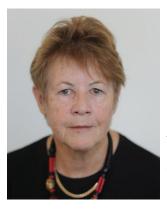
# A history of human quarantine in Australia: settlement to 1980



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Abstract. Quarantine has been widely used for infection control in Australia since the time of settlement by Europeans. The history of human quarantine stations in Australia is discussed briefly here.

During the plague (black death) of the 14th century various Italian states set out rules to protect their subjects. The Duke of Lombardy ordered that no person should be allowed to enter his kingdom from any infected place under the penalty of the yoke<sup>1</sup>, thus beginning the practice of quarantine.

Before the development of modern medicine, infectious diseases posed a major public health threat. The only means of protecting communities from outbreaks of infectious diseases such as typhus fever, cholera and smallpox was by isolating sufferers and those with whom they had been in contact<sup>1</sup>.

The first definite step towards the differentiation of aetiological factors was the differentiation between typhus and enteric fevers (particularly typhoid fever). The bacteria involved are *Salmonella* Typhi causing typhoid and *Rickettsiae* causing typhus. This differentiation of typhus from typhoid was not adopted in official nosology in Australia until 1869<sup>2</sup>. Prior to 1869, typhus was used to describe both fevers.

In 1825 Britain passed comprehensive laws to protect the people against such diseases as plague, cholera, and yellow fever. The British Quarantine Act shaped early Australian quarantine principles. The first Quarantine Act passed in 1832 in New South Wales was to protect the health of the new colony.

The gold discoveries of the early 1850s and the consequent mass migration forced authorities to take more strenuous action to protect public health. With the opening of the Suez Canal in 1869, passage from Europe to Australia became a shorter journey, thus putting at risk the country's isolation from disease. Typhus/typhoid and smallpox were common on immigrant ships and each Colony brought in legislation over a number of years in an attempt to control the spread of disease. In 1908 the Commonwealth Department of Health took over the responsibility for all quarantine in Australia<sup>1</sup> (Commonwealth Quarantine Act 1908).

In 1918–19 a serious attempt was made to protect Australia from pandemic influenza by quarantine, and the disease was excluded for a few months. When it did arrive, early 1919, the cases were less severe and the outbreak less extensive than in countries in which the disease had arrived during the 'first wave in 1918'<sup>3</sup>.

A new Department of Health was created in 1921. The Director of Quarantine, John Howard Lidgett Cumpston became Director-General of Health<sup>3</sup>.

Methods of quarantine have evolved to meet the needs of the current society. Factors such as infection control, antibiotics, clean water, sewage control, and vaccination have led to much greater control of infectious diseases in the community. Many hospitals have their own quarantine facilities and recently hotels have been used for quarantine. However, the same principles of quarantine, relevant in the past, are still relevant in 2020 COVID-19 pandemic.

#### **New South Wales**

In February 1833, North Head on Port Jackson near the Sydney settlement was reserved for quarantine purposes. In fact, it was first used in 1828 for the landing of convicts and guards from the ship *Bussorah Merchant* on which there had been a smallpox outbreak during the voyage. Work on the construction of a quarantine station commenced in October 1837<sup>4</sup>. Thus, the first permanent Australian quarantine station was established at North Head. It closed in 1984<sup>4</sup>. Non-compliance with the system of self-reporting led to the passage of the Quarantine Act in 1832, which made it mandatory for all ships to fully disclose diseases and authorised the establishment of places for the purpose of

quarantine<sup>4</sup>. The growing number of commercial vessels entering Port Jackson from the 1830s, together with large-scale assisted immigration, made quarantine by proclamation increasingly difficult to enforce. Between 1837 and 1840 some 30 000 free immigrants arrived in NSW.

#### **Victoria**

When the boat *Glen Huntley* entered Hobson's Bay on 17 April 1840 flying the yellow flag, indicating contagion on board, port authorities ordered it to anchor off Red Bluff (now Point Ormond). This was the site of the first quarantine station in Victoria.

The Point Nepean Quarantine Station, established in 1852, was the major place for quarantine services until 1979. It was closed in 1980. This site was used by the army as Officer Cadet School from 1952–85 and as the School of Health from 1985–98<sup>1</sup>.

In 1889 Dan Astley Gresswell was appointed medical inspector of new Victorian Board of Public Health and in 1896 he initiated and chaired the first of the intercolonial quarantine conferences.

