

YLD cause classifications

18 broad cause groups: infectious and parasitic diseases; respiratory infections; maternal conditions; neonatal conditions; nutritional deficiencies; neoplasms; diabetes mellitus, and endocrine, blood, immune disorders; mental and substance use disorders; neurological conditions; sense organ diseases; cardiovascular diseases; respiratory diseases; skin diseases; musculoskeletal diseases; congenital anomalies; digestive diseases, genitourinary diseases, oral conditions, sudden infant death syndrome; unintentional injuries; and intentional injuries.

54 specific cause categories: tuberculosis, HIV/AIDS, diarrhoeal diseases, whooping cough, measles, tetanus, meningitis, encephalitis, hepatitis, malaria, intestinal nematode infections, other infectious or parasitic diseases, lower respiratory infections, upper respiratory infections and otitis media, maternal conditions, preterm birth complications, birth asphyxia and birth trauma, neonatal sepsis and infections, other neonatal conditions, protein-energy malnutrition, iron-deficiency anemia, other nutritional deficiencies, leukemia, other malignant and benign neoplasms, sickle cell disorders and traits, diabetes mellitus and other endocrine, blood and immune disorders, depressive disorders, bipolar disorder, alcohol and drug use disorders, anxiety disorders, autism and Asperger syndrome, childhood behavioral disorders, idiopathic intellectual disability, other mental disorders, migraine, other neurological conditions, uncorrected refractive errors, hearing loss, other sense organ diseases, cardiovascular diseases, asthma, other respiratory diseases, skin diseases, back and neck pain, other musculoskeletal diseases, congenital anomalies, other noncommunicable diseases, road injury, falls, drowning, other unintentional injuries, self-harm, interpersonal violence, collective violence and legal intervention.

Among the 54 specific cause categories, the 'other' categories including the following conditions:

- **Other infection and parasitic diseases:** Sexually transmitted diseases (STDs) other than HIV, diphtheria, trypanosomiasis, Chagas disease, schistosomiasis, leishmaniasis, lymphatic filariasis, onchocerciasis, cysticercosis, echinococcosis, dengue, trachoma, yellow fever, rabies, leprosy, other infectious diseases
- **Other nutritional deficiencies:** iodine deficiency, vitamin A deficiency, other nutritional deficiencies
- **Other malignant and benign neoplasms:** mouth and oropharynx cancers, esophagus cancer, stomach cancer, colon and rectum cancers, liver cancer, pancreas cancer, trachea, bronchus, lung cancers,

melanoma and other skin cancers, breast cancer, cervix uteri cancer, corpus uteri cancer, ovary cancer, prostate cancer, testicular cancer, kidney cancer, bladder cancer, brain and nervous system cancers, gallbladder and biliary cancer, larynx cancer, thyroid cancer, mesothelioma, lymphomas, multiple myeloma, other malignant neoplasms, other neoplasms.

- **Other mental disorders:** schizophrenia, eating disorders, other mental and behavioral disorders
- **Other neurological conditions:** Alzheimer disease and other dementias, Parkinson disease, epilepsy, multiple sclerosis, non-migraine headache, other neurological conditions
- **Other sense organ diseases:** glaucoma, cataracts, macular degeneration, other vision loss, other sense organ disorders
- **Other respiratory diseases:** chronic obstructive pulmonary disease, other respiratory diseases
- **Other noncommunicable diseases:** digestive diseases, genitourinary diseases, oral conditions, sudden infant death syndrome
- **Other musculoskeletal diseases:** rheumatoid arthritis, osteoarthritis, gout, other musculoskeletal disorders
- **Other unintentional injuries:** poisonings, fire, heat and hot substances, exposure to mechanical forces, natural disasters, other unintentional injuries

Appendix Table 1. YLD cause classifications

Categories used in the Global Health Estimates				Categories used in this paper	
Cause group (Level 1)	Cause name (Level 2)	Cause name (Level 3)	Cause name (Level 4)	Cause group name (18 categories)	Cause category name (54 categories)
All causes					
Communicable, maternal, perinatal and nutritional conditions				Communicable, maternal, perinatal and nutritional conditions	
	Infectious and parasitic diseases			Infectious and parasitic diseases	
		Tuberculosis			Tuberculosis
		STDs excluding HIV			Other infectious and parasitic diseases
			Syphilis		
			Chlamydia		
			Gonorrhoea		
			Trichomoniasis		
			Genital herpes		
			Other STDs		
		HIV/AIDS			HIV/AIDS
		Diarrhoeal diseases			Diarrhoeal diseases
		Childhood-cluster diseases			
			Whooping cough		Whooping cough
			Diphtheria		Other infectious and parasitic diseases
			Measles		Measles
			Tetanus		Tetanus
		Meningitis			Meningitis
		Encephalitis			Encephalitis
		Hepatitis			Hepatitis
			Acute hepatitis A		
			Acute hepatitis B		
			Acute hepatitis C		
			Acute hepatitis E		
		Parasitic and vector diseases			
			Malaria		Malaria

