# Nosology and mortality patterns of tuberculosis in Tasmania, 1860-1930

# Rebecca Kippen and Isabelle Cherkesly

### **Monash University**

For much of the nineteenth century, it was widely held that those born and raised in the Australasian colonies were immune to tuberculosis. However by 1900, tuberculosis was recognised as the greatest single cause of death in Australasia—killing many young adults in their prime. In late nineteenth-century Tasmania, tuberculosis mortality peaked at ages 25–34 years for both sexes, while age-standardised mortality declined over time. This paper investigates the change in cause-of-death terminology used to describe tuberculosis, from consumption, to phthisis, to tuberculosis, and patterns of tuberculosis mortality over time. This analysis is based on a dataset of more than 100,000 individual-level Tasmanian death registrations.

# Introduction

At the end of the nineteenth century, the Health Officer for Tasmania's capital, Hobart, noted that tuberculosis was 'the greatest single cause of death...in Australasia' (Sprott 1896), and that it produced

more suffering to humanity than any other known disease at the present time...It is indeed appalling to see so many of our young men and women cut off in the prime of man or womanhood...those who are not doomed to a speedy death are frequently chronic invalids (Sprott 1896).

In late nineteenth- and early-twentieth-century Tasmania, as elsewhere, tuberculosis was largely a disease of young adults. Over the period 1860–1930, tuberculosis was responsible for more than 20 per cent of deaths occurring at ages 15–34 years, and killed at least one in 30 people before their 35th birthday. Many more Tasmanians were permanently incapacitated by the disease.

Although the aetiology of tuberculosis was not well understood until the twentieth century, nineteenth-century observers recognised that the characteristic 'morbid deposits' of tuberculosis, wherever they manifested in the body, indicated a common disease process, if not a common. The various forms of tuberculosis commonly recorded as causes of death in Tasmania's death registers were pulmonary tuberculosis, scrofula, tabes mesenterica, tubercular enteritis, tubercular meningitis and other non-pulmonary forms of tuberculosis.

In this study we discuss the cause-of-death terms used for tuberculosis in Tasmania, outline tuberculosis mortality trends, and conclude with an investigation of the accuracy of late nineteenth-century and early-twentieth-century tuberculosis mortality statistics.

### Data and method

The main data for this study are drawn from individual-level death registrations for Tasmania. In 1803, Britain established a penal colony on the island of Van Diemen's Land (now Tasmania, a state of Australia). In 1838, the Lieutenant-Governor of Van Diemen's Land instituted compulsory civil registration of births, deaths and marriages for the island—one year after its introduction in England and Wales.

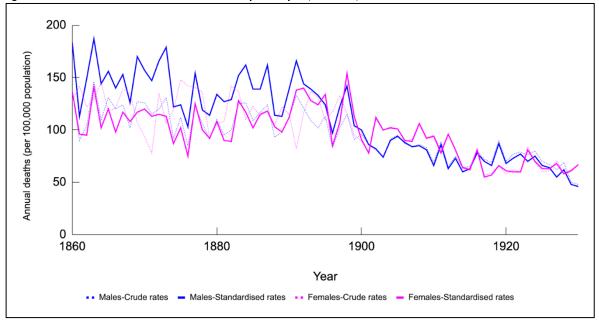
The death registers from 1838 to 1930, containing information on more than 150 thousand deaths, have been fully transcribed under successive grants from the Australian Research Council. These death registers include name, age, sex and occupation of the deceased; date and cause of death; and date and district of registration. From 1895, the registers also contained information on birthplace and place of death, certifying medical practitioner, and date and place of autopsy (where relevant).

Deaths due to pulmonary tuberculosis and other forms of tuberculosis were classified using ICD10h (Reid et al 2024)—a historical cause-of-death coding system based on the International Classification of Diseases, 10th Revision (ICD-10).

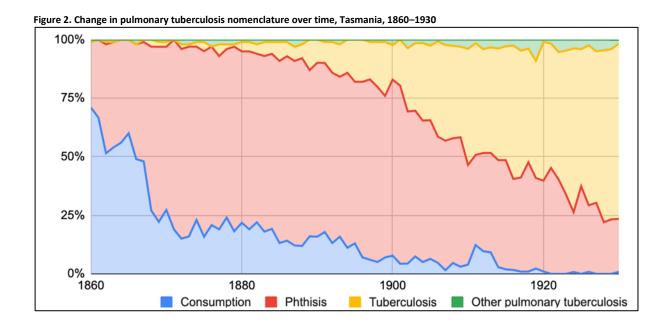
Annual age-sex-specific tuberculosis mortality rates were calculated using the death data, and population data from the Tasmanian censuses from 1861.

### **Results**





a. Standardised to the age structure of the 1901 Tasmanian population.



### References

Alice Reid, Eilidh Garret, Maria Hiltunen Maltesdotter, Mayra Murkens 2024. *ICD10h: Historic Cause of Death Coding and Classification Scheme for Individual-level Causes of Death—Manual.* 

Gregory Sprott 1896. 'Tuberculosis', Papers and Proceedings of the Royal Society of Tasmania, 45–68.