

# VITAL STATISTICS REPORT 2018–2020 HIGHLIGHTS











The Tonga National Vital Statistics Report 2018-2020 (https://purl.org/spc/ digilib/doc/5dysj) provides statistics on births and deaths that occurred during 2018-2020. The Tonga **Statistics** Department (TSD), Ministry of Health (MOH), and Ministry of Justice (MOJ)

compiled this report to provide crucial statistical information for planning and policy decisions and legislating programs for the benefit of the people of Tonga. This fact sheet contains highlights, facts and figures from the report.

Tonga is an archipelago nation of 169 islands, of which 36 are permanently inhabited. Most people live on the main island of Tongatapu (74%). In the Census 2021, Tonga had a population of 100,179, with over 97% Tongan Polynesian or part-Polynesian. Tonga is classified by the World Bank as an upper-middle income country, moving from lower-middle income within the past decade.

Vital statistics on births and deaths provide a picture of fertility and mortality trends. Several agencies within the Tonga government collect and maintain vital statistics data. These include:

- civil registration data collected by the Registrar General office at the MOJ;
- other continuous administrative sources at the MOH such as the Live Birth certificates database, Death database of Medical Certificates of Cause-of-Death, and

- consolidated monthly nursing reports from the Reproduction Health Services; and,
- 3. periodic sources by the TSD such as censuses and population surveys

#### BIRTHS AND FERTILITY: KEY FACTS AND FIGURES

Over the 2018–2020 period in Tonga:

- A total of 6.069 live births were recorded.
- The number of births reported in 2020 was lower than expected (1,798), which may be due to late registration and/or data availability constraints.
- The adolescent fertility rate (AFR) (live births per 1,000 women aged 15–19 years) was 29.
   Age-specific fertility rates (ASFR) peaked at 176 births per 1,000 women aged 25–29.
- The total fertility rate was 3.1, indicating that a woman of reproductive age would give birth to 3 children on average during her lifetime.

Figure 1: Number of births by percentage by sex, 2018–2020

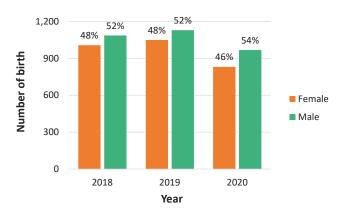
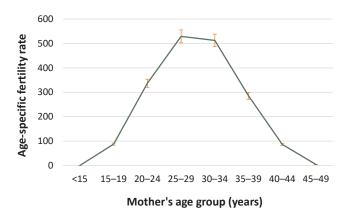


Figure 2: ASFR, by 3-year period, 2018–2020



### MORTALITY, LIFE EXPECTANCY, AND CAUSES OF DEATH: KEY FACTS AND FIGURES

Over the 2018–2020 period in Tonga:

- A total of 1,758 deaths were recorded.
- The number of deaths reported in 2019 was lower than expected (455), primarily due to data availability constraints for months September— December.
- More male than female deaths were recorded, at a ratio of 57% males and 43% females.
- Life expectancy at birth for females was 72 years, higher than that for males at 68 years.
- The probability of a 15-year-old dying before reaching the age of 60 was 24.3% for males and around 16.9% for females.
- Cause-of-death analyses are based on deaths for which a medical death certificate was issued (85% of the reported deaths in 2018–2020). However, the reported causes may not be based on accurate assignment of the underlying cause of death. Major causes of deaths such as diabetes are likely to be underestimated.

Table 1: Number of deaths recorded in each source, and when reconciled, 2018–2020

Year	Civil registration	Medical death certificates	Reconciled*
2018	591	626	728
2019	365	411	455
2020	480	452	575
Total	1,436	1,489	1,758

<sup>\*</sup> After deduplication. The figures for reconciled are likely an undercount of the number of deaths in 2018, 2019 and 2020 as Community nursing reports of deaths and the Hospital discharge records of deaths were not available

at the time of data reconciliation. For the 2019 data, death records for months September, October, November and December were not available.

