

GBD PROFILE: ZIMBABWE

GLOBAL BURDEN OF DISEASES, INJURIES, AND RISK FACTORS STUDY 2010

The Global Burden of Disease Study 2010 (GBD 2010) is a collaborative project of nearly 500 researchers in 50 countries led by the Institute for Health Metrics and Evaluation (IHME) at the University of Washington. It is the largest systematic scientific effort in history to quantify levels and trends of health loss due to diseases, injuries, and risk factors. GBD serves as a global public good to inform evidence-based policymaking and health systems design.

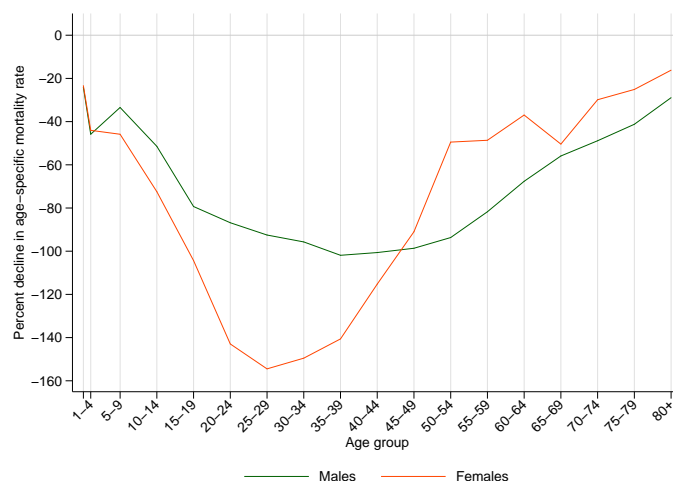
PROFILE OVERVIEW

- In terms of the number of years of life lost (YLLs) due to premature death in Zimbabwe, HIV/AIDS, lower respiratory infections, and diarrheal diseases were the highest ranking causes in 2010.
- Of the 25 most important causes of burden, as measured by disability-adjusted life years (DALYs), preterm birth complications showed the largest decrease, falling by 9% from 1990 to 2010.
- The leading risk factor in Zimbabwe is household air pollution from solid fuels.

ALL-CAUSE MORTALITY RATE

- This chart shows the increase in mortality rate at every age range as a negative percent decline. The lower points on the chart indicate that increases in mortality rates were faster in those age groups between 1990 and 2010.
- Zimbabwe experienced no reductions in mortality rate for any age group of either sex from 1990 to 2010. Females aged 25-29 years saw the largest increase in mortality rate (154%).

Percent decline in age-specific mortality rate by sex from 1990-2010 in Zimbabwe



CAUSES OF PREMATURE DEATH

Years of life lost (YLLs) quantify premature mortality by weighting younger deaths more than older deaths.