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Cause group (Level 1)	Cause name (Level 2)	Cause name (Level 3)	Cause name (Level 4)	Cause group name (18 categories)	Cause category name (54 categories)
			African trypanosomiasis		Other infectious and parasitic diseases
			Chagas disease		Other infectious and parasitic diseases
			Schistosomiasis		Other infectious and parasitic diseases
			Leishmaniasis		Other infectious and parasitic diseases
			Lymphatic filariasis		Other infectious and parasitic diseases
			Onchocerciasis		Other infectious and parasitic diseases
			Cysticercosis		Other infectious and parasitic diseases
			Echinococcosis		Other infectious and parasitic diseases
			Dengue		Other infectious and parasitic diseases
			Trachoma		Other infectious and parasitic diseases
			Yellow fever		Other infectious and parasitic diseases
			Rabies		Other infectious and parasitic diseases
		Intestinal nematode infections			Intestinal nematode infections
			Ascariasis		
			Trichuriasis		
			Hookworm disease		
			Food-borne trematodes		
		Leprosy			Other infectious and parasitic diseases
		Other infectious diseases			Other infectious and parasitic diseases
	Respiratory infections			Respiratory infections	
		Lower respiratory infections			Lower respiratory infections
		Upper respiratory infections			Upper respiratory infections and Otitis media
		Otitis media			Upper respiratory infections and Otitis media
	Maternal conditions			Maternal conditions	Maternal conditions
	Neonatal conditions			Neonatal conditions	
		Preterm birth complications			Preterm birth complications
		Birth asphyxia and birth trauma			Birth asphyxia and birth trauma
		Neonatal sepsis and infections			Neonatal sepsis and infections
		Other neonatal conditions			Other neonatal conditions

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Cause group (Level 1)	Cause name (Level 2)	Cause name (Level 3)	Cause name (Level 4)	Cause group name (18 categories)	Cause category name (54 categories)
	Nutritional deficiencies			Nutritional deficiencies	
		Protein-energy malnutrition			Protein-energy malnutrition
		Iodine deficiency			Other nutritional deficiencies
		Vitamin A deficiency			Other nutritional deficiencies
		Iron-deficiency anaemia			Iron-deficiency anaemia
		Other nutritional deficiencies			Other nutritional deficiencies
Noncommunicable diseases				Noncommunicable diseases	
	Malignant neoplasms			Neoplasms	
		Mouth and oropharynx cancers			Other malignant and benign neoplasms
			Lip and oral cavity		
			Nasopharynx		
			Other pharynx		
		Oesophagus cancer			Other malignant and benign neoplasms
		Stomach cancer			Other malignant and benign neoplasms
		Colon and rectum cancers			Other malignant and benign neoplasms
		Liver cancer			Other malignant and benign neoplasms
			Liver cancer secondary to hepatitis B		
			Liver cancer secondary to hepatitis C		
			Liver cancer secondary to alcohol use		
			Other liver cancer		
		Pancreas cancer			Other malignant and benign neoplasms
		Trachea, bronchus, lung cancers			Other malignant and benign neoplasms
		Melanoma and other skin cancers			Other malignant and benign neoplasms
			Malignant skin melanoma		
			Non-melanoma skin cancer		
		Breast cancer			Other malignant and benign neoplasms
		Cervix uteri cancer			Other malignant and benign neoplasms
		Corpus uteri cancer			Other malignant and benign neoplasms
		Ovary cancer			Other malignant and benign neoplasms

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Cause group (Level 1)	Cause name (Level 2)	Cause name (Level 3)	Cause name (Level 4)	Cause group name (18 categories)	Cause category name (54 categories)
		Prostate cancer			Other malignant and benign neoplasms
		Testicular cancer			Other malignant and benign neoplasms
		Kidney cancer			Other malignant and benign neoplasms
		Bladder cancer			Other malignant and benign neoplasms
		Brain and nervous system cancers			Other malignant and benign neoplasms
		Gallbladder and biliary tract cancer			Other malignant and benign neoplasms
		Larynx cancer			Other malignant and benign neoplasms
		Thyroid cancer			Other malignant and benign neoplasms
		Mesothelioma			Other malignant and benign neoplasms
		Lymphomas, multiple myeloma			Other malignant and benign neoplasms
			Hodgkin lymphoma		
			Non-Hodgkin lymphoma		
			Multiple myeloma		
		Leukaemia			Leukaemia
		Other malignant neoplasms			Other malignant and benign neoplasms
	Other neoplasms			Neoplasms	Other malignant and benign neoplasms
	Diabetes mellitus			Diabetes mellitus, endocrine, blood, immune disorders	Diabetes mellitus, endocrine, blood, immune disorders
	Endocrine, blood, immune disorders			Diabetes mellitus, endocrine, blood, immune disorders	
		Thalassaemias			Diabetes mellitus, and other endocrine, blood, immune disorders
		Sickle cell disorders and trait			Sickle cell disorders and trait
		Other haemoglobinopathies and haemolytic anaemias			Diabetes mellitus, and other endocrine, blood, immune disorders
		Other endocrine, blood and immune disorders			Diabetes mellitus, and other endocrine, blood, immune disorders
	Mental and substance use disorders			Mental and substance use disorders	
		Depressive disorders			Depressive disorders
			Major depressive disorder		
			Dysthymia		
		Bipolar disorder			Bipolar disorder

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		Schizophrenia			Other mental disorders
		Alcohol use disorders			Alcohol and drug use disorders
		Drug use disorders			Alcohol and drug use disorders
			Opioid use disorders		
			Cocaine use disorders		
			Amphetamine use disorders		
			Cannabis use disorders		
			Other drug use disorders		
		Anxiety disorders			Anxiety disorders
		Eating disorders			Other mental disorders
		Autism and Asperger syndrome			Autism and Asperger syndrome
		Childhood behavioural disorders			Childhood behavioural disorders
			Attention deficit/hyperactivity syndrome		
			Conduct disorder		
		Idiopathic intellectual disability			Idiopathic intellectual disability
		Other mental and behavioural disorders			Other mental disorders
	Neurological conditions			Neurological conditions	
		Alzheimer disease and other dementias			Other neurological conditions
		Parkinson disease			Other neurological conditions
		Epilepsy			Other neurological conditions
		Multiple sclerosis			Other neurological conditions
		Migraine			Migraine
		Non-migraine headache			Other neurological conditions
		Other neurological conditions			Other neurological conditions
	Sense organ diseases			Sense organ diseases	
		Glaucoma			Other sense organ diseases
		Cataracts			Other sense organ diseases
		Uncorrected refractive errors			Uncorrected refractive errors

