

18 Health, morbidity and mortality in the Netherlands and the world

Table: The twenty most populated countries of the world, in ranking order, inhabitants in millions, percentual share, cumulative percentage and surface (in thousands km²); medio 2003. Four (*) belong to the richest countries (Source: The CIA World Fact Book 2003).

| Country and ranking number | Number inhabit. | % | Cumulat. % | Surface |
|----------------------------|-----------------|-------|------------|---------|
| 1 China | 1.291,4 | 20,5 | 20,5 | 9.561 |
| 2 India | 1.049,7 | 16,7 | 37,2 | 3.288 |
| 3 United States * | 290,3 | 4,6 | 42,3 | 9,373 |
| 4 Indonesia | 234,9 | 3,7 | 46,0 | 1.905 |
| 5 Brazil | 182,0 | 2,9 | 48,9 | 8.512 |
| 6 Pakistan | 150,7 | 2,4 | 51,3 | 796 |
| 7 Russian Fed | 144,5 | 2,3 | 53,6 | 17.075 |
| 8 Bangladesh | 138,4 | 2,2 | 55,8 | 144 |
| 9 Nigeria | 133,9 | 2,1 | 57,9 | 924 |
| 10 Japan * | 127,2 | 2,0 | 59,9 | 378 |
| 11 Mexico | 104,9 | 1,7 | 61,6 | 1.958 |
| 12 Philippines | 84,7 | 1,3 | 62,9 | 300 |
| 13 Germany * | 82,4 | 1,3 | 64,2 | 357 |
| 14 Vietnam | 81,6 | 1,3 | 65,5 | 330 |
| 15 Egypt | 74,7 | 1,2 | 66,7 | 1.001 |
| 16 Iran | 68,3 | 1,1 | 67,8 | 1.648 |
| 17 Turkey | 68,1 | 1,1 | 68,9 | 781 |
| 18 Ethiopia | 66,6 | 1,1 | 70,0 | 1.222 |
| 19 Thailand | 64,3 | 1,0 | 71,0 | 513 |
| 20 France * | 60,2 | 1,0 | # 72,0 | 552 |
| Tezamen | 4.570,3 | #72,5 | | |
| World | 6.302,3 | 100,0 | | 111.306 |

Small difference by rounding off.

In 2003 there were 3 more countries with more than 50 million inhabitants: resp. United Kingdom, Italy en Congo (Zaire).

Table: The Netherlands, 2000: six age classes and their contribution to the total number of lost life years and to the total mortality, followed by the ratio [% mortality] / [% lost life years]. By sex (source: CBS/RIVM).

| Age class | Lost life | years (%) | Mortality | (%) | Ratio | Ratio |
|--------------|------------|------------|------------|------------|------------|------------|
| | men | women | men | women | men | women |
| 0-14 | 10 | 9 | 2 | 1 | 5,4 | 5,2 |
| 15-24 | 5 | 3 | 1 | 1 | 4,2 | 5,2 |
| 25-44 | 13 | 10 | 5 | 3 | 3,0 | 3,7 |
| 45-64 | 29 | 24 | 19 | 11 | 1,6 | 2,1 |
| 65-74 | 23 | 20 | 27 | 16 | 0,9 | 1,2 |
| 75+ | 20 | 34 | 47 | 68 | 0,4 | 0,5 |
| Total | 100 | 100 | 100 | 100 | 1,0 | 1,0 |

Table: The Netherlands, 2000: the 10 major causes of death with the largest loss in life years (approximated) on their contribution to the extension of life expectancy if eliminated. Life years gained, by sex (source: CBS/RIVM).

| Cause of death | + number of lost life years | Increase of life expectancy in years for men | Increase of life expectancy in years for women |
|--------------------------|-----------------------------|--|--|
| Coronary heart disease | 225.000 | 2,3 | 1,6 |
| Stroke | 100.000 | 0,7 | 1,2 |
| Lung cancer | 100.000 | 1,2 | 0,3 |
| Breast cancer | 50.000 | - | 0,8 |
| COPD * | 50.000 | 0,6 | 0,3 |
| Traffic accidents | 50.000 | 0,2 | 0,2 |
| Colon and end gut cancer | 50.000 | 0,3 | 0,4 |
| Suicide | 50.000 | 0,3 | 0,2 |
| Diabetes | 40.000 | 0,2 | 0,4 |
| Gastric cancer | 25.000 | 0,2 | 0,1 |

* COPD: Chronic Obstructive Pulmonary Diseases (asthma, bronchitis, emphysema)

Table: Some essential data from the eleven poorest countries in the world in 2003 (literacy may be dated differently). Nine are part of Africa and two are in Asia (Source: United Nations Population Fund 2003). Compared with The Netherlands. GNP = Gross National Product.

