

THE GLOBAL BURDEN OF DISEASE 2000 IN AGING POPULATIONS

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project: aims, methods and data sources**

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This research paper series reports on research supported by the National Institute on Aging program grant entitled The Global Burden of Disease 2000 in Aging Populations (1-P01-AG17625). The purpose of the grant is to strengthen the methodological and empirical bases for undertaking comparative assessments of health problems, their determinants and consequences in aging populations.

Since the publication of the Global Burden of Disease Study 1990, there has been increasing interest in comparative analyses of health outcomes, determinants and consequences. A major revision of the Global Burden of Disease Study has been launched for the year 2000 with the full commitment of the World Health Organization (WHO). The Global Programme on Evidence for Health Policy at WHO has developed a Global Burden of Disease Network, which operates in parallel to the research conducted as part of the program project. The program project will strengthen the scientific basis for the large-scale undertaking led by WHO at the global, regional and national level.

The purpose of this series is to present original research that emerges from the various project components of this program grant. The views expressed in these research papers are those of the author(s) and do not necessarily reflect the views of the Harvard Burden of Disease Unit, the World Health Organization nor the National Institute on Aging.

THE HARVARD BURDEN OF DISEASE UNIT

The Harvard Burden of Disease Unit was established to design, test, and implement methodologies to aid in the effective allocation of health resources. To achieve this end, the Unit conducts research in collaboration with national governments, international agencies and other researchers and policy-makers. The Unit's research has two main foci:

- to forge the theory, design, and implementation of approaches to the combined measurement of mortality and non-fatal health outcomes, in order to develop valid, reliable, comparable and comprehensive measures of population health and comparative assessments of the burden of diseases, injuries and risk factors; and
- to investigate the costs, efficacy and effectiveness of major health interventions applied in diverse settings, toward the goal of establishing a broad database on cost-effectiveness.

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The Global Burden of Disease 2000 project: aims, methods and data sources¹

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1. Objectives

Decision makers need the best available evidence in the form of quantities of interest to them. Concerns about quality and uncertainty of data are not an acceptable reason for failing to provide such evidence, as decisions must be made now and decision makers will not wait years for improvements in evidence before making these decisions. This means systematically identifying and assembling all the relevant evidence available now, assessing its quality, limitations and uncertainty, and using the best possible methods to come up with estimates of the quantities of interest to decision makers, with estimates of the uncertainty in these.

In relation to international efforts to improve the health of populations, this means assessing the available evidence, and using the best available methods, to quantify the burden of disease and injury, its causes in terms of risk factors and broader health determinants, and the likely burden in the future. The Global Burden of Disease (GBD) project was formed to address these objectives. As well generating the most comprehensive and consistent set of estimates of mortality and morbidity by age, sex and region ever produced (1-7), the GBD also introduced a new metric – disability adjusted life year (DALY) – to quantify the burden of disease (4). The DALY is a health gap measure, which combines information on the impact of premature death and of disability and other non-fatal health outcomes. One DALY can be thought of as one lost year of ‘healthy’ life and the burden of disease as a measurement of the gap between current health status and an ideal situation where everyone lives into old age free of disease and disability. For a review of the development of DALYs and recent advances in the measurement of burden of disease see Murray and Lopez (8).

The World Health Organization is now undertaking a new assessment of the Global Burden of Disease (GBD) for the year 2000. The three goals articulated for the GBD 1990 (8,9) remain central:

- (i) to decouple epidemiological assessment of the magnitude of health problems from advocacy by interest groups of particular health policies or interventions;
- (ii) to include in international health policy debates information on non-fatal health outcomes along with information on mortality; and
- (iii) to undertake the quantification of health problems in time-based units that can also be used in economic appraisal.

The specific objectives for GBD 2000 are similar to the original objectives:

- to develop internally consistent estimates of mortality from 135 major causes of death, disaggregated by age and sex, for the world and major geographic regions;
- to develop internally consistent estimates of the incidence, prevalence, duration, and case-fatality for over 500 sequelae resulting from the above causes;
- to describe and value the health states associated with these sequelae of diseases and injuries
- to quantify the burden of premature mortality and disability by age, sex, and region for 135 major causes or groups of causes;
- to analyze the contribution to this burden of major physiological, behavioural, and social risk factors by age, sex and region (see Table 1);
- to develop alternative projection scenarios of mortality and non-fatal health outcomes over the next 30 years, disaggregated by cause, age, sex and region.

Table 1. Risk factors included in the Comparative Risk Assessment component of the GBD2000

1. Alcohol	11. Selected occupational risks
2. Blood pressure	12. Ambient air pollution
3. Cholesterol	13. Physical inactivity
4. Climate change	14. Tobacco
5. Illicit drugs	15. Unsafe injection practises in medical settings
6. Indoor smoke from biofuels	16. Unsafe sex and unplanned pregnancies
7. Lead	17. Unsafe water, sanitation, and hygiene
8. Childhood and maternal under-nutrition	18. Non-breast-feeding
9. Obesity and overweight	19. Childhood sexual abuse
10. Lack of fruit and vegetable intake	20. Distribution of risk factors by poverty

In other words, the GBD 2000 aims to produce the best possible evidence-based description of health, the causes of lost health, and likely future trends in health. To the extent possible, the GBD 2000 aims to utilise and synthesise within a consistent and comprehensive framework, *all* relevant epidemiological evidence on population demography and health for the various regions of the world. Where the evidence is uncertain or incomplete, the GBD 2000 attempts to make the best possible inferences based on the knowledge base that is available, and to assess the uncertainty in the resulting estimates (10).

It is important to include assessments of all causes of disease and injury burden in the GBD 2000. Otherwise, limitations in the evidence base for certain causes or regions translate to ‘no burden’ rather than the best achievable uncertain estimates of burden, and health decision makers would be presented with a misleading picture. There is a tendency in descriptive epidemiology to refuse to make estimates where data are sparse, uncertain or based on studies that do not reach certain methodological standards. In contrast, disciplines such as demography and economics more often aim to make the best possible estimates from the available data, using a range of techniques depending on the type and quality of evidence. Thus the GBD 1990 has been criticised by some epidemiologists for using ‘estimates’ rather than ‘actual data’. This is a false dichotomy. All epidemiological data relating to population are ‘estimates’ of varying degrees of precision or uncertainty. The GBD 2000 seeks to use all available relevant data, to maximise the use of high quality population-based data, and, even for regions and causes where data are sparse, to use the available evidence and the best available methods to make inferences. Internal consistency and transparency of methods and assumptions are crucial. To this end, it is aimed to progressively document the data sources, disease models, methods and assumptions used in the GBD 2000 and to release these as drafts for discussion over the next two years.

A variety of measures are used to analyse the patterns of descriptive epidemiology in the GBD database. These include death numbers, probabilities of deaths (between birth and 15 years of age, between ages 15 and 60 and between ages 60 and 70), incidence and point prevalence, years of life lost to premature mortality, prevalence of severity adjusted disability, and years lived in various states of disability. In addition, two summary measures of population health, disability adjusted life years (DALYs) and healthy life expectancy (HALE) are used to describe the broad patterns (11, 12).

A number of commentators have incorrectly equated the GBD with one summary measure of population health used extensively in the presentation of the GBD results by cause, namely DALYs (13, 14). Such critiques miss the point that the primary activity of the GBD is the development of comparable, valid and reliable epidemiological information on a wide range

of diseases, injuries and risk factors. As such, the GBD 2000 is a crucial underpinning for a wide variety of WHO programs and for evidence to support global health policy.

As suggested by the objectives outlined above, a major focus of the GBD 2000 project is to work with WHO disease and injury programs to improve the comparability, validity and reliability of the descriptive epidemiology for mortality and non-fatal health outcomes attributed to various diseases, injuries and risk factors. The creation and maintenance of databases on the descriptive epidemiology of major conditions is probably the most formidable, time consuming and resource-intensive task of the GBD 2000 enterprise. WHO program participation in this task is highly desirable. Not only do programs benefit from the improvement in the evidence base, but they can facilitate epidemiological reviews that maximise the use of available evidence and expertise and thus are of maximum use to WHO and Member States. Program participation is also highly desirable because the estimates of incidence, prevalence and mortality for specific causes that are produced for the GBD 2000 will ultimately become the official estimates used in WHO publications and analyses

The Epidemiology and Burden of Disease team (EBD) within the Global Program on Evidence for Health Policy (EIP/GPE) is responsible for coordinating the GBD 2000. Reviews of epidemiological information and assessments of global epidemiological patterns are being carried out in collaboration and consultation with relevant programs at WHO and with experts and expert groups outside WHO. Funding support is being provided under a grant from the US National Institutes on Aging.

Version 1 estimates of the Global Burden of Disease 2000 are reported in this year's World Health Report (11). This paper summarises the analysis categories, methods and data sources for the GBD 2000. It does not attempt to document detailed epidemiological assessments for individual diseases. Some of these have been published for the GBD 1990 (15, 16), and over the next two years, will also become available progressively for the GBD 2000. This paper also provides a summary of the Version 1 results for the GBD 2000. These estimates will continue to be revised and improved over the next two years.

2. GBD2000 study categories

2.1 Age groups

The 5 age groups used in the GBD 1990 for each sex have been expanded to 8 age groups as follows:

0-4, 5-14, 15-29, 30-44, 45-59, 60-69, 70-79, 80+ years

2.2 Regions

For geographic disaggregation of the global burden of disease, the six WHO regions of the world have been further divided into 14 subregions, based on levels of child (under five years) and adult (15-59 years) mortality for WHO Member States. The classification of WHO Member States into the mortality strata were carried out using population estimates for 1999 (UN Population Division 1998) and estimates of ${}_5q_0$ and ${}_{45}q_{15}$ based on WHO analyses of mortality rates for 1999 (17).

Five mortality strata were defined in terms of quintiles of the distribution of ${}_5q_0$ and ${}_{45}q_{15}$ (both sexes combined) as shown in Table 2. Adult mortality ${}_{45}q_{15}$ was regressed on ${}_5q_0$ and the regression line used to divide countries with high child mortality into high adult mortality (stratum D) and very high adult mortality (stratum E). Stratum E includes the countries in sub-Saharan Africa where HIV/AIDS has had a very substantial impact.

Table 2. Definitions of mortality strata used to define WHO subregions for the GBD2000

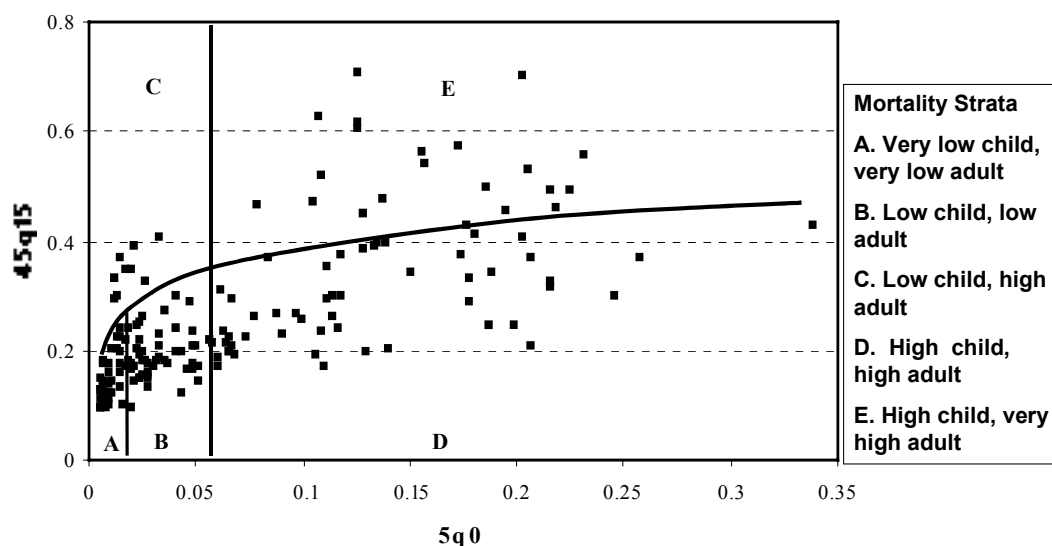
Mortality stratum	Child mortality	Definition	Adult mortality
A	Very low child mortality (1 st quintile of ${}_5q_0$)	${}_5q_0 < 0.0122$	Low adult mortality
B	Low child mortality (2 nd and 3 rd quintile of ${}_5q_0$)	$0.0122 < {}_5q_0 < 0.062$	Low adult mortality
C	Low child mortality (2 nd and 3 rd quintile of ${}_5q_0$)	$0.0122 < {}_5q_0 < 0.062$	High adult mortality
D	High child mortality (4 th and 5 th quintile of ${}_5q_0$)	$0.062 < {}_5q_0$	High adult mortality
E	High child mortality (4 th and 5 th quintile of ${}_5q_0$)	$0.062 < {}_5q_0$	Very high adult mortality

When these mortality strata are applied to the six WHO regions, they produce 14 mortality subregions (Figure 1). These are listed in Annex Table 1, together with the WHO Member States in each subregion.

For the purposes of burden of disease epidemiological analyses, 2 of these regions have been further subdivided: EURO B into EURO B1 and EURO B2 – the latter including the central Asian states; and WPRO B into WPRO B1 (mainly China), WPRO B2 (South east Asian countries) and WPRO B3 (Pacific Islands). Additionally, some Member States have been reclassified into subregions with similar epidemiological/geographic/ethnic patterns in order to maximise the epidemiological homogeneity of the subregions for the purposes of epidemiological analysis. The resulting 17 epidemiological subregions are listed in Annex

Table 2. These subregions are used for analysis in the GBD 2000, but the resulting estimates are mapped back to the 14 subregions defined in Annex Table 1 for all reporting purposes.

Figure 1. Global Mortality Strata for GBD 2000 Regions



2.3 Cause categories

Annex Table 3 lists the cause categories used in the GBD 2000 and their definitions in terms of ICD-9 and ICD-10 codes (18, 19). The tree structure used for classification of disease and injury causes is similar to that used for the GBD 1990 but includes some revisions and additional cause categories. The cause list has four levels of disaggregation and includes 135 specific diseases and injuries. At the first level, overall mortality is divided into three broad groups of causes: Group I, consisting of communicable diseases, maternal causes, conditions arising in the perinatal period and nutritional deficiencies, Group II encompassing the non-communicable diseases; and Group III, comprising intentional and unintentional injuries.

Deaths and health states are categorically attributed to one underlying cause using the rules and conventions of the International Classification of Diseases. In some cases, the ICD rules are ambiguous; in these cases, the GBD 2000 follows the conventions used in the GBD 1990 (2, Table 3.3).

Annex Table 4 lists the sequelae analysed for each cause category and provides relevant case definitions.

In some cases, diseases may act as risk factors for other diseases, and the total burden attributable to a disease may be greater than that assigned under the ICD conventions. It is intended to separately estimate the total attributable burden for the following causes:

Hepatitis	Include attributable burden of liver cancer and renal failure
Diabetes	Include attributable burden of cardiovascular disease and renal failure
Depression	Include attributable burden of suicide
Hearing loss	Total burden of hearing loss sequelae for all causes
Vision disorders	Total burden of vision disorders resulting from all causes
Osteoporosis	Attributable burden of falls/fractures

3. Methods

3.1 Population

The GBD 2000 uses the latest population estimates for WHO Member States prepared by the UN Population Division (see Annex Table 5). Note that these estimates refer to de facto population (eg. including guest workers and refugees) no de jure population (citizens).

3.2 All cause mortality

The first analytical step in the GBD 2000 study is to estimate the age-specific death rates, by sex, for the 14 WHO subregions for the year 2000. The importance of this step cannot be overemphasized. The number of deaths, by age and sex, provides an essential “envelope” which constrains individual disease and injury estimates of deaths. Competing claims for the magnitude of deaths from various causes must be reconciled within this envelope. The sum of deaths from all specific causes for any sex-age group must sum to the total number of deaths for that age-sex group estimated via the data sources and methods described below. From the estimated age-specific mortality rates, life tables for the populations of the subregions can be derived using standard methods.

Since publication of the WHR 2000 (17), there has been intensive contact between WHO and Member States in an effort to verify the best sources of recent data on vital registration and cause of death, and new life tables for the year 2000 have been constructed for all 191 WHO Member States (11). The available sources of mortality data for the 14 mortality subregions are summarised in Tables 3 and 4. Complete or incomplete vital registration data together with sample registration systems cover 74% of global mortality. Survey data and indirect demographic techniques provide information on levels of child and adult mortality for the remaining 26% of estimated global mortality.

These data sources were used as follows to estimate global mortality. For countries with good quality vital registration systems, no demographic adjustments were made. Using the latest available life table as a standard (typically 1998 or 1999), the straightforward Brass Logit technique was applied to these data to obtain a time series of α and β parameter estimates from 1980. Suitable time series techniques were then used to forecast the corresponding parameter estimates of α and β for the year 2000, and hence the 2000 life table (20). In the 30% of countries with incomplete or sample vital registration systems, demographic techniques¹ were used to estimate the level of completeness of death recording and to adjust the data accordingly. The Brass logit technique was then applied to the time series of corrected data. In the few cases where time series data were not available, life tables were constructed using information on estimates of adult ($_{45}q_{15}$) and child ($_{5}q_0$) mortality in conjunction with the new WHO modified-logit life table system based on the Brass logit system (21).

Finally, for the 63 countries lacking vital registration data, the levels of adult mortality were estimated from projected trends in child mortality using the modified Brass Logit system (21). This system is an extension of the ordinary Brass2-parameter system to include two additional age-specific correction factors (called γ and θ) which correct for the increasing non-linearity of logits with increasing distance from the standard (21). HIV/AIDS mortality

¹ The methods for assessing completeness of reporting that were used are (i) Bennet Horiuchi method, (ii) the Simple Growth Balance method and (iii) the generalized Growth Balance method.

Table 3. Mortality data sources (number of Member States with recent deaths coverage) by WHO subregion for the GBD2000

Subregion	Complete vital statistics (coverage of 95%+)	Incomplete vital statistics	Sample registration and surveillance systems	Surveys and indirect demographic methods	No recent data	Total Member States
Afro D	2	2	0	18	4	26
Afro E	0	2	1	13	4	20
Amro A	3	0	0	0	0	3
Amro B	17	9	0	0	0	26
Amro D	0	4	0	1	1	6
Emro B	4	4	0	5	0	13
Emro D	0	2	0	5	2	9
Euro A	26	0	0	0	0	26
Euro B	7	9	0	0	0	16
Euro C	8	1	0	0	0	9
Searo B	1	1	0	1	0	3
Searo D	0	2	2	1	2	7
Wpro A	4	1	0	0	0	5
Wpro B	3	12	1	6	0	22
Total	75	49	4	50	13	191

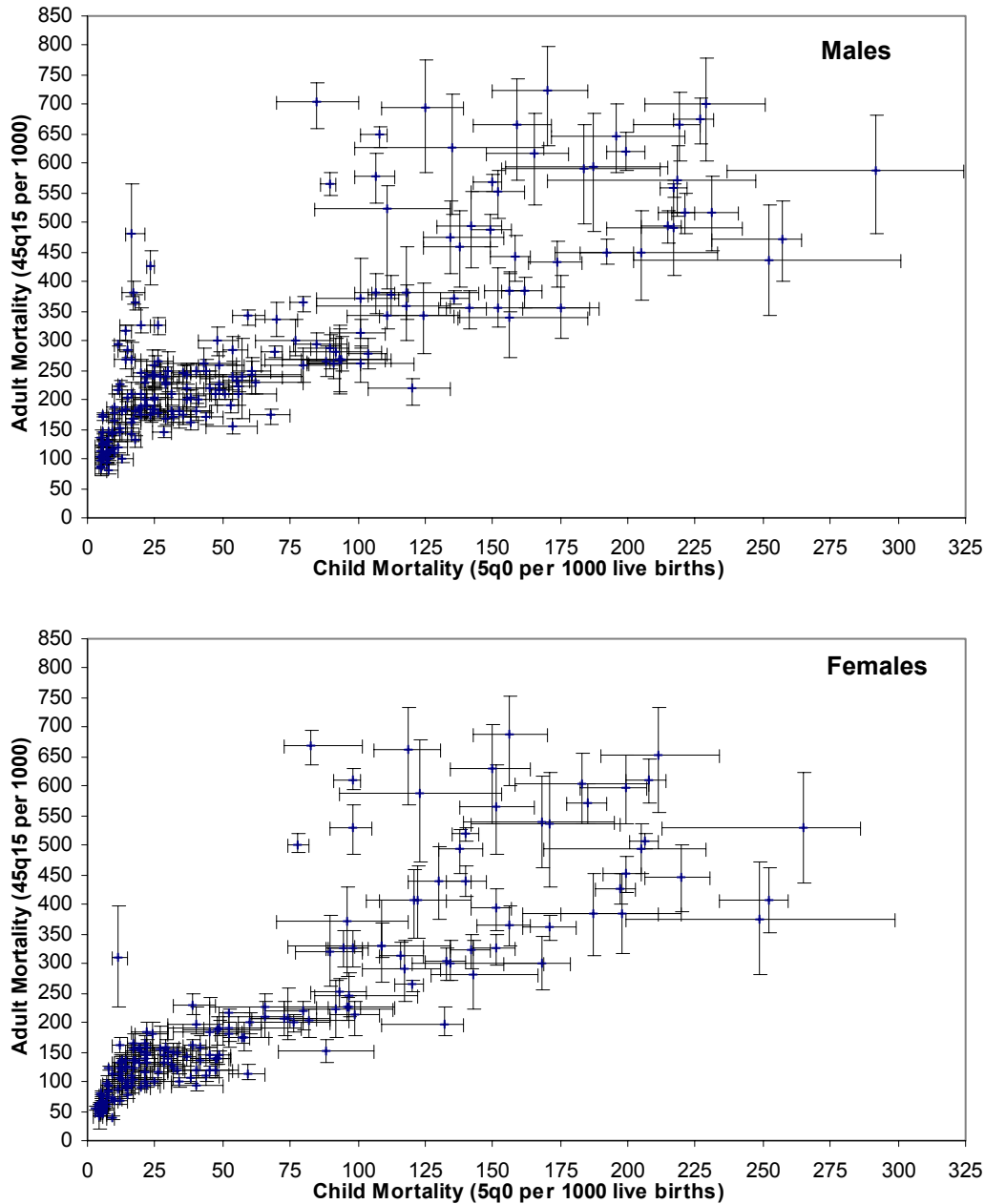
Table 4. Mortality data sources (% of recent deaths covered) by WHO subregion for the GBD2000

Subregion	Complete vital statistics (coverage of 95%+)	Incomplete vital statistics	Sample registration and surveillance systems	Surveys and indirect demographic methods	No recent data	Total deaths 2000 (WHO estimates)
Afro D	0%	4%	0%	89%	7%	100%
Afro E	0%	13%	9%	54%	23%	100%
Amro A	100%	0%	0%	0%	0%	100%
Amro B	39%	61%	0%	0%	0%	100%
Amro D	0%	65%	0%	14%	21%	100%
Emro B	2%	74%	0%	24%	0%	100%
Emro D	0%	18%	0%	68%	14%	100%
Euro A	100%	0%	0%	0%	0%	100%
Euro B	51%	49%	0%	0%	0%	100%
Euro C	96%	4%	0%	0%	0%	100%
Searo B	6%	19%	0%	76%	0%	100%
Searo D	0%	2%	92%	4%	2%	100%
Wpro A	100%	0%	0%	0%	0%	100%
Wpro B	0%	15%	84%	1%	0%	100%
Total	24%	13%	36%	22%	5%	100%

was estimated separately for these countries and added to the model age patterns allowing for competing mortality risks.

Some of the most recent data available from countries used in the construction of the new life tables are summarized in Figure 2. It plots, by country, adult ($_{45}q_{15}$) versus child ($_{5}q_0$) mortality for males and females showing, for example, that some countries with low levels of child mortality have much higher than expected levels of adult male mortality. The bars show the estimated 95% uncertainty intervals for adult and child mortality (10). Annex Tables 6 and 7 summarize all cause mortality estimates for Version 1 of the GBD 2000.

Figure 2. Adult mortality versus child mortality for 191 WHO Member States for the year 2000.



3.2 Cause distribution of deaths

Causes of death for the WHO subregions and the world have been estimated based on data from national vital registration systems that capture about 17 million deaths annually. In addition, information from sample registration systems, population laboratories and epidemiological analyses of specific conditions have been used to improve estimates of the cause of death patterns (22-25). WHO is intensifying efforts with Member States to obtain and verify recent vital registration data on causes of death.

Cause of death data have been carefully analysed to take into account incomplete coverage of vital registration in countries and the likely differences in cause of death patterns that would be expected in the uncovered and often poorer sub-populations. Techniques to undertake this analysis have been developed based on the global burden of disease study (2) and further refined using a much more extensive database and more robust modelling techniques (26).

Special attention has been paid to problems of misattribution or miscoding of causes of death in cardiovascular diseases, cancer, injuries and general ill-defined categories. A correction algorithm for reclassifying ill-defined cardiovascular codes has been developed (24). Cancer mortality by site has been evaluated using both vital registration data and population based cancer incidence registries. The latter have been analysed using a complete age, period cohort model of cancer survival in each region (25).

As a general rule, vital registration data, suitably corrected for ill-defined coding and probable systematic biases in certifying deaths to non-specific vascular, cancer and injury codes were used to estimate the cause of death pattern. Vital registration data to do so was available for 65 countries. In a further 28 countries, cause of death models were used to correct vital registration data by age and sex to yield more plausible patterns across Groups I, II and III. The distribution of specific causes within groups was then based on the recorded cause of death patterns from vital registration data. The resulting estimates were then systematically corrected on the basis of other epidemiological evidence from registries, community studies and disease surveillance systems.

