Table 19 presents deaths by age and sex and age-specific death rates by sex for the latest available year between 2009 and 2018.

**Description of variables:** Age is defined as age at last birthday, that is, the difference between the date of birth and the date of the occurrence of the event, expressed in completed solar years. The age classification used in this table is the following: under 1 year, 1-4 years, 5-year age groups through 95-99 years, and 100 years or over.

Rate computation: Age-specific death rates by sex are the annual number of deaths in each age-sex group per 1,000 population in the same age-sex group. These rates are calculated by the United Nations Statistics Division.

Deaths at unknown age and the population of unknown age are excluded from age-specific rate calculations but are part of the death rate for all ages combined.

Death rates for infants under one year of age in this table differ from the infant mortality rates shown elsewhere, because the latter are computed per 1,000 live births rather than per 1,000 population.

The population used in computing the rates is the estimated or the enumerated population by age and sex reported to United Nations Statistics Division. First priority is given to an estimate and second priority to census returns of the year to which the deaths refer.

Rates presented in this table have been limited to those countries or areas having at least a total of 100 deaths in a given year. Moreover, rates specific for individual sub-categories that are based on 30 or fewer deaths are identified by the symbol “♦”.

**Reliability of data:** Data from civil registers of deaths that are reported as incomplete (less than 90 per cent completeness) or of unknown completeness are considered unreliable and are set in italics rather than in roman type. Table 18 and the technical notes for that table provide more detailed information on the completeness of death registration. For more information about the quality of vital statistics data in general and the information available on the basis of the completeness estimates in particular, see section 4.2 of the Introduction.

Rates are not computed if data from civil registers of deaths are reported as incomplete (less than 90 per cent completeness) or of unknown completeness, and therefore deemed unreliable.

**Limitations:** Statistics on deaths by age and sex are subject to the same qualifications as are set forth for vital statistics and particularly for death statistics discussed in section 4 of the Introduction.

The reliability of the data is an important factor in considering the limitations. In addition, some deaths are tabulated by date of registration and not by date of occurrence; these have been indicated by a plus sign “+”. Whenever the lag between the date of occurrence and date of registration is prolonged and, therefore, a large proportion of the death registrations are delayed, death statistics for any given year may be seriously affected. However, delays in the registration of deaths are less common and shorter than in the registration of live births.

International comparability in mortality statistics may also be affected by the exclusion of deaths of infants who were born alive but died before the registration of the birth or within the first 24 hours of life. Statistics of this type are footnoted.

Because these statistics are classified according to age, they are subject to the limitations with respect to accuracy of age reporting similar to those already discussed in connection with section 3.1.3 of the Introduction. The factors influencing the accuracy of reporting may be somewhat dissimilar in vital statistics (because of the differences in the method of taking a census and registering a death) but, in general, the same errors can be observed.

The absence of data in the unknown age group does not necessarily indicate completely accurate reporting and tabulation of the age item. It is often an indication that the unknowns have been eliminated by assigning ages to them before tabulation, or by proportionate distribution after tabulation.
International comparability of statistics on deaths by age is also affected by the use of different methods to determine age at death. If age is obtained from an item that simply requests age at death in completed years or is derived from information on year of birth and death rather than from information on complete date (day, month and year) of birth and death, the number of deaths classified in the under-one-year age group will tend to be reduced and the number of deaths in the next age group will tend to be somewhat increased. A similar bias may affect other age groups but its impact is usually negligible. Information on this factor is given in the footnotes when known.

**Limitations of rates:** Rates shown in this table are subject to the same limitations that affect the corresponding data and are set forth in the technical notes for table 18. These include differences in the completeness of registration, the treatment of infants who were born alive but died before the registration of their birth or within the first 24 hours of life, the method used to determine age at death and the quality of the reported information relating to age at death. In addition, some rates are based on deaths tabulated by date of registration and not by date of occurrence; these have been indicated with a plus sign “+”.

The problem of obtaining precise correspondence between deaths (numerator) and population (denominator) as regards the inclusion or exclusion of armed forces, refugees, displaced persons and other special groups is particularly difficult where age-specific death rates are concerned. Even when deaths and population do correspond conceptually, comparability of the rates may be affected by abnormal conditions such as absence from the country or area of large numbers of young men in the military forces or working abroad as temporary workers. Death rates may appear high in the younger ages, simply because a large section of the able-bodied members of the age group, whose death rates under normal conditions might be less than the average for persons of their age, is not included. Therefore, care should be exercised in using these rates for comparative purposes.

Also, in a number of cases the rates shown here for all ages combined differ from crude death rates shown elsewhere, because in this table they are computed on the population for which an appropriate age-sex distribution was available, while the crude death rates shown elsewhere may utilize a different total population. The population by age and sex might refer to a census date within the year rather than to the mid-point, or it might be more or less inclusive as regards ethnic groups, armed forces and so forth. In a few instances, the difference is attributable to the fact that the rates in this table were computed on the mean population whereas the corresponding rates in other tables were computed on an estimate for 1 July.

**Earlier data:** Age-specific deaths and death rates by sex have been shown for the latest available year in each issue of the *Demographic Yearbook* since the 1955 issue. For information on specific years covered, the reader should consult the Historical Index.