally, several countries embark on multiple surveys, with 43% of the countries implementing all three of them.

Member States mentioned that f**urther clarification** was needed on what was covered by some indicators (e.g. external causes); in addition it was suggested that the use of International Classification of Diseases (ICD) codes would help to clarify the boundaries and that further definition of the indicators (e.g. for immunization coverage) and their interpretation (e.g. health expenditures and universal coverage) would be useful. The ICD-10 codes will be added to the specific indicators at 3-digit level for reference on their content and coverage. Likewise, in the case of immunizations, specific children's ages and number of doses required for complete immunization will be indicated for each disease. Similarly, regarding interpretation of health expenditures and coverage, using a private household's out-of-pocket expenditure as a proportion of total health expenditure is considered a good proxy for how good cost coverage is and it is widely available, while the suggestion of using coverage by compulsory health insurance is good but hard to implement. Also, total health expenditure does not necessarily translate into better or worse coverage, but it helps to explain the individual country's context and it is known that lower spending is associated with poorer coverage. Finally, to facilitate the

understanding and use of the different indicators suggested in the core and the additional lists, WHO is preparing a set of technical notes, where additional information on the rationale, potential sources of information, methods used for the measurement of the indicator and their interpretation are briefly described in a standard approach (see example in Annex 1). This is expected to further enhance the harmonization and comparability of indicators.

Member States requested that appropriate **indicators be age-standardized** and that the standard population used be mentioned and made available. All data disaggregated by age and sex provided to WHO in different instances (e.g. from mortality data collections or risk factors surveys) will enable age standardization through the application of the direct method and the European standard population for the calculations.

Some Member States questioned the inclusion of **indicators outside of the health domain**, particularly the socioeconomic ones (e.g. Gini coefficient, unemployment, and school enrolment) and those on well-being. The rationale for their inclusion includes: they are a good indication of inequalities in a population; they take into account the issue of the "whole of government" approach to health contained in the Health 2020 policy; and well-being is considered an integral part of the WHO definition of health and is both a determining factor and a result of health that deserves further assessment. WHO is working together with other international organizations and a group of experts to define more clearly the type of measurements required to assess subjective and objective well-being; the results are expected to be available for presentation to and consideration by Member States by the end of 2013.

Member States expressed some concern about the qualitative **indicators on national target or goal setting by Member States**, particularly with regard to the apparent suggestion of determining national targets based on the Health 2020 policy and the limited comparability. WHO does not suggest following such approach; rather the spirit of this indicator is to determine the alignment of existing or future national policies with those promoted by the Health 2020 policy.

Finally, to reflect additional suggestions or requests for clarifications on specific indicators made by Member States, WHO has prepared an **adjusted version of the originally proposed lists of indicators**, which is presented in Table 3. It is expected that these changes provide a satisfactory response to the comments but also that the technical notes offer a tool for further common understanding of the indicators.

Next steps to build on the results of the regional consultation

Once the indicators and the monitoring framework are approved by Member States at the sixty-third session of the WHO Regional Committee for Europe (RC63), refinement of indicators in close consultation with Member States will be ongoing in order to improve their comparability. After that, a baseline report will be prepared and submitted to the sixty-fourth session of the WHO Regional Committee for Europe and thereafter in accordance with the proposed monitoring framework, as per document EUR/RC63.8 (see reference 1). Furthermore, when preparing the analysis of the indicators, their links with indicators not included in these sets but in other health monitoring frameworks, such as the Millennium Development Goals, the Parma Declaration on Environment and Health, or the Comprehensive Global Monitoring Framework and Targets for the Prevention and Control of Noncommunicable Diseases, will have to be taken into account. For example, to assess potential contributions on premature mortality from chronic respiratory disease (core indicator 1.1a), it will be important to take into account changes in air

pollution with microparticle matter (PM 2.5 microns) that reach the lower respiratory tract, and when analysing changes in cervical cancer mortality, both screening access and vaccination coverage against the human papilloma virus should be considered.

In order to improve harmonization and comparability of indicators in an ongoing process, WHO will develop and provide technical notes on the core and additional indicators, based on international standards, and share them with Member States for their review and additional clarification (see Annex 2 for draft examples that will be reviewed and completed once indicators are approved). Technical notes for some subset indicators e.g. specific causes for external causes of death, will not be included as all elements except the ICD-10 codes, would be the same. Technical notes for indicators on well-being and national target or goal setting by Member States are still to be developed. Likewise, indicators from non-WHO health sources (e.g. employment, education and income distribution) will be determined from original sources and added later.

As already included in the 2014–2015 biannual cooperation agreements, WHO will continue to work with Member States during the coming years providing technical guidance and tools to improve the availability and quality of health indicators, their analysis, and reporting for both national and regional monitoring processes. To increase access, all materials will be made available through dedicated WHO web sites.

Table 1. Originally proposed sets of core and additional indicators for monitoring Health 2020 policy targets, their suggested sources and availability in Member States of the European Region.

Target	Quantification	Core indicators	Data source (No. of Member States for which the source holds data)	Additional indicators	Data source (No. of Member States for which the source holds data)
Overarching or headline target 1. Reduce premature mortality in Europe by 2020	1.1. A 1.5% relative annual reduction in overall (four causes combined) premature mortality from cardiovascular disease, cancer, diabetes, and chronic respiratory disease until 2020	(1) 1.1a. Standardized overall premature mortality rate (from 30 to under 70 years) for four major noncommunicable diseases (cardiovascular diseases, cancer, diabetes mellitus and chronic respiratory disease), disaggregated by sex	HFA-MDB (42)	(1) 1.1a. Standardized mortality rate from all causes, disaggregated by sex and cause of death	HFA-MDB (42)
		(2) 1.1b. Age-standardized prevalence of current tobacco smoking among persons aged 15+ years.	Source used by the Global Monitoring Framework for Noncommunicable Diseases (Global Health Observatory) (50)	(2) 1.1b. Prevalence of weekly tobacco smoking among school-aged children	HBSC Survey (38)

	(3) 1.1c. Total (recorded and unrecorded) per capita alcohol consumption among persons aged 15+ years within a calendar year (litres of pure alcohol)	Source used by the Global Monitoring Framework for Noncommunicable Diseases (Global Health Observatory) (50))	(3) 1.1.c. Heavy episodic drinking among adolescents	ESPAD (34)
	(4) 1.1d. Age-standardized prevalence of overweight and obesity in persons aged 18+ years (defined as a body mass index > 25 kg/m^2 for overweight and > 30 kg/m^2 for obesity)	Source used by the Global Monitoring Framework for Noncommunicable Diseases (Global Health Observatory) (46)	(4) 1.1d. Prevalence of overweight and obesity among school-aged children	HBSC Survey (38)
1.2. Achieved and sustained elimination of selected vaccine-preventable diseases (polio, measles, rubella) and prevention of congenital rubella syndrome	(5) 1.2a. Percentage of children vaccinated against measles, polio and rubella	HFA (51)		
1.3. Reduction of mortality from external causes	(6) 1.3a. Standardized mortality rates from all external causes and injuries, disaggregated by sex	HFA-MDB (42)	(5) 1.3a. Standardized mortality rates from motor vehicle traffic accidents	HFA-MDB (36)

				(6) 1.3b. Standardized mortality rates from accidental poisonings	HFA-MDB (42)
				(7) 1.3c. Standardized mortality rates from alcohol poisoning	HFA-MDB (35)
				(8) 1.3d. Standardized mortality rates from suicides	HFA-MDB (42)
				(9) 1.3e. Standardized mortality rates from accidental falls	HFA-MDB (42)
				(10) 1.3f. Standardized mortality rates from homicides and assaults	HFA-MDB (41)
Overarching or headline target 2. Increase life expectancy in Europe	2.1. Continued increase in life expectancy at current rate (= annual rate during 2006-2010) coupled with reducing differences in life expectancy in the European Region	(7) 2.1. Life expectancy at birth	HFA (42)	(11) 2.1a. Life expectancy at birth and at ages 1, 15, 45 and 65	HFA (41)
				(12) 2.1b. Healthy life years at age 65	Eurostat (31 (EU-27 plus Iceland, Norway, Switzerland and Croatia))

Overarching or headline target 3. Reduce inequities in Europe (social determinants target)	3.1. Reduction in the gaps in health status associated with social determinants within the European population	(8) 3.1a. Infant mortality per 1000 live births	HFA (42)
		(7) 3.1b. Life expectancy at birth, disaggregated by sex	HFA (42)
		(9) 3.1c. Proportion of children of official primary school age not enrolled	UNESCO (46)
		(10) 3.1d. Unemployment rate, disaggregated by age	ILOSTAT and Eurostat (ILO 38, SILC 30, total 43)
		(11) 3.1e. National and/or subnational policy addressing health inequities established and documented	Direct reporting by Member States through the Annual Report of the WHO Regional Director for Europe
		(12) 3.1f. GINI coefficient	World Bank & Eurostat (22 World Bank, 26 SILC, total 40)

Overarching or headline target 4. Enhance well-being of the European population	Will be set as a result of the baseline of the core well-being indicators with the aim of narrowing intraregional differences and levelling up	(13) 4.1a. Life satisfaction	To be established – WHO in discussion with existing survey providers	4.1a. Indicators of subjective well-being, either in different domains or by eudaimonia or by affect; to be developed	To be established
		4.1b. Indicators of objective well-being in different domains; to be developed and potentially already covered by other areas of Health 2020 targets	Must be from readily available sources	4.1b. Indicators of objective well-being in different domains; to be developed	From readily available sources
Overarching or headline target 5. Universal coverage and the "right to health"	5.1. Moving towards universal coverage (according to WHO definition)* by 2020	(14) 5.1a. Private household out-of-pocket expenditure as a proportion of total health expenditure	HFA (53)	(13) 5.1a. Maternal deaths per 100 000 live births	HFA (49)
	** Equitable access to effective and needed services without financial burden*	(5) 5.1b. Percentage of children vaccinated against measles, polio and rubella	HFA (51)	(14) 5.1b. Percentage of people treated for tuberculosis who completed treatment	WHO Global TB report (46)
		(15) 5.1c. Per capita expenditure on health (as a percentage of GDP)	HFA (53)	(15) 5.1c. Government expenditure on health as a percentage of GDP	HFA (53)

Overarching or headline target 6. National targets/ goals set by Member States	6.1. Establishment of processes for the purpose of setting national targets (if not already in place)	(16) 6.1a. Establishment of process for target-setting documented	Direct reporting by Member States through the Annual Report of the WHO Regional Director for Europe	
		(17) 6.1b. Evidence documenting: (a) establishment of national Health 2020 policy, (b) implementation plan, (c) accountability mechanism	Direct reporting by Member States through the Annual Report of the WHO Regional Director for Europe	

Fig. 1. Member States' replies to regional consultation on Health 2020 *core* indicators

