

Injury: A Leading Cause of the Global Burden of Disease

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1. Introduction

Every day around the world, almost 16 000 people die from injuries. For every person that dies, several thousands more are injured, many of them with permanent sequelae of injuries. Injuries occur in all regions and countries, and affect people in all age and income groups. The magnitude of the problem however varies considerably by age, sex, region and income group. For example, in the low- and middle-income countries in the Western Pacific the leading injury-related causes of death are road traffic injuries, drowning and suicide, while in Africa they are war, interpersonal violence and traffic injuries. In the high-income countries of the Americas, the leading injury-related cause of death among people aged 15–44 years is traffic injuries, while in the low- and middle-income countries of the Americas it is interpersonal violence.

The World Health Organization has prepared this document to inform policy-makers, health officials, researchers and the general public about the magnitude

and ranking of injuries to facilitate informed decision-making. It is intended to serve as a reference document on the ranking of injuries among other leading causes of burden of disease.

An injury is a bodily lesion at the organic level resulting from acute exposure to energy (which can be mechanical, thermal, electrical, chemical or radiant) interacting with the body in amounts or rates that exceed the threshold of physiological tolerance. In some cases (e.g. in drowning, strangulation or freezing), the injury results from an insufficiency of a vital element. The time between exposure and the appearance of the injury needs to be short.¹ Injuries are often classified as unintentional and intentional. Most traffic injuries, fire-related injuries, falls, drownings and poisonings are classified as unintentional. On the other hand, homicides, suicides and war are classified as intentional.

The traditional view of injuries as “accidents” or random events has resulted in the historical neglect of this area of

¹ Baker SP, O'Neill R, Karpf RS. *The Injury Fact Book*. Lexington, MA/Toronto, Lexington Books, D.C. Health and Company, 1984.

public health. During the past few decades, public health officials have recognized injuries as preventable and have established methods of scientific study to the prevention of injuries. The public health approach to injury prevention involves four key steps. The *first step* is to determine the magnitude, scope and characteristics of the problem. The *second step* is to identify the factors that increase the risk of disease, injury or disability, and to determine which factors are potentially modifiable. The *third step* is to assess what measures can be taken to prevent the problem by using the information about causes and risk factors to design, pilot test and evaluate interventions. The *final step* is to implement the most promising interventions on a broad scale.

This publication contributes to the *first step*, the description of the magnitude of the problem. It provides the most recent estimates on the magnitude of injuries in the world.

The information provided includes both mortality and morbidity data. Mortality is a very important indicator of the magnitude of a health problem. However, it is

important to realize that for each death from injury there are many more injuries that result in hospitalization, treatment in emergency departments or by general practitioners, and treatment outside hospitals. Non-fatal outcomes must also therefore be measured to characterize the burden of injury accurately. Disability-adjusted life years (DALYs) take account of this by combining the number of years of life lost from premature death with the loss of health from disability.² This report includes a series of tables showing the 15 Leading Causes of Death and Burden of Disease (DALYs lost) for the world. Rankings for cause of death and burden of diseases are summarized by age group, sex, and income group for the world and for the different regions.

² Recognizing the need for a method of evaluating the cost-effectiveness of global health policy, a method of quantifying the cost per unit of disease burden averted was developed. The resulting DALY (Disability Adjusted Life Year) allows the comparison of disability and death on a common scale. The DALY expresses the number of years of life lost (YLLs) summed with a comparatively adjusted measure of years living with a disability (YLDs). YLD measurement adjustments are based on the severity and duration of disease, and age and sex of the individual. Characteristics such as socioeconomic status, race or level of education are not included in the YLD measurement.

2. Methods

All data used in the tables are from the WHO World Health Report 1999 database. We followed the World Health Report procedure for creating death and disability rankings. The World Health Report divides deaths and disabilities first into three broad groups: communicable diseases, maternal and, perinatal conditions and nutritional deficiencies; non-communicable conditions/diseases; and injuries. Next, deaths and disabilities within each of these groups are divided into categories. For example, injuries are divided into *unintentional* and *intentional*. Following this level of disaggregation, deaths and disabilities are further divided into subcategories. For example, unintentional injuries are subdivided into road traffic injuries, poisoning, falls, fires and drowning, while intentional injuries are sub-divided into self-inflicted injuries, interpersonal violence (homicide and violence), and war injuries (see example). The same procedure is followed for the other two broad groups of deaths and disabilities.

Example of tree structure used to develop the tables

Group X

Category Y

Subcategory Y1

Subcategory Y2

I. Communicable diseases, maternal and perinatal conditions and nutritional deficiencies

A. Infectious and parasitic diseases

1. Tuberculosis
2. STDs excluding HIV
3. HIV/AIDS
4. Diarrhoeal diseases

...

III. Injuries

A. Unintentional

1. Road traffic injuries
2. Poisoning
3. Falls
4. Fires
5. Drowning
6. Other unintentional injuries

B. Intentional

1. Self-inflicted injuries
2. Homicide and violence (interpersonal violence)
3. War injuries

Deaths and disabilities are coded based on the WHO International Classification of Diseases (see Appendix 1). The rankings are produced by ordering the subcategories. Two sets of tables were developed for this report. The first set of tables (Tables 1–18) present the global burden

of the 15 Leading Causes of Deaths and Burden of Disease for the world. The second set of tables (Tables 19–42) present the 15 Leading Causes of Death and Burden of Diseases by region and income groups. The geographical regions and income status were classified as presented in Appendix 2.

The 15 leading causes of death/burden of disease are presented in tables by geographical region and income levels, by age and sex. All injury-related groups or categories are highlighted in each table for illustration. The numbers listed below for each subcategory represent either the total number of deaths or DALYs. It is important to realize that these are a measure of magnitude and are not directly comparable to another region, sex or income group. A table describing the population is provided to allow the calculation of rates of disease or injury which may then be more accurately compared between tables (Appendix 3).

3. Results

It is estimated that 5.8 million people worldwide died from injuries in 1998, which corresponds to a rate of 97.9

per 100,000 population (appendix 4). 3.8 million (128.6 per 100,000 population) of them were males and 1.9 million (66.7 per 100,000 population) were females.

Injuries are leading causes of deaths in all age groups (Table 1). Road traffic and self-inflicted injuries are the leading causes of injury-related deaths worldwide. Five of the top ten causes of death in the world for persons aged 15–44 years are the result of injuries. Road traffic injuries, interpersonal violence, self-inflicted injuries, war injuries, drowning and injuries resulting from exposure to fire are all among the leading causes of death for persons aged 15–44 years (Table 1). The leading injury-related cause of death among youths is traffic injuries, while among persons aged 45 years and older it is self-inflicted injuries. Although falls do not appear among the leading causes of death in the world, they are the leading cause of burden of disease for children aged 5–14 years and the 14th leading cause for all age groups combined (Table 2).

Worldwide, road traffic injuries are the leading injury-related cause of death and burden of disease in males (Tables 3 and 4). For females, self-inflicted injuries are

the leading injury-related cause of death (Table 5). In high-income countries, road traffic injuries, self-inflicted injuries and interpersonal violence are the three leading causes of death among people aged 15–44 years (Table 7). Among persons 15–44 years of age in high-income countries there are twice as many suicides and three times as many traffic-related deaths as homicides. These differences are much less marked in low-and middle-income countries (Table 12).

When analysed by region the differences are also important. In most of the regions, road traffic injuries are the leading cause of injury-related deaths. However, wars are the leading injury-related cause of death in Africa (Table 19), and self-inflicted injuries are the leading injury-related cause death in China (Table 39). China and the Other Low- and Middle Income Western Pacific Countries are the only regions to count drownings among the 15 leading causes of death and burden of disease. India is the only country where fire is classified among the 15 leading causes of death.

4. Conclusion

The goal of this publication is to provide the most recent estimates on the magnitude of injuries in the world and compare the burden of injuries to other leading public health problems. Such information is the basis for informed priority-setting and decision-making. Injuries have been shown to account for a significant health burden on all populations regardless of their age, sex, income or geographical region.

Injuries are preventable non-random events. The data in this report clearly show the importance of injuries as a public health problem. The time has come to develop effective injury prevention strategies that will decrease the impact of injuries on the health of the world's population.

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Table 1. Leading Causes of Death, Both Sexes, 1998

Rank	0-4 years	5-14 years	15-44 years	45-59 years	≥60 years	All ages
1	Perinatal conditions 2 155 000	Acute lower respiratory infections 213 429	HIV/AIDS 1 629 726	Ischaemic heart disease 887 146	Ischaemic heart disease 6 239 562	Ischaemic heart disease 7 375 408
2	Acute lower respiratory infections 1 850 412	Malaria 209 109	Road traffic injuries 600 312	Cerebrovascular disease 600 854	Cerebrovascular disease 4 247 080	Cerebrovascular disease 5 106 125
3	Diarrhoeal diseases 1 814 158	Road traffic injuries 161 956	Interpersonal violence 509 844	Tuberculosis 407 737	Chronic obstructive pulmonary disease 1 974 652	Acute lower respiratory infections 3 452 178
4	Measles 887 671	Drowning 157 573	Self-inflicted injuries 508 621	Trachea/bronchus/lung cancers 305 982	Acute lower respiratory infections 1 184 698	HIV/AIDS 2 285 229
5	Malaria 793 368	Diarrhoeal diseases 133 883	Tuberculosis 427 314	Cirrhosis of the liver 264 117	Trachea/bronchus/lung cancers 889 873	Chronic obstructive pulmonary disease 2 249 252
6	Congenital abnormalities 404 849	War injuries 57 285	War injuries 372 935	HIV/AIDS 214 571	Tuberculosis 570 513	Diarrhoeal diseases 2 219 032
7	HIV/AIDS 349 885	Nephritis/nephrosis 44 640	Ischaemic heart disease 244 556	Liver cancers 205 394	Stomach cancers 561 527	Perinatal conditions 2 155 000
8	Pertussis 345 771	Congenital abnormalities 43 056	Cerebrovascular disease 195 983	Stomach cancers 205 212	Diabetes mellitus 426 964	Tuberculosis 1 498 061
9	Tetanus 302 668	Inflammatory cardiac disease 40 802	Cirrhosis of the liver 142 445	Chronic obstructive pulmonary disease 203 192	Colon/rectum cancer 424 463	Trachea/bronchus/lung cancers 1 244 407
10	Protein-energy malnutrition 214 717	HIV/AIDS 39 042	Drowning 141 922	Self-inflicted injuries 178 478	Cirrhosis of the liver 355 615	Road traffic injuries 1 170 694
11	Drowning 125 301	Fires 38 968	Fires 122 666	Road traffic injuries 172 312	Nephritis/nephrosis 307 832	Malaria 1 110 293
12	STDs excluding HIV 118 178	Cerebrovascular disease 38 349	Maternal haemorrhage 116 771	Breast cancers 132 238	Oesophagus cancers 296 550	Self-inflicted injuries 947 697
13	War injuries 103 323	Tuberculosis 38 093	Acute lower respiratory infections 115 100	Oesophagus cancers 117 352	Liver cancers 295 756	Measles 887 671
14	Road traffic injuries 82 429	Interpersonal violence 34 938	Rheumatic heart disease 104 635	Diabetes mellitus 104 855	Inflammatory cardiac disease 268 545	Stomach cancers 822 069
15	Meningitis 60 198	Leukaemia 34 503	Liver cancers 103 131	Inflammatory cardiac disease 97 511	Self-inflicted injuries 227 724	Cirrhosis of the liver 774 563

Source: World Health Report 1999 Database



Table 2. Leading Causes of Burden of Disease, Both Sexes, 1998

Rank	0-4 years	5-14 years	15-44 years	45-59 years	≥60 years	All ages
1	Perinatal conditions 80 558 861	Falls 10 956 652	Unipolar major depression 48 723 776	Ischaemic heart disease 15 184 630	Ischaemic heart disease 29 028 308	Acute lower respiratory infections 82 344 294
2	Acute lower respiratory infections 64 228 262	Road traffic injuries 8 701 689	HIV/AIDS 45 990 984	Cerebrovascular disease 10 835 472	Cerebrovascular disease 20 431 975	Perinatal conditions 80 563 550
3	Diarrhoeal diseases 61 928 529	Acute lower respiratory infections 8 393 604	Road traffic injuries 22 817 459	Chronic obstructive pulmonary disease 7 737 631	Chronic obstructive pulmonary disease 13 856 850	Diarrhoeal diseases 73 100 467
4	Malaria 28 377 796	Malaria 7 786 061	Alcohol dependence 16 399 139	Unipolar major depression 7 458 410	Dementias 5 345 048	HIV/AIDS 70 929 569
5	Measles 25 431 470	Drowning 5 913 678	Interpersonal violence 16 379 055	Osteoarthritis 7 343 566	Trachea/bronchus/lung cancers 5 059 575	Unipolar major depression 58 246 285
6	Congenital abnormalities 25 000 333	Diarrhoeal diseases 5 877 867	Self-inflicted injuries 16 258 293	Tuberculosis 6 711 389	Acute lower respiratory infections 4 862 411	Ischaemic heart disease 51 947 726
7	HIV/AIDS 18 802 590	Anaemias 5 233 961	War injuries 15 074 260	Cirrhosis of the liver 5 129 074	Cataracts 4 711 846	Cerebrovascular disease 41 626 214
8	Protein-energy malnutrition 14 143 562	Measles 4 726 253	Bipolar affective disorder 14 957 032	Trachea/bronchus/lung cancers 4 747 878	Diabetes mellitus 4 117 836	Malaria 39 267 129
9	Pertussis 11 740 117	Fires 4 354 125	Tuberculosis 14 213 396	Diabetes mellitus 3 772 964	Tuberculosis 3 749 742	Road traffic injuries 38 848 625
10	Tetanus 10 121 217	Tropical diseases 3 265 006	Psychoses 14 008 554	Cataracts 3 623 541	Stomach cancers 3 258 550	Measles 30 255 379
11	STDs excluding HIV 5 782 412	HIV/AIDS 2 957 143	Anaemias 13 668 409	Stomach cancers 3 297 807	Osteoarthritis 2 977 733	Chronic obstructive pulmonary disease 28 653 713
12	Falls 5 635 576	Intestinal nematode infections 2 826 447	STDs excluding HIV 10 835 570	Road traffic injuries 3 257 794	Colon/rectum cancers 2 461 593	Tuberculosis 28 189 217
13	Drowning 4 191 300	Asthma 2 649 491	Obsessive-compulsive disorders 9 178 795	Liver cancers 3 137 898	Cirrhosis of the liver 2 409 307	Congenital abnormalities 28 146 782
14	War injuries 3 942 734	War injuries 2 578 041	Cerebrovascular disease 8 121 363	Self-inflicted injuries 2 841 741	Unipolar major depression 2 064 100	Falls 27 020 881
15	Road traffic injuries 3 122 911	Nephritis/nephrosis 2 003 418	Falls 7 796 120	HIV/AIDS 2 694 108	Liver cancers 1 720 706	Anaemias 24 746 124

Source: World Health Report 1999 Database



Table 3. Leading Causes of Death, Males, 1998

Rank	0-4 years	5-14 years	15-44 years	45-59 years	≥60 years	All ages
1	Perinatal conditions 1 120 998	Drowning 105 746	HIV/AIDS 793 410	Ischaemic heart disease 585 911	Ischaemic heart disease 2 906 453	Ischaemic heart disease 3 658 699
2	Acute lower respiratory infections 967 919	Malaria 105 377	Road traffic injuries 481 687	Cerebrovascular disease 335 697	Cerebrovascular disease 1 851 926	Cerebrovascular disease 2 340 299
3	Diarrhoeal diseases 960 418	Road traffic injuries 102 095	Interpersonal violence 437 920	Tuberculosis 249 929	Chronic obstructive pulmonary disease 1 078 693	Acute lower respiratory infections 1 753 220
4	Measles 456 041	Acute lower respiratory infections 98 019	Self-inflicted injuries 297 230	Trachea/bronchus/lung cancers 235 558	Trachea/bronchus/lung cancers 640 198	Chronic obstructive pulmonary disease 1 239 658
5	Malaria 416 892	Diarrhoeal diseases 61 790	Tuberculosis 244 364	Cirrhosis of the liver 195 874	Acute lower respiratory infections 579 314	HIV/AIDS 1 163 808
6	Congenital abnormalities 208 297	War injuries 33 917	War injuries 227 217	Liver cancers 158 533	Tuberculosis 351 636	Diarrhoeal diseases 1 149 275
7	Pertussis 178 246	Nephritis/nephrosis 21 586	Ischaemic heart disease 166 335	HIV/AIDS 146 560	Stomach cancers 344 520	Perinatal conditions 1 120 998
8	HIV/AIDS 169 886	Interpersonal violence 21 478	Cerebrovascular disease 119 755	Stomach cancers 143 281	Cirrhosis of the liver 223 169	Trachea/bronchus/lung cancers 910 971
9	Tetanus 155 834	Self-inflicted injuries 21 307	Drowning 109 568	Chronic obstructive pulmonary disease 124 148	Prostate cancers 221 605	Tuberculosis 893 387
10	Protein-energy malnutrition 105 520	Congenital abnormalities 20 942	Cirrhosis of the liver 108 669	Road traffic injuries 124 011	Colon/rectum cancers 210 434	Road traffic injuries 854 939
11	Drowning 73 364	Cerebrovascular disease 20 606	Liver cancers 84 288	Self-inflicted injuries 114 917	Oesophagus cancers 189 945	Interpersonal violence 582 486
12	STDs excluding HIV 61 305	Leukaemia 19 910	Poisoning 60 961	Oesophagus cancer 82 969	Liver cancers 187 544	Malaria 572 411
13	War injuries 51959	Inflammatory cardiac disease 19 262	Inflammatory cardiac disease 59 791	Mouth and oropharynx cancers 68 012	Diabetes mellitus 167 727	Self-inflicted injuries 565 156
14	Road traffic injuries 49 848	HIV/AIDS 18 507	Acute lower respiratory infections 59 633	Interpersonal violence 66 555	Nephritis/nephrosis 160 083	Cirrhosis of the liver 533 724
15	Meningitis 31 274	Tuberculosis 17 989	Falls 55 627	Inflammatory cardiac disease 56 779	Mouth and oropharynx cancers 134 770	Stomach cancer 517 821

Source: World Health Report 1999 Database



Table 4. Leading Causes of Burden of Disease, Males, 1998

Rank	0-4 years	5-14 years	15-44 years	45-59 years	≥60 years	All ages
1	Perinatal conditions 41 823 595	Falls 7 532 099	HIV/AIDS 22 103 635	Ischaemic heart disease 9 946 355	Ischaemic heart disease 15 006 875	Acute lower respiratory infections 42 405 506
2	Acute lower respiratory infections 33 503 856	Road traffic injuries 5 440 118	Road traffic injuries 18 169 711	Cerebrovascular disease 5 864 526	Cerebrovascular disease 9 734 830	Perinatal conditions 41 826 464
3	Diarrhoeal diseases 32 761 139	Drowning 3 963 228	Unipolar major depression 17 344 714	Chronic obstructive pulmonary disease 4 579 920	Chronic obstructive pulmonary disease 7 923 127	Diarrhoeal diseases 38 011 849
4	Malaria 14 826 431	Malaria 3 915 755	Alcohol dependence 14 480 185	Tuberculosis 4 055 513	Trachea/bronchus/lung cancers 3 709 747	HIV/AIDS 34 985 250
5	Measles 13 103 117	Acute lower respiratory infections 3 865 169	Interpersonal violence 14 048 737	Cirrhosis of the liver 3 756 440	Acute lower respiratory infections 2 506 148	Ischaemic heart disease 30 044 444
6	Congenital abnormalities 12 737 963	Anaemias 2 786 954	War injuries 9 168 611	Trachea/bronchus/lung cancers 3 604 287	Tuberculosis 2 275 392	Road traffic injuries 28 412 521
7	HIV/AIDS 9 395 203	Diarrhoeal diseases 2 745 490	Self-inflicted injuries 8 970 010	Osteoarthritis 2 835 200	Stomach cancers 2 113 225	Cerebrovascular disease 21 566 153
8	Protein-energy malnutrition 7 091 211	Measles 2 366 428	Tuberculosis 8 023 828	Unipolar major depression 2 665 600	Dementias 2 108 940	Unipolar major depression 20 674 348
9	Pertussis 6 073 647	Tropical diseases 2 131 818	Bipolar affective disorder 7 629 669	Liver cancers 2 400 407	Cataracts 2 091 595	Malaria 20 187 610
10	Tetanus 5 308 209	Asthma 1 581 869	Psychoses 7 380 240	Road traffic injuries 2 305 289	Diabetes mellitus 1 710 260	Interpersonal violence 17 151 072
11	STDs excluding HIV 2 959 647	Fires 1 540 036	Anaemias 5 545 460	Stomach cancers 2 266 614	Cirrhosis of the liver 1 547 707	Falls 17 073 927
12	Falls 2 823 695	HIV/AIDS 1 449 383	Falls 5 407 850	Diabetes mellitus 1 825 667	Colon/rectum cancers 1 279 964	Chronic obstructive pulmonary disease 16 393 270
13	Drowning 2 452 798	War injuries 1 449 368	Ischaemic heart disease 5 091 213	Cataracts 1 794 107	Prostate cancers 1 242 080	Alcohol dependence 16 162 286
14	War injuries 1 980 086	Intestinal nematode infections 1 447 312	Cerebrovascular disease 4 783 178	Benign prostatic hypertrophy 1 754 018	Liver cancers 1 134 939	Tuberculosis 16 137 329
15	Road traffic injuries 1 887 677	Nephritis/nephrosis 977 273	Drug dependence 4 555 664	Self-inflicted injuries 1 752 846	Oesophagus cancers 1 123 024	Measles 15 526 243