Ranks for top 25 causes of YLLs 1990-2010, Zimbabwe

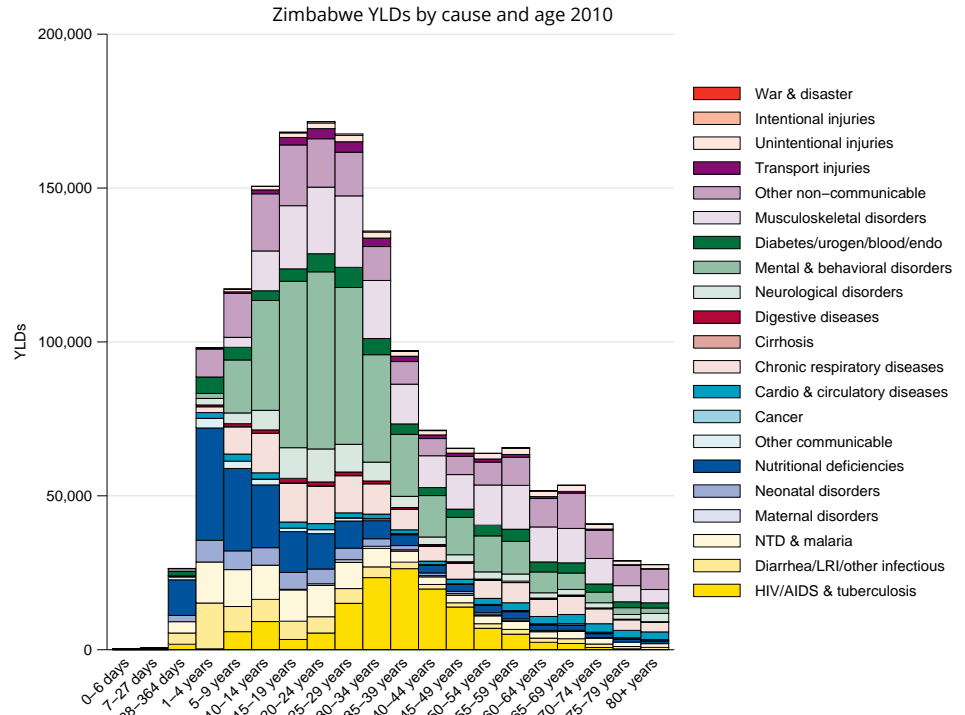
# YLLs in thousands (% of total)	Rank and disorder 1990	Rank and disorder 2010	# YLLs in thousands (% of total)	% change
868 (20.8%)	1 HIV/AIDS	1 HIV/AIDS	2,213 (29.0%)	156
541 (13.0%)	2 Lower respiratory infections	2 Lower respiratory infections	895 (11.7%)	66
281 (6.8%)	3 Diarrheal diseases	3 Diarrheal diseases	455 (6.0%)	62
259 (6.2%)	4 Preterm birth complications	4 Tuberculosis	318 (4.2%)	105
154 (3.7%)	5 Tuberculosis	5 Malaria	275 (3.6%)	183
126 (3.0%)	6 Neonatal encephalopathy	6 Preterm birth complications	232 (3.0%)	-9
97 (2.3%)	7 Congenital anomalies	7 Self-harm	179 (2.3%)	172
98 (2.4%)	8 Malaria	8 Road injury	189 (2.5%)	145
91 (2.2%)	9 Protein-energy malnutrition	9 Stroke	153 (2.0%)	121
80 (1.9%)	10 Road injury	10 Protein-energy malnutrition	148 (1.9%)	61
75 (1.8%)	11 Meningitis	11 Neonatal encephalopathy	130 (1.7%)	4
83 (2.0%)	12 Measles	12 Congenital anomalies	114 (1.5%)	15
69 (1.7%)	13 Stroke	13 Interpersonal violence	110 (1.4%)	128
69 (1.6%)	14 Self-harm	14 Meningitis	98 (1.3%)	32
45 (1.1%)	15 Maternal disorders	15 Maternal disorders	91 (1.2%)	98
45 (1.1%)	16 Drowning	16 Neonatal sepsis	98 (1.3%)	40
46 (1.1%)	17 Interpersonal violence	17 Ischemic heart disease	80 (1.0%)	99
40 (1.0%)	18 Ischemic heart disease	18 Drowning	80 (1.0%)	76
35 (0.8%)	19 Hypertensive heart disease	19 Hypertensive heart disease	74 (1.0%)	112
45 (1.1%)	20 Typhoid fevers	20 Cirrhosis	72 (0.9%)	223
36 (0.9%)	21 Syphilis	21 Rheumatic heart disease	69 (0.9%)	155
34 (0.8%)	22 Iron-deficiency anemia	22 Diabetes	61 (0.8%)	116
45 (1.1%)	23 Neonatal sepsis	23 COPD	59 (0.8%)	179
28 (0.7%)	24 Diabetes	24 Measles	65 (0.9%)	-21
28 (0.7%)	25 Fire	25 Chronic kidney disease	56 (0.7%)	123
	26 Rheumatic heart disease	28 Fire		
	27 Chronic kidney disease	29 Typhoid fevers		
	31 Cirrhosis	30 Syphilis		
	35 COPD	31 Iron-deficiency anemia		

This chart shows the change in the top 25 causes of YLLs due to premature mortality from 1990 to 2010. Solid lines indicate a cause has moved up in rank or stayed the same. Broken lines indicate a cause has moved down in rank. The causes are color coded by blue for non-communicable diseases, green for injuries, and red for communicable, maternal, neonatal, and nutritional causes of death.

