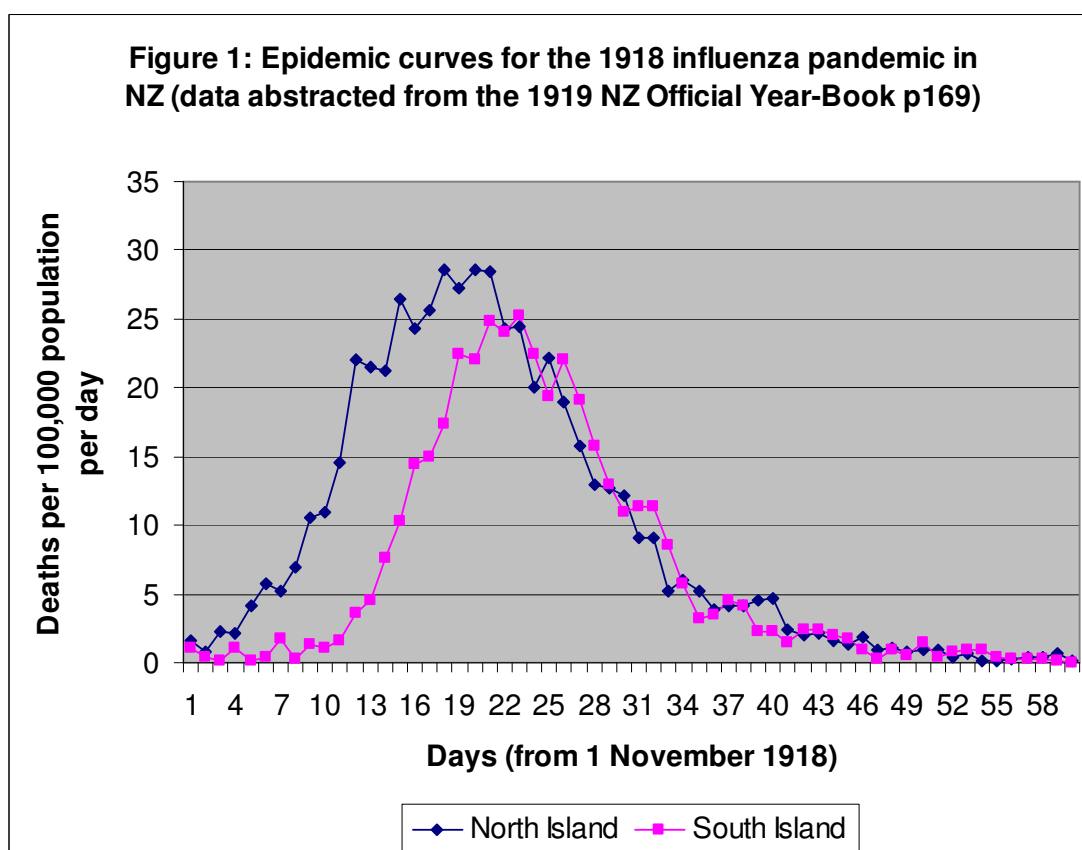


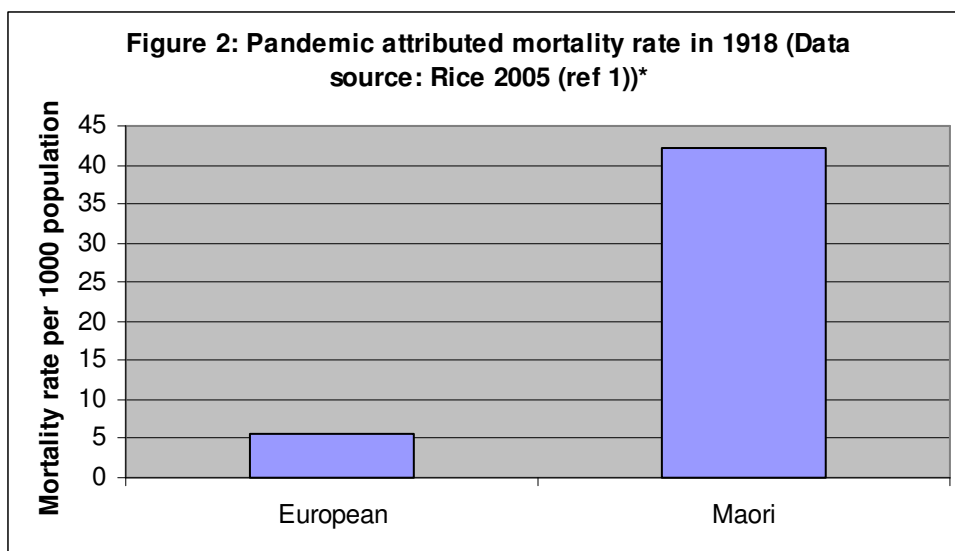


Ninety years on: what we still need to learn from “Black November” 1918 about pandemic influenza

The 1918 influenza pandemic remains the worst single human health disaster in recorded New Zealand history. Here we take the opportunity of the 90th anniversary of this epidemic to summarise the impact of this event and the need for further research.

The second wave of the pandemic probably arrived in New Zealand in October 1918 and peaked in mid-November in the North Island, leading the South Island by about a week (Figure 1). There were over 8000 deaths.¹ Māori were particularly hard hit with a mortality rate at least seven times that of Europeans (Figure 2).





* Hundreds of probable pandemic-influenza-related deaths amongst New Zealand military personnel overseas (First World War in Europe) are not included in these rates (with work on clarifying this mortality currently underway by us). Nevertheless, these rates more accurately reflect the total disease burden than the Year Book data in Figure 1 (which was based on only 5516 pandemic-attributed deaths).

As influenza pandemics are infrequent (at around three per century or fewer), we need to look carefully at this event to extract all possible lessons. Furthermore, understanding this disaster may inform societal preparations for future disasters such as those associated with climate change or other events.²

In a recent editorial we argued that as part of a research agenda on pandemic influenza we need to learn more about the epidemiology of this pandemic in New Zealand.³ This research work needs to build on previous work by historians,^{1,4,5} demographers,⁶ and public health workers.⁷⁻¹¹ But many other gaps remain as we suggest in Table 1.

Table 1: Research domains that continue to need development with regard to the 1918 influenza pandemic in New Zealand