CORE INDICATORS

Area	Target	Core Indicator			Country 1	Country 2	Country 3	Country 4	Country 5	Country 6	Country 7	Country 8	Country 9	Country 10	Country 11	Country 12	Country 13	Country 14	Country 15	Country 16	Country 17	Country 18	Country 19	Country 20	Country 21	Country 22	Country 23	Country 24	Country 25	Country 26
					6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Area 1. Burden of disease and risk factors	Overarching target 1. Reduce premature mortality in Europe by 2020	1	1.1.a	Standardized overall premature mortality rate (from 30 to under 70 years) for four major noncommunicable diseases (cardiovascular diseases, cancer, diabetes mellitus and chronic respiratory disease), disaggregated by sex	Approve	Approve	Approve	Approve			Approve	Approve	Reject	Approve		Approve	Approve	Approve	Approve	Approve	Approve	Approve	Approve	Approve	Approve		Approve	Approve	Approve	Approve
		2	1.1.b	Age-standardized prevalence of current tobacco smoking among persons aged 15+ years.	Approve	Approve	Approve	Approve			Approve	Approve	Approve	Approve	Approve	Approve	Approve	Approve	No Decision	Approve		Approve	Approve	Approve	Approve		Approve	Approve	Approve	Reject
		3	1.1.c	Total (recorded and unrecorded) per capita alcohol consumption among persons aged 15+ years within a calendar year (litres of pure alcohol)	Approve	Approve	Approve	Approve			Approve	Approve	Approve	Approve	Approve	Approve	Approve	Approve	Approve	Approve		Approve	Approve	Approve	Approve		Approve	Approve	Approve	Reject
		4	1.1.d	Age-standardized prevalence of overweight and obesity in persons aged 18+ years (defined as a body mass index > 25 kg/m? for overweight and > 30 kg/m? for obesity)	Approve	Approve	Approve	Approve			Approve	Approve	Approve	Approve	Approve	Approve	Approve	Approve	Approve	Approve		Approve	Approve	Approve	Approve		Approve	Approve	Approve	Approve
		5	1.2.a	Percentage of children vaccinated against measles, polio and rubella	Approve	Approve	Approve	Approve			Approve	Approve	Approve	Approve	Approve	Approve	Approve	Approve	No Decision	Approve	Approve	Approve	Approve	Approve	Approve		Approve	Approve	Approve	Approve
		6	1.3.a	Standardized mortality rates from all external causes and injuries, disaggregated by sex	Approve	Approve	Approve	Approve			Approve	Approve	Approve	Approve		Approve	Approve	Approve		Approve	Approve	Approve	Approve	Approve	Approve		Approve	Approve	Approve	Approve
Area 2. Healthy people, well-being and determinants	Overarching target 2. Increase life expectancy in Europe	7	2.1.	Life expectancy at birth	Approve	Approve	Approve	Approve			Approve	Approve	Approve	Approve	Approve	Approve	Approve	Approve	Approve	Approve	Approve	Approve	Approve		Approve		Approve		Approve	
	Overarching target 3. Reduce inequities in Europe (social determinants target)	8	3.1.a	Infant mortality per 1000 live births	Approve	Approve	Approve	Approve			Approve	To be completed	Approve	Approve	Approve	Approve	Approve	Approve	Approve	Approve	Approve	Approve	Approve	Approve	Approve		Approve	Approve	Approve	Approve
		9	3.1.b	Life expectancy at birth, disaggregated by sex	Approve	Approve	Approve	Approve			Approve	To be completed	Approve	Approve	Approve	Approve	Approve	Approve	Approve	Approve	Approve	Approve	Approve	Approve	Approve		Approve	Approve	Approve	Approve
		10	3.1.c	Proportion of children of official primary school age not enrolled	Approve	Approve	Approve	Approve			Approve	Approve	Approve	Approve	Approve	Approve	No Decision	Approve	Approve	Approve		Approve	Approve	Approve	Approve		Approve	Approve	Approve	Approve
		11	3.1.d	Unemployment rate, disaggregated by age	Approve	No decision	Approve	Approve			Approve	Approve	Approve	Approve	Approve	Approve	Approve	Approve	Approve	Approve	Approve	Approve	Approve	Approve	Approve		Approve	Approve	Approve	Approve
		12	3.1.e	National and/or subnational policy addressing health inequities established and documented	Approve	Approve	Approve	Approve			Approve	To be completed	Approve	No decision	Approve	Approve	Approve	Approve	No Decision	Approve			Approve	No Decision	Reject		Approve	Approve	Approve	Approve
		13	3.1.f	GINI coefficient	Approve	No decision	No decision	Approve			Approve		Approve	Approve	Approve	Approve	Approve	Approve	Approve	No Decision		Approve	Approve	Approve	Approve		Approve	Approve	Approve	Reject
	Overarching target 4. Enhance well-being of the European population	14	4.1.a	Life satisfaction	Approve	Approve	Approve	No decision			Approve	Approve		No decision	Approve	Approve	Approve	No Decision	Reject	Approve		Approve	No Decision	No Decision	No Decision		Approve	Approve	No Decision	Reject
		15	4.1.b	Indicators of objective well-being in different domains; to be developed and potentially already covered by other areas of Health 2020 targets	Approve	No decision	Approve				Approve	Approve		No decision	Approve	Approve	Approve	No Decision	Reject	Approve		Approve	No Decision	No Decision	No Decision		Approve	Approve	No Decision	Reject
Area 3. Processes, governance and health systems	Overarching target 5. Universal coverage and the "right to health"	16	5.1.a	Private household out-of-pocket expenditure as a proportion of total health expenditure	Approve	Approve	Approve	Approve			Approve	Approve	Approve	Approve	Approve	Approve	Approve	Approve	Approve	Approve	No Decision	Approve	Approve	Approve	Approve		Approve	Approve	Approve	Approve
		17	5.1.b	Percentage of children vaccinated against measles, polio and rubella	Approve	Approve	Approve	Approve			Approve	Approve	Approve	Approve	Approve	Approve	Approve	Approve	No Decision	Approve		Approve	Approve	Approve	Approve		Approve	Approve	Approve	Approve
		18	5.1.c	Per capita expenditure on health (as a percentage of GDP)	Approve	Approve	No decision	Approve			Approve	Approve	Approve	Approve	Approve	Approve	Approve	Approve	Approve	Approve	No Decision		Approve	Approve	Approve		Approve	Approve	Approve	Approve
	Overarching target 6. National targets/ goals set by Member States	19	6.1.a	Establishment of process for target-setting documented	Approve	Approve	Approve	Approve			No decision	Approve	Approve	No decision	Approve	Approve	Approve			Approve			Approve	No Decision	Reject		Approve	Approve	Approve	Approve
		20	6.1.b	Evidence documenting: (a) establishment of national policies aligned with Health 2020 policy, (b) implementation plan, (c) accountability mechanism	Approve	Approve	Approve	Approve			No decision	Approve	Approve	No decision	Approve	Approve	Approve		Reject	Approve			Approve	No Decision	Reject		Approve	Approve	Approve	Approve

Fig. 2. Member States' replies to regional consultation on Health 2020 *additional* indicators

ADDITIONAL INDICATORS

Area	Target			Additional Indicator	Country 1	Country 2	Country 3	Country 4	Country 5	Country 6	Country 7	Country 8	Country 9	Country 10	Country 11	Country 12	Country 13	Country 14	Country 15	Country 16	Country 17	Country 18	Country 19	Country 20	Country 21	Country 22	Country 23	Country 24	Country 25	Country 26
					6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Area 1. Burden of disease and risk factors	Overarching target 1. Reduce premature mortality in Europe by 2020	1	1.1.a	Standardized mortality rate from all causes, disaggregated by sex and cause of death	Approve	Approve	Approve	Approve			Approve	Approve		Approve	Approve	Approve	approve	Approve		Reject	Approve	Approve	Approve	Approve	Approve		Approve	Approve	Reject	Approve
		2	1.1.b	Prevalence of weekly tobacco smoking among school-aged children	Approve	Approve	Approve	Approve			Approve	Approve		No Decision	Approve	Approve	approve	Approve		Approve	Approve	Approve	Approve	Approve	Approve		Approve	Approve	Approve	Reject
		3	1.1.c	Heavy episodic drinking among adolescents	Approve	Approve	Approve	Approve			Approve	Approve		No Decision	Approve	No Decision	approve	Approve		Approve	Approve		Approve	Approve	Approve		Approve	Approve	Approve	Approve
		4	1.1.d	Prevalence of overweight and obesity among school-aged children	Approve	Approve	Approve	Approve			Approve	Approve		Approve	Approve	Approve	approve	Approve		Approve	Approve	Approve	Approve	Approve	Approve		Approve	Approve	Approve	Approve
		5	1.3.a	Standardized mortality rates from motor vehicle traffic accidents	Approve	Approve		Approve			Approve	Approve		Approve	Approve	Approve	Approve	Approve		Approve	Approve	Approve	Approve		Approve		Approve	Approve	Approve	Approve
		6	1.3.b	Standardized mortality rates from accidental poisonings	Approve	Approve	Approve	Approve			Approve	Approve		Approve	Approve	Reject	Approve	Approve		Approve	Approve	Approve	Approve		Approve		Approve	Approve	Approve	Reject
		7	1.3.c	Standardized mortality rates from alcohol poisoning	No Decision		Approve	Approve			Approve	Approve		Approve	Approve	Approve	Approve	Approve		No Decision	Approve	Approve	Approve		Approve		Approve	Approve	Approve	Approve
		8	1.3.d	Standardized mortality rates from suicides	Approve	Approve	Approve	Approve			Approve	Approve		Approve	Approve	Approve	Approve	Approve		Approve	Approve	Approve	Approve		Approve		Approve	Approve	Approve	Approve
		9	1.3.e	Standardized mortality rates from accidental falls	Approve	Approve	Approve	Approve			Approve	Approve		Approve	Approve	reject	Approve	Approve		Approve	Approve	Approve	Approve		Approve		Approve	Approve	Approve	Reject
		10	1.3.f	Standardized mortality rates from homicides and assaults	Approve	Approve	Approve	Approve			Approve	Approve		Approve	Approve	Approve	Approve	Approve		Approve	Approve	Approve	Approve		Approve		Approve	Approve	Approve	Approve
Area 2. Healthy people, well-being and determinants	Overarching target 2. Increase life expectancy in Europe	11	2.1.a	Life expectancy at birth and at ages 1, 15, 45 and 65	Approve	Approve	Approve	Approve			Approve	Approve		Approve	Approve	Approve	Approve	Approve		Approve	Approve	Approve	Approve		Approve		Approve	Approve	Approve	Approve
		12	2.1.b	Healthy life years at age 65	Approve	Approve	Approve	No Decision	Reject		Approve	Approve		Approve	Approve	Approve	Approve	Approve		Approve	Approve	Approve	No Decision		Approve		Approve	Approve	Approve	Reject
	Overarching target 4. Enhance well-being of the European population	13	4.1.a	Indicators of subjective well-being, either in different domains or by eudaimonia or by affect; to be developed		Approve	Approve				No Decision	Approve		Approve	Approve	Approve	No Decision	No Decision		Approve		No Decision	No Decision	No Decision	No Decision			Approve	Reject	
		14	4.1.b	Indicators of objective well-being in different domains; to be developed		No Decision	Approve				No Decision	Approve		Approve	Approve	Approve	No Decision	No Decision		Approve		No Decision	No Decision	No Decision	No Decision			Approve	Reject	
Area 3. Processes, governance and health systems	Overarching target 5. Universal coverage and the "right to health"	15	5.1.a	Maternal deaths per 100 000 live births	approve	Approve	Approve	Approve			Approve	Approve		Approve	Approve	No Decision	Approve	Approve		Approve		Approve	Reject	Approve	Approve		Approve	Approve	Approve	Approve
		16	5.1.b	Percentage of people treated for tuberculosis who completed treatment	no decision	Approve	Approve	Approve			Approve	Approve		Approve	Approve	Reject	Approve	Approve		Approve		Approve	Approve	Approve	Approve		Approve	Approve	Reject	Approve
		17	5.1.c	Government expenditure on health as a percentage of GDP	no decision	Approve	No Decision	Approve			Approve	Approve		Approve	Approve	Approve	Approve	Approve		Approve	Approve	Approve	Approve	Approve	Approve		Approve	Approve	Approve	Approve

Table 2. Consolidated results from Member States' replies to the consultation by specific target and set of indicators

Overarching Target	*Core* indicators					*Additional* indicators				
	Number of indicators	Total replies	Approval (%)	No decision (%)	Rejection (%)	Number of indicators	Total replies	Approval (%)	No decision (%)	Rejection (%)
1. Reduce premature mortality in Europe by 2020	6	156	151 (97)	2 (1)	3 (2)	10	260	255 (98)	5 (2)	0 (0)
2. Increase life expectancy in Europe	1	26	26 (100)	0 (0)	0 (0)	2	52	48 (92)	2 (4)	2 (4)
3. Reduce inequities in Europe	6	156	143 (92)	11 (7)	2 (1)	0				
4. Enhance well-being of the European population	2	52	34 (65)	14 (27)	4 (8)	2	52	35 (67)	15 (29)	3 (4)
5. Universal coverage and the "right" to health	3	78	74 (95)	4 (5)	0 (0)	3	78	71 (91)	4 (5)	3 (4)
6. National targets/goals set by Member States	2	52	44 (85)	6 (12)	2 (4)	0				
Total	20	520	473 (91)	36 (7)	11 (2)	17	442	409 (93)	26 (6)	7 (2)

Table 3. Proposed sets of core and additional indicators for monitoring Health 2020 policy targets, adjusted following Member States comments to the Regional consultation (**suggested changes in bold**).