YEARS LIVED WITH DISABILITY (YLDs)

Years lived with disability (YLDs) are estimated by weighting the prevalence of different conditions based on severity. The top five leading causes of YLDs in Zimbabwe are iron-deficiency anemia, major depressive disorder, HIV/AIDS, low back pain, and chronic obstructive pulmonary disease.

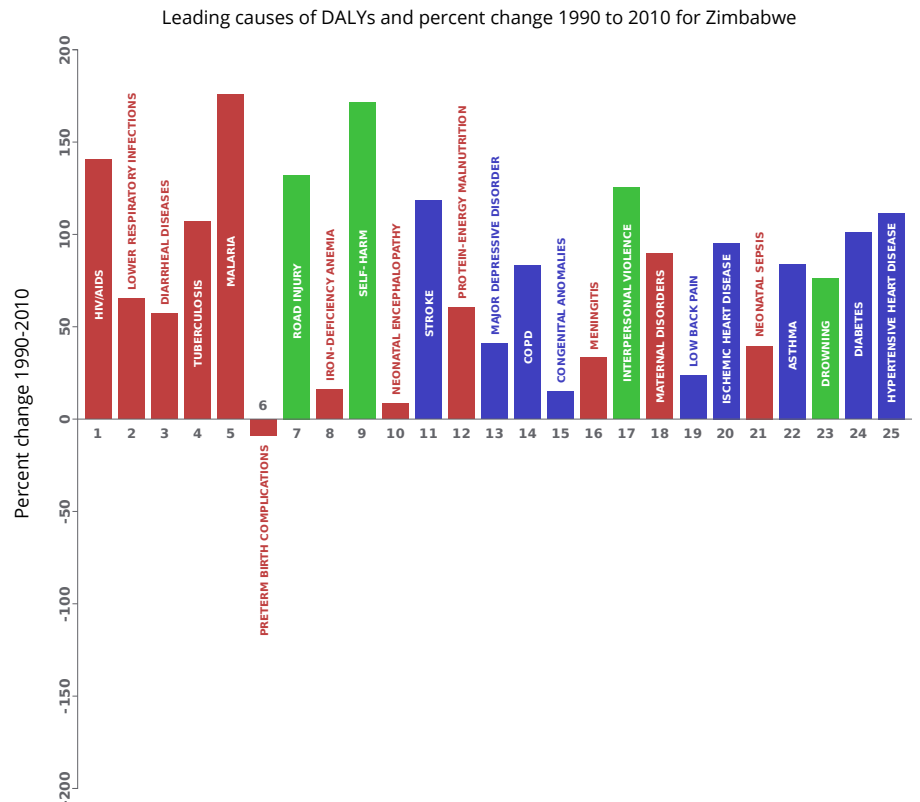
The size of the colored portion in each bar represents the number of YLDs attributable to each cause. The height of each bar shows which age groups had the most YLDs in 2010. The causes are aggregated. For example, musculoskeletal disorders include low back pain and neck pain.



DISABILITY-ADJUSTED LIFE YEARS (DALYs)

Disability-adjusted life years (DALYs) quantify both premature mortality (YLLs) and disability (YLDs) within a population. In Zimbabwe, the top three causes of DALYs in 2010 were HIV/AIDS, lower respiratory infections, and diarrheal diseases. Two causes that appeared in the 10 leading causes of DALYs in 2010 and not 1990 were road injury and self-harm.

The top 25 causes of DALYs are ranked from left to right in order of the number of DALYs they contributed in 2010. Bars going up show the percent by which DALYs have increased since 1990. Bars going down show the percent by which DALYs have decreased. Globally, non-communicable diseases and injuries are generally on the rise, while communicable, maternal, neonatal, and nutritional causes of DALYs are generally on the decline.

