

Infant and Child Mortality



Infant and child mortality data are important not only for demographic assessment but also for design and evaluation of health programs and policies. Primary and preventative health services target improving the quality of life for the Tuvaluan people; this includes the reduction of infant and childhood mortality and the incidence of high risk pregnancies.

Neonatal mortality	- the probability of dying within the first month of life
Infant mortality	- the probability of dying before the first birthday
Under-five mortality	- the probability of dying before the fifth birthday

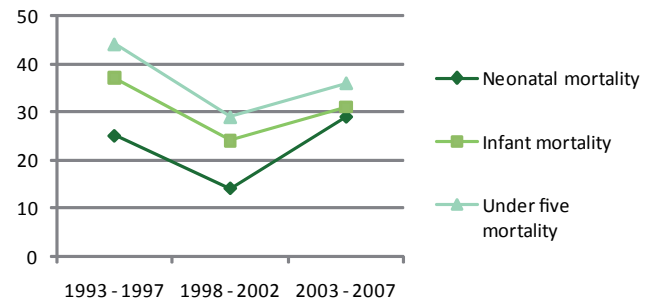
For the period measured during the Tuvalu 2007 DHS, the infant mortality rate was 31 deaths per 1000 live births. This means that around 3 in every 100 children born in Tuvalu do not live until their first birthday. Of those who survive until their first birthday, 5 out of 1000 will die before reaching their fifth birthday. This results in an under-five mortality rate of 36 deaths per 1000 live births.

The trends in childhood mortality show a worsening situation from 2003-2007 compared with 1998-2003, when childhood mortality rates had improved significantly compared to the 1992-1997 period. The 2003-2007 increase in childhood mortality rates is noticeable across each of the different measures (neonatal, infant and under-five mortality), and is particularly pronounced for neonatal mortality with a neonatal mortality rate of 29 per 1000 in the period 2003-2007, compared with 14 per 1000 for 1998-2002. Only post-neonatal mortality has constantly declined during the 15 years prior to the Tuvalu 2007 DHS.

As in neighbouring Nauru, when the estimates from the 2007 Tuvalu DHS are compared with the vital registration system in Tuvalu, there is a significant difference in mortality levels and trends. The vital registration system indicates a considerably higher rate of early age mortality than the 2007 Tuvalu DHS for the period 1997-2002, of 35. This discrepancy highlights that great care must be taken when interpreting the survey results, especially given the low number of respondents and the scope

for sampling errors with a small number of childhood deaths. Having said this, and with the results providing an underestimate of infant and child mortality compared to indications from the vital registration system, the bottom line is the situation has worsened in recent years.

Childhood mortality trends

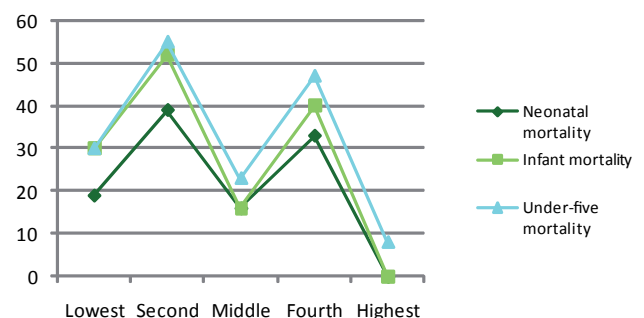


Childhood mortality by socio-economic characteristics

There is a strong correlation between the level of a mother's education and a child's chances of survival. The survey results indicate that Tuvalu follows this trend with an infant mortality rate of 29 for children whose mothers have a secondary education, compared with 40 for the children of women with less than a secondary education.

Although childhood mortality rates tend to decline as wealth quintiles increase, this trend is not strictly observed in the Tuvalu 2007 DHS. Children in the second and fourth quintile have higher mortality rates than those in the lowest and middle quintiles. This observation may be contributed to the small sample size, the 2007 Tuvalu DHS collected birth histories from 915 women.

Mortality by wealth quintile

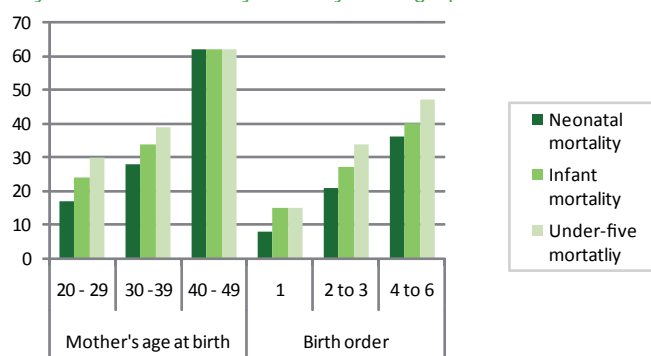




Childhood mortality by demographic characteristics

The hypothesis of 'too early and too late increases child mortality' appears to hold true to a certain extent in Tuvalu. Although the small sample size meant the 'too early' (generally mothers younger than 20 years of age) hypothesis could not be tested, the mortality rate for children born to mothers older than 40 years of age was about twice as high as the mortality rate for the children of younger mothers.

Early childhood mortality rates by demographic characteristics

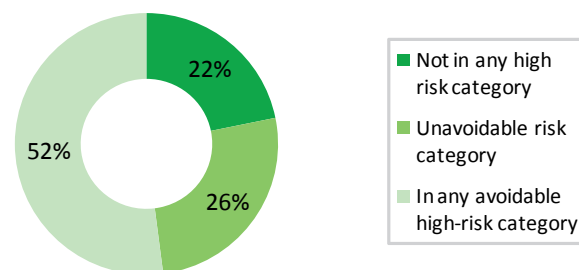


High risk fertility behaviour

Generally, infants and children have a greater probability of dying if they are: born to mothers who are too old (over 34 years) or too young (under 18 years), born after a short birth interval (<24 months after a previous birth), or of high birth order (i.e. the mother has previously given birth to three or more children).

Only 22% of births in Tuvalu were not in any high-risk category. An additional 26% of births are first order births to mothers aged 18-34, which is considered an unavoidable risk category. The remaining 52% of births are in at least one of the specified avoidable high-risk categories. About one third of births are in only one of the high risk categories, while almost one quarter are in multiple risk categories. The births with multiple risk categories tend to combine a mother older than 34 years of age with a birth order higher than three.

High risk births



Policy note:

Infant and child mortality show a trend reversal over the past 5 five years, showing slight increases since 1998-2002. Of particular concern is the doubling in neo-natal mortality, from 14/1000 live births to 29/1000 over the past 5 years, which accounts for almost the entire infant mortality of 31/1000.

The fact that only 2 in 10 births in Tuvalu were not in any high risk category would provide some explanation, yet the low post-partum reproductive care figures referred to elsewhere seem to point to broader neo-natal health care challenges in Tuvalu. Given the small number of births per annum, improvements in the management of neonatal and post-partum health care could yield significant improvements to the health of mothers and the lives of their children.

* For more information on infant and child mortality see chapter 8 in the Tuvalu 2007 DHS report