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		Macular degeneration			Other sense organ diseases
		Other vision loss			Other sense organ diseases
		Other hearing loss			Hearing loss
		Other sense organ disorders			Other sense organ diseases
	Cardiovascular diseases			Cardiovascular diseases	Cardiovascular diseases
		Rheumatic heart disease			
		Hypertensive heart disease			
		Ischaemic heart disease			
		Stroke			
			Ischaemic stroke		
			Haemorrhagic stroke		
		Cardiomyopathy, myocarditis, endocarditis			
		Other circulatory diseases			
	Respiratory diseases			Respiratory diseases	
		Chronic obstructive pulmonary disease			Other respiratory diseases
		Asthma			Asthma
		Other respiratory diseases			Other respiratory diseases
	Digestive diseases			Digestive diseases, genitourinary diseases, oral conditions, SIDS	Other Noncommunicable diseases
		Peptic ulcer disease			
		Cirrhosis of the liver			
			Cirrhosis due to hepatitis B		
			Cirrhosis due to hepatitis C		
			Cirrhosis due to alcohol use		
			Other liver cirrhosis		
		Appendicitis			
		Gastritis and duodenitis			
		Paralytic ileus and intestinal obstruction			

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		Inflammatory bowel disease			
		Gallbladder and biliary diseases			
		Pancreatitis			
		Other digestive diseases			
	Genitourinary diseases			Digestive diseases, genitourinary diseases, oral conditions, AIDS	Other Noncommunicable diseases
		Kidney diseases			
			Acute glomerulonephritis		
			Chronic kidney disease due to diabetes		
			Other chronic kidney disease		
		Benign prostatic hyperplasia			
		Urolithiasis			
		Other urinary diseases			
		Infertility			
		Gynecological diseases			
	Skin diseases			Skin diseases	
	Musculoskeletal diseases			Musculoskeletal diseases	
		Rheumatoid arthritis			Other musculoskeletal diseases
		Osteoarthritis			Other musculoskeletal diseases
		Gout			Other musculoskeletal diseases
		Back and neck pain			Back and neck pain
		Other musculoskeletal disorders			Other musculoskeletal diseases
	Congenital anomalies			Congenital anomalies	Congenital anomalies
		Neural tube defects			
		Cleft lip and cleft palate			
		Down syndrome			
		Congenital heart anomalies			
		Other chromosomal anomalies			
		Other congenital anomalies			

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<i>Cause group (Level 1)</i>	<i>Cause name (Level 2)</i>	<i>Cause name (Level 3)</i>	<i>Cause name (Level 4)</i>	<i>Cause group name (18 categories)</i>	<i>Cause category name (54 categories)</i>
	Oral conditions			Digestive diseases, genitourinary diseases, oral conditions, SIDS	Other Noncommunicable diseases
		Dental caries			
		Periodontal disease			
		Edentulism			
		Other oral disorders			
	Sudden Infant Death Syndrome (SIDS)			Digestive diseases, genitourinary diseases, oral conditions, SIDS	Other Noncommunicable diseases
Injuries				Injuries	
	Unintentional injuries			Unintentional injuries	
		Road injury			Road injury
		Poisonings			Other unintentional injuries
		Falls			Falls
		Fire, heat and hot substances			Other unintentional injuries
		Drowning			Drowning
		Exposure to mechanical forces			Other unintentional injuries
		Natural disasters			Other unintentional injuries
		Other unintentional injuries			Other unintentional injuries
	Intentional injuries			Intentional injuries	
		Self-harm			Self-harm
		Interpersonal violence			Interpersonal violence
		Collective violence and legal intervention			Collective violence and legal intervention

WHO Modified Regional Classifications

WHO African Region LMICs: Algeria, Angola, Benin, Botswana, Burkina Faso, Burundi, Cabo Verde, Cameroon, Central African Republic, Chad, Comoros, Congo, Côte d'Ivoire, Democratic Republic of the Congo, Equatorial Guinea, Eritrea, Eswatini, Ethiopia, Gabon, Gambia, Ghana, Guinea, Guinea-Bissau, Kenya, Lesotho, Liberia, Madagascar, Malawi, Mali, Mauritania, Mauritius, Mozambique, Namibia, Niger, Nigeria, Rwanda, Sao Tome and Principe, Senegal, Sierra Leone, South Africa, South Sudan, Togo, Uganda, United Republic of Tanzania, Zambia, Zimbabwe

WHO American Region LMICs: Argentina, Belize, Bolivia (Plurinational State of), Brazil, Colombia, Costa Rica, Cuba, Dominican Republic, Ecuador, El Salvador, Grenada, Guatemala, Guyana, Haiti, Honduras, Jamaica, Mexico, Nicaragua, Panama, Paraguay, Peru, Saint Lucia, Saint Vincent and the Grenadines, Suriname, Venezuela (Bolivarian Republic of)

WHO Eastern Mediterranean Region LMICs: Afghanistan, Djibouti, Egypt, Iran (Islamic Republic of), Iraq, Jordan, Lebanon, Libya, Morocco, Pakistan, Somalia, Sudan, Syrian Arab Republic, Tunisia, Yemen.