For China and India, cause patterns of mortality were based on existing mortality registration systems, namely the Disease Surveillance Points system (DSP) and the Vital Registration System of the Ministry of Health in China, and the Medical Certificate of Cause of Death (MCCD) for urban India and the Annual Survey of Causes of Death (SCD)) for rural areas of India. For all other countries lacking vital registration data, cause of death models were used to firstly estimate the maximum likelihood distribution of deaths across the broad categories of communicable, non-communicable and injuries, based on estimated total mortality rates and income (26). A regional model pattern of specific causes of death was then constructed based on local vital registration and *verbal autopsy* data and this proportionate distribution was then applied within each broad cause group. Finally, the resulting estimates were then adjusted based on other epidemiological evidence from specific disease studies.

There are considerable regional variations in early childhood mortality (under 5 years of age), particularly in Africa where – unlike in other regions – malaria and HIV rank among the top ten causes of childhood death. Among the 10.9 million children under the age of 5 who died in 2000 across the world, conditions arising in the perinatal period were the leading cause of death responsible for over 2.4 million deaths, followed by lower respiratory infections (about 2.1 million), diarrhoeal diseases (1.3 million), malaria (over 900,000) and measles (nearly 590,000) (Table 5, see also Annex Table 6). Among the top ten leading causes globally in 2000, seven were infectious or parasitic diseases. However, lower respiratory infections and perinatal conditions are placed among the first three causes of death in all 6 regions.

Table 5: Causes of death in children under age 5 years, WHO regions, GBD 2000, Version 1 estimates.

WORLD				AFRO	AMRO	EMRO	EURO	SEARO	WPRO
Rank	Cause	No deaths ('000)	% total	Ranking					
	All causes	10,901							
1	Conditions arising in the perinatal period	2,438	22.4	3	1	1	1	1	1
2	Lower respiratory infections (LRI)	2,134	19.6	2	3	2	2	2	2
3	Diarrhoeal diseases	1,315	12.1	4	4	3	3	3	5
4	Malaria	906	8.3	1		8			
5	Measles	587	5.4	6		5	5	5	6
6	Congenital anomalies	560	5.1		2	4	4	4	3
7	HIV	419	3.9	5					
8	Pertussis	296	2.7	7	8	6		7	
9	Tetanus	222	2.0	8		7		6	10
10	Protein-energy malnutrition	173	1.6	10	5			8	8
11	Syphilis	138	1.3	9				9	
12	Drownings	116	1.1		10		7		4
13	Meningitis	77	0.7		6	10	6		
14	Motor vehicle accidents	76	0.7		9		10	10	9
16	Endocrine disorders	60	0.6		7	9			
17	Poisonings	47	0.4				8		
18	Upper respiratory infections	44	0.4						7
27	Hepatitis B	20	0.2				9		

Annex Table 8 summarizes GBD 2000 Version 1 estimates of death by cause, age and sex for the 14 mortality subregions.

3.3 YLD estimation

Estimating the years lived with a disability (YLD) is the most difficult component of burden of disease analysis. Various methods have been developed to reconcile often fragmented and partial estimates available from different studies. A specific software tool, DisMod, has been developed to assist in the development of internally consistent estimates (27).

YLD are the disability component of DALYs. The basic formula for calculating YLD is:

$$YLD = I \times DW \times L$$

where I is the number of incident cases in the reference period, DW is the disability weight (in the range 0-1) and L is the average duration of disability (measured in years).

The full formula with discounting and non-uniform age weights is given elsewhere (6, 27). Consistent and meaningful YLD estimates depend on a clear definition of the condition under consideration in terms of case or episode, and severity level or disease stage. It is then necessary to ensure that the disability weight and the population incidence or prevalence data relate to the same case definition. The data required to estimate YLD are: disability incidence, disability duration, age of onset, and distribution by severity class, all of which must be

disaggregated by age and sex. These in turn require estimates of incidence, remission, case-fatality rates or relative risks, by age and sex.

The key to estimation of YLD is to develop comprehensive and consistent estimates for incidence and point prevalence. WHO program participation in the development and finalisation of these estimates is important to ensure that final estimates reflect all information and knowledge available to WHO. Annex Table 9 summarises Version 1 incidence estimates by subregion for selected communicable diseases and nutritional problems. Annex Table 10 similarly summarises point prevalence estimates for selected Group II conditions by subregion.

A wide range of data sources are used for the analysis of incidence, prevalence and YLD. These include:

(1) Disease registers

Disease registers record new cases of disease based on reports by physicians and/or laboratories. Registers are common in infectious diseases (e.g. tuberculosis), cancer, congenital anomalies, a number of relatively rare diseases (e.g. cystic fibrosis or thalassaemia), and sometimes conditions such as diabetes, schizophrenia and epilepsy. For many Group I conditions, WHO programs maintain up-to-date databases based on diseases registers, population surveys and epidemiological studies. These have been used where available.

(2) Population surveys

Interview surveys such as the National Health Interview Survey in the USA can provide self-reported information on disabilities, impairments and diseases. However, self-report data is generally not comparable across countries (28, 29); it is also often difficult to attribute impairment to the underlying causes, and, there are often considerable differences between the disease concept the ‘general public’ has and the ‘medically’ defined disease category for which information is intended to be collected.

In general, the results of measurement surveys contribute more to YLD calculations than self-reported interview surveys. This may even be the case if the measurement survey was conducted in only part of the country or in a specific subpopulation. The CIDI and DIS questionnaires used in mental health surveys are examples of standard questionnaires based on self-report that have undergone validity testing and have been used widely.

(3) Epidemiological studies

Some of the most useful sources of information for the GBD 2000 are population-based epidemiological studies. Particularly, longitudinal studies of the ‘natural’ history of a disease can provide a wealth of information on the incidence, average duration, levels of severity, remission and case fatality. Such studies are rare because they are very costly to undertake. As they are often conducted in a particular region or town, judgment is needed to extrapolate results to the whole population.

(4) Health facility data

In the majority of cases, routine data on consultations by diagnosis is not be very helpful in estimating burden. Facility based data — unless the coverage of the health system is near complete — will always be based on biased samples of the disability present in the community. Likewise, hospital deaths are unlikely to be useful due to the same problems of selection bias. Examples of conditions that can be estimated from hospital data if there is good coverage and data are available include: perinatal

and maternal conditions, meningitis, stroke, myocardial infarction, surgical conditions and the more serious injuries.

Over the next two years, it is planned to progressively document and publish the epidemiological reviews underlying the GBD 2000 estimates. Table 6 summarises the numbers of epidemiological studies or databases available for each WHO region for the estimation of YLD for selected conditions.

Table 6. GBD2000: numbers of epidemiological studies used, by region, selected causes.

Cause	AFRO	AMRO	EMRO	EURO	SEARO	WPRO	Comment
Childhood Cluster diseases							
Pertussis	19	89	6	137	8	15	Includes community surveys, country and review data Plus: 29 Global review studies
Poliomyelitis	Country reporting and correction factor used						
Diphtheria	Country reporting and correction factor used						
Measles	27	40	12	27	9	7	Includes community surveys, country and review data Plus: 5 Global review studies
Tetanus	79	35	40	45	63	20	Includes community surveys, country, hospital and review data. Plus: 7 Global review studies
Meningitis	27	43	12	45	7	23	
Nutritional deficiencies							
Protein-energy malnutrition	45	25	14	16	11	13	Data available on WHO nutrition website
Iodine deficiency	44	16	17	27	25	9	
Vitamin A deficiency	29	14	4	4	9	9	No evidence of problem in A countries or Euro B countries ("0" prevalence assumed)
Malignant neoplasms							
	14	13	11	25	3	15	Number of cancer registries (national or subnational) used to derive incidence rates (refer to the IARC database GLOBOCAN 2000 for further details)
	0	2	0	17	2	4	Number of countries for which cancer survival analyses available and used.
Diabetes mellitus	1	6	4	8	3	5	
Neuropsychiatric conditions							
Unipolar depressive disorders	5	23	3	31	6	8	
Bipolar disorder	1	3	1	9	2	5	
Schizophrenia	5	18		46	26	8	
Alcohol use disorders	5	11	1	27	2	9	
Drug use disorders	15	22	10	47	12	8	
Post-traumatic stress disorder		4		2	1	1	
Obsessive-compulsive disorder	1	5		6	2	5	
Panic disorder	2	5	1	10		5	
Insomnia (primary)	1	6	1	6	3	4	
Asthma	7	25	12	56	12	38	
Osteoarthritis	1	5	2	5	2	5	

3.4 Disability weights

During the last year, WHO has embarked on large-scale efforts to improve the methodological and empirical basis for the valuation of health states (30). Thus far, there has been a scarcity of empirical data on health state valuations, and a number of methodological problems have emerged from various research efforts. In order to address both of these challenges WHO, in collaboration with Member States, has initiated a two-tiered data collection strategy involving general population surveys, combined with more detailed surveys among respondents with high levels of educational attainment in the same sites (31).

In the household surveys, individuals provide descriptions for a series of hypothetical health states along seven core domains of health, followed by valuations of these states using a simple thermometer-type (visual analog) scale. The more detailed surveys include more abstract and cognitively demanding valuation tasks that have limited reliability in general population surveys but have been applied widely in industrialized countries among convenience samples of educated respondents.

Statistical methods have been used to estimate the relationships between valuations elicited using visual analog scale and those elicited with other valuation techniques in order to measure the underlying health state severities that inform responses on each of the different measurement methods. A valuation function based on estimation of the relationships between levels on the core domains of health for a particular health state and the valuation of that health state has then been used together with the calibrated prevalences of health states to estimate the overall severity-weighted prevalence of health states for the 61 surveys in 55 countries.

It is planned for Version 2 of the GBD 2000, to use these health state valuations to comprehensively revise the disability weights used in the GBD 2000. At present, the YLD estimates for Version 1 of the GBD 2000 are still based largely on the GBD 1990 disability weights (2).

4. Version 1 results

This section gives an overview of the Version 1 results for the GBD 2000 as published in the World Health Report 2001 (11). Deaths and YLL for all causes have been estimated from the available sources of data as described above in Sections 3.1 and 3.2. An incremental approach is being taken for the revision of YLD estimates. Version 1 of the GBD 2000 includes new reviews of the epidemiological data and new or revised disease models for many causes – in some cases, these draft estimates will undergo further review and revision. For other causes which have not yet been reviewed in detail, the previous disease models have been updated to reflect trends in mortality between 1990 and 2000. Annex Table 4 gives details of the stage of revision for each cause.

Leading causes of deaths and burden according to Version 1 estimates are shown in Tables 7, 8 and 9 below.

Table 7. Leading causes of deaths and DALYs, persons, Version 1 global estimates^a for 2000

	Leading causes of death	% total deaths		Leading causes of DALYs	% total DALYs
1	Ischaemic heart disease	12.4%	1	Lower respiratory infections	6.4%
2	Cerebrovascular disease	9.2%	2	Perinatal conditions	6.2%
3	Lower respiratory infections	6.9%	3	HIV/AIDS	6.1%
4	HIV/AIDS	5.3%	4	Unipolar depressive disorders	4.4%
5	COPD	4.5%	5	Diarrhoeal diseases	4.2%
6	Perinatal conditions	4.4%	6	Ischaemic heart disease	3.8%
7	Diarrhoeal diseases	3.8%	7	Cerebrovascular disease	3.1%
8	Tuberculosis	3.0%	8	Road traffic accidents	2.8%
9	Road traffic accidents	2.3%	9	Malaria	2.7%
10	Trachea, bronchus, lung cancers	2.2%	10	Tuberculosis	2.4%
11	Malaria	1.9%	11	COPD	2.3%
12	Hypertensive heart disease	1.7%	12	Congenital anomalies	2.2%
13	Self-inflicted injuries	1.5%	13	Measles	1.9%
14	Diabetes mellitus	1.5%	14	Anaemia	1.8%
15	Cirrhosis of the liver	1.4%	15	Hearing loss, adult onset	1.7%
16	Measles	1.4%	16	Falls	1.3%
17	Stomach cancer	1.3%	17	Self-inflicted injuries	1.3%
18	Congenital anomalies	1.2%	18	Alcohol use disorders	1.3%
19	Liver cancer	1.1%	19	Protein-energy malnutrition	1.1%
20	Nephritis and nephrosis	1.1%	20	Osteoarthritis	1.1%

^a As published in the World Health Report 2001 (11).

Total deaths by cause and WHO subregion are given in Annex Table 8. Incidence and prevalence estimates for selected causes are given in Annex Tables 9 and 10 for WHO subregions. Total YLD by cause and WHO subregion are given in Annex Table 11. Total DALYs by cause and WHO subregion are given in Annex Table 12. Detailed tables for deaths, YLL, YLD and DALYs by subregion, cause, sex and age group may also be downloaded from the WHO website at <http://www.who.int/evidence> (select the burden of disease link on this page).

Tables 10 and 11 list the 15 leading causes of death and DALYs for males and females combined by WHO region. Tables 12 and 13 compare leading causes of death and DALYs for high income countries versus middle and low income countries. The income categories are as defined in the World Health Report 1999 (32).

Table 8. Leading causes of death in males and females, Version 1 global estimates^a for 2000

Males		% total deaths	Females		% total deaths
1	Ischaemic heart disease	12.2%	1	Ischaemic heart disease	12.6%
2	Cerebrovascular disease	8.1%	2	Cerebrovascular disease	10.4%
3	Lower respiratory infections	7.0%	3	Lower respiratory infections	6.9%
4	HIV/AIDS	5.0%	4	HIV/AIDS	5.6%
5	COPD	4.6%	5	COPD	4.4%
6	Perinatal conditions	4.4%	6	Perinatal conditions	4.4%
7	Diarrhoeal diseases	4.0%	7	Diarrhoeal diseases	3.6%
8	Tuberculosis	3.5%	8	Tuberculosis	2.4%
9	Road traffic accidents	3.1%	9	Malaria	2.1%
10	Trachea, bronchus, lung cancers	3.0%	10	Hypertensive heart disease	1.9%
11	Cirrhosis of the liver	1.8%	11	Diabetes mellitus	1.8%
12	Malaria	1.8%	12	Breast cancer	1.8%
13	Self-inflicted injuries	1.7%	13	Measles	1.5%
14	Stomach cancer	1.6%	14	Road traffic accidents	1.3%
15	Hypertensive heart disease	1.5%	15	Trachea, bronchus, lung cancers	1.2%
16	Liver cancer	1.5%	16	Congenital anomalies	1.2%
17	Violence	1.4%	17	Self-inflicted injuries	1.2%
18	Measles	1.3%	18	Nephritis and nephrosis	1.1%
19	Diabetes mellitus	1.2%	19	Cervix uteri cancer	1.1%
20	Congenital anomalies	1.1%	20	Stomach cancer	1.1%

^a As published in the World Health Report 2001 (11).

Table 9. Leading causes of DALYs in males and females, Version 1 global estimates^a, 2000

Males		% total DALYs	Females		% total DALYs
1	Perinatal conditions	6.4%	1	HIV/AIDS	6.5%
2	Lower respiratory infections	6.4%	2	Lower respiratory infections	6.4%
3	HIV/AIDS	5.8%	3	Perinatal conditions	6.0%
4	Diarrhoeal diseases	4.2%	4	Unipolar depressive disorders	5.5%
5	Ischaemic heart disease	4.2%	5	Diarrhoeal diseases	4.2%
6	Road traffic accidents	4.0%	6	Ischaemic heart disease	3.4%
7	Unipolar depressive disorders	3.4%	7	Cerebrovascular disease	3.2%
8	Cerebrovascular disease	3.0%	8	Malaria	3.0%
9	Tuberculosis	2.9%	9	Congenital anomalies	2.2%
10	Malaria	2.5%	10	COPD	2.1%
11	COPD	2.4%	11	Anaemia	2.1%
12	Congenital anomalies	2.2%	12	Tuberculosis	2.0%
13	Alcohol use disorders	2.1%	13	Measles	2.0%
14	Measles	1.8%	14	Hearing loss, adult onset	1.7%
15	Hearing loss, adult onset	1.8%	15	Road traffic accidents	1.5%
16	Violence	1.6%	16	Osteoarthritis	1.4%
17	Anaemia	1.5%	17	Protein-energy malnutrition	1.2%
18	Falls	1.5%	18	Self-inflicted injuries	1.1%
19	Self-inflicted injuries	1.5%	19	Diabetes mellitus	1.1%
20	Cirrhosis of the liver	1.4%	20	Falls	1.1%

^a As published in the World Health Report 2001 (11).

Table 10. Leading causes of deaths in WHO regions, Version 1 global estimates^a for 2000

African Region (AMRO)		% total deaths	American Region (AMRO)		% total deaths
1	HIV/AIDS	22.6%	1	Ischaemic heart disease	15.6%
2	Lower respiratory infections	10.1%	2	Cerebrovascular disease	7.7%
3	Malaria	9.1%	3	Lower respiratory infections	4.4%
4	Diarrhoeal diseases	6.7%	4	Trachea, bronchus, lung cancers	3.9%
5	Perinatal conditions	5.5%	5	Diabetes mellitus	3.7%
6	Measles	4.3%	6	COPD	3.5%
7	Tuberculosis	3.6%	7	Violence	2.7%
8	Ischaemic heart disease	3.1%	8	Perinatal conditions	2.6%
9	Cerebrovascular disease	2.9%	9	Road traffic accidents	2.4%
10	Road traffic accidents	1.6%	10	Hypertensive heart disease	2.3%
11	War	1.6%	11	Colon and rectum cancers	1.8%
12	Whooping cough	1.6%	12	Cirrhosis of the liver	1.8%
13	Tetanus	1.1%	13	Breast cancer	1.5%
14	Violence	1.1%	14	Nephritis and nephrosis	1.4%
15	COPD	1.1%	15	Diarrhoeal diseases	1.3%
Eastern Mediterranean (EMRO)		% total deaths	European Region (EURO)		% total deaths
1	Ischaemic heart disease	10.5%	1	Ischaemic heart disease	24.3%
2	Lower respiratory infections	9.1%	2	Cerebrovascular disease	15.4%
3	Perinatal conditions	7.5%	3	Trachea, bronchus, lung cancers	3.9%
4	Diarrhoeal diseases	7.1%	4	Lower respiratory infections	3.0%
5	Cerebrovascular disease	5.3%	5	COPD	2.8%
6	Tuberculosis	3.4%	6	Colon and rectum cancers	2.5%
7	Road traffic accidents	2.3%	7	Self-inflicted injuries	1.9%
8	Congenital anomalies	2.2%	8	Stomach cancer	1.9%
9	Measles	2.0%	9	Cirrhosis of the liver	1.8%
10	Hypertensive heart disease	1.8%	10	Hypertensive heart disease	1.6%
11	Nephritis and nephrosis	1.7%	11	Breast cancer	1.6%
12	Diabetes mellitus	1.6%	12	Diabetes mellitus	1.4%
13	Tetanus	1.4%	13	Road traffic accidents	1.3%
14	Whooping cough	1.4%	14	Poisonings	1.1%
15	COPD	1.4%	15	Prostate cancer	1.0%
South East Asian Region (SEARO)		% total deaths	Western Pacific Region (WPRO)		% total deaths
1	Ischaemic heart disease	13.7%	1	Cerebrovascular disease	16.2%
2	Lower respiratory infections	9.5%	2	COPD	13.8%
3	Perinatal conditions	7.1%	3	Ischaemic heart disease	8.2%
4	Diarrhoeal diseases	6.7%	4	Lower respiratory infections	4.7%
5	Cerebrovascular disease	5.7%	5	Trachea, bronchus, lung cancers	3.5%
6	Tuberculosis	4.8%	6	Liver cancer	3.5%
7	Road traffic accidents	3.1%	7	Stomach cancer	3.2%
8	HIV/AIDS	2.6%	8	Self-inflicted injuries	3.0%
9	COPD	2.2%	9	Tuberculosis	3.0%
10	Congenital anomalies	1.9%	10	Perinatal conditions	2.8%
11	Cirrhosis of the liver	1.6%	11	Hypertensive heart disease	2.7%
12	Hypertensive heart disease	1.5%	12	Road traffic accidents	2.7%
13	Measles	1.4%	13	Oesophagus cancer	1.9%
14	Diabetes mellitus	1.4%	14	Cirrhosis of the liver	1.7%
15	Mouth and oropharynx cancers	1.2%	15	Drownings	1.5%

^a As published in the World Health Report 2001 (11).

Table 11. Leading causes of DALYs in WHO regions, Version 1 global estimates^a for 2000

African Region (AMRO)		% total DALYs	American Region (AMRO)		% total DALYs
1	HIV/AIDS	20.6%	1	Unipolar depressive disorders	8.1%
2	Malaria	10.1%	2	Alcohol use disorders	4.4%
3	Lower respiratory infections	8.6%	3	Ischaemic heart disease	4.4%
4	Perinatal conditions	6.3%	4	Perinatal conditions	3.9%
5	Diarrhoeal diseases	6.1%	5	Violence	3.8%
6	Measles	4.5%	6	Cerebrovascular disease	3.3%
7	Tuberculosis	2.8%	7	Road traffic accidents	3.2%
8	Whooping cough	1.8%	8	Lower respiratory infections	2.7%
9	Road traffic accidents	1.6%	9	Congenital anomalies	2.6%
10	Protein-energy malnutrition	1.6%	10	Hearing loss, adult onset	2.6%
11	War	1.6%	11	Diabetes mellitus	2.4%
12	Unipolar depressive disorders	1.1%	12	Diarrhoeal diseases	2.0%
13	Tetanus	1.1%	13	Asthma	1.9%
14	Congenital anomalies	1.1%	14	COPD	1.7%
15	Violence	1.0%	15	HIV/AIDS	1.7%
Eastern Mediterranean (EMRO)		% total DALYs	European Region (EURO)		% total DALYs
1	Perinatal conditions	8.4%	1	Ischaemic heart disease	10.1%
2	Lower respiratory infections	8.4%	2	Cerebrovascular disease	6.8%
3	Diarrhoeal diseases	6.9%	3	Unipolar depressive disorders	6.0%
4	Unipolar depressive disorders	3.5%	4	Alcohol use disorders	3.4%
5	Congenital anomalies	3.3%	5	Alzheimer and other dementias*	3.0%
6	Ischaemic heart disease	3.1%	6	Self-inflicted injuries	2.6%
7	Road traffic accidents	2.5%	7	Road traffic accidents	2.5%
8	Tuberculosis	2.2%	8	Lower respiratory infections	2.4%
9	Measles	2.2%	9	Hearing loss, adult onset	2.3%
10	Cerebrovascular disease	2.0%	10	Trachea, bronchus, lung cancers	2.2%
11	Anaemia	1.9%	11	Osteoarthritis	2.1%
12	Hearing loss, adult onset	1.7%	12	COPD	2.1%
13	Whooping cough	1.7%	13	Perinatal conditions	1.9%
14	Malaria	1.5%	14	Cirrhosis of the liver	1.7%
15	Falls	1.5%	15	Diabetes mellitus	1.6%
South East Asian Region (SEARO)		% total DALYs	Western Pacific Region (WPRO)		% total DALYs
1	Perinatal conditions	8.9%	1	COPD	7.3%
2	Lower respiratory infections	7.4%	2	Cerebrovascular disease	5.8%
3	Diarrhoeal diseases	5.5%	3	Unipolar depressive disorders	5.8%
4	Unipolar depressive disorders	4.7%	4	Lower respiratory infections	5.2%
5	Ischaemic heart disease	4.4%	5	Perinatal conditions	4.6%
6	Tuberculosis	3.5%	6	Road traffic accidents	3.7%
7	Road traffic accidents	3.3%	7	Anaemia	3.2%
8	Congenital anomalies	3.0%	8	Ischaemic heart disease	3.0%
9	HIV/AIDS	2.7%	9	Self-inflicted injuries	2.8%
10	Anaemia	2.3%	10	Falls	2.6%
11	Cerebrovascular disease	2.1%	11	Congenital anomalies	2.4%
12	Hearing loss, adult onset	2.0%	12	Liver cancer	2.0%
13	Measles	1.7%	13	Tuberculosis	2.0%
14	COPD	1.5%	14	Drownings	2.0%

15	Fires	1.3%	15	Osteoarthritis	1.8%
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^a As published in the World Health Report 2001 (11).

Table 12. Leading causes of deaths in high income and middle/low income countries, Version 1 global estimates for 2000

High income countries ^a		% total deaths	Middle and low income countries		% total deaths
1	Ischaemic heart disease	17.9%	1	Ischaemic heart disease	11.5%
2	Cerebrovascular disease	10.7%	2	Cerebrovascular disease	8.9%
3	Trachea, bronchus, lung cancers	5.6%	3	Lower respiratory infections	7.3%
4	Lower respiratory infections	4.7%	4	HIV/AIDS	6.1%
5	COPD	3.5%	5	Perinatal conditions	5.1%
6	Colon and rectum cancers	3.2%	6	COPD	4.7%
7	Diabetes mellitus	2.3%	7	Diarrhoeal diseases	4.4%
8	Stomach cancer	2.0%	8	Tuberculosis	3.4%
9	Breast cancer	2.0%	9	Road traffic accidents	2.4%
10	Alzheimer and other dementias*	1.8%	10	Malaria	2.3%
11	Hypertensive heart disease	1.6%	11	Hypertensive heart disease	1.7%
12	Road traffic accidents	1.6%	12	Measles	1.6%
13	Self-inflicted injuries	1.5%	13	Trachea, bronchus, lung cancers	1.6%
14	Prostate cancer	1.5%	14	Self-inflicted injuries	1.5%
15	Cirrhosis of the liver	1.5%	15	Cirrhosis of the liver	1.4%

^a High income countries are defined as in the World Health Report 1999 and include most countries in the three A mortality subregions (AMRO A, EURO A, WPRO A, excluding Cuba, Croatia, Czech Republic and Malta) as well as the following countries from other mortality subregions: Bahamas, Cyprus, Kuwait, Qatar, United Arab Emirates and the Republic of Korea.

