The Global Burden of Diseases, Injuries and Risk Factor Study:
The UL Data Science source for injury, illness and fatality data

The UL Standards Data Science Team acquires data on injuries, illnesses and fatalities for its work from the *Global Burden of Diseases, Injuries and Risk Factor Study* (GBD), coordinated by the Institute for Health Metrics and Evaluation (IHME). IHME is an independent global health research center at the University of Washington whose mission is to deliver timely, relevant and scientifically valid evidence to the world to improve health policy and practice. More information on IHME is available here.

The GBD collects input data on hundreds of diseases, injuries and risk factors from more than 195 countries. The input data, in the form of microdata or tabulated data obtained directly from data holders or publications, are collected and synthesized by a consortium of more than 7,000 researchers.

Input data includes, but is not limited to:

- Administrative records (e.g., hospital and other health facility data)
- Censuses
- Demographic surveillance (e.g., birth, death, migration and cause of death data)
- Disease registries
- Epidemiological surveillance (e.g., case notifications about a disease outbreak)
- Surveys and vital registration (e.g., birth and death registration data)

GBD then produces estimates of all-cause mortality, deaths by cause and years of life lost due to premature mortality (YLLs),[1] years lived with disability (YLDs)[2] and disability-adjusted life years (DALYs).[3] The GBD data is suitable for comparisons over time, across age groups and among populations.

As the GBD data are estimates, the GBD consortium strictly adheres to the Guidelines for Accurate and Transparent Health Estimates Reporting (GATHER) to ensure they follow the best reporting practices for studies calculating health estimates for multiple populations using multiple information. These practices include:

- Identifying all input data sources, sampling methods, case definitions and the potential for bias
- Employing statistical methods that handle both sampling and non-sampling error
- Releasing data including point estimates and uncertainty intervals (UI) for all estimates

You can read more about GATHER here, and find out the details on the GBD methodology here.

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[1] Years of life lost (YLLs): Years of life lost due to premature mortality.

[2] Years lived with disability (YLDs): Years lived in less-than-ideal health. This includes health loss that may last for only a few days or a lifetime.

[3] Disability-adjusted life years (DALYs): Years of healthy life lost to premature death and disability. DALYs are the sum of years of life lost (YLLs) and years lived with disability (YLDs).