WHO European Region LMICs: Albania, Armenia, Azerbaijan, Belarus, Bosnia and Herzegovina, Bulgaria, Croatia, Georgia, Kazakhstan, Kyrgyzstan, Montenegro, Republic of Moldova, Romania, Russian Federation, Serbia, Tajikistan, The former Yugoslav Republic of Macedonia, Turkey, Turkmenistan, Ukraine, Uzbekistan.

WHO Southeast Asian Region LMICs: Bangladesh, Bhutan, Democratic People's Republic of Korea, India, Indonesia, Maldives, Myanmar, Nepal, Sri Lanka, Thailand, Timor-Leste.

WHO Western Pacific Region LMICs: Cambodia, China, Fiji, Kiribati, Lao People's Democratic Republic, Malaysia, Micronesia (Federated States of), Mongolia, Papua New Guinea, Philippines, Samoa, Solomon Islands, Tonga, Vanuatu, Viet Nam.

High-income countries: Antigua and Barbuda, Australia, Austria, Bahamas, Bahrain, Barbados, Belgium, Brunei Darussalam, Canada, Chile, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Israel, Italy, Japan, Kuwait, Latvia, Lithuania, Luxembourg, Malta, Netherlands, New

Zealand, Norway, Oman, Poland, Portugal, Qatar, Republic of Korea, Saudi Arabia, Seychelles, Singapore, Slovakia, Slovenia, Spain, Sweden, Switzerland, Trinidad and Tobago, United Arab Emirates, United Kingdom, United States of America, Uruguay.

Appendix Table 2. All-cause YLD rates (per 1,000 population) 2000 and 2016, and percent decrease over time, by sex, age and modified WHO region.

Region	Age	Males			Females		
		YLD rate (UI), 2000	YLD rate (UI), 2016	% decrease (UI)	YLD rate (UI), 2000	YLD rate (UI), 2016	% decrease (UI)
African low- and middle-income countries	0-27 days	47 (34 to 63)	41 (30 to 55)	12 (-10 to 29)	47 (34 to 63)	41 (30 to 55)	13 (-9 to 30)
	28 days-11 months	66 (48 to 88)	59 (42 to 78)	10 (-14 to 29)	64 (46 to 86)	56 (41 to 76)	12 (-10 to 29)
	1-4 years	58 (41 to 80)	52 (37 to 70)	10 (-13 to 29)	55 (39 to 74)	50 (36 to 67)	10 (-16 to 29)
	5-9 years	61 (42 to 84)	55 (39 to 75)	9 (-16 to 30)	56 (39 to 76)	50 (36 to 68)	10 (-16 to 29)
	10-14 years	69 (49 to 92)	63 (46 to 83)	8 (-17 to 26)	66 (48 to 89)	60 (44 to 80)	9 (-17 to 27)
	15-19 years	79 (58 to 102)	72 (54 to 94)	8 (-13 to 25)	86 (63 to 112)	78 (58 to 102)	9 (-12 to 26)
American low- and middle-income countries	0-27 days	22 (16 to 30)	22 (16 to 28)	3 (-22 to 22)	23 (17 to 30)	23 (17 to 30)	2 (-22 to 22)
	28 days-11 months	37 (27 to 49)	34 (25 to 45)	7 (-14 to 26)	37 (27 to 48)	35 (26 to 45)	5 (-19 to 23)
	1-4 years	37 (27 to 49)	35 (25 to 47)	4 (-20 to 23)	36 (26 to 48)	35 (25 to 47)	4 (-22 to 23)
	5-9 years	39 (29 to 53)	38 (28 to 52)	4 (-22 to 24)	39 (28 to 52)	37 (27 to 49)	3 (-24 to 24)
	10-14 years	48 (35 to 63)	47 (35 to 61)	1 (-23 to 19)	51 (38 to 67)	51 (38 to 66)	0 (-23 to 19)
	15-19 years	61 (45 to 79)	60 (45 to 77)	2 (-19 to 20)	71 (53 to 92)	68 (51 to 88)	3 (-17 to 21)
Eastern Mediterranean low- and middle-income countries	0-27 days	36 (25 to 52)	31 (22 to 43)	15 (-11 to 35)	40 (29 to 54)	35 (25 to 46)	14 (-10 to 30)
	28 days-11 months	51 (35 to 72)	46 (32 to 63)	9 (-21 to 30)	51 (37 to 69)	45 (32 to 60)	12 (-12 to 30)
	1-4 years	48 (34 to 68)	47 (33 to 64)	4 (-23 to 26)	46 (32 to 64)	44 (32 to 60)	4 (-24 to 24)
	5-9 years	53 (36 to 73)	51 (35 to 71)	3 (-26 to 25)	50 (35 to 69)	47 (34 to 65)	4 (-25 to 24)
	10-14 years	60 (43 to 79)	58 (42 to 77)	4 (-20 to 23)	62 (45 to 83)	59 (43 to 78)	5 (-17 to 24)
	15-19 years	73 (55 to 94)	69 (51 to 89)	6 (-16 to 25)	85 (63 to 110)	79 (58 to 102)	7 (-13 to 25)
European low- and middle-income countries	0-27 days	25 (18 to 32)	22 (16 to 29)	10 (-12 to 28)	25 (18 to 33)	22 (16 to 30)	10 (-12 to 28)
	28 days-11 months	36 (26 to 47)	34 (25 to 45)	4 (-20 to 23)	36 (26 to 49)	33 (24 to 44)	8 (-14 to 26)
	1-4 years	37 (27 to 49)	33 (25 to 44)	9 (-15 to 26)	35 (26 to 47)	32 (24 to 43)	10 (-13 to 28)
	5-9 years	38 (28 to 51)	36 (26 to 48)	5 (-19 to 26)	39 (28 to 52)	37 (26 to 49)	5 (-19 to 25)
	10-14 years	49 (36 to 64)	46 (34 to 60)	5 (-18 to 24)	51 (37 to 68)	49 (36 to 64)	5 (-17 to 23)
	15-19 years	64 (47 to 82)	61 (45 to 80)	4 (-17 to 21)	68 (50 to 88)	66 (49 to 86)	2 (-19 to 20)
South-East Asian low- and middle-income countries	0-27 days	44 (31 to 60)	40 (29 to 55)	8 (-20 to 30)	41 (29 to 56)	38 (27 to 51)	7 (-18 to 26)
	28 days-11 months	60 (43 to 83)	55 (39 to 75)	9 (-17 to 29)	57 (40 to 77)	52 (37 to 70)	9 (-19 to 27)
	1-4 years	56 (40 to 76)	58 (42 to 78)	-3 (-34 to 19)	54 (38 to 73)	55 (39 to 74)	-2 (-29 to 20)
	5-9 years	62 (44 to 84)	57 (41 to 77)	7 (-18 to 27)	58 (41 to 78)	54 (38 to 72)	7 (-19 to 27)
	10-14 years	61 (44 to 81)	57 (42 to 76)	6 (-18 to 25)	65 (47 to 85)	62 (45 to 82)	4 (-20 to 22)
	15-19 years	68 (50 to 88)	64 (48 to 82)	6 (-17 to 23)	82 (60 to 107)	79 (58 to 102)	4 (-20 to 22)
Western Pacific low- and middle-income countries	0-27 days	14 (10 to 19)	10 (7 to 14)	29 (12 to 42)*	15 (11 to 20)	11 (8 to 15)	23 (2 to 39)*
	28 days-11 months	24 (17 to 33)	18 (13 to 24)	27 (9 to 43)*	23 (17 to 31)	18 (13 to 25)	21 (2 to 38)*
	1-4 years	27 (19 to 36)	20 (15 to 27)	24 (4 to 39)*	26 (19 to 35)	20 (15 to 27)	22 (2 to 38)*
	5-9 years	33 (23 to 43)	29 (21 to 38)	12 (-9 to 28)	32 (23 to 43)	29 (21 to 38)	9 (-15 to 26)
	10-14 years	40 (29 to 53)	38 (27 to 49)	6 (-17 to 24)	41 (30 to 54)	39 (29 to 51)	5 (-18 to 23)
	15-19 years	51 (38 to 66)	49 (36 to 63)	4 (-20 to 22)	56 (42 to 73)	54 (41 to 70)	4 (-16 to 22)
High-income countries	0-27 days	13 (9 to 17)	12 (9 to 15)	7 (-13 to 26)	13 (9 to 16)	11 (8 to 15)	9 (-11 to 27)
	28 days-11 months	21 (15 to 27)	20 (14 to 25)	7 (-15 to 25)	21 (16 to 28)	19 (14 to 26)	8 (-13 to 26)
	1-4 years	25 (18 to 34)	24 (18 to 33)	3 (-22 to 23)	24 (17 to 32)	23 (16 to 31)	3 (-24 to 24)
	5-9 years	31 (23 to 41)	30 (22 to 40)	2 (-23 to 22)	29 (21 to 38)	28 (20 to 38)	1 (-26 to 22)
	10-14 years	44 (33 to 57)	43 (32 to 57)	1 (-21 to 21)	47 (35 to 61)	47 (35 to 62)	0 (-23 to 18)
	15-19 years	63 (47 to 81)	63 (47 to 82)	0 (-22 to 19)	74 (55 to 96)	75 (56 to 97)	-1 (-23 to 17)