Table 13. Leading causes of DALYs in high income and middle/low income countries, Version 1 global estimates for 2000

High income countries ^a		% total deaths	Middle and low income countries		% total deaths
1	Unipolar depressive disorders	8.8%	1	Lower respiratory infections	6.8%
2	Ischaemic heart disease	6.7%	2	Perinatal conditions	6.7%
3	Alcohol use disorders	5.4%	3	HIV/AIDS	6.6%
4	Cerebrovascular disease	4.9%	4	Meningitis	4.6%
5	Alzheimer and other dementias*	4.3%	5	Diarrhoeal diseases	4.6%
6	Road traffic accidents	3.1%	6	Unipolar depressive disorders	4.0%
7	Trachea, bronchus, lung cancers	3.0%	7	Ischaemic heart disease	3.5%
8	Osteoarthritis	2.7%	8	Malaria	3.0%
9	COPD	2.5%	9	Cerebrovascular disease	2.9%
10	Hearing loss, adult onset	2.5%	10	Road traffic accidents	2.8%
11	Diabetes mellitus	2.4%	11	Tuberculosis	2.6%
12	Self-inflicted injuries	2.0%	12	Congenital anomalies	2.3%
13	Colon and rectum cancers	1.8%	13	COPD	2.3%
14	Asthma	1.6%	14	Measles	2.0%
15	Breast cancer	1.6%	15	Cirrhosis of the liver	2.0%

^a High income countries are defined as in the World Health Report 1999 and include most countries in the three A mortality subregions (AMRO A, EURO A, WPRO A, excluding Cuba, Croatia, Czech Republic and Malta) as well as the following countries from other mortality subregions: Bahamas, Cyprus, Kuwait, Qatar, United Arab Emirates and the Republic of Korea.

5. Conclusions

This discussion paper has summarised the aims, methods and data sources for the Global Burden of Disease 2000 project. It also documents the analysis categories used in the GBD 2000 and provides an overview of the Version 1 estimates published in the World Health Report 2001. Over the next 12 months, work will continue on the revision of YLD and YLL estimates: Version 2 estimates will form the basis of the comparative risk assessment analyses to be published in the World Health Report 2002. It is hoped to publish the final version (Version 3) in 2003. Over the next two years, it is also planned to document and publish the epidemiological reviews underlying the GBD 2000 estimates.

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Annex Table 1. Regional reporting categories for Global Burden of Disease 2000 project:: WHO regions and 14 subregions.

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

Annex Table 2. Regional epidemiological analysis categories for Global Burden of Disease 2000 project:: GBD regions and 17 subregions.

GBD region	Mortality stratum	Region code	WHO Member States	Reporting subregion
AFRO	D	1	Algeria, Angola, Benin, Burkina Faso, Cameroon, Cape Verde, Chad, Comoros, Equatorial Guinea, Gabon, Gambia, Ghana, Guinea, Guinea-Bissau, Liberia, Madagascar, Mali, Mauritania, Mauritius, Niger, Nigeria, Sao Tome And Principe, Senegal, Seychelles, Sierra Leone, Togo,	AFRO D
			Djibouti, Somalia, Sudan	EMRO D
AFRO	E	2	Botswana, Burundi, Central African Republic, Congo, Côte d'Ivoire, Democratic Republic Of The Congo, Eritrea, Ethiopia, Kenya, Lesotho, Malawi, Mozambique, Namibia, Rwanda, South Africa, Swaziland, Uganda, United Republic of Tanzania, Zambia, Zimbabwe	AFRO E
AMRO	A	3	Canada, United States Of America	AMRO A
AMRO	B	4	Antigua And Barbuda, Argentina, Bahamas, Barbados, Belize, Brazil, Chile, Colombia, Costa Rica, Dominica, Dominican Republic, El Salvador, Grenada, Guyana, Honduras, Jamaica, Mexico, Panama, Paraguay, Saint Kitts And Nevis, Saint Lucia, Saint Vincent And The Grenadines, Suriname, Trinidad And Tobago, Uruguay, Venezuela	AMRO B
			Cuba	AMRO A
AMRO	D	5	Bolivia, Ecuador, Guatemala, Haiti, Nicaragua, Peru	AMRO D
EMRO	B	6	Bahrain, Cyprus, Iran (Islamic Republic Of), Jordan, Kuwait, Lebanon, Libyan Arab Jamahiriya, Oman, Qatar, Saudi Arabia, Syrian Arab Republic, Tunisia, United Arab Emirates	EMRO B
EMRO	D	7	Egypt, Iraq, Morocco, Yemen	EMRO D
EURO	A	8	Andorra, Austria, Belgium, Croatia, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Israel, Italy, Luxembourg, Malta, Monaco, Netherlands, Norway, Portugal, San Marino, Slovenia, Spain, Sweden, Switzerland, United Kingdom	EURO A
EURO	B1	9	Albania, Bosnia And Herzegovina, Bulgaria, Georgia, Poland, Romania, Slovakia, The Former Yugoslav Republic Of Macedonia, Turkey, Yugoslavia	EURO B
EURO	B2	10	Armenia, Azerbaijan, Kyrgyzstan, Tajikistan, Turkmenistan, Uzbekistan	EURO B
EURO	C	11	Belarus, Estonia, Hungary, Kazakhstan, Latvia, Lithuania, Republic of Moldova, Russian Federation, Ukraine	EURO C
SEARO	B	12	Indonesia, Sri Lanka, Thailand	SEARO B
			Malaysia, Philippines	WPRO B
			Brunei Darussalam, Singapore	WPRO A
SEARO	D	13	Bangladesh, Bhutan, India, Maldives, Nepal	SEARO D
			Afghanistan, Pakistan	EMRO D
WPRO	A	14	Australia, Japan, New Zealand	WPRO A
WPRO	B1	15	China, Mongolia, Republic Of Korea	WPRO B
			DPR Korea	SEARO D
WPRO	B2	16	Cambodia, Lao People's Democratic Republic, Viet Nam	WPRO B
			Myanmar	SEARO D
WPRO	B3	17	Cook Islands, Fiji, Kiribati, Marshall Islands, Micronesia (Federated States Of), Nauru, Niue, Palau, Papua New Guinea, Samoa, Solomon Islands, Tonga, Tuvalu, Vanuatu	WPRO B

Annex Table 3: GBD2000 cause categories and ICD codes

Code	GBD Cause Name	ICD-9 code	ICD-10 code
U000	All Causes		
U001	I. Communicable, maternal, perinatal and nutritional conditions	001-139, 243, 260-269, 279.5, 280-285, 320-323, 381-382, 460-465, 466, 480-487, 614-616, 630-676, 760-779	A00-B99, G00-G04, N70-N73, J00-J06, J10-J18, J20-J22, H65-H66, O00-O99, P00-P96, E00-E02, E40-E46, E50, D50-D64
U002	A. Infectious and parasitic diseases	001-139, 279.5, 320-322, 614-616, 771.3	A00-B99, G00, N70-N73
U003	1. Tuberculosis	010-018, 137	A15-A19, B90
U004	2. Sexually transmitted diseases excluding HIV	090-099, 614-616	A50-A64, N70-N73
U005	a. Syphilis	090-097	A50-A53
U006	b. Chlamydia		A55-A56
U007	c. Gonorrhoea	098	A54
U008	Other STDs	099, 614-616	A57-A64, N70-N73
U009	3. HIV/AIDS	279.5 (=042-044)	B20-B24
U010	4. Diarrhoeal diseases	001, 002, 004, 006-009	A00, A01, A03, A04, A06-A09
U011	5. Childhood-cluster diseases	032, 033, 037, 045, 055, 138, 771.3	A33-37, A80, B05, B91
U012	a. Pertussis	033	A37
U013	b. Poliomyelitis	045, 138	A80, B91
U014	c. Diphtheria	032	A36
U015	d. Measles	055	B05
U016	e. Tetanus	037, 771.3	A33-A35
U017	6. Meningitis	036, 320-322	A39, G00, G03
U018	7. Hepatitis B	070.2-070.9	B16-B19
U019	Hepatitis C		
U020	8. Malaria	084	B50-B54
U021	9. Tropical-cluster diseases	085, 086, 120, 125.0, 125.1, 125.3, 125.6, 125.9	B55-B57, B65, B73, B74.0-B74.2
U022	a. Trypanosomiasis	086.3, 086.4, 086.5,	B56
U023	b. Chagas disease	086.0, 086.1, 086.2, 086.9	B57
U024	c. Schistosomiasis	120	B65
U025	d. Leishmaniasis	085	B55
U026	e. Lymphatic filariasis	125.0, 125.1	B74.0-B74.2
U027	f. Onchocerciasis	125.3	B73
U028	10. Leprosy	030	A30
U029	11. Dengue	061	A90-A91
U030	12. Japanese encephalitis	062.0	A83.0
U031	13. Trachoma	076	A71
U032	14. Intestinal nematode infections	126-129	B76-B81
U033	a. Ascariasis	127.0	B77
U034	b. Trichuriasis	127.3	B79
U035	c. Hookworm disease (Ancylostomiasis and necatoriasis)	126	B76
U036	Other intestinal infections	127.1, 127.2, 127.4-127.9, 128, 129	B78, B80, B81

Annex Table 3 (continued): GBD2000 cause categories and ICD codes

Code	GBD Cause Name	ICD-9 code	ICD-10 code
U037	Other infectious diseases	003, 005, 020-027, 031, 034, 035, 038-041, 046-049, 050-054, 056-057, 060, 062.1-066, 070.0-070.1, 071-075, 077-079, 080-083, 087-088, 100-104, 110-118, 121-124, 125.2, 125.4, 125.5, 125.6, 125.9, 125.7, 130-136, 139, 323	A02,A05,A20-A28,A31,A32,A38,A40-A49,A65-A70,A74-A79,A81,A82,A83.1-A83.9,A84-A89,A92-A99,B00-B04,B06-B15,B25-B49,B58-B60,B64,B66-B72,B74.3-B74.9,B75,B82-B89,B92-B99, G04
U038	B. Respiratory infections	460-466, 480-487, 381-382	J00-J06, J10-J18, J20-J22, H65-H66
U039	1. Lower respiratory infections	466, 480-487	J10-J18, J20-J22
U040	2. Upper respiratory infections	460-465	J00-J06
U041	3. Otitis media	381-382	H65-H66
U042	C. Maternal conditions	630-676	O00-O99
U043	1. Maternal haemorrhage	640, 641, 666	O44-O46, O67, O72
U044	2. Maternal sepsis	670	O85-O86
U045	3. Hypertensive disorders of pregnancy	642	O10-O16
U046	4. Obstructed labour	660	O64-O66
U047	5. Abortion	630-639	O00-O08
U048	Other maternal conditions	643-659, 661-665, 667-669, 671-676	O20-O43,O47-O63,O68-O71,O73-O84,O87-O99
U049	D. Conditions arising during the perinatal period	760-779 minus 771.3	P00-P96
U050	1. Low birth weight	764-765	P05-P07
U051	2. Birth asphyxia and birth trauma	767-770	P03, P10-P15, P20-P29
U052	Other perinatal conditions	760-763, 766, 771 (minus 771.3), 772-779	P00-P02, P04, P08, P35-P96
U053	E. Nutritional deficiencies	243, 260-269, 280-285	E00-E02, E40-E46, E50, D50-D64
U054	1. Protein-energy malnutrition	260-263	E40-E46
U055	2. Iodine deficiency	243	E00-E02
U056	3. Vitamin A deficiency	264	E50
U057	4. Iron-deficiency anaemia	280-285	D50-D64
U058	Other nutritional disorders	265-269	
U059	II. Noncommunicable diseases	140-242, 244-259, 270-279 (minus 279.5), 286-319, 324-380, 383-459, 470-478, 490-613, 617-629, 680-759	C00-C97, D00-D48, D65-D89, E03-E07, E10-E16, E20-E34, E51-E89, F01-F99, G06-G99, H00-H61, H68-H95, I00-I99, J30-J99, K00-K92, N00-N64, N75-N99, L00-L99, M00-M99, Q00-Q99
U060	A. Malignant neoplasms	140-208	C00-C97
U061	1. Mouth and oropharynx cancers	140-149	C00-C14
U062	2. Oesophagus cancer	150	C15
U063	3. Stomach cancer	151	C16
U064	4. Colon and rectum cancers	153, 154	C18-C21
U065	5. Liver cancer	155	C22
U066	6. Pancreas cancer	157	C25
U067	7. Trachea, bronchus and lung cancers	162	C33-C34
U068	8. Melanoma and other skin cancers	172-173	C43-C44

Annex Table 3 (continued): GBD2000 cause categories and ICD codes

Code	GBD Cause Name	ICD-9 code	ICD-10 code
U069	9. Breast cancer	174	C50
U070	10. Cervix uteri cancer	180	C53
U071	11. Corpus uteri cancer	179, 182	C54-C55
U072	12. Ovary cancer	183	C56
U073	13. Prostate cancer	185	C61
U074	14. Bladder cancer	188	C67
U075	15. Lymphomas and multiple myeloma	200-203	C81-C90, C96
U076	16. Leukaemia	204-208	C91-C95
U077	Other malignant neoplasms	152, 156, 158-161, 163-171, 175, 181, 184, 186-187, 189-199	C17, C23, C24, C26-C32, C37-C41, C45-C49, C51, C52, C57-C60, C62-C66, C68-C80, C97
U078	B. Other neoplasms	210-239	D00-D48
U079	C. Diabetes mellitus	250	E10-E14
U080	D. Endocrine disorders	240-242, 244-246, 251-259, 270-279 minus 279.5, 286-289	D65-D89, E03-E07, E15-E16, E20-E34, E51-E89
U081	E. Neuro-psychiatric conditions	290-319, 324-359	F01-F99, G06-G99
U082	1. Unipolar depressive disorders		F32-F33
U083	2. Bipolar affective disorder	296	F30-F31
U084	3. Schizophrenia	295	F20-F29
U085	4. Epilepsy	345	G40-G41
U086	5. Alcohol use disorders	291, 303, 305.0	F10
U087	6. Alzheimer and other dementias	330, 331, 290	F01, F03, G30-G31
U088	7. Parkinson disease	332	G20-G21
U089	8. Multiple sclerosis	340	G35
U090	9. Drug use disorders	304, 305.2-305.9	F11-F16, F18-F19
U091	10. Post-traumatic stress disorder		F43
U092	11. Obsessive-compulsive disorder	300.3	F42
U093	12. Panic disorder	300.2	F40.0, F41.0
U094	13. Insomnia (primary)		F51
U095	14. Migraine		G43
U096	Mental Retardation attributable to lead exposure		F70-F73 (part)
U097	Other neuropsychiatric disorders	292-294, 297-300.1, 300.4-302, 305.1, 306-308, 309-319, 323-326, 333-337, 341-344, 346-349, 350-359	F04-F09, F17, F34-F39, F401-F409, F411-F419, F44-F50, F52-F69, F74-F99, G06-G011, G12, G23-G25, G36, G37, G44-G99
U098	F. Sense organ diseases	360-380, 383-389	H00-H61, H68-H95
U099	1. Glaucoma	365	H40
U100	2. Cataracts	366	H25-H26
U101	3. Vision disorders, age-related	367	
U102	4. Hearing loss, adult onset	389	
U103	Other sense organ disorders	360-364, 368-380, 383-388	H00-H21, H27-H35, H43-H61, H68-H95
U104	G. Cardiovascular diseases	390-459	I00-I99
U105	1. Rheumatic heart disease	390-398	I01-I09
U106	2. Hypertensive heart disease	401-405	I10-I15
U107	3. Ischaemic heart disease	410-414	I20-I25
U108	4. Cerebrovascular disease	430-438	I60-I69
U109	5. Inflammatory heart diseases	420, 421, 422, 425	I30-I33, I38, I40, I42
U110	Other cardiovascular diseases	415-417, 423-424, 426-	I00, I26-I28, I34-I37, I44-

Annex Table 3 (continued): GBD2000 cause categories and ICD codes

Code	GBD Cause Name	ICD-9 code	ICD-10 code
U111	H. Respiratory diseases	470-478, 490-519	J30-J99
U112	1. Chronic obstructive pulmonary disease	490-492, 495-496	J40-J44
U113	2. Asthma	493	J45-J46
U114	Other respiratory diseases	470-478, 494, 500-508, 510-519	J30-J39, J47-J99
U115	I. Digestive diseases	530-579	K20-K92
U116	1. Peptic ulcer disease	531-533	K25-K27
U117	2. Cirrhosis of the liver	571	K70, K74
U118	3. Appendicitis	540-543	K35-K37
U119	Other digestive diseases	530, 534-537, 550-553, 555-558, 560-570, 572-579	K20-K22, K28-K31, K38, K40-K66, K71-K73, K75-K92
U120	J. Genito-urinary diseases	580-611, 617-629	N00-N64, N75-N99
U121	1. Nephritis and nephrosis	580-589	N00-N19
U122	2. Benign prostatic hypertrophy	600	N40
U123	Other genitourinary system diseases	590-599, 601-611, 617-629	N20-N39, N41-N64, N75-N99
U124	K. Skin diseases	680-709	L00-L99
U125	L. Musculoskeletal diseases	710-739	M00-M99
U126	1. Rheumatoid arthritis	714	M05-M06
U127	2. Osteoarthritis	715	M15-M19
U128	3. Gout		
U129	4. Low back pain	720-722, 724	
U130	Other musculoskeletal disorders	710-713, 716-739	M00-M02, M08-M13, M20-M99
U131	M. Congenital anomalies	740-759	Q00-Q99
U132	1. Abdominal wall defect	756.7	Q79.2-Q79.5
U133	2. Anencephaly	740.0	Q00
U134	3. Anorectal atresia	751.2	Q42
U135	4. Cleft lip	749.1	Q36
U136	5. Cleft palate	749.0	Q35, Q37
U137	6. Oesophageal atresia	750.3	Q39.0-Q39.1
U138	7. Renal agenesis	753.0	Q60
U139	8. Down syndrome	758.0	Q90
U140	9. Congenital heart anomalies	745-747	Q20-Q28
U141	10. Spina bifida	741	Q05
U142	Other Congenital anomalies	740.1, 740.2, 742-744, 748, 749.2, 750.0, 750.1, 750.2, 750.4-751.1, 751.3-751.9, 752, 753.1-753.9, 754, 755, 756.0-756.6, 756.8, 756.9, 757, 758.1-758.9, 759	Q01-Q04, Q06-Q18, Q30-Q34, Q38, Q392-Q399, Q40-Q41, Q43-Q56, Q61-Q78, Q790, Q791, Q796, Q798, Q799, Q80-Q89, Q91-Q99
U143	N. Oral conditions	520-529	K00-K14
U144	1. Dental caries	521.0	K02
U145	2. Periodontal disease	523	K05
U146	3. Edentulism		-
U147	Other oral diseases	520, 521.1-521.9, 522, 524-529	K00, K01, K03, K04, K06-K14

Annex Table 3 (continued): GBD2000 cause categories and ICD codes

Code	GBD Cause Name	ICD-9 code	ICD-10 code
U148	III. Injuries	E800-999(minus E980-E989)	V01-Y98(minus Y10-Y34)
U149	A. Unintentional injuries	E800-949	V01-X59, Y40-Y98
U150	1. Road traffic accidents	E800-848	See attached
U151	2. Poisonings	E850-869	X40-X49
U152	3. Falls	E880-888	W00-W19
U153	4. Fires	E890-899	X00-X09
U154	5. Drownings	E910	W65-W74
U155	6. Other unintentional injuries	E870-E879, E900-E909, E911-E921, E923-E949	<i>Rest of V, W20-W64, W75-W99, X10-X39, X50-X59, Y40-Y48</i>
U156	B. Intentional injuries	E950-978, 990-999	X60-Y09, Y35-Y36
U157	1. Self-inflicted injuries	E950-959	X60-X84
U158	2. Violence	E960-969	X85-Y09
U159	3. War	E990-999	Y36
U160	Other intentional injuries	E970-E978	Y35

Annex Table 4: GBD2000 cause categories, sequelae and case definitions

GBD Cause/Sequelae	Case definition	Version^a
I. Communicable, maternal, perinatal and nutritional conditions		
A1. Tuberculosis	Cases refer to individuals with clinical tuberculosis, normally pulmonary sputum culture positives and extra-pulmonary cases.	2
HIV sero-negative cases	HIV sero-negative cases	
HIV sero-positive cases	HIV sero-positive cases	
A2a. Syphilis	Acute and chronic infection with <i>Treponema pallidum</i>	0
Congenital syphilis	Syphilis in the newborn due to maternal-fetal transmission in utero	
Low birth weight	Birthweight of less than 2500 g	
Primary	Initial infection in adults resulting in primary chancre at the site of inoculation	
Secondary	Disseminated disease, which appears 2-8 weeks after the primary stage and usually marked by a rash	
Tertiary -- Cardiovascular	Late stage of the disease characterised by chronic inflammation and necrosis of the arteries and heart, particularly the aorta.	
Tertiary -- Gummas	Late stage of the disease with painless nodules in potentially all organs, but mainly in skeletal system, skin and mucosae.	
Tertiary -- Neurologic	Late stage of the disease with varied neurological manifestations	
A2b. Chlamydia	Bacterial infection transmitted through vaginally, anally or perinatally with <i>Chlamydia trachomatis</i> (excludes ocular trachoma)	0
Ophthalmia neonatorum	Purulent conjunctivitis in infants less than 30 days, which was acquired during passage through an infected birth canal	
Low birth weight	Birthweight of less than 2500 g	
Corneal scar -- Blindness	Permanent corneal scar resulting from corneal ulceration due to infection with <i>Chlamydia trachomatis</i> and leading to blindness	
Corneal scar -- Low vision	Permanent corneal scar resulting from corneal ulceration due to infection with <i>Chlamydia trachomatis</i> and to low vision	
Cervicitis	Inflammation of the cervix uteri due to <i>Chlamydia trachomatis</i>	
Neonatal pneumonia	Pneumonia in infants due to infection with <i>Chlamydia</i> .	
Pelvic inflammatory disease	Inflammation of the adnexa of the uterus (includes endometritis)	
Ectopic pregnancy	Pregnancy located outside the uterus	
Tubo-ovarian abscess	Abscess located in the fallopian tubes or ovaries	
Chronic pelvic pain	Chronic pelvic pain following reproductive tract infection with <i>Chlamydia</i>	
Infertility	Total of infertility due to chlamydia-related PID and ectopic pregnancy in women and epididymitis in men.	
Symptomatic urethritis	Inflammation of the urethra causing symptoms including dysuria and/or haematuria	
Epididymitis	Inflammation of the sperm ducts	
Stricture	Narrowing of the urethra due to urethritis	
A2c. Gonorrhoea	Bacterial infection transmitted through vaginally, anally or perinatally with <i>Neisseria gonorrhoea</i>	0
Ophthalmia neonatorum	Purulent conjunctivitis in infants less than 30 days, which was acquired during passage through an infected birth canal	
Low birth weight	Birthweight of less than 2500 g	
Corneal scar -- Blindness	Permanent corneal scar resulting from corneal ulceration due to infection with <i>Neisseria gonorrhoea</i> and leading to blindness	
Corneal scar -- Low vision	Permanent corneal scar resulting from corneal ulceration due to infection with <i>Neisseria gonorrhoea</i> and to low vision	
Cervicitis	Inflammation of the cervix uteri due to <i>Neisseria gonorrhoea</i>	
Pelvic inflammatory disease	Includes both acute and recurrent PID due to gonorrhoea.	
Ectopic pregnancy	Pregnancy located outside the uterus	
Tubo-ovarian abscess	Abscess located in the fallopian tubes or ovaries	
Chronic pelvic pain	Chronic pelvic pain following reproductive tract infection with <i>N gonorrhoea</i>	
Infertility	Total of infertility due to gonorrhoea -related PID and ectopic pregnancy in women and epididymitis in men.	
Symptomatic urethritis	Inflammation of the urethra causing symptoms including dysuria and/or haematuria	
Epididymitis	Inflammation of the sperm ducts	
Stricture	Narrowing of the urethra due to urethritis	
A3. HIV/AIDS		2
HIV cases	HIV sero-positive, not yet progressed to AIDS	
AIDS cases	HIV sero-positive and progressed to AIDS	
A4. Diarrhoeal diseases -- episodes	Episodes of diarrhoea including acute watery diarrhoea, persistent diarrhoea and dysentery. Deaths of children with both measles and diarrhoea or both LRI and diarrhoea are not included in the estimates of diarrhoea mortality.	1

Annex Table 4 (continued): GBD2000 cause categories, sequelae and case definitions