| Country | Population mid 2003 | GNP per capita in US \$ 2003 | Life expectancy at birth in 1991 | Literacy of adults (%) | |
|--------------------|---------------------|------------------------------|----------------------------------|------------------------|----------------|
| | | | | women | total |
| Sierra Leone | 5,7 | 500 | 37 | 18 | 31 ('95) |
| Tanzania | 35.9 | 550 | 44 | 71 | 78 |
| Ethiopia | 66,6 | 560 | 42 | 35 | 43 |
| Somalia | 8,0 | 600 | 47 | 26 | 38 ('01) |
| Cambodia | 13.1 | 710 | 54 | 60 | 70 |
| Congo (Zaire) | 56,6 | 710 | 45 | 55 | 66 |
| Rwanda | 7,8 | 720 | 40 | 65 | 70 |
| Comoros | 0,6 | 725 | 61 | 49 | 57 |
| Burundi | 6,1 | 730 | 42 | 45 | 52 |
| Eritrea/ Yemen | 4,4/ 19,3 | 750 | 51/ 57 | 48/ 30 | 59/ 50 |
| Netherlands | 16,3 | 24.400 | 78 | > 95 | > 95 |

Table: Some health (care) data about eight of the poorest countries in the world: 1990. Seven are in sub-Saharan Africa and one is in continental Asia (Source: WB93). In comparison: The Netherlands.

| Land | inc. tbc per 100,000 in 1990 | median age at dying 1990 # | Health expenditures pp/ US \$/ 1990 | hospital-beds per 1,000 in 1990 | Doctors / 100,000 in 1990 |
|--------------------|------------------------------|----------------------------|-------------------------------------|---------------------------------|---------------------------|
| Moçambique | 189 | 2 | 5 | 0,9 | 2 |
| Tanzania | 140 | 5 | 4 | 1,1 | 3 |
| Ethiopia | 155 | 4 | 4 | 0,3 | 3 |
| Uganda | 300 | 4 | 6 | 0,8 | 4 |
| Nepal | 167 | 12 | 7 | 0,3 | 6 |
| Burundi | 367 | 11 | 7 | 1,3 | 6 |
| Chad | 167 | 7 | 13 | .. | 3 |
| Madagascar | 310 | 11 | 7 | 0,9 | 12 |
| Netherlands | 9 | 77 | 1500* | 5,9** | 243 |

* In 1995 this amount was 4,000 guilders per person.

** The Netherlands has not so many more beds, but these are of superior quality.

The age at which 50 percent of a cohort has died.

Where did the 6 billion people on this earth live in 2000, what was the population growth rate and what do demographers expect for 2025, what was the urbanization rate, what was the mortality rate in babies and infants, what was the percentage of teenage mothers, and to what degree modern anticonceptive methods are used? (Source: UNFPA 2000).

| Region | Pop. in millions in 2000 | Pop. growth 1995-00 | Exp. pop. in 2025 | % Urban in 1995 | Mort. rate Babies * 2000 | Infant mortal. * in 2000 M / V | Births per 1,000 w. 15-19 y. | Modern anticonception (%) |
|--|--------------------------|---------------------|-------------------|-----------------|--------------------------|--------------------------------|------------------------------|---------------------------|
| Africa | 784 | 2,4% | 1298 | 34 | 87 | 146 / 133 | 119 | 16 |
| Asia | 3683 | 1,4% | 4723 | 35 | 57 | 71 / 77 | 57 | 56 |
| Europe | 729 | 0,0% | 702 | 74 | 12 | 16 / 12 | 25 | 46 |
| North-America (USA + Canada) | 310 | 0,9% | 364 | 76 | 7 | 9 / 7 | 56 | 68 |
| Latin America/Caribes | 519 | 1,6% | 697 | 74 | 36 | 49 / 39 | 76 | 57 |
| Oceania | 30 | 1,3% | 40 | 70 | 24 | 31 / 32 | 28 | 22 |
| More developed regions | 1188 | 0,3% | 1215 | 75 | 21 | 13 / 10 | 31 | 51 |
| Less developed regions | 4867 | 1,6% | 6609 | 38 | 152 | 87 / 88 | 71 | 50 |
| From which in the least developed countries: | 645 | 2,4% | 1093 | 22 | 25 | 160 / 151 | 128 | n.d. |
| Wereld | 6055 | 1,3% | 7824 | 45 | 135 | 80 / 80 | 65 | 50 |

* Baby and infant mortality: percentage of deaths among respectively babies and children aged 0-4 years per 1.000 live born.