Source: World Health Report 1999 Database



Table 5. Leading Causes of Death, Females, 1998

Rank	0-4 years	5-14 years	15-44 years	45-59 years	≥60 years	All ages
1	Perinatal conditions 1 034 002	Acute lower respiratory infections 115 411	HIV/AIDS 836 316	Ischaemic heart disease 301 235	Ischaemic heart disease 3 333 109	Ischaemic heart disease 3 716 709
2	Acute lower respiratory infections 882 493	Malaria 103 732	Self-inflicted injuries 211 391	Cerebrovascular disease 265 157	Cerebrovascular disease 2 395 154	Cerebrovascular disease 2 765 827
3	Diarrhoeal diseases 853 740	Diarrhoeal diseases 72 092	Tuberculosis 182 950	Tuberculosis 157 808	Chronic obstructive pulmonary disease 895 959	Acute lower respiratory infections 1 698 957
4	Measles 431 630	Road traffic injuries 59 861	War injuries 145 717	Breast cancers 132 238	Acute lower respiratory infections 605 384	HIV/AIDS 1 121 421
5	Malaria 376 476	Drowning 51 828	Road traffic injuries 118 624	Cervix cancers 90 046	Diabetes mellitus 259 237	Diarrhoeal diseases 1 069 757
6	Congenital abnormalities 196 552	Fires 24 965	Maternal haemorrhage 116 771	Chronic obstructive pulmonary disease 79 044	Trachea/bronchus/lung cancers 249 675	Perinatal conditions 1 034 002
7	HIV/AIDS 179 998	War injuries 23 368	Ischaemic heart disease 78 221	Trachea/bronchus/lung cancers 70 425	Breast cancers 222 931	Chronic obstructive pulmonary disease 1 009 594
8	Pertussis 167 525	Nephritis/nephrosis 23 054	Fires 77 309	Cirrhosis of the liver 68 243	Tuberculosis 218 876	Tuberculosis 604 674
9	Tetanus 146 834	Congenital abnormalities 22 113	Cerebrovascular disease 76 228	HIV/AIDS 68 011	Stomach cancers 217 007	Malaria 537 882
10	Protein-energy malnutrition 109 197	Inflammatory cardiac disease 21 540	Interpersonal violence 71 924	Self-inflicted injuries 63 561	Colon/rectum cancers 214 028	Measles 431 630
11	STDs excluding HIV 56 872	HIV/AIDS 20 535	Maternal sepsis 70 561	Stomach cancers 61 931	Nephritis/nephrosis 147 749	Breast cancers 411 668
12	Drowning 51 937	Tuberculosis 20 104	Abortion 63 317	Rheumatic heart disease 54 889	Inflammatory cardiac disease 147 213	Self-inflicted injuries 382 541
13	War injuries 51 363	Tetanus 18 021	Hypertensive disorders of pregnancy 58 870	Diabetes mellitus 52 085	Cirrhosis of the liver 132 446	Diabetes mellitus 343 021
14	Road traffic injuries 32 581	Cerebrovascular disease 17 743	Breast cancers 56 165	Road traffic injuries 48 301	Dementias 114 217	Trachea/bronchus/lung cancers 333 436
15	Meningitis 28 925	Leukaemia 14 593	Acute lower respiratory infections 55 467	Liver cancers 46 861	Cervix cancers 111 623	Road traffic injuries 315 755

Source: World Health Report 1999 Database



Table 6. Leading Causes of Burden of Disease, Females, 1998

Rank	0-4 years	5-14 years	15-44 years	45-59 years	≥60 years	All ages
1	Perinatal conditions 38 735 266	Acute lower respiratory infections 4 528 435	Unipolar major depression 31 379 061	Ischaemic heart disease 5 238 275	Ischaemic heart disease 14 021 433	Acute lower respiratory infections 39 938 788
2	Acute lower respiratory infections 30 724 407	Malaria 3 870 306	HIV/AIDS 23 887 349	Cerebrovascular disease 4 970 947	Cerebrovascular disease 10 697 144	Perinatal conditions 38 737 086
3	Diarrhoeal diseases 29 167 391	Childhood diseases 3 778 869	Anaemias 8 122 949	Unipolar major depression 4 792 809	Chronic obstructive pulmonary disease 5 933 723	Unipolar major depression 37 571 938
4	Malaria 13 551 365	Falls 3 424 553	STDs excluding HIV 8 100 921	Osteoarthritis 4 508 366	Dementias 3 236 109	HIV/AIDS 35 944 319
5	Measles 12 328 353	Road traffic injuries 3 261 570	Bipolar affective disorder 7 327 363	Chronic obstructive pulmonary disease 3 157 710	Cataracts 2 620 251	Diarrhoeal diseases 35 088 618
6	Congenital abnormalities 12 262 371	Diarrhoeal diseases 3 132 377	Self-inflicted injuries 7 288 284	Tuberculosis 2 655 876	Diabetes mellitus 2 407 576	Ischaemic heart disease 21 903 282
7	HIV/AIDS 9 407 387	Fires 2 814 089	Obstructed labour 6 994 148	Breast cancers 2 213 579	Acute lower respiratory infections 2 356 263	Cerebrovascular disease 20 060 061
8	Protein-energy malnutrition 7 052 352	Anaemias 2 447 008	Psychoses 6 628 315	Diabetes mellitus 1 947 297	Osteoarthritis 1 904 842	Malaria 19 079 519
9	Pertussis 5 666 470	Drowning 1 950 449	Tuberculosis 6 189 568	Cataracts 1 829 434	Tuberculosis 1 474 351	Measles 14 729 136
10	Tetanus 4 913 008	HIV/AIDS 1 507 760	War injuries 5 905 650	Cervix cancers 1 463 839	Unipolar major depression 1 400 067	Congenital abnormalities 13 844 496
11	STDs excluding HIV 2 822 765	Intestinal nematode infections 1 379 134	Maternal sepsis 5 874 005	Cirrhosis of the liver 1 372 634	Trachea/bronchus/lung cancers 1 349 828	Anaemias 13 680 229
12	Falls 2 811 881	Tropical diseases 1 133 188	Abortion 5 419 923	Anaemias 1 306 013	Breast cancers 1 311 539	Chronic obstructive pulmonary disease 12 260 443
13	War injuries 1 962 647	War injuries 1 128 673	Obsessive-compulsive disorders 5 148 746	Glaucoma 1 242 426	Colon/rectum cancers 1 181 628	Tuberculosis 12 051 889
14	Drowning 1 738 503	Asthma 1 067 622	Road traffic injuries 4 647 748	Trachea/bronchus/lung cancers 1 143 591	Stomach cancers 1 145 325	STDs excluding HIV 11 227 229
15	Meningitis 1 393 103	Nephritis/nephrosis 1 026 146	Maternal haemorrhage 3 683 957	Self-inflicted injuries 1 088 895	Cirrhosis of the liver 861 600	Road traffic injuries 10 436 103

Source: World Health Report 1999 Database



Table 7. Leading Causes of Death, High-Income Countries, Both Sexes, 1998

Rank	0-4 years	5-14 years	15-44 years	45-59 years	≥60 years	All ages
1	Perinatal conditions 53 198	Road traffic injuries 5 313	Road traffic injuries 76 249	Ischaemic heart disease 140 620	Ischaemic heart disease 1 719 015	Ischaemic heart disease 1 883 763
2	Congenital abnormalities 25 459	Congenital abnormalities 1 491	Self-inflicted injuries 54 517	Trachea/bronchus/lung cancers 67 308	Cerebrovascular disease 835 735	Cerebrovascular disease 893 182
3	Acute lower respiratory infections 5 744	Leukaemia 1 470	Interpersonal violence 26 196	Cerebrovascular disease 43 867	Trachea/bronchus/lung cancers 346 568	Trachea/bronchus/lung cancers 422 347
4	Measles 5 342	Drowning 1 159	Ischaemic heart disease 24 128	Breast cancers 40 126	Acute lower respiratory infections 286 658	Acute lower respiratory infections 306 187
5	Diarrhoeal diseases 4 192	Interpersonal violence 926	HIV/AIDS 23 462	Cirrhosis of the liver 38 948	Chronic obstructive pulmonary disease 264 968	Chronic obstructive pulmonary disease 280 168
6	Pertussis 3 475	Acute lower respiratory infections 821	Cirrhosis of the liver 13 285	Self-inflicted injuries 31 851	Colon/rectum cancers 207 234	Colon/rectum cancers 242 996
7	Road traffic injuries 2 328	Nutritional/endocrine disorders 775	Cerebrovascular disease 12 680	Colon/rectum cancers 30 481	Diabetes mellitus 143 018	Diabetes mellitus 161 069
8	Nutritional/endocrine disorders 1 853	Self-inflicted injuries 702	Breast cancers 12 137	Road traffic injuries 22 105	Stomach cancers 118 001	Breast cancers 160 139
9	Drowning 1 512	Fires 666	Trachea/bronchus/lung cancers 8 433	Stomach cancers 20 447	Prostate cancers 111 173	Stomach cancers 143 310
10	Interpersonal violence 1 311	Cerebrovascular disease 407	Poisoning 7 700	Pancreas cancers 13 814	Breast cancers 107 874	Road traffic injuries 141 656
11	Meningitis 1 144	Inflammatory cardiac disease 396	Leukaemia 6 753	Chronic obstructive pulmonary disease 13 759	Dementias 97 966	Self-inflicted injuries 129 935
12	Fires 1 048	Lymphoma 337	Lymphoma 6 286	Diabetes mellitus 13 716	Pancreas cancers 83 422	Cirrhosis of the liver 121 816
13	Dementias 959	War injuries 301	Inflammatory cardiac disease 5 963	Lymphoma 13 412	Nephritis/nephrosis 81 798	Prostate cancers 114 807
14	Inflammatory cardiac disease 851	Dementias 297	Colon/rectum cancers 5 267	Mouth and oropharynx cancers 12 840	Lymphoma 70 824	Dementias 104 719
15	Tetanus 741	Falls 272	Falls 5 218	Oesophagus cancers 10 735	Cirrhosis of the liver 69 489	Pancreas cancers 99 126

Source: World Health Report 1999 Database



Table 8. Leading Causes of Burden of Disease, High-Income Countries, Both Sexes, 1998

Rank	0-4 years	5-14 years	15-44 years	45-59 years	≥60 years	All ages
1	Perinatal conditions 2 012 591	Road traffic injuries 326 589	Unipolar major depression 5 268 853	Ischaemic heart disease 2 310 508	Ischaemic heart disease 6 584 017	Ischaemic heart disease 9 500 891
2	Congenital abnormalities 1 704 944	Asthma 202 047	Alcohol dependence 3 979 194	Osteoarthritis 1 711 056	Cerebrovascular disease 3 467 017	Unipolar major depression 7 029 403
3	Acute lower respiratory infections 199 970	Dental caries 141 063	Road traffic injuries 3 460 708	Unipolar major depression 1 297 615	Dementias 2 278 483	Cerebrovascular disease 5 219 417
4	Diarrhoeal diseases 197 796	Falls 131 177	Psychoses 2 224 976	Cerebrovascular disease 1 067 696	Trachea/bronchus/lung cancers 1 856 794	Alcohol dependence 4 739 492
5	Nutritional/endocrine disorders 178 868	Obsessive-compulsive disorders 123 431	Self-inflicted injuries 1 667 323	Trachea/bronchus/lung cancers 1 059 043	Chronic obstructive pulmonary disease 1 704 296	Road traffic injuries 4 555 512
6	Pertussis 131 874	Drug dependence 115 840	Bipolar affective disorder 1 546 074	Diabetes mellitus 992 079	Diabetes mellitus 1 440 767	Diabetes mellitus 3 131 487
7	Measles 112 274	Anaemias 109 008	Drug dependence 1 367 377	Cirrhosis of the liver 764 577	Colon/rectum cancers 1 136 874	Trachea/bronchus/lung cancers 3 122 003
8	Protein-energy malnutrition 97 148	Nutritional/endocrine disorders 100 741	Obsessive-compulsive disorders 1 166 502	Breast cancers 689 178	Acute lower respiratory infections 855 378	Osteoarthritis 3 045 518
9	Road traffic injuries 93 461	Epilepsy 98 708	Interpersonal violence 993 068	Alcohol dependence 605 397	Osteoarthritis 636 118	Dementias 2 983 207
10	Meningitis 89 593	Otitis media 67 944	HIV/AIDS 826 178	Chronic obstructive pulmonary disease 571 630	Breast cancers 622 789	Chronic obstructive pulmonary disease 2 448 746
11	Falls 86 850	Fires 65 128	Osteoarthritis 698 344	Colon/rectum cancers 536 810	Prostate cancers 596 398	Self-inflicted injuries 2 416 102
12	Asthma 76 566	Measles 63 848	Diabetes mellitus 678 839	Dementias 522 875	Stomach cancers 590 682	Psychoses 2 280 326
13	Dementias 69 466	Leukaemia 57 331	Cerebrovascular disease 652 920	Self-inflicted injuries 501 484	Cirrhosis of the liver 485 770	Perinatal conditions 2 015 940
14	Interpersonal violence 52 349	Congenital abnormalities 55 977	Ischaemic heart disease 606 365	Road traffic injuries 459 875	Unipolar major depression 462 934	Congenital abnormalities 1 914 609
15	Drowning 50 560	Interpersonal violence 43 953	Asthma 579 165	Stomach cancers 332 915	Pancreas cancers 404 967	Colon/rectum cancers 1 817 732

Source: World Health Report 1999 Database



Table 9. Leading Causes of Death, High-Income Countries, Males, 1998

Rank	0-4 years	5-14 years	15-44 years	45-59 years	≥60 years	All ages
1	Perinatal conditions 30 746	Road traffic injuries 3 312	Road traffic injuries 59 021	Ischaemic heart disease 110 379	Ischaemic heart disease 810 499	Ischaemic heart disease 940 096
2	Congenital abnormalities 13 903	Drowning 934	Self-inflicted injuries 42 971	Trachea/bronchus/lung cancers 45 598	Cerebrovascular disease 331 813	Cerebrovascular disease 367 604
3	Acute lower respiratory infections 3 126	Leukaemia 858	Interpersonal violence 20 959	Cirrhosis of the liver 29 436	Trachea/bronchus/lung cancers 230 451	Trachea/bronchus/lung cancers 281 367
4	Measles 2 730	Congenital abnormalities 778	HIV/AIDS 19 269	Cerebrovascular disease 27 634	Chronic obstructive pulmonary disease 174 444	Chronic obstructive pulmonary disease 184 196
5	Diarrhoeal diseases 2 190	Self-inflicted injuries 522	Ischaemic heart disease 19 218	Self-inflicted injuries 22 917	Acute lower respiratory infections 137 956	Acute lower respiratory infections 150 051
6	Pertussis 1 928	Interpersonal violence 513	Cirrhosis of the liver 9 990	Colon/rectum cancers 17 800	Prostate cancers 111 173	Colon/rectum cancers 124 484
7	Road traffic injuries 1 299	Nutritional/endocrine disorders 424	Cerebrovascular disease 7 648	Road traffic injuries 15 971	Colon/rectum cancers 103 801	Prostate cancers 114 807
8	Nutritional/endocrine disorders 988	Acute lower respiratory infections 407	Poisoning 6 043	Stomach cancers 14 180	Stomach cancers 70 388	Road traffic injuries 101 280
9	Drowning 973	Fires 363	Trachea/bronchus/lung cancers 5 288	Mouth and oropharynx cancers 11 040	Diabetes mellitus 53 035	Self-inflicted injuries 94 968
10	Interpersonal violence 659	Lymphoma 239	Falls 4 437	Oesophagus cancers 9 364	Cirrhosis of the liver 43 043	Stomach cancers 87 082
11	Meningitis 656	Cerebrovascular disease 227	Inflammatory cardiac disease 4 339	Pancreas cancers 8 992	Pancreas cancers 41 654	Cirrhosis of the liver 82 516
12	Fires 576	Inflammatory cardiac disease 206	Lymphoma 4 183	Chronic obstructive pulmonary disease 8 833	Nephritis/nephrosis 38 925	Diabetes mellitus 64 030
13	Dementia 494	Falls 193	Leukaemia 4 053	Liver cancers 8 758	Bladder cancers 37 444	Pancreas cancers 51 881
14	Inflammatory cardiac disease 391	Dementia 181	Drowning 4 052	Lymphoma 8 478	Lymphoma 36 156	Lymphoma 49 113
15	Tetanus 380	War injuries 178	Alcohol dependence 2 930	Diabetes mellitus 8 253	Dementias 35 768	Nephritis/nephrosis 44 113

Source: World Health Report 1999 Database



Table 10. Leading Causes of Burden of Disease, High-Income Countries, Males, 1998

Rank	0-4 years	5-14 years	15-44 years	45-59 years	≥60 years	All ages
1	Perinatal conditions 1 143 046	Road traffic injuries 202 857	Alcohol dependence 3 368 317	Ischaemic heart disease 1 797 168	Ischaemic heart disease 3 609 681	Ischaemic heart disease 5 886 381
2	Congenital abnormalities 900 309	Asthma 122 814	Road traffic injuries 2 588 238	Trachea/bronchus/lung cancers 701 102	Cerebrovascular disease 1 574 804	Alcohol dependence 4 004 689
3	Acute lower respiratory infections 108 484	Falls 93 130	Unipolar major depression 1 864 603	Osteoarthritis 691 670	Trachea/bronchus/lung cancers 1 243 487	Road traffic injuries 3 301 629
4	Diarrhoeal diseases 102 893	Drug dependence 86 927	Self-inflicted injuries 1 279 658	Cerebrovascular disease 621 737	Chronic obstructive pulmonary disease 1 139 228	Cerebrovascular disease 2 593 720
5	Nutritional/endocrine disorders 91 612	Dental caries 72 281	Psychoses 1 163 653	Cirrhosis of the liver 571 437	Dementias 828 413	Unipolar major depression 2 466 114
6	Measles 77 691	Nutritional/endocrine disorders 56 547	Drug dependence 1 037 882	Alcohol dependence 515 608	Colon/rectum cancers 609 152	Trachea/bronchus/lung cancers 2 073 083
7	Pertussis 67 911	Anaemias 55 744	Interpersonal violence 794 963	Diabetes mellitus 502 365	Prostate cancers 596 398	Self-inflicted injuries 1 794 623
8	Road traffic injuries 52 054	Obsessive-compulsive disorders 54 466	Bipolar affective disorder 785 646	Unipolar major depression 459 669	Diabetes mellitus 595 747	Chronic obstructive pulmonary disease 1 610 281
9	Falls 51 907	Epilepsy 45 276	HIV/AIDS 664 297	Chronic obstructive pulmonary disease 358 920	Acute lower respiratory infections 443 804	Diabetes mellitus 1 465 316
10	Protein-energy malnutrition 49 746	Fires 35 350	Obsessive-compulsive disorders 510 009	Self-inflicted injuries 348 815	Stomach cancers 385 586	Psychoses 1 192 664
11	Meningitis 48 197	Drowning 35 010	Ischaemic heart disease 479 531	Road traffic injuries 325 574	Cirrhosis of the liver 311 192	Dementia 1 187 589
12	Asthma 47 401	Otitis media 34 944	Falls 415 201	Colon/rectum cancers 307 824	Bladder cancers 275 092	Osteoarthritis 1 184 233
13	Dementia 35 292	Leukaemia 33 295	Cerebrovascular disease 379 239	Dementia 261 092	Pancreas cancers 221 700	Cirrhosis of the liver 1 171 561
14	Drowning 32 516	Measles 31 073	Diabetes mellitus 358 095	Stomach cancers 226 968	Lymphoma 185 521	Drug dependence 1 170 794
15	Interpersonal violence 26 308	Congenital abnormalities 29 161	Osteoarthritis 325 068	Mouth and oropharynx cancers 181 398	Osteoarthritis 167 494	Perinatal conditions 1 145 122