GBD Cause/Sequelae	Case definition	Version ^a
A5a. Pertussis	Acute bacterial infection of the respiratory tract with <i>Bordetella pertussis</i> or paraptussis	2
Episodes	Acute bacterial infection of the respiratory tract with <i>Bordetella pertussis</i> or paraptussis, characterised by paroxysmal, violent coughs followed by high-pitched inspiratory whoop.	
Encephalopathy	Degenerative disease of the brain, which in pertussis is usually a result of hypoxia, leading to mental retardation	
A5b. Poliomyelitis – lameness	Viral infection characterised by acute flaccid paralysis and proven by isolation of polio virus from stool.	2
A5c. Diphtheria	Acute disease caused by toxin-producing <i>Corynebacterium diphtheriae</i>	1
Episodes	Acute bacterial disease involving primarily tonsils, pharynx, larynx, nose and other sites, characterised by grayish plaques or membranes with surrounding tissue inflammation.	
Neurological complications	Polyneuritis involving both cranial and peripheral nerve palsies, which are largely reversible.	
Myocarditis	Inflammation of the heart muscle leading to electrocardiographic aberrations and sometimes permanent damage with congestive heart failure, which may be fatal.	
A5d. Measles – episodes	Acute and highly contagious infection with measles virus characterised by red, blotchy rash, fever, cough, coryza and conjunctivitis	2
A5e. Tetanus – episodes	Neonatal: Infection with <i>Clostridium tetani</i> in infants less than 30 days with progressive difficulty and inability to feed because of trismus, generalised stiffness, spasms and opisthotonus. Non-neonatal: Infection with <i>Clostridium tetani</i> non-neonates with initial localised spasms lead to general rigidity, opisthotonus and "risus sardonicus".	2
A6. Meningitis	Acute bacterial disease with sudden onset and fever, intense headache, nausea, vomiting, neck stiffness and – in meningococcal disease – petechial rash with pink macules. The disease must be accompanied by laboratory evidence (in cerebrospinal fluid or blood) of <i>Neisseria meningitidis</i> , <i>Strep pneumoniae</i> or <i>Haemophilus influenzae type B</i> .	1
Streptococcus pneumoniae – episodes	Acute bacterial disease with sudden onset and fever, intense headache, nausea, vomiting, and neck stiffness. The disease must be accompanied by laboratory evidence (in cerebrospinal fluid or blood) of <i>Strep pneumoniae</i> .	
Haemophilus influenzae – Episodes	Acute bacterial disease with sudden onset and fever, intense headache, nausea, vomiting, and neck stiffness. The disease must be accompanied by laboratory evidence (in cerebrospinal fluid or blood) of <i>Haemophilus influenzae type B</i> .	
Neisseria meningitidis – Episodes	Acute bacterial disease with sudden onset and fever, intense headache, nausea, vomiting, and neck stiffness. The disease must be accompanied by laboratory evidence (in cerebrospinal fluid or blood) of <i>Neisseria meningitidis</i> .	
Meningococcaemia without meningitis -- Episodes	Invasion of the bloodstream with <i>Neisseria meningitidis</i> .	
Deafness	At least <u>moderate</u> impairment, where person is able to hear and repeat words using raised voice at 1 metre, RESULTING from meningitis.	
Seizure disorder	Seizures of any type that were present at least 6 months after hospitalisation, RESULTING from meningitis.	
Motor deficit	Spasticity or paresis of one or more limbs, RESULTING from meningitis	
Mental retardation	IQ of 70 or below	
A7a. Hepatitis B – episodes	Inflammation of the liver due to Hepatitis B virus	0
A7b Hepatitis C – episodes	Inflammation of the liver due to Hepatitis C virus	0
A8. Malaria	Infectious disease caused by protozoa of the genus <i>Plasmodium</i>	0
Episodes	Attacks of chills, fever, and sweating due to <i>Plasmodium</i> infection	
Anaemia	Defined using WHO criteria for mild to very severe anaemia.	
Neurological sequelae	Includes hemiplegia, aphasia, ataxia and cortical blindness.	
A9a. Trypanosomiasis – Episodes	Infection with protozoa of the genus <i>Trypanosoma</i> , excluding <i>T. cruzi</i>	0
A9b. Chagas disease	Infection with <i>Trypanosoma cruzi</i>	1
Infection	Episode of infection with <i>Trypanosoma cruzi</i>	
Cardiomyopathy without congestive heart failure	Disorder of the heart muscle resulting from infection with <i>T. cruzi</i> without congestive heart failure	
Cardiomyopathy with congestive heart failure	Disorder of the heart muscle resulting from infection with <i>T. cruzi</i> without congestive heart failure	
Megaviscera	Dilation of interior organ in the abdominal cavity, particularly of oesophagus and colon due to <i>T. cruzi</i>	
A9c. Schistosomiasis – Infection	Infection and associated direct mortality from schistosomiasis. Does not include estimates of mortality from bladder cancer, cirrhosis or colon cancer that may be related to schistosomiasis.	1
A9d. Leishmaniasis	Infection with flagellate protozoa of the genus <i>Leishmania</i>	0
Visceral	Generalised involvement of the reticulo-endothelial system due to infection with <i>Leishmania</i>	
Cutaneous	Presence of skin lesions (which may ulcerate) due to infection with <i>Leishmania</i>	

Annex Table 4 (continued): GBD2000 cause categories, sequelae and case definitions

GBD Cause/Sequelae	Case definition	Version ^a
A9e. Lymphatic filariasis	Infection with filariae (<i>Wuchereria bancrofti</i> and <i>Brugia malayi</i>)	0
Hydrocele > 15cm	Circumscribed collection of fluid in testicle or along the spermatic cord due to filariasis	
Bancroftian lymphoedema	Swelling of subcutaneous tissues due to the presence of excessive lymph fluid as a result of infection with <i>Wuchereria bancrofti</i>	
Brugian lymphoedema	Swelling of subcutaneous tissues due to the presence of excessive lymph fluid as a result of infection with <i>Brugia malayi</i>	
A9f. Onchocerciasis	Infection with worms of the genus <i>Onchocerca</i>	0
Blindness	Inability to distinguish the fingers of a hand at the distance of 3 metres, or less than 5% of remaining vision as compared to a normally sighted individual as a result of infection with <i>Onchocerca volvulus</i>	
Itching	Itchy dermatitis as a result of infection with <i>Onchocerca volvulus</i>	
Low vision	Corrected visual acuity in the better eye of less than 6/18 but better than or equal to 3/60 due to infection with <i>Onchocerca volvulus</i>	
A10. Leprosy	Chronic disease resulting from infection with <i>Mycobacterium leprae</i>	2
Cases	WHO case definition: Person showing clinical signs of leprosy, with or without bacteriological confirmation of the diagnosis, and requiring chemotherapy	
Disabling leprosy	Grade 1 and 2 of World Health Organization grades of disability for leprosy	
A11. Dengue	Mosquito-borne disease caused by viruses of the family <i>Flaviviridae</i>	0
Dengue haemorrhagic fever	Severe manifestation of dengue infection characterised by multiple haemorrhages, and potentially followed by circulatory failure, neurological manifestations and shock.	
A12. Japanese encephalitis	Mosquito-borne encephalitis caused by JE virus	0
Episodes	Episode of Japanese encephalitis infection	
Cognitive impairment	Reduced cognitive function resulting from encephalitis due to JE virus	
Neurological sequelae	Neurological deficits resulting from encephalitis due to JE virus	
A13. Trachoma	Cases of follicular or inflammatory trachoma.	0
Blindness	Corrected visual acuity in the better eye of less than 3/60.	
Low vision	Corrected visual acuity in the better eye of less than 6/18 but better than or equal to 3/60.	
A14. Intestinal nematode infections		1
A14a. Ascariasis	Infection with worms of the genus <i>Ascaris</i>	0
High intensity infection	Infection resulting in at least 20-40 worms per stool load	
Contemporaneous cognitive deficit	Reduction in cognitive ability in school-age children, which occur only while infection persists. – Provisional definition	
Cognitive impairment	Delayed psychomotor development, impaired performance on language skills, motor skills and co-ordination that is equivalent to a 5-10 point deficit in IQ.	
Intestinal obstruction	Blockage of the intestines due to worm mass	
A14b. Trichuriasis		0
High intensity infection	Infection resulting in at least 250-500 worms per stool load	
Contemporaneous cognitive deficit	Reduction in cognitive ability in school-age children, which occur only while infection persists. – Provisional definition	
Massive dysentery syndrome	Rectal prolapse and/or tenesmus and/or bloody mucoid stools due to carpeting of intestinal mucosa by worms.	
Cognitive impairment	Delayed psychomotor development, impaired performance on language skills, motor skills and co-ordination that is equivalent to a 5-10 point deficit in IQ.	
A14c. Hookworm disease	<i>Ancylostomiasis</i> and <i>neatoriasis</i>	1
High intensity infection	Infection resulting in at least 80-160 worms per stool load	
Anaemia	Anaemia (as under E.4) due to hookworm infection	
Cognitive impairment	Delayed psychomotor development, impaired performance on language skills, motor skills and co-ordination that is equivalent to a 5-10 point deficit in IQ.	
B1. Lower respiratory infections	ICD-10: J12-22	2
Episodes	Episode of lower respiratory infection	
Chronic sequelae	Includes bronchiectasis and impaired lung function as measured by a decrease in FEV.	
B2. Upper respiratory infections	ICD-10: J00-06	2
Episodes	Episode of upper respiratory infection	
Pharyngitis	Inflammation of the pharynx	
B3. Otitis media	Inflammation of the middle ear	0
Episodes	Episodes of acute otitis media.	
Deafness	At least <u>moderate</u> impairment, where person is able to hear and repeat words using raised voice at 1 metre, RESULTING from otitis media.	

Annex Table 4 (continued): GBD2000 cause categories, sequelae and case definitions

GBD Cause/Sequelae	Case definition	Version^a
C1. Maternal haemorrhage		0
Episodes	All episodes of antepartum and postpartum haemorrhage	
Sheehan syndrome	Postpartum pituitary necrosis following obstetric shock	
Severe anaemia	Blood haemoglobin level < 10mg/dl following postpartum haemorrhage	
C2. Maternal sepsis		0
Episodes	Major puerperal infection, excluding infection following abortion, minor genital tract infection following delivery and urinary tract infections following deliver	
Infertility	Failure to conceive again after a previous conception (secondary infertility), caused by maternal sepsis	
C3. Hypertensive disorders of pregnancy		0
Episodes	Includes pre-eclampsia and eclampsia.	
Neurological sequelae	Cases	
C4. Obstructed labour		0
Episodes	Labour with no advance of the presenting part of the fetus despite strong uterine contractions	
Stress incontinence	Cases with leaking of urine during coughing or sneezing	
Rectovaginal fistula	Cases with a communication between the vaginal wall and the bladder/the rectum resulting from obstructed labour	
C5. Abortion		0
Episodes	Episodes of unsafe abortion (termination of an unwanted pregnancy either by persons lacking the necessary skills or in an environment lacking the necessary standards or both)	
Infertility	Failure to conceive following unsafe abortion	
D1. Low birth weight – All sequelae	Birthweight below 2500g. Includes small-for-gestational-age infants and premature infants. All developmental sequelae due to low birth weight have been clustered into one outcome, which includes cerebral palsy, mental retardation, epilepsy, hearing loss and visual loss.	1
D2. Birth asphyxia and birth trauma All sequelae	All the developmental sequelae due to birth asphyxia and birth trauma have been clustered into one outcome which includes cerebral palsy, mental retardation, epilepsy, hearing loss and visual loss.	1
E1. Protein-energy malnutrition		2
Wasting	Observed weight for height at least 2 standard deviations below the mean for 0-5 year old children.	
Stunting	Observed height for age at least 2 standard deviations below the mean for 0-5 year old children.	
Developmental disability	Limited physical and mental ability to perform most activities in <u>all</u> of the following areas: recreation, education, procreation or occupation	
E2. Iodine deficiency		2
Goitre – grade 0	A mass in the neck consistent with an enlarged thyroid – grade 0 = Not palpable or visible	
Goitre – grade 1	A mass in the neck consistent with an enlarged thyroid – grade 1 = Palpable but not visible	
Goitre – grade 2	A mass in the neck consistent with an enlarged thyroid – grade 2 = Visible in neutral neck position	
Mild developmental disability	Any of the following due to iodine deficiency: Bilateral hearing loss, delay of walking ability, mild intellectual impairment	
Cretinoidism	Hypothyroid cretinism: Hypothyroidism and stunting as a RESULT of iodine deficiency Neurological cretinism: Mental deficiency (IQ below 70), deaf-mutism, and spastic paralysis as a RESULT of iodine deficiency	
Cretinism	Some but not all features of full cretinism as a RESULT of iodine deficiency	
E3. Vitamin A deficiency		2
Xerophthalmia	All ocular manifestations of vitamin A deficiency: night blindness, Bitot's spots, corneal xerosis, corneal ulceration and corneal scarring.	
Corneal scar	Permanent corneal scar resulting from corneal ulceration due to Vitamin A deficiency and potentially leading to blindness	
E4. Iron-deficiency anaemia		1
Mild	Haemoglobin of 100-109 g/l in pregnant women, 110-119 g/l in children and adult women and 120-129 g/l in adult men.	
Moderate	Haemoglobin of 70-99 g/l in pregnant women, 80-109 g/l in children and adult women and 90-119 g/l in adult men.	
Severe	Haemoglobin of 40-69 g/l in pregnant women, 50-79 g/l in children and adult women and 60-89 g/l in adult men.	
Very severe	Haemoglobin of <40 g/l in pregnant women, <50 g/l in children and adult women and <60 g/l in adult men.	
Cognitive impairment	Delayed psychomotor development, impaired performance on language skills, motor skills and co-ordination that is equivalent to a 5-10 point deficit in IQ.	

Annex Table 4 (continued): GBD2000 cause categories, sequelae and case definitions

GBD Cause/Sequelae	Case definition	Version ^a
II. Noncommunicable diseases		
A. Malignant neoplasms sequelae		1
Diagnosis and primary therapy	Chemotherapy, radiotherapy, surgery	
Control	Clinical observation during control/remission phase	
Preterminal (metastasis)	Metastatic dissemination of the disease	
Terminal	Terminal stage prior to death	
C. Diabetes mellitus		1
Cases	Venous plasma concentration of μ 11.1 mmol/l 2 h after a 75g oral glucose challenge	
Diabetic foot	Chronic or recurring diabetic foot ulcers	
Neuropathy	Loss of reflexes and of vibration; damage and dysfunction of sensory, motor or autonomic nerves attributable to diabetes	
Retinopathy – blindness	Retinopathy: Microaneurysms or worse lesions in at least one eye; progressive damage of the small blood vessels of the retina Blindness: Unable to distinguish the fingers of a hand at the distance of 3 meters, or, has less than 5% of remaining vision as compared to a normally sighted individual; visual acuity of less than 3/60, or corresponding visual field loss in the better eye with best possible correction	
Amputation	Surgical elimination of the lower extremity or part of it because of gangrene	
E1. Unipolar depressive disorders		2
Mild episode	Mild major depressive episode (F 32.0 and F 33.0)	
Moderate episode	Moderate major depressive episode (F 32.1 and F 33.1)	
Severe episode	Severe major depressive episode (F 32.2 , F 32.3, F 33.2 and F 33.3)	
Dysthymia	Dysthymia case with no concurrent major depressive episode	
E2. Bipolar affective disorder – cases	Cases that meet ICD 10 criteria	2
E3. Schizophrenia – cases	Cases that meet ICD 10 criteria	2
E4. Epilepsy – cases	Cases meeting ILAE definition.	2
	Cases meeting ICD 10 criteria for alcohol dependence and harmful use (F10.1 and F 10.2), excluding cases with comorbid depressive episode.	2
E6. Alzheimer and other dementias – cases	Mild, moderate and severe Alzheimer disease, senile and other dementias.	2
E7. Parkinson disease – cases	Cases meeting clinical criteria for Parkinson disease	2
E8. Multiple sclerosis -- cases	Cases of chronic or intermittent relapsing multiple sclerosis.	2
E9. Drug use disorders	Cases meeting ICD 10 criteria for opioid dependence and harmful use (F 11.1 F 11. 2) or cocaine dependence and harmful use (F 14.1 and F 14.2), excluding cases with comorbid depressive episode.	2
E10. Post-traumatic stress disorder – cases	Cases meeting DSM IV criteria for PTSD, excluding cases with comorbid depressive episode or alcohol and drug use(harmful and/or dependence).	2
E11. Obsessive-compulsive disorder – cases	Cases meeting ICD 10 criteria (F 42), excluding cases with comorbid depressive episode.	2
E12. Panic disorder – cases	Cases meeting ICD 10 criteria for panic disorder (F 41.0) or agoraphobia with panic disorder (F 40.01), excluding cases with comorbid depressive episode.	2
E13. Insomnia (primary)	Cases meeting DSM IV criteria for primary insomnia (307.42) where the insomnia causes problems with usual activities. Cases with comorbid depressive episode or alcohol and drug use(harmful and/or dependence) are excluded.	2
E14. Migraine	Cases meeting IHS definition for migraine.	1
E15. Mental retardation attributable to lead exposure		2
Mild mental retardation	IQ in the range 50-69 attributable to childhood lead exposure.	2
Moderate/severe mental retardation	IQ less than 50 attributable to childhood lead exposure.	2
F1. Glaucoma	Cases of primary angle closure glaucoma and primary open angle glaucoma.	1
Blindness	Corrected visual acuity in the better eye of less than 3/60.	
F2. Cataracts	Cases of senile cataract causing progressive visual impairment.	1
Blindness	Corrected visual acuity in the better eye of less than 3/60.	
F3. Vision disorders, age-related	Low vision or blindness due to macular degeneration, refractive errors or other age-related causes. Excludes sight loss due to congenital causes, other diseases or injury.	0
Low vision	Corrected visual acuity in the better eye of less than 6/18 but better than or equal to 3/60.	
Blindness	Corrected visual acuity in the better eye of less than 3/60.	

Annex Table 4 (continued): GBD2000 cause categories, sequelae and case definitions

GBD Cause/Sequelae	Case definition	Version^a
F4. Hearing loss, adult onset	Cases of adult onset hearing loss due to ageing or noise exposure. Excludes hearing loss due to congenital causes, infectious diseases, other diseases or injury.	1
Moderate hearing loss, no aids	Hearing threshold level in the better ear is 41-60 dBHTL (averaged over 0.5, 1, 2, 4kHz). (some difficulty understanding or actively participating in a conversation with one person, great difficulty with more than one person). Person does not use a hearing aid	
Severe hearing loss, no aids	Hearing threshold level in the better ear is 61 dBHTL or more (averaged over 0.5, 1, 2, 4kHz). (great difficulty or unable to understand or participate in a conversation with one other person). Person does not use a hearing aid	
Moderate hearing loss, uses aids	Hearing threshold level in the better ear is 41-60 dBHTL (averaged over 0.5, 1, 2, 4kHz). (some difficulty understanding or actively participating in a conversation with one person, great difficulty with more than one person). Person uses a hearing aid	
Severe hearing loss, uses aids	Hearing threshold level in the better ear is 61 dBHTL or more (averaged over 0.5, 1, 2, 4kHz). (great difficulty or unable to understand or participate in a conversation with one other person). Person uses a hearing aid	
G1. Rheumatic heart disease	Symptomatic cases of congestive heart failure due to rheumatic heart disease.	0
G2. Hypertensive heart disease	Symptomatic cases of congestive heart failure due to hypertensive heart disease.	0
G3. Ischaemic heart disease		1
Acute myocardial infarction	Definite and possible episodes of acute myocardial infarction according to MONICA study criteria	
Angina pectoris	Cases of clinically diagnosed angina pectoris or definite angina pectoris according to Rose questionnaire	
Congestive heart failure	Mild and greater (Killip scale k2-k4)	
G4. Cerebrovascular disease		1
First-ever stroke cases	First-ever stroke according to WHO definition (includes subarachnoid haemorrhage but excludes transient ischaemic attacks, subdural haematoma, and haemorrhage or infarction due to infection or tumour).	
Long-term stroke survivors	Persons who survive more than 28 days after first-ever stroke.	
G5. Inflammatory heart diseases		0
Myocarditis	Symptomatic cases of congestive heart failure due to myocarditis.	
Pericarditis	Symptomatic cases of congestive heart failure due to pericarditis.	
Endocarditis	Symptomatic cases of congestive heart failure due to endocarditis	
Cardiomyopathy	Symptomatic cases of congestive heart failure due to cardiomyopathy	
H1. Chronic obstructive pulmonary disease – Symptomatic cases	Chronic (stable) airways obstruction with FEV1 < 1 litre (corresponding to symptomatic disability)	0
H2. Asthma -- Cases	Reported wheeze in the last 12 months plus current bronchial hyperresponsiveness, defined as a 20% fall in FEV1 with a provoking concentration of histamine (PC20) at 8 mg/ml or less.	1
I1. Peptic ulcer disease	Individuals with peptic ulcers, most of whom have recurrent intermittent symptoms.	0
Cases with antibiotic treatment	Active gastric or peptic duodenal ulcer receiving appropriate antibiotic treatment	
Cases not treated with antibiotic	Other active gastric or peptic duodenal ulcer. Includes untreated cases and cases receiving symptomatic treatment.	
I2. Cirrhosis of the liver – Symptomatic cases	Individuals with symptomatic cirrhosis.	0
I3. Appendicitis -- episodes	Episodes of acute appendicitis (treated or untreated).	0
J1. Nephritis and nephrosis		0
Acute glomerulonephritis	Acute episode of glomerulonephritis	
End-stage renal disease	End-stage renal failure with or without dialysis, excluding diabetic nephropathy and nephropathy due to cancers, congenital conditions and injury	
J2. Benign prostatic hypertrophy – Symptomatic cases	Individuals with some albeit intermittent symptoms from benign prostatic hypertrophy.	0
L1. Rheumatoid arthritis -- cases	Definite or classical RA by 1958 ARA or 1987 ACR criteria	1
L2. Osteoarthritis		1
Hip – Grade 2 symptomatic	Symptomatic osteoarthritis of the hip, radiologically confirmed as Kellgren-Lawrence grade 2.	
Hip – Grade 3-4 symptomatic	Symptomatic osteoarthritis of the hip, radiologically confirmed as Kellgren-Lawrence grade 3-4.	
Knee – Grade 2 symptomatic	Symptomatic osteoarthritis of the knee, radiologically confirmed as Kellgren-Lawrence grade 2.	
Knee – Grade 3-4 symptomatic	Symptomatic osteoarthritis of the knee, radiologically confirmed as Kellgren-Lawrence grade 3-4.	
L3. Gout	Cases of gout (ARA 1977 survey criteria; at least 6 of 11 symptoms) (ref)	1

Annex Table 4 (continued): GBD2000 cause categories, sequelae and case definitions

GBD Cause/Sequelae	Case definition	Version^a
L4. Low back pain		1
Episode of limiting low back pain	Acute episode of low back pain resulting in moderate or greater limitations to mobility and usual activities. Excludes low back pain due to intervertebral disc displacement or herniation, and low back pain that does not result in some limitations to mobility and usual activities.	
Episode of intervertebral disc displacement or herniation	Episode of intervertebral disc displacement or herniation.	
Chronic intervertebral disc	Disorder of intervertebral disc resulting in pain and disability that does not resolve within 6 weeks following treatment (medical or surgical).	
M1. Abdominal wall defect – cases	Liveborn cases with exomphalos or gastroschisis	1
M2. Anencephaly – cases	Liveborn cases with anencephaly	1
M3. Anorectal atresia – cases	Liveborn cases with anorectal atresia	1
M4. Cleft lip – cases	Liveborn cases, includes individuals who have had surgical correction.	1
M5. Cleft palate – cases	Liveborn cases, includes individuals who have had surgical correction.	1
M6. Oesophageal atresia – cases	Liveborn cases with oesophageal atresia	1
M7. Renal agenesis – cases	Liveborn cases with renal agenesis	1
M8. Down syndrome – cases	Liveborn cases with Down syndrome	1
M9. Congenital heart anomalies – cases	Liveborn cases with major congenital malformations	1
M10. Spina bifida -- cases	Liveborn cases with spina bifida aperta (low, medium or high level)	1
N1. Dental caries – episodes	Incidence rates and prevalence are per person, not per tooth, quadrant or sextant.	0
N2. Periodontal disease – cases	Pockets greater than 6 mm deep	0
N3. Edentulism -- cases	Cases of treated and untreated edentulism (absence of all teeth)	0
III. Injuries – external cause (refer to Annex Table 3 for ICD 9 and ICD 10 definitions)		
A1. Road traffic accidents	Includes crashes and pedestrian injuries due to motor vehicles.	0
A2. Poisonings	Only one outcome is included for poisonings.	0
A3. Falls	Includes falls resulting from osteoporotic fractures.	0
A4. Fires	Most of the sequelae of fires are due to burns. Some individuals, however, jump from buildings or are otherwise injured due to fires.	0
A5. Drownings	Other than drowning and near-drowning rates, the only other major disabling sequelae from near-drowning included is quadriplegia.	0
A6. Other unintentional injuries	This is not a residual category, but includes injuries due to environmental factors, machinery and electrical equipment, cutting and piercing implements, and various other external causes of unintentional injury.	0
B1. Self-inflicted injuries	Suicide attempts, whether or not resulting in death.	0
B2. Violence	Interpersonal violence, including assault and homicide.	0
B3. War	Injuries and deaths directly attributable to war in combatants and non-combatants. For example, the estimates of mortality include deaths to children and adults from landmines.	0
B4. Other intentional injuries	Injuries and deaths resulting from legal interventions.	0
III. Injuries - type of injury sequelae	Injury severe enough to warrant medical attention or that leads immediately to death. In other words, injuries that are severe enough that if an individual had access to a medical facility he or she would seek attention.	
	<i>ICD 9 Code</i>	<i>ICD 10 Code</i>
1. Fractures		
Skull—short-term ¹	800 to 801	S02.0/1/7/9, T90.2
Skull—long-term ¹	800 to 801	S02.0/1/7/9, T90.2
Face bones ¹	802	S02.2/6/8
Vertebral column	805	S12, S22.0/1, S32.0/7, T91.1
Rib or sternum ²	807	S22.2-9
Pelvis ²	808	S32.1-5/8, T91.2
Clavicle, scapula or humerus ³	810-812	S42, S49.7
Radius or ulna ³	813	S52, S59.7, T10, T92.1
Hand bones ³	814-817	S62, S69.7, T92.2
Femur—short-term ⁴	820-821	S72, S79.7
Femur—long-term ⁴	820-821	S72, S79.7
Patella, tibia or fibula ⁴	822-823	S82.0-4, S82.7/9, S89.7, T12
Ankle ⁴	824	S82.5-6/8
Foot bones ⁴	825-826	S92, S99.7
2. Injured spinal cord	806 and 952	S14, S24, S34, T06.0/1, T08, T91.3
3. Dislocations		
Shoulder, elbow or hip	831, 832, 835	S43, S73
Other dislocation	830, 833-834, 836-839	S03.0-3, S13, S23, S33, S53, S63.0/1, S83.1-3, S93.1-3, T03, T11.2, T13.2, T14.3, T92.3, T93.3
4. Sprains	840-848	S03.4/5, S16, S29.0, S39.0, S46, S56, S63.5-7, S66, S76, S83.4/7, S86, S93.4/6, S96, T06.4, T11.5, T13.5, T14.6, T92.5, T93.5

Annex Table 4 (continued): GBD2000 cause categories, sequelae and case definitions

GBD Cause/Sequelae	Case definition	
III. Injuries - type of injury sequelae (continued)	<i>ICD 9 Code</i>	<i>ICD 10 Code</i>
5. Intracranial injuries		
Short-term	850-854	S06, T90.5
Long-term	850-854	S06, T90.5
6. Internal injuries	860-869	S25-S27, S35-S37, S39.6, T06.4, T91.4/5
7. Open wound	870, 872-884, 890-894	S01, S08, S11, S15, S21, S31, S41, S45, S51, S55, S61, S65, S71, S75, S81, S85, S91, S95, T01, T11.1/4, T13.5, T14.6, T90.1, T92.5, T93.5
8. Injury to eyes		
Short-term	871, 950	S05, T90.4
Long-term	871, 950	S05, T90.4
9. Amputations		
Thumb	885	S68.0
Finger	886	S68.1/2
Arm	887	S48, S58, S68.3-9, T05.0/2, T11.6
Toe ⁵	895	S98.1/2
Foot ⁵	896, 897.0-1	S98.0/3/4, T05.3
Leg ⁵	897.2-3	S78, S88, T05.4/6, T13.6
10. Crushing	925-929	S07, S17, S28, S38, S47, S57, S67, S77, S87, S97, T04, T14.7, T92.6, T93.6
11. Burns		
Less than 20%—short-term ⁶	940-947, 948.0-1	T31.0/1
Less than 20%—long-term ⁶	940-947, 948.0-1	T31.0/1
20 to 60%—short-term ⁶	948.2-5	T331.2/5
20 to 60%—long-term ⁶	948.2-5	T331.2/5
Greater than 60%—short-term ⁶	948.6-9	T31.6/9
Greater than 60%—long-term ⁶	948.6-9	T31.6/9
12. Injured nerves		
Short-term	951, 953-957	S04, S44, S54, S64, S74, S84, S94, T06.2, T11.3, T13.3, T14.4
Long-term	951, 953-957	S04, S44, S54, S64, S74, S84, S94, T06.2, T11.3, T13.3, T14.4
13. Poisoning	960-979, 980-989	T36-T65, T96-T97

a Version 0 estimates for YLD are based on epidemiological reviews and disease models from the GBD 1990, adjusted for time trends and internal consistency with the 2000 population estimates, and cause-specific and background mortality for the year 2000. Version 1 estimates for YLD are provisional revised estimates based on new epidemiological reviews and disease models for the year 2000. These estimates may change with further revisions. Version 2 estimates for YLD are close-to-final estimates based on new epidemiological reviews and disease models for the year 2000. YLL for all causes based on complete analysis of mortality data for the year 2000.