Target	Quantification	Core indicators	Data source (No. of Member States for which the source holds data)	Additional indicators	Data source (No. of Member States for which the source holds data)
Overarching or headline target 1. Reduce premature mortality in Europe by 2020	1.1. A 1.5% relative annual reduction in overall (four causes combined) premature mortality from cardiovascular disease, cancer, diabetes, and chronic respiratory disease until 2020	(1) 1.1a. **Age-s**tandardized overall premature mortality rate (from 30 to under 70 years) for four major noncommunicable diseases (cardiovascular diseases **(ICD-10 codes I00-I99)**, cancer **(ICD-10 codes C00-C97)**, diabetes mellitus **(ICD-10 codes E10-E14), and** chronic respiratory disease **(ICD-10 codes J40-47)**) disaggregated by sex**. Diseases of the digestive system (ICD-10 codes K00-K93), suggested also but to be reported separately.**	HFA-MDB (42)	(1) 1.1a. Standardized mortality rate from all causes, disaggregated by **age,** sex and cause of death	HFA-MDB (42)

(2) 1.1b. Age-standardized prevalence of current **(includes both daily and non-daily or occasional)** tobacco **use** among persons aged **18**+ years.	Source used by the Global Monitoring Framework for Noncommunicable Diseases (Global Health Observatory) (50)	(2) 1.1b. Prevalence of weekly tobacco use among **adolescents**	HBSC Survey (38)
(3) 1.1c. Total (recorded and unrecorded) per capita alcohol consumption among persons aged 15+ years within a calendar year (litres of pure alcohol), **if possible, separately unrecorded and recorded consumption**	Source used by the Global Monitoring Framework for Noncommunicable Diseases (Global Health Observatory) (50))	(3) 1.1.c. Heavy episodic drinking **(60g of pure alcohol or around 6 standard alcoholic drinks on at least one occasion weekly)** among adolescents	ESPAD (34)
(4) 1.1d. Age-standardized prevalence of overweight and obesity in persons aged 18+ years (defined as a body mass index > 25 kg/m^2 for overweight and > 30 kg/m^2 for obesity), **where possible disaggregated by age and sex, separately for measured and self-reported**	Source used by the Global Monitoring Framework for Noncommunicable Diseases (Global Health Observatory) (46)	(4) 1.1d. Prevalence of overweight and obesity among **adolescents (defined as BMI-for-age value above +1 Z-score and +2 Z-scores relative to the 2007 WHO growth reference median, respectively)**	HBSC Survey (38)

1.2. Achieved and sustained elimination of selected vaccine-preventable diseases (polio, measles, rubella) and prevention of congenital rubella syndrome	(5) 1.2a. Percentage of children vaccinated against measles (**1 dose by second birthday**), polio **(3 doses by first birthday**)and rubella **(1 dose by second birthday)**	HFA (51)		
1.3. Reduction of mortality from external causes	(6) 1.3a. **Age-**standardized mortality rates from all external causes and injuries, disaggregated by sex **(ICD-10 codes V00-V99, W00-W99, X00-X99 and Y00-Y99)**	HFA-MDB (42)	(5) 1.3a. **Age-**standardized mortality rates from motor vehicle traffic accidents **(ICD-10 codes V02-V04, V09, V12-V14, V19-V79, V82-V87, V89)**	HFA-MDB (36)
			(6) 1.3b. **Age-**standardized mortality rates from accidental poisonings **(ICD-10 codes X40-X49)**	HFA-MDB (42)
			(7) 1.3c. **Age-**standardized mortality rates from alcohol poisoning **(ICD-10 code X45)**	HFA-MDB (35)
			(8) 1.3d. **Age-**standardized mortality rates from suicides **(ICD-10 codes X60-X84)**	HFA-MDB (42)

				(9) 1.3e. **Age-**standardized mortality rates from accidental falls **(ICD-10 codes W00-W19)**	HFA-MDB (42)
				(10) 1.3f. **Age-**standardized mortality rates from homicides and assaults **(ICD-10 codes X85-Y09)**	HFA-MDB (41)
Overarching or headline target 2. Increase life expectancy in Europe	2.1. Continued increase in life expectancy at current rate (= annual rate during 2006-2010) coupled with reducing differences in life expectancy in the European Region	(7) 2.1. Life expectancy at birth**, disaggregated by sex**	HFA (42)	(11) 2.1a. Life expectancy at ages 1, 15, 45 and 65 **years, disaggregated by sex**	HFA (41)
				(12) 2.1b. Healthy life years at age 65**, disaggregated by sex**	Eurostat (31 (EU-27 plus Iceland, Norway, Switzerland and Croatia))

Overarching or headline target 3. Reduce inequities in Europe (social determinants target)	3.1. Reduction in the gaps in health status associated with social determinants within the European population	(8) 3.1a. Infant mortality per 1000 live births**, disaggregated by sex**	HFA (42)
		(7) 3.1b. Life expectancy at birth, disaggregated by sex	HFA (42)
		(9) 3.1c. Proportion of children of official primary school age not enrolled**, disaggregated by sex**	UNESCO (46)
		(10) 3.1d. Unemployment rate, disaggregated by age**, and by sex**	ILOSTAT and Eurostat (ILO 38, SILC 30, total 43)
		(11) 3.1e. National and/or subnational policy addressing **the reduction** of health inequities established and documented	Direct reporting by Member States through the Annual Report of the WHO Regional Director for Europe
		(12) 3.1f. GINI coefficient **(income distribution)**	World Bank & Eurostat (22 World bank, 26 SILC, total 40)

Overarching or headline target 4. Enhance well-being of the European population	Will be set as a result of the baseline of the core well-being indicators with the aim of narrowing intraregional differences and levelling up	(13) 4.1a. Life satisfaction**, disaggregated by age and sex**	To be established – WHO in discussion with existing survey providers	4.1a. Indicators of subjective well-being, either in different domains or by eudaimonia or by affect; to be developed	To be established
		4.1b. Indicators of objective well-being in different domains; to be developed and potentially already covered by other areas of Health 2020 targets	Must be from readily available sources	4.1b. Indicators of objective well-being in different domains; to be developed	From readily available sources
Overarching or headline target 5. Universal coverage and the "right to health"	5.1. Moving towards universal coverage (according to WHO definition)* by 2020 ** Equitable access to effective and needed services without financial burden*	(14) 5.1a. Private household**'s** out-of-pocket expenditure as a proportion of total health expenditure	HFA (53)	(13) 5.1a. Maternal deaths per 100 000 live births **(ICD-10 codes O00-O99)**	HFA (49)
		(5) 5.1b. Percentage of children vaccinated against measles (**1 dose by second birthday**), polio **(3 doses by first birthday**)and rubella **(1 dose by second birthday)**	HFA (51)	(14) 5.1b. Percentage of people treated **successfully among laboratory confirmed pulmonary** tuberculosis who completed treatment	WHO Global TB report (46)

		(15) 5.1c. **Total** expenditure on health as a percentage of GDP	HFA (53)	(15) 5.1c. Government **(public)** expenditure on health as a percentage of GDP	HFA (53)
Overarching or headline target 6. National targets/ goals set by Member States	6.1. Establishment of processes for the purpose or setting national targets (if not already in place)	(16) 6.1a. Establishment of process for target-setting documented **(mode of documenting to be decided by individual Member States)**	Direct reporting by Member States through the Annual Report of the WHO Regional Director for Europe		
		(17) 6.1b. Evidence documenting: (a) establishment of national **policies aligned with Health 2020 policy,** (b) implementation plan, (c) accountability mechanism **(mode of 'documentation' decided by individual Member States)**	Direct reporting by Member States through the Annual Report of the WHO Regional Director for Europe		

Annex 1. Example of technical note: Life expectancy at birth

Data Element	Example Life expectancy at birth (years)
Indicator number/name	(7) 2.1. Life expectancy at birth, disaggregated by sex
Name abbreviated	Life expectancy at birth
Data Type Representation	Statistic
Topic	Increasing life expectancy in Europe
Rationale	Life expectancy at birth reflects the overall mortality level of a population. It summarizes the mortality pattern that prevails across all age groups – children and adolescents, adults and the elderly.
Definition	The average number of years that a newborn could expect to live, if he or she were to pass through life exposed to the sex- and age-specific death rates prevailing at the time of his or her birth, for a specific year, in a given country, territory, or geographic area.
Associated terms	Life table
Preferred data sources	Civil registration with complete coverage
Other possible data sources	Household surveys Population censuses
Method of measurement	Life expectancy at birth is derived from life tables and is based on sex- and age-specific death rates. Life expectancy at birth values from the United Nations correspond to mid-year estimates, consistent with the corresponding United Nations medium-fertility variant quinquennial population projections.
Method of estimation	Procedures used to estimate WHO life tables for Member States vary depending on the data available to assess child and adult mortality. WHO has developed a model life table using a modified logit system based on about 1800 life tables from vital registration data that are judged to be of good quality to project life tables and to estimate life tables using a limited number of parameters as inputs. 1) When mortality data from civil registration are available, their quality is assessed; they are adjusted for level of completeness of registration if necessary and they are directly used to construct the life tables. 2) When mortality data from civil registration for the latest year are not available, the life tables are projected from available years from 1985 onwards. 3) When no useable data from civil registration are available, the latest life table analyses of the United Nations Population Division were used. Predominant type of statistics: Predicted
M&E Framework	Impact
Method of estimation of global and regional aggregates	The numbers of deaths estimated from life tables and the population by age groups are aggregated by relevant region in order to produce regional life tables

Disaggregation	Sex
Unit of Measure	Years
Unit Multiplier	Not applicable
Expected frequency of data dissemination	Annual
Expected frequency of data collection	Annual
Limitations	Depends on data availability and quality

Annex 2. Examples of draft technical notes for core and additional sets of indicators for the Health 2020 targets

Core indicators

Data Element	Age-standardized mortality rate (per 100 000 population)
Indicator name	(1) 1.1a. Age-standardized overall premature mortality rate (from 30 to under 70 years) for four major noncommunicable diseases (cardiovascular diseases (ICD-10 codes I00-I99), cancer (ICD-10 codes C00-C97), diabetes mellitus (ICD-10 codes E10-E14) and chronic respiratory disease (ICD-10 codes J40-47)) disaggregated by sex. Diseases of the digestive system (ICD-10 codes K00-K93) suggested also but to be reported separately.
Name abbreviated	Age-standardized mortality rate (per 100 000 population)
Data Type Representation	Rate
Topic	Health Status
Rationale	The numbers of death per 100 000 population is influenced by the age distribution of the population. Two populations with the same age-specific mortality rates for a particular cause of death will have different overall death rates if the age distributions of their populations are different. Age-standardized mortality rates adjust for differences in the age distribution of the population by applying the observed age-specific mortality rates for each population to a standard population.
Definition	The age-standardized mortality rate (SDR) is a weighted average of the age-specific mortality rates per 100 000 persons, where the weights are the proportions of persons in the corresponding age groups of the WHO standard population. SDR is the age-standardized death rate calculated using the direct method, i.e. it represents what the crude rate would have been if the population had the same age distribution as the standard European population. Circulatory disease: ICD-10 codes: I00-I99. Cancer: ICD-10 codes: C00-C97. Diabetes: ICD-10 codes: E10-E14. Chronic respiratory diseases: ICD-10 code: J40-J47 Digestive disease: ICD-10 codes: K00-K93
Associated terms	WHO Standard Population
Preferred data sources	Civil registration with complete coverage and medical certification of cause of death
Other possible data sources	Civil registration with complete coverage Household surveys Population censuses Sample or sentinel registration systems Special studies Surveillance systems
Method of measurement	Data on deaths by cause, age and sex collected using national death registration systems or sample registration systems