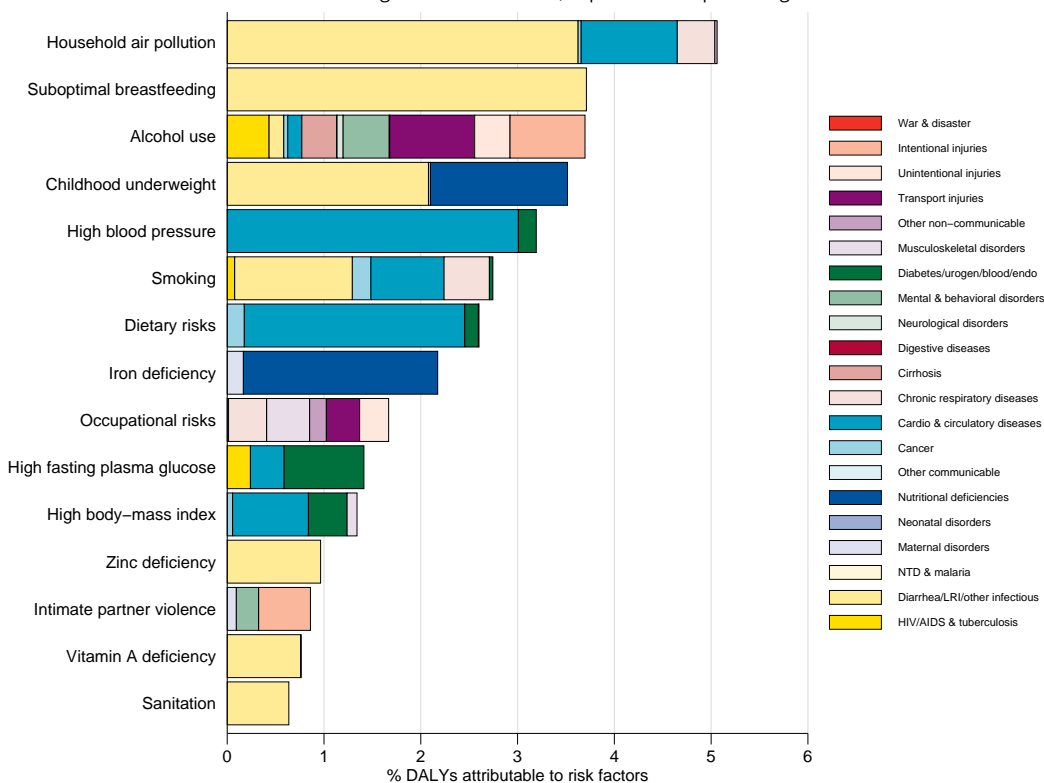


RISK FACTORS

Overall, the three risk factors that account for the most disease burden in Zimbabwe are household air pollution from solid fuels, suboptimal breastfeeding, and alcohol use. The leading risk factors for children under 5 and adults aged 15-49 years were suboptimal breastfeeding and alcohol use, respectively, in 2010.

The graph shows the top 15 risk factors for Zimbabwe. The colored portion of each bar represents the specific diseases attributable to that risk factor while bar size represents the percentage of DALYs linked to specific risk factors.

Burden of disease attributable to 15 leading risk factors in 2010, expressed as a percentage of Zimbabwe DALYs



COUNTRY BENCHMARKING OF BURDEN OF DISEASE

Understanding the relative performance of Zimbabwe against other comparator countries provides key insight into public health successes and areas where Zimbabwe might be falling behind. The table identifies Zimbabwe's rank across 14 other comparator countries, selected and ordered by income per capita, for five metrics of interest, with 1 indicating the best rank and 15 indicating the worst rank.

- Age-standardized rates are used to make meaningful comparisons across time by adjusting for changes in population size and age structure.
- Life expectancy incorporates mortality, and health-adjusted life expectancy further incorporates years lived in less than ideal health.
- In 2010, Zimbabwe ranked 12th for life expectancy and 14th for age-standardized YLD rate.

