Date last modification documentation sheet: 16-04-2012

Compared to previous version documentation sheet (09-08-2010) the following issues were adapted:
- New section on relevant policy areas added to the documentation sheet
- Item added to the work-to-do section; discuss addition of premature mortality operationalization to this indicator
- Links to reports case definitions replaced

ECHIM Indicator name	B) Health status
	13. Disease-specific mortality
Relevant policy areas	- Health system performance, quality of care, efficiency of care - Non-communicable diseases (NCDs), chronic diseases - Health threats, communicable diseases - (Preventable) Burden of Disease (BoD) - Lifestyle, health behaviour - Mental health
Definition	Deaths caused by specific diseases or disease groups per 100,000 inhabitants for the following ICD-10 codes:

Number	Description	ICD-10 Codes
1	Total (All Causes)	All
2	Infectious & Parasitic Diseases	A00 - B99
3	AIDS (HIV Disease)	B20 - B24
4	Malignant Neoplasms	C00 - C97
5	Malignant Neoplasm of Stomach	C16
6	Malignant Neoplasm of Colon	C18
7	Malignant Neoplasm of Larynx & Trachea / Bronchus / Lung	C32 - C34
8	Malignant Melanoma of Skin	C43
9	Malignant Neoplasm of Breast	C50
10	Malignant Neoplasm of Cervix	C53
11	Malignant Neoplasm of Prostate	C61
12	Malignant Neoplasm of Lymphatic / Haematopietic Tissue	C81 - C96
13	All Childhood Cancers (Age 0-14 Years)	C00 - C97
14	Mental and Behavioural Disorders	F00 - F99
15	Diseases of the Circulatory System	I00 - I99
16	Ischaemic Heart Disease	I20 - I25
17	Cerebrovascular Disease	I60 - I69
18	Diseases of the Respiratory System	J00 - J99
19	Chronic Lower Respiratory Diseases	J40 - J47
20	Diseases of the Digestive System	K00 - K93
21	External Causes of Injury & Poisoning	V01 - Y89
22	Accidents	V01 - X59
23	Transport Accidents	V01 - V99
24	Accidental Falls	W00 - W19
25	Suicide & Intentional Self Harm	X60 - X84
26	Homicide / Assault	X85 - Y09

Calculation	Number of deaths per 100,000 inhabitants (age-standardized rates). The (age-)standardized death rate is a weighted average of age-specific mortality rates. The weighting factor is the age distribution of a standard reference population. Standardization is carried out through the direct method. The standard reference population used is the European standard population as

	defined by the World Health Organisation (WHO). The annual average population available in Eurostat's demography database is used to calculate the rates.
Relevant dimensions and subgroups	- Calendar year - Country - Region (according to ISARE recommendations; see data availability) - Sex
Preferred data type and data source	Preferred data type: - Causes of death registries (administrative data) Preferred source: For all selected ICD-10 groups except HIV/AIDS: - Eurostat Preferred source for HIV/AIDS: - CISID database (based on EuroHIV data collection)
Data availability	Time series for most EU-27 countries and EFTA (without Liechtenstein) are available in the Eurostat database from 1994 onwards. Regional data (NUTS level 2) are available for most of the countries (i.e. not completely in accordance with ISARE recommendations). Regional mortality data (age/sex breakdown of deaths by cause) have also been collected by the ISARE-3 project on regional data. Data for "Deaths among AIDS cases - Incidence (cases per 100 000 population)" are available in CISID as of 1999 (provided by EuroHIV) for all EU-27 countries and for Albania, Bosnia & Herzegovina, Croatia, Iceland, Norway, Moldova, Serbia, Switzerland and FYR Macedonia.
Data periodicity	- Eurostat data are updated annually. Eurostat asks for the submission of final data for the year N at N+18 months. However, a number of countries still faces difficulties with this timetable and delivers data at their earliest convenience. - Annual data on deaths among AIDS cases are available in CISID.
Rationale	Data on causes of death provide information on mortality patterns and form a major element of public health information necessary for planning of prevention and health care, and for the evaluation of policies.
Remarks	- ECHIM does not require mortality data by age group and by Socio-Economic Status (SES) to reduce number of indicator operationalisations. For further details on SES, see Eurothine project. - Causes of death (COD) data are derived from death certificates. The medical certification of death is an obligation in all Member States. Countries code the information provided in the medical certificate of cause of death into International Classification of Diseases (ICD) codes according to the rules specified in the ICD10. - COD data refer to the *underlying cause* which - according to the World Health Organisation (WHO) - is "the disease or injury which initiated the train of morbid events leading directly to death, or the circumstances of the accident or violence which produced the fatal injury". - The ICD-10 categories used in this indicator are based on the codes used in the Eurostat 65CoD shortlist. Note that there are discrepancies between the ICD codes relating to cancer in the Eurostat 65CoD list, which are used for this indicator, and the codes used for the cancer categories in Indicators 20 & 78. - For AIDS mortality EuroHIV is the preferred source because countries report data to EuroHIV from national AIDS monitoring systems. These include confirmed AIDS cases, i.e. they are more accurate than routine vital statistics system (death certificates), because the accuracy and standardization of coding included on death certificates is much lower. - EuroHIV project ended by 31 December 2007. As of that date ECDC and the WHO Regional Office for Europe (WHO/Europe) jointly coordinate HIV/AIDS surveillance in Europe. Data on HIV infections and AIDS diagnoses are collected in the joint database for HIV/AIDS surveillance. - EuroHIV data on HIV/AIDS are not reported according to ICD-10. For EuroHIV cases are reported according to a uniform AIDS case definition originally published in 1982 and revised in 1985, 1987 and, for adults and adolescents (13 years and over), in 1993 (see references). - Mortality data from Eurostat are age-standardized but data from CISID are probably not age-standardized as rates in EuroHIV report No. 75 were also not age-standardized. As most