Method of estimation	Life tables specifying all-cause mortality rates by age and sex for WHO Member States are developed from available death registration data, sample registration systems (India, China) and data on child and adult mortality from censuses and surveys. Cause-of-death distributions are estimated from death registration data, and data from population-based epidemiological studies, disease registers and notifications systems for selected specific causes of death. Causes of death for populations without useable death-registration data are estimated using cause-of-death models together with data from population-based epidemiological studies, disease registers and notifications systems for 21 specific causes of death.
M&E Framework	Impact
Method of estimation of global and regional aggregates	Aggregation of estimates of deaths by cause, age and sex for WHO Member States to estimate regional and global age-sex-cause specific mortality rates.
Disaggregation	Age Cause Sex
Unit of Measure	Deaths per 100 000 population
Unit Multiplier	
Expected frequency of data dissemination	Every 2–3 years
Expected frequency of data collection	Continuous
Limitations	Depends on data availability and quality

Data Element	Prevalence of current tobacco use among adults aged ≥ 18 years (%)
Indicator name	(2) 1.1b. Age-standardized prevalence of current (includes both daily and non-daily or occasional) tobacco use among persons aged 18+ years.
Name abbreviated	
Data Type Representation	Percentage
Topic	Risk factors
Rationale	The prevalence of current tobacco use among adults is an important measure of the health and economic burden of tobacco, and provides a baseline for evaluating the effectiveness of tobacco control programmes over time. Adjusted and age-standardized prevalence rates are constructed solely for the purpose of comparing tobacco use prevalence estimates across multiple countries or across multiple time periods for the same country. These rates should not be used to estimate the number of smokers in the population.
Definition	Current prevalence estimates for smoking of any tobacco product, are derived from the results of the latest adult tobacco use survey (or a survey which asks tobacco use questions), which have been adjusted using the WHO regression method for standardization described in the Method of Estimation section below.

	"Tobacco use" includes cigarettes, cigars, pipes or any other tobacco products. "Current smoking" includes both daily and non-daily or occasional use. This indicator is measured using the standard questionnaire during a health interview of a representative sample of the population aged 18 years and above. Many countries are carrying out such health interview surveys on a more or less regular basis. However, most of the data are collected from multiple sources by the Tobacco or Health units at WHO/Europe.
Associated terms	
Preferred data sources	Household surveys The Global Adult Tobacco Survey (GATS) and the Tobacco Questions for Surveys (TQS) are joint initiatives by WHO and the Centers for Disease Control and Prevention that aim to harmonize tobacco survey tools and provide global and regional comparisons.
Other possible data sources	Specific population surveys Surveillance systems
Method of measurement	
Method of estimation	In addition, as part of the regular collection of data for the WHO Report on the Global Tobacco Epidemic, WHO/Europe requests updates on surveys and prevalence estimates from the national focal points. For those countries that have not participated in the GATS or the TQS, data are adjusted using a regression model to allow for a degree of comparability across countries. All data received and calculated for adjustment/standardization are requested to be validated and signed-off by the appropriate individual representing the Ministry of Health. WHO has developed a regression method that attempts to enable comparisons between countries. If data are partly missing or are incomplete for a country, the regression technique uses data available for the region in which the country is located to generate estimates for that country. The regression models are run at the United Nations subregional level 3 separately for males and females in order to obtain age-specific prevalence rates for a specific region. These estimates are then substituted for the country falling within the subregion for the missing indicator. Note that the technique cannot be used for countries without any data: these countries are excluded from any analysis. Information from heterogeneous sources that originate from different surveys that do not employ standardized survey instruments make it difficult to produce national-level age-standardized rates. The four main types of differences between surveys and the relevant adjustment procedures used are listed below. Differences in age groups covered by the survey: In order to estimate tobacco use prevalence rates for standard age ranges (by five-year groups from age 15 until age 80 and thereafter from 80 to 100 years), the association between age and daily tobacco use is examined for males and females separately for each country using scatter plots. For this exercise, data from the latest nationally representative survey are chosen; in some cases more than one survey is chosen if male and female prevalence rates stem from different surveys or if the additional survey supplements data for the extreme age intervals. To obtain age-specific prevalence rates for five-year age intervals, regression models using tobacco use prevalence estimates from a first order, second order and third order function of age are graphed against the scatter plot and the best fitting curve is chosen. For the remaining indicators, a combination of methods is applied: regression models are run at the subregional level to obtain age-specific rates for current and daily cigarette smoking, and an equivalence relationship is applied between

	smoking prevalence rates and cigarette smoking where cigarette smoking is dominant to obtain age-specific prevalence rates for current and daily cigarette smoking for the standard age intervals. Differences in geographic coverage of the survey within the country: Adjustments are made to the data by observing the prevalence relationship between urban and rural areas in countries falling within the relevant subregion. Results from this urban-rural regression exercise are applied to countries to allow a scaling-up of prevalence to the national level. As an example, if a country has prevalence rates for daily tobacco in urban areas only, the regression results from the rural-urban tobacco use relationship are used to obtain rural prevalence rates for daily smoking. These are then combined with urban prevalence rates using urban-rural population ratios as weights to generate a national prevalence estimate as well as national age-specific rates. Differences in survey year: For the WHO Report on the Global Tobacco Epidemic, 2009, smoking prevalence estimates were generated for 2006. Smoking prevalence data was sourced from surveys conducted in countries in different years. In some cases, the latest available prevalence data came from surveys before 2006 while in other cases the survey took place after 2006. To obtain smoking prevalence estimates for 2006, trend information was used either to project into the future for countries with data from before 2006 or to backtrack for countries with data later than 2006. This is achieved by incorporating trend information from all available surveys for each country. For countries without historical data, trend information from the respective subregion in which they fall is used. Age-standardized prevalence: Tobacco use generally varies widely between both sexes and across age groups. Although the crude prevalence rate is reasonably easy to understand for a country at one point in time, comparing crude rates between two or more countries at one point in time, or of one country at different points in time, can be misleading if the two populations being compared have significantly different age distributions or differences in tobacco use by sex. The method of age-standardization is commonly used to overcome this problem and allows for meaningful comparison of prevalence between countries. The method involves applying the age-specific rates by sex in each population to one standard population. The WHO Standard Population, a fictitious population whose age distribution was artificially created and is largely reflective of the population age structure of low- and middle-income countries, is used. The resulting age-standardized rate, also expressed as a percentage of the total population, refers to the number of smokers per 100 persons in the WHO Standard Population. As a result, the rate generated using this process is only a hypothetical number with no inherent meaning in its magnitude. It is only useful when contrasting rates obtained from one country to those obtained in another country, or from the same country at a different point in time. In order to produce an overall smoking prevalence rate for a country, the age-standardized prevalence rates for males and females must be combined to generate total prevalence. Since the WHO Standard Population is the same irrespective of sex, the age-standardized rates for males and females are combined using population weights for males and for females at the global level from the United Nations population data for the relevant year. For example, if the age-standardized prevalence rate for tobacco smoking in adults is 60% for males and 30% for females, the combined prevalence rate for tobacco smoking in all adults is calculated as 60 x (0.51) + 30 x (0.49) = 45%, with the figures in brackets representing male and female population weights. Thus, of the total smoking prevalence (45%) the proportion of smoking attributable to males is 66.7% [= (30 ÷ 45) x 100] and to females, 33.3% [= (15 ÷ 45) x 100]. Predominant type of statistics: adjusted

M&E Framework	Outcome
Method of estimation of global and regional aggregates	Regional and global aggregates are based on population-weighted averages weighted by the total number of population aged ≥18 years. They are only presented if available data cover at least 50% of the total population aged ≥18 years in the regional or global groupings.
Disaggregation	Sex
Unit of Measure	N/A
Unit Multiplier	
Expected frequency of data dissemination	Continuous
Expected frequency of data collection	
Limitations	

Data Element	Recorded adult (15+ years) per capita consumption of pure alcohol
Indicator name	(3) 1.1c. Total (recorded and unrecorded) per capita alcohol consumption among persons aged 15+ years within a calendar year (litres of pure alcohol); if possible separately unrecorded and recorded consumption
Name abbreviated	Recorded APC
Data Type Representation	Rate
Topic	Risk factors
Rationale	The recorded APC is part of a core set of indicators, whose purpose is to monitor the magnitude, pattern and trends of alcohol consumption in the adult population. It is an agreed indicator in the Comprehensive Global Monitoring Framework for the Prevention and Control of Noncommunicable Diseases.
Definition	Total (sum of recorded and unrecorded) amount of alcohol consumed per adult (aged 15+ years) over a calendar year, in litres of pure alcohol. Recorded alcohol consumption refers to official statistics (production, import, export, and sales or taxation data), while the unrecorded alcohol consumption refers to alcohol which is not taxed and is outside the usual system of governmental control. In circumstances in which the number of tourists per year is at least the number of inhabitants, the tourist consumption is also taken into account and is deducted from the country's recorded adult per capita consumption. Numerator: The amount of recorded alcohol consumed per adult (15+ years) during a calendar year, in litres of pure alcohol. Denominator: Midyear resident population (15+ years) for the same calendar year, the United Nations World Population Prospects, medium variant.
Associated terms	Pure alcohol: 100% ethanol
Preferred data sources	Administrative reporting system
Other possible data sources	None
Method of measurement	Recorded adult per capita consumption of pure alcohol is calculated as the sum of beverage-specific alcohol consumption of pure alcohol (beer, wine, spirits, other) from

	different sources. First priority in the decision tree is given to government statistics; second, to country-specific alcohol industry statistics in the public domain (Canadean, IWSR-International Wine and Spirit Research, OIV-International Organisation of Vine and Wine, The Wine Institute and World Drink Trends); and third to the statistical database Food and Agriculture Organization of the United Nations (FAOSTAT). For countries where the data source is FAOSTAT, unrecorded consumption may be included in the recorded consumption figures. Since the introduction of the "Other" beverage-specific category, "Beer" includes malt beers, "Wine" includes wine made from grapes, "Spirits" include all distilled beverages, and "Other" includes one or several other alcoholic beverages, such as fermented beverages made from sorghum, maize, millet, rice, or cider, fruit wine, fortified wine, etc. Also, there was a change in the data source for some countries in the early 2000s. Updates for this indicator are made on an ongoing basis as data become available.
Method of estimation	In order to make the conversion into litres of pure alcohol, the alcohol content (% alcohol by volume) is considered to be as follows: Beer (barley beer, 5%), Wine (grape wine, 12%; grape must, 9%; vermouth, 16%), Spirits (distilled spirits, 40%; spirit-like, 30%), and Other (sorghum, millet, maize beers, 5%; cider, 5%; fortified wine, 17% and 18%; fermented wheat and fermented rice, 9%; other fermented beverages, 9%). Since different data sources may use different conversion factors to estimate alcohol content, the beverage-specific recorded APC may not equal the total provided, in some cases.
M&E Framework	Comprehensive Global Monitoring Framework for the Prevention and Control of Noncommunicable Diseases
Method of estimation of global and regional aggregates	Adult per capita consumption data exist for almost all countries. Regional and global estimates are calculated as a population-weighted average of country data.
Disaggregation	Alcoholic beverage type By type of alcoholic beverage (beer, wine, spirits and other alcoholic beverages)
Unit of Measure	Litres of pure alcohol per person per year Litres of pure alcohol per adult (15+ years) per year
Unit Multiplier	None
Expected frequency of data dissemination	Annual
Expected frequency of data collection	Annual
Limitations	Factors, such as stockpiling, waste and spillage, as well as cross-border shopping (recorded in different jurisdiction), tax-free alcohol, surrogate alcohol and variations in beverage strength, cannot be accounted for. This may influence the accuracy of recorded consumption as an indicator for alcohol consumed. Also, administrative data do not permit the disaggregation of recorded adult consumption per capita by gender – to this end, other data sources such as survey data are needed.

