



TE RAU ORA

Strengthening Māori Health and Well-Being

Annotated Bibliography

This annotated bibliography was compiled (April 2020) by Te Rau Ora to provide insights from the literature about the impacts of natural and pandemic events upon Māori and Indigenous peoples. We ask you to reflect on these to provide encouragement in how we respond and recover from COVID 19.

1. Phibbs, S., Kenney, C., & Solomon, M. (2015). Ngā Mōwaho: an analysis of Māori responses to the Christchurch earthquakes. *Kōtuitui: New Zealand Journal of Social Sciences Online*, 10(2), 72-82, DOI: [10.1080/1177083X.2015.1066401](https://doi.org/10.1080/1177083X.2015.1066401)

A qualitative research project, in partnership with Te Rūnanga o Ngāi Tahu conducted with 70 Māori community members explored Māori cultural factors that facilitated disaster risk reduction and management in response to the Christchurch earthquakes. The prompt and effective Māori response to the earthquakes in Christchurch was recognised by the United Nations as an exemplar of community-led disaster risk management. Key successes Māori participants experienced after the earthquakes included increased engagement and collaboration between iwi, local authorities and government.

Māori participants did experience a range of issues after the earthquakes, including, delayed coordination between Māori agencies and emergency services, difficulties in securing representation in agencies charged with emergency preparedness and

response planning. A lack of Māori representation within national and local emergency management agencies which meant Māori community needs, cultural sensitivities, capacity and capability were overlooked in emergency preparedness planning and in the response.

Phibbs, Kenney & Solomon (2015) evidence a values-based approach to national disaster preparedness planning, drawing on traditional Māori knowledge and practices. They express these have relevance for Māori whānau, hapu and iwi and will enhance existing disaster risk reduction capabilities. More work is needed to ensure disaster risk management is inclusive of ethnic differences and integrates cultural strengths into policy and planning at the local, national and international levels.

2. Five Māori female community leaders volunteer to reduce earthquake impact on elderly residents in Eastern Christchurch. In UNISDR (Ed). *Women's Leadership in Risk-Resilient Development* (pp. 65-70). *Bangkok: United Nations Office for Disaster Risk Reduction cited in Māori Health Review* (63) 2016.

Christine Kenney discusses the value of Kaupapa Māori based approaches in addressing disaster recovery and reflects on the Māori led responses that occurred in the Canterbury earthquakes. The approaches were characterised by collaborative accountability, authority, agency, and actions within a Māori paradigm. Kenney states evidence proved that a hierarchically-structured 'command and control' approach to facilitating community recovery was ineffective for Māori.

The focus of this work is upon Māori elders who resided in Canterbury, who experienced significant health and mobility issues, consequently, were marginalised,

due to isolation and unsafe homes. Access to appropriate and culturally acceptable health services were limited. Consequently, Māori elders experienced increased rates of illness and a corresponding deterioration in their psychosocial wellbeing.

Five Māori women with community leadership and service expertise collaborated to develop a community-led initiative called 'Kaumātua Day', in order to facilitate psychosocial and material support for elderly Māori living in the eastern suburbs. The objectives were to reduce social isolation, foster social connectedness, facilitate access to essential goods and to help meet their social and health needs. The successes of the initiative included a Māori collectivised approach, the enactment of traditional cultural values and practices that helped minimise and manage the health risks of elderly Māori.

3. Kenney, C., & Phibbs, S. (2014). Shakes, rattles and rollouts: The untold story of Māori engagement with community recovery, social resilience and urban sustainability in Christchurch, *New Zealand. Procedia Economics and Finance*, 18, 754-762, [https://doi.org/10.1016/S2212-5671\(14\)00999-X](https://doi.org/10.1016/S2212-5671(14)00999-X)

Kenney & Phibbs (2014) conference paper presents on their Māori community-based participatory research project of Māori responses to the Christchurch earthquakes. Their qualitative research builds the evidence base for Māori cultural technologies, their application and sustenance for Māori resilience, and community recovery.

Māori cultural technologies of kotahitanga; whānau; whakapapa; whanaungatanga; marae; manaakitanga and kaitiakitanga informed many of the responses. For example; Māori established a Māori Recovery Network to ensure the response was inclusive of and accessible to diverse communities; their actions were based in Māori values and practices to support community resilience and ensure Māori involvement in the

recovery phase; they linked agencies and welfare support to people; they bridged social capital to people in crisis; designated recovery assistance centres; set up a 24-hour telephone line; implemented door to door outreach visits; created additional virtual communication tools and support networks; ensured people had access to essential supplies; health, food, water, clothing; shelter and ablutions. Post-earthquakes, the recovery phase has been important for Māori strategies to build resilience and their futures by fostering wealth creation, employment, education, housing and wellbeing. In drawing upon this evidence base, it is important to integrate Māori resources and cultural strengths into pre-disaster planning and emergency response strategies locally and nationally.