Source: World Health Report 1999 Database



Table 11. Leading Causes of Death, High-Income Countries, Females, 1998

Rank	0-4 years	5-14 years	15-44 years	45-59 years	≥60 years	All ages
1	Perinatal conditions 22 452	Road traffic injuries 2 001	Road traffic injuries 17 228	Breast cancers 40 126	Ischaemic heart disease 908 516	Ischaemic heart disease 943 666
2	Congenital abnormalities 11 555	Congenital abnormalities 713	Breast cancers 12 137	Ischaemic heart disease 30 241	Cerebrovascular disease 503 922	Cerebrovascular disease 525 578
3	Acute lower respiratory infections 2 618	Leukaemia 612	Self-inflicted injuries 11 547	Trachea/bronchus/lung cancers 21 710	Acute lower respiratory infections 148 702	Breast cancers 160 139
4	Measles 2 613	Acute lower respiratory infections 415	Interpersonal violence 5 238	Cerebrovascular disease 16 232	Trachea/bronchus/lung cancers 116 117	Acute lower respiratory infections 156 137
5	Diarrhoeal diseases 2 002	Interpersonal violence 413	Cerebrovascular disease 5 032	Colon/rectum cancers 12 681	Breast cancers 107 874	Trachea/bronchus/lung cancers 140 980
6	Pertussis 1 547	Nutritional/endocrine disorders 351	Ischaemic heart disease 4 909	Ovary cancers 9 979	Colon/rectum cancers 103 433	Colon/rectum cancers 118 512
7	Road traffic injuries 1 030	Fires 303	HIV/AIDS 4 193	Cirrhosis of the liver 9 513	Chronic obstructive pulmonary disease 90 524	Diabetes mellitus 97 039
8	Nutritional/endocrine disorders 865	Drowning 225	Cirrhosis of the liver 3 295	Self-inflicted injuries 8 935	Diabetes mellitus 89 983	Chronic obstructive pulmonary disease 95 972
9	Interpersonal violence 652	Inflammatory cardiac disease 189	Trachea/bronchus/lung cancers 3 145	Stomach cancers 6 267	Dementias 62 198	Dementias 64 979
10	Drowning 539	Self-inflicted injuries 180	Cervix uteri cancers 2 767	Road traffic injuries 6 134	Stomach cancers 47 613	Stomach cancers 56 228
11	Meningitis 488	Cerebrovascular disease 180	Leukaemia 2 700	Diabetes mellitus 5 464	Nephritis/nephrosis 42 874	Pancreas cancers 47 245
12	Fires 471	War injuries 123	Colon/rectum cancers 2 395	Lymphoma 4 934	Pancreas cancers 41 768	Nephritis/nephrosis 45 995
13	Dementias 464	Dementia 116	Stomach cancers 2 345	Chronic obstructive pulmonary disease 4 925	Falls 41 372	Ovary cancers 45 296
14	Inflammatory cardiac disease 460	Diarrhoeal diseases 101	Lymphoma 2 103	Pancreas cancers 4 822	Lymphoma 34 668	Falls 43 589
15	Tetanus 360	Asthma 101	Ovary cancers 2 096	Cervix cancers 4 142	Ovary cancers 33 204	Lymphoma 41 841

Source: World Health Report 1999 Database



Table 12. Leading Causes of Burden of Disease, High-Income Countries, Females, 1998

Rank	0-4 years	5-14 years	15-44 years	45-59 years	≥60 years	All ages
1	Perinatal conditions 869 545	Road traffic injuries 123 732	Unipolar major depression 3 404 250	Osteoarthritis 1 019 386	Ischaemic heart disease 2 974 336	Unipolar major depression 4 563 288
2	Congenital abnormalities 804 635	Asthma 79 233	Psychoses 1 061 323	Unipolar major depression 837 947	Cerebrovascular disease 1 892 213	Ischaemic heart disease 3 614 510
3	Diarrhoeal diseases 94 903	Obsessive-compulsive disorders 68 965	Road traffic injuries 872 470	Breast cancers 689 178	Dementias 1 450 070	Cerebrovascular disease 2 625 697
4	Acute lower respiratory infections 91 486	Dental caries 68 782	Bipolar affective disorder 760 428	Ischaemic heart disease 513 340	Diabetes mellitus 845 020	Osteoarthritis 1 861 285
5	Nutritional/endocrine disorders 87 255	Epilepsy 53 433	Obsessive-compulsive disorders 656 493	Diabetes mellitus 489 714	Breast cancers 622 789	Dementias 1 795 618
6	Pertussis 63 963	Anaemias 53 265	Alcohol dependence 610 877	Cerebrovascular disease 445 959	Trachea/bronchus/lung cancers 613 307	Diabetes mellitus 1 666 171
7	Protein-energy malnutrition 47 402	Nutritional/endocrine disorders 44 194	Self-inflicted injuries 387 664	Trachea/bronchus/lung cancers 357 941	Chronic obstructive pulmonary disease 565 067	Breast cancers 1 642 504
8	Road traffic injuries 41 408	Falls 38 047	STDs excluding HIV 375 327	Dementias 261 783	Colon/rectum cancers 527 722	Road traffic injuries 1 253 883
9	Meningitis 41 396	Otitis media 33 000	Osteoarthritis 373 276	Colon/rectum cancers 228 987	Osteoarthritis 468 623	Psychoses 1 087 662
10	Falls 34 943	Measles 32 775	Panic disorder 359 964	Chronic obstructive pulmonary disease 212 710	Acute lower respiratory infections 411 574	Trachea/bronchus/lung cancers 1 048 920
11	Measles 34 583	Fires 29 778	Rheumatoid arthritis 330 714	Cirrhosis of the liver 193 141	Unipolar major depression 321 092	Congenital abnormalities 897 653
12	Dementias 34 175	Drug dependence 28 913	Breast cancers 330 489	Rheumatoid arthritis 187 918	Rheumatoid arthritis 227 521	Bipolar affective disorder 875 533
13	Asthma 29 165	Congenital abnormalities 26 816	Drug dependence 329 495	Nutritional/endocrine disorders 183 087	Stomach cancers 205 096	Perinatal conditions 870 817
14	Interpersonal violence 26 041	Post-traumatic stress disorder 26 757	Diabetes mellitus 320 744	Ovary cancers 163 173	Falls 204 606	Obsessive-compulsive disorders 862 138
15	Anaemias 22 855	Leukaemia 24 035	Anaemias 280 760	Self-inflicted injuries 152 669	Pancreas cancers 183 267	Chronic obstructive pulmonary disease 838 465

Source: World Health Report 1999 Database



Table 13. Leading Causes of Death, Low- and Middle-Income Countries, Both Sexes, 1998

Rank	0-4 years	5-14 years	15-44 years	45-59 years	≥60 years	All ages
1	Perinatal conditions 2 101 802	Acute lower respiratory infections 212 608	HIV/AIDS 1 606 263	Ischaemic heart disease 746 527	Ischaemic heart disease 4 520 547	Ischaemic heart disease 5 491 646
2	Acute lower respiratory infections 1 844 668	Malaria 209 109	Road traffic injuries 524 063	Cerebrovascular disease 556 987	Cerebrovascular disease 3 411 345	Cerebrovascular disease 4 212 944
3	Diarrhoeal diseases 1 809 966	Road traffic injuries 156 643	Interpersonal violence 483 647	Tuberculosis 405 265	Chronic obstructive pulmonary disease 1 709 684	Acute lower respiratory infections 3 145 990
4	Measles 882 329	Drowning 156 414	Self-inflicted injuries 454 103	Trachea/bronchus/lung cancers 238 674	Acute lower respiratory infections 898 041	HIV/AIDS 2 253 201
5	Malaria 793 368	Diarrhoeal diseases 133 682	Tuberculosis 426 104	Cirrhosis of the liver 225 169	Tuberculosis 556 458	Diarrhoeal diseases 2 211 933
6	Congenital abnormalities 379 390	War injuries 56 984	War injuries 370 497	HIV/AIDS 207 788	Trachea/bronchus/lung cancers 543 305	Perinatal conditions 2 101 802
7	HIV/AIDS 349 712	Nephritis/nephrosis 44 510	Ischaemic heart disease 220 428	Liver cancers 195 144	Stomach cancers 443 526	Chronic obstructive pulmonary disease 1 969 084
8	Pertussis 342 296	Congenital abnormalities 41 565	Cerebrovascular disease 183 303	Chronic obstructive pulmonary disease 189 433	Cirrhosis of the liver 286 127	Tuberculosis 1 480 272
9	Tetanus 301 927	Inflammatory cardiac disease 40 407	Drowning 137 297	Stomach cancers 184 764	Diabetes mellitus 283 947	Malaria 1 110 293
10	Protein-energy malnutrition 214 112	HIV/AIDS 38 876	Cirrhosis of the liver 129 160	Road traffic injuries 150 208	Liver cancers 261 315	Road traffic injuries 1 029 037
11	Drowning 123 790	Fires 38 302	Fires 119 867	Self-inflicted injuries 146 626	Oesophagus cancers 258 923	Measles 882 329
12	STDs excluding HIV 118 031	Tuberculosis 38 076	Maternal haemorrhage 116 426	Oesophagus cancers 106 617	Nephritis/nephrosis 226 034	Trachea/bronchus/lung cancers 822 060
13	War injuries 102 859	Cerebrovascular disease 37 942	Acute lower respiratory infections 110 946	Breast cancers 92 112	Colon/rectum cancers 217 229	Self-inflicted injuries 817 762
14	Road traffic injuries 80 101	Interpersonal violence 34 012	Rheumatic heart disease 103 401	Diabetes mellitus 91 139	Inflammatory cardiac disease 211 844	Interpersonal violence 698 187
15	Meningitis 59 054	Leukaemia 33 033	Liver cancers 101 928	Rheumatic heart disease 88 129	Self-inflicted injuries 184 859	Stomach cancers 678 759

Source: World Health Report 1999 Database



Table 14. Leading Causes of Burden of Disease, Low- and Middle-Income Countries, Both Sexes, 1998

Rank	0-4 years	5-14 years	15-44 years	45-59 years	≥60 years	All ages
1	Perinatal conditions 78 546 270	Falls 10 825 475	HIV/AIDS 45 164 806	Ischaemic heart disease 12 874 122	Ischaemic heart disease 22 444 291	Acute lower respiratory infections 80 989 604
2	Acute lower respiratory infections 64 028 292	Road traffic injuries 8 375 099	Unipolar major depression 43 454 923	Cerebrovascular disease 9 767 776	Cerebrovascular disease 16 964 958	Perinatal conditions 78 547 611
3	Diarrhoeal diseases 61 730 733	Acute lower respiratory infections 8 353 500	Road traffic injuries 19 356 752	Chronic obstructive pulmonary disease 7 166 000	Chronic obstructive pulmonary disease 12 152 555	Diarrhoeal diseases 72 741 883
4	Malaria 28 377 796	Malaria 7 786 061	Interpersonal violence 15 385 986	Tuberculosis 6 672 130	Cataracts 4 668 183	HIV/AIDS 69 907 361
5	Measles 25 319 196	Drowning 5 870 198	War injuries 14 973 679	Unipolar major depression 6 160 795	Acute lower respiratory infections 4 007 033	Unipolar major depression 51 216 883
6	Congenital abnormalities 23 295 389	Diarrhoeal diseases 5 850 178	Self-inflicted injuries 14 590 971	Osteoarthritis 5 632 511	Tuberculosis 3 685 651	Ischaemic heart disease 42 446 835
7	HIV/AIDS 18 770 689	Anaemias 5 124 953	Tuberculosis 14 176 191	Cirrhosis of the liver 4 364 496	Trachea/bronchus/lung cancers 3 202 781	Malaria 39 267 129
8	Protein-energy malnutrition 14 046 414	Measles 4 662 405	Bipolar affective disorder 13 410 958	Trachea/bronchus/lung cancers 3 688 835	Dementias 3 066 566	Cerebrovascular disease 36 406 797
9	Pertussis 11 608 243	Fires 4 288 997	Anaemias 13 314 272	Cataracts 3 603 490	Diabetes mellitus 2 677 069	Road traffic injuries 34 293 113
10	Tetanus 10 096 448	Tropical diseases 3 263 605	Alcohol dependence 12 419 945	Liver cancers 2 979 928	Stomach cancers 2 667 868	Measles 30 069 492
11	STDs excluding HIV 5 777 002	HIV/AIDS 2 950 670	Psychoses 11 783 578	Stomach cancers 2 964 892	Osteoarthritis 2 341 615	Tuberculosis 28 046 908
12	Falls 5 548 727	Intestinal nematode infections 2 824 878	STDs excluding HIV 10 436 157	Road traffic injuries 2 797 919	Cirrhosis of the liver 1 923 537	Congenital abnormalities 26 232 173
13	Drowning 4 140 740	War injuries 2 564 470	Obsessive-compulsive disorders 8 012 293	Diabetes mellitus 2 780 885	Unipolar major depression 1 601 165	Chronic obstructive pulmonary disease 26 204 967
14	War injuries 3 924 998	Asthma 2 447 443	Cerebrovascular disease 7 468 443	HIV/AIDS 2 551 951	Liver cancers 1 520 871	Falls 25 623 754
15	Road traffic injuries 3 029 449	Nephritis/nephrosis 1 995 774	Falls 7 224 622	Self-inflicted injuries 2 340 258	Oesophagus cancers 1 508 702	Anaemias 23 972 657

Source: World Health Report 1999 Database



Table 15. Leading Causes of Death, Low- and Middle-Income Countries, Both Sexes, 1998

Rank	0-4 years	5-14 years	15-44 years	45-59 years	≥60 years	All ages
1	Perinatal conditions 1 090 252	Malaria 105 377	HIV/AIDS 774 141	Ischaemic heart disease 475 532	Ischaemic heart disease 2 095 954	Ischaemic heart disease 2 718 603
2	Acute lower respiratory infections 964 793	Drowning 104 812	Road traffic injuries 422 667	Cerebrovascular disease 308 063	Cerebrovascular disease 1 520 113	Cerebrovascular disease 1 972 695
3	Diarrhoeal diseases 958 229	Road traffic injuries 98 783	Interpersonal violence 416 961	Tuberculosis 248 030	Chronic obstructive pulmonary disease 904 249	Acute lower respiratory infections 1 603 169
4	Measles 453 311	Acute lower respiratory infections 97 612	Self-inflicted injuries 254 259	Trachea/bronchus/lung cancers 189 959	Acute lower respiratory infections 441 358	Diarrhoeal diseases 1 145 851
5	Malaria 416 892	Diarrhoeal diseases 61 691	Tuberculosis 243 473	Cirrhosis of the liver 166 439	Trachea/bronchus/lung cancers 409 747	HIV/AIDS 1 137 247
6	Congenital abnormalities 194 394	War injuries 33 739	War injuries 225 672	Liver cancers 149 775	Tuberculosis 342 598	Perinatal conditions 1 090 252
7	Pertussis 176 318	Nephritis/nephrosis 21 528	Ischaemic heart disease 147 116	HIV/AIDS 140 578	Stomach cancers 274 132	Chronic obstructive pulmonary disease 1 055 462
8	HIV/AIDS 169 801	Interpersonal violence 20 965	Cerebrovascular disease 112 107	Stomach cancers 129 101	Cirrhosis of the liver 180 126	Tuberculosis 881 528
9	Tetanus 155 453	Self-inflicted injuries 20 785	Drowning 105 516	Chronic obstructive pulmonary disease 115 315	Liver cancers 163 347	Road traffic injuries 753 658
10	Protein-energy malnutrition 105 208	Cerebrovascular disease 20 378	Cirrhosis of the liver 98 679	Road traffic injuries 108 040	Oesophagus cancers 162 529	Trachea/bronchus/lung cancers 629 604
11	Drowning 72 391	Congenital abnormalities 20 164	Liver cancers 83 357	Self-inflicted injuries 92 000	Nephritis/nephrosis 121 159	Malaria 572 411
12	STDs excluding HIV 61 227	Inflammatory cardiac disease 19 055	Acute lower respiratory infections 56 937	Oesophagus cancers 73 605	Mouth and oropharynx cancers 116 522	Interpersonal violence 553 794
13	War injuries 51 724	Leukaemia 19 051	Inflammatory cardiac disease 55 452	Interpersonal violence 62 315	Diabetes mellitus 114 693	Self-inflicted injuries 470 188
14	Road traffic injuries 48 550	HIV/AIDS 18 415	Poisoning 54 918	Mouth and oropharynx cancers 56 972	Prostate cancers 110 432	Measles 453 311
15	Meningitis 30 617	Tuberculosis 17 979	Rheumatic heart disease 51 394	Inflammatory cardiac disease 49 643	Colon/rectum cancers 106 634	Cirrhosis of the liver 451 208

Source: World Health Report 1999 Database



Table 16. Leading Causes of Burden of Disease, Low- and Middle-Income Countries, Males, 1998

Rank	0-4 years	5-14 years	15-44 years	45-59 years	≥60 years	All ages
1	Perinatal conditions 40 680 548	Falls 7 438 969	HIV/AIDS 21 439 338	Ischaemic heart disease 8 149 187	Ischaemic heart disease 11 397 194	Acute lower respiratory infections 41 667 998
2	Acute lower respiratory infections 33 395 371	Road traffic injuries 5 237 261	Road traffic injuries 15 581 473	Cerebrovascular disease 5 242 789	Cerebrovascular disease 8 160 026	Perinatal conditions 40 681 342
3	Diarrhoeal diseases 32 658 245	Drowning 3 928 218	Unipolar major depression 15 480 111	Chronic obstructive pulmonary disease 4 221 000	Chronic obstructive pulmonary disease 6 783 899	Diarrhoeal diseases 37 828 222
4	Malaria 14 826 431	Malaria 3 915 755	Interpersonal violence 13 253 774	Tuberculosis 4 025 106	Trachea/bronchus/lung cancers 2 466 260	HIV/AIDS 34 169 282
5	Measles 13 025 426	Acute lower respiratory infections 3 845 168	Alcohol dependence 11 111 869	Cirrhosis of the liver 3 185 003	Tuberculosis 2 231 693	Road traffic injuries 25 110 892
6	Congenital abnormalities 11 837 654	Diarrhoeal diseases 2 731 450	War injuries 9 104 589	Trachea/bronchus/lung cancers 2 903 185	Cataracts 2 071 167	Ischaemic heart disease 24 158 063
7	HIV/AIDS 9 379 896	Anaemias 2 731 210	Tuberculosis 7 996 417	Liver cancers 2 266 043	Acute lower respiratory infections 2 062 344	Malaria 20 187 610
8	Protein-energy malnutrition 7 041 465	Measles 2 335 355	Self-inflicted injuries 7 690 352	Unipolar major depression 2 205 932	Stomach cancers 1 727 638	Cerebrovascular disease 18 972 433
9	Pertussis 6 005 736	Tropical diseases 2 130 996	Bipolar affective disorder 6 844 023	Osteoarthritis 2 143 530	Dementias 1 280 527	Unipolar major depression 18 208 233
10	Tetanus 5 195 494	Fires 1 504 686	Psychoses 6 216 587	Stomach cancers 2 039 646	Cirrhosis of the liver 1 236 515	Falls 16 241 953
11	STDs excluding HIV 2 956 783	Asthma 1 459 055	Anaemias 5 472 082	Road traffic injuries 1 979 715	Diabetes mellitus 1 114 513	Interpersonal violence 16 217 253
12	Falls 2 771 788	HIV/AIDS 1 446 764	Falls 4 992 649	Cataracts 1 783 005	Liver cancers 985 323	Tuberculosis 16 034 818
13	Drowning 2 420 281	Intestinal nematode infections 1 446 522	Ischaemic heart disease 4 611 682	Benign prostatic hypertrophy 1 627 868	Oesophagus cancers 963 747	Measles 15 412 257
14	War injuries 1 971 090	War injuries 1 441 746	Cerebrovascular disease 4 403 939	HIV/AIDS 1 597 494	Osteoarthritis 905 397	Chronic obstructive pulmonary disease 14 782 990
15	Road traffic injuries 1 835 623	Nephritis/nephrosis 974 434	Tropical diseases 4 099 577	Self-inflicted injuries 1 404 032	Mouth and oropharynx cancers 754 012	Congenital abnormalities 13 285 330