Data Element	Prevalence of overweight and obesity in persons aged 18+ years, Body Mass Index (BMI) of ≥ 25 and ≥ 30 kg/m^2, respectively
Indicator name	(4) 1.1d. Age-standardized prevalence of overweight and obesity in persons aged 18+ years (defined as a body mass index > 25 kg/m^2 for overweight and > 30 kg/m^2 for obesity), where possible disaggregated by age and sex, separately for measured and self-reported data
Name abbreviated	OverW & Obesity
Data Type Representation	Statistic
Topic	Risk factors
Rationale	Excess body weight predisposes to various NCDs, particularly cardiovascular diseases, diabetes and some cancers. Obesity is a growing public health problem across the WHO European Region where in most Member States more than 50% of the adult population is overweight (including obesity). Effective interventions exist to prevent and tackle overweight and obesity. Many of the risks diminish with weight loss.
Definition	Percentage of defined population aged 18 years and over with overweight or obesity (defined as a body mass index ≥ 25 kg/m^2 for overweight and ≥ 30 kg/m^2 for obesity).
Associated terms	Excess body weight
Preferred data sources	Population surveys and existing surveillance mechanisms; nationally representative surveys with measured weight and height data
Other possible data sources	Population surveys and existing surveillance mechanisms; nationally representative surveys with self-reported weight and height data
Method of measurement	Based on measured or self-reported height and weight.
Method of estimation	The prevalence of overweight is defined as the proportion of the adult population aged 18 years and over with a BMI value equal to and above 25.0 kg/m^2. It is estimated as follows: Number of subjects that have a BMI value equal to and above 25.0 kg/m^2/Total number of subjects that were measured) * 100. The prevalence of obesity is defined as the proportion of the adult population aged 18 with a BMI value equal to and above 30.0 kg/m^2. It is estimated as follows: Number of subjects that have a BMI value equal to and above 30.0 kg/m^2/Total number of subjects that were measured) * 100.
M&E Framework	Outcome
Method of estimation of global and regional aggregates	
Disaggregation	Sex
Unit of Measure	
Unit Multiplier	
Expected frequency of data dissemination	Continuous through the WHO European Database on Nutrition, Obesity and Physical Activity – once a new survey has been released, data will be processed into it.

Expected frequency of data collection	This varies by country.
Limitations	Using nationally representative prevalence estimates limits comparability across countries, due to different data collection methods (measured versus self-reported weight and height), sampling design, age range of the survey population and survey year.

Data Element	Percentage of children vaccinated against measles Percentage of infants vaccinated against poliomyelitis (polio) Percentage of infants vaccinated against rubella
Indicator name	(5) 1.2a. Percentage of children vaccinated against measles (1 dose by second birthday), polio (3 doses by first birthday) and rubella (1 dose by second birthday)
Name abbreviated	
Data Type Representation	Statistic
Topic	Achievement and sustainability of elimination of selected vaccine-preventable diseases; Health service coverage
Rationale	
Definition	Percentage of children vaccinated against measles – Proportion of children reaching their second birthday who have been fully vaccinated against measles (1 dose). Data are reported annually to, and available from, the Communicable Diseases unit at WHO/Europe. Percentage of infants vaccinated against poliomyelitis – Proportion of infants reaching their first birthday in the given calendar year who were fully vaccinated against poliomyelitis (3 doses). Data are reported annually to, and available from, the Communicable Diseases unit at WHO/Europe. Percentage of infants vaccinated against rubella – Proportion of children reaching their second birthday in the given calendar year who have been fully vaccinated against rubella. Data are reported annually to and available from the Communicable Diseases unit at WHO/Europe.
Associated terms	
Preferred data sources	
Other possible data sources	
Method of measurement	
Method of estimation	
M&E Framework	
Method of estimation of global and regional aggregates	
Disaggregation	By type of vaccine
Unit of Measure	

Unit Multiplier	
Expected frequency of data dissemination	Annual
Expected frequency of data collection	
Limitations	

Data Element	Age-standardized mortality rate from external cause injury and poison, all ages per 100 000 persons
Indicator name	(6) 1.3a. Age-standardized mortality rates from all external causes and injuries, disaggregated by sex (ICD-10 codes V00-V99, W00-W99, X00-X99 and Y00-Y99)
Name abbreviated	Age-standardized mortality rate (per 100 000 population)
Data Type Representation	Rate
Topic	Health Status
Rationale	The number of deaths per 100 000 population is influenced by the age distribution of the population. Two populations with the same age-specific mortality rates for a particular cause of death will have different overall death rates if the age distributions of their populations are different. Age-standardized mortality rates adjust for differences in the age distribution of the population by applying the observed age-specific mortality rates for each population to a standard population.
Definition	The age-standardized mortality rate is a weighted average of the age-specific mortality rates per 100 000 persons, where the weights are the proportion of persons in the corresponding age groups of the WHO standard population. The age-standardized death rate is calculated using the direct method, i.e. it represents what the crude rate would have been if the population had the same age distribution as the standard European population. ICD-10 code: V00-V99, W00-W99, X00-X99, Y00-Y99.
Associated terms	WHO Standard Population
Preferred data sources	Civil registration with complete coverage and medical certification of cause of death
Other possible data sources	Civil registration with complete coverage Household surveys Population censuses Sample or sentinel registration systems Special studies Surveillance systems
Method of measurement	Data on deaths by cause, age and sex collected using national death registration systems or sample registration systems
Method of estimation	Life tables specifying all-cause mortality rates by age and sex for WHO Member States are developed from available death registration data, sample registration systems (India, China) and data on child and adult mortality from censuses and surveys. Cause-of-death distributions are estimated from death registration data, and data from

	population-based epidemiological studies, disease registers and notifications systems for selected specific causes of death. Causes of death for populations without useable death-registration data were estimated using cause-of-death models together with data from population-based epidemiological studies, disease registers and notifications systems for 21 specific causes of death.
M&E Framework	Impact
Method of estimation of global and regional aggregates	Aggregation of estimates of deaths by cause, age and sex to enable WHO Member States to estimate regional and global age- sex- and cause-specific mortality rates.
Disaggregation	Age Cause Sex
Unit of Measure	Deaths per 100 000 population
Unit Multiplier	
Expected frequency of data dissemination	Every 2–3 years
Expected frequency of data collection	Continuous
Limitations	

Data Element	Life expectancy at birth (years)
Indicator number/name	(7) 2.1. Life expectancy at birth, disaggregated by sex
Name abbreviated	Life expectancy at birth
Data Type Representation	Statistic
Topic	Increasing life expectancy in Europe
Rationale	Life expectancy at birth reflects the overall mortality level of a population. It summarizes the mortality pattern that prevails across all age groups – children and adolescents, adults and the elderly.
Definition	The average number of years that a newborn could expect to live, if he or she were to pass through life exposed to the sex- and age-specific death rates prevailing at the time of his or her birth, for a specific year, in a given country, territory, or geographic area.
Associated terms	Life table
Preferred data sources	Civil registration with complete coverage
Other possible data sources	Household surveys Population censuses
Method of measurement	Life expectancy at birth is derived from life tables and is based on sex- and age-specific death rates. Life expectancy at birth values from the United Nations correspond to mid-year estimates, consistent with the corresponding United Nations medium-fertility variant

	quinquennial population projections.
Method of estimation	Procedures used to estimate WHO life tables for Member States vary depending on the data available to assess child and adult mortality. WHO has developed a model life table using a modified logit system based on about 1800 life tables from vital registration data that are judged to be of good quality to project life tables and to estimate life tables using a limited number of parameters as inputs. 1) When mortality data from civil registration are available, their quality is assessed; they are adjusted for level of completeness of registration if necessary and they are directly used to construct the life tables. 2) When mortality data from civil registration for the latest year are not available, the life tables are projected from available years from 1985 onwards. 3) When no useable data from civil registration are available, the latest life table analyses of the United Nations Population Division were used. Predominant type of statistics: Predicted
M&E Framework	Impact
Method of estimation of global and regional aggregates	The numbers of deaths estimated from life tables and the population by age groups are aggregated by relevant region in order to produce regional life tables
Disaggregation	Sex
Unit of Measure	Years
Unit Multiplier	Not applicable
Expected frequency of data dissemination	Annual
Expected frequency of data collection	Annual
Limitations	Depends on data availability and quality

Data Element	Infant mortality rate (probability of dying between birth and age 1 per 1000 live births)
Indicator name	(8) 3.1a. Infant mortality per 1000 live births, disaggregated by sex
Name abbreviated	Infant mortality rate (IMR)
Data Type Representation	Rate
Topic	Health status
Rationale	Infant mortality represents an important component of under-five mortality. Like under-five mortality, infant mortality rates measure child survival. They also reflect the social, economic and environmental conditions in which children (and others in society) live, including their health care. Since data on the incidence and prevalence of diseases (morbidity data) are frequently unavailable, mortality rates are often used to identify vulnerable populations. Infant mortality rate is an MDG indicator.
Definition	Infant mortality rate is the probability of a child born in a specific year or period dying before reaching the age of one, if subject to the age-specific mortality rates of that period.

	Infant mortality rate is strictly speaking not a rate (i.e. the number of deaths divided by the number of population at risk during a certain period of time) but a probability of death derived from a life table and expressed as rate per 1000 live births.
Associated terms	Live birth
Preferred data sources	Civil registration with complete coverage
Other possible data sources	
Method of measurement	Most frequently used methods using the above-mentioned data sources are as follows: • Civil registration: Number of deaths at age 0 and population for the same age are used to calculate the death rate which is then converted into age-specific probability of dying. • Censuses and surveys: An indirect method is used based on questions to each woman of reproductive age as to how many children she has ever born and how many are still alive. The Brass method and model life tables are then used to obtain an estimate of infant mortality. • Surveys: A direct method is used based on birth history – a series of detailed questions on each child a woman has given birth to during her lifetime. To reduce sampling errors, the estimates are generally presented as period rates, for five or 10 years preceding the survey.
Method of estimation	WHO produces IMR trends using a standardized methodology for groups of countries depending on the type and quality of source of data available. For countries with adequate trend data from civil registration, age patterns between infant mortality and under-five mortality from the most recent data are used as standard for the modified logit life table developed by WHO, in order to convert the projected under-five mortality rate from a weighted regression into a projected infant mortality rate. For countries with survey data, since infant mortality rates from birth histories in surveys have proved to recall biases, infant mortality is derived from the projection of under-five mortality rates converted into infant mortality rates using Coale-Demeney model life tables. The Inter-agency Group for Child Mortality of Estimation which includes representatives from UNICEF, WHO, the World Bank and the United Nations Population Division, is actively working to harmonize and carry out joint estimations. These infant mortality rates have been estimated by applying methods to the available data from Member States, in order to ensure comparability of data across countries and time; hence they are not necessarily the same as the official national data. Predominant type of statistics: adjusted and predicted.
M&E Framework	Impact
Method of estimation of global and regional aggregates	Global and regional estimates are derived from the number of estimated deaths and the population for age groups 0 year, aggregated by relevant region.
Disaggregation	0–27 days, 28 days – <1 year
Unit of Measure	Deaths per 1000 live births
Unit Multiplier	3
Expected frequency of data dissemination	Annual

Expected frequency of data collection	Annual
Limitations	Civil registration systems are the preferred source of data on infant mortality. However, many developing countries lack fully functioning registration systems that accurately record all births and deaths. Thus, household surveys, such as Demographic and Health Surveys (DHS) and Multiple Indicator Cluster Surveys (MICS) have become the primary source of data on child mortality in developing countries; but there are some limits to their quality. Estimates obtained from household surveys have attached confidence intervals that need to be considered when comparing values over time or across countries. Similarly, these estimates are often affected by non-sampling errors. Like census data, survey data on child mortality may omit births and deaths, include stillbirths along with live births, and suffer from survivor selection bias and age truncation. Direct estimates of child mortality based on survey data may also suffer from mothers misreporting their children's birth dates, current age or age at death — perhaps more so if the child has died. The heaping of deaths at age 12 months is especially common. Age heaping may transfer deaths across the one-year boundary and lead to underestimates of infant mortality rates. However, it has little effect on under-five mortality rates; making the that rate a more robust estimate than the infant mortality rate if the information is drawn from household surveys.