- 1 The N-codes 803 and 804 were assigned to fractured skull following the distribution of N-codes 801 and 802.
- 2 The N-code 809 was assigned to fractured rib, sternum, and pelvis following the distribution of N-codes 807 and 808.
- 3 The N-codes 818 and 819 were assigned to fractured clavicle, scapula, humerus, radius, ulna and hand bones following the distribution of N-codes 810-817.
- 4 The N-codes 827 and 828 were assigned to Fractured patella, tibia, fibula, ankle and foot bones following the distribution of N-codes 822-826.
- 5 The N-codes 897.4 to 897.7 were assigned to Amputated toe, foot and leg following the distribution of N-codes 895, 896 and 897.0-897.3.
- 6 The N-code 949 was assigned to Burns following the N-codes 940-948. In ICD-10, burns are classified by site (T20–T30) and/or proportion of body surface affected (T31). If there is no information given on the proportion of body surface affected, a decision will have to be made how to map the T20–T30 codes across.

Annex Table 5: Population^a by sex, age and WHO subregion, 2000

Sex	Total	0-4	5-14	15-29	30-44	45-59	60-69	70-79	80+
WHO subregion^b	<i>(000)</i>	<i>(000)</i>	<i>(000)</i>	<i>(000)</i>	<i>(000)</i>	<i>(000)</i>	<i>(000)</i>	<i>(000)</i>	<i>(000)</i>
Total persons	6,045,172	612,118	1,198,616	1,558,756	1,264,828	806,225	339,090	196,468	69,072
AFRO D	294,099	49,682	79,499	81,473	44,796	24,131	9,043	4,359	1,122
AFRO E	345,533	58,474	94,293	95,845	52,320	28,463	10,266	4,725	1,147
AMRO A	325,186	22,555	47,212	65,976	77,226	59,814	23,602	18,464	10,310
AMRO B	430,951	44,772	88,504	121,247	89,749	52,230	19,577	11,108	3,789
AMRO D	71,235	9,354	17,224	20,522	12,588	7,009	2,705	1,400	434
EMRO B	139,071	16,462	35,755	40,155	24,773	14,410	4,704	2,232	579
EMRO D	342,584	51,708	86,838	93,194	58,594	33,091	12,111	5,667	1,327
EURO A	411,910	21,855	47,835	80,604	94,885	78,022	41,872	31,669	15,167
EURO B	218,473	17,917	39,343	57,614	45,631	30,811	15,220	9,310	2,626
EURO C	243,192	11,382	33,917	55,410	55,119	42,497	24,379	15,587	4,901
SEARO B	293,821	29,122	57,828	84,043	64,155	35,672	14,617	6,763	1,662
SEARO D	1,241,813	146,327	276,964	339,413	245,109	143,363	56,339	27,115	7,189
WPRO A	154,358	8,006	16,465	31,858	31,204	33,152	16,757	11,438	5,471
WPRO B	1,532,946	124,502	276,938	391,403	368,678	223,559	87,896	46,631	13,348
Males	3,045,372	314,256	615,986	797,049	643,144	403,999	162,033	84,945	23,960
AFRO D	147,143	25,129	40,192	41,049	22,334	11,778	4,228	1,969	467
AFRO E	171,608	29,418	47,269	47,899	26,081	13,737	4,707	2,055	442
AMRO A	160,495	11,554	24,169	33,571	38,923	29,579	11,227	8,014	3,446
AMRO B	213,318	22,822	45,039	60,863	43,995	25,214	9,089	4,839	1,469
AMRO D	35,474	4,766	8,752	10,313	6,138	3,392	1,288	641	182
EMRO B	72,161	8,443	18,331	20,536	13,168	7,925	2,411	1,081	265
EMRO D	174,279	26,484	44,541	47,659	29,819	16,647	5,838	2,637	624
EURO A	201,524	11,225	24,530	41,190	48,071	38,867	19,868	13,071	4,702
EURO B	108,189	9,146	20,084	29,376	22,864	15,096	6,971	3,776	876
EURO C	114,055	5,823	17,325	28,063	27,267	19,716	9,921	4,881	1,059
SEARO B	147,174	14,816	29,352	42,442	32,337	17,622	6,866	3,069	684
SEARO D	639,091	75,328	143,098	176,413	127,881	72,926	27,378	12,841	3,240
WPRO A	75,799	4,111	8,441	16,266	15,721	16,529	8,052	4,910	1,766
WPRO B	785,062	65,191	144,862	201,407	188,545	114,970	44,189	21,161	4,738
Females	2,999,800	297,862	582,630	761,708	621,683	402,226	177,056	111,523	45,112
AFRO D	146,956	24,554	39,307	40,424	22,462	12,353	4,815	2,391	655
AFRO E	173,924	29,056	47,024	47,946	26,239	14,726	5,559	2,670	705
AMRO A	164,691	11,001	23,042	32,405	38,303	30,235	12,375	10,450	6,864
AMRO B	217,633	21,950	43,466	60,384	45,754	27,016	10,488	6,269	2,321
AMRO D	35,762	4,587	8,471	10,209	6,450	3,617	1,417	759	252
EMRO B	66,909	8,019	17,424	19,619	11,605	6,486	2,293	1,151	314
EMRO D	168,305	25,224	42,297	45,535	28,775	16,444	6,273	3,030	703
EURO A	210,386	10,630	23,305	39,414	46,815	39,155	22,004	18,598	10,466
EURO B	110,284	8,771	19,259	28,238	22,766	15,715	8,250	5,534	1,750
EURO C	129,137	5,559	16,592	27,347	27,852	22,781	14,459	10,706	3,842
SEARO B	146,647	14,306	28,475	41,600	31,817	18,050	7,751	3,694	979
SEARO D	602,722	71,000	133,866	163,000	117,229	70,437	28,962	14,273	3,949
WPRO A	78,560	3,895	8,024	15,591	15,484	16,623	8,705	6,528	3,704
WPRO B	747,885	59,311	132,077	189,996	180,134	108,588	43,706	25,470	8,610

a Source: *World population prospects: the 2000 revision* (2001). New York, United Nations.

b See list of Member States by WHO Region and mortality stratum (Annex Table 1).

Annex Table 6: Total deaths by sex, age and WHO subregion, Version 1 global estimates for 2000

Sex	Total	0-4	5-14	15-29	30-44	45-59	60-69	70-79	80+
WHO subregion^a	<i>(000)</i>	<i>(000)</i>	<i>(000)</i>	<i>(000)</i>	<i>(000)</i>	<i>(000)</i>	<i>(000)</i>	<i>(000)</i>	<i>(000)</i>
Total persons	55,694	10,901	1,444	3,632	5,082	7,007	8,021	10,289	9,317
AFRO D	4,245	1,930	187	398	486	379	316	346	203
AFRO E	6,327	2,316	250	907	1,198	656	400	391	208
AMRO A	2,778	37	9	55	129	308	371	687	1,183
AMRO B	2,587	316	36	194	255	387	411	521	467
AMRO D	510	119	17	48	55	64	63	76	68
EMRO B	690	127	21	50	52	103	112	133	91
EMRO D	3,346	1,421	134	208	243	343	357	398	242
EURO A	4,076	27	7	49	120	347	575	1,126	1,824
EURO B	1,952	170	24	67	126	264	370	510	420
EURO C	3,636	57	18	125	295	567	759	967	850
SEARO B	2,142	301	55	191	249	331	370	404	242
SEARO D	12,015	3,012	484	850	1,092	1,714	1,850	1,902	1,110
WPRO A	1,152	8	2	16	30	118	179	294	504
WPRO B	10,238	1,060	201	475	750	1,427	1,888	2,534	1,903
Males	29,696	5,649	733	1,882	3,026	4,346	4,799	5,504	3,759
AFRO D	2,189	1,023	93	165	258	219	169	171	90
AFRO E	3,228	1,235	122	357	633	387	216	191	87
AMRO A	1,382	21	5	40	84	192	220	371	448
AMRO B	1,491	177	21	148	177	240	238	279	212
AMRO D	282	65	9	29	34	36	35	41	33
EMRO B	387	67	11	32	32	64	65	71	45
EMRO D	1,750	723	66	98	134	198	198	209	123
EURO A	2,036	15	4	37	82	233	379	627	659
EURO B	1,053	93	15	46	86	177	224	253	159
EURO C	1,857	33	12	97	229	406	470	409	202
SEARO B	1,185	173	31	122	152	188	203	207	108
SEARO D	6,518	1,489	228	424	646	1,028	1,074	1,052	577
WPRO A	626	5	1	11	20	81	124	178	205
WPRO B	5,712	529	114	275	459	896	1,184	1,443	812
Females	25,998	5,253	712	1,751	2,056	2,662	3,222	4,786	5,558
AFRO D	2,056	907	93	232	228	160	147	175	114
AFRO E	3,099	1,081	128	550	566	269	184	200	121
AMRO A	1,396	16	4	15	45	116	151	315	735
AMRO B	1,096	140	15	46	78	147	173	242	256
AMRO D	229	55	8	18	22	28	28	35	36
EMRO B	303	60	10	19	21	40	47	61	46
EMRO D	1,596	698	68	110	109	145	158	190	119
EURO A	2,040	12	3	12	38	114	197	499	1,165
EURO B	900	77	9	22	40	87	146	257	261
EURO C	1,779	23	6	28	66	160	289	558	648
SEARO B	957	127	23	69	97	142	167	197	134
SEARO D	5,496	1,524	257	427	446	686	776	849	532
WPRO A	526	3	1	4	10	37	55	117	299
WPRO B	4,526	531	87	200	291	530	704	1,091	1,092

^a See list of Member States by WHO Region and mortality stratum (Annex Table 1).

Annex Table 7: Mortality rates by sex, age and WHO subregion, Version 1 global estimates^a for 2000

Sex WHO subregion ^b	Total deaths per 100,000 population								
	Total	0-4	5-14	15-29	30-44	45-59	60-69	70-79	80+
Total persons	921	1,781	120	233	402	869	2,365	5,237	13,488
AFRO D	1,443	3,884	235	488	1,085	1,571	3,496	7,932	18,130
AFRO E	1,831	3,960	265	947	2,291	2,306	3,899	8,285	18,093
AMRO A	854	163	19	83	167	514	1,572	3,720	11,477
AMRO B	600	706	40	160	284	741	2,099	4,688	12,337
AMRO D	717	1,274	100	232	439	914	2,324	5,425	15,748
EMRO B	496	774	58	125	212	718	2,386	5,948	15,666
EMRO D	977	2,749	154	223	415	1,036	2,945	7,029	18,208
EURO A	990	124	15	61	127	445	1,374	3,556	12,026
EURO B	894	951	61	117	277	856	2,434	5,475	16,007
EURO C	1,495	497	52	225	535	1,333	3,113	6,201	17,347
SEARO B	729	1,033	95	228	388	927	2,529	5,978	14,573
SEARO D	968	2,059	175	250	446	1,196	3,283	7,014	15,435
WPRO A	746	103	14	50	96	355	1,067	2,574	9,222
WPRO B	668	851	72	121	203	638	2,148	5,435	14,260
Males	975	1,797	119	236	471	1,076	2,962	6,479	15,688
AFRO D	1,487	4,072	232	403	1,155	1,859	4,004	8,688	19,182
AFRO E	1,881	4,198	258	746	2,426	2,817	4,585	9,314	19,620
AMRO A	861	180	22	118	217	648	1,961	4,635	13,001
AMRO B	699	774	47	243	402	951	2,615	5,767	14,429
AMRO D	794	1,355	104	282	547	1,074	2,728	6,417	17,833
EMRO B	537	795	60	154	241	802	2,714	6,611	17,001
EMRO D	1,004	2,731	149	206	449	1,191	3,394	7,911	19,695
EURO A	1,011	137	17	89	172	600	1,906	4,796	14,018
EURO B	973	1,015	72	156	377	1,174	3,218	6,694	18,143
EURO C	1,628	573	67	346	839	2,060	4,734	8,377	19,044
SEARO B	805	1,171	107	288	470	1,067	2,957	6,745	15,818
SEARO D	1,020	1,976	159	240	505	1,410	3,924	8,196	17,818
WPRO A	826	117	17	71	128	489	1,539	3,624	11,629
WPRO B	728	812	78	137	244	779	2,679	6,821	17,128
Females	867	1,763	122	230	331	662	1,820	4,291	12,320
AFRO D	1,399	3,692	237	575	1,016	1,296	3,050	7,310	17,381
AFRO E	1,782	3,719	272	1,147	2,156	1,829	3,318	7,493	17,135
AMRO A	848	144	16	46	116	383	1,219	3,018	10,712
AMRO B	504	636	34	76	171	544	1,652	3,856	11,013
AMRO D	640	1,190	96	181	336	765	1,957	4,586	14,238
EMRO B	453	752	56	95	179	614	2,041	5,325	14,537
EMRO D	948	2,768	160	241	379	880	2,527	6,261	16,887
EURO A	969	109	12	31	81	292	894	2,684	11,132
EURO B	816	883	49	76	176	551	1,771	4,643	14,937
EURO C	1,378	418	36	101	238	704	2,000	5,209	16,879
SEARO B	653	890	82	166	304	789	2,150	5,341	13,704
SEARO D	912	2,146	192	262	381	974	2,678	5,951	13,479
WPRO A	669	88	11	28	63	221	631	1,785	8,074
WPRO B	605	895	66	105	161	489	1,611	4,284	12,681

^a As published in the World Health Report 2001 (11).

^b See list of Member States by WHO Region and mortality stratum (Annex Table 1).

Annex Table 8: Deaths by cause, sex and WHO subregions^a, Version 1 global estimates for 2000

Cause ^b	Global total						AFRO		AMRO		
	Both sexes		Males		Females		D	E	A	B	D
	(000)	%	(000)	%	(000)	%	(000)	(000)	(000)	(000)	(000)
Population (000)	6,045,172		3,045,372		2,999,800		294,099	345,533	325,186	430,951	71,235
All Causes	55,694	100	29,696	100	25,998	100	4,245	6,327	2,778	2,587	510
I. Communicable, maternal, perinatal nutritional conditions	17,777	31.9	9,282	31.3	8,495	32.7	2,893	4,597	203	475	185
A. Infectious & parasitic diseases	10,457	18.8	5,637	19.0	4,819	18.5	1,969	3,467	60	213	93
1. Tuberculosis	1,660	3.0	1,048	3.5	613	2.4	146	235	2	33	22
2. STDs excluding HIV	217	0.4	119	0.4	97	0.4	43	58	0	1	0
a. Syphilis	197	0.4	118	0.4	79	0.3	42	56	0	0	0
b. Chlamydia	7	0.0	0	0.0	7	0.0	1	1	0	0	0
c. Gonorrhoea	4	0.0	0	0.0	4	0.0	1	1	0	0	0
3. HIV/AIDS	2,943	5.3	1,500	5.0	1,443	5.6	517	1,875	15	34	23
4. Diarrhoeal diseases	2,124	3.8	1,178	4.0	946	3.6	272	433	2	49	27
5. Childhood-cluster diseases	1,385	2.5	693	2.3	692	2.7	432	308	0	2	6
a. Pertussis	296	0.5	148	0.5	148	0.6	92	74	0	1	6
b. Poliomyelitis	1	0.0	0	0.0	0	0.0	0	0	0	0	0
c. Diphtheria	3	0.0	2	0.0	2	0.0	1	1	0	0	0
d. Measles	777	1.4	388	1.3	388	1.5	264	188	0	0	0
e. Tetanus	309	0.6	154	0.5	154	0.6	75	45	0	1	1
6. Meningitis	156	0.3	87	0.3	69	0.3	19	23	1	9	1
7. Hepatitis ^c	128	0.2	70	0.2	57	0.2	15	18	5	3	1
8. Malaria	1,080	1.9	522	1.8	558	2.1	489	477	0	1	1
9. Tropical-cluster diseases	124	0.2	76	0.3	48	0.2	33	30	0	20	3
a. Trypanosomiasis	50	0.1	32	0.1	18	0.1	25	24	0	0	0
b. Chagas disease	21	0.0	12	0.0	9	0.0	0	0	0	18	3
c. Schistosomiasis	11	0.0	8	0.0	3	0.0	3	2	0	1	0
d. Leishmaniasis	41	0.1	23	0.1	18	0.1	5	4	0	0	0
e. Lymphatic filariasis	0	0.0	0	0.0	0	0.0	0	0	0	0	0
f. Onchocerciasis	0	0.0	0	0.0	0	0.0	0	0	0	0	0
10. Leprosy	2	0.0	2	0.0	1	0.0	0	0	0	0	0
11. Dengue	12	0.0	8	0.0	4	0.0	0	0	0	0	0
12. Japanese encephalitis	4	0.0	1	0.0	2	0.0	0	0	0	0	0
13. Trachoma	0	0.0	0	0.0	0	0.0	0	0	0	0	0
14. Intestinal nematode infections	17	0.0	9	0.0	8	0.0	1	2	0	2	1
a. Ascariasis	6	0.0	3	0.0	3	0.0	0	1	0	1	0
b. Trichuriasis	2	0.0	1	0.0	1	0.0	0	0	0	0	0
c. Hookworm disease	6	0.0	4	0.0	2	0.0	1	1	0	0	0
B. Respiratory infections	3,941	7.1	2,121	7.1	1,821	7.0	460	622	115	104	43
1. Lower respiratory infections	3,866	6.9	2,084	7.0	1,782	6.9	454	614	115	102	42
2. Upper respiratory infections	69	0.1	34	0.1	35	0.1	4	5	0	1	1
3. Otitis media	6	0.0	3	0.0	3	0.0	1	2	0	0	0
C. Maternal conditions	495	0.9	0	0.0	495	1.9	97	146	0	13	7
D. Perinatal conditions	2,439	4.4	1,307	4.4	1,133	4.4	296	281	17	106	28
E. Nutritional deficiencies	445	0.8	218	0.7	227	0.9	70	81	10	39	13
1. Protein-energy malnutrition	271	0.5	137	0.5	134	0.5	49	52	5	28	8
2. Iodine deficiency	9	0.0	5	0.0	5	0.0	1	2	0	0	0
3. Vitamin A deficiency	41	0.1	17	0.1	24	0.1	11	13	0	0	0
4. Iron-deficiency anaemia	103	0.2	49	0.2	53	0.2	8	13	6	11	2
II. Noncommunicable diseases	32,855	59.0	16,998	57.2	15,856	61.0	1,043	1,286	2,397	1,779	276
A. Malignant neoplasms	6,930	12.4	3,918	13.2	3,011	11.6	228	305	652	371	50
1. Mouth and oropharynx cancers	340	0.6	242	0.8	98	0.4	11	22	11	10	2
2. Oesophagus cancer	413	0.7	274	0.9	139	0.5	5	21	16	14	1
3. Stomach cancer	744	1.3	464	1.6	280	1.1	18	18	19	42	10
4. Colon and rectum cancers	579	1.0	303	1.0	276	1.1	11	15	77	26	3
5. Liver cancer	626	1.1	433	1.5	193	0.7	28	35	15	14	3
6. Pancreas cancer	214	0.4	114	0.4	100	0.4	3	5	34	13	1
7. Trachea/bronchus/lung cancers	1,213	2.2	895	3.0	318	1.2	9	14	182	47	3
8. Melanoma & other skin cancers	65	0.1	35	0.1	30	0.1	4	5	13	5	0
9. Breast cancer	459	0.8	0	0.0	458	1.8	14	24	56	28	3
10. Cervix uteri cancer	288	0.5	0	0.0	288	1.1	21	38	6	17	6
11. Corpus uteri cancer	76	0.1	0	0.0	76	0.3	1	2	9	10	1
12. Ovary cancer	128	0.2	0	0.0	128	0.5	3	7	16	6	1
13. Prostate cancer	258	0.5	258	0.9	0	0.0	24	19	45	26	3
14. Bladder cancer	157	0.3	117	0.4	40	0.2	8	6	16	6	1

Annex Table 8 (continued): Deaths by cause, sex and WHO subregions^a, Version 1 global estimates for 2000

