

## COMPARING US HEALTH PERFORMANCE TO PERFORMANCE OF PEER COUNTRIES

The GBD approach affords countries a unique opportunity to explore their successes in improving health outcomes over time. GBD can also be used to better understand how fast a country's health is improving relative to similar countries. Benchmarking can help countries put their health achievements in context and pinpoint specific diseases, injuries, and risk factors that have the greatest potential for improvement. IHME invites countries interested in collaborating on benchmarking exercises to contact us.

Because differences in population growth and ages across countries can make a country with a younger population appear better in terms of health performance than a country with an older population, researchers remove the impact of population growth and aging to isolate what is important for comparisons of health performance. This metric is known as age-standardized rates. Figure 13 ranks OECD countries by age-standardized rates of premature death, with the top performer – Iceland – at the top.

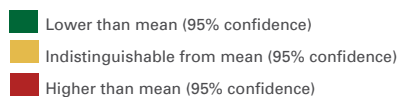
Figure 13 also shows the 25 leading causes of age-standardized premature death in the US, from ischemic heart disease – the top cause of YLLs in the US – to leukemia, and ranks each OECD country's performance for each cause. The best performers for each cause are in green while the worst performers for each cause appear in red. Yellow shading indicates that the ranking for a particular country does not differ in a statistically significant way from the OECD average.

In terms of age-standardized rates of premature mortality, the US ranks toward the bottom, near countries including Estonia, Hungary, Mexico, Poland, Slovakia, and Turkey. Countries with lower per capita incomes and lower health spending than the US, such as Chile, Portugal, Slovenia, and South Korea, had lower mortality rates than the US.

For 15 causes, the US performed worse than the OECD average as measured by age-standardized YLLs. The US performed significantly better than the OECD average for stroke, however. After removing the effects of demographic changes using age-standardized rates, the three leading causes of premature mortality in the US were ischemic heart disease, lung cancer, and road traffic injuries. Since the US performed significantly worse than the OECD average for these three major causes, the greatest potential reductions in premature mortality could be gained by improving outcomes for these causes. Other leading causes where progress would maximize health gains in the US include interpersonal violence, COPD, preterm birth complications, diabetes, drug use disorders, Alzheimer's disease, and poisonings.

**Figure 13: Ranking of leading age-standardized cause rates of years of life lost (YLLs), US relative to OECD countries, both sexes, 2010**