Data Element	Targets and indicators for health and well-being in the Health 2020 policy.
Indicator name	(13) 4.1a. Life satisfaction, disaggregated by age and sex (as measure of well-being)
Name abbreviated	Well-being
Data Type Representation	Percentage of population
Topic	Population well-being
Rationale	Although well-being is a component of the WHO definition of health, to date most health assessments have been based on mortality, morbidity or disability outcomes. Efforts have been done to conceptualize well-being beyond the domain of wealth to include other aspects of life.
Definition	Well-being exists in two dimensions: subjective and objective. It comprises an individual's experience of their life as well as a comparison of life circumstances with social norms and values.
Associated terms	
Preferred data sources	Based on surveys conducted by Member States
Other possible data sources	
Method of measurement	Surveys (described in United Nations Development Programme and Gallup methodologies)
Method of estimation	
M&E Framework	
Method of estimation of global and regional aggregates	

Disaggregation	By sex
Unit of Measure	Proportion of population in a given state
Unit Multiplier	
Expected frequency of data dissemination	Annual
Expected frequency of data collection	Annual
Limitations	

Data Element	Total health expenditure as percentage of gross domestic product
Indicator name	(15) 5.1c. Total expenditure on health as a percentage of GDP
Name abbreviated	THE as %GDP
Data Type Representation	Money
Topic	Health systems resources
Rationale	This is a core indicator of health financing systems. This indicator contributes to the understanding of the total expenditure on health relative to the beneficiary population, adjusted by Purchasing power parity (PPP) to facilitate international comparisons.
Definition	This represents the sum of general government and private expenditure on health. Estimates for this indicator are produced by WHO, jointly with the Organisation for Economic Co-operation and Development (OECD) and the World Bank. The estimates are, to the greatest extent possible, based on the National Health Accounts classification (see the World Health Report 2006 for details). The sources include both nationally reported data and estimates from international organizations such as the International Monetary Fund, the World Bank, the United Nations and OECD. Therefore they may somewhat differ from official national statistics reported by countries.
Associated terms	Total health expenditure (THE)
Preferred data sources	National Health Accounts
Other possible data sources	
Method of measurement	National Health Accounts (NHAs) indicators are based on expenditure information collected within an internationally recognized framework. NHAs synthesize the financing flows of a health system, recorded from the origin of the resources (sources), and the purchasing agents (financing schemes), which distribute their funds between providers, to pay for selected health goods and services to benefit individuals. Beneficiaries are analysed across geographical, demographic, socioeconomic and epidemiological dimensions. THE is measured as the sum of spending of all financing agents managing funds to purchase health goods and services. The NHA strategy is to track records of transactions, without double counting and in order

	to achieve comprehensive coverage. Monetary and non-monetary transactions are accounted for at purchasers' values. Guides to producing national health accounts exist. (Systems of Health Accounts manual version 2, OECD, 2000; WHO-World Bank-USAID, 2003).
Method of estimation	These data are generated from sources that WHO has been collecting for over ten years. The most comprehensive and consistent data on health financing are generated from national health accounts. Not all countries have or update national health accounts and in these instances, data are obtained from technical contacts in-country or from publicly-available documents and reports and harmonized to the NHA framework. Missing values are estimated using various accounting techniques depending on the data available for each country. Preferred data sources: THE: WHO NHA database. Population figures are taken from the United Nations Population Division, OECD Health Data and the EUROSTAT database. WHO sends estimates to the respective Ministries of Health every year for validation.
M&E Framework	Input
Method of estimation of global and regional aggregates	Averages are weighted by population to obtain global and regional averages for income groups (World Bank classification) and for WHO regions
Disaggregation	
Unit of Measure	Per cent, based on Purchasing power parity international dollar
Unit Multiplier	
Expected frequency of data dissemination	Annual
Expected frequency of data collection	Annual
Limitations	Data on estimated health expenditure are collected by triangulating information from several sources to ensure that the outlays constitute the bulk of the government/private expenditure on health. Some figures may be underestimated when it is not possible to obtain data on expenditure by local government, corporations, nongovernmental organizations or insurance companies. A time lag affects the registration of voluntary or forced population migrations.

Data Element	Private households' out-of-pocket payment on health as percentage of total health expenditure
Indicator name	(14) 5.1a. Private household out-of-pocket expenditure as a proportion of total health expenditure
Name abbreviated	OOPs as % of THE
Data Type Representation	Percentage
Topic	Health systems resources

Rationale	This is a core indicator of health financing systems. It contributes to the understanding of the relative weight of direct payments by households in total health expenditures. High out-of-pocket payments are strongly associated with catastrophic and impoverishing spending. Thus it represents a key support for equity and planning processes.
Definition	Level of out-of-pocket expenditure expressed as a percentage of private expenditure on health Private households' out-of-pocket payment on health are the direct outlays of households, including gratuities and payments in-kind made to health practitioners and suppliers of pharmaceuticals, therapeutic appliances, and other goods and services, whose primary intent is to contribute to the restoration or to the enhancement of the health status of individuals or population groups. It also includes household payments to public services, non-profit institutions or nongovernmental organizations, non-reimbursable cost sharing, deductibles, co-payments and fee-for service. It excludes payments made by enterprises which deliver medical and paramedical benefits, mandated by law or not, to their employees and payments for overseas treatment.
Associated terms	Out-of-pocket expenditure Private expenditure on health
Preferred data sources	Administrative reporting system Household surveys National Health Accounts
Other possible data sources	Special studies
Method of measurement	National health accounts traces the financing flows from the households as the agents who decide on the use of the funds to health providers. Thus in this indicator only direct payments or out-of-pocket expenditure are included. NHA approach is to track records of transactions, without double counting in order to achieve comprehensive coverage. Thus, reimbursements from insurance companies should be deducted. Monetary and non-monetary transactions are accounted for at purchaser's value, meaning that in-kind payments should be valued at the purchasers' price. Guides to producing national health accounts exist. (Organisation for Economic Co-operation and Development, 2000; WHO, World Bank, USAID, 2003).
Method of estimation	In countries where the fiscal year begins in July, expenditure data have been allocated to the later calendar year (for example, 2008 data will cover the fiscal year 2007–2008), unless otherwise stated. These data are generated from sources that WHO has been collecting for over ten years. The most comprehensive and consistent data on health financing is generated from national health accounts. Not all countries have or update national health accounts and in these instances, data are obtained from technical contacts in-country or from publicly-available documents and reports and harmonized to the NHA framework. Missing values are estimated using various accounting techniques depending on the data available for each country. The principal international references used are the EUROSTAT database, International Monetary Fund (IMF) international financial statistics; OECD health data; and the United Nations national accounts statistics.

	National sources include National health accounts (NHA) reports, national accounts (NA) reports, comprehensive financing studies, private expenditure by purpose reports (COICOP), institutional reports of private entities involved in health care provision or financing, in particular actuarial and financial reports of private health insurance agencies. Additional sources involve: household surveys, business surveys, economic censuses. Other possible data sources include ad hoc surveys. WHO sends estimates to the respective Ministries of Health every year for validation.
M&E Framework	Impact
Method of estimation of global and regional aggregates	Averages are weighted by population to obtain global and regional averages for income groups (World Bank classification) and for WHO regions.
Disaggregation	
Unit of Measure	
Unit Multiplier	
Expected frequency of data dissemination	Annual
Expected frequency of data collection	Annual
Limitations	Data on estimated health expenditure are collected by triangulating information from several sources to ensure that the outlays constitute the bulk of the government/private expenditure on health. Some figures lack accuracy when they do not involve a full commodity flow. Household surveys tend to be biased due to sampling and non-sampling errors.

Additional indicators

Data Element	Prevalence of current tobacco use among adolescents (%)
Indicator name	(2) 1.1b. Prevalence of weekly tobacco use among adolescents
Name abbreviated	
Data Type Representation	Percentage
Topic	Risk factors
Rationale	The prevalence of current tobacco use among adolescents is an important measure of the health and economic burden of tobacco, and provides a baseline for evaluating the effectiveness of tobacco control programmes over time. While a more general measure of tobacco use (including both smoked and smokeless products) would be ideal, data limitations restrict the present indicator to smoked tobacco. Adjusted and age-standardized prevalence rates are constructed solely for the purpose of comparing tobacco use prevalence estimates across multiple countries or across multiple time periods for the same country. These rates should not be used to estimate the number of smokers in the population. The risk of chronic diseases starts early in childhood and such behaviour continues into adulthood. Tobacco is an addictive substance and use often starts in adolescence, before the development of risk perception. By the time the risk to health is recognized, addicted individuals find it difficult to stop tobacco use.
Definition	Current prevalence estimates for use of any tobacco product, are derived from the results of the latest adolescent tobacco use survey (or survey which asks tobacco use questions), which have been adjusted using the WHO regression method for standardization described in the Method of Estimation section below. “Tobacco use” includes cigarettes, cigars, pipes or any other tobacco products. “Current use” includes both daily and non-daily or occasional smoking. The prevalence of tobacco use (including smoking and the use of oral tobacco and snuff) among 13–15-year-olds on more than one occasion in the 30 days preceding the survey. This indicator is measured using the standard questionnaire during a health interview of a representative sample of the population aged 15 years and above. Many countries are carrying out such health interview surveys on a more or less regular basis. However, most of the data are collected from multiple sources by the Tobacco or Health unit at the WHO Regional Office for Europe. When only data on male of female use are available, the total is calculated as the average of the male and female value.
Associated terms	
Preferred data sources	Household surveys Specific population surveys
Other possible data sources	Specific population surveys Surveillance systems

Method of measurement	Prevalence of current tobacco use among adolescents aged 13–15 years can be obtained from the Global Youth Tobacco Survey (GYTS) and Global School Health Survey (GSHS), which are school-based surveys that include the following questions: 1. The number of days on which respondent smoked cigarettes or other tobacco products during the past 30 days 2. Whether or not, or the number of days on which, the respondent used any tobacco products other than cigarettes during the past 30 days
Method of estimation	WHO has developed a regression method that attempts to enable comparisons between countries. If data are partly missing or are incomplete for a country, the regression technique uses data available for the region in which the country is located to generate estimates for that country. The regression models are run at the United Nations subregional level 3 separately for males and females in order to obtain age-specific prevalence rates for that region. These estimates are then substituted for the country within the subregion for the missing indicator. Note that the technique cannot be used for countries without any data; these countries are excluded from any analysis. Information from heterogeneous sources that originate from different surveys and do not employ standardized survey instruments make it difficult to produce national-level age-standardized rates. The four types of differences between surveys and the relevant adjustment procedures used are listed below. Differences in age groups covered by the survey: In order to estimate smoking prevalence rates for standard age ranges (by five-year groups from age 15 until age 80 and thereafter from 80 to 100 years), the association between age and daily smoking is examined for males and females separately for each country using scatter plots. For this exercise, data from the latest nationally representative survey are chosen; in some cases more than one survey is chosen if male and female prevalence rates stem from different surveys or if the additional survey supplements data for the extreme age intervals. To obtain age-specific prevalence rates for five-year age intervals, regression models using daily smoking prevalence estimates from a first order, second order and third order function of age are graphed against the scatter plot and the best fitting curve is chosen. For the remaining indicators, a combination of methods is applied: regression models are run at the subregional level to obtain age-specific rates for current and daily cigarette smoking, and an equivalence relationship is applied between smoking prevalence rates and cigarette smoking where cigarette smoking is dominant to obtain age-specific prevalence rates for current and daily cigarette smoking for the standard age intervals. Differences in the types of indicators used to measure tobacco use: If we only have data on current tobacco smoking and current cigarette smoking, then definitional adjustments are made to account for the missing daily tobacco smoking and daily cigarette smoking data. Likewise, if we have data on current and daily tobacco smoking only, then tobacco type adjustments are made across tobacco types to generate estimates for current and daily cigarette smoking. Differences in geographic coverage of the survey within the country: Adjustments are made to the data by observing the prevalence relationship between urban and rural areas in countries falling within the relevant subregion. Results from this urban-rural regression exercise are applied to countries to enable a scaling-up of prevalence to the national level. As an example, if a country has prevalence rates for daily smoking of tobacco in urban areas only, the regression results from the rural-urban smoking relationship are used to obtain rural prevalence rates for daily smoking. These are then combined with urban prevalence rates using urban-rural population ratios as weights to generate a national prevalence estimate as well as national age-

