

Date last modification documentation sheet: 16-04-2012

Compared to previous version documentation sheet (21-06-2010) the following issues were adapted:

- New section on relevant policy areas added to the documentation sheet

<i>ECHIM Indicator name</i>	<b>B) Health status</b>
	10. Life expectancy
<i>Relevant policy areas</i>	<ul style="list-style-type: none"> <li>- Sustainable health care systems</li> <li>- Health inequalities (including accessibility of care)</li> <li>- (Preventable) Burden of Disease (BoD)</li> </ul>
<i>Definition</i>	Life expectancy at a given age represents the average number of years of life remaining if a group of persons at that age were to experience the mortality rates for a particular year over the course of their remaining life. Life expectancy at birth is a summary measure of the age-specific all cause mortality rates in an area in a given period.
<i>Calculation</i>	Life expectancies are calculated using (abridged) life tables presenting age specific mortality rates. Life expectancy tables are calculated based on death probabilities according to Farr's death rate method: $qx = Mx / (Bx + (Mx/2))$ where $Mx$ = the number of deaths at the age of $x$ to under $x+1$ years in the reported period; $Bx$ = average population aged $x$ to under $x+1$ in the base period; $qx$ = death probability from age $x$ to $x+1$ . Farr's method of calculation of abridged life-tables assumes that there is a constant mortality within the age intervals and thus the years of life lived by a person dying in the interval is (on average) half of the length of the interval.
<i>Relevant dimensions and subgroups</i>	<ul style="list-style-type: none"> <li>- Calendar year</li> <li>- Country</li> <li>- Region (according to ISARE recommendations)</li> <li>- Sex</li> <li>- Age group (at birth and at age 65)</li> <li>- Socio-economic status (see availability and remarks)</li> </ul>
<i>Preferred data types and data source</i>	<p>Preferred data type: register data (as input for the calculations)          Preferred data source: Eurostat</p>
<i>Data availability</i>	Data on life expectancy in the Eurostat database are available from 1960 onwards for most EU-27 Member States, as well as for the other countries participating in the Joint Action for ECHIM. For some countries data are presented only from the 1990's onwards (Cyprus, France, Liechtenstein, Poland, Macedonia, the United Kingdom) and for Croatia and Latvia only from 2002 onwards. For Malta, life expectancy figures are missing from 1982 to 1994. Life expectancy data are available by age group (including at birth and at age 65) and by sex. Regional life expectancy data at age 65 and at birth were collected by the ISARE-III project. Data for life expectancy by socio-economic status are under preparation (see remarks and reference to Eurostat OMC web page on indicators of the health and long term care strand).
<i>Data periodicity</i>	Life expectancy data are updated annually.
<i>Rationale</i>	Basic indicator for population health. It reflects the cumulative effect of the impact of risk factors, occurrence and severity of disease, and the effectiveness of interventions and treatment.
<i>Remarks</i>	<ul style="list-style-type: none"> <li>- WHO and OECD use different methods for calculating life expectancy (e.g. Wiesler's method). Different calculation methods produce slightly different results. This explains why indicators of life expectancy may differ between different databases.</li> <li>- The national statistical offices send raw national numbers to Eurostat, which subsequently are validated and recalculated by Eurostat before publication in the database. This explains why some indicators might differ from the ones published by the countries themselves.</li> <li>- Life expectancy at birth, at age 45 and at age 65, and life expectancy by socio-economic status by socio-economic status are indicators of the health and long-term care strand of the Open Method of Coordination on Social Inclusion and Social Protection. Data for life expectancy by socio-economic status are under preparation.</li> </ul>
<i>References</i>	<ul style="list-style-type: none"> <li>- Eurostat metadata on Mortality:</li> </ul>

	<p><a href="http://epp.eurostat.ec.europa.eu/cache/ITY_SDDS/EN/demo_mor_esms.htm">http://epp.eurostat.ec.europa.eu/cache/ITY_SDDS/EN/demo_mor_esms.htm</a></p> <p>- Calot G, Sardon J-P. Methodology for the calculation of Eurostat's demographic indicators. Detailed report by the European Demographic Observatory:  <a href="http://epp.eurostat.ec.europa.eu/cache/ITY_OFFPUB/KS-CC-04-004/EN/KS-CC-04-004-EN.PDF">http://epp.eurostat.ec.europa.eu/cache/ITY_OFFPUB/KS-CC-04-004/EN/KS-CC-04-004-EN.PDF</a></p> <p>- CODED, the Eurostat Glossary and Definition Database:  <a href="http://circa.europa.eu/irc/dsis/coded/info/data/coded/en/gl009320.htm">http://circa.europa.eu/irc/dsis/coded/info/data/coded/en/gl009320.htm</a></p> <p>- Eurostat database, Life expectancy by sex and age:  <a href="http://nui.epp.eurostat.ec.europa.eu/nui/show.do?dataset=demo_mlexpec&amp;lang=en">http://nui.epp.eurostat.ec.europa.eu/nui/show.do?dataset=demo_mlexpec&amp;lang=en</a></p> <p>- Health Indicators in the European Regions (ISARE) project: <a href="http://www.isare.org">http://www.isare.org</a></p> <p>- Eurostat OMC:  <a href="http://epp.eurostat.ec.europa.eu/portal/page/portal/employment_and_social_policy_indicators/omc_social_inclusion_and_social_protection/health_long_term_care_strand">http://epp.eurostat.ec.europa.eu/portal/page/portal/employment_and_social_policy_indicators/omc_social_inclusion_and_social_protection/health_long_term_care_strand</a></p>
<i>Work to do</i>	<ul style="list-style-type: none"> <li>- Monitor developments Open Method of Coordination regarding Life expectancy by socio-economic status</li> </ul>