*significant decrease at 5% level

Appendix Table 3. Global YLD rates (per 1,000 population) due to 18 broad cause groups for males and females, by age, 2000 and 2016, and percent decrease over time. Causes are sorted by YLD rates in 2016. Causes with a YLD rate of less than 0.5 per 1,000 population are not shown.

Age	Cause	YLD rate (UI), 2000	YLD rate (UI), 2016	Rank 2016	% decrease (UI)
0-27 days, Males	Nutritional deficiencies	12 (8 to 17)	11 (7 to 17)	1	1 (-39 to 26)
	Neonatal conditions	8 (6 to 10)	7 (5 to 9)	2	13 (-8 to 30)
	Infectious and parasitic diseases	5 (3 to 6)	4 (3 to 5)	3	25 (4 to 40)*
	Congenital anomalies	3 (2 to 4)	3 (2 to 4)	4	6 (-17 to 26)
	Respiratory infections	2 (1 to 2)	1 (1 to 2)	5	11 (-23 to 38)
	Mental and substance use disorders	1 (1 to 2)	1 (1 to 2)	6	9 (-27 to 32)
	Diabetes mellitus, and endocrine, blood, immune disorders	1 (1 to 2)	1 (1 to 1)	7	17 (-12 to 40)
	Sense organ diseases	1 (1 to 1)	1 (0 to 1)	8	14 (-17 to 36)
28 days-11 months, Males	Nutritional deficiencies	19 (13 to 27)	18 (12 to 25)	1	5 (-26 to 29)
	Infectious and parasitic diseases	9 (6 to 12)	7 (5 to 10)	2	20 (-2 to 37)
	Neonatal conditions	5 (4 to 6)	5 (3 to 6)	3	2 (-16 to 17)
	Congenital anomalies	3 (2 to 4)	3 (2 to 4)	4	6 (-19 to 25)
	Diabetes mellitus, and endocrine, blood, immune disorders	3 (2 to 4)	2 (2 to 4)	5	9 (-26 to 34)
	Skin diseases	2 (1 to 3)	2 (1 to 3)	6	7 (-40 to 35)
	Respiratory infections	2 (1 to 3)	2 (1 to 3)	7	8 (-26 to 33)
	Unintentional injuries	2 (1 to 2)	1 (1 to 2)	8	20 (-4 to 39)
	Mental and substance use disorders	2 (1 to 2)	1 (1 to 2)	9	8 (-24 to 34)
	Sense organ diseases	1 (1 to 2)	1 (1 to 1)	10	13 (-18 to 33)
	Neurological conditions	1 (0 to 1)	1 (0 to 1)	11	3 (-48 to 32)
1-4 years, Males	Nutritional deficiencies	14 (10 to 20)	14 (10 to 20)	1	-1 (-34 to 24)
	Infectious and parasitic diseases	7 (5 to 9)	6 (4 to 8)	2	16 (-6 to 32)
	Skin diseases	3 (2 to 5)	3 (2 to 5)	3	4 (-30 to 32)
	Neonatal conditions	3 (2 to 4)	3 (2 to 4)	4	-8 (-29 to 10)
	Sense organ diseases	3 (2 to 4)	2 (2 to 3)	5	10 (-17 to 33)
	Respiratory infections	3 (2 to 4)	2 (1 to 4)	6	7 (-29 to 33)
	Congenital anomalies	2 (2 to 3)	2 (2 to 3)	7	3 (-21 to 24)
	Mental and substance use disorders	2 (2 to 3)	2 (1 to 3)	8	6 (-26 to 30)
	Diabetes mellitus, and endocrine, blood, immune disorders	2 (1 to 4)	2 (1 to 4)	9	6 (-92 to 50)
	Neurological conditions	1 (1 to 2)	1 (1 to 2)	10	-4 (-51 to 28)
	Unintentional injuries	1 (1 to 2)	1 (1 to 2)	11	6 (-24 to 28)
	Respiratory diseases	1 (1 to 2)	1 (1 to 2)	12	0 (-48 to 36)
	Digestive diseases, Genitourinary diseases, Oral conditions, Sudden infant death syndrome	1 (1 to 1)	1 (1 to 1)	13	6 (-25 to 31)
5-9 years, Males	Nutritional deficiencies	11 (7 to 15)	10 (6 to 15)	1	6 (-24 to 32)
	Mental and substance use disorders	8 (5 to 11)	7 (5 to 11)	2	2 (-28 to 25)
	Infectious and parasitic diseases	5 (4 to 7)	5 (3 to 6)	3	14 (-11 to 32)
