

Socio-demographic Index (SDI)

The **Socio-demographic Index (SDI)** is a composite metric developed by the **Global Burden of Disease (GBD) Study** to quantify a region or country's **level of socio-demographic development**.

Components

SDI is calculated as the geometric mean of three indicators:

- **Income per capita** (lag-distributed)
- **Average educational attainment** (years of schooling among individuals aged 15+)
- **Total fertility rate** (TFR) among women under age 25

Scale and Interpretation

- Ranges from **0 (lowest development)** to **1 (highest development)**
- Enables categorization of countries/regions into:
 - **High SDI**
 - **High-middle SDI**
 - **Middle SDI**
 - **Low-middle SDI**
 - **Low SDI**

Purpose

- To analyze how disease burden varies by socio-demographic status
- To provide a **contextual framework** for interpreting health outcomes and risk factor exposure
- To support **comparative modeling** across countries with different development levels

Applications

- Used extensively in **GBD estimates** of:
 - Mortality
 - Disability-Adjusted Life Years (DALYs)
 - Risk factor attribution
- Facilitates **longitudinal and cross-country comparisons**
- Supports **projections** of future health burden

Example

- Regions with **low SDI** often have a higher burden of infectious diseases and maternal mortality.
- Regions with **high SDI** have a higher burden of non-communicable diseases (e.g., stroke, ICH), often with different risk factor profiles (e.g., aging, lifestyle, pollution).

Related Entries

- [Global burden modeling](#)
- [SDI Region](#)
- [Disability-Adjusted Life Year \(DALY\)](#)
- [Intracerebral hemorrhage epidemiology](#)

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