Research domain	Plausible research funders	Comment
Epidemiology	Health Research Council (HRC), Ministry of Health (MoH)	As detailed elsewhere, ³ there are knowledge gaps around the mortality differentials by ethnicity and socioeconomic position (for civilians and military personnel). The epidemiology of the disease in military camps and troop ships is also largely unexplored. Factors contributing to lower mortality rates in some communities could be investigated, as has been done elsewhere. ¹²
Māori history	Te Puni Kōkiri, Department of Internal Affairs, Marsden Fund	A Māori perspective on the impact and response to the 1918 pandemic is important given the very much larger mortality rates documented for Māori (Figure 1). ^{1,6}
Social history	Department of Internal Affairs, Marsden Fund	Some high quality work has been done (e.g. by Rice ¹ and others) so the next step is probably a review that integrates all the work to date. Such a review could incorporate work from unpublished theses (listed by Rice ¹) and local histories e.g. for Wellington. ¹³

Research domain	Plausible research funders	Comment
Military history	Department of Internal Affairs, Ministry of Defence, Marsden Fund	The pandemic influenza experience of the NZ Expeditionary Force has never been described in detail. A good model for such a study has recently been provided by a US-based historian. ¹⁴
Disaster sociology/ psychology	HRC, MoH, Marsden Fund	No sociologist or social psychologist has published anything on this pandemic disaster in New Zealand.

We hope that, by the time of the 100th anniversary of this pandemic, New Zealand research funders will have supported new work on this important topic. We also hope that New Zealand society will have a much deeper understanding of this disaster and that more of its lessons can be built into emergency plans and preparedness infrastructure.

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