4. Lambert, S., Mark-Shadbolt, M., Ataria, J., & Black, A. (2012). Indigenous resilience through urban disaster: the Maori response to the 2010 and 2011 Christchurch Otautahi earthquakes. *Proceedings of the International Indigenous Development Research Conference*, (2012 June 27-30), *Auckland University*, 234-240.

An overview of two projects, the first project involved semi-structured interviews with ten Māori who provided immediate response whilst in the central business district on the day of the Christchurch earthquake. The second project focused on whānau resilience. Key findings identify the response and recovery of Māori who displayed strength and resilience informed by Māori cultural values and skills. The institutions of whānau, marae and iwi provided immediate assistance to all people as manifested by the values of whanaungatanga and manaakitanga.

Lambert et al. (2012) preferred not to locate resilience in a mainstream construct but to privilege Māori resilience as nuanced, place-based and culturally attuned. Whilst

also acknowledging Māori approaches to disaster responses and recovery will improve disaster preparation and post-disaster recoveries.

5. Lambert, S. J., & Mark-Shadbolt, M. (2012). Māori experiences and expressions of leadership through the Christchurch Otautahi earthquakes. *Proceedings of the International Indigenous Development Research Conference*, Auckland University 242-247.

The earthquakes of Christchurch had a serious and ongoing impact upon Māori through the response and recovery phases. Notably, Māori first responders put others first before their own wellbeing and whānau members. Also, a mobilisation of Māori providers and workforces focused on an all of community response.

Being unprepared for such a disaster, the type of leadership expected in response to the earthquakes were highly critical. Local Kaumatua who provided calm guidance were recognised for their leadership and provided common sense approaches when the diversification of cultural practices were necessary to ensure safety and the respect to tikanga. Conflicts did arise in the response as government and non- government organisational structures preceded Māori aspirations.

Lambert and Mark-Shadbolt (2012) believed the response and recovery phases required differing skillsets: In Response – Courage and Initiative were key, whereas in Recovery - Networking, Collaboration and Professional Managerial skills were required. The authors recommend in future disaster planning; there is a need to clarify how Māori responses will respond and coordinate among their own communities, and how they will work within the wider non-Māori response.

6. Webber, C. (2011). A Summary of Māori Issues for Disaster Recovery in the Environmental Health Field1. *Journal of Indigenous Wellbeing Te Mauri Pimatisiwin*, 9(1). 23.

Webber (2011) shares the outcomes of his master's degree study (Māori Environmental Health) to build the evidence base around Māori and disaster recovery. Webber (2011) states Māori are not engaged enough to generate in-depth responses to many technical aspects of disaster recovery and tend to be underrepresented and less likely to achieve equitable outcomes. Protocols for engagement must be followed by stakeholders and long-term relationships formed with Māori to develop responsiveness in this field.

A general lack of Māori involvement in related scientific and regulatory fields requires innovative use of available knowledge and tools. Webber's study identifies nine key themes distilled from his interviews: Doing a good job for Māori; Realities for Māori: Practical outcomes; Māori development; Māori preparedness; Protocols and approach; Māori viewpoint and thinking, Plain truths and the interface. From this data, Webber makes the following suggestions:

- Māori to develop and articulate their thinking and viewpoints about disaster scenarios and technical issues
- Māori to link their outcomes to Māori development aspirations
- Agencies to better understand Māori realities and the outcomes of doing a good job for Māori (both agency and Māori aspirations)
- Māori and agencies to develop the interface, including appropriate protocols and approach, whilst being real about the plain truths that need to be kept in mind in achieving outcomes.

- A Māori approach will involve current or contemporary Māori frameworks; tikanga, people, and environmental indicators along with evolving relationships of trust — inviting Māori engagement and better understanding between stakeholders.

Webber (2011) concludes by stating transformation lies in the maintenance of indigenous peoples and their own eternal truths and relationships, and the ability to marry these with the tools of today to make a difference for their communities.

7. Wilson, N., Barnard, L. T., Summers, J. A., Shanks, G. D., & Baker, M. G. (2012). Differential mortality rates by ethnicity in 3 influenza pandemics over a century, New Zealand. *Emerging infectious diseases*, 18(1), 71.