	causes of death vary significantly with people's age and sex, the use of standardized death rates improves comparability over time and between countries. - A new Regulation on Community statistics on public health and health and safety at work (EC) No 1338/2008 was signed by the European Parliament and the Council on 16 December 2008. This Regulation is the framework of the data collection on the domain. Within the context of this framework Regulation, a specific Implementing Measure is currently being developed - within the ESS - on Causes of Death statistics and, according to forthcoming agreement with the member States, Implementing Measures for other domains will follow.
References	- Health Indicators in the European Regions (ISARE) project: http://www.isare.org - Eurostat database, Causes of death - Standardized death rate (per 100,000 inhabitants): http://nui.epp.eurostat.ec.europa.eu/nui/show.do?dataset=hlth_cd_asdr&lang=en - CISID database, for "Deaths among AIDS cases - Incidence (cases per 100 000 population)": http://data.euro.who.int/cisid/?TabID=242870 - Eurostat metadata on causes of death : http://epp.eurostat.ec.europa.eu/cache/ITY_SDDS/EN/hlth_cdeath_esms.htm - International Classification of Diseases (ICD): http://www.who.int/classifications/icd/en/ - Metadata European Shortlist for Causes of Death 1998: http://ec.europa.eu/eurostat/ramon/nomenclatures/index.cfm?TargetUrl=LST_NOM_DTL&StrNom=COD_1998&StrLanguageCode=EN&IntPcKey=&StrLayoutCode=HIERARCHIC&CFID=1383960&CFTOKEN=5235092365011733-D3F83061-FAC3-867E-DA915D4F10ADB365&jsessionid=1f513b85dae3ddc42cab15619523e536e7a5TR - Regulation (EC) No 1338/2008 of the European Parliament and of the Council of 16 December 2008 on Community statistics on public health and health and safety at work: http://epp.eurostat.ec.europa.eu/portal/page/portal/health/documents/Regulation%20no%201338-2008%2016Dec2008%20OJL354%20p.70.pdf - EUROTHINE. Tackling health inequalities in Europe: an integrated approach. EUROTHINE Final Report. Rotterdam: Department of Public Health, University Medical Centre Rotterdam, 2007. http://survey.erasmusmc.nl/eurothine/ - European Centre for the Epidemiological Monitoring of AIDS. 1993 revision of the European AIDS surveillance case definition. AIDS Surveillance in Europe, Quarterly Report 1993; No. 37: 23-28: http://cedoc.cies.edu.ni/general/2nd_Generation%20(D)/Definitions,%20testing%20&%20ethical/AIDS%20Case%20Definitions/EURO%201993%20AIDS%20Definition.pdf - European Centre for the Epidemiological Monitoring of AIDS. European case definition for AIDS surveillance in children - revision 1995. HIV/AIDS Surveillance in Europe, Quarterly Report 1995; No. 48: 46-53: http://www.who.int/hiv/strategic/en/euro_1995_Def.pdf
Work to do	- Wait for information from WHO/CISID and process in documentation sheet (request for clarification on age-standardization yes/no pending at WHO-Euro) - Discuss with (Extended) Core Group (or comparable body, if (E)CG is no longer maintained after the Joint Action for ECHIM) the addition of an additional operationalization to this indicator; premature mortality. This was a proposal by France during the lasting ECG meeting of the Joint Action in March 2012. ECG members however felt that; 1) it was better not to make substantial changes to the indicators this shortly before the ending of the Joint Action, 2) more detailed discussions are needed on e.g. usefulness of an indicator for premature mortality for different diagnoses and the cut off point to use (<65, <70, <75?).