	specific rates. Differences in survey year: For the WHO Report on the Global Tobacco Epidemic, 2009, smoking prevalence estimates were generated for 2006. Smoking prevalence data were sourced from surveys conducted in countries in different years. In some cases, the latest available prevalence data came from surveys from before 2006 while in other cases the survey took place after 2006. To obtain smoking prevalence estimates for 2006, trend information was used either to project into the future for countries with data from before 2006 or to backtrack for countries with data from after 2006. This is achieved by incorporating trend information from all available surveys for each country. For countries without historical data, trend information from the respective subregion in which they fall is used. Age-standardized prevalence: Tobacco use generally varies widely between both sexes and across age groups. Although the crude prevalence rate is reasonably easy to understand for a country at one point in time, comparing crude rates between two or more countries at one point in time, or of one country at different points in time, can be misleading if the two populations being compared have significantly different age distributions or differences in tobacco use by sex. The method of age-standardization is commonly used to overcome this problem and allows for meaningful comparison of prevalence between countries. The method involves applying the age-specific rates by sex in each population to one standard population. The WHO Standard Population, a fictitious population whose age distribution was artificially created and is largely reflective of the population age structure of low- and middle-income countries, was used. The resulting age-standardized rate, also expressed as a percentage of the total population, refers to the number of smokers per 100 persons in the WHO Standard Population. As a result, the rate generated using this process is only a hypothetical number with no inherent meaning in its magnitude. It is only useful when contrasting rates obtained from one country to those obtained in another country, or from the same country at a different point in time. In order to produce an overall smoking prevalence rate for a country, the age-standardized prevalence rates for males and females must be combined to generate total prevalence. Since the WHO Standard Population is the same irrespective of sex, the age-standardized rates for males and females are combined using population weights for males and for females at the global level from the United Nations population data for the relevant year. For example, if the age-standardized prevalence rate for tobacco smoking in adults is 60% for males and 30% for females, the combined prevalence rate for tobacco smoking in all adults is calculated as 60 x (0.51) + 30 x (0.49) = 45%, with the figures in brackets representing male and female population weights. Thus, of the total smoking prevalence (45%) the proportion of smoking attributable to males is 66.7% [= (30 ÷ 45) x 100] and to females, 33.3% [= (15 ÷ 45) x 100]. WHO compiles data from Global Youth Tobacco Survey (GYTS) and Global School Health Survey (GSHS) in the WHO Global InfoBase. Predominant type of statistics: adjusted
M&E Framework	Outcome
Method of estimation of global and regional aggregates	Regional and global aggregates are based on population-weighted averages weighted by the total number of population aged ≥15 years. They are presented only if available data cover at least 50% of the total population aged ≥15 years in the regional or global groupings.
Disaggregation	Sex

Unit of Measure	N/A
Unit Multiplier	
Expected frequency of data dissemination	Continuous
Expected frequency of data collection	
Limitations	Some of the surveys were conducted in small subnational populations and therefore may not accurately reflect the national picture.

Data Element	Heavy episodic drinking
Indicator name	(3)1.1.c. Heavy episodic drinking (60 g. of pure alcohol or around 6 standard alcoholic drinks on at least one occasion weekly) among adolescents
Name abbreviated	HED
Data Type Representation	Percentage
Topic	Risk factors
Rationale	Heavy episodic drinking is one of the key indicators that provide information regarding the patterns of alcohol consumption in a given country. More specifically, it identifies the proportion of the population that consumes high levels of alcohol on single occasions, and consequently highlights the population that has a higher risk of experiencing alcohol-related acute harm and also of developing chronic health complications.
Definition	Heavy episodic drinking is defined as the proportion of adolescents (15+ years) who have had at least 60 grams or more of pure alcohol on at least one occasion weekly. A consumption of 60 grams of pure alcohol corresponds approximately to 6 standard alcoholic drinks. Numerator: The (appropriately weighted) number of respondents (15+ years) who reported drinking 60 grams or more of pure alcohol on at least one occasion weekly. Denominator: The total number of participants (15+ years) responding to the corresponding question(s) in the survey plus abstainers.
Associated terms	
Preferred data sources	Population-based surveys Health behaviour of schoolchildren survey
Other possible data sources	
Method of measurement	A representative sample of the adolescent population (15+ years) of the country is asked to answer questions in a survey. The first priority in the decision tree is given to internationally comparative, nationally representative surveys (in this order of preference: the World Health Survey, STEPS, GENACIS, and the European Cancer Anaemia Survey (ECAS)); second is national surveys.
Method of estimation	Weighted percentages of survey respondents, where abstainers were coded as having 0 occasions.
M&E Framework	

Method of estimation of global and regional aggregates	Survey estimates weighted by population size of countries.
Disaggregation	Sex
Unit of Measure	
Unit Multiplier	
Expected frequency of data dissemination	Every 3–5 years
Expected frequency of data collection	Every 3–5 years
Limitations	Different data sources depending on surveys conducted in different countries which needs proxy measures for weekly occasions, such as at least one day in the past seven days with 60 grams.

Data Element	Prevalence of overweight and obesity among schoolchildren.
Indicator name	(4) 1.1d. Prevalence of overweight and obesity among school-aged children (defined as a BMI-for-age value above +1 Z-score and +2 Z-scores relative to the 2007 WHO growth reference median, respectively)
Name abbreviated	ChildOverW
Data Type Representation	Statistic
Topic	Risk factors
Rationale	Excess body weight predisposes to various diseases, particularly cardiovascular diseases, diabetes mellitus type 2, sleep apnoea and osteoarthritis. Obesity is a growing public health problem. Effective interventions exist to prevent and treat obesity. Many of the risks diminish with weight loss.
Definition	Percentage of defined population with overweight or obesity (defined as a body mass index-for-age value (BMI) above +1 Z-score relative to the 2007 WHO growth reference median for overweight and above +2 Z-scores relative to the 2007 WHO growth reference median for obesity).
Associated terms	Excess body weight.
Preferred data sources	WHO European Childhood Obesity Surveillance Initiative (COSI)
Other possible data sources	Health Behaviour of School-aged Children (HBSC) survey
Method of measurement	Based on measured height and weight (COSI) or self-reported height and weight (HBSC).
Method of estimation	The prevalence of overweight is defined as the proportion of the study population with a BMI-for-age value above +1 Z-score (standard deviation scores), relative to the 2007 WHO growth reference median. It is estimated as follows: Number of subjects that fall above plus one standard deviation from the median BMI-for-age value of the 2007 WHO growth reference population (5–19 years)/Total number of subjects that were measured * 100.

	The prevalence of obesity is defined as the proportion of the study population with a BMI-for-age value above +2 Z-scores (standard deviation scores), relative to the 2007 WHO growth reference median. It is estimated as follows: Number of subjects that fall above plus two standard deviation from the median BMI-for-age value of the 2007 WHO growth reference population (5–19 years)/Total number of subjects that were measured * 100.
M&E Framework	Outcome
Method of estimation of global and regional aggregates	N/A
Disaggregation	Sex
Unit of Measure	
Unit Multiplier	
Expected frequency of data dissemination	Continuous through the WHO European Database on Nutrition, Obesity and Physical Activity.
Expected frequency of data collection	Every 3 years (COSI) or 4 years (HBSC).
Limitations	Self-reported HBSC weight and height data underestimates the prevalence of overweight or obesity. Missing values for BMI vary from 3% to 84%.

Data Element	Maternal mortality ratio (per 100 000 live births)
Indicator name	(13) 5.1a. Maternal deaths per 100 000 live births (ICD-10 codes O00-O99)
Name abbreviated	Maternal mortality ratio
Data Type Representation	Ratio
Topic	Health status
Rationale	Complications during pregnancy and childbirth are a leading cause of death and disability among women of reproductive age in developing countries. The maternal mortality ratio represents the risk associated with each pregnancy, i.e. the obstetric risk. It is also a Millennium Development Goal Indicator for monitoring Goal 5, improving maternal health. The indicator monitors deaths related to pregnancy and childbirth. It reflects the capacity of the health systems to provide effective health care to prevent and address the complications occurring during pregnancy and childbirth.
Definition	The maternal mortality ratio (MMR) is the annual number of female deaths from any cause related to or aggravated by pregnancy or its management (excluding accidental or incidental causes) during pregnancy and childbirth or within 42 days of termination of pregnancy, irrespective of the duration and site of the pregnancy, per 100 000 live births, for a specified year. ICD-10 codes: O00-O99. A maternal death is the death of a woman while pregnant or within 42 days of termination of pregnancy, irrespective of the duration and site of the pregnancy, from any cause related to or aggravated by the pregnancy or its management, but not from accidental or incidental causes.

	There are two alternative sources of information on maternal mortality which are used to calculate this indicator: a) Routine mortality by cause statistics, regularly reported to WHO (in most cases from Central Statistical Offices); b) Hospital data reported to Ministries of Health. Normally, the numbers of maternal deaths from both sources should be identical, which is the case in most western countries. However, in some countries, particularly in eastern Europe, there are significant differences because of national practices of death certification and coding. In such cases, hospital data are more complete/ accurate. Following the publication of the European Health for All database in January 2001, the maternal mortality rate is calculated using both data (when both figures are reported), taking the larger figure if unequal. Experts argue that even in countries with good vital registration systems, maternal mortality is actually is approximately 50% higher. WHO, UNICEF and the United Nations Population Fund have developed such adjusted estimates for 1990 and 1995.
Associated terms	Late maternal death Live birth Maternal death
Preferred data sources	Civil registration with complete coverage and medical certification of cause of death
Other possible data sources	Household surveys Population censuses Sample or sentinel registration systems Special studies
Method of measurement	The maternal mortality ratio can be calculated by dividing the recorded (or estimated) maternal deaths by the total recorded (or estimated) live births in the same period and multiplying by 100 000. Measurement requires information on pregnancy status, timing of death (during pregnancy, childbirth, or within 42 days of termination of pregnancy), and cause of death. Maternal mortality ratio = (Number of maternal deaths/Number of live births) X 100 000 The maternal mortality ratio can be calculated directly from data collected through vital registration systems, household surveys or other sources. However, there are often data quality problems, particularly related to the underreporting and misclassification of maternal deaths. Therefore, data are often adjusted in order to take into account these data quality issues. Adjustments for underreporting and misclassification of deaths and model-based estimates should be made in the cases where data are not reliable. Because maternal mortality is a relatively rare event, large sample sizes are needed if household surveys are used. This is very costly and may still result in estimates with large confidence intervals, limiting the usefulness for comparisons between countries or over time. To reduce sample size requirements, the sisterhood method used in the Demographic and Health Surveys (DHS) and Multiple Indicator Cluster Surveys for 2010–2011 (MICS4) measures maternal mortality by asking respondents about the survival of sisters. It should be noted that the sisterhood method results in pregnancy-related mortality; regardless of cause of death, all deaths occurring during pregnancy, birth, or the six weeks following the termination of the pregnancy are included in the numerator of the maternal mortality ratio. Reproductive Age Mortality Studies (RAMOS) are special studies that use a variety of sources, depending on the context, to identify all deaths of women of reproductive age and ascertain which of these are maternal or pregnancy-related

