

Healthy Life Expectancy Metadata

Name abbreviated	Healthy life expectancy (HALE)
Indicator name	Healthy life expectancy at age x (e.g, at birth, at age 60 years, etc)
Definition	Average remaining number of years that a person can expect to live in "full health" at a certain age by taking into account years lived in less than full health due to disease and/or injury.
Method of estimation/calculation	<p>HALE is a metric based on methods by Sullivan (1971), provides a single summary measure of population health across all causes combined by weighting years lived with a measure of functional health loss before death and is the most comprehensive among competing expectancy metrics.</p> <p>HALE at age x is the sum of YWD_i from $i = x$ to w (the last open-ended age interval in the life table) divided by I_x (survivors at age x):</p> $HALE_x = \left[\sum_{i=x}^w YWD_i \right] / I_x$ <p>$YWD_x = L_x(1 - D_x)$ – Years lived without disability, equivalent years of healthy life lived between ages x and x+5.</p> <p>I_x – Survivors at age x.</p> <p>L_x – Total years lived by the life table population between ages x and x+5.</p> <p>D_x – Equivalent lost healthy year fraction between ages x and x+5.</p>
Numerator	See above
Denominator	See above
Preferred data sources	<p>Vital registration systems which record deaths with sufficient completeness to allow estimation of all-cause death rates.</p> <p>National health examination surveys on the prevalence of diseases, injuries, and disabilities.</p>
Other possible data sources	Sample registration systems; verbal autopsy.
WHO GPW13 Framework	Outcome
Disaggregation	By sex, location (urban/rural, major regions/provinces), and socio-economic characteristics (e.g., education, wealth quintile).
Expected frequency of data collection	
Limitations	<ul style="list-style-type: none"> - Lack of reliable data on mortality and morbidity, especially from low income countries. - Lack of comparability of self-reported data from health interviews and the measurement of health-state preferences for such self-reporting.
Data type	Number of years
Related links	WHO: https://cdn.who.int/media/docs/default-source/gho-documents/global-health-estimates/ghes2019-life-table-methods.pdf?sfvrsn=c433c229_5