Source: World Health Report 1999 Database



Table 17. Leading Causes of Death, Low- and Middle-Income Countries, Females, 1998

Rank	0-4 years	5-14 years	15-44 years	45-59 years	≥60 years	All ages
1	Perinatal conditions 1 011 551	Acute lower respiratory infections 114 996	HIV/AIDS 832 122	Ischaemic heart disease 270 994	Ischaemic heart disease 2 424 593	Ischaemic heart disease 2 773 043
2	Acute lower respiratory infections 879 875	Malaria 103 732	Self-inflicted injuries 199 845	Cerebrovascular disease 248 925	Cerebrovascular disease 1 891 232	Cerebrovascular disease 2 240 249
3	Diarrhoeal diseases 851 738	Diarrhoeal diseases 71 991	Tuberculosis 182 631	Tuberculosis 157 235	Chronic obstructive pulmonary disease 805 435	Acute lower respiratory infections 1 542 821
4	Measles 429 017	Road traffic injuries 57 860	War injuries 144 825	Breast cancers 92 112	Acute lower respiratory infections 456 682	HIV/AIDS 1 115 954
5	Malaria 376 476	Drowning 51 603	Maternal haemorrhage 116 426	Cervix cancers 85 904	Tuberculosis 213 860	Diarrhoeal diseases 1 066 081
6	Congenital abnormalities 184 996	Fires 24 663	Road traffic injuries 101 396	Chronic obstructive pulmonary disease 74 119	Stomach cancers 169 394	Perinatal conditions 1 011 551
7	HIV/AIDS 179 912	War injuries 23 245	Fires 76 473	HIV/AIDS 67 210	Diabetes mellitus 169 254	Chronic obstructive pulmonary disease 913 622
8	Pertussis 165 978	Nephritis/nephrosis 22 982	Ischaemic heart disease 73 312	Cirrhosis of the liver 58 730	Trachea/bronchus/lung cancers 133 558	Tuberculosis 598 745
9	Tetanus 146 474	Congenital abnormalities 21 401	Cerebrovascular disease 71 196	Stomach cancers 55 664	Inflammatory cardiac disease 116 046	Malaria 537 882
10	Protein-energy malnutrition 108 904	Inflammatory cardiac disease 21 351	Maternal sepsis 70 348	Self-inflicted injuries 54 626	Breast cancers 115 057	Measles 429 017
11	STDs excluding HIV 56 803	HIV/AIDS 20 461	Interpersonal violence 66 686	Rheumatic heart disease 53 199	Colon/rectum cancers 110 595	Self-inflicted injuries 347 574
12	Drowning 51 398	Tuberculosis 20 097	Abortion 63 146	Trachea/bronchus/lung cancers 48 715	Cirrhosis of the liver 106 001	Road traffic injuries 275 379
13	War injuries 51 135	Tetanus 18 005	Hypertensive disorders of pregnancy 58 350	Diabetes mellitus 46 622	Nephritis/nephrosis 104 875	Breast cancers 251 529
14	Road traffic injuries 31 551	Cerebrovascular disease 17 563	Acute lower respiratory infections 54 009	Liver cancers 45 368	Cervix cancers 101 160	Stomach cancers 248 020
15	Meningitis 28 437	Leukaemia 13 982	Rheumatic heart disease 52 007	Road traffic injuries 42 168	Liver cancers 97 968	Diabetes mellitus 245 982

Source: World Health Report 1999 Database



Table 18. 15 Leading Causes of Burden of Disease, Low- and Middle-Income Countries, Females, 1998

Rank	0-4 years	5-14 years	15-44 years	45-59 years	≥60 years	All ages
1	Perinatal conditions 37 865 721	Acute lower respiratory infections 4 508 332	Unipolar major depression 27 974 811	Ischaemic heart disease 4 724 935	Ischaemic heart disease 11 047 097	Acute lower respiratory infections 39 321 606
2	Acute lower respiratory infections 30 632 921	Malaria 3 870 306	HIV/AIDS 23 725 468	Cerebrovascular disease 4 524 988	Cerebrovascular disease 8 804 932	Perinatal conditions 37 866 269
3	Diarrhoeal diseases 29 072 488	Falls 3 386 506	Anaemias 7 842 189	Unipolar major depression 3 954 863	Chronic obstructive pulmonary disease 5 368 656	HIV/AIDS 35 738 079
4	Malaria 13 551 365	Road traffic injuries 3 137 838	STDs excluding HIV 7 725 594	Osteoarthritis 3 488 980	Cataracts 2 597 016	Diarrhoeal diseases 34 913 661
5	Measles 12 293 771	Diarrhoeal diseases 3 118 729	Self-inflicted injuries 6 900 619	Chronic obstructive pulmonary disease 2 945 000	Acute lower respiratory infections 1 944 689	Unipolar major depression 33 008 650
6	Congenital abnormalities 11 457 736	Fires 2 784 312	Obstructed labour 6 743 902	Tuberculosis 2 647 024	Dementias 1 786 039	Malaria 19 079 519
7	HIV/AIDS 9 390 794	Anaemias 2 393 743	Bipolar affective disorder 6 566 935	Cataracts 1 820 485	Diabetes mellitus 1 562 556	Ischaemic heart disease 18 288 771
8	Protein-energy malnutrition 7 004 949	Measles 2 327 050	Tuberculosis 6 179 775	Breast cancers 1 524 401	Tuberculosis 1 453 958	Cerebrovascular disease 17 434 365
9	Pertussis 5 062 507	Drowning 1 941 980	War injuries 5 869 089	Diabetes mellitus 1 457 584	Osteoarthritis 1 436 219	Measles 14 657 234
10	Tetanus 4 900 955	HIV/AIDS 1 503 906	Maternal sepsis 5 824 923	Cervix cancers 1 395 846	Unipolar major depression 1 078 975	Anaemias 13 148 434
11	STDs excluding HIV 2 820 219	Intestinal nematode infections 1 378 356	Psychoses 5 566 991	Glaucoma 1 219 050	Stomach cancers 940 229	Congenital abnormalities 12 946 843
12	Falls 2 776 938	Tropical diseases 1 132 609	Abortion 5 401 781	Anaemias 1 211 286	Trachea/bronchus/lung cancers 736 521	Tuberculosis 12 012 090
13	War injuries 1 953 908	War injuries 1 122 724	Obsessive-compulsive disorders 4 492 253	Cirrhosis of the liver 1 179 494	Breast cancers 688 750	Chronic obstructive pulmonary disease 11 421 978
14	Drowning 1 720 459	Nephritis/nephrosis 1 021 340	Road traffic injuries 3 775 279	HIV/AIDS 954 456	Cirrhosis of the liver 687 022	STDs excluding HIV 10 840 414
15	Meningitis 1 351 707	Asthma 988 389	Maternal haemorrhage 3 659 138	Self-inflicted injuries 936 226	Colon/rectum cancers 653 907	Falls 9 381 801

Source: World Health Report 1999 Database



Table 19. Leading Causes of Death, African Region, Both Sexes, 1998

Rank	0-4 years	5-14 years	15-44 years	45-59 years	≥60 years	All ages
1	Malaria 744 163	Malaria 168 801	HIV/AIDS 1 250 047	HIV/AIDS 173 098	Cerebrovascular disease 312 880	HIV/AIDS 1 829 729
2	Diarrhoeal diseases 617 756	Acute lower respiratory infections 62 946	Interpersonal violence 214 416	Cerebrovascular disease 80 396	Ischaemic heart disease 198 069	Malaria 960 734
3	Acute lower respiratory infections 552 133	Diarrhoeal diseases 54 981	War injuries 192 587	Ischaemic heart disease 52 073	Acute lower respiratory infections 144 899	Acute lower respiratory infections 792 568
4	Perinatal conditions 532 461	Drowning 46 595	Tuberculosis 98 573	Tuberculosis 45 661	Chronic obstructive pulmonary disease 78 279	Diarrhoeal diseases 731 475
5	Measles 502 510	Road traffic injuries 46 198	Road traffic injuries 84 434	Liver cancers 23 022	Prostate cancers 32 662	Perinatal conditions 532 461
6	HIV/AIDS 340 283	HIV/AIDS 37 809	Malaria 44 289	Interpersonal violence 21 148	Inflammatory cardiac disease 32 656	Measles 502 510
7	Pertussis 130 468	War injuries 30 743	Maternal haemorrhage 44 117	Chronic obstructive pulmonary disease 20 420	Tuberculosis 30 222	Cerebrovascular disease 448 902
8	Tetanus 80 543	Fires 14 774	Cerebrovascular disease 40 560	War injuries 15 170	Nephritis/nephrosis 29 742	War injuries 308 425
9	Protein-energy malnutrition 69 576	Tropical diseases 14 538	Maternal sepsis 29 374	Road traffic injuries 15 013	HIV/AIDS 28 492	Ischaemic heart disease 275 092
10	War injuries 57 554	Tuberculosis 14 235	Abortion 24 671	Nephritis/nephrosis 13 858	Diarrhoeal diseases 28 212	Interpersonal violence 265 900
11	STDs excluding HIV 48 397	Nephritis/nephrosis 13 773	Diarrhoeal diseases 23 255	Cervix cancers 13 514	Liver cancers 25 583	Tuberculosis 209 293
12	Congenital abnormalities 43 436	Interpersonal violence 13 346	Acute lower respiratory infections 23 216	Inflammatory cardiac disease 11 834	Cervix cancers 20 987	Road traffic injuries 170 118
13	Fires 23 434	Cerebrovascular disease 11 076	Tropical diseases 22 793	Stomach cancers 11 643	Mouth and oropharynx cancers 19 406	Pertussis 130 468
14	Drowning 22 604	Vitamin A deficiency 8 862	Hypertensive disorders of pregnancy 22 233	Cirrhosis of the liver 10 324	Stomach cancers 18 601	Chronic obstructive pulmonary disease 110 145
15	Poisoning 22 584	Inflammatory cardiac disease 7 990	Ischaemic heart disease 21 046	Oesophagus cancers 10 246	Breast cancers 15 219	Tetanus 103 438

Source: World Health Report 1999 Database



Table 20. Leading Causes of Burden of Disease, African Region, Both Sexes, 1998

Rank	0-4 years	5-14 years	15-44 years	45-59 years	≥60 years	All ages
1	Malaria 26 611 615	Malaria 6 287 868	HIV/AIDS 34 181 137	HIV/AIDS 1 714 753	Cerebrovascular disease 1 575 582	HIV/AIDS 54 100 841
2	Diarrhoeal diseases 20 917 977	Measles 2 770 226	War injuries 7 756 289	Cerebrovascular disease 1 318 745	Ischaemic heart disease 1 049 029	Malaria 34 506 494
3	Perinatal conditions 20 032 582	HIV/AIDS 2 471 386	Interpersonal violence 6 633 732	Ischaemic heart disease 898 828	Cataracts 738 080	Diarrhoeal diseases 24 231 478
4	Acute lower respiratory infections 18 906 295	Acute lower respiratory infections 2 420 389	Unipolar major depression 4 860 480	Cataracts 861 720	Acute lower respiratory infections 653 546	Acute lower respiratory infections 22 817 647
5	HIV/AIDS 15 419 011	Road traffic injuries 2 308 694	Tuberculosis 3 179 472	Tuberculosis 737 934	Chronic obstructive pulmonary disease 521 404	Perinatal conditions 20 032 582
6	Measles 14 356 931	Diarrhoeal diseases 2 240 165	Tropical diseases 2 928 470	Tropical diseases 578 425	HIV/AIDS 314 553	Measles 17 132 438
7	Pertussis 4 277 746	Tropical diseases 1 761 306	Road traffic injuries 2 913 773	Chronic obstructive pulmonary disease 536 982	Tuberculosis 233 093	War injuries 11 740 254
8	Protein-energy malnutrition 3 948 577	Drowning 1 748 360	STDs excluding HIV 2 702 187	Unipolar major depression 535 833	Glaucoma 219 198	Interpersonal violence 7 878 238
9	Congenital abnormalities 3 558 429	Fires 1 585 023	Alcohol dependence 1 931 429	Osteoarthritis 445 915	Inflammatory cardiac disease 199 700	Road traffic injuries 6 116 559
10	Tetanus 2 693 335	War injuries 1 384 451	Maternal sepsis 1 889 801	Liver cancers 349 459	Prostate cancers 194 285	Tropical diseases 5 558 249
11	STDs excluding HIV 2 396 120	Falls 1 046 705	Obstructed labour 1 787 234	Interpersonal violence 327 790	Osteoarthritis 174 502	Unipolar major depression 5 517 539
12	War injuries 2 192 842	Anaemias 859 795	Abortion 1 735 893	War injuries 315 519	Trachoma 155 433	Tuberculosis 5 441 617
13	Fires 1 078 924	Nephritis/nephrosis 615 677	Malaria 1 553 172	Road traffic injuries 259 262	Nephritis/nephrosis 150 202	STDs excluding HIV 5 249 412
14	Poisoning 772 121	Tuberculosis 587 562	Bipolar affective disorder 1 507 042	Inflammatory cardiac disease 219 693	Liver cancers 143 449	Cerebrovascular disease 4 894 478
15	Drowning 755 996	Interpersonal violence 575 093	Cerebrovascular disease 1 450 880	Cervix cancers 218 986	Dementias 135 764	Pertussis 4 793 469

Source: World Health Report 1999 Database



Table 21. Leading Causes of Death, Region of the Americas - High-Income Countries, Both Sexes, 1998

Rank	0-4 years	5-14 years	15-44 years	45-59 years	≥60 years	All ages
1	Perinatal conditions 11 258	Road traffic injuries 2 153	Road traffic injuries 27 814	Ischaemic heart disease 46 324	Ischaemic heart disease 534 136	Ischaemic heart disease 589 338
2	Congenital abnormalities 10 636	Congenital abnormalities 590	Self-inflicted injuries 20 219	Trachea/bronchus/lung cancers 22 568	Cerebrovascular disease 261 537	Cerebrovascular disease 281 048
3	Road traffic injuries 976	Leukaemia 588	HIV/AIDS 13 473	Cerebrovascular disease 14 483	Trachea/bronchus/lung cancers 107 262	Trachea/bronchus/lung cancers 133 051
4	Acute lower respiratory infections 927	Drowning 441	Interpersonal violence 9 604	Breast cancers 13 631	Acute lower respiratory infections 90 102	Acute lower respiratory infections 95 636
5	Nutritional/endocrine disorders 769	Interpersonal violence 357	Ischaemic heart disease 8 878	Cirrhosis of the liver 13 031	Chronic obstructive pulmonary disease 83 225	Chronic obstructive pulmonary disease 88 260
6	Drowning 597	Nutritional/endocrine disorders 300	Cirrhosis of the liver 5 036	Self-inflicted injuries 10 690	Colon/rectum cancers 64 527	Colon/rectum cancers 76 836
7	Interpersonal violence 488	Fires 266	Cerebrovascular disease 4 720	Colon/rectum cancers 10 303	Diabetes mellitus 44 309	Breast cancers 51 121
8	Meningitis 453	Self-inflicted injuries 203	Breast cancers 4 635	Road traffic injuries 7 381	Stomach cancers 36 746	Diabetes mellitus 50 385
9	Fires 428	Acute lower respiratory infections 160	Trachea/bronchus/lung cancers 3 206	Stomach cancers 6 840	Prostate cancers 35 647	Road traffic injuries 49 304
10	Dementias 410	Lymphoma 129	Poisoning 2 850	Pancreas cancers 4 655	Breast cancers 32 855	Stomach cancers 45 427
11	Inflammatory cardiac disease 297	Dementias 124	Leukaemia 2 504	Chronic obstructive pulmonary disease 4 540	Dementias 30 771	Self-inflicted injuries 44 303
12	Leukaemia 249	Cerebrovascular disease 113	Lymphoma 2 352	Lymphoma 4 526	Pancreas cancers 25 879	Cirrhosis of the liver 39 147
13	Cerebrovascular disease 195	Asthma 105	Inflammatory cardiac disease 2 122	Diabetes mellitus 4 506	Nephritis/nephrosis 25 627	Prostate cancers 36 867
14	Nephritis/nephrosis 194	Falls 101	Colon/rectum cancers 2 000	Mouth and oropharynx 4 296	Lymphoma 21 977	Dementias 33 205
15	Diarrhoeal diseases 161	Inflammatory cardiac disease 95	Falls 1 933	HIV/AIDS 4 146	Cirrhosis of the liver 21 055	Pancreas cancers 31 255

Source: World Health Report 1999 Database



Table 22. 15 Leading Causes of Burden of Disease, Region of the Americas, High-Income Countries, Both Sexes, 1998

Rank	0-4 years	5-14 years	15-44 years	45-59 years	≥60 years	All ages
1	Congenital abnormalities 714 900	Road traffic injuries 132 947	Unipolar major depression 1 936 751	Ischaemic heart disease 760 587	Ischaemic heart disease 1 978 070	Ischaemic heart disease 2 954 844
2	Perinatal conditions 433 116	Asthma 82 939	Alcohol dependence 1 484 348	Osteoarthritis 578 553	Cerebrovascular disease 1 045 722	Unipolar major depression 2 511 443
3	Nutritional/endocrine disorders 74 831	Dental caries 57 934	Road traffic injuries 1 279 157	Unipolar major depression 435 425	Dementias 691 004	Alcohol dependence 1 736 134
4	Road traffic injuries 39 251	Falls 51 209	Psychoses 819 519	Trachea/bronchus/lung cancers 355 260	Trachea/bronchus/lung cancers 564 614	Road traffic injuries 1 670 374
5	Meningitis 36 589	Obsessive-compulsive disorders 50 768	Self-inflicted injuries 615 475	Cerebrovascular disease 355 163	Chronic obstructive pulmonary disease 515 558	Cerebrovascular disease 1 651 090
6	Falls 34 303	Drug dependence 48 136	Bipolar affective disorder 567 225	Diabetes mellitus 322 036	Diabetes mellitus 469 775	Osteoarthritis 1 029 558
7	Acute lower respiratory infections 32 266	Anaemias 42 098	Drug dependence 503 187	Cirrhosis of the liver 255 839	Colon/rectum cancers 345 402	Diabetes mellitus 1 017 620
8	Asthma 32 115	Nutritional/endocrine disorders 40 916	Obsessive-compulsive disorders 429 807	Breast cancers 234 155	Acute lower respiratory infections 256 543	Trachea/bronchus/lung cancers 996 145
9	Dementia 29 513	Epilepsy 40 139	Interpersonal violence 366 205	Alcohol dependence 204 494	Osteoarthritis 191 843	Dementias 940 350
10	Diarrhoeal diseases 29 216	Otitis media 27 773	Osteoarthritis 259 161	Chronic obstructive pulmonary disease 190 961	Breast cancers 187 956	Self-inflicted injuries 858 469
11	Protein-energy malnutrition 27 514	Fires 25 769	Cerebrovascular disease 239 454	Colon/rectum cancers 181 510	Prostate cancers 182 354	Psychoses 836 623
12	Drowning 19 970	Leukaemia 22 937	Diabetes mellitus 219 931	Dementias 176 986	Stomach cancers 179 397	Congenital abnormalities 790 899
13	Interpersonal violence 19 965	Congenital abnormalities 22 160	Ischaemic heart disease 216 188	Self-inflicted injuries 168 375	Cirrhosis of the liver 146 807	Chronic obstructive pulmonary disease 767 490
14	Fires 18 817	Post-traumatic stress disorder 17 843	HIV/AIDS 214 422	Road traffic injuries 153 844	Unipolar major depression 139 267	Bipolar affective disorder 639 211
15	Anaemias 18 289	Interpersonal violence 17 239	Asthma 213 550	Stomach cancers 111 405	Pancreas cancers 123 108	Colon/rectum cancers 580 242