Influenza pandemics in 1918, 1957 and 2009 disproportionately affected Indigenous populations globally. Dr Nick Wilson and colleagues analysed the influenza data to understand the impact among Māori in New Zealand. They identified the mortality rates from the three pandemic influenza for Māori and non-Māori declined, possibly due to improved public health controls and health care over time, given the variation in virulence of different pandemic influenza viruses.

Yet persistently poorer health outcomes among Māori in the 2009 pandemic raised concern about persisting inequalities in major health risk factors and health outcomes when comparing Māori with non-Māori. Specifically, in the total Māori hospitalisation rates for infectious diseases which were consistently double those seen for non-Māori over the 20-year period of 1989–2008. Wilson et al. (2012) advocate for societal and public health actions to reduce known risk factors for influenza infection and the adverse health outcomes for Māori.

8. Verrall, A., Norton, K., Rooker, S., Dee, S., Olsen, L., Tan, C. E., ... & Blackmore, T. K. (2010). Hospitalisations for pandemic (H1N1) 2009 among Māori and Pacific Islanders, *New Zealand. Emerging infectious diseases*, 16(1), 100.

Dr Verrall and colleagues present the outcomes of a study where they analysed the data of patients confirmed with H1N1 who were admitted to public hospital beds in Wellington and Hutt Valley regions (2009). Testing for H1N1 began in April 2009, and local community transmission was detected in the Wellington region two months later. During June to August pandemic (H1N1), 2009 was identified in 229 hospitalised patients. Hospitalisations began in June, peaked in July, and then declined rapidly (notably during the winter months).

Their study showed Pasifika and Māori were seven and five times more likely, respectively than Pakeha to require hospital admission. However, the study did not address why the prevalence was higher in these two groups, as there were little evidence in this cohort of patients of pre-existing medical conditions and there was a lower rate of chronic respiratory conditions in Pacific Island peoples.

INDIGENOUS

9. Butler, J. C., Crengle, S., Cheek, J. E., Leach, A. J., Lennon, D., O'Brien, K. L., & Santosham, M. (2001). Emerging infectious diseases among indigenous peoples. *Emerging infectious diseases*, 7(3 Suppl), 554.

A conference panel of indigenous leaders shared perspectives of emerging infectious diseases of concern among first nation peoples of America, Alaska, Australia and Aotearoa. The emerging infectious diseases were diverse at the time (*e.g. respiratory tract infections, infections with antimicrobial-resistant organisms, zoonotic diseases, viral hepatitis, Helicobacter pylori and respiratory syncytial virus infections, diseases*

caused by Group A and B streptococcus, tuberculosis, and bacteremia and meningitis caused by Streptococcus pneumoniae, Haemophilus influenzae type b, and Neisseria meningitidis)

Though each indigenous nation were identified as being unique, the commonalities experienced amongst them included their high risk to emerging infectious diseases, the requirement for culturally appropriate prevention and control strategies, the need to increase leadership within communities of indigenous people and the critical role indigenous research, researchers and data sovereignty could play.

10. Yumagulova, L., Phibbs, S., Kenney, C. M., Yellow Old Woman-Munro, D., Christianson, A. C., McGee, T. K., & Whitehair, R. (2019). *The role of disaster volunteering in Indigenous communities. Environmental Hazards*, 1-18.

A collaborative article of indigenous case studies and practitioner experiences drawn from research and first-person accounts of Māori (Aotearoa), First Nations (Canada) and the Navajo Nation (U.S.A) explore the nature of volunteering in emergencies and disasters in their communities.

Yumagulova et al. (2019) identified indigenous volunteering gave people a sense of purpose and improved their mental wellbeing. In these cases, the disaster strengthened tribal bonds and reinforced cultural traditions associated with co-operation and inclusion.

Response capacity was raised in terms of the immediate response functions (evacuations, dealing with the injured, and providing for basic needs). Often the early responses were carried out by people closest to the disaster, given it may take time before professional emergency teams arrive, depending on the location of the disaster,

the extent of disruption to transport and communication and the capacity of organisations to respond.

The cultural enablers across these indigenous groups included building capacity during non-emergency times, using all senses when volunteering, and supporting locally emergent psychosocial recovery institutions based on cultural understanding and trust.

However, tensions between non-Indigenous and Indigenous disaster response and recovery systems were common. More coordinated systems-oriented disaster preparedness and responses built on indigenous values and institutions were called for. Resolving systemic barriers to volunteering would require institutional and organisational changes through governance, coordination and training. With practical recommendations to include building and supporting volunteer management led by and in Indigenous communities.

11. Massey, P., Miller, A., Durrheim, D., Speare, R., Siggers, S., & Eastwood, K. (2009). Pandemic influenza containment and the cultural and social context of Indigenous communities.