Age-standardized death rates, YLL rates, YLD rates, and life expectancy at birth and health-adjusted life expectancy at birth for 1990 and 2010, both sexes combined																				
Country	Age-standardized death rate (per 100,000)				Age-standardized YLL rate (per 100,000)				Age-standardized YLD rate (per 100,000)				Life expectancy at birth				Health-adjusted life expectancy at birth			
	1990		2010		1990		2010		1990		2010		1990		2010		1990		2010	
	Rate	Rank	Rate	Rank	Rate	Rank	Rate	Rank	Rate	Rank	Rate	Rank	LE	Rank	LE	Rank	HALE	Rank	HALE	Rank
Afghanistan	1,931	12	1,668	10	68,958	6	52,078	6	17,727	15	17,252	15	51.9	6	57.7	6	42.4	7	47.3	9
Madagascar	1,451	3	1,156	1	56,586	3	37,200	1	14,116	2	14,145	4	56.1	3	63.6	1	47.6	3	53.8	1
Togo	1,282	2	1,199	2	51,184	2	46,594	4	14,577	5	13,973	3	58.3	2	60.2	4	49.1	2	51	4
Mozambique	1,659	6	1,725	11	74,370	8	67,547	14	15,342	11	14,841	9	50	8	52.5	14	41.9	8	44.5	14
Sierra Leone	1,682	7	1,347	6	78,271	10	49,641	5	15,322	10	15,221	13	48.9	10	58.6	5	40.9	12	49.1	5
Ethiopia	2,152	15	1,292	4	86,420	14	43,719	2	13,713	1	12,723	1	46.7	14	60.9	2	40.2	14	52.5	2
Malawi	1,768	10	1,730	12	79,007	11	66,486	13	15,082	8	14,549	7	48.7	11	52.9	13	41	11	45	12
Central African Republic	2,131	14	2,408	15	81,026	13	90,581	15	15,696	14	15,022	10	48.3	12	46.2	15	40.8	13	39.5	15
Eritrea	1,807	11	1,353	7	67,111	5	44,346	3	15,508	13	14,614	8	52.4	5	60.6	3	44	5	51.2	3
Somalia	1,738	8	1,606	9	70,184	7	57,208	9	14,350	3	14,546	6	51.3	7	55.8	9	43.6	6	47.4	8
Niger	1,765	9	1,268	3	88,497	15	52,955	7	14,526	4	13,915	2	46.1	15	57.7	7	39	15	48.9	6
Zimbabwe	1,144	1	1,801	14	39,368	1	65,919	12	15,058	7	15,659	14	63	1	53.1	12	52.7	1	44.7	13
Liberia	1,585	5	1,333	5	75,995	9	53,808	8	15,298	9	15,200	12	49.6	9	57.2	8	41.4	9	47.7	7
Burundi	1,966	13	1,759	13	80,347	12	62,752	11	14,581	6	14,412	5	48.3	13	54	11	41.1	10	46	11
Democratic Republic of the Congo	1,568	4	1,506	8	65,799	4	59,031	10	15,361	12	15,099	11	52.9	4	55.2	10	44.3	4	46.4	10

COUNTRY BENCHMARKING OF BURDEN OF DISEASE, CONTINUED

This figure shows the rank of Zimbabwe relative to the same comparator countries for the leading causes of DALYs in 1990 (top) and 2010 (bottom).

- The columns are ordered by the absolute number of DALYs in Zimbabwe for that particular year, with greatest burden on the left.
- The numbers indicate the rank across countries for each cause in terms of age-standardized DALY rates, with 1 as the best performance and 15 as the worst.