Source: World Health Report 1999 Database



Table 23. Leading Causes of Death, Region of the Americas, Low- and Middle-Income Countries, Both Sexes, 1998

Rank	0-4 years	5-14 years	15-44 years	45-59 years	≥60 years	All ages
1	Perinatal conditions 137 645	Road traffic injuries 18 404	Interpersonal violence 106 116	Ischaemic heart disease 65 686	Ischaemic heart disease 332 224	Ischaemic heart disease 420 126
2	Diarrhoeal diseases 90 231	Drowning 7 159	Road traffic injuries 70 469	Cerebrovascular disease 49 599	Cerebrovascular disease 224 765	Cerebrovascular disease 298 122
3	Acute lower respiratory infections 68 621	Acute lower respiratory infections 5 914	HIV/AIDS 52 010	Cirrhosis of the liver 23 389	Diabetes mellitus 67 276	Acute lower respiratory infections 140 767
4	Congenital abnormalities 31 467	Interpersonal violence 4 576	Cerebrovascular disease 22 282	Diabetes mellitus 19 739	Chronic obstructive pulmonary disease 55 561	Perinatal conditions 137 645
5	Protein-energy malnutrition 21 789	Diarrhoeal diseases 3 684	Ischaemic heart disease 22 216	Road traffic injuries 17 704	Acute lower respiratory infections 46 721	Interpersonal violence 133 917
6	Pertussis 15 723	Leukaemia 3 395	Tuberculosis 22 058	Breast cancers 15 343	Trachea/bronchus/lung cancers 31 986	Road traffic injuries 125 959
7	Tetanus 12 980	Congenital abnormalities 3 196	Self-inflicted injuries 17 985	Interpersonal violence 15 096	Stomach cancers 29 455	Diarrhoeal diseases 110 694
8	STDs excluding HIV 6 574	Tuberculosis 2 500	Cirrhosis of the liver 15 779	Trachea/bronchus/lung cancers 13 753	Nephritis/nephrosis 24 636	Diabetes mellitus 95 779
9	Nutritional/endocrine disorders 6 109	War injuries 1 782	Drowning 13 934	Cervix cancers 10 759	Cirrhosis of the liver 24 015	HIV/AIDS 80 493
10	Road traffic injuries 5 508	Lymphoma 1 749	War injuries 11 941	Tuberculosis 10 745	Prostate cancers 23 621	Chronic obstructive pulmonary disease 67 702
11	Drowning 4 160	Protein-energy malnutrition 1 728	Acute lower respiratory infections 11 126	HIV/AIDS 10 072	Colon/rectum cancers 20 372	Cirrhosis of the liver 63 819
12	Meningitis 4 062	Nephritis/nephrosis 1 582	Diabetes mellitus 6 959	Stomach cancers 8 823	Breast cancers 19 702	Tuberculosis 52 735
13	War injuries 3 363	Anaemias 1 533	Breast cancers 6 616	Acute lower respiratory infections 8 385	Tuberculosis 15 636	Trachea/bronchus/lung cancers 48 336
14	HIV/AIDS 2 873	Falls 1 467	Nephritis/nephrosis 6 600	Chronic obstructive pulmonary disease 7 488	HIV/AIDS 14 760	Breast cancers 41 661
15	Chronic obstructive pulmonary disease 2 466	Intestinal nematode infections 1 450	Cervix cancers 6 435	Nephritis/nephrosis 7 165	Inflammatory cardiac disease 13 974	Nephritis/nephrosis 41 577

Source: World Health Report 1999 Database



**Table 24. Leading Causes of Burden of Disease, Region of the Americas,
Low- and Middle-Income Countries, Both Sexes, 1998**

Rank	0-4 years	5-14 years	15-44 years	45-59 years	≥60 years	All ages
1	Perinatal conditions 5 061 346	Road traffic injuries 1 055 375	Unipolar major depression 4 193 189	Osteoarthritis 1 291 947	Ischaemic heart disease 1 559 530	Perinatal conditions 5 062 687
2	Diarrhoeal diseases 3 142 287	Falls 636 933	Alcohol dependence 3 943 035	Ischaemic heart disease 1 120 217	Cerebrovascular disease 1 095 051	Unipolar major depression 4 895 545
3	Acute lower respiratory infections 2 441 582	Dental caries 481 892	Interpersonal violence 3 417 684	Cerebrovascular disease 845 585	Diabetes mellitus 632 316	Road traffic injuries 4 410 736
4	Congenital abnormalities 2 076 326	Intestinal nematode infections 387 886	Road traffic injuries 2 711 969	Diabetes mellitus 645 434	Dementias 389 894	Alcohol dependence 4 347 519
5	Protein-energy malnutrition 977 479	Diarrhoeal diseases 294 979	HIV/AIDS 1 979 270	Unipolar major depression 564 647	Cataracts 388 970	Interpersonal violence 3 986 394
6	Pertussis 593 042	Asthma 279 548	Psychoses 1 440 200	Cirrhosis of the liver 453 832	Osteoarthritis 374 321	Diarrhoeal diseases 3 774 260
7	Nutritional/endocrine disorders 511 677	Drowning 268 619	Bipolar affective disorder 1 272 144	Road traffic injuries 340 519	Chronic obstructive pulmonary disease 373 092	Ischaemic heart disease 3 393 509
8	Tetanus 434 039	Acute lower respiratory infections 259 647	Drug dependence 1 137 288	Alcohol dependence 326 454	Acute lower respiratory infections 184 967	Acute lower respiratory infections 3 354 899
9	STDs excluding HIV 265 486	Anaemias 232 585	STDs excluding HIV 938 331	Chronic obstructive pulmonary disease 288 839	Trachea/bronchus/lung cancers 175 281	Cerebrovascular disease 2 830 317
10	Falls 259 157	Interpersonal violence 213 143	Osteoarthritis 871 232	Breast cancers 255 267	Stomach cancers 164 060	Osteoarthritis 2 538 021
11	Anaemias 245 278	Epilepsy 188 340	Cerebrovascular disease 836 399	Interpersonal violence 236 285	Cirrhosis of the liver 160 689	HIV/AIDS 2 348 289
12	Meningitis 214 985	Nutritional/endocrine disorders 141 927	Obsessive-compulsive disorders 782 517	Trachea/bronchus/lung cancers 214 699	Unipolar major depression 137 709	Congenital abnormalities 2 280 285
13	Road traffic injuries 214 141	Leukaemia 130 583	Tuberculosis 745 088	Benign prostatic hypertrophy 194 867	Prostate cancers 135 958	Diabetes mellitus 1 862 139
14	HIV/AIDS 192 245	Obsessive-compulsive disorders 124 755	Ischaemic heart disease 713 762	Tuberculosis 178 827	Colon/rectum cancers 118 262	Falls 1 700 462
15	Drowning 139 149	Congenital abnormalities 119 962	Anaemias 651 300	Cervix cancers 175 371	Breast cancers 114 260	Psychoses 1 464 840



Table 25. 15 Leading Causes of Death, Eastern Mediterranean Region - High-Income Countries, Both Sexes, 1998

Rank	0-4 years	5-14 years	15-44 years	45-59 years	≥60 years	All ages
1	Diarrhoeal diseases 1 827	Acute lower respiratory infections 228	War injuries 1 204	Ischaemic heart disease 1 997	Ischaemic heart disease 4 868	Ischaemic heart disease 7 424
2	Acute lower respiratory infections 1 713	War injuries 154	Road traffic injuries 561	Cerebrovascular disease 610	Cerebrovascular disease 1 535	Acute lower respiratory infections 2 818
3	Perinatal conditions 1 397	Self-inflicted injuries 112	Ischaemic heart disease 559	Trachea/bronchus/lung cancers 380	Acute lower respiratory infections 717	Cerebrovascular disease 2 408
4	Measles 393	Road traffic injuries 104	Self-inflicted injuries 319	Cirrhosis of the liver 242	Chronic obstructive pulmonary disease 514	Diarrhoeal diseases 1 983
5	Congenital abnormalities 366	Diarrhoeal diseases 91	Interpersonal violence 260	Diabetes mellitus 227	Diabetes mellitus 310	War injuries 1 825
6	Tetanus 344	Inflammatory cardiac disease 87	Inflammatory cardiac disease 183	Inflammatory cardiac disease 203	Trachea/bronchus/lung cancers 262	Perinatal conditions 1 397
7	Protein-energy malnutrition 269	Cerebrovascular disease 71	Cerebrovascular disease 172	Chronic obstructive pulmonary disease 196	Inflammatory cardiac disease 208	Road traffic injuries 923
8	Pertussis 245	Drowning 58	Rheumatic heart disease 148	War injuries 181	Cirrhosis of the liver 183	Chronic obstructive pulmonary disease 797
9	War injuries 216	Rheumatic heart disease 47	HIV/AIDS 110	Road traffic injuries 177	Nephritis/nephrosis 151	Inflammatory cardiac disease 758
10	Interpersonal violence 84	Congenital abnormalities 45	Maternal haemorrhage 107	Self-inflicted injuries 147	Stomach cancers 110	Trachea/bronchus/lung cancers 693
11	Inflammatory cardiac disease 77	Interpersonal violence 41	Drowning 103	Stomach cancers 137	Mouth and oropharynx cancers 109	Diabetes mellitus 659
12	Vitamin A deficiency 62	Vitamin A deficiency 38	Nephritis/nephrosis 98	Nephritis/nephrosis 123	Colon/rectum cancers 96	Self-inflicted injuries 643
13	Drowning 60	Leukaemia 38	Cirrhosis of the liver 92	Acute lower respiratory infections 83	War injuries 70	Cirrhosis of the liver 536
14	STDs excluding HIV 56	Nephritis/nephrosis 34	Diabetes mellitus 81	Oesophagus cancers 79	Bladder cancers 69	Congenital abnormalities 495
15	Meningitis 45	Nutritional/endocrine disorders 31	Acute lower respiratory infections 77	Breast cancers 78	Dementias 66	Interpersonal violence 486

Source: World Health Report 1999 Database



Table 26. 15 Leading Causes of Burden of Disease, Eastern Mediterranean Region – High-Income Countries, Both Sexes, 1998

Rank	0-4 years	5-14 years	15-44 years	45-59 years	≥60 years	All ages
1	Diarrhoeal diseases 62 214	Acute lower respiratory infections 8 943	War injuries 50 233	Ischaemic heart disease 33 751	Ischaemic heart disease 25 113	Acute lower respiratory infections 75 853
2	Acute lower respiratory infections 59 643	War injuries 6 914	Unipolar major depression 45 345	Cerebrovascular disease 10 790	Cerebrovascular disease 8 088	Ischaemic heart disease 73 041
3	Perinatal conditions 51 245	Road traffic injuries 5 572	Road traffic injuries 19 723	Unipolar major depression 8 212	Cataracts 4 222	War injuries 69 672
4	Congenital abnormalities 21 680	Falls 4 966	Psychoses 16 656	Cataracts 6 615	Chronic obstructive pulmonary disease 4 069	Diarrhoeal diseases 68 437
5	Protein-energy malnutrition 15 984	Anaemias 4 608	Bipolar affective disorder 14 704	Trachea/bronchus/lung cancers 5 776	Acute lower respiratory infections 3 597	Unipolar major depression 54 660
6	Measles 11 550	Self-inflicted injuries 4 220	Ischaemic heart disease 14 177	Cirrhosis of the liver 4 712	Diabetes mellitus 3 149	Perinatal conditions 51 245
7	Tetanus 11 517	Diarrhoeal diseases 4 104	Anaemias 12 728	Osteoarthritis 4 514	Trachea/bronchus/lung cancers 1 563	Road traffic injuries 29 979
8	Pertussis 8 452	Inflammatory cardiac disease 3 362	Drug dependence 11 000	Benign prostatic hypertrophy 4 479	Cirrhosis of the liver 1 227	Cerebrovascular disease 28 685
9	War injuries 8 252	Cerebrovascular disease 2 671	Self-inflicted injuries 9 928	Edentulism 4 130	Inflammatory cardiac disease 1 214	Congenital abnormalities 25 229
10	Falls 3 460	Asthma 2 467	Obstructed labour 9 265	Diabetes mellitus 4 126	Unipolar major depression 1 102	Anaemias 21 506
11	Interpersonal violence 2 840	Drowning 2 163	Obsessive-compulsive disorders 8 600	Chronic obstructive pulmonary disease 4 104	Osteoarthritis 1 066	Inflammatory cardiac disease 17 349
12	Inflammatory cardiac disease 2 729	Fires 1 990	Interpersonal violence 8 112	War injuries 3 751	Dementias 1 000	Psychoses 17 003
13	Nutritional/endocrine disorders 2 573	Rheumatic heart disease 1 922	Maternal sepsis 7 067	Inflammatory cardiac disease 3 629	Edentulism 978	Self-inflicted injuries 16 777
14	Anaemias 2 546	Measles 1 860	Cerebrovascular disease 6 484	Road traffic injuries 3 208	Trachoma 932	Protein-energy malnutrition 16 370
15	Meningitis 2 245	Dental caries 1 823	Inflammatory cardiac disease 6 415	Self-inflicted injuries 2 277	Nephritis/nephrosis 756	Bipolar affective disorder 16 022



Table 27. Leading Causes of Death, Eastern Mediterranean Region - Low- and Middle-Income Countries, Both Sexes, 1998

Rank	0-4 years	5-14 years	15-44 years	45-59 years	≥60 years	All ages
1	Perinatal conditions 272 167	Acute lower respiratory infections 25 648	War injuries 102 794	Ischaemic heart disease 81 698	Ischaemic heart disease 391 723	Ischaemic heart disease 505 657
2	Diarrhoeal diseases 255 388	War injuries 16 568	Tuberculosis 54 837	Tuberculosis 33 568	Cerebrovascular disease 141 148	Acute lower respiratory infections 339 817
3	Acute lower respiratory infections 237 732	Road traffic injuries 12 808	Road traffic injuries 41 465	Cerebrovascular disease 31 383	Acute lower respiratory infections 64 559	Diarrhoeal diseases 275 848
4	Measles 98 087	Diarrhoeal diseases 12 159	Interpersonal violence 32 110	Trachea/bronchus/lung cancers 14 038	Chronic obstructive pulmonary disease 44 674	Perinatal conditions 272 167
5	Pertussis 49 798	Self-inflicted injuries 10 766	Ischaemic heart disease 31 997	Cirrhosis of the liver 10 285	Tuberculosis 34 144	Cerebrovascular disease 195 859
6	Congenital abnormalities 46 153	Malaria 10 255	Self-inflicted injuries 22 939	Diabetes mellitus 10 109	Diabetes mellitus 25 544	War injuries 163 116
7	Tetanus 45 921	Inflammatory cardiac disease 8 818	HIV/AIDS 13 898	Chronic obstructive pulmonary disease 9 205	Trachea/bronchus/lung cancers 19 954	Tuberculosis 138 607
8	Malaria 36 277	Drowning 8 480	Cerebrovascular disease 13 294	Inflammatory cardiac disease 9 159	Inflammatory cardiac disease 18 372	Measles 96 087
9	Protein-energy malnutrition 36 232	Cerebrovascular disease 7 467	Inflammatory cardiac disease 13 188	War injuries 8 383	Cirrhosis of the liver 14 839	Road traffic injuries 70 677
10	War injuries 29 205	Tuberculosis 5 583	Maternal haemorrhage 11 904	Road traffic injuries 7 464	Nephritis/nephrosis 13 627	Chronic obstructive pulmonary disease 62 918
11	Interpersonal violence 10 498	Rheumatic heart disease 4 927	Rheumatic heart disease 11 604	Nephritis/nephrosis 6 113	Stomach cancers 9 600	Inflammatory cardiac disease 59 148
12	Tuberculosis 10 475	Interpersonal violence 4 778	Drowning 8 365	Stomach cancers 6 090	Mouth and oropharynx cancers 9 408	Congenital abnormalities 56 883
13	STDs excluding HIV 9 656	Congenital abnormalities 4 704	Maternal sepsis 7 970	Breast cancers 5 823	Colon/rectum cancers 8 369	Interpersonal violence 54 217
14	Inflammatory cardiac disease 9 610	Vitamin A deficiency 4 217	Nephritis/nephrosis 7 675	Self-inflicted injuries 5 633	War injuries 6 166	Malaria 52 733
15	Drowning 8 527	Nephritis/nephrosis 4 153	Hypertensive disorders of pregnancy 7 474	Acute lower respiratory infections 4 538	Liver cancers 5 747	Tetanus 51 585

Source: World Health Report 1999 Database



Table 28. 15 Leading Causes of Burden of Disease, Eastern Mediterranean Region – Low- and Middle-Income Countries, Both Sexes, 1998

Rank	0-4 years	5-14 years	15-44 years	45-59 years	≥60 years	All ages
1	Perinatal conditions 10 009 706	Acute lower respiratory infections 1 004 458	War injuries 4 145 089	Ischaemic heart disease 1 387 448	Ischaemic heart disease 1 965 555	Perinatal conditions 10 009 706
2	Diarrhoeal diseases 8 688 230	War injuries 745 609	Unipolar major depression 3 834 512	Cerebrovascular disease 552 207	Cerebrovascular disease 730 297	Acute lower respiratory infections 9 876 826
3	Acute lower respiratory infections 8 258 419	Road traffic injuries 677 877	HIV/AIDS 2 096 138	Tuberculosis 544 111	Cataracts 378 761	Diarrhoeal diseases 9 441 463
4	Measles 2 816 057	Falls 539 093	Tuberculosis 1 805 448	Unipolar major depression 431 296	Chronic obstructive pulmonary disease 332 986	War injuries 6 228 034
5	Congenital abnormalities 2 797 540	Diarrhoeal diseases 533 351	Road traffic injuries 1 520 615	Cataracts 350 101	Acute lower respiratory infections 315 057	Ischaemic heart disease 4 427 032
6	Protein-energy malnutrition 2 144 129	Anaemias 492 687	Psychoses 1 263 359	Diabetes mellitus 281 387	Tuberculosis 250 656	Unipolar major depression 4 363 574
7	Pertussis 1 696 248	Measles 453 615	Bipolar affective disorder 1 187 268	HIV/AIDS 257 119	Diabetes mellitus 214 748	HIV/AIDS 3 420 409
8	Tetanus 1 535 610	Self-inflicted injuries 406 508	Anaemias 1 098 772	Osteoarthritis 239 463	Trachea/bronchus/lung cancers 115 312	Measles 3 420 409
9	Malaria 1 295 873	Malaria 382 217	Ischaemic heart disease 1 066 029	Chronic obstructive pulmonary disease 225 468	Inflammatory cardiac disease 105 459	Tuberculosis 3 187 971
10	War injuries 1 116 517	Inflammatory cardiac disease 339 316	Interpersonal violence 1 010 585	Trachea/bronchus/lung cancers 214 168	Osteoarthritis 98 923	Congenital abnormalities 3 109 068
11	HIV/AIDS 991 144	Drowning 318 133	Obstructed labour 927 904	Cirrhosis of the liver 201 755	Cirrhosis of the liver 98 398	Road traffic injuries 2 533 771
12	Falls 439 664	Fires 290 591	Drug dependence 758 775	Edentulism 179 692	Unipolar major depression 97 766	Cerebrovascular disease 2 215 379
13	STDs excluding HIV 389 460	Cerebrovascular disease 280 317	Maternal sepsis 744 002	War injuries 174 781	Trachoma 88 283	Protein-energy malnutrition 2 183 471
14	Tuberculosis 358 004	Asthma 263 474	Self-inflicted injuries 728 210	Inflammatory cardiac disease 165 449	Dementias 86 687	Anaemias 2 020 033
15	Interpersonal violence 355 162	Tuberculosis 229 752	Obsessive-compulsive disorders 707 096	Benign prostatic hypertrophy 158 381	Edentulism 81 397	Pertussis 1 880 397