A letter to the Editor of the International electronic journal of rural and remote health research, education, practice and policy in response to the World Health Organisations direction to prepare for future influenza pandemics. Australian authors Massey et al. (2009) recognised an increased risk of influenza to Indigenous Australians and advocated for their leadership to inform pandemic strategies. From a review of national pandemic plans in Australia and discussions with indigenous leaders, Massey et al. (2009) found social and economic needs of disadvantaged communities were not addressed.

Concerns arose about infection disease practices used historically (*e.g. isolation, incarceration, government surveillance, containment and control measures*) had provoked fear amongst indigenous communities. Overall if these approaches were implemented again, it could provoke passive and active resistance to government policies. Recommendations made to public health professionals were to work in genuine and respectful partnerships with indigenous communities to ensure practices are culturally appropriate and acceptable. In addition, to affirming indigenous communities and organisations will have aspirations for self-determination and action. If there is an enforced non-indigenous model of containment applied in future pandemics, the consequences will be dire for indigenous people.

12. Flint, S. M., Davis, J. S., Su, J. Y., Oliver-Landry, E. P., Rogers, B. A., Goldstein, A., & Goldrick, P. (2010). Disproportionate impact of pandemic (H1N1) 2009 influenza on Indigenous people in the Top End of Australia's Northern Territory. *Medical Journal of Australia*, 192(10), 617-622.

Northern Territory of Australia is remote (477,000 m²) with a widely dispersed population and 26.5% residents who identify as indigenous. In an analyses of influenza notifications of patients admitted through an emergency department or admitted with H1N1 to a main hospital and intensive care unit (ICU) in a three month period identified 918 H1N1 notifications. The rates of notification, hospital admission and ICU admission were three and half times, 12 times and five times higher, respectively for indigenous peoples than for the non-Indigenous population. A markedly higher rate amongst indigenous patients was also identified in comparison to non-Indigenous patients (269 per 100 000 versus 29 per 100 000).

Some of the differences in the cohort between indigenous and non-indigenous patients included indigenous patients more likely to live remotely, to be younger, cigarette smokers and consumers of alcohol. They also had lower haemoglobin and serum albumin levels and higher white cell counts and C-reactive protein levels than non-Indigenous patients. The findings have implications for planning hospital and ICU capacity during an influenza pandemic in remote regions where large numbers of indigenous populations reside. It also reinforces the need for preventive measures such as influenza vaccinations for indigenous populations.

13. Richardson, K. L., Driedger, M. S., Pizzi, N. J., Wu, J., & Moghadas, S. M. (2012). Indigenous populations health protection: a Canadian perspective. *BMC Public Health*, 12(1), 1098.

Following the disproportionate effects of 2009 H1N1 pandemic on first nation peoples of Canada. A two-day public health workshop on Indigenous Populations Health Protection was held with indigenous leaders, organisations, policy decision-makers and researchers. The workshop focused on public health responses, health determinants and differential effects of intervention strategies to first nation peoples. Richardson et al. (2012) present the outcomes of the public health workshop that discussed complex health challenges such as; poor social determinants and limited access to healthcare, medicines and treatment. Also, highlighting information of health protection and promotion issues for first nations communities. The recommendations included active engagement with first nation communities; building upon existing partnerships within the research community to create new collaborative links with first nation health organisations.

Topics	Recommendations
Determinants of health	<ul style="list-style-type: none"> – Develop educational programs to eliminate cross-cultural barriers (e.g., language training). – Review and evaluate the impact of public health decisions on health inequalities. – Develop policies and programs to address homelessness beyond responses to emerging crises
Healthcare access, program development, and delivery	<ul style="list-style-type: none"> – Enhance collaborative multi-jurisdictional efforts. – Involve indigenous communities in the development of healthcare programs and delivery. – Deploy more resources (e.g., medical equipment and pharmaceutical measures) to remote regions and improve training of healthcare professionals. – Streamline public health surveillance systems across Canada to build more comprehensive databases
Vaccines	<ul style="list-style-type: none"> – Develop new vaccine candidates for helicobacter pylori and haemophilus influenza A
Antiviral drugs	<ul style="list-style-type: none"> – Evaluate antiviral strategies for emerging influenza viruses in remote and isolated communities. – Create formal structures for strategy development with oversight bodies and multi-stakeholder networks

Table 1. Summary of Workshop Topics and Recommendations. Adapted from Richardson et al. (2012).

Te Rau Ora: <https://terauora.com/our-work/public-health/coronavirus-covid-19/>