Influenza first appeared in Australian troops in France in 1918. Although widespread, it was initially mild, but when it recurred in October it was in a much more severe form. The second wave was due to reach Australia, and did in fact reach her nearest neighbours during the first stages of the repatriation of the Australian Imperial Forces. Cumpston, the Australian Director of Quarantine, decided to exclude the disease from Australia by quarantine. From 1918 to April 1919 the quarantine service dealt with 149 uninfected and 174 infected vessels. Pandemic influenza occurred in some of the ships detained in quarantine, but for some months there was no escape from them to the shore population. When influenza did occur in Melbourne in January 1919, and subsequently in all other states it was milder than the disease experienced elsewhere in the world<sup>3</sup>.

## **Tasmania**

As a result of the first all-colony conference on public health in Sydney in 1884, Tasmanian action resulted in the establishment of a quarantine station at Barnes Bay, Bruny Island<sup>5</sup>. The most intensive and significant usage of the Barnes Bay Station was during and after World War 1, first, as an internment camp for 'enemy aliens' in 1914, and second, as a quarantine station for returning service personnel and travellers during the world influenza pandemic of 1917–19<sup>5</sup>. By October 1939 the quarantine station was not required and eventually the Barnes Bay quarantine site was abandoned as a human quarantine station.

### **South Australia**

The establishment of a quarantine station on Torrens Island was first proposed in 1850 and its location at the mouth of Adelaide's Port River isolated from the main settlement made it an ideal location. Torrens Island officially became a quarantine station in 1879 and was used to quarantine passengers from the 1880s to the 1960s<sup>6</sup>. Since European settlement in Adelaide in 1836 it has been used for a number of purposes: a quarantine station, an internment camp, a power station, a protected areas and for military use.

#### **Western Australia**

Woodman Point, on a headland located in Munster (South Fremantle) was being used for the quarantining of people and of cargo as far back as the 1830s. However, it was not until 1885 that a tender for a quarantine station at Woodman Point was agreed on and the first building was completed in 1886. The facility continued to be used as a quarantine station until about 1979 when it closed<sup>7</sup>.

## Queensland

There were no human quarantine facilities at Moreton Bay during the penal era of 1824–42 as all immigration came via Sydney. Following the opening of the district to free settlement in February 1842, a quarantine station was established at Dunwich on North Stradbroke Island, a site of the former goods transfer depot established by convicts in the late 1820s. From 1864, Dunwich served as both quarantine station and benevolent asylum. The quarantine station was relocated briefly to St Helena Island in Moreton Bay in 1866–67 but was soon returned to Dunwich. From 1874–1915 Peel Island in Moreton Bay served as Brisbane's human quarantine station. Between 1873 and 1896 many ships were quarantined at Peel Island<sup>8</sup>.

In the 1880s a quarantine station was established at West Point on Magnetic Island. Because of the severe cyclones, *Sigma* in 1896 and *Leonta* in 1903, and owing to a lack of water and the difficulty of the distance from the mainland, the government decided to build an alternative station on the mainland. This station was used particularly during the influenza epidemic in 1919 and during sporadic outbreaks of bubonic plague that occurred until the early 1920s.

A new quarantine station was established at Pallarenda in 1915 and closed in the 1970s<sup>9</sup>. The Lytton Quarantine Station<sup>8</sup> was established in 1913–14, to accommodate newly arrived immigrants and persons considered to be at risk of causing infection to the general public. Situated at an isolated location at the mouth of the Brisbane River. It is important as part of a continuum of sites in and adjacent to Moreton Bay and was used for

quarantine purposes from 1844. By the late 1980s the Lytton facility had closed completely.

## **Northern Territory**

Channel Island in Darwin Harbor is connected to the mainland by a bridge. A quarantine station was erected on Channel Island in 1914. This site was used during the influenza pandemic of 1918–19. In 1930 a new quarantine station was opened at East Arm (on the mainland) and the Channel Island site was converted into a Leprosarium.

#### Conclusion

Increased human population, human travel, humans taking over animal habitats and climate change have all contributed to the speed at which micro-organisms spread around the world via humans, animals and foodstuffs. The issue of quarantine is just as relevant today as it was in the past. The past informs the future.

### **Conflicts of interest**

The author declares no conflicts of interest.

## **Acknowledgements**

This research did not receive any specific funding.

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## **Biography**

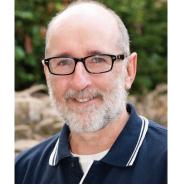
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# The 1918 Spanish influenza pandemic: plus ça change, plus c'est la même chose



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Abstract. Towards the end of world war one, the world faced a pandemic, caused not by smallpox or bubonic plague, but by an influenza A virus. The 1918–19 influenza pandemic was possibly the worst single natural disaster of

all time, infecting an estimated 500 million people, or one third of the world population and killing between 20 and 100 million people in just over one year. The impact of the virus may have influenced the outcome of the first world war