

What is the Global Burden of Disease (GBD)?

Everyone, all over the world, deserves to live a long life in full health. The Global Burden of Disease study measures what prevents us from achieving that goal.

The study identifies the biggest health problems in 195 countries and territories.

GBD includes

2 billion+

300+ diseases, injuries, and risk factors Results by sex



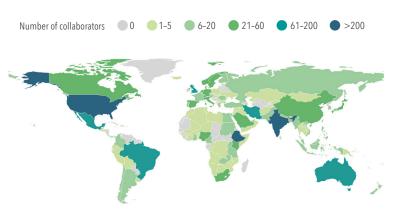
Over 20 age groups



What questions can it answer?

- What are my country's biggest health problems?
- What causes more ill health in my country, depression or breast cancer?
- What contributes to more death and disability in my country - smoking, obesity/overweight, or unsafe water?
- What is the leading cause of death among children under the age of 5 in the world?
- I'm designing an intervention to improve the health of young women - which diseases, injuries, and risk factors should I target to make the greatest impact?
- Which countries have the highest death rates from drug use? Leukemia? Cardiovascular diseases?

GBD is a worldwide effort



Current contributors to the study

2,434 132 3
collaborators countries territories

Published in *The Lancet*, the study uses more than **80,000 data sources**, drawing from the **world's largest global health database**. Governments in Australia, Brazil, Kenya, Norway, the UK, and the US, as well as the Bill & Melinda Gates Foundation and the World Bank, are using GBD findings to inform decision-making.



What are GBD's main findings?

- The world is in the midst of an "epidemiological transition," which means that as countries increase their levels of development, early death and disability from communicable diseases are declining and life expectancies are rising.
- While more developed countries tend to be healthier than less developed ones, some countries are much healthier than expected given their level of development, such as Ethiopia and Spain.
- People's exposure to poor sanitation, indoor air pollution, and childhood undernutrition has dropped, resulting in dramatic declines in the burden of diarrhea and pneumonia in children.
- Several risk factors linked to development increased markedly from 1990 to 2015. These include obesity/overweight, high blood sugar, ambient air pollution, and drug use.

Causes of DALYs, global, 1990-2015

Road injuries 11

HIV/AIDS 42

Communicable, maternal,

neonatal, and nutritional

disorders 1990-2015 1990 Ranking Percent change 2015 Ranking Lower respiratory infections 1 1 Ischemic heart disease 0.8 Neonatal preterm birth complications 2 2 Cerebrovascular disease -12.5 Diarrheal diseases 3 3 Lower respiratory infections -65.6 Ischemic heart disease 4 4 Low back and neck pain 14.8 Cerebrovascular disease 5 5 Neonatal preterm birth complications -66.3 6 Diarrheal diseases Neonatal encephalopathy 6 -67.2 Malaria 7 7 Sense organ diseases 25.6 Measles 8 8 Neonatal encephalopathy -40.0 Road injuries Congenital anomalies 9 -24.8 Chronic obstructive pulmonary disease 10 10 HIV/AIDS 232.2

Non-communicable

diseases

Injuries

same or increase

53.2

-93.7

····· decrease

Low back and neck pain 12
Tuberculosis 13
Iron-deficiency anemia 14
Total Malaria
Tuberculosis 15
Depressive disorders

12
Chronic obstructive pulmonary disease -28.8

-36.6

-36.6

-36.6

-46.5

11 Diabetes mellitus

Sense organ diseases 16 Iron-deficiency anemia -20.8

Depressive disorders 19 Italian Tuberculosis -50.5

Diabetes mellitus 24 31 Protein-energy malnutrition -63.6

81 Measles

Disability-adjusted life years (DALYs) are years of healthy life lost to premature death and disability. This figure shows that communicable diseases declined between 1990 and 2015.

How can I learn more?

- Download the GBD report, Rethinking Development and Health: Findings from the Global Burden of Disease, at http://www.healthdata.org/policy-reports
- View main findings by country at http://www.healthdata.org/results/country-profiles
- Explore the GBD Compare data visualization http://vizhub.healthdata.org/gbd-compare/
- Explore the results in data visualization tools
 http://www.healthdata.org/results/data-visualizations
- Read about the GBD study at www.healthdata.org/gbd

How can I get involved?

IHME is is always working to expand and strengthen the GBD collaborative network. GBD collaborators have expertise in a range of areas and provide timely feedback related to interpretation of GBD results, data sources, and/or methodological approaches pertaining to their area of expertise.

We invite you to apply to be a GBD collaborator! Enrollment is now open for the next round of GBD.

For more information, visit

http://www.healthdata.org/gbd/call-for-collaborators.

To contact the GBD Management Team, please email **gbdsec@uw.edu**.