Method of estimation	WHO, UNICEF, the United Nations Population Fund and the World Bank have developed a method to adjust existing data in order to take into account data quality issues and ensure the comparability of different data sources. This method involves the assessment of data for completeness and, where necessary, adjustment for underreporting and misclassification of deaths as well as development of estimates through statistical modelling for countries with no reliable national level data. Data on maternal mortality and other relevant variables are obtained from databases maintained by WHO, the United Nations Development Programme, UNICEF, and the World Bank. Data available from countries varies in terms of source and collection methods. Given the variability of data sources, different methods are used for each source in order to arrive at country estimates that are comparable and enable regional and global aggregation. Currently, approximately only one third of all countries/territories have reliable data available, and do not need additional estimations. For about half of the countries included in the estimation process, country-reported estimates of maternal mortality are adjusted for the purposes of comparability of the methodologies. For the remainder of countries/territories—those with no appropriate maternal mortality data –a statistical model is employed to predict maternal mortality levels. However, the calculated point estimates with this methodology might not represent the true levels of maternal mortality. It is advised to consider the estimates together with the reported uncertainty margins where the true levels are regarded to lie. Predominant type of statistics: predicted
M&E Framework	Impact
Method of estimation of global and regional aggregates	Regional and global aggregates are based on weighted averages using the total number of live births as the weight. Aggregates are presented only if available data cover at least 50% of total live births in the regional or global grouping.
Disaggregation	
Unit of Measure	Deaths per 100 000 live births
Unit Multiplier	
Expected frequency of data dissemination	Every 3–5 years
Expected frequency of data collection	

Data Element	Life expectancy at ages 1, 15, 45 and 65 (years)
Indicator name	(11) 2.1a. Life expectancy at ages 1, 15, 45 and 65 years, disaggregated by sex
Name abbreviated	Life expectancy at ages 1, 15, 45 and 65 years
Data Type Representation	Statistic
Topic	Health status
Rationale	Life expectancy at age 65 reflects the overall mortality level of a population over 65 years. It summarizes the mortality pattern that prevails across all age groups above 65 years.

Definition	The average number of years that a person aged 65 could expect to live, if he or she were to pass through life exposed to the sex- and age-specific death rates prevailing at the time of his or her 65 years, for a specific year, in a given country, territory, or geographic area.
Associated terms	Life table
Preferred data sources	Civil registration with complete coverage
Other possible data sources	Household surveys Population censuses
Method of measurement	Life expectancy at aged 65 is derived from life tables and is based on sex- and age-specific death rates.
Method of estimation	Procedures used to estimate WHO life tables for Member States vary depending on the data available to assess child and adult mortality. Three basic methods have been used for this revision. In all three cases, the United Nations Inter-agency Group for Child Mortality Estimation estimates of neonatal, infant and under-five mortality rates were used. WHO has developed a model life table using a modified logit system based on about 1800 life tables from vital registration judged to be of good quality to project life tables and to estimate life tables using a limited number of parameters as inputs. 1) When mortality data from civil registration are available, their quality is assessed; if necessary, they are adjusted for the level of completeness of registration and they are directly used to construct the life tables. 2) When mortality data from civil registration for the most recent year are not available, the life tables are projected from available years from 1985 onwards using estimated under-five mortality rates and adult mortality rates, or under-five mortality rates only, and a modified logit model to which a global standard (defined as the average of all the 1800 life tables) is applied. 3) When no useable data from civil registration are available, the latest life table analyses of the United Nations Population Division were used. Predominant type of statistics: Predicted
M&E Framework	
Method of estimation of global and regional aggregates	The numbers of deaths estimated from the life table and population by age groups are aggregated by relevant region in order to produce regional life tables.
Disaggregation	Sex
Unit of Measure	Years
Unit Multiplier	
Expected frequency of data dissemination	Annual
Expected frequency of data collection	Annual
Limitations	

Data Element	Healthy life years at age 65
Indicator name	(12) 2.1b. Healthy life years at age 65, disaggregated by sex
Name abbreviated	Healthy life expectancy
Data Type Representation	
Topic	Health status
Rationale	
Definition	The indicator Healthy Life Years (HLY) at age 65 measures the number of years that a person at age 65 is still expected to live in a healthy condition. HLY is a health expectancy indicator which combines information on mortality and morbidity. The data required are the age-specific prevalence (proportions) of the population in healthy and unhealthy conditions and age-specific mortality information. A healthy condition is defined by the absence of limitations in functioning/disability. The indicator is calculated separately for males and females. The indicator is also called disability-free life expectancy (DFLE). Life expectancy at age 65 is defined as the mean number of years still to be lived by a person at age 65, if subjected throughout the rest of his or her life to the current mortality conditions.
Associated terms	
Preferred data sources	Civil registration for mortality/life expectancy component and health interview surveys to determine functioning limitations/disability
Other possible data sources	
Method of measurement	
Method of estimation	
M&E Framework	
Method of estimation of global and regional aggregates	
Disaggregation	By sex
Unit of Measure	• Number of years for Healthy Life Years • Number of years for life expectancy • Healthy Life Years expressed as a percentage of life expectancy.
Unit Multiplier	
Expected frequency of data dissemination	Yearly
Expected frequency of	Annual

data collection	
Limitations	

Data Element	Treatment success rate for new pulmonary smear-positive pulmonary tuberculosis (TB) cases
Indicator name	(14) 5.1b. Percentage of people treated for tuberculosis who completed treatment
Name abbreviated	Smear-negative and extrapulmonary TB treatment success rate
Data Type Representation	Percentage
Topic	Health service coverage
Rationale	Treatment success is an indicator of the performance of national TB control programmes. In addition to the obvious benefit to individual patients, successful treatment of infectious cases of TB is essential to prevent the spread of the infection. Detecting and successfully treating a large proportion of TB cases should have an immediate impact on TB prevalence and mortality. By reducing transmission, successfully treating the majority of cases will also affect, with some delay, the incidence of disease.
Definition	The proportion of new smear-negative and extrapulmonary (or smear unknown/not done) TB cases registered under a national TB control programme in a given year that successfully completed treatment (without bacteriological evidence of success, i.e. “treatment completed”). At the end of treatment, each patient is assigned one of the following five mutually exclusive treatment outcomes: completed; died; failed; defaulted; and transferred out with outcome unknown. The proportions of cases assigned to these outcomes, plus any additional cases registered for treatment but not assigned to an outcome, add up to 100% of cases registered.
Associated terms	New case of tuberculosis Tuberculosis (TB)
Preferred data sources	Patient record system Surveillance systems
Other possible data sources	
Method of measurement	Treatment success rates are calculated from cohort data (outcomes in registered patients) as the proportion of new smear-negative and extrapulmonary TB cases registered under a national TB control programme in a given year that successfully completed treatment without bacteriological evidence of success. The treatment outcomes of TB cases registered for treatment are reported annually by countries to WHO using a web-based data collection system. See the WHO Global Tuberculosis Report. The treatment outcomes of TB cases reported by countries follow the WHO recommendations on definitions of outcomes, they are internationally comparable and there is no need for any adjustment. Because treatment for TB lasts 6–8 months, there is a delay in assessing treatment

	outcomes. Each year, national TB control programmes report to WHO the number of cases of TB diagnosed in the preceding year, and the outcomes of treatment for the cohort of patients who started treatment a year earlier.
Method of estimation	Reported by countries.
M&E Framework	Output
Method of estimation of global and regional aggregates	Regional and global estimates are produced by aggregating national estimates (e.g. to calculate the global treatment success rate of new smear-negative and extrapulmonary cases, the sum of the number of new smear-negative and extrapulmonary cases that completed treatment in individual countries is divided by the total number of new smear-negative and extrapulmonary cases registered for treatment in a given year).
Disaggregation	
Unit of Measure	Per cent
Unit Multiplier	
Expected frequency of data dissemination	Annual
Expected frequency of data collection	Annual
Limitations	

Data Element	Government expenditure on health as a percentage of total health expenditure (THE
Indicator name	(15) 5.1c. Government (public) expenditure on health as a percentage of GDP
Name abbreviated	GGHE as %GDP
Data Type Representation	Percentage
Topic	Health systems resources
Rationale	This is a core indicator of health financing systems. This indicator contributes to the understanding of the relative level of public spending on health to the beneficiary population, expressed in international dollars to facilitate international comparisons. It not only includes the resources channelled through government budgets but also the expenditure on health by parastatals and extrabudgetary entities, particularly with regard to compulsory health insurance. It refers to resources collected and polled by public agencies including all the revenue modalities.
Definition	Total health expenditure as percentage of GDP, WHO estimates: Sum of General Government and of Private Expenditure on Health. Estimates for this indicator are produced by WHO. The estimates are, to the greatest extent possible, based on the National Health Accounts classification (see the World Health Report 2006 for details). The sources include both nationally reported data and estimates from international organizations such as the International Monetary Fund, the World Bank, the United Nations and the Organisation for Economic Co-operation and Development. Therefore they may somewhat differ from official national statistics reported by countries.

	Total health expenditure, purchasing power parity dollar (PPP) per capita, WHO estimates: Sum of General Government and of Private Expenditure on Health. Estimates for this indicator are produced by WHO. The estimates are, to the greatest extent possible, based on the National Health Accounts classification (see the World Health Report 2006 for details). The sources include both nationally reported data and estimates from international organizations like International Monetary Fund, the World Bank, the United Nations and the Organisation for Economic Co-operation and Development. Therefore they may somewhat differ from official national statistics reported by countries.
Associated terms	General government expenditure on health (GGHE) International dollar rate/PPP
Preferred data sources	National Health Accounts Administrative reporting system
Other possible data sources	
Method of measurement	National Health Accounts (NHA) indicators are based on expenditure information collected within an internationally recognized framework. For this indicator, resources are tracked for all public entities acting as financing agents: i.e. those that are managing health funds and purchasing or paying for health goods and services. The NHA strategy is to track records of transactions, without double counting and in order to achieve comprehensive coverage. In particular, it aims to be consolidated in order not to double count government transfers to social security and extrabudgetary funds. Monetary and non-monetary transactions are accounted for at purchasers' value. Guides to producing national health accounts exist. (OECD, 2000; WHO-World Bank-USAID, 2003).
Method of estimation	PPP series resulting from the 2005 International Comparison Project (ICP) estimated by the World Bank have been used. In countries where this is not available, PPP series are estimated by WHO. In countries where the fiscal year begins in July, expenditure data have been allocated to the later calendar year (for example, 2008 data will cover the fiscal year 2007–2008), unless otherwise stated. These data are generated from sources that WHO has been collecting for over ten years. The most comprehensive and consistent data on health financing is generated from NHAs. Not all countries have or update NHAs and in these instances, data are obtained from technical contacts in-country or from publicly available documents and reports and harmonized to the NHA framework. Missing values are estimated using various accounting techniques depending on the data available for each country. The principle international references used are GGHE: WHO NHA database. PPP: World Bank, WHO estimates for countries for which the World Bank does not provide PPP series. Population figures are taken from the United Nations Population Division, OECD Health Data, and the EUROSTAT database. WHO sends estimates to the respective Ministries of Health every year for validation.
M&E Framework	Input

Method of estimation of global and regional aggregates	Averages are weighted by population to obtain global and regional averages for income groups (World Bank classification) and for WHO regions
Disaggregation	
Unit of Measure	Percent, based on PPP international dollar
Unit Multiplier	
Expected frequency of data dissemination	Annual
Expected frequency of data collection	Annual
Limitations	Data on estimated health expenditure are collected by triangulating information from several sources to ensure that the outlays constitute the bulk of the government expenditure on health. Some figures may be underestimated when it is not possible to obtain data on expenditure by local government, other ministries and extrabudgetary entities. A time lag affects the registration of voluntary and forced population migrations.