Table: Mortality according to cause of death in the Third World versus the First-plus-Second-World in 1990. Division after two age groups (0-4 years and older). And sex. The numbers have to be multiplied by 1,000. The total registered mortality was 50 million. One third is by infectious diseases, three fifths by other diseases and less than a tenth by accidents and violence. The numbers have been rounded off (source: WB93).

| cause | Third world | | | | | First/Second world | | | | |
|---------------------|-------------|--------|--------|--------|-------|--------------------|--------|--------|--------|-------|
| | Men | | Women | | total | Men | | Women | | total |
| | 0-4 y. | ≥ 5 y. | 0-4 y. | ≥ 5 y. | | 0-4 y. | ≥ 5 y. | 0-4 y. | ≥ 5 y. | |
| infectious diseases | 5539 | 2801 | 2651 | 1658 | 9301 | 73 | 243 | 52 | 207 | 575 |
| Tbc | 34 | 1187 | 37 | 720 | 1978 | 0 | 29 | 0 | 9 | 38 |
| HIV/AIDS | 29 | 101 | 27 | 92 | 248 | 1 | 35 | 1 | 6 | 43 |
| diarrhoea | 1263 | 191 | 1211 | 201 | 2866 | 2 | 1 | 2 | 2 | 7 |
| malaria | 332 | 143 | 301 | 151 | 926 | 0 | 0 | 0 | 0 | 0 |
| Maternal death | - | - | - | 428 | 428 | - | - | - | 3 | 3 |
| Perinatal death | 1353 | - | 1048 | - | 2402 | 52 | - | 36 | - | 89 |
| non infectious | 693 | 9562 | 687 | 8612 | 19553 | 37 | 4626 | 30 | 4808 | 29055 |
| cancer | 16 | 2150 | 27 | 1504 | 3698 | 2 | 1352 | 2 | 1075 | 2431 |
| heart- & vessels | 64 | 4436 | 59 | 4459 | 9017 | 2 | 2399 | 2 | 2925 | 5328 |
| Accidents violence | | | | | 3420 | | | | | 807 |
| Total | 6485 | 14372 | 5958 | 12273 | 39088 | 123 | 5428 | 91 | 5242 | 10883 |

Table: The former table simplified. The three main categories of mortality in two age classes (0-4 years and older) in the Third world versus the First/Second world and the world totals in 1990. Numbers have to be multiplied by 1,000. In brackets the percentual share of mortality in the total mortality in each of the regions and in the whole world (columns). The numbers have been rounded off (source: WB93).

See also figure 3 in the last section of this book.

| age cause | Third World | | | First-plus-Second Wereld | | | total world |
|----------------------------|---------------|---------------|------------------------|--------------------------|---------------|------------------------|------------------------|
| | 0-4 year* | ≥ 5 jaar | totaal | 0-4 year* | ≥ 5 jaar | total | |
| Infectious diseasesen | 10,577 | 5,539 | 16115 (41) | 125 | 450 | 575 (5) | 16,690 (33) |
| Non-infectious diseases | 1,378 | 18,174 | 19553 (50) | 67 | 9,434 | 9,502 (87) | 29,055 (58) |
| accident | 487 | 2,933 | 3420 (9) | 21 | 786 | 807 (7) | 4,227 (8) |
| Causes total | 12,443 | 26,645 | 39,088 (100) | 214 | 10,670 | 10,883 (100) | 49,971 (100) |

* mortality 0-4 jaar (infant mortality)

Table: The assessed disease burden in poor quarters of urban areas in the Third World in 1990 and the degree at which this can be reduced by efficient improvement of house hold facilities: nearly 25% ! (source: WB93).

| Principal poverty diseases in house holds | Relevant environmental problem | Disease burden in developing countries in million DALY's / j. | Reduction possible by feasible interventions (%) | Disease burden prevented by feasible interventions (million DALY's/ j.) | Disease burden prevented per 1,000 inhabitants (DALY/ j.) |
|---|--|---|--|---|---|
| Tuberculosis | Crowding | 46 | 10 | 5 | 1.2 |
| Diarrhoea ^c | Sanitation, Water supply, hygiene | 99 | 40 | 40 | 9.7 |
| Trachoma | Water supply, hygiene | 3 | 30 | 1 | 0.3 |
| Tropical cluster ^d | sanitation, waste disposal, breeding facilities of vectors near dwelling | 8 | 30 | 2 | 0.5 |
| Intestinal worms | sanitation, water supply, hygiene | 18 | 40 | 7 | 1.7 |
| Resp. infections | air pollution indoors, crowding | 119 | 15 | 18 | 4.4 |
| COPD | air pollution indoors | 41 | 15 | 6 | 1.5 |
| Resp. cancers | Air pollution indoors | 4 | 10 | 0,4 | 0.1 |
| All Comb. | | 338 | ± 23 | 79 | 19.4 |