Table 29. Leading Causes of Death, European Region - High-Income Countries, Both Sexes, 1998

Rank	0-4 years	5-14 years	15-44 years	45-59 years	≥60 years	All ages
1	Perinatal conditions 20 060	Road traffic injuries 2 273	Road traffic injuries 34 833	Ischaemic heart disease 64 406	Ischaemic heart disease 869 258	Ischaemic heart disease 944 775
2	Congenital abnormalities 10 674	Congenital abnormalities 640	Self-inflicted injuries 25 017	Trachea/bronchus/lung cancers 30 790	Cerebrovascular disease 422 546	Cerebrovascular disease 448 854
3	Acute lower respiratory infections 2 789	Leukaemia 630	Interpersonal violence 11 973	Cerebrovascular disease 20 085	Trachea/bronchus/lung cancers 173 578	Trachea/bronchus/lung cancers 208 269
4	Diarrhoeal diseases 2 165	Drowning 500	Ischaemic heart disease 11 112	Breast cancers 18 311	Acute lower respiratory infections 144 591	Acute lower respiratory infections 153 707
5	Road traffic injuries 975	Interpersonal violence 398	HIV/AIDS 8 699	Cirrhosis of the liver 17 835	Chronic obstructive pulmonary disease 132 790	Chronic obstructive pulmonary disease 139 745
6	Nutritional/endocrine disorders 778	Acute lower respiratory infections 376	Cirrhosis of the liver 6 122	Self-inflicted injuries 14 580	Colon/rectum cancers 104 189	Colon/rectum cancers 120 567
7	Measles 772	Nutritional/endocrine disorders 334	Cerebrovascular disease 5 831	Colon/rectum cancers 13 945	Diabetes mellitus 72 403	Diabetes mellitus 80 679
8	Drowning 643	Self-inflicted injuries 313	Breast cancers 5 594	Road traffic injuries 10 110	Stomach cancers 59 212	Breast cancers 78 880
9	Interpersonal violence 565	Fires 286	Trachea/bronchus/lung cancers 3 886	Stomach cancers 9 357	Breast cancers 54 975	Stomach cancers 70 809
10	Pertussis 508	Cerebrovascular disease 182	Poisoning 3 535	Pancreas cancers 6 322	Prostate cancers 54 891	Road traffic injuries 66 099
11	Meningitis 486	Inflammatory cardiac disease 179	Leukaemia 3 095	Chronic obstructive pulmonary disease 6 296	Dementias 49 467	Self-inflicted injuries 61 410
12	Fires 442	War injuries 147	Lymphoma 2 886	Diabetes mellitus 6 283	Pancreas cancers 41 950	Cirrhosis of the liver 59 019
13	Dementias 399	Lymphoma 145	Inflammatory cardiac disease 2 748	Lymphoma 6 136	Nephritis/nephrosis 41 224	Prostate cancers 56 556
14	Tetanus 389	Dementias 126	Colon/rectum cancers 2 427	Mouth and oropharynx cancers 5 883	Lymphoma 35 604	Dementias 52 510
15	Inflammatory cardiac disease 372	Falls 118	Falls 2 396	Oesophagus cancers 4 920	Cirrhosis of the liver 35 021	Pancreas cancers 49 144



Table 30. Leading Causes of Burden of Disease, European Region - High-Income Countries, Both Sexes, 1998

Rank	0-4 years	5-14 years	15-44 years	45-59 years	≥60 years	All ages
1	Perinatal conditions 767 076	Road traffic injuries 139 632	Unipolar major depression 2 414 194	Ischaemic heart disease 1 058 254	Ischaemic heart disease 3 327 038	Ischaemic heart disease 4 663 904
2	Congenital abnormalities 714 103	Asthma 86 348	Alcohol dependence 1 822 606	Osteoarthritis 781 928	Cerebrovascular disease 1 751 981	Unipolar major depression 3 242 602
3	Acute lower respiratory infections 97 081	Dental caries 60 209	Road traffic injuries 1 585 210	Unipolar major depression 593 590	Dementias 1 150 391	Cerebrovascular disease 2 553 701
4	Diarrhoeal diseases 96 623	Falls 56 386	Psychoses 1 019 407	Diabetes mellitus 509 440	Trachea/bronchus/lung cancers 931 598	Alcohol dependence 2 177 401
5	Nutritional/endocrine disorders 74 914	Obsessive-compulsive disorders 52 715	Self-inflicted injuries 764 267	Cerebrovascular disease 488 714	Chronic obstructive pulmonary disease 856 924	Road traffic injuries 2 082 321
6	Protein-energy malnutrition 44 056	Drug dependence 49 455	Bipolar affective disorder 708 554	Trachea/bronchus/lung cancers 484 418	Diabetes mellitus 739 579	Diabetes mellitus 1 606 590
7	Road traffic injuries 39 116	Anaemias 46 948	Drug dependence 626 380	Cirrhosis of the liver 350 103	Colon/rectum cancers 571 952	Trachea/bronchus/lung cancers 1 510 399
8	Meningitis 37 768	Nutritional/endocrine disorders 43 110	Obsessive-compulsive disorders 534 391	Breast cancers 314 483	Acute lower respiratory infections 432 741	Dementias 1 469 021
9	Falls 36 918	Epilepsy 42 211	Interpersonal violence 454 389	Alcohol dependence 277 344	Osteoarthritis 322 527	Osteoarthritis 1 424 073
10	Asthma 32 070	Otitis media 29 044	Diabetes mellitus 348 299	Chronic obstructive pulmonary disease 261 875	Breast cancers 317 014	Chronic obstructive pulmonary disease 1 198 084
11	Dementias 28 994	Fires 27 965	HIV/AIDS 325 760	Colon/rectum cancers 245 567	Prostate cancers 296 892	Self-inflicted injuries 1 116 539
12	Pertussis 27 130	Leukaemia 24 577	Osteoarthritis 319 618	Dementias 239 045	Stomach cancers 296 620	Psychoses 1 046 668
13	Interpersonal violence 22 448	Congenital abnormalities 24 029	Cerebrovascular disease 299 156	Self-inflicted injuries 229 534	Cirrhosis of the liver 244 490	Colon/rectum cancers 883 473
14	Drowning 21 496	Interpersonal violence 18 871	Ischaemic heart disease 278 612	Road traffic injuries 210 350	Unipolar major depression 234 818	Bipolar affective disorder 813 478
15	Anaemias 20 404	Drowning 18 746	Asthma 265 238	Stomach cancers 152 351	Pancreas cancers 203 640	Congenital abnormalities 809 514

Source: World Health Report 1999 Database



Table 31. Leading Causes of Death, European Region, Low- and Middle-Income Countries, Both Sexes, 1998

Rank	0-4 years	5-14 years	15-44 years	45-59 years	≥60 years	All ages
1	Perinatal conditions 91 814	War injuries 6 436	Road traffic injuries 60 577	Ischaemic heart disease 163 682	Ischaemic heart disease 1 216 657	Ischaemic heart disease 1 419 683
2	Acute lower respiratory infections 57 883	Acute lower respiratory infections 6 292	War injuries 48 624	Cerebrovascular disease 74 261	Cerebrovascular disease 724 923	Cerebrovascular disease 816 863
3	Diarrhoeal diseases 53 338	Road traffic injuries 6 110	Self-inflicted injuries 45 982	Trachea/bronchus/lung cancers 50 635	Trachea/bronchus/lung cancers 126 585	Trachea/bronchus/lung cancers 184 297
4	Congenital abnormalities 24 122	Drowning 4 199	Ischaemic heart disease 39 344	Stomach cancers 28 227	Acute lower respiratory infections 105 423	Acute lower respiratory infections 182 272
5	Pertussis 14 323	Self-inflicted injuries 3 306	Interpersonal violence 29 193	Self-inflicted injuries 26 842	Chronic obstructive pulmonary disease 96 354	Chronic obstructive pulmonary disease 113 626
6	War injuries 9 919	Congenital abnormalities 2 279	Poisoning 19 099	Cirrhosis of the liver 20 531	Stomach cancers 77 056	Stomach cancers 111 199
7	Tetanus 11 165	Diarrhoeal diseases 2 262	Cerebrovascular disease 15 127	Road traffic injuries 20 410	Colon/rectum cancers 58 187	Road traffic injuries 106 757
8	Protein-energy malnutrition 7 565	Inflammatory cardiac disease 2 237	Tuberculosis 14 964	Tuberculosis 19 005	Inflammatory cardiac disease 39 722	Self-inflicted injuries 102 164
9	Measles 5 982	Leukaemia 2 025	Drowning 14 234	Poisoning 18 238	Diabetes mellitus 35 440	Perinatal conditions 91 814
10	Meningitis 2 771	Cerebrovascular disease 1 868	Inflammatory cardiac disease 9 068	Breast cancers 16 045	Cirrhosis of the liver 34 221	Colon/rectum cancers 75 987
11	Interpersonal violence 2 646	Interpersonal violence 1 406	Rheumatic heart disease 7 902	Colon/rectum cancers 14 371	Self-inflicted injuries 26 034	War injuries 73 279
12	Drowning 2 600	Rheumatic heart disease 1 230	Cirrhosis of the liver 7 229	Chronic obstructive pulmonary disease 13 788	Breast cancers 24 509	Inflammatory cardiac disease 64 359
13	Inflammatory cardiac disease 2 370	Nephritis/nephrosis 995	Trachea/bronchus/lung cancers 7 000	Rheumatic heart disease 11 681	Pancreas cancers 22 462	Cirrhosis of the liver 62 549
14	Road traffic injuries 1 791	Vitamin A deficiency 937	Falls 6 943	Inflammatory cardiac disease 10 961	Liver cancers 19 524	Diarrhoeal diseases 57 806
15	Vitamin A deficiency 1 749	Nutritional/endocrine disorders 916	Stomach cancers 5 885	Mouth and oropharynx cancers 9 258	Falls 19 298	Tuberculosis 53 335

Source: World Health Report 1999 Database



**Table 32. Leading Causes of Burden of Disease, European Region –
Low- and Middle-Income Countries, Both Sexes, 1998**

Rank	0-4 years	5-14 years	15-44 years	45-59 years	≥60 years	All ages
1	Perinatal conditions 3 380 069	Road traffic injuries 338 708	Unipolar major depression 3 628 363	Ischaemic heart disease 2 760 173	Ischaemic heart disease 5 372 265	Ischaemic heart disease 9 220 987
2	Acute lower respiratory infections 2 012 444	War injuries 288 838	Road traffic injuries 2 311 156	Cerebrovascular disease 1 357 696	Cerebrovascular disease 3 312 641	Cerebrovascular disease 5 411 429
3	Diarrhoeal diseases 1 842 989	Acute lower respiratory infections 261 120	War injuries 2 016 437	Osteoarthritis 831 003	Trachea/bronchus/lung cancers 795 050	Unipolar major depression 4 579 350
4	Congenital abnormalities 1 362 321	Falls 224 878	Alcohol dependence 1 577 634	Trachea/bronchus/lung cancers 785 671	Dementias 751 040	Perinatal conditions 3 380 069
5	Protein-energy malnutrition 514 066	Anaemias 215 018	Self-inflicted injuries 1 389 277	Unipolar major depression 695 961	Chronic obstructive pulmonary disease 646 500	Road traffic injuries 3 213 104
6	Pertussis 440 029	Drowning 157 538	Psychoses 1 257 750	Chronic obstructive pulmonary disease 498 791	Stomach cancers 449 809	Acute lower respiratory infections 2 960 173
7	War injuries 378 997	Pertussis 138 693	Bipolar affective disorder 1 100 587	Stomach cancers 455 881	Diabetes mellitus 411 532	War injuries 2 804 913
8	Tetanus 323 309	Asthma 136 748	Ischaemic heart disease 1 088 549	Self-inflicted injuries 417 722	Acute lower respiratory infections 406 284	Osteoarthritis 2 255 052
9	Falls 159 841	Epilepsy 127 267	Osteoarthritis 1 028 976	Cirrhosis of the liver 401 292	Osteoarthritis 395 073	Self-inflicted injuries 2 071 110
10	Meningitis 145 800	Self-inflicted injuries 124 788	Interpersonal violence 989 061	Road traffic injuries 385 205	Colon/rectum cancers 350 411	Diarrhoeal diseases 2 055 510
11	Measles 116 800	Diarrhoeal diseases 109 289	Obsessive-compulsive disorders 729 326	Diabetes mellitus 305 552	Unipolar major depression 255 026	Alcohol dependence 1 835 204
12	Anaemias 110 497	Obsessive-compulsive disorders 92 801	Drug dependence 720 602	Tuberculosis 287 491	Cirrhosis of the liver 234 823	Trachea/bronchus/lung cancers 1 766 043
13	Nutritional/endocrine disorders 99 165	Dental caries 92 341	Falls 683 455	Poisoning 270 466	Cataracts 198 487	Congenital abnormalities 1 554 561
14	HIV/AIDS 97 813	Inflammatory cardiac disease 87 279	Cerebrovascular disease 648 086	Breast cancers 269 793	Inflammatory cardiac disease 195 622	Chronic obstructive pulmonary disease 1 467 389
15	Interpersonal violence 92 238	Congenital abnormalities 85 559	Poisoning 509 724	Colon/rectum cancers 246 171	Breast cancers 153 936	Falls 1 377 221



Table 33. Leading Causes of Death, South-East Asia Region - India, Both Sexes, 1998

Rank	0-4 years	5-14 years	15-44 years	45-59 years	≥60 years	All ages
1	Perinatal conditions 611 910	Acute lower respiratory infections 71 971	HIV/AIDS 159 420	Ischaemic heart disease 212 072	Ischaemic heart disease 1 220 779	Ischaemic heart disease 1 470 950
2	Acute lower respiratory infections 550 704	Diarrhoeal diseases 44 256	Tuberculosis 118 248	Tuberculosis 131 841	Cerebrovascular disease 469 186	Acute lower respiratory infections 968 568
3	Diarrhoeal diseases 538 466	Road traffic injuries 37 755	Road traffic injuries 94 797	Cerebrovascular disease 61 992	Acute lower respiratory infections 271 662	Diarrhoeal diseases 711 234
4	Measles 190 000	Drowning 31 595	Self-inflicted injuries 87 244	Cirrhosis of the liver 53 728	Tuberculosis 147 274	Perinatal conditions 611 910
5	Congenital abnormalities 126 152	Fires 16 117	Fires 77 140	Mouth and oropharynx cancers 37 105	Chronic obstructive pulmonary disease 122 772	Cerebrovascular disease 557 345
6	Tetanus 122 144	Tetanus 15 726	Acute lower respiratory infections 41 532	Road traffic injuries 35 234	Diarrhoeal diseases 77 768	Tuberculosis 420 928
7	Pertussis 71 410	Nephritis/nephrosis 15 398	Ischaemic heart disease 38 100	Acute lower respiratory infections 32 698	Diabetes mellitus 60 872	Road traffic injuries 216 859
8	Protein-energy malnutrition 38 875	Falls 11 478	Diarrhoeal diseases 33 386	Trachea/bronchus/lung cancers 30 072	Cirrhosis of the liver 54 802	Measles 190 000
9	STDs excluding HIV 33 216	Congenital abnormalities 11 315	Rheumatic heart disease 33 369	Rheumatic heart disease 29 232	Mouth and oropharynx cancers 52 467	HIV/AIDS 179 365
10	Road traffic injuries 21 976	Tropical diseases 10 849	Cirrhosis of the liver 32 128	Cervix cancers 27 572	Inflammatory cardiac disease 45 032	Tetanus 165 020
11	Meningitis 17 927	Tuberculosis 9 181	Maternal haemorrhage 28 992	Inflammatory cardiac disease 23 193	Nephritis/nephrosis 42 538	Congenital abnormalities 153 481
12	Drowning 17 687	Diabetes mellitus 8 122	Drowning 26 680	Self-inflicted injuries 22 623	Trachea/bronchus/lung cancers 41 827	Chronic obstructive pulmonary disease 152 575
13	Fires 15 199	Dengue 7 369	Interpersonal violence 24 628	Chronic obstructive pulmonary disease 21 016	Oesophagus cancers 36 706	Cirrhosis of the liver 144 387
14	Tuberculosis 14 385	Self-inflicted injuries 6 576	Childhood diseases 23 935	Oesophagus cancers 20 930	Stomach cancers 27 385	Fires 134 550
15	Interpersonal violence 13 648	Vitamin A deficiency 5 771	Inflammatory cardiac disease 20 133	Diabetes mellitus 20 512	Road traffic injuries 27 098	Self-inflicted injuries 124 378

Source: World Health Report 1999 Database



Table 34. Leading Causes of Burden of Disease, South-East Asia Region - India, Both Sexes, 1998

Rank	0-4 years	5-14 years	15-44 years	45-59 years	≥60 years	All ages
1	Perinatal conditions 23 315 835	Falls 6 964 831	Unipolar major depression 8 227 330	Ischaemic heart disease 3 724 816	Ischaemic heart disease 6 743 414	Acute lower respiratory infections 24 806 393
2	Acute lower respiratory infections 18 966 571	Acute lower respiratory infections 2 785 099	HIV/AIDS 3 802 963	Tuberculosis 2 074 619	Cerebrovascular disease 2 523 377	Perinatal conditions 23 315 835
3	Diarrhoeal diseases 18 314 537	Road traffic injuries 2 060 366	Tuberculosis 3 706 973	Cataracts 1 204 468	Cataracts 1 521 169	Diarrhoeal diseases 22 005 232
4	Congenital abnormalities 6 664 919	Fires 1 868 839	Road traffic injuries 3 493 784	Unipolar major depression 1 164 894	Acute lower respiratory infections 1 330 932	Ischaemic heart disease 11 697 101
5	Measles 5 478 515	Diarrhoeal diseases 1 831 887	Anaemias 3 452 262	Cerebrovascular disease 1 153 958	Tuberculosis 918 256	Falls 10 897 503
6	Tetanus 3 750 146	Anaemias 1 518 581	STDs excluding HIV 3 107 007	Cirrhosis of the liver 1 036 940	Chronic obstructive pulmonary disease 890 557	Unipolar major depression 9 679 324
7	Protein-energy malnutrition 3 491 974	Drowning 1 186 455	Fires 2 808 318	Chronic obstructive pulmonary disease 877 049	Diabetes mellitus 524 548	Tuberculosis 7 576 709
8	Pertussis 2 409 036	Tropical diseases 1 127 971	Self-inflicted injuries 2 682 149	Road traffic injuries 651 161	Dementias 458 983	Congenital abnormalities 7 453 645
9	Falls 1 957 064	Measles 983 899	Bipolar affective disorder 2 561 265	Osteoarthritis 647 061	Diarrhoeal diseases 389 092	Road traffic injuries 7 203 864
10	STDs excluding HIV 1 655 634	Nephritis/nephrosis 633 408	Psychoses 1 935 788	Mouth and oropharynx 622 460	Cirrhosis of the liver 335 786	Measles 6 474 228
11	HIV/AIDS 1 248 486	Tetanus 591 700	Tropical diseases 1 708 876	Diabetes mellitus 596 405	Mouth and oropharynx 330 251	Anaemias 6 301 897
12	Road traffic injuries 836 420	Congenital abnormalities 424 894	Abortion 1 695 494	Rheumatic heart disease 498 931	Osteoarthritis 293 294	Fires 5 722 982
13	Meningitis 778 704	Tuberculosis 387 380	Obstructed labour 1 596 325	Acute lower respiratory infections 495 248	Unipolar major depression 287 100	HIV/AIDS 5 611 121
14	Fires 724 272	Intestinal nematode infections 354 146	Obsessive-compulsive disorders 1 540 299	Anaemias 484 019	Inflammatory cardiac disease 270 705	Tetanus 5 160 285
15	Drowning 591 725	Asthma 353 855	Falls 1 484 807	Glaucoma 472 921	Anaemias 262 018	STDs excluding HIV 4 909 114