Ranking of leading age-standardized rates of disability-adjusted life years (DALYs) relative to comparator countries in 1990																									
Country	HIV/AIDS	Lower respiratory infections	Diarrheal diseases	Preterm birth complications	Tuberculosis	Iron-deficiency anemia	Neonatal encephalopathy	Congenital anomalies	Major depressive disorder	Malaria	Protein-energy malnutrition	Road injury	Meningitis	Low back pain	COPD	Stroke	Measles	Self-harm	Maternal disorders	Interpersonal violence	Ischemic heart disease	Asthma	Drowning	Diabetes	Neck pain
Afghanistan	1	13	3	4	4	2	1	14	15	2	2	15	6	15	4	15	2	6	7	15	15	13	15	15	1
Madagascar	5	3	6	10	1	3	2	11	2	4	8	9	2	11	9	14	10	9	4	12	13	4	7	4	8
Togo	10	2	2	8	2	10	11	3	10	7	3	8	8	10	3	7	8	4	3	8	5	10	1	6	4
Mozambique	3	10	7	12	11	8	14	4	12	15	4	2	10	9	1	11	12	9	4	1	1	12	1	14	14
Sierra Leone	2	12	4	15	5	15	15	8	3	13	15	7	13	7	10	8	7	3	5	3	7	9	3	9	2
Ethiopia	7	14	8	13	13	5	6	9	1	5	6	12	12	1	13	4	15	13	13	13	4	12	6	11	13
Malawi	14	5	13	2	8	6	13	15	5	12	7	10	5	2	5	12	3	11	10	1	12	2	14	12	7
Central African Republic	11	6	11	9	15	12	5	13	14	11	13	13	14	4	15	11	6	7	11	11	14	11	10	14	9
Eritrea	4	8	12	1	12	11	4	1	13	3	9	6	7	12	11	10	14	10	15	7	10	6	8	10	10
Somalia	9	11	10	5	9	4	7	6	11	8	11	11	9	13	8	9	4	8	12	5	9	8	9	8	11
Niger	8	15	15	3	7	14	8	5	4	6	14	4	15	6	7	5	13	1	8	6	6	14	4	5	6
Zimbabwe	15	1	1	6	3	7	3	2	8	1	1	1	1	3	2	2	1	15	1	10	2	3	5	7	5
Liberia	6	7	14	14	6	9	12	10	9	9	5	5	11	8	14	3	9	2	6	9	3	15	2	2	3
Burundi	13	9	9	7	14	1	10	7	7	14	12	14	4	14	12	13	5	14	14	2	11	5	13	13	12
Democratic Republic of the Congo	12	4	5	11	10	13	9	12	6	10	10	3	3	5	6	6	12	5	2	14	8	7	11	3	15
Ranking of leading age-standardized rates of disability-adjusted life years (DALYs) relative to comparator countries in 2010																									
Country	HIV/AIDS	Lower respiratory infections	Diarrheal diseases	Tuberculosis	Malaria	Preterm birth complications	Road injury	Iron-deficiency anemia	Self-harm	Neonatal encephalopathy	Stroke	Protein-energy malnutrition	Major depressive disorder	COPD	Congenital anomalies	Meningitis	Interpersonal violence	Maternal disorders	Low back pain	Ischemic heart disease	Neonatal sepsis	Asthma	Drowning	Diabetes	Hypertensive heart disease
Afghanistan	1	8	1	3	1	12	14	1	6	1	15	1	15	12	13	4	15	10	15	15	1	12	12	15	14
Madagascar	2	1	3	1	5	6	4	5	7	2	14	5	6	8	1	1	10	4	12	13	10	7	6	1	8
Togo	10	6	7	2	9	9	6	8	4	11	5	4	3	1	10	11	6	1	9	7	14	9	2	8	5
Mozambique	13	2	4	10	15	8	12	6	13	15	1	3	4	4	2	7	9	7	13	1	13	1	14	3	2
Sierra Leone	6	5	2	5	11	15	5	15	3	13	7	13	7	3	6	13	4	6	7	8	9	2	1	14	4
Ethiopia	4	11	5	7	3	14	9	2	9	3	2	7	1	10	3	6	11	3	1	2	5	11	5	2	7
Malawi	14	9	8	6	6	1	13	4	14	12	12	6	10	6	12	3	2	13	2	12	11	4	15	10	13
Central African Republic	12	14	15	14	12	13	15	13	11	6	10	15	8	15	15	15	12	15	5	14	3	13	11	11	11
Eritrea	5	3	9	9	4	3	8	11	10	5	9	9	14	5	4	8	8	11	10	9	8	3	7	9	10
Somalia	8	12	12	12	7	4	7	9	8	7	8	12	12	7	5	10	7	14	14	6	6	8	8	7	6
Niger	3	15	14	4	8	2	2	14	1	4	4	11	2	2	7	14	1	8	6	5	12	6	3	4	1
Zimbabwe	15	13	6	11	2	7	10	10	15	8	6	2	13	13	11	2	13	2	3	3	2	14	13	13	15
Liberia	7	10	11	8	13	11	3	7	2	14	3	8	5	14	9	12	5	12	8	4	15	15	4	6	3
Burundi	11	7	10	15	14	5	11	3	12	10	13	10	11	9	8	5	3	9	11	10	7	5	9	12	12
Democratic Republic of the Congo	9	4	13	13	10	10	1	12	5	9	11	14	9	11	14	9	14	5	4	11	4	10	10	5	9
Ranking Legend	1 - 3			4 - 7				8 - 11				12 - 15													