Cause ^b	EMRO		EURO			SEARO		WPRO	
	B	D	A	B	C	B	D	A	B
	(000)	(000)	(000)	(000)	(000)	(000)	(000)	(000)	(000)
Population (000)	139,071	342,584	411,910	218,473	243,192	293,821	1,241,813	154,358	1,532,946
All Causes	690	3,346	4,076	1,952	3,636	2,142	12,015	1,152	10,238
I. Communicable, maternal, perinatal nutritional conditions	153	1,556	240	221	152	604	4,913	131	1,454
A. Infectious & parasitic diseases	84	836	49	85	86	332	2,540	25	618
1. Tuberculosis	7	129	6	19	49	157	517	6	336
2. STDs excluding HIV	0	12	0	2	1	1	95	0	3
a. Syphilis	0	10	0	1	0	1	85	0	2
b. Chlamydia	0	0	0	0	0	0	4	0	0
c. Gonorrhoea	0	0	0	0	0	0	2	0	0
3. HIV/AIDS	0	54	10	1	10	37	334	0	32
4. Diarrhoeal diseases	24	262	2	27	4	30	921	1	71
5. Childhood-cluster diseases	1	196	0	8	0	43	337	0	52
a. Pertussis	0	57	0	0	0	1	62	0	2
b. Poliomyelitis	0	0	0	0	0	0	0	0	0
c. Diphtheria	0	0	0	0	0	0	1	0	0
d. Measles	0	81	0	7	0	34	168	0	34
e. Tetanus	0	57	0	0	0	8	105	0	17
6. Meningitis	2	22	2	7	5	12	42	1	11
7. Hepatitis ^c	3	7	4	5	2	5	32	5	22
8. Malaria	0	47	0	0	0	8	43	0	13
9. Tropical-cluster diseases	1	5	0	0	0	0	30	0	2
a. Trypanosomiasis	0	1	0	0	0	0	0	0	0
b. Chagas disease	0	0	0	0	0	0	0	0	0
c. Schistosomiasis	1	2	0	0	0	0	0	0	2
d. Leishmaniasis	0	2	0	0	0	0	30	0	0
e. Lymphatic filariasis	0	0	0	0	0	0	0	0	0
f. Onchocerciasis	0	0	0	0	0	0	0	0	0
10. Leprosy	0	0	0	0	0	0	1	0	0
11. Dengue	0	1	0	0	0	1	10	0	1
12. Japanese encephalitis	0	0	0	0	0	0	0	0	3
13. Trachoma	0	0	0	0	0	0	0	0	0
14. Intestinal nematode infections	0	2	0	0	0	1	5	0	3
a. Ascariasis	0	1	0	0	0	0	1	0	1
b. Trichuriasis	0	0	0	0	0	0	0	0	1
c. Hookworm disease	0	0	0	0	0	0	3	0	0
B. Respiratory infections	40	330	168	86	44	142	1,221	102	463
1. Lower respiratory infections	39	327	165	85	42	141	1,199	101	439
2. Upper respiratory infections	1	3	3	1	1	1	22	1	24
3. Otitis media	0	0	0	0	0	0	1	0	0
C. Maternal conditions	3	62	0	2	1	21	122	0	19
D. Perinatal conditions	20	284	11	42	19	90	919	2	321
E. Nutritional deficiencies	5	43	11	6	2	19	110	1	32
1. Protein-energy malnutrition	2	23	3	2	1	8	66	1	22
2. Iodine deficiency	0	2	0	0	0	0	3	0	0
3. Vitamin A deficiency	0	6	0	0	0	0	10	0	0
4. Iron-deficiency anaemia	1	8	8	3	2	6	27	0	7
II. Noncommunicable diseases	459	1,530	3,637	1,588	3,009	1,307	5,961	942	7,640
A. Malignant neoplasms	78	164	1,056	290	536	226	877	341	1,756
1. Mouth and oropharynx cancers	2	20	25	9	18	18	152	6	34
2. Oesophagus cancer	4	10	28	11	15	3	68	12	205
3. Stomach cancer	10	7	70	33	83	9	55	56	313
4. Colon and rectum cancers	5	7	141	29	67	23	32	44	100
5. Liver cancer	4	7	38	9	20	26	26	35	365
6. Pancreas cancer	2	1	52	12	30	4	11	20	26
7. Trachea/bronchus/lung cancers	11	20	206	59	109	35	118	62	339
8. Melanoma & other skin cancers	1	1	15	4	9	1	2	3	2
9. Breast cancer	5	12	91	21	43	26	78	12	46
10. Cervix uteri cancer	5	14	8	8	13	15	102	3	33
11. Corpus uteri cancer	1	1	16	6	13	2	2	3	9
12. Ovary cancer	1	3	26	5	17	7	17	5	15
13. Prostate cancer	3	4	71	9	14	6	15	11	9
14. Bladder cancer	3	9	37	9	18	5	15	6	18

Annex Table 8 (continued): Deaths by cause, sex and WHO subregions^a, Version 1 global estimates for 2000

Cause ^b	Global total						AFRO		AMRO		
	Both sexes		Males		Females		D	E	A	B	D
	(000)	%	(000)	%	(000)	%	(000)	(000)	(000)	(000)	(000)
15. Lymphomas/multiple myeloma	291	0.5	173	0.6	118	0.5	18	19	47	16	3
16. Leukaemia	265	0.5	145	0.5	119	0.5	8	12	27	18	3
B. Other neoplasms	115	0.2	59	0.2	56	0.2	1	2	10	9	2
C. Diabetes mellitus	810	1.5	345	1.2	465	1.8	19	35	76	120	23
D. Endocrine disorders	224	0.4	103	0.3	121	0.5	17	20	29	24	6
E. Neuro-psychiatric conditions	948	1.7	477	1.6	472	1.8	31	44	135	51	13
1. Unipolar depressive disorders	0	0.0	0	0.0	0	0.0	0	0	0	0	0
2. Bipolar affective disorder	4	0.0	1	0.0	3	0.0	0	0	0	0	0
3. Schizophrenia	17	0.0	8	0.0	9	0.0	0	0	1	0	0
4. Epilepsy	98	0.2	59	0.2	38	0.1	9	15	2	6	2
5. Alcohol use disorders	84	0.2	73	0.2	12	0.0	2	5	8	13	4
6. Alzheimer and other dementias	276	0.5	93	0.3	183	0.7	2	3	61	7	1
7. Parkinson disease	90	0.2	44	0.1	45	0.2	2	2	16	2	0
8. Multiple sclerosis	17	0.0	6	0.0	10	0.0	0	0	3	1	0
9. Drug use disorders	15	0.0	14	0.0	2	0.0	0	0	2	1	0
10. Post-traumatic stress disorder	0	0.0	0	0.0	0	0.0	0	0	0	0	0
11. Obsessive-compulsive disorder	0	0.0	0	0.0	0	0.0	0	0	0	0	0
12. Panic disorder	0	0.0	0	0.0	0	0.0	0	0	0	0	0
13. Insomnia (primary)	0	0.0	0	0.0	0	0.0	0	0	0	0	0
14. Migraine	0	0.0	0	0.0	0	0.0	0	0	0	0	0
F. Sense organ diseases	7	0.0	3	0.0	4	0.0	0	0	0	0	0
1. Glaucoma	1	0.0	0	0.0	0	0.0	0	0	0	0	0
2. Cataracts	1	0.0	0	0.0	1	0.0	0	0	0	0	0
4. Hearing loss, adult onset	0	0.0	0	0.0	0	0.0	0	0	0	0	0
G. Cardiovascular diseases	16,701	30.0	8,195	27.6	8,506	32.7	460	514	1,138	786	98
1. Rheumatic heart disease	332	0.6	137	0.5	195	0.7	13	16	6	6	3
3. Ischaemic heart disease	6,894	12.4	3,625	12.2	3,269	12.6	162	167	581	306	29
4. Cerebrovascular disease	5,101	9.2	2,406	8.1	2,695	10.4	137	166	197	229	24
5. Inflammatory heart diseases	395	0.7	216	0.7	180	0.7	15	19	34	27	3
H. Respiratory diseases	3,542	6.4	1,891	6.4	1,651	6.3	101	131	172	170	16
1. COPD	2,523	4.5	1,367	4.6	1,156	4.4	51	63	124	76	6
2. Asthma	218	0.4	107	0.4	111	0.4	8	16	7	11	3
I. Digestive diseases	1,923	3.5	1,151	3.9	772	3.0	87	112	97	144	32
1. Peptic ulcer disease	237	0.4	140	0.5	96	0.4	6	10	6	11	4
2. Cirrhosis of the liver	797	1.4	531	1.8	266	1.0	31	38	30	58	17
3. Appendicitis	33	0.1	19	0.1	13	0.1	1	1	1	2	1
J. Genito-urinary diseases	825	1.5	447	1.5	378	1.5	54	67	57	49	14
1. Nephritis and nephrosis	620	1.1	327	1.1	293	1.1	35	44	31	38	12
2. Benign prostatic hypertrophy	35	0.1	35	0.1	0	0.0	3	4	1	2	1
K. Skin diseases	68	0.1	30	0.1	38	0.1	10	12	4	5	2
L. Musculoskeletal diseases	104	0.2	36	0.1	68	0.3	6	7	12	9	3
1. Rheumatoid arthritis	20	0.0	6	0.0	14	0.1	1	1	2	2	1
2. Osteoarthritis	4	0.0	1	0.0	3	0.0	0	0	1	1	0
M. Congenital anomalies	657	1.2	341	1.1	315	1.2	30	36	15	40	16
N. Oral conditions	2	0.0	1	0.0	1	0.0	0	0	0	0	0
1. Dental caries	0	0.0	0	0.0	0	0.0	0	0	0	0	0
2. Periodontal disease	0	0.0	0	0.0	0	0.0	0	0	0	0	0
3. Edentulism	0	0.0	0	0.0	0	0.0	0	0	0	0	0
III. Injuries	5,062	9.1	3,415	11.5	1,647	6.3	308	445	178	333	50
A. Unintentional injuries	3,403	6.1	2,262	7.6	1,141	4.4	196	245	119	185	29
1. Road traffic accidents	1,260	2.3	931	3.1	329	1.3	69	99	49	82	10
2. Poisonings	315	0.6	204	0.7	112	0.4	15	20	12	3	2
3. Falls	283	0.5	170	0.6	113	0.4	8	10	23	15	2
4. Fires	238	0.4	104	0.3	135	0.5	18	17	4	5	1
5. Drownings	450	0.8	301	1.0	148	0.6	44	40	5	20	2
6. Other unintentional injuries	857	1.5	553	1.9	304	1.2	42	60	26	60	12
B. Intentional injuries	1,659	3.0	1,153	3.9	506	1.9	112	199	59	148	21
1. Self-inflicted injuries	815	1.5	509	1.7	305	1.2	10	17	39	23	4
2. Violence	520	0.9	401	1.4	119	0.5	40	76	20	123	17
3. War	310	0.6	233	0.8	77	0.3	62	106	0	2	0

Annex Table 8 (continued): Deaths by cause, sex and WHO subregions^a, Version 1 global estimates for 2000

Cause ^b	EMRO		EURO			SEARO		WPRO	
	B	D	A	B	C	B	D	A	B
	(000)	(000)	(000)	(000)	(000)	(000)	(000)	(000)	(000)
15. Lymphomas/multiple myeloma	5	12	54	9	14	14	40	14	27
16. Leukaemia	7	9	37	9	15	12	38	9	62
B. Other neoplasms	1	4	27	3	5	26	5	10	10
C. Diabetes mellitus	11	52	86	26	25	50	146	17	123
D. Endocrine disorders	3	25	24	2	2	15	16	8	33
E. Neuro-psychiatric conditions	11	73	158	27	33	51	169	20	131
1. Unipolar depressive disorders	0	0	0	0	0	0	0	0	0
2. Bipolar affective disorder	0	0	0	0	0	0	3	0	0
3. Schizophrenia	1	1	1	0	0	2	6	0	5
4. Epilepsy	2	5	6	5	4	5	19	1	18
5. Alcohol use disorders	0	2	13	5	9	5	7	1	11
6. Alzheimer and other dementias	1	5	76	4	7	20	37	7	48
7. Parkinson disease	1	4	21	1	1	2	10	4	24
8. Multiple sclerosis	0	0	4	1	2	0	3	0	1
9. Drug use disorders	0	0	4	0	0	1	3	1	3
10. Post-traumatic stress disorder	0	0	0	0	0	0	0	0	0
11. Obsessive-compulsive disorder	0	0	0	0	0	0	0	0	0
12. Panic disorder	0	0	0	0	0	0	0	0	0
13. Insomnia (primary)	0	0	0	0	0	0	0	0	0
14. Migraine	0	0	0	0	0	0	0	0	0
F. Sense organ diseases	0	0	0	0	0	0	1	0	3
1. Glaucoma	0	0	0	0	0	0	0	0	0
2. Cataracts	0	0	0	0	0	0	0	0	1
4. Hearing loss, adult onset	0	0	0	0	0	0	0	0	0
G. Cardiovascular diseases	276	811	1,797	1,051	2,125	598	3,493	406	3,147
1. Rheumatic heart disease	4	17	12	10	16	11	106	3	110
3. Ischaemic heart disease	136	288	762	472	1,115	237	1,706	140	792
4. Cerebrovascular disease	58	158	470	276	741	181	625	173	1,667
5. Inflammatory heart diseases	4	12	28	23	26	13	111	8	74
H. Respiratory diseases	26	126	205	65	127	135	482	57	1,728
1. COPD	13	43	136	42	93	52	255	23	1,545
2. Asthma	5	17	14	9	11	22	35	7	55
I. Digestive diseases	23	123	185	81	112	115	367	46	399
1. Peptic ulcer disease	3	6	18	7	14	21	53	5	74
2. Cirrhosis of the liver	7	28	68	47	55	42	181	15	180
3. Appendicitis	0	1	1	1	1	1	18	0	6
J. Genito-urinary diseases	17	69	60	26	28	56	140	27	162
1. Nephritis and nephrosis	11	58	40	18	11	45	122	24	131
2. Benign prostatic hypertrophy	1	1	1	2	3	1	8	0	8
K. Skin diseases	0	5	8	1	2	5	6	1	8
L. Musculoskeletal diseases	1	3	18	2	4	10	3	5	20
1. Rheumatoid arthritis	0	0	4	1	1	2	1	2	2
2. Osteoarthritis	0	0	1	0	0	0	0	0	0
M. Congenital anomalies	12	76	13	12	10	20	254	4	119
N. Oral conditions	0	0	0	0	0	0	1	0	0
1. Dental caries	0	0	0	0	0	0	0	0	0
2. Periodontal disease	0	0	0	0	0	0	0	0	0
3. Edentulism	0	0	0	0	0	0	0	0	0
III. Injuries	79	259	199	143	475	231	1,141	78	1,144
A. Unintentional injuries	61	181	140	88	285	155	900	49	769
1. Road traffic accidents	40	51	46	20	55	115	320	16	288
2. Poisonings	2	16	6	14	89	4	78	1	53
3. Falls	4	17	48	11	17	8	31	8	81
4. Fires	4	20	3	4	15	7	121	2	19
5. Drownings	3	16	4	10	33	12	85	6	169
6. Other unintentional injuries	8	61	34	29	76	8	266	16	158
B. Intentional injuries	17	78	59	55	190	76	241	30	376
1. Self-inflicted injuries	7	16	54	25	107	19	150	28	315
2. Violence	7	24	4	11	62	11	66	1	58
3. War	3	36	0	17	20	45	18	0	2

^a See list of Member States by WHO Region and mortality stratum (Annex Table 1).

^b Estimates for specific causes may not sum to broader cause groupings due to omission of residual categories.

^c Does not include liver cancer and cirrhosis deaths resulting from chronic hepatitis virus infection.

**Annex Table 9: Annual global incidence ('000s) for selected Group I diseases, by WHO subregion^a:
Version 1 global estimates for the year 2000**

Cause	Global total			AFRO		AMRO		
	Both sexes	Males	Females	D	E	A	B	D
	(000)	(000)	(000)	(000)	(000)	(000)	(000)	(000)
Population (000)	6,045,172	3,045,372	2,999,800	294,099	345,533	325,186	430,951	71,235
A1. Tuberculosis ^b	7,558	4,707	2,851	630	890	21	226	127
A2a. Syphilis ^c	18,254	8,247	10,007	2,830	3,150	207	1,452	228
A3. HIV infection	4,667	2,431	2,237	605	2,654	39	151	61
A3. AIDS	3,066	1,626	1,440	506	1,876	37	45	27
A4. Diarrhoeal diseases	4,371,466	2,228,698	2,142,768	361,776	426,081	73,934	374,885	71,627
A5. Childhood-cluster diseases								
A5a. Pertussis	41,264	20,632	20,632	6,308	5,714	938	2,677	649
A5b. Poliomyelitis	16	8	8	1	0	0	1	0
A5c. Diphtheria	22	11	11	3	1	0	1	0
A5d. Measles	31,303	15,835	15,468	6,345	6,355	0	4	4
A5e. Tetanus	520	261	259	131	77	0	0	1
A6. Meningitis	698	354	344	175	93	16	63	12
Streptococcus pneumoniae	169	84	84	25	28	6	29	5
Haemophilus influenzae	141	72	69	29	20	1	12	3
Neisseria meningitidis	246	125	121	90	27	6	11	3
Meningococcaemia without meningitis	142	73	70	31	19	4	11	2
A7a. Hepatitis B	719	449	269	58	79	79	9	4
A7b. Hepatitis C	369	236	133	30	41	41	4	3
A8. Malaria	381,988	191,443	190,545	155,090	163,443	80	2,915	702
A9. Tropical-cluster diseases								
a. Trypanosomiasis	43	26	17	18	22	0	0	0
c. Schistosomiasis	22,508	13,325	9,183	9,037	10,496	18	757	131
d. Leishmaniasis - cutaneous	1,110	731	379	6	3	7	273	44
d. Leishmaniasis - visceral	513	328	185	87	51	0	5	1
e. Lymphatic filariasis								
Hydrocele > 15cm	1,505	1,505	0	271	311	0	2	0
Bancroftian lymphoedema	765	304	461	129	147	0	1	0
Brugian lymphoedema	145	91	53	0	0	0	0	0
f. Onchocerciasis -- itching	1,501	833	668	609	802	0	2	2
A10. Leprosy	175	90	85	11	10	0	17	0
A11. Dengue	72	33	39	2	2	0	0	0
A14. Intestinal nematode infections								
a. Ascariasis	7,257	3,749	3,508	202	238	15	770	149
b. Trichuriasis ^d	8,070	4,103	3,967	246	291	69	3,192	585
E1. Protein-energy malnutrition								
Wasting	7,299	3,733	3,566	1,094	1,195	8	146	31
Stunting	34,671	17,930	16,741	3,451	4,782	110	896	550
Developmental disability	10,028	5,137	4,892	1,316	789	30	184	45
E2. Iodine deficiency ^e	802,206	282,697	519,509	54,754	67,968	339	13,476	3,499
E3. Vitamin A deficiency ^f	1,081	552	529	187	222	1	44	9

a. See list of Member States by WHO Region and mortality stratum (Annex Table 1).

b. Incidence of tuberculosis in HIV-negative persons only.

c. Primary, secondary and congenital syphilis

d. Incidence of contemporaneous cognitive deficit.

e. incidence of goitre grade 0.

f. Incidence of xerophthalmia due to vitamin A deficiency.

Annex Table 9 (continued): Annual global incidence ('000s) for selected Group I diseases, by WHO subregion^a: Version 1 global estimates for the year 2000

Cause	EMRO		EURO			SEARO		WPRO	
	B	D	A	B	C	B	D	A	B
	(000)	(000)	(000)	(000)	(000)	(000)	(000)	(000)	(000)
Population (000)	139,071	342,584	411,910	218,473	243,192	293,821	1,241,813	154,358	1,532,946
A1. Tuberculosis ^b	67	468	72	136	283	662	2,218	49	1,709
A2a. Syphilis ^c	336	1,456	220	179	79	1,200	6,042	94	781
A3. HIV infection	0	151	21	2	118	70	556	2	236
A3. AIDS	0	110	7	2	14	37	332	1	73
A4. Diarrhoeal diseases	100,903	323,165	77,696	79,289	52,015	148,842	1,004,568	31,190	1,245,495
A5. Childhood-cluster diseases									
A5a. Pertussis	721	3,477	1,171	1,025	621	1,273	9,438	596	6,654
A5b. Poliomyelitis	0	1	0	0	0	1	6	0	5
A5c. Diphtheria	0	3	0	0	2	1	9	0	1
A5d. Measles	621	2,969	74	553	332	661	7,951	36	5,399
A5e. Tetanus	0	59	0	0	0	12	202	0	35
A6. Meningitis	13	13	21	7	2	12	38	138	8
Streptococcus pneumoniae	4	4	5	1	0	2	10	35	2
Haemophilus influenzae	2	3	2	1	0	1	12	46	1
Neisseria meningitidis	5	4	9	3	1	5	10	34	3
Meningococcaemia without meningitis	3	3	6	2	1	4	7	23	2
A7a. Hepatitis B	14	25	66	23	27	20	103	86	126
A7b. Hepatitis C	7	13	34	12	13	10	51	44	66
A8. Malaria	386	25,270	0	0	0	5,701	24,402	91	3,908
A9. Tropical-cluster diseases									
a. Trypanosomiasis	0	3	0	0	0	0	0	0	0
c. Schistosomiasis	332	1,575	0	0	0	20	5	0	136
d. Leishmaniasis - cutaneous	333	327	0	117	0	0	0	0	0
d. Leishmaniasis - visceral	4	57	0	1	0	6	296	0	5
e. Lymphatic filariasis									
Hydrocele > 15cm	1	127	0	0	0	33	662	1	96
Bancroftian lymphoedema	1	67	0	0	0	31	362	0	26
Brugian lymphoedema	0	7	0	0	0	29	62	1	46
f. Onchocerciasis -- itching	0	86	0	0	0	0	0	0	0
A10. Leprosy	0	17	0	0	0	5	109	0	7
A11. Dengue	0	7	0	0	0	9	43	0	8
A14. Intestinal nematode infections									
a. Ascariasis	96	274	0	33	0	644	1,158	8	3,670
b. Trichuriasis ^d	11	163	0	4	0	1,040	946	13	1,511
E1. Protein-energy malnutrition									
Wasting	54	856	6	46	27	293	2,152	9	1,381
Stunting	397	3,513	99	522	215	1,154	12,291	64	6,627
Developmental disability	209	1,174	32	162	86	439	4,169	21	1,372
E2. Iodine deficiency ^e	25,350	71,662	14,693	44,735	53,141	36,461	295,528	571	120,028
E3. Vitamin A deficiency ^f	44	119	1	16	0	43	243	1	151

a. See list of Member States by WHO Region and mortality stratum (Annex Table 1).

b. Incidence of tuberculosis in HIV-negative persons only.

c. Primary, secondary and congenital syphilis

d. Incidence of contemporaneous cognitive deficit.

e. incidence of goitre grade 0.

f. Incidence of xerophthalmia due to vitamin A deficiency.

Annex Table 10: Estimated global prevalence^a ('000s) for selected noncommunicable diseases, by WHO subregion^b: Version 1 estimates for the year 2000

Cause	Global total			AFRO		AMRO		
	Both sexes	Males	Females	D	E	A	B	D
	(000)	(000)	(000)	(000)	(000)	(000)	(000)	(000)
Population (000)	6,045,172	3,045,372	2,999,800	294,099	345,533	325,186	430,951	71,235
C. Diabetes mellitus	156,778	73,008	83,770	2,080	1,761	17,601	15,439	1,755
E. Neuro-psychiatric conditions								
1. Unipolar depressive disorders ^c	121,456	47,864	73,592	4,416	5,004	9,094	9,411	1,447
2. Bipolar affective disorder	27,379	13,762	13,617	1,076	1,211	1,590	1,934	289
3. Schizophrenia	24,404	12,330	12,074	797	960	1,522	1,812	269
4. Epilepsy	37,193	19,273	17,920	3,400	3,157	1,721	5,621	767
5. Alcohol use disorders	70,383	60,167	10,216	1,198	2,957	12,499	10,072	1,389
6. Alzheimer and other dementias	37,466	14,549	22,917	706	755	6,769	2,129	179
7. Parkinson disease	4,693	2,078	2,615	66	71	939	109	13
8. Multiple sclerosis	2,296	989	1,308	79	75	169	153	23
9. Drug use disorders	15,049	11,506	3,543	1,355	1,537	2,036	2,006	548
10. Post-traumatic stress disorder	22,248	6,148	16,100	901	1,033	1,328	1,328	194
11. Obsessive-compulsive disorder	26,469	11,278	15,191	1,792	2,037	1,405	3,014	449
12. Panic disorder	28,531	9,778	18,753	1,222	1,386	1,504	2,115	331
13. Insomnia (primary)	28,254	11,871	16,383	990	1,098	2,458	2,399	343
14. Migraine	302,745	78,526	224,219	4,672	5,987	27,293	23,804	4,200
F. Sense organ diseases								
1. Glaucoma ^d	2,617	1,040	1,577	344	351	39	181	14
2. Cataracts ^d	17,627	7,960	9,668	1,716	1,678	120	648	304
4. Hearing loss, adult onset	222,564	115,069	107,495	8,104	8,732	18,946	15,902	2,456
G. Cardiovascular diseases								
1. Rheumatic heart disease ^e	2,353	826	1,526	73	83	56	64	10
3. Ischaemic heart disease ^f	39,279	19,855	19,424	1,084	1,054	3,387	2,212	232
4. Cerebrovascular disease	41,719	18,488	23,231	832	1,149	3,671	3,557	157
5. Inflammatory heart diseases ^f	5,998	3,599	2,398	252	329	491	423	49
H. Respiratory diseases								
1. COPD	341,047	188,967	152,080	5,079	6,920	13,419	10,277	866
2. Asthma	220,437	118,814	101,623	10,664	14,950	18,692	27,145	4,506
L. Musculoskeletal diseases								
1. Rheumatoid arthritis	22,504	6,217	16,287	233	194	1,829	2,316	327
2. Osteoarthritis	138,699	52,354	86,345	3,830	4,139	11,065	7,622	973

a. Average point prevalence of cases or episodes as defined in Annex Tables 3 and 4.

b See list of Member States by WHO Region and mortality stratum (Annex Table 1).

c Point prevalence of major depressive episodes.

d. Point prevalences of cases with blindness.

e Point prevalence of congestive heart failure as sequela.

f Point prevalence of angina pectoris.

