

New Zealand's immunisation policy fails again and entrenches ethnic disparities

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New Zealand has a long history of failing to immunise and protect its children. The last national immunisation survey in 2005 showed overall immunisation rates of 77% at age two years.¹ It also revealed a significant ethnic disparity with overall Māori rates of 69% compared to European rates of 80%.

There was an effort to improve overall immunisation coverage rates when the then government made childhood immunisation one of six health targets in 2009.² It was hoped that using the National Immunisation Register to identify missed immunisations could raise immunisation coverage levels.³ There was much celebrating when the Māori and European immunisation coverage rates equalised at the two-year target (93%) in September 2014 (Figure 1).⁴ However, those who understood how this was achieved and looked at other time points remained concerned that these gains were illusory.

The increases in immunisation coverage rates at the two-year age that occurred from 2009 to 2014 were not achieved by addressing the previously underperforming system in primary care. Instead, they were achieved by having another separate district health board (DHB) immunisation register based system. The details of patients who did not have their immunisations on time at primary care were sent to the local DHB who then contacted these families to facilitate immunisation catch up. The process of reporting and immunisation catch up took time and the age six-months immunisation coverage levels provided a better indicator of how the immunisation delivery process was truly performing.