Source: World Health Report 1999 Database



Table 35. Leading Causes of Death, South-East Asia Region - Other Low- and Middle-Income Countries, Both Sexes, 1998

Rank	0-4 years	5-14 years	15-44 years	45-59 years	≥60 years	All ages
1	Perinatal conditions 203 466	Acute lower respiratory infections 23 846	HIV/AIDS 106 060	Tuberculosis 74 534	Ischaemic heart disease 324 068	Ischaemic heart disease 394 426
2	Diarrhoeal diseases 157 111	Drowning 17 469	Road traffic injuries 61 337	Ischaemic heart disease 49 005	Cerebrovascular disease 249 122	Cerebrovascular disease 325 085
3	Acute lower respiratory infections 143 997	Malaria 17 001	Tuberculosis 55 529	Cerebrovascular disease 42 995	Tuberculosis 126 527	Acute lower respiratory infections 287 766
4	Measles 65 512	Road traffic injuries 14 788	Self-inflicted injuries 43 966	Cirrhosis of the liver 36 877	Acute lower respiratory infections 100 547	Tuberculosis 261 058
5	Congenital abnormalities 36 013	Diarrhoeal diseases 10 236	Interpersonal violence 34 527	Trachea/bronchus/lung cancers 26 610	Trachea/bronchus/lung cancers 54 583	Perinatal conditions 203 466
6	Pertussis 35 828	Inflammatory cardiac disease 9 966	Ischaemic heart disease 21 353	Liver cancers 23 171	Chronic obstructive pulmonary disease 51 357	Diarrhoeal diseases 182 595
7	Tetanus 21 996	Cerebrovascular disease 7 988	Cerebrovascular disease 20 650	Road traffic injuries 14 109	Mouth and oropharynx cancers 45 595	HIV/AIDS 119 329
8	Drowning 18 119	Leukaemia 6 643	Malaria 20 243	Stomach cancers 12 999	Cirrhosis of the liver 41 898	Road traffic injuries 118 608
9	Road traffic injuries 17 010	Nephritis/nephrosis 4 146	Cirrhosis of the liver 18 169	Cervix cancers 12 225	Nephritis/nephrosis 39 618	Cirrhosis of the liver 98 664
10	Protein-energy malnutrition 16 420	Tetanus 3 921	Drowning 15 473	Nephritis/nephrosis 11 391	Liver cancers 31 241	Trachea/bronchus/lung cancers 85 728
11	STDs excluding HIV 12 991	Congenital abnormalities 3 420	Poisoning 15 034	Breast cancers 11 308	Diabetes mellitus 30 891	Nephritis/nephrosis 66 301
12	Malaria 7 547	Tuberculosis 3 242	Inflammatory cardiac disease 14 711	Diabetes mellitus 10 136	Colon/rectum cancers 29 511	Measles 65 512
13	Inflammatory cardiac disease 6 966	Poisoning 3 181	Falls 11 633	Mouth and oropharynx cancers 9 036	Stomach cancers 26 567	Self-inflicted injuries 62 981
14	Meningitis 4 939	Vitamin A deficiency 2 892	Acute lower respiratory infections 11 268	Inflammatory cardiac disease 8 784	Inflammatory cardiac disease 18 117	Liver cancers 62 381
15	Vitamin A deficiency 4 845	Intestinal nematode infections 2 714	Nephritis/nephrosis 9 795	Self-inflicted injuries 8 468	Oesophagus cancers 14 489	Mouth and oropharynx cancers 62 134

Source: World Health Report 1999 Database



Table 36. Leading Causes of Burden of Disease, South-East Asia Region – Other Low- and Middle- Income Countries, Both Sexes, 1998

Rank	0-4 years	5-14 years	15-44 years	45-59 years	≥60 years	All ages
1	Perinatal conditions 7 444 919	Acute lower respiratory infections 934 310	Unipolar major depression 5 091 912	Tuberculosis 1 296 031	Ischaemic heart disease 1 619 106	Perinatal conditions 7 444 919
2	Diarrhoeal diseases 5 359 874	Road traffic injuries 784 425	Road traffic injuries 2 241 437	Ischaemic heart disease 847 278	Cerebrovascular disease 1 255 998	Acute lower respiratory infections 6 922 766
3	Acute lower respiratory infections 5 058 619	Drowning 655 481	HIV/AIDS 2 223 529	Osteoarthritis 799 531	Tuberculosis 853 637	Diarrhoeal diseases 6 148 712
4	Congenital abnormalities 2 146 179	Malaria 629 850	Tuberculosis 2 080 047	Cerebrovascular disease 759 007	Cataracts 529 978	Unipolar major depression 5 911 585
5	Measles 1 907 821	Falls 585 550	Anaemias 2 065 128	Cirrhosis of the liver 713 175	Acute lower respiratory infections 459 067	Tuberculosis 4 437 981
6	Protein-energy malnutrition 1 264 581	Intestinal nematode infections 580 409	STDs excluding HIV 1 977 100	Unipolar major depression 660 969	Chronic obstructive pulmonary disease 363 983	Road traffic injuries 3 997 631
7	Pertussis 1 251 934	Anaemias 460 424	Psychoses 1 949 920	Cataracts 431 195	Trachea/bronchus/lung cancers 317 229	Cerebrovascular disease 3 272 106
8	Falls 863 215	Diarrhoeal diseases 438 603	Alcohol dependence 1 578 596	Trachea/bronchus/lung cancers 406 392	Dementias 314 917	Ischaemic heart disease 3 171 715
9	Tetanus 735 532	Inflammatory cardiac disease 387 079	Bipolar affective disorder 1 563 087	Liver cancers 352 862	Mouth and oropharynx 284 268	Anaemias 3 098 487
10	STDs excluding HIV 701 321	Measles 315 806	Self-inflicted injuries 1 422 963	Glaucoma 337 790	Cirrhosis of the liver 284 169	HIV/AIDS 3 034 115
11	Road traffic injuries 643 244	Cerebrovascular disease 299 821	Falls 1 183 128	Diabetes mellitus 317 454	Diabetes mellitus 267 604	Falls 2 808 432
12	Drowning 606 054	Leukaemia 254 613	Interpersonal violence 1 124 323	Road traffic injuries 257 210	Edentulism 205 218	STDs excluding HIV 2 746 265
13	HIV/AIDS 542 429	Asthma 224 032	Obsessive-compulsive disorders 947 698	Anaemias 220 882	Osteoarthritis 204 771	Congenital abnormalities 2 389 598
14	Malaria 272 584	Epilepsy 183 891	Cerebrovascular disease 812 487	Stomach cancers 207 958	Nephritis/nephrosis 190 418	Measles 2 228 772
15	Inflammatory cardiac disease 249 341	Nephritis/nephrosis 179 449	Drug dependence 724 037	Chronic obstructive pulmonary disease 200 443	Colon/rectum cancers 182 035	Psychoses 1 977 180



Table 37. Leading Causes of Death, Western Pacific Region - High-Income Countries, Both Sexes, 1998

Rank	0-4 years	5-14 years	15-44 years	45-59 years	≥60 years	All ages
1	Perinatal conditions 20 483	Road traffic injuries 784	Road traffic injuries 13 041	Ischaemic heart disease 27 894	Ischaemic heart disease 310 753	Ischaemic heart disease 342 226
2	Measles 4 177	Congenital abnormalities 215	Self-inflicted injuries 8 963	Trachea/bronchus/lung cancers 13 571	Cerebrovascular disease 150 118	Cerebrovascular disease 160 873
3	Congenital abnormalities 3 783	Leukaemia 214	Interpersonal violence 4 359	Cerebrovascular disease 8 688	Trachea/bronchus/lung cancers 65 465	Trachea/bronchus/lung cancers 80 333
4	Pertussis 2 698	Drowning 160	Ischaemic heart disease 3 579	Breast cancers 8 106	Acute lower respiratory infections 51 248	Acute lower respiratory infections 54 027
5	Road traffic injuries 347	Interpersonal violence 130	Cirrhosis of the liver 2 035	Cirrhosis of the liver 7 841	Chronic obstructive pulmonary disease 48 439	Chronic obstructive pulmonary disease 51 366
6	Acute lower respiratory infections 316	Nutritional/endocrine disorders 110	Cerebrovascular disease 1 956	Self-inflicted injuries 6 434	Colon/rectum cancers 38 422	Colon/rectum cancers 45 426
7	Nutritional/endocrine disorders 273	Fires 97	Breast cancers 1 871	Colon/rectum cancers 6 187	Diabetes mellitus 25 995	Breast cancers 29 978
8	Drowning 212	Self-inflicted injuries 74	Trachea/bronchus/lung cancers 1 291	Road traffic injuries 4 437	Stomach cancers 21 933	Diabetes mellitus 29 345
9	Interpersonal violence 173	Acute lower respiratory infections 57	Poisoning 1 241	Stomach cancers 4 113	Prostate cancers 20 587	Stomach cancers 26 794
10	Meningitis 161	Lymphoma 47	HIV/AIDS 1 180	Pancreas cancers 2 799	Breast cancers 20 001	Road traffic injuries 25 330
11	Fires 152	Dementias 45	Leukaemia 1 112	Chronic obstructive pulmonary disease 2 727	Dementias 17 663	Self-inflicted injuries 23 579
12	Dementias 146	Cerebrovascular disease 41	Lymphoma 1 011	Lymphoma 2 719	Pancreas cancers 15 564	Cirrhosis of the liver 23 114
13	Inflammatory cardiac disease 105	Asthma 38	Inflammatory cardiac disease 910	Diabetes mellitus 2 700	Nephritis/nephrosis 14 796	Prostate cancers 21 316
14	Leukaemia 89	Falls 37	Falls 838	Mouth and oropharynx cancers 2 590	Cirrhosis of the liver 13 229	Perinatal conditions 20 483
15	Cerebrovascular disease 69	Inflammatory cardiac disease 34	Colon/rectum cancers 815	Oesophagus cancers 2 158	Lymphoma 13 206	Dementias 18 911

Source: World Health Report 1999 Database



Table 38. Leading Causes of Burden of Disease, Western Pacific Region - High-Income Countries, Both Sexes, 1998

Rank	0-4 years	5-14 years	15-44 years	45-59 years	≥60 years	All ages
1	Perinatal conditions 761 154	Measles 51 350	Unipolar major depression 872 563	Ischaemic heart disease 457 916	Ischaemic heart disease 1 253 797	Ischaemic heart disease 1 809 102
2	Congenital abnormalities 254 261	Road traffic injuries 48 439	Alcohol dependence 668 985	Osteoarthritis 346 061	Cerebrovascular disease 661 225	Unipolar major depression 1 220 698
3	Pertussis 88 515	Asthma 30 293	Road traffic injuries 576 618	Unipolar major depression 260 388	Dementias 436 089	Cerebrovascular disease 985 941
4	Measles 83 438	Pertussis 24 705	Psychoses 369 394	Trachea/bronchus/lung cancers 213 590	Trachea/bronchus/lung cancers 359 019	Alcohol dependence 822 366
5	Nutritional/endocrine disorders 26 550	Dental caries 21 097	HIV/AIDS 284 215	Cerebrovascular disease 213 030	Chronic obstructive pulmonary disease 327 745	Road traffic injuries 772 838
6	Road traffic injuries 13 940	Falls 18 617	Self-inflicted injuries 277 653	Diabetes mellitus 156 477	Diabetes mellitus 228 264	Perinatal conditions 762 453
7	HIV/AIDS 13 164	Obsessive-compulsive disorders 18 544	Bipolar affective disorder 255 592	Cirrhosis of the liver 153 924	Colon/rectum cancers 218 922	Trachea/bronchus/lung cancers 606 958
8	Meningitis 12 991	Drug dependence 17 604	Drug dependence 226 810	Breast cancers 139 254	Acute lower respiratory infections 162 498	Osteoarthritis 583 433
9	Falls 12 170	Anaemias 15 354	Obsessive-compulsive disorders 193 703	Alcohol dependence 123 252	Osteoarthritis 120 681	Dementias 571 014
10	Asthma 11 421	Nutritional/endocrine disorders 14 942	Interpersonal violence 164 362	Chronic obstructive pulmonary disease 114 690	Breast cancers 117 561	Diabetes mellitus 494 463
11	Acute lower respiratory infections 10 980	Epilepsy 14 644	Osteoarthritis 116 691	Colon/rectum cancers 108 980	Prostate cancers 116 840	Chronic obstructive pulmonary disease 469 523
12	Dementias 10 498	Otitis media 10 140	Cerebrovascular disease 107 826	Dementias 106 113	Stomach cancers 113 990	Self-inflicted injuries 424 318
13	Diarrhoeal diseases 9 743	Fires 9 404	Diabetes mellitus 106 865	Self-inflicted injuries 101 297	Cirrhosis of the liver 93 246	Psychoses 380 032
14	Protein-energy malnutrition 9 595	Leukaemia 8 367	Ischaemic heart disease 97 389	Road traffic injuries 92 473	Unipolar major depression 87 747	HIV/AIDS 352 872
15	Interpersonal violence 7 096	Congenital abnormalities 8 083	Asthma 96 228	Stomach cancers 66 974	Pancreas cancers 78 051	Colon/rectum cancers 351 929

Source: World Health Report 1999 Database



Table 39. Leading Causes of Death, Western Pacific Region - China, Both Sexes, 1998

Rank	0-4 years	5-14 years	15-44 years	45-59 years	≥60 years	All ages
1	Perinatal conditions 186 196	Drowning 33 872	Self-inflicted injuries 204 922	Cerebrovascular disease 203 935	Chronic obstructive pulmonary disease 1 244 601	Cerebrovascular disease 1 467 062
2	Acute lower respiratory infections 171 681	Road traffic injuries 14 618	Road traffic injuries 90 629	Liver cancers 125 583	Cerebrovascular disease 1 209 961	Chronic obstructive pulmonary disease 1 382 668
3	Congenital abnormalities 56 563	Congenital abnormalities 9 179	Liver cancers 71 654	Chronic obstructive pulmonary disease 110 714	Ischaemic heart disease 733 912	Ischaemic heart disease 881 435
4	Drowning 42 301	Leukaemia 8 891	Cerebrovascular disease 47 761	Ischaemic heart disease 108 183	Stomach cancers 246 663	Self-inflicted injuries 412 595
5	Diarrhoeal diseases 30 122	Acute lower respiratory infections 6 384	Tuberculosis 43 641	Stomach cancers 95 077	Trachea/bronchus/lung cancers 237 780	Stomach cancers 367 848
6	Protein-energy malnutrition 16 595	Self-inflicted injuries 5 253	Ischaemic heart disease 39 340	Trachea/bronchus/lung cancers 86 736	Oesophagus cancers 165 660	Liver cancers 354 989
7	Pertussis 13 099	Intestinal nematode infections 4 681	Cirrhosis of the liver 36 074	Self-inflicted injuries 73 319	Liver cancers 156 034	Trachea/bronchus/lung cancers 336 555
8	Interpersonal violence 11 461	Poisoning 3 838	Rheumatic heart disease 35 752	Tuberculosis 65 410	Tuberculosis 142 005	Acute lower respiratory infections 324 735
9	Tetanus 9 218	Interpersonal violence 2 813	Drowning 34 447	Cirrhosis of the liver 59 505	Acute lower respiratory infections 132 365	Tuberculosis 258 503
10	Chronic obstructive pulmonary disease 8 879	Nephritis/nephrosis 2 792	Interpersonal violence 31 219	Oesophagus cancers 54 767	Self-inflicted injuries 129 101	Oesophagus cancers 230 843
11	Meningitis 8 128	Tuberculosis 2 207	Leukaemia 30 956	Rheumatic heart disease 39 417	Rheumatic heart disease 105 967	Cirrhosis of the liver 187 548
12	Road traffic injuries 6 153	Cerebrovascular disease 2 187	Nephritis/nephrosis 28 537	Road traffic injuries 36 228	Cirrhosis of the liver 89 992	Perinatal conditions 186 196
13	Tuberculosis 5 240	Vitamin A deficiency 2 006	Poisoning 28 110	Colon/rectum cancers 25 253	Colon/rectum cancers 63 508	Rheumatic heart disease 182 951
14	Poisoning 4 996	Appendicitis 1 982	Stomach cancers 25 686	Nephritis/nephrosis 18 936	Nephritis/nephrosis 47 041	Road traffic injuries 178 894
15	Leukaemia 4 807	Diarrhoeal diseases 1 980	Chronic obstructive pulmonary disease 18 203	Inflammatory cardiac disease 15 522	Falls 42 270	Drowning 135 109



Table 40. Leading Causes of Burden of Disease, Western Pacific Region - China, Both Sexes, 1998

Rank	0-4 years	5-14 years	15-44 years	45-59 years	≥60 years	All ages
1	Perinatal conditions 6 881 674	Drowning 1 271 228	Unipolar major depression 11 917 210	Chronic obstructive pulmonary disease 4 480 862	Chronic obstructive pulmonary disease 8 912 877	Chronic obstructive pulmonary disease 17 008 546
2	Acute lower respiratory infections 6 209 295	Anaemias 1 160 390	Self-inflicted injuries 6 807 059	Cerebrovascular disease 3 560 858	Cerebrovascular disease 6 082 860	Unipolar major depression 14 324 282
3	Congenital abnormalities 3 766 914	Intestinal nematode infections 965 277	Anaemias 3 827 109	Liver cancers 1 919 872	Ischaemic heart disease 3 635 249	Cerebrovascular disease 11 906 254
4	Drowning 1 415 024	Road traffic injuries 833 401	Bipolar affective disorder 3 698 315	Unipolar major depression 1 913 323	Stomach cancers 1 519 358	Self-inflicted injuries 8 837 488
5	Protein-energy malnutrition 1 161 899	Asthma 646 668	Road traffic injuries 3 419 895	Ischaemic heart disease 1 891 044	Trachea/bronchus/lung cancers 1 366 654	Acute lower respiratory infections 7 406 660
6	Diarrhoeal diseases 1 160 233	Falls 591 363	Chronic obstructive pulmonary disease 3 307 666	Stomach cancers 1 524 891	Oesophagus cancers 972 085	Perinatal conditions 6 881 674
7	Falls 1 040 434	Congenital abnormalities 344 602	Psychoses 2 681 178	Trachea/bronchus/lung cancers 1 351 340	Liver cancers 935 235	Anaemias 6 770 202
8	Pertussis 534 042	Leukaemia 341 130	Obsessive-compulsive disorders 2 118 861	Self-inflicted injuries 1 182 404	Tuberculosis 914 139	Ischaemic heart disease 6 690 063
9	Interpersonal violence 454 226	Acute lower respiratory infections 312 058	Cerebrovascular disease 2 072 894	Cirrhosis of the liver 1 156 214	Dementias 831 344	Road traffic injuries 5 384 909
10	Meningitis 423 698	Obsessive-compulsive disorders 270 074	Falls 1 898 804	Osteoarthritis 1 144 637	Cataracts 747 995	Liver cancers 4 806 183
11	Anaemias 403 304	Diarrhoeal diseases 225 161	Liver cancers 1 886 467	Tuberculosis 1 127 092	Osteoarthritis 737 430	Congenital abnormalities 4 499 812
12	Tetanus 308 231	Otitis media 211 364	Tuberculosis 1 542 980	Anaemias 975 916	Self-inflicted injuries 649 407	Falls 4 174 986
13	Dental caries 306 910	Self-inflicted injuries 198 618	Alcohol dependence 1 529 025	Oesophagus cancers 839 940	Cirrhosis of the liver 631 606	Bipolar affective disorder 4 009 184
14	Chronic obstructive pulmonary disease 296 987	Epilepsy 196 079	Asthma 1 528 405	Road traffic injuries 695 651	Rheumatic heart disease 582 763	Drowning 3 918 624
15	Iodine deficiency 250 174	Fires 184 873	Ischaemic heart disease 1 163 770	Rheumatic heart disease 680 974	Acute lower respiratory infections 516 004	Tuberculosis 3 877 543

Source: World Health Report 1999 Database



Table 41. Leading Causes of Death, Western Pacific Region - Other Low- and Middle-Income Countries, Both Sexes, 1998