Annex Table 10 (continued): Estimated global prevalence^a ('000s) for selected noncommunicable diseases, by WHO subregion^b: Version 1 estimates^b for the year 2000

Cause	EMRO		EURO			SEARO		WPRO	
	B	D	A	B	C	B	D	A	B
	(000)	(000)	(000)	(000)	(000)	(000)	(000)	(000)	(000)
Population (000)	139,071	342,584	411,910	218,473	243,192	293,821	1,241,813	154,358	1,532,946
C. Diabetes mellitus	5,122	11,739	13,548	6,622	15,299	6,430	28,819	7,665	22,898
E. Neuro-psychiatric conditions									
1. Unipolar depressive disorders ^c	2,790	6,655	9,702	4,690	4,889	4,789	27,357	1,880	29,331
2. Bipolar affective disorder	568	1,321	2,035	1,018	1,225	1,298	5,371	761	7,682
3. Schizophrenia	540	1,131	2,029	1,093	1,151	1,386	4,300	812	6,602
4. Epilepsy	572	2,026	2,107	912	1,032	1,576	7,407	851	6,042
5. Alcohol use disorders	32	974	11,346	924	8,967	853	6,818	2,642	9,711
6. Alzheimer and other dementias	546	957	10,812	1,287	3,056	738	3,430	1,689	4,414
7. Parkinson disease	50	115	1,285	242	314	88	546	413	443
8. Multiple sclerosis	43	103	252	85	111	106	425	71	601
9. Drug use disorders	981	539	1,941	408	856	291	1,119	710	720
10. Post-traumatic stress disorder	477	1,142	1,612	842	966	1,196	4,682	638	5,908
11. Obsessive-compulsive disorder	953	1,683	1,791	1,555	1,787	918	4,393	427	4,263
12. Panic disorder	632	1,472	1,920	1,050	1,187	1,479	5,817	719	7,698
13. Insomnia (primary)	276	1,163	3,479	1,017	1,505	964	6,529	1,302	4,731
14. Migraine	4,003	10,511	52,285	10,429	12,648	11,512	52,969	11,266	71,166
F. Sense organ diseases									
1. Glaucoma ^d	153	287	125	86	290	66	156	20	506
2. Cataracts ^d	386	1416	103	240	753	1203	6055	44	2962
4. Hearing loss, adult onset	4816	11323	24255	10409	15641	11318	51374	7519	31770
G. Cardiovascular diseases									
1. Rheumatic heart disease ^e	46	120	91	86	122	41	562	35	965
3. Ischaemic heart disease ^f	789	2068	3407	2178	4316	1166	10315	877	6194
4. Cerebrovascular disease	1162	1442	5641	2525	3819	1308	4713	2825	8918
5. Inflammatory heart diseases ^e	53	290	367	414	585	208	1517	102	919
H. Respiratory diseases									
1. COPD	1,626	7,635	13,502	7,354	11,484	9,491	54,567	2,008	196,820
2. Asthma	4,057	10,065	18,840	5,704	3,822	7,807	36,615	10,211	47,359
L. Musculoskeletal diseases									
1. Rheumatoid arthritis	367	1,151	1,749	1,353	1,949	538	5,689	659	4,151
2. Osteoarthritis	1,743	4,894	16,720	6,682	10,522	6,008	24,673	6,561	33,266

a. Average point prevalence of cases or episodes as defined in Annex Tables 3 and 4.

b See list of Member States by WHO Region and mortality stratum (Annex Table 1).

c Point prevalence of major depressive episodes.

d. Point prevalences of cases with blindness.

e Point prevalence of congestive heart failure as sequela.

f Point prevalence of angina pectoris.

Annex Table 11: YLD by cause, sex and WHO subregions^a, Version 1 global estimates for 2000

Cause ^b	Global total						AFRO		AMRO		
	Both sexes		Males		Females		D	E	A	B	D
	(000)	%	(000)	%	(000)	%	(000)	(000)	(000)	(000)	(000)
Population (000)	6,045,172		3,045,372		2,999,800		294,099	345,533	325,186	430,951	71,235
All Causes	546,349	100	266,629	100	279,720	100	34,894	44,620	25,682	41,237	7,023
I. Communicable, maternal, perinatal nutritional conditions	127,633	23.4	53,079	19.9	74,554	26.7	15,231	20,256	1,324	6,156	1,334
A. Infectious & parasitic diseases	55,949	10.2	27,931	10.5	28,018	10.0	8,376	12,177	727	2,983	655
1. Tuberculosis	4,773	0.9	2,983	1.1	1,789	0.6	379	405	6	100	49
2. STDs excluding HIV	10,043	1.8	2,802	1.1	7,241	2.6	1,494	1,529	108	585	95
a. Syphilis	316	0.1	144	0.1	173	0.1	58	60	1	11	2
b. Chlamydia	5,930	1.1	902	0.3	5,027	1.8	798	801	91	389	63
c. Gonorrhoea	3,797	0.7	1,756	0.7	2,041	0.7	638	668	16	185	31
3. HIV/AIDS	8,264	1.5	4,379	1.6	3,886	1.4	1,070	4,527	171	284	100
4. Diarrhoeal diseases	5,659	1.0	2,888	1.1	2,771	1.0	410	481	91	502	93
5. Childhood-cluster diseases	2,784	0.5	1,388	0.5	1,396	0.5	441	375	50	155	37
a. Pertussis	2,521	0.5	1,255	0.5	1,266	0.5	412	354	50	149	36
b. Poliomyelitis	166	0.0	84	0.0	82	0.0	11	4	0	6	1
c. Diphtheria	0	0.0	0	0.0	0	0.0	0	0	0	0	0
d. Measles	92	0.0	46	0.0	46	0.0	16	16	0	0	0
e. Tetanus	5	0.0	3	0.0	3	0.0	1	1	0	0	0
6. Meningitis	1,385	0.3	703	0.3	683	0.2	191	153	20	138	28
7. Hepatitis ^c	89	0.0	57	0.0	32	0.0	9	11	7	2	1
8. Malaria	4,656	0.9	2,346	0.9	2,311	0.8	1,562	1,751	1	56	10
9. Tropical-cluster diseases	8,884	1.6	6,204	2.3	2,680	1.0	2,080	2,125	9	364	60
a. Trypanosomiasis	90	0.0	55	0.0	35	0.0	39	45	0	0	0
b. Chagas disease	322	0.1	162	0.1	160	0.1	0	0	7	271	43
c. Schistosomiasis	1,474	0.3	870	0.3	604	0.2	586	674	1	57	9
d. Leishmaniasis	501	0.1	326	0.1	175	0.1	77	44	1	27	4
e. Lymphatic filariasis	5,546	1.0	4,242	1.6	1,304	0.5	894	966	0	8	1
f. Onchocerciasis	951	0.2	549	0.2	402	0.1	484	395	0	1	2
10. Leprosy	114	0.0	58	0.0	56	0.0	7	6	0	11	0
11. Dengue	6	0.0	3	0.0	3	0.0	0	0	0	0	0
12. Japanese encephalitis	306	0.1	157	0.1	149	0.1	0	0	0	0	0
13. Trachoma	1,181	0.2	319	0.1	862	0.3	212	232	0	0	0
14. Intestinal nematode infections	4,323	0.8	2,210	0.8	2,114	0.8	263	303	10	493	91
a. Ascariasis	1,030	0.2	527	0.2	502	0.2	43	51	2	129	25
b. Trichuriasis	1,563	0.3	803	0.3	759	0.3	47	56	5	239	46
c. Hookworm disease	1,731	0.3	879	0.3	852	0.3	172	196	3	125	20
B. Respiratory infections	5,840	1.1	3,121	1.2	2,718	1.0	358	421	75	493	99
1. Lower respiratory infections	4,307	0.8	2,337	0.9	1,970	0.7	253	297	28	376	76
2. Upper respiratory infections	228	0.0	115	0.0	113	0.0	12	14	12	15	3
3. Otitis media	1,304	0.2	669	0.3	635	0.2	93	110	36	102	20
C. Maternal conditions	19,767	3.6	0	0.0	19,767	7.1	2,282	3,387	170	929	214
D. Perinatal conditions	10,875	2.0	5,798	2.2	5,077	1.8	1,563	1,523	62	387	105
E. Nutritional deficiencies	35,202	6.4	16,228	6.1	18,974	6.8	2,652	2,748	289	1,364	261
1. Protein-energy malnutrition	9,459	1.7	4,850	1.8	4,608	1.6	1,263	1,272	19	205	66
2. Iodine deficiency	917	0.2	417	0.2	500	0.2	94	121	2	7	2
3. Vitamin A deficiency	63	0.0	32	0.0	31	0.0	11	13	0	3	1
4. Iron-deficiency anaemia	24,703	4.5	10,912	4.1	13,791	4.9	1,284	1,343	265	1,144	192
II. Noncommunicable diseases	359,403	65.8	177,821	66.7	181,583	64.9	15,974	19,392	23,247	31,191	5,013
A. Malignant neoplasms	4,354	0.8	1,672	0.6	2,682	1.0	108	163	557	248	36
1. Mouth and oropharynx cancers	249	0.0	172	0.1	77	0.0	8	14	9	7	1
2. Oesophagus cancer	78	0.0	50	0.0	27	0.0	1	3	4	2	0
3. Stomach cancer	243	0.0	149	0.1	94	0.0	4	5	6	11	3
4. Colon and rectum cancers	695	0.1	375	0.1	320	0.1	9	11	105	29	2
5. Liver cancer	112	0.0	73	0.0	39	0.0	5	6	3	2	1
6. Pancreas cancer	50	0.0	27	0.0	23	0.0	1	1	7	3	0
7. Trachea/bronchus/lung cancers	316	0.1	226	0.1	91	0.0	2	3	52	12	1
8. Melanoma & other skin cancers	43	0.0	23	0.0	20	0.0	1	2	13	2	0
9. Breast cancer	852	0.2	0	0.0	852	0.3	16	26	155	45	4
10. Cervix uteri cancer	506	0.1	0	0.0	506	0.2	25	47	15	26	8
11. Corpus uteri cancer	288	0.1	0	0.0	288	0.1	3	5	29	62	10
12. Ovary cancer	160	0.0	0	0.0	160	0.1	5	8	15	8	1
13. Prostate cancer	232	0.0	232	0.1	0	0.0	9	8	68	14	1
14. Bladder cancer	232	0.0	178	0.1	54	0.0	7	7	32	6	1

Annex Table 11 (continued): YLD by cause, sex and WHO subregions^a, Version 1 global estimates for 2000

Cause ^b	EMRO		EURO			SEARO		WPRO	
	B	D	A	B	C	B	D	A	B
	(000)	(000)	(000)	(000)	(000)	(000)	(000)	(000)	(000)
Population (000)	139,071	342,584	411,910	218,473	243,192	293,821	1,241,813	154,358	1,532,946
All Causes	10,812	33,830	27,567	17,289	23,199	24,350	132,662	8,979	114,206
I. Communicable, maternal, perinatal nutritional conditions	2,136	9,808	1,211	2,474	1,718	6,213	36,216	495	23,061
A. Infectious & parasitic diseases	524	3,688	542	722	754	2,391	14,133	217	8,060
1. Tuberculosis	29	309	22	67	134	503	1,726	21	1,025
2. STDs excluding HIV	73	792	120	156	179	526	3,886	50	449
a. Syphilis	3	26	1	1	1	21	117	0	14
b. Chlamydia	51	462	105	120	140	290	2,326	41	253
c. Gonorrhoea	20	303	15	35	38	215	1,443	8	183
3. HIV/AIDS	2	264	62	6	179	155	992	5	449
4. Diarrhoeal diseases	118	364	97	92	64	187	1,206	39	1,916
5. Childhood-cluster diseases	45	242	62	59	30	103	666	36	482
a. Pertussis	38	219	62	55	28	88	583	36	409
b. Poliomyelitis	5	14	0	2	0	10	60	0	52
c. Diphtheria	0	0	0	0	0	0	0	0	0
d. Measles	3	8	0	2	1	4	20	0	21
e. Tetanus	0	1	0	0	0	0	3	0	0
6. Meningitis	22	119	27	13	14	74	382	7	197
7. Hepatitis ^c	0	4	5	2	3	4	18	8	17
8. Malaria	47	351	0	16	0	97	628	2	136
9. Tropical-cluster diseases	44	711	0	7	0	241	2,820	4	420
a. Trypanosomiasis	0	5	0	0	0	0	0	0	0
b. Chagas disease	0	0	0	0	0	0	0	0	0
c. Schistosomiasis	26	105	0	0	0	2	1	0	13
d. Leishmaniasis	15	60	0	5	0	6	259	0	4
e. Lymphatic filariasis	4	472	0	1	0	233	2,561	4	403
f. Onchocerciasis	0	69	0	0	0	0	0	0	0
10. Leprosy	0	11	0	0	0	3	71	0	4
11. Dengue	0	1	0	0	0	1	4	0	1
12. Japanese encephalitis	0	6	0	0	0	22	47	0	230
13. Trachoma	71	108	0	0	0	24	50	0	483
14. Intestinal nematode infections	47	195	0	7	0	443	931	6	1,535
a. Ascariasis	20	34	0	7	0	100	83	1	535
b. Trichuriasis	1	31	0	0	0	184	193	2	759
c. Hookworm disease	26	130	0	0	0	159	656	2	241
B. Respiratory infections	181	510	79	118	70	270	1,615	33	1,517
1. Lower respiratory infections	136	394	29	77	37	196	1,240	15	1,154
2. Upper respiratory infections	5	14	15	8	9	13	55	5	49
3. Otitis media	40	102	36	33	24	62	320	13	314
C. Maternal conditions	591	1,703	198	857	416	1,384	5,444	74	2,118
D. Perinatal conditions	145	993	56	261	130	233	3,970	17	1,429
E. Nutritional deficiencies	695	2,913	336	517	347	1,934	11,054	155	9,937
1. Protein-energy malnutrition	101	1,090	17	96	49	361	3,153	15	1,751
2. Iodine deficiency	31	113	5	27	31	31	370	2	81
3. Vitamin A deficiency	3	7	0	1	0	3	14	0	9
4. Iron-deficiency anaemia	560	1,702	312	374	241	1,539	7,515	137	8,094
II. Noncommunicable diseases	7,569	20,054	24,880	13,262	18,055	16,094	79,412	7,957	77,305
A. Malignant neoplasms	49	122	840	180	308	173	603	301	665
1. Mouth and oropharynx cancers	2	13	34	6	12	13	94	7	29
2. Oesophagus cancer	1	2	8	2	3	1	12	5	34
3. Stomach cancer	3	3	24	9	23	3	13	55	83
4. Colon and rectum cancers	6	8	208	27	48	26	34	86	95
5. Liver cancer	1	1	6	1	3	4	5	10	64
6. Pancreas cancer	0	1	11	3	7	1	3	5	7
7. Trachea/bronchus/lung cancers	3	6	56	17	28	9	28	16	84
8. Melanoma & other skin cancers	0	0	13	2	3	0	1	4	1
9. Breast cancer	9	19	206	40	66	46	95	52	72
10. Cervix uteri cancer	8	35	14	12	15	28	211	5	55
11. Corpus uteri cancer	5	2	36	26	39	9	11	8	43
12. Ovary cancer	1	6	19	6	15	12	32	6	25
13. Prostate cancer	1	2	77	7	12	3	6	19	4
14. Bladder cancer	3	11	79	12	21	5	15	13	19

Annex Table 11 (continued): YLD by cause, sex and WHO subregions^a, Version 1 global estimates for 2000

Cause ^b	Global total						AFRO		AMRO		
	Both sexes		Males		Females		D	E	A	B	D
	(000)	%	(000)	%	(000)	%	(000)	(000)	(000)	(000)	(000)
15. Lymphomas/multiple myeloma	165	0.0	96	0.0	69	0.0	9	10	28	9	1
16. Leukaemia	134	0.0	72	0.0	62	0.0	3	5	15	10	2
B. Other neoplasms	0	0.0	0	0.0	0	0.0	0	0	0	0	0
C. Diabetes mellitus	7,447	1.4	3,655	1.4	3,791	1.4	94	73	762	806	84
D. Endocrine disorders	4,093	0.7	1,728	0.6	2,365	0.8	357	405	527	812	141
E. Neuro-psychiatric conditions	168,312	30.8	80,571	30.2	87,741	31.4	6,325	7,640	13,329	15,842	2,578
1. Unipolar depressive disorders	64,963	11.9	25,901	9.7	39,063	14.0	1,906	2,154	5,031	5,589	867
2. Bipolar affective disorder	13,610	2.5	6,883	2.6	6,726	2.4	743	852	503	1,025	172
3. Schizophrenia	15,427	2.8	7,873	3.0	7,554	2.7	728	820	505	1,217	203
4. Epilepsy	4,754	0.9	2,434	0.9	2,320	0.8	253	366	228	709	122
5. Alcohol use disorders	17,002	3.1	14,571	5.5	2,431	0.9	320	770	2,907	2,617	384
6. Alzheimer and other dementias	10,869	2.0	4,720	1.8	6,150	2.2	262	273	1,246	713	54
7. Parkinson disease	1,049	0.2	507	0.2	542	0.2	22	24	176	32	4
8. Multiple sclerosis	1,221	0.2	534	0.2	687	0.2	51	39	71	90	15
9. Drug use disorders	5,399	1.0	4,146	1.6	1,253	0.4	526	601	657	749	214
10. Post-traumatic stress disorder	3,230	0.6	895	0.3	2,335	0.8	141	158	176	200	31
11. Obsessive-compulsive disorder	4,761	0.9	2,048	0.8	2,713	1.0	370	428	218	535	85
12. Panic disorder	6,591	1.2	2,239	0.8	4,352	1.6	336	386	262	493	83
13. Insomnia (primary)	3,361	0.6	1,447	0.5	1,914	0.7	134	150	258	310	47
14. Migraine	7,536	1.4	2,044	0.8	5,492	2.0	182	236	490	729	146
F. Sense organ diseases	37,590	6.9	19,213	7.2	18,377	6.6	2,531	3,180	1,277	2,672	481
1. Glaucoma	1,739	0.3	626	0.2	1,112	0.4	220	369	21	122	8
2. Cataracts	10,577	1.9	4,978	1.9	5,599	2.0	1,189	1,113	45	363	141
4. Hearing loss, adult onset	25,274	4.6	13,609	5.1	11,665	4.2	1,122	1,698	1,212	2,188	332
G. Cardiovascular diseases	20,068	3.7	10,199	3.8	9,869	3.5	568	813	1,379	1,380	136
1. Rheumatic heart disease	675	0.1	260	0.1	415	0.1	32	36	8	18	3
3. Ischaemic heart disease	5,199	1.0	2,652	1.0	2,547	0.9	182	170	348	267	22
4. Cerebrovascular disease	9,417	1.7	4,506	1.7	4,911	1.8	198	392	674	876	82
5. Inflammatory heart diseases	1,517	0.3	898	0.3	619	0.2	84	115	93	95	12
H. Respiratory diseases	40,546	7.4	21,956	8.2	18,590	6.6	2,122	2,801	1,745	3,104	498
1. COPD	18,299	3.3	10,154	3.8	8,145	2.9	311	433	643	554	49
2. Asthma	11,309	2.1	6,203	2.3	5,106	1.8	739	1,011	692	1,408	252
I. Digestive diseases	22,584	4.1	12,619	4.7	9,964	3.6	1,475	1,673	892	1,870	333
1. Peptic ulcer disease	1,440	0.3	972	0.4	468	0.2	52	63	19	45	7
2. Cirrhosis of the liver	3,790	0.7	2,682	1.0	1,108	0.4	131	151	122	292	86
3. Appendicitis	98	0.0	58	0.0	40	0.0	3	4	8	8	1
J. Genito-urinary diseases	5,399	1.0	3,486	1.3	1,913	0.7	436	496	289	520	79
1. Nephritis and nephrosis	697	0.1	377	0.1	320	0.1	63	74	11	58	11
2. Benign prostatic hypertrophy	2,107	0.4	2,107	0.8	0	0.0	102	111	83	187	25
K. Skin diseases	961	0.2	545	0.2	416	0.1	137	167	30	72	15
L. Musculoskeletal diseases	28,836	5.3	12,516	4.7	16,320	5.8	832	855	1,789	2,076	283
1. Rheumatoid arthritis	4,951	0.9	1,388	0.5	3,563	1.3	50	40	317	587	88
2. Osteoarthritis	16,433	3.0	6,645	2.5	9,788	3.5	574	598	1,022	938	113
M. Congenital anomalies	11,233	2.1	5,789	2.2	5,443	1.9	754	858	329	978	205
N. Oral conditions	7,983	1.5	3,871	1.5	4,112	1.5	235	268	342	810	144
1. Dental caries	4,626	0.8	2,344	0.9	2,282	0.8	174	202	176	693	128
2. Periodontal disease	291	0.1	147	0.1	144	0.1	14	16	13	20	3
3. Edentulism	2,979	0.5	1,359	0.5	1,620	0.6	42	44	152	92	12
III. Injuries	59,314	10.9	35,730	13.4	23,584	8.4	3,689	4,972	1,111	3,889	676
A. Unintentional injuries	53,299	9.8	32,103	12.0	21,196	7.6	3,138	4,184	992	3,072	582
1. Road traffic accidents	9,868	1.8	7,203	2.7	2,666	1.0	501	815	400	727	81
2. Poisonings	411	0.1	212	0.1	199	0.1	49	72	4	11	2
3. Falls	15,295	2.8	8,823	3.3	6,472	2.3	668	809	283	754	149
4. Fires	3,603	0.7	1,276	0.5	2,327	0.8	315	340	68	52	8
5. Drownings	4	0.0	3	0.0	1	0.0	0	0	0	0	0
6. Other unintentional injuries	24,118	4.4	14,587	5.5	9,531	3.4	1,606	2,146	237	1,528	342
B. Intentional injuries	6,014	1.1	3,626	1.4	2,388	0.9	551	789	119	817	95
1. Self-inflicted injuries	1,760	0.3	531	0.2	1,229	0.4	19	32	17	51	13
2. Violence	2,445	0.4	1,904	0.7	541	0.2	161	319	102	754	78
3. War	1,809	0.3	1,192	0.4	618	0.2	371	437	0	13	3

Annex Table 11 (continued): YLD by cause, sex and WHO subregions^a, Version 1 global estimates for 2000

Cause ^b	EMRO		EURO			SEARO		WPRO	
	B	D	A	B	C	B	D	A	B
	(000)	(000)	(000)	(000)	(000)	(000)	(000)	(000)	(000)
15. Lymphomas/multiple myeloma	3	7	31	5	8	7	22	8	16
16. Leukaemia	3	5	18	4	6	6	20	4	34
B. Other neoplasms	0	0	0	0	0	0	0	0	0
C. Diabetes mellitus	255	421	577	415	592	295	1,510	348	1,215
D. Endocrine disorders	131	197	439	132	122	95	96	164	474
E. Neuro-psychiatric conditions	3,596	8,571	14,247	6,053	8,647	6,981	35,780	3,719	35,004
1. Unipolar depressive disorders	1,184	3,507	4,074	2,548	2,634	2,832	17,123	1,000	14,515
2. Bipolar affective disorder	354	809	619	465	450	701	2,963	243	3,710
3. Schizophrenia	438	950	590	554	436	1,019	3,457	233	4,278
4. Epilepsy	84	258	269	123	134	245	1,070	82	811
5. Alcohol use disorders	9	259	2,503	224	2,103	217	1,752	583	2,355
6. Alzheimer and other dementias	164	404	2,867	410	937	301	1,322	482	1,434
7. Parkinson disease	15	36	209	54	69	31	169	89	118
8. Multiple sclerosis	29	65	106	44	46	60	253	27	326
9. Drug use disorders	391	209	604	146	286	106	418	231	260
10. Post-traumatic stress disorder	78	180	207	123	131	178	706	81	841
11. Obsessive-compulsive disorder	184	326	257	267	284	170	823	63	752
12. Panic disorder	174	397	323	241	237	361	1,479	128	1,691
13. Insomnia (primary)	33	151	345	116	159	114	839	129	576
14. Migraine	144	394	747	250	240	334	1,684	155	1,805
F. Sense organ diseases	1,032	2,636	1,347	1,158	1,644	2,423	10,775	474	5,960
1. Glaucoma	92	194	61	52	146	47	97	10	299
2. Cataracts	212	885	21	101	279	760	3,788	21	1,660
4. Hearing loss, adult onset	728	1,557	1,265	1,005	1,219	1,616	6,889	442	4,001
G. Cardiovascular diseases	362	1,229	1,498	1,046	1,615	725	5,081	656	3,581
1. Rheumatic heart disease	16	44	12	21	25	11	202	5	241
3. Ischaemic heart disease	102	327	274	242	441	176	1,856	74	720
4. Cerebrovascular disease	161	425	838	541	848	354	1,305	497	2,226
5. Inflammatory heart diseases	13	82	62	91	125	63	456	18	208
H. Respiratory diseases	467	1,789	1,682	1,026	1,218	1,382	8,069	593	14,051
1. COPD	86	455	631	422	619	543	3,175	91	10,286
2. Asthma	251	651	619	260	139	428	2,197	331	2,332
I. Digestive diseases	288	1,657	1,106	1,060	1,179	1,301	5,260	417	4,073
1. Peptic ulcer disease	11	87	47	44	65	63	503	11	423
2. Cirrhosis of the liver	33	210	185	157	208	206	1,096	56	858
3. Appendicitis	2	5	10	5	7	4	17	4	20
J. Genito-urinary diseases	159	279	289	234	403	234	712	116	1,153
1. Nephritis and nephrosis	21	52	13	20	17	30	172	5	149
2. Benign prostatic hypertrophy	56	112	116	58	65	101	408	49	634
K. Skin diseases	8	78	42	17	54	96	167	9	70
L. Musculoskeletal diseases	462	1,351	2,200	1,290	1,634	1,360	6,491	897	7,314
1. Rheumatoid arthritis	79	296	264	288	353	117	1,492	101	877
2. Osteoarthritis	244	704	1,470	759	995	848	3,415	634	4,120
M. Congenital anomalies	355	1,089	263	268	290	391	3,197	123	2,134
N. Oral conditions	405	635	351	383	350	637	1,672	140	1,611
1. Dental caries	197	356	200	189	167	241	1,053	76	775
2. Periodontal disease	5	18	16	10	13	15	97	6	45
3. Edentulism	201	255	133	182	169	377	503	58	759
III. Injuries	1,107	3,968	1,476	1,553	3,426	2,043	17,034	527	13,841
A. Unintentional injuries	1,021	3,647	1,374	1,416	2,946	1,581	16,087	507	12,752
1. Road traffic accidents	371	525	416	159	430	820	2,154	69	2,398
2. Poisonings	4	26	4	22	28	3	102	1	85
3. Falls	381	1,072	482	432	691	514	3,736	135	5,190
4. Fires	27	399	13	39	72	49	1,995	10	216
5. Drownings	0	0	0	0	0	0	1	0	2
6. Other unintentional injuries	237	1,625	459	764	1,725	195	8,100	293	4,861
B. Intentional injuries	86	321	102	137	480	463	947	20	1,088
1. Self-inflicted injuries	22	61	73	42	151	43	437	4	793
2. Violence	39	70	28	49	251	136	246	11	201
3. War	25	190	0	45	78	284	264	5	95

a See list of Member States by WHO Region and mortality stratum (Annex Table 1).

b Estimates for specific causes may not sum to broader cause groupings due to omission of residual categories.

c Does not include liver cancer and cirrhosis deaths resulting from chronic hepatitis virus infection.

