

## Population Facts

Department of Economic and Social Affairs • Population Division

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### The Age Distribution of Deaths

### 1. Despite improvements in child survival, children under five still account for one in six deaths globally

- Low-income countries account for 83 per cent of all deaths to children under five, whereas high- and upper-middle-income countries account for 3 per cent of child deaths and lower-middle-income countries for 14 per cent.
- Deaths to children under five constitute 30 per cent of all deaths in low-income countries but just 7 per cent of deaths in lower-middle-income countries and 2 per cent in high- and upper-middle-income countries.
- Without accelerated progress, the target of reducing under-five mortality by two-thirds between 1990 and 2015, as stipulated by Millennium Development Goal 4, will not be achieved in most developing countries. At current rates of decline, underfive mortality will not be cut by even half in 81 developing countries.<sup>1</sup>

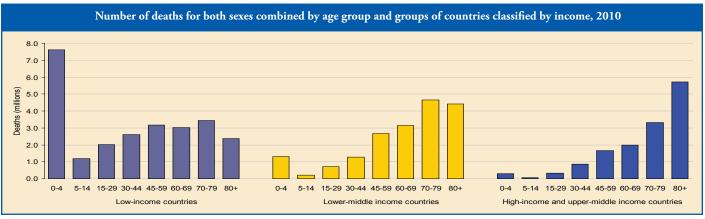
# 2. Deaths to adults aged 15 to 59 account for 26 per cent of deaths globally and 31 per cent of all deaths in low-income countries

• Among deaths of persons of working age (15 to 59), those to persons aged 15 to 29 account for 26 per cent in low-income countries, but just 15 per cent in lower-middle-income countries and 12 per cent in high- and upper-middle-income countries.

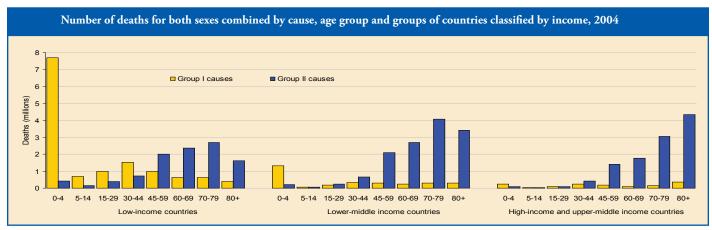
- The number of deaths to persons of working age is highest after age 45: 41 per cent of deaths to persons aged 15 to 59 occur among adults aged 45 to 59 in low-income countries, 57 per cent in lower-middle-income countries and 59 per cent in high-and upper-middle-income countries.
- There is a higher concentration of deaths at the older working ages in lower-middle-income countries and in high- and upper-middle-income countries than in low-income countries.

### 3. The proportion of deaths occurring at age 60 or over is highly correlated with income level

- In high- and upper-middle-income countries, 78 per cent of deaths occur at age 60 or over and 40 per cent at age 80 or over. In lower-middle-income countries, the equivalent proportions are 66 per cent and 24 per cent.
- In sharp contrast, just 35 per cent of deaths in low-income countries occur at age 60 or over and the proportion at age 80 or over is a low 9 per cent. In low-income countries, there are almost as many deaths among children as among the elderly.
- Whereas in high- and upper-middle-income countries, there are almost four times as many deaths at ages 60 or over as among persons aged 15 to 59, in low-income countries the numbers of deaths in those two age groups are similar.



Source: World Population Prospects: The 2008 Revision, United Nations publication, Sales No. 09.XII.6.



Source: Global Burden of Disease: 2004 Update, World Health Organization, Geneva, 2008.

#### 4. Differences in the age distribution of deaths across income groups reflect differences in the major causes of death

- The World Health Organizations classifies causes of death into three groups: Group I includes communicable, maternal, perinatal<sup>2</sup> and nutritional conditions; Group II includes non-communicable diseases; and Group III includes injuries.<sup>3</sup>
- In 2004, the causes of death in Group I were responsible for 89 per cent of deaths to children under five. Perinatal conditions were the leading cause of death among children (31 per cent), followed by acute respiratory infections (17 per cent), diarrhoeal diseases (17 per cent) and malaria (7 per cent). Group I causes were responsible for the majority of deaths under age five in all income groups.
- Among deaths to persons aged 15 to 44 in low-income countries, 53 per cent were caused by Group I conditions, reflecting the effects of HIV/AIDS and maternal mortality.
- Group I causes were responsible for 21 per cent of deaths in ages 15 to 44 in lower-middle-income countries, whereas Group II causes accounted for 36 per cent of those deaths in those countries.
- In high- and upper-middle-income countries, deaths from Group II causes accounted for 38 per cent of deaths among persons aged 15 to 44 but Group I causes were also significant, accounting for 25 per cent of deaths in those ages.
- Among persons aged 45 or over, Group II causes were responsible for the vast majority of deaths in all income groups, ranging from 72 per cent in low-

- income countries to 89 per cent in high- and uppermiddle-income countries.
- Cardiovascular diseases are the leading causes of death, responsible for 29 per cent of all deaths globally in 2004. Cancers and respiratory diseases are also major causes of death in countries at all income levels.

## 5. The age distribution of deaths changes as the main causes of death pass from communicable to non-communicable diseases

- Low-income countries and some lower-middleincome countries remain in the early stages of the epidemiological transition, characterized by high death rates from communicable diseases among children and adults of working age.
- With improvements in infrastructure and public health, expanded access to primary health care, widespread use of preventive measures against communicable diseases and access to effective treatments, death rates from Group I causes decline and deaths shift to older ages in the later stages of the epidemiological transition, as in high-income countries today.

#### **Notes**

<sup>1</sup> World Population Prospects: The 2008 Revision. United Nations publication, Sales No. 09.XII.6.

<sup>2</sup> According to WHO, the perinatal period commences at 22 completed weeks (154 days) of gestation and ends seven completed days after birth. Perinatal conditions refer to causes related to the perinatal period but do not include all conditions occurring in the perinatal period.

<sup>3</sup> World Health Organization (2008). *Global Burden of Disease: 2004 Update.* Geneva: WHO.