LEUKEMIA	1	32	7	1	6	11	13	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	33	34				
PANCREATIC CANCER	7	22	2	4	5	6	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28			
KIDNEY CANCERS	2	13	22	2	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26			
STROKE	1	4	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25			
HYPERTENSIVE HEART DISEASE	4	13	22	2	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26			
OTHER CARDIO & CIRCULATORY	5	12	2	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27			
BREAST CANCER	5	2	20	8	10	6	9	6	10	6	10	6	10	6	10	6	10	6	10	6	10	6	10	6	10	6	10			
COLORECTAL CANCER	5	12	2	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27			
CHRONIC KIDNEY DISEASE	3	25	1	6	20	8	10	6	9	6	10	6	10	6	10	6	10	6	10	6	10	6	10	6	10	6	10			
HIV/AIDS	28	3	1	25	12	2	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
CARDIOMYOPATHY	4	8	1	3	26	1	14	5	4	9	6	10	6	10	6	10	6	10	6	10	6	10	6	10	6	10	11			
LOWER RESPIRATORY INFECTIONS	6	4	28	3	1	20	23	13	16	24	7	25	7	12	5	12	22	19	2	28	13	21	2	28	13	21	2			
POISONINGS	13	6	4	28	3	1	20	23	13	16	24	7	25	7	12	5	12	22	19	2	28	13	21	2	28	13	21			
ALZHEIMER'S DISEASE	32	13	6	4	28	3	1	20	23	13	16	24	7	25	7	12	5	12	22	19	2	28	13	21	2	28	13	21		
CONGENITAL ANOMALIES	2	8	1	30	8	5	3	26	1	14	5	4	9	6	10	6	10	6	10	6	10	6	10	6	10	6	10	11		
DRUG USE DISORDERS	22	10	30	8	5	3	26	1	14	5	4	9	6	10	6	10	6	10	6	10	6	10	6	10	6	10	11	12		
CIRRHOISIS	1	13	2	8	1	30	8	5	3	26	1	14	5	4	9	6	10	6	10	6	10	6	10	6	10	6	10	11		
DIABETES	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
PRETERM BIRTH COMPLICATIONS	5	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
COPD	11	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
INTERPERSONAL VIOLENCE	16	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
SELF-HARM	10	31	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
ROAD INJURY	1	8	24	7	6	10	11	10	14	25	15	8	3	19	13	12	3	14	6	23	6	30	28	7	14	5	4	9		
LUNG CANCER	14	3	3	19	13	12	3	14	6	23	6	30	28	7	14	5	4	9	6	23	6	30	28	7	14	5	4	9		
ISCHEMIC HEART DISEASE	12	14	3	19	13	12	3	14	6	23	6	30	28	7	14	5	4	9	6	23	6	30	28	7	14	5	4	9		
ISRAEL	10	6	12	5	29	9	25	33	7	17	16	13	1	13	6	18	32	17	28	16	12	5	9	27	29	3	31			
SPAIN	5	16	13	4	6	15	12	9	16	15	15	28	22	9	22	27	18	20	8	18	15	15	13	5	11	11	11			
AUSTRALIA	11	7	21	13	17	18	17	5	25	14	21	32	4	15	16	14	23	12	4	2	4	18	6	27	4	18	6	27		
NORWAY	13	12	5	15	3	25	2	8	3	33	9	25	26	16	5	7	25	7	12	5	12	22	19	2	2	4	18	6	27	
NETHERLANDS	6	30	4	8	14	26	13	18	4	8	18	26	2	20	11	8	9	27	32	23	8	13	24	18	17	1	2	28	13	21
AUSTRIA	21	15	14	22	2	17	26	24	24	20	9	6	2	21	15	23	11	11	13	24	11	19	26	10	5	31	9	9		
LUXEMBOURG	14	20	17	9	18	22	4	4	18	29	1	20	23	11	23	22	10	21	17	30	17	19	5	31	9	9	9			
GERMANY	23	19	7	12	4	20	20	16	22	20	10	11	4	12	26	14	20	19	23	26	22	10	26	24	15	5	31	9	9	
CANADA	20	27	19	18	26	21	24	26	11	21	23	31	33	15	13	24	19	13	22	9	1	2	28	13	21	2	28	13	21	
NEW ZEALAND	19	10	28	21	20	27	23	20	2	19	27	23	9	3	24	6	28	30	26	3	3	7	20	4	16	16	16	16	16	
FRANCE	3	24	20	27	11	3	9	10	20	11	5	19	18	10	17	21	8	15	27	27	11	6	10	14	26	7	12	19	19	
IRELAND	24	17	10	17	10	24	19	7	12	26	26	17	31	25	16	10	17	24	29	15	10	14	8	16	7	12	19	19		
GREECE	28	25	33	1	12	10	22	5	9	27	21	8	16	24	1	31	27	4	14	20	26	7	12	19	19	19	19	19		
SOUTH KOREA	1	11	26	32	19	7	8	32	29	1	4	18	11	18	2	19	24	10	1	1	21	28	1	10	14	14	14	14	14	
UNITED KINGDOM	22	21	6	7	5	29	27	3	17	28	22	24	25	28	12	12	6	18	33	24	9	17	12	11	12	12	12	12	12	
FINLAND	26	5	9	34	27	4	7	6	25	31	11	34	29	8	30	9	2	3	9	11	19	20	21	30	5	5	5	5	5	
BELGIUM	16	29	29	30	23	28	17	13	15	13	12	29	19	21	19	17	11	22	34	25	16	18	23	17	18	18	18	18	18	
PORTUGAL	4	8	27	11	25	14	6	27	26	7	7	12	3	29	9	33	29	31	25	28	18	27	3	8	25	25	25	25	25	
SLOVENIA	15	22	23	29	9	8	16	12	30	18	13	3	7	19	29	13	5	28	21	21	29	25	14	25	8	8	8	8	8	
DENMARK	18	31	11	14	8	31	14	25	19	30	19	22	24	17	10	20	12	29	31	20	14	21	29	29	13	13	13	13	13	
CZECH REPUBLIC	29	26	18	23	21	16	15	19	27	6	3	6	27	26	18	3	16	32	15	32	23	29	34	24	24	24	24	24	24	
CHILE	8	2	30	25	31	19	29	28	31	3	32	27	12	31	25	30	33	2	4	6	26	24	15	3	31	31	31	31	31	
UNITED STATES	27	28	32	16	33	32	31	31	21	32	24	33	34	23	31	29	31	8	16	22	27	9	31	23	23	23	23	23	23	
POLAND	30	32	31	28	24	23	28	23	28	5	30	7	30	27	32	11	26	26	19	29	31	33	25	21	22	22	22	22	22	
SLOVAKIA	34	23	24	20	30	13	30	21	32	10	31	10	31	15	33	27	2	30	33	18	33	30	31	33	32	28	28	28	28	
ESTONIA	31	18	15	26	32	2	11	15	23	34	29	10	20	22	34	34	15	14	10	17	34	30	30	28	20	20	20	20	20	
HUNGARY	32	34	25	33	22	33	32	30	33	4	28	16	14	14	33	25	21	34	30	31	33	32	27	33	32	32	32	32	32	32
MEXICO	25	1	34	2	34	30	33	34	34	9	33	4	21	34	7	32	34	1	3	19	28	23	6	1	33	33	33	33	33	
TURKEY	33	33	16	6	28	34	34	29	8	12	34	1	17	32	28	4	22	7	13	34	32	34	4	2	34	34	34	34	34	



Another way to assess US health performance in comparison to OECD countries is to rank its performance in terms of age-standardized YLDs for different causes (figure not shown). Using this metric, the US performs better than the OECD average for three out of 25 causes, including low back pain, falls, and migraine, which may be due to more widespread treatment of these causes of disability in the US compared to other OECD countries. The performance of the US in 17 other causes was not significantly different from the OECD average. Relative to its peers, the US has the greatest potential to reduce years lost due to disability from other musculoskeletal disorders, drug use disorders, COPD, stroke, and sickle cell disease.

Figure 14 shows how the US compares to other OECD countries in terms of age-standardized DALYs attributable to different risk factors. For five of the top six leading risk factors (high BMI, tobacco smoking, dietary risks, high fasting plasma glucose, and drug use) the US performed worse than the OECD average. Thus, prioritizing action to reduce these risk factors could achieve the greatest potential reductions in premature death and disability. As explored elsewhere in this report, these risk factors are major contributors to the leading causes of premature death in the US, such as ischemic heart disease, lung cancer, COPD, and diabetes. Even for high-ranking risk factors where the US performs better or similar to the OECD, such as for alcohol use (fourth-leading risk factor) and high blood pressure (seventh-leading risk factor), reductions in these risk factors could substantially improve health in the US.

**Figure 14: Ranking of leading age-standardized risk rates of disability-adjusted life years (DALYs), US relative to OECD countries, both sexes, 2010**