Annex Table 12: DALYs by cause, sex and WHO subregions^a, Version 1 global estimates for 2000

Cause ^b	Global total						AFRO		AMRO		
	Both sexes		Males		Females		D	E	A	B	D
	(000)	%	(000)	%	(000)	%	(000)	(000)	(000)	(000)	(000)
Population (000)	6,045,172		3,045,372		2,999,800		294,099	345,533	325,186	430,951	71,235
All Causes	1,472,392	100	765,774	100	706,619	100	143,671	209,616	45,991	79,562	16,803
I. Communicable, maternal, perinatal nutritional conditions	610,353	41.5	294,708	38.5	315,645	44.7	102,806	155,682	3,181	17,565	6,213
A. Infectious & parasitic diseases	340,176	23.1	173,704	22.7	166,473	23.6	68,459	114,085	1,478	7,820	3,058
1. Tuberculosis	35,792	2.4	21,829	2.9	13,962	2.0	3,754	6,034	20	633	482
2. STDs excluding HIV	15,839	1.1	5,808	0.8	10,031	1.4	2,837	3,351	110	601	98
a. Syphilis	5,574	0.4	3,095	0.4	2,479	0.4	1,353	1,817	1	23	4
b. Chlamydia	6,128	0.4	902	0.1	5,226	0.7	829	837	91	389	63
c. Gonorrhoea	3,919	0.3	1,758	0.2	2,161	0.3	655	693	16	186	31
3. HIV/AIDS	90,392	6.1	44,366	5.8	46,026	6.5	15,605	57,046	504	1,145	714
4. Diarrhoeal diseases	62,227	4.2	32,399	4.2	29,828	4.2	8,070	13,424	108	1,838	882
5. Childhood-cluster diseases	50,380	3.4	25,151	3.3	25,229	3.6	15,396	11,043	50	202	256
a. Pertussis	12,768	0.9	6,369	0.8	6,398	0.9	3,612	2,922	50	178	236
b. Poliomyelitis	184	0.0	95	0.0	89	0.0	16	7	0	6	1
c. Diphtheria	114	0.0	61	0.0	53	0.0	24	23	0	2	0
d. Measles	27,549	1.9	13,755	1.8	13,793	2.0	9,344	6,646	0	2	3
e. Tetanus	9,766	0.7	4,870	0.6	4,895	0.7	2,400	1,446	0	14	17
6. Meningitis	5,751	0.4	3,011	0.4	2,740	0.4	698	817	47	437	46
7. Hepatitis ^c	2,739	0.2	1,400	0.2	1,339	0.2	334	444	82	59	35
8. Malaria	40,213	2.7	19,237	2.5	20,976	3.0	17,916	17,832	1	83	27
9. Tropical-cluster diseases	12,289	0.8	8,271	1.1	4,018	0.6	3,051	3,012	9	701	109
a. Trypanosomiasis	1,585	0.1	1,013	0.1	572	0.1	804	754	0	0	0
b. Chagas disease	680	0.0	360	0.0	320	0.0	0	0	7	582	91
c. Schistosomiasis	1,713	0.1	1,037	0.1	676	0.1	648	724	1	70	9
d. Leishmaniasis	1,810	0.1	1,067	0.1	744	0.1	222	173	1	41	5
e. Lymphatic filariasis	5,549	0.4	4,245	0.6	1,304	0.2	894	966	0	8	1
f. Onchocerciasis	951	0.1	549	0.1	402	0.1	484	395	0	1	2
10. Leprosy	141	0.0	76	0.0	65	0.0	8	8	0	15	0
11. Dengue	433	0.0	286	0.0	147	0.0	2	4	0	3	7
12. Japanese encephalitis	426	0.0	207	0.0	219	0.0	0	0	0	0	0
13. Trachoma	1,181	0.1	319	0.0	862	0.1	212	232	0	0	0
14. Intestinal nematode infections	4,811	0.3	2,461	0.3	2,350	0.3	289	364	11	549	123
a. Ascariasis	1,252	0.1	636	0.1	616	0.1	48	70	3	168	27
b. Trichuriasis	1,640	0.1	836	0.1	803	0.1	50	70	5	239	46
c. Hookworm disease	1,829	0.1	939	0.1	890	0.1	191	222	3	125	20
B. Respiratory infections	97,658	6.6	50,452	6.6	47,206	6.7	13,210	17,823	561	2,400	1,144
1. Lower respiratory infections	94,222	6.4	48,786	6.4	45,436	6.4	12,933	17,467	509	2,233	1,095
2. Upper respiratory infections	1,963	0.1	916	0.1	1,047	0.1	149	188	15	56	27
3. Otitis media	1,472	0.1	750	0.1	722	0.1	128	168	37	110	22
C. Maternal conditions	34,480	2.3	0	0.0	34,480	4.9	5,166	7,710	182	1,321	431
D. Perinatal conditions	91,797	6.2	49,072	6.4	42,726	6.0	11,390	10,845	613	3,905	1,034
E. Nutritional deficiencies	46,242	3.1	21,480	2.8	24,761	3.5	4,580	5,219	347	2,119	547
1. Protein-energy malnutrition	16,483	1.1	8,298	1.1	8,185	1.2	2,578	2,904	34	763	239
2. Iodine deficiency	1,218	0.1	572	0.1	646	0.1	140	193	3	7	2
3. Vitamin A deficiency	1,392	0.1	587	0.1	805	0.1	382	440	0	3	1
4. Iron-deficiency anaemia	26,650	1.8	11,807	1.5	14,843	2.1	1,468	1,680	306	1,341	237
II. Noncommunicable diseases	679,484	46.1	352,434	46.0	327,050	46.3	28,701	36,552	38,260	49,550	8,658
A. Malignant neoplasms	78,508	5.3	42,208	5.5	36,300	5.1	2,741	3,942	5,624	4,320	628
1. Mouth and oropharynx cancers	4,379	0.3	3,152	0.4	1,227	0.2	124	297	110	119	16
2. Oesophagus cancer	4,096	0.3	2,721	0.4	1,375	0.2	56	237	133	127	7
3. Stomach cancer	7,326	0.5	4,565	0.6	2,761	0.4	198	211	143	386	96
4. Colon and rectum cancers	5,659	0.4	3,074	0.4	2,585	0.4	132	171	617	260	26
5. Liver cancer	7,948	0.5	5,600	0.7	2,348	0.3	402	519	126	140	35
6. Pancreas cancer	1,867	0.1	1,064	0.1	803	0.1	31	53	242	114	11
7. Trachea/bronchus/lung cancers	11,418	0.8	8,303	1.1	3,115	0.4	98	157	1,443	481	27
8. Melanoma & other skin cancers	690	0.0	387	0.1	303	0.0	35	60	133	54	5
9. Breast cancer	6,386	0.4	4	0.0	6,382	0.9	182	315	686	392	41
10. Cervix uteri cancer	4,649	0.3	0	0.0	4,649	0.7	273	515	98	273	83
11. Corpus uteri cancer	993	0.1	0	0.0	993	0.1	13	21	93	174	27
12. Ovary cancer	1,651	0.1	0	0.0	1,651	0.2	44	95	149	85	13
13. Prostate cancer	1,526	0.1	1,526	0.2	0	0.0	144	124	255	147	19
14. Bladder cancer	1,329	0.1	998	0.1	331	0.0	69	64	116	50	5

Annex Table 12 (continued): DALYs by cause, sex and WHO subregions^a, Version 1 global estimates for 2000

Cause ^b	EMRO		EURO			SEARO		WPRO	
	B	D	A	B	C	B	D	A	B
	(000)	(000)	(000)	(000)	(000)	(000)	(000)	(000)	(000)
Population (000)	139,071	342,584	411,910	218,473	243,192	293,821	1,241,813	154,358	1,532,946
All Causes	22,400	110,959	52,862	40,278	59,972	60,423	364,581	16,393	248,883
I. Communicable, maternal, perinatal nutritional conditions	6,592	56,529	2,800	8,608	5,164	20,700	163,137	1,110	60,266
A. Infectious & parasitic diseases	2,965	28,474	1,097	3,118	2,608	9,745	76,637	397	20,234
1. Tuberculosis	176	2,775	63	444	1,096	3,063	11,929	53	5,272
2. STDs excluding HIV	79	1,150	122	201	194	541	5,981	51	521
a. Syphilis	3	316	1	24	4	33	1,932	1	62
b. Chlamydia	51	463	105	120	140	291	2,442	41	266
c. Gonorrhoea	20	313	15	35	38	215	1,505	8	189
3. HIV/AIDS	2	1,784	307	36	421	1,198	10,279	11	1,340
4. Diarrhoeal diseases	815	8,358	109	963	166	976	22,387	45	4,084
5. Childhood-cluster diseases	63	6,934	66	332	34	1,599	12,128	37	2,240
a. Pertussis	42	2,204	63	63	29	133	2,737	36	462
b. Poliomyelitis	5	16	1	5	1	11	62	0	52
c. Diphtheria	0	16	0	6	1	4	35	0	4
d. Measles	10	2,882	1	252	2	1,212	5,989	1	1,206
e. Tetanus	7	1,816	1	6	1	239	3,306	0	516
6. Meningitis	71	800	66	206	125	442	1,429	14	555
7. Hepatitis ^c	73	181	45	142	46	98	756	56	389
8. Malaria	47	1,898	2	19	0	292	1,582	2	514
9. Tropical-cluster diseases	62	846	0	7	0	242	3,772	4	472
a. Trypanosomiasis	0	26	0	0	0	0	0	0	0
b. Chagas disease	0	0	0	0	0	0	0	0	0
c. Schistosomiasis	43	154	0	0	0	3	1	0	60
d. Leishmaniasis	16	124	0	6	0	6	1,210	0	9
e. Lymphatic filariasis	4	473	0	1	0	233	2,562	4	403
f. Onchocerciasis	0	69	0	0	0	0	0	0	0
10. Leprosy	0	12	0	0	0	7	83	0	6
11. Dengue	0	19	0	0	0	25	346	0	26
12. Japanese encephalitis	0	6	0	0	0	22	61	0	336
13. Trachoma	71	108	0	0	0	24	50	0	484
14. Intestinal nematode infections	47	248	0	8	1	469	1,044	6	1,651
a. Ascariasis	20	83	0	7	0	114	123	1	588
b. Trichuriasis	1	31	0	0	0	194	202	2	799
c. Hookworm disease	26	134	0	0	0	160	703	2	242
B. Respiratory infections	1,279	10,120	676	2,264	951	3,456	29,005	381	14,387
1. Lower respiratory infections	1,212	9,929	612	2,182	894	3,350	28,134	358	13,316
2. Upper respiratory infections	28	77	28	48	31	38	528	10	741
3. Otitis media	40	115	37	34	27	69	343	13	330
C. Maternal conditions	693	3,502	206	908	448	1,992	9,132	76	2,713
D. Perinatal conditions	819	10,424	435	1,669	771	3,224	34,473	94	12,101
E. Nutritional deficiencies	836	4,009	386	649	385	2,283	13,890	161	10,830
1. Protein-energy malnutrition	176	1,647	25	151	61	567	4,907	21	2,409
2. Iodine deficiency	31	173	5	27	32	32	486	2	85
3. Vitamin A deficiency	3	161	0	1	0	6	373	0	23
4. Iron-deficiency anaemia	588	1,890	352	445	266	1,624	8,053	137	8,264
II. Noncommunicable diseases	12,654	43,155	45,608	26,860	41,365	31,624	155,306	13,643	147,547
A. Malignant neoplasms	1,086	2,514	8,659	3,278	5,706	3,160	12,398	2,820	21,633
1. Mouth and oropharynx cancers	30	277	291	107	217	259	1,978	59	495
2. Oesophagus cancer	36	114	233	107	150	34	804	96	1,960
3. Stomach cancer	108	103	475	323	800	99	669	452	3,264
4. Colon and rectum cancers	60	115	1,082	283	606	287	442	397	1,181
5. Liver cancer	48	91	272	87	187	333	369	291	5,048
6. Pancreas cancer	16	19	365	113	289	53	134	143	282
7. Trachea/bronchus/lung cancers	121	211	1,665	604	1,093	369	1,223	430	3,495
8. Melanoma & other skin cancers	10	19	146	43	92	11	29	27	27
9. Breast cancer	80	191	1,013	297	558	454	1,220	194	763
10. Cervix uteri cancer	70	235	106	124	169	262	1,888	34	519
11. Corpus uteri cancer	14	12	144	89	160	29	35	33	149
12. Ovary cancer	9	61	234	70	200	118	281	58	233
13. Prostate cancer	15	28	376	61	106	40	94	63	54
14. Bladder cancer	22	100	273	87	166	48	134	41	152

Annex Table 12 (continued): DALYs by cause, sex and WHO subregions^a, Version 1 global estimates for 2000

Cause ^b	Global total						AFRO		AMRO		
	Both sexes		Males		Females		D	E	A	B	D
	(000)	%	(000)	%	(000)	%	(000)	(000)	(000)	(000)	(000)
15. Lymphomas/multiple myeloma	3,994	0.3	2,569	0.3	1,424	0.2	317	366	396	224	41
16. Leukaemia	5,147	0.3	2,835	0.4	2,312	0.3	131	234	254	382	87
B. Other neoplasms	1,394	0.1	728	0.1	666	0.1	28	46	81	130	31
C. Diabetes mellitus	14,943	1.0	7,002	0.9	7,941	1.1	289	433	1,290	1,901	292
D. Endocrine disorders	8,061	0.5	3,728	0.5	4,332	0.6	751	867	768	1,205	307
E. Neuro-psychiatric conditions	181,755	12.3	88,423	11.5	93,332	13.2	6,920	8,539	14,076	16,711	2,841
1. Unipolar depressive disorders	64,963	4.4	25,901	3.4	39,063	5.5	1,906	2,154	5,031	5,589	867
2. Bipolar affective disorder	13,645	0.9	6,897	0.9	6,747	1.0	743	852	504	1,026	172
3. Schizophrenia	15,686	1.1	8,013	1.0	7,672	1.1	732	827	509	1,221	204
4. Epilepsy	7,067	0.5	3,832	0.5	3,235	0.5	423	690	262	848	190
5. Alcohol use disorders	18,469	1.3	15,844	2.1	2,624	0.4	368	858	3,032	2,848	446
6. Alzheimer and other dementias	12,464	0.8	5,381	0.7	7,083	1.0	280	300	1,415	750	64
7. Parkinson disease	1,473	0.1	723	0.1	750	0.1	30	37	227	43	6
8. Multiple sclerosis	1,475	0.1	630	0.1	845	0.1	51	40	110	100	15
9. Drug use disorders	5,830	0.4	4,535	0.6	1,295	0.2	526	601	697	788	227
10. Post-traumatic stress disorder	3,230	0.2	896	0.1	2,335	0.3	141	158	176	200	31
11. Obsessive-compulsive disorder	4,761	0.3	2,048	0.3	2,713	0.4	370	428	218	535	85
12. Panic disorder	6,591	0.4	2,239	0.3	4,352	0.6	336	386	262	494	83
13. Insomnia (primary)	3,361	0.2	1,447	0.2	1,914	0.3	134	150	258	310	47
14. Migraine	7,539	0.5	2,045	0.3	5,494	0.8	182	236	490	729	146
F. Sense organ diseases	37,673	2.6	19,253	2.5	18,420	2.6	2,537	3,187	1,278	2,676	483
1. Glaucoma	1,744	0.1	628	0.1	1,115	0.2	220	369	21	122	8
2. Cataracts	10,585	0.7	4,981	0.7	5,604	0.8	1,190	1,114	45	363	141
4. Hearing loss, adult onset	25,276	1.7	13,610	1.8	11,665	1.7	1,122	1,698	1,212	2,188	332
G. Cardiovascular diseases	150,975	10.3	80,325	10.5	70,651	10.0	5,049	6,445	7,240	7,753	1,064
1. Rheumatic heart disease	6,528	0.4	2,773	0.4	3,755	0.5	320	446	53	113	78
3. Ischaemic heart disease	55,682	3.8	31,997	4.2	23,685	3.4	1,526	1,721	3,288	2,673	255
4. Cerebrovascular disease	45,677	3.1	23,072	3.0	22,606	3.2	1,439	2,058	1,594	2,735	317
5. Inflammatory heart diseases	6,631	0.5	3,860	0.5	2,771	0.4	334	435	390	409	48
H. Respiratory diseases	68,737	4.7	37,408	4.9	31,329	4.4	3,270	4,397	2,667	4,718	719
1. COPD	33,748	2.3	18,677	2.4	15,071	2.1	717	961	1,262	1,032	88
2. Asthma	13,858	0.9	7,509	1.0	6,350	0.9	892	1,278	769	1,574	301
I. Digestive diseases	48,874	3.3	29,367	3.8	19,507	2.8	2,764	3,501	1,677	3,676	779
1. Peptic ulcer disease	4,113	0.3	2,651	0.3	1,462	0.2	132	201	53	144	44
2. Cirrhosis of the liver	14,856	1.0	10,358	1.4	4,497	0.6	492	648	492	1,121	306
3. Appendicitis	887	0.1	542	0.1	345	0.0	22	33	14	40	17
J. Genito-urinary diseases	15,875	1.1	9,099	1.2	6,777	1.0	1,194	1,559	564	1,037	268
1. Nephritis and nephrosis	9,150	0.6	4,921	0.6	4,229	0.6	597	818	172	479	170
2. Benign prostatic hypertrophy	2,304	0.2	2,304	0.3	0	0.0	122	134	84	193	28
K. Skin diseases	1,859	0.1	1,033	0.1	827	0.1	272	376	51	124	36
L. Musculoskeletal diseases	29,938	2.0	12,919	1.7	17,019	2.4	903	952	1,883	2,194	314
1. Rheumatoid arthritis	5,099	0.3	1,434	0.2	3,665	0.5	55	45	331	604	92
2. Osteoarthritis	16,446	1.1	6,650	0.9	9,796	1.4	574	598	1,024	941	113
M. Congenital anomalies	32,871	2.2	17,053	2.2	15,819	2.2	1,749	2,041	719	2,291	749
N. Oral conditions	8,021	0.5	3,890	0.5	4,131	0.6	235	268	343	813	146
1. Dental caries	4,626	0.3	2,344	0.3	2,282	0.3	174	202	176	693	128
2. Periodontal disease	293	0.0	148	0.0	144	0.0	14	16	13	20	3
3. Edentulism	2,979	0.2	1,359	0.2	1,620	0.2	42	44	152	92	12
III. Injuries	182,555	12.4	118,631	15.5	63,924	9.0	12,164	17,382	4,550	12,447	1,931
A. Unintentional injuries	136,485	9.3	87,309	11.4	49,176	7.0	8,605	11,122	3,099	7,565	1,285
1. Road traffic accidents	41,234	2.8	30,333	4.0	10,902	1.5	2,289	3,473	1,512	2,781	326
2. Poisonings	8,235	0.6	5,057	0.7	3,178	0.4	493	705	283	97	44
3. Falls	19,518	1.3	11,760	1.5	7,758	1.1	802	990	414	994	193
4. Fires	9,989	0.7	3,929	0.5	6,060	0.9	851	839	139	175	25
5. Drownings	13,263	0.9	8,874	1.2	4,389	0.6	1,428	1,260	124	588	59
6. Other unintentional injuries	44,246	3.0	27,356	3.6	16,890	2.4	2,741	3,854	627	2,929	639
B. Intentional injuries	46,070	3.1	31,323	4.1	14,748	2.1	3,559	6,260	1,451	4,882	646
1. Self-inflicted injuries	19,257	1.3	11,145	1.5	8,112	1.1	245	432	799	604	117
2. Violence	16,122	1.1	12,438	1.6	3,683	0.5	1,246	2,420	641	4,208	515
3. War	10,320	0.7	7,483	1.0	2,837	0.4	2,068	3,408	0	55	14

Annex Table 12 (continued): DALYs by cause, sex and WHO subregions^a, Version 1 global estimates for 2000

Cause ^b	EMRO		EURO			SEARO		WPRO	
	B	D	A	B	C	B	D	A	B
	(000)	(000)	(000)	(000)	(000)	(000)	(000)	(000)	(000)
15. Lymphomas/multiple myeloma	94	271	445	136	186	230	720	115	454
16. Leukaemia	154	246	334	163	197	265	1,004	97	1,600
B. Other neoplasms	25	72	175	37	66	387	98	68	151
C. Diabetes mellitus	366	963	1,008	667	841	764	3,294	457	2,378
D. Endocrine disorders	178	912	618	183	162	381	498	220	1,008
E. Neuro-psychiatric conditions	3,812	10,497	15,285	6,599	9,196	7,669	39,250	3,878	36,482
1. Unipolar depressive disorders	1,184	3,507	4,074	2,548	2,634	2,832	17,123	1,000	14,515
2. Bipolar affective disorder	354	809	621	466	450	702	2,990	243	3,713
3. Schizophrenia	453	956	595	559	437	1,055	3,538	235	4,365
4. Epilepsy	131	400	358	256	219	371	1,528	99	1,291
5. Alcohol use disorders	18	303	2,691	297	2,253	304	1,910	595	2,546
6. Alzheimer and other dementias	170	458	3,101	450	994	428	1,873	505	1,678
7. Parkinson disease	20	58	281	62	77	49	231	105	248
8. Multiple sclerosis	34	72	155	63	81	63	318	29	346
9. Drug use disorders	391	214	717	156	295	120	511	250	335
10. Post-traumatic stress disorder	78	180	207	123	131	179	706	81	841
11. Obsessive-compulsive disorder	184	326	257	267	284	170	823	63	752
12. Panic disorder	174	397	323	241	237	361	1,479	128	1,691
13. Insomnia (primary)	33	151	345	116	159	114	839	129	576
14. Migraine	144	394	747	250	240	334	1,686	155	1,805
F. Sense organ diseases	1,032	2,644	1,348	1,158	1,644	2,425	10,795	474	5,991
1. Glaucoma	92	194	61	52	146	47	98	11	303
2. Cataracts	212	885	21	101	279	760	3,788	21	1,665
4. Hearing loss, adult onset	728	1,557	1,265	1,005	1,219	1,616	6,890	442	4,001
G. Cardiovascular diseases	2,852	10,287	9,533	8,262	15,586	6,771	39,658	2,584	27,892
1. Rheumatic heart disease	85	501	81	177	232	279	2,384	22	1,757
3. Ischaemic heart disease	1,321	2,795	4,066	3,536	7,887	2,327	16,435	797	7,055
4. Cerebrovascular disease	600	2,101	2,732	2,415	5,284	1,936	6,950	1,268	14,248
5. Inflammatory heart diseases	58	248	280	381	503	272	2,322	82	869
H. Respiratory diseases	701	4,036	2,648	1,597	2,170	2,784	13,917	856	24,256
1. COPD	178	827	1,239	731	1,241	959	5,206	179	19,127
2. Asthma	308	918	717	346	237	678	2,718	380	2,743
I. Digestive diseases	577	3,996	2,457	2,086	2,544	2,964	12,057	733	9,063
1. Peptic ulcer disease	34	178	133	118	227	289	1,310	37	1,213
2. Cirrhosis of the liver	136	628	931	765	932	857	4,116	215	3,216
3. Appendicitis	6	19	16	14	19	33	538	5	111
J. Genito-urinary diseases	387	1,431	547	579	727	981	3,117	227	3,258
1. Nephritis and nephrosis	174	1,022	196	271	184	649	2,351	103	1,965
2. Benign prostatic hypertrophy	62	120	120	66	80	107	459	49	679
K. Skin diseases	11	156	68	33	89	164	296	14	167
L. Musculoskeletal diseases	480	1,395	2,289	1,328	1,688	1,465	6,542	936	7,571
1. Rheumatoid arthritis	79	300	283	295	367	133	1,507	113	894
2. Osteoarthritis	244	704	1,474	759	996	848	3,415	634	4,121
M. Congenital anomalies	743	3,606	621	669	595	1,071	11,699	238	6,082
N. Oral conditions	405	645	352	384	350	638	1,687	140	1,615
1. Dental caries	197	356	200	189	167	241	1,053	76	775
2. Periodontal disease	5	18	16	11	13	15	97	6	46
3. Edentulism	201	255	133	182	169	377	503	58	759
III. Injuries	3,153	11,275	4,454	4,810	13,443	8,098	46,138	1,639	41,070
A. Unintentional injuries	2,586	8,719	3,308	3,404	8,890	5,720	38,960	1,113	32,110
1. Road traffic accidents	1,400	1,935	1,407	635	1,721	3,913	10,120	359	9,363
2. Poisonings	52	524	128	348	1,799	106	2,293	20	1,342
3. Falls	467	1,474	742	577	956	697	4,388	198	6,624
4. Fires	118	1,010	58	134	334	233	5,397	30	646
5. Drownings	100	498	78	274	823	376	2,376	69	5,210
6. Other unintentional injuries	449	3,277	895	1,435	3,258	394	14,386	436	8,925
B. Intentional injuries	567	2,556	1,147	1,406	4,553	2,379	7,178	526	8,960
1. Self-inflicted injuries	221	506	1,015	574	2,315	509	4,396	482	7,042
2. Violence	234	735	129	322	1,643	450	1,791	38	1,751
3. War	112	1,254	1	472	570	1,388	822	5	154

^a See list of Member States by WHO Region and mortality stratum (Annex Table 1).

^b Estimates for specific causes may not sum to broader cause groupings due to omission of residual categories.

^c Does not include liver cancer and cirrhosis deaths resulting from chronic hepatitis virus infection.