Figure 2.2: Age-Specific Mortality Rates by sex (deaths per 1,000 people), by three-year period, 2018-2020

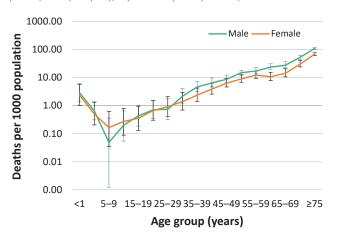


Table 2: Probability of dying (%) (with 95% confidence intervals) from selected NCDs between ages 30 and 69 years (inclusive) by sex, 2018–2020

Disease	Male	Female
Circulatory system diseases <sup>a</sup>	15.1 (13.0–17.5)	6.9 (5.4–8.5)
Diabetes mellitus <sup>b</sup>	0.56 (0.17–1.3)	0.9 (0.38-1.79)
Cancer <sup>c</sup>	2.9 (1.9–4.3)	3.2 (2.2–4.4)
Chronic lower respiratory diseasesd	1.6 (0.88–2.7)	0.16 (-0.7–3.9)
Total	19.4 (17.0–22.0)	10.8 (9.0–12.8)

Source: MOH medical death certificates 2018–2020

- <sup>a</sup> ICD-10 General Mortality List 1, code 064
- <sup>b</sup> ICD-10 General Mortality List 1, code 052
- ° ICD-10 General Mortality List 1, codes 027 to 046
- <sup>d</sup> ICD-10 General Mortality List 1, code 076

## REPORTING AND REGISTRATION PROCESSES FOR BIRTHS AND DEATHS

When a baby is born, a Notice of Live Birth form is issued by Health staff (or Public Health Nurse or Community Health staff if birth occurs outside of hospital) and recorded in the Reproductive Health Nurse register at the hospital. The birth notification form is used to issue a Certificate of Live Birth. Triplicate copies of the certificate are produced. The original copy is given to the family of the baby to present to the Civil Registry to register their child's birth. The duplicate is used for data entry into the MOH live births database. The triplicate is kept in the Live Birth Certificate Book.

When a death occurs in a hospital, a medical certificate of cause-of-death should be completed and signed off by the attending doctor. When a death occurs outside of hospital and notified to a Public Health Nurse or Community Health staff (without a doctor or health officer present), a Notice of Death form is issued. This notification must be signed by the resident Town Officer before a medical death certificate can be completed.

Duplicate copies of the medical death certificate are produced. The original certificate is given to the family of the deceased to present to the Civil Registry to register the death. The duplicate is used for cause-of-death coding and data entry into the hospital's Health Information System. A copy of the coded certificate is used for data entry into the MOH death database.

#### SUMMARY OF INDICATORS

Indicators (Unit)	2018-2020			
Fertility				
Total birth	6,069			
Average number of births	2,023			
Sex ratio at birth (male live births per 100 female live births)	110.2			
Total fertility rate (per woman)	3.1			
Crude birth rate (per 1,000 population)	19.7			
Adolescent birth rate (per 1,000 adolescent population)	29.1			
Mortality				
Total death	1,758			
Average number of deaths	586			
Crude death rate (per 1,000 population)	5.7			
Neonatal mortality rate (per 1,000 live births)	Not available			
Infant mortality rate (per 1,000 live births)	2.6			
Under-5 mortality rate (per 1,000 live births)	5.0			
Life expectancy at birth (both sexes) (years)	70			
Life expectancy at birth (male) (years)	68.2			
Life expectancy at birth (female) (years)	71.9			
Cause of death Probability of dying (%) from major non-communicable diseases between ages 30–70 years				
Male	19.4			
Female	10.8			

The accuracy of these estimates in the present report are affected by data availability constraints. Estimates of maternal mortality and neonatal mortality were unable to be calculated. The analysis of the cause of death is limited by the quality of certification and coding. See the full report. Next report will include more complete data for all years and from all available sources, and cause of death data assessed for quality issues.

#### © Pacific Community (SPC) 2023

All rights for commercial/for profit reproduction or translation, in any form, reserved. SPC authorises the partial reproduction or translation of this material for scientific, educational or research purposes, provided that SPC and the source document are properly acknowledged. Permission to reproduce the document and/or translate in whole, in any form, whether for commercial/for profit or non-profit purposes, must be requested in writing. Original SPC artwork may not be altered or separately published without permission.

Disclaimer: While efforts have been made to ensure the accuracy and reliability of the material contained in this report, SPC cannot guarantee that the information is free from errors and omissions, and does not accept any liability, contractual or otherwise, for the content of this report or any consequences arising from its use.