	Sense organ diseases	4 (3 to 6)	4 (2 to 5)	4	7 (-25 to 31)
	Respiratory diseases	3 (2 to 4)	3 (2 to 5)	5	-5 (-48 to 29)

Age	Cause	YLD rate (UI), 2000	YLD rate (UI), 2016	Rank 2016	% decrease (UI)
5-9 years, Males	Skin diseases	3 (2 to 4)	3 (2 to 4)	6	2 (-46 to 31)
	Neonatal conditions	2 (1 to 3)	2 (2 to 3)	7	-17 (-43 to 3)
	Respiratory infections	2 (1 to 3)	2 (1 to 3)	8	4 (-34 to 33)
	Neurological conditions	2 (1 to 3)	2 (1 to 3)	9	-4 (-40 to 24)
	Diabetes mellitus, and endocrine, blood, immune disorders	2 (1 to 4)	2 (1 to 3)	10	11 (-39 to 47)
	Congenital anomalies	2 (1 to 3)	2 (1 to 3)	11	3 (-24 to 24)
	Unintentional injuries	2 (1 to 3)	2 (1 to 3)	12	3 (-22 to 24)
	Digestive diseases, Genitourinary diseases, Oral conditions, Sudden infant death syndrome	1 (1 to 2)	1 (1 to 2)	13	7 (-27 to 30)
10-14 years, Males	Mental and substance use disorders	15 (11 to 22)	15 (11 to 22)	1	0 (-33 to 23)
	Nutritional deficiencies	6 (4 to 8)	5 (3 to 8)	2	4 (-27 to 32)
	Sense organ diseases	5 (3 to 7)	4 (3 to 6)	3	6 (-27 to 29)
	Neurological conditions	4 (3 to 6)	4 (3 to 6)	4	-2 (-39 to 22)
	Infectious and parasitic diseases	4 (3 to 6)	4 (3 to 5)	5	12 (-12 to 30)
	Skin diseases	3 (2 to 5)	3 (2 to 5)	6	0 (-37 to 30)
	Unintentional injuries	3 (2 to 4)	3 (2 to 4)	7	2 (-23 to 22)
	Respiratory diseases	3 (2 to 3)	3 (2 to 4)	8	-7 (-39 to 18)
	Neonatal conditions	2 (1 to 2)	2 (2 to 3)	9	-21 (-49 to 0)*
	Congenital anomalies	2 (1 to 3)	2 (1 to 2)	10	2 (-26 to 21)
	Respiratory infections	2 (1 to 3)	2 (1 to 3)	11	4 (-36 to 33)
	Diabetes mellitus, and endocrine, blood, immune disorders	2 (1 to 2)	2 (1 to 2)	12	-3 (-49 to 31)
	Musculoskeletal diseases	1 (1 to 2)	1 (1 to 2)	13	5 (-25 to 30)
	Digestive diseases, Genitourinary diseases, Oral conditions, Sudden infant death syndrome	1 (1 to 2)	1 (1 to 1)	14	4 (-29 to 29)
15-19 years, Males	Mental and substance use disorders	23 (16 to 31)	22 (16 to 30)	1	2 (-28 to 22)
	Neurological conditions	5 (3 to 7)	5 (3 to 7)	2	0 (-35 to 27)
	Sense organ diseases	5 (3 to 7)	5 (3 to 7)	3	6 (-27 to 30)
	Skin diseases	4 (3 to 6)	4 (3 to 6)	4	-1 (-38 to 25)
	Infectious and parasitic diseases	5 (3 to 6)	4 (3 to 5)	5	13 (-8 to 29)
	Musculoskeletal diseases	4 (3 to 6)	4 (3 to 6)	6	7 (-24 to 30)
	Unintentional injuries	4 (3 to 5)	4 (3 to 5)	7	3 (-22 to 22)
	Nutritional deficiencies	3 (2 to 5)	3 (2 to 4)	8	10 (-26 to 39)
	Neonatal conditions	2 (1 to 2)	2 (2 to 3)	9	-22 (-47 to 0)
	Respiratory diseases	2 (1 to 3)	2 (1 to 3)	10	-1 (-31 to 21)
	Congenital anomalies	2 (1 to 2)	2 (1 to 2)	11	3 (-25 to 23)
	Digestive diseases, Genitourinary diseases, Oral conditions, Sudden infant death syndrome	1 (1 to 2)	2 (1 to 2)	12	-1 (-33 to 27)
	Respiratory infections	2 (1 to 2)	1 (1 to 2)	13	5 (-30 to 33)
	Diabetes mellitus, and endocrine, blood, immune disorders	1 (1 to 2)	1 (1 to 2)	14	-15 (-65 to 21)
	Cardiovascular diseases	1 (1 to 1)	1 (1 to 1)	15	-7 (-36 to 16)
	Intentional injuries	1 (1 to 1)	1 (0 to 1)	16	28 (10 to 41)*