Rank	0-4 years	5-14 years	15-44 years	45-59 years	≥60 years	All ages
1	Diarrhoeal diseases 67 554	Acute lower respiratory infections 9 607	Road traffic injuries 20 356	Tuberculosis 24 501	Ischaemic heart disease 103 116	Ischaemic heart disease 124 277
2	Perinatal conditions 66 143	Drowning 7 046	Tuberculosis 18 253	Ischaemic heart disease 14 129	Cerebrovascular disease 79 361	Acute lower respiratory infections 109 496
3	Acute lower respiratory infections 61 915	Malaria 6 960	HIV/AIDS 14 651	Cerebrovascular disease 12 428	Tuberculosis 41 591	Cerebrovascular disease 103 707
4	Measles 17 053	Road traffic injuries 5 962	Self-inflicted injuries 14 646	Cirrhosis of the liver 10 529	Acute lower respiratory infections 31 865	Tuberculosis 85 814
5	Congenital abnormalities 15 484	Diarrhoeal diseases 4 125	Interpersonal violence 11 438	Trachea/bronchus/lung cancers 7 591	Trachea/bronchus/lung cancers 16 641	Diarrhoeal diseases 76 470
6	Pertussis 11 647	Inflammatory cardiac disease 4 015	Ischaemic heart disease 7 032	Liver cancers 6 602	Chronic obstructive pulmonary disease 16 085	Perinatal conditions 66 143
7	Tetanus 9 457	Cerebrovascular disease 3 219	Cerebrovascular disease 6 837	Road traffic injuries 4 045	Mouth and oropharynx cancers 14 073	Road traffic injuries 41 165
8	Drowning 7 791	Leukaemia 2 677	Malaria 6 698	Stomach cancers 3 729	Cirrhosis of the liver 12 817	Cirrhosis of the liver 30 022
9	Road traffic injuries 7 313	Nephritis/nephrosis 1 671	Cirrhosis of the liver 5 966	Cervix cancers 3 664	Nephritis/nephrosis 12 561	Trachea/bronchus/lung cancers 25 731
10	Protein-energy malnutrition 7 060	Tetanus 1 579	Drowning 5 147	Breast cancers 3 389	Diabetes mellitus 9 783	Drowning 21 590
11	STDs excluding HIV 5 586	Congenital abnormalities 1 378	Poisoning 5 011	Nephritis/nephrosis 3 310	Liver cancers 9 585	Nephritis/nephrosis 21 376
12	Inflammatory cardiac disease 2 995	Poisoning 1 281	Inflammatory cardiac disease 4 884	Diabetes mellitus 2 946	Colon/rectum cancers 9 214	Self-inflicted injuries 20 525
13	Malaria 2 498	Vitamin A deficiency 1 165	Falls 3 849	Mouth and oropharynx cancers 2 594	Stomach cancers 8 198	Inflammatory cardiac disease 20 197
14	Meningitis 2 123	Intestinal nematode infections 1 094	Acute lower respiratory infections 3 753	Inflammatory cardiac disease 2 535	Inflammatory cardiac disease 5 767	Malaria 19 586
15	Vitamin A deficiency 2 083	Tuberculosis 1 066	Nephritis/nephrosis 3 253	Self-inflicted injuries 2 428	Oesophagus cancers 4 447	Mouth and oropharynx cancers 19 219

Source: World Health Report 1999 Database



Table 42. Leading Causes of Burden of Disease, Western Pacific Region – Other Low- and Middle-Income Countries, Both Sexes, 1998

Rank	0-4 years	5-14 years	15-44 years	45-59 years	≥60 years	All ages
1	Perinatal conditions 2 420 138	Acute lower respiratory infections 376 418	Unipolar major depression 1 701 927	Tuberculosis 426 025	Ischaemic heart disease 500 143	Acute lower respiratory infections 2 844 239
2	Diarrhoeal diseases 2 304 606	Road traffic injuries 316 252	Road traffic injuries 744 123	Ischaemic heart disease 244 318	Cerebrovascular disease 389 152	Diarrhoeal diseases 2 594 225
3	Acute lower respiratory infections 2 175 068	Drowning 264 384	HIV/AIDS 722 617	Osteoarthritis 232 953	Tuberculosis 280 603	Perinatal conditions 2 420 138
4	Congenital abnormalities 922 760	Malaria 257 833	Anaemias 690 175	Cerebrovascular disease 219 721	Cataracts 164 742	Unipolar major depression 1 945 684
5	Protein-energy malnutrition 543 710	Falls 236 123	Tuberculosis 683 743	Cirrhosis of the liver 203 733	Acute lower respiratory infections 141 176	Tuberculosis 1 458 831
6	Measles 496 289	Intestinal nematode infections 233 809	STDs excluding HIV 661 819	Unipolar major depression 193 872	Chronic obstructive pulmonary disease 111 156	Road traffic injuries 1 432 539
7	Pertussis 406 166	Anaemias 185 473	Psychoses 650 077	Cataracts 125 322	Dementias 97 937	Anaemias 1 078 343
8	Falls 371 152	Diarrhoeal diseases 176 743	Alcohol dependence 523 123	Trachea/bronchus/lung cancers 115 974	Trachea/bronchus/lung cancers 95 845	Cerebrovascular disease 1 062 462
9	Tetanus 316 246	Inflammatory cardiac disease 155 943	Bipolar affective disorder 521 250	Liver cancers 100 582	Mouth and oropharynx 86 796	Falls 1 051 642
10	STDs excluding HIV 301 544	Cerebrovascular disease 120 815	Self-inflicted injuries 474 111	Diabetes mellitus 99 914	Cirrhosis of the liver 86 404	Congenital abnormalities 1 011 967
11	Road traffic injuries 276 559	Leukaemia 102 614	Falls 393 141	Glaucoma 99 504	Diabetes mellitus 84 225	STDs excluding HIV 986 300
12	Drowning 260 593	Asthma 90 293	Interpersonal violence 373 108	Road traffic injuries 73 794	Edentulism 63 767	HIV/AIDS 985 713
13	HIV/AIDS 176 090	Measles 82 152	Obsessive-compulsive disorders 316 368	Anaemias 64 576	Osteoarthritis 63 301	Ischaemic heart disease 979 210
14	Inflammatory cardiac disease 107 200	Epilepsy 74 059	Cerebrovascular disease 270 520	Stomach cancers 59 695	Nephritis/nephrosis 59 102	Drowning 689 300
15	Meningitis 105 173	Nephritis/nephrosis 72 314	Obstructed labour 241 579	Cervix cancers 59 558	Colon/rectum cancers 56 181	Psychoses 658 223

Source: World Health Report 1999 Database



Appendix 1: ICD Codes of the Leading Causes of Global Burden of Disease

Title of GBD cause	ICD-9 Code	ICD 9 BTL CODES	ICD-10 Code
I. Communicable, maternal, perinatal and nutritional conditions			
A. Infectious and parasitic diseases			
1. Tuberculosis	010-018, 137	B02, B077	A15-A19, B90
2. Sexually transmitted diseases excluding HIV	090-099, 614-616	B06, B371-B373	A50-A64, N70-N73
3. HIV/AIDS	279.5 (=042-044)	B184	B20-B24
4. Diarrhoeal diseases	001, 002, 004, 006-009	B01 minus B013	A00, A01,A03, A04, A06-A09
5. Childhood diseases			
a. Pertussis	033	B034	A37
b. Poliomyelitis	045, 138	B040, B078	A80,B91
c. Diphtheria	032	B033	A36
d. Measles	055	B042	B05
e. Tetanus	037, 771.3	B037	A33-A35
6. Bacterial meningitis	036, 320-322	B036, B220	A39, G00
7. Hepatitis	070.2-070.9	B046	B16-B19
8. Malaria	084	B052	B50-B54
9. Tropical-cluster diseases	085, 086, 120, 125	B053, B054, B072, B074	B55-B57, B65, B73-B74
10. Leprosy	030	B032	A30
11. Dengue	061		A90-A91
12. Japanese encephalitis	062.0		A83.0
13. Trachoma	076	B048	A71
14. Intestinal nematode infections	126-129	B075, B076	B76-B81
B. Respiratory infections			
1. Lower respiratory infections	466, 480-487	B320-B322	J10-J18, J20-J22
2. Upper respiratory infections	460-465	B310-B312	J00-J06
3. Otitis media	381-382	B240	H65-H66
C. Maternal conditions			

1. Maternal haemorrhage	640, 641, 666	B390	O44-O46, O67, O72
2. Maternal sepsis	670		O85-O86
3. Hypertensive disorders of pregnancy	642		O10-O16
4. Obstructed labour	660	B393	O64-O66
5. Abortion	630-639	B38	O00-O08
D. Perinatal conditions	760-779	B45	P00-P96
E. Nutritional deficiencies			
1. Protein-energy malnutrition	260-263	B190-B192	E40-E46
2. Iodine deficiency	243		E00-E02
3. Vitamin A deficiency	264		E50
4. Anaemias	280	B200	D50
II. Noncommunicable diseases			
A. Malignant neoplasms			
1. Mouth and oropharynx cancers	140-149	B08	C00-C14
2. Oesophagus cancer	150	B090	C15
3. Stomach cancer	151	B091	C16
4. Colon and rectum cancers	153, 154	B093, B094	C18-C21
5. Liver cancer	155	B095	C22
6. Pancreas cancer	157	B096	C25
7. Trachea, bronchus and lung cancers	162	B101	C33-C34
8. Melanoma and other skin cancers	172-173	B111, B112	C43-C44
9. Breast cancer	174	B113	C50
10. Cervix uteri cancer	180	B120	C53
11. Corpus uteri cancer	179, 182	B122	C54-C55
12. Ovary cancer	183	B123	C56
13. Prostate cancer	185	B124	C61
14. Bladder cancer	188	B126	C67
15. Lymphoma	200-202	B14 [minus B141]	C81-C90, C96
16. Leukaemia	204-208	B141	C91-C95
C. Diabetes mellitus	250	B181	E10-E14

D.	Nutritional/Endocrine disorders	240-242, 244-246, B18, B20 [minus 251-259, 270-279, B181, B184, 286-289 B200]	D51-D89, E03-E07, E15-E16, E20-E34, E51-E89	1. Peptic ulcer disease 2. Cirrhosis of the liver 3. Appendicitis	531-533 571 540-543	B341 B347 B342	K25-K27 K70, K74 K35-K37		
E.	Neuro-psychiatric conditions			J.	Genito-urinary diseases				
1.	Unipolar major depression		F32-F33	1. Nephritis and nephrosis 2. Benign prostatic hypertrophy	580-589 600	B350 B360	N00-N19 N40		
2.	Bipolar disorder	296	B212	F30-F31					
3.	Psychoses	295	B211	F20-F29	K.	Skin diseases	680-709	B42	L00-L99
4.	Epilepsy	345	B225	G40-G41	L.	Musculo-skeletal diseases			
5.	Alcohol dependence	291, 303, 305.0	B215	F10	1. Rheumatoid arthritis 2. Osteoarthritis	714 715	B430	M05-M06 M15-M19	
6.	Dementia and other degenerative and hereditary CNS disorders	330, 331, 290	B222, B210	F01, F03, G30-G31	M.	Congenital anomalies	740-759	B44	Q00-Q99
7.	Parkinson disease	332	B221	G20-G21	N.	Oral conditions			
8.	Multiple sclerosis	340	B223	G35	1. Dental caries 2. Periodontal disease 3. Edentulism	521.0 523		K02 K05	
9.	Drug dependence	304, 305.2-305.9	B216	F11-F16, F18-F19					
10.	Post-traumatic stress disorder			F43					
11.	Obsessive-compulsive disorders	300.3		F42					
12.	Panic disorder	300.2		F40.0, F41.0					
F.	Sense organ diseases				III	Injuries	E800-999(minus E980-E989)	B47-B56 minus B560	V01-Y98(minus Y10-Y34)
1.	Glaucoma	365	B230	H40	A.	Unintentional injuries	E800-949	B47- B53	V01-X59, Y40-Y98
2.	Cataracts	366	B231	H25-H26	1.	Road Traffic injuries	E810-919	B47	V02-04, V09, V12-14, V19, V20-79, V86-89
G.	Cardiovascular diseases				2.	Poisonings	E850-869	B48	X40-X49
1.	Rheumatic heart disease	390-398	B25	I01-I09	3.	Falls	E880-888	B50	W00-W19
2.	Ischaemic heart disease	410-414, Proportion of: 428, 427.1, 427.4, 427.5, 440.9, 429.0-429.2, 429.9	B27	I20-I25	4.	Fires	E890-899	B51	X00-X09
3.	Cerebrovascular disease	430-438	B29	I60-I69	5.	Drownings	E910	B521	W65-W74
4.	Inflammatory heart diseases	420, 421, 422, 425, Proportion of 428	I30-I33, I38, I40, I42	6.	Firearm accidents	E922	B524	W32-W34	
H.	Respiratory diseases			B.	Intentional injuries	E950-978, 990-999	B54-B55, B56 minus B560	X60-Y09, Y35-Y36	
1.	Chronic obstructive pulmonary disease	490-492, 495-496 B323-B325	J40-J44	1.	Self-inflicted injuries	E950-959	B54	X60-X84	
2.	Asthma	493	J45-J46	2.	Homicide/interpersonal violence	E960-969	B55	X85-Y09	
I.	Digestive diseases			3.	War	E990-999	B561	Y35-Y36	

Appendix 2. WHO Regional and Economic Groupings

Africa	Region of the Americas	Eastern Mediterranean Region	European Region	South-East Asia Region	Western Pacific Region
46 Member States	35 Member States	22 Member States	51 Member States	10 Member States	27 Member States
Low and middle income	Low and middle income	Low and middle income	Low and middle income	Other low and middle income	Other low and middle income
Algeria	Antigua and Barbuda	Afghanistan	Albania	India	Cambodia
Angola	Argentina	Bahrain	Armenia	Bangladesh	Cook Islands
Benin	Barbados	Djibouti	Azerbaijan	Bhutan	Fiji
Botswana	Belize	Egypt	Belarus	Dem. People's Rep. of Korea	Kiribati
Burkina Faso	Bolivia	Iran (Islamic Republic of)	Bosnia and Herzegovina	Indonesia	Lao People's Dem. Republic
Burundi	Brazil	Iraq	Bulgaria	Maldives	Malaysia
Cameroon	Chile	Jordan	Croatia	Myanmar	Marshall Islands
Cape Verde	Colombia	Lebanon	Czech Republic	Nepal	Micronesia, (Fed. States of).
Central African Republic	Costa Rica	Libyan Arab Jamahiriya	Estonia	Sri Lanka	Mongolia
Chad	Cuba	Morocco	Georgia	Thailand	Nauru
Comoros	Dominica	Oman	Hungary		Niue
Congo	Dominican Republic	Pakistan	Kazakhstan		Palau
Cote d'Ivoire	Ecuador	Saudi Arabia	Kyrgyzstan		Papua New Guinea
Dem. Republic of the Congo	El Salvador	Somalia	Latvia		Philippines
Equatorial Guinea	Grenada	Sudan	Lithuania		Samoa
Eritrea	Guatemala	Syrian Arab Republic	Malta		Solomon Islands
Ethiopia	Guyana	Tunisia	Poland		Tonga
Gabon	Haiti	Yemen	Republic of Moldova		Tuvalu
Gambia	Honduras	High income	Romania		Vanuatu
Ghana	Jamaica	Cyprus	Russian Federation		Viet Nam
Guinea	Mexico	Kuwait	Slovakia		High income
Guinea-Bissau	Nicaragua	Qatar	Slovenia	Australia	
Kenya	Panama	United Arab Emirates	Tajikistan	Brunei Darussalam	
Lesotho	Paraguay		TFYR Macedonia	Japan	
Liberia	Peru		Turkey	New Zealand	
Madagascar	Saint Kitts and Nevis		Turkmenistan	Republic of Korea	
Malawi	Saint Lucia		Ukraine	Singapore	
Mali	Saint Vincent and the Grenadines		Uzbekistan		
Mauritania	Suriname		Yugoslavia		
Mauritius	Trinidad and Tobago	High income	High income		
Mozambique	Uruguay	Andorra	Andorra		
Namibia	Venezuela	Austria	Austria		
Niger	High income	Belgium	Belgium		
Nigeria	Bahamas	Denmark	Denmark		
Rwanda	Canada	Finland	Finland		
Sao Tome and Principe	United States of America	France	France		
Senegal		Germany	Germany		
Seychelles		Greece	Greece		
Sierra Leone		Iceland	Iceland		
South Africa		Ireland	Ireland		
Swaziland		Israel	Israel		
Togo		Italy	Italy		
Uganda		Luxembourg	Luxembourg		
United Rep. of Tanzania		Monaco	Monaco		
Zambia		Netherlands	Netherlands		
Zimbabwe		Norway	Norway		
		Portugal	Portugal		
		San Marino	San Marino		
		Spain	Spain		
		Sweden	Sweden		
		Switzerland	Switzerland		
		United Kingdom	United Kingdom		

Appendix 3. Populations by Age Group

WHO Geographic Regions

	Population by Age Group (000)					Total
	0-4	5-14	15-44	45-59	60+	
World, Both Sexes	603 648	1186 025	2763 736	757 385	579 097	5889 891
World, Males	310 022	609 010	1409 261	379 186	258 961	2966 441
World, Females	293 625	577 015	1354 475	378 199	320 136	2923 451
World - High Income, Both Sexes	51 014	107 812	367 737	159 814	164 890	851 268
World - High Income, Males	26 162	55 244	186 795	79 592	70 593	418 386
World - High Income, Females	24 852	52 568	180 942	80 222	94 297	432 881
World - Low and Middle Income, Both Sexes	552 634	1078 213	2395 999	597 571	414 207	5038 624
World - Low and Middle Income, Males	283 860	553 766	1222 466	299 594	188 368	2548 054
World - Low and Middle Income, Females	268 774	524 447	1173 533	297 977	225 839	2490 570
Africa, Both Sexes	102 171	164 594	257 299	49 202	28 284	601 550
Americas – High Income Countries, Both Sexes	21 513	44 380	135 535	53 653	49 803	304 884
Americas – Low and Middle Income Countries, Both Sexes	54 753	106 803	240 917	56 788	38 123	497 383
Eastern Mediterranean - High Income Countries, Both Sexes	514	1 167	2 641	890	300	5 512
Eastern Mediterranean - Low and Middle Income Countries, Both Sexes	67 371	121 413	212 358	41 844	25 141	468 127
Europe - High Income Countries, Both Sexes	21 334	46 050	168 471	73 107	83 311	392 274
Europe - Low and Middle Income Countries, Both Sexes	31 835	77 652	219 970	74 477	73 789	477 722
South-East Asia - India, Both Sexes	115 615	220 580	459 491	113 400	73 136	982 221
South-East Asia - Other Low and Middle Income Countries, Both Sexes	57 568	116 744	281 131	63 866	40 076	559 386
Western Pacific - High Income, Both Sexes	7 653	16 214	61 090	32 164	31 476	148 597
Western Pacific - China, Both Sexes	98 570	223 400	631 082	179 427	123 219	1255 697
Western Pacific - Other Low and Middle Income, Both Sexes	24 751	47 028	93 751	18 568	12 439	196 537

Source: United Nations dataset *World population prospects 1950-2050 (the 1998 revision)*, New York, United Nations Population Division, 1998

Appendix 4. Injury related mortality, world, 1998

	<u>Both Sexes</u>		<u>Males</u>		<u>Females</u>	
	Number of Deaths	Mortality Rate (per 100,000)	Number of Deaths	Mortality Rate (per 100,000)	Number of Deaths	Mortality Rate (per 100,000)
All Injuries	5 764 825	97.9	3 814 757	128.6	1 950 068	66.7
Road Traffic Injuries	1 170 694	19.9	854 939	28.8	315 755	10.8
Suicide	947 697	16.1	565 156	19.1	382 541	13.1
Homicide	735 972	12.5	582 486	19.6	153 485	5.3
War	588 050	10.0	343 762	11.6	244 287	8.4
Drowning	495 463	8.4	332 498	11.2	162 964	5.6
Falls	315 633	5.4	177 022	6.0	138 611	4.7
Fires	282 178	4.8	119 090	4.0	163 088	5.6
Poisoning	251 881	4.3	155 112	5.2	96 769	3.3
Other injuries	977 259	16.6	684 692	23.1	292 567	10.0