Age	Cause	YLD rate (UI), 2000	YLD rate (UI), 2016	Rank 2016	% decrease (UI)
0-27 days, Females	Nutritional deficiencies	11 (7 to 16)	11 (7 to 16)	1	-2 (-38 to 26)
	Neonatal conditions	9 (7 to 12)	8 (6 to 10)	2	13 (-8 to 30)
	Infectious and parasitic diseases	5 (3 to 6)	4 (3 to 5)	3	24 (4 to 40)*
	Congenital anomalies	4 (3 to 5)	3 (2 to 4)	4	6 (-17 to 24)
	Respiratory infections	2 (1 to 2)	1 (1 to 2)	5	12 (-19 to 40)
	Diabetes mellitus, and endocrine, blood, immune disorders	1 (1 to 2)	1 (1 to 2)	6	9 (-25 to 33)
	Sense organ diseases	1 (1 to 1)	1 (0 to 1)	7	13 (-18 to 36)
28 days-11 months, Females	Nutritional deficiencies	18 (12 to 25)	17 (11 to 24)	1	6 (-29 to 32)
	Infectious and parasitic diseases	9 (7 to 12)	7 (5 to 10)	2	20 (-1 to 35)
	Neonatal conditions	5 (4 to 6)	5 (4 to 6)	3	3 (-15 to 18)
	Congenital anomalies	3 (2 to 4)	3 (2 to 4)	4	5 (-16 to 25)
	Diabetes mellitus, and endocrine, blood, immune disorders	3 (2 to 4)	2 (2 to 4)	5	3 (-36 to 32)
	Skin diseases	2 (1 to 3)	2 (1 to 3)	6	6 (-38 to 31)
	Respiratory infections	2 (1 to 3)	2 (1 to 3)	7	7 (-27 to 34)
	Unintentional injuries	2 (1 to 2)	1 (1 to 2)	8	17 (-7 to 37)
	Sense organ diseases	1 (1 to 2)	1 (1 to 1)	9	12 (-19 to 36)
	Mental and substance use disorders	1 (0 to 1)	1 (0 to 1)	10	9 (-34 to 37)
	Neurological conditions	1 (0 to 1)	1 (0 to 1)	11	0 (-54 to 30)
1-4 years, Females	Nutritional deficiencies	14 (9 to 19)	14 (9 to 19)	1	1 (-31 to 28)
	Infectious and parasitic diseases	7 (5 to 9)	6 (4 to 8)	2	16 (-5 to 33)
	Skin diseases	4 (2 to 6)	4 (2 to 5)	3	4 (-31 to 31)
	Neonatal conditions	3 (2 to 4)	3 (2 to 4)	4	-11 (-33 to 9)
	Congenital anomalies	3 (2 to 3)	3 (2 to 3)	5	3 (-22 to 23)
	Sense organ diseases	3 (2 to 4)	2 (2 to 3)	6	10 (-22 to 33)
	Respiratory infections	3 (2 to 4)	2 (1 to 3)	7	7 (-31 to 35)
	Diabetes mellitus, and endocrine, blood, immune disorders	2 (1 to 4)	2 (1 to 3)	8	6 (-77 to 51)
	Respiratory diseases	1 (1 to 2)	1 (1 to 2)	9	-4 (-51 to 29)
	Neurological conditions	1 (1 to 2)	1 (1 to 2)	10	-5 (-50 to 26)
	Unintentional injuries	1 (1 to 2)	1 (1 to 2)	11	6 (-24 to 27)
	Mental and substance use disorders	1 (1 to 2)	1 (1 to 2)	12	5 (-36 to 33)
	Digestive diseases, Genitourinary diseases, Oral conditions, Sudden infant death syndrome	1 (0 to 1)	1 (0 to 1)	13	12 (-19 to 34)
5-9 years, Females	Nutritional deficiencies	10 (7 to 15)	9 (6 to 13)	1	10 (-21 to 35)
	Mental and substance use disorders	5 (4 to 7)	5 (3 to 7)	2	1 (-28 to 25)
	Infectious and parasitic diseases	5 (4 to 7)	4 (3 to 6)	3	12 (-13 to 32)
	Sense organ diseases	4 (3 to 6)	4 (2 to 5)	4	7 (-25 to 32)
	Respiratory diseases	3 (2 to 5)	3 (2 to 5)	5	-8 (-49 to 26)
	Skin diseases	3 (2 to 5)	3 (2 to 5)	6	1 (-43 to 31)
	Neurological conditions	2 (1 to 3)	2 (2 to 3)	7	-3 (-40 to 23)

Age	Cause	YLD rate (UI), 2000	YLD rate (UI), 2016	Rank 2016	% decrease (UI)
5-9 years, Females	Neonatal conditions	2 (1 to 2)	2 (2 to 3)	8	-21 (-46 to 1)
	Respiratory infections	2 (1 to 3)	2 (1 to 3)	9	4 (-35 to 32)
	Congenital anomalies	2 (2 to 3)	2 (2 to 3)	10	3 (-24 to 23)
	Diabetes mellitus, and endocrine, blood, immune disorders	2 (1 to 3)	2 (1 to 3)	11	5 (-47 to 40)
	Unintentional injuries	2 (1 to 2)	2 (1 to 2)	12	3 (-22 to 23)
	Digestive diseases, Genitourinary diseases, Oral conditions, Sudden infant death syndrome	1 (1 to 2)	1 (1 to 2)	13	7 (-27 to 30)
10-14 years, Females	Mental and substance use disorders	14 (9 to 19)	14 (10 to 19)	1	-1 (-33 to 22)
	Nutritional deficiencies	8 (5 to 11)	8 (5 to 11)	2	3 (-31 to 28)
	Neurological conditions	5 (4 to 8)	6 (4 to 8)	3	-3 (-41 to 22)
	Sense organ diseases	4 (3 to 6)	4 (3 to 6)	4	5 (-27 to 28)
	Skin diseases	4 (2 to 6)	4 (3 to 6)	5	-1 (-40 to 28)
	Infectious and parasitic diseases	4 (3 to 5)	3 (2 to 5)	6	10 (-13 to 28)
	Respiratory diseases	3 (2 to 4)	3 (2 to 4)	7	-9 (-38 to 15)
	Unintentional injuries	2 (2 to 3)	2 (2 to 3)	8	2 (-22 to 22)
	Neonatal conditions	2 (1 to 2)	2 (2 to 3)	9	-22 (-49 to 1)
	Congenital anomalies	2 (1 to 3)	2 (1 to 2)	10	3 (-23 to 23)
	Musculoskeletal diseases	2 (1 to 2)	2 (1 to 2)	11	6 (-28 to 29)
	Respiratory infections	2 (1 to 3)	2 (1 to 3)	12	4 (-33 to 33)
	Diabetes mellitus, and endocrine, blood, immune disorders	1 (1 to 2)	1 (1 to 2)	13	3 (-43 to 36)
	Digestive diseases, Genitourinary diseases, Oral conditions, Sudden infant death syndrome	1 (1 to 2)	1 (1 to 2)	14	9 (-22 to 34)
15-19 years, Females	Mental and substance use disorders	22 (16 to 29)	22 (15 to 29)	1	1 (-26 to 23)
	Neurological conditions	8 (5 to 11)	8 (5 to 11)	2	0 (-34 to 25)
	Nutritional deficiencies	7 (5 to 10)	7 (5 to 10)	3	5 (-26 to 31)
	Musculoskeletal diseases	6 (4 to 8)	5 (3 to 7)	4	5 (-25 to 27)
	Skin diseases	5 (3 to 7)	5 (3 to 7)	5	-1 (-43 to 27)
	Sense organ diseases	5 (3 to 7)	5 (3 to 7)	6	6 (-25 to 30)
	Infectious and parasitic diseases	4 (3 to 6)	4 (3 to 5)	7	10 (-14 to 28)
	Digestive diseases, Genitourinary diseases, Oral conditions, Sudden infant death syndrome	4 (3 to 6)	4 (3 to 6)	8	1 (-34 to 26)
	Unintentional injuries	3 (2 to 4)	3 (2 to 4)	9	3 (-19 to 22)
	Respiratory diseases	2 (2 to 3)	2 (2 to 3)	10	-1 (-25 to 19)
	Neonatal conditions	2 (1 to 2)	2 (2 to 3)	11	-22 (-48 to 1)
	Congenital anomalies	2 (1 to 2)	2 (1 to 2)	12	3 (-23 to 23)
	Diabetes mellitus, and endocrine, blood, immune disorders	2 (1 to 2)	2 (1 to 2)	13	0 (-42 to 30)
	Respiratory infections	2 (1 to 2)	1 (1 to 2)	14	4 (-29 to 31)
	Cardiovascular diseases	1 (1 to 1)	1 (1 to 1)	15	-8 (-40 to 16)
	Intentional injuries	1 (1 to 1)	1 (0 to 1)	16	32 (11 to 50)*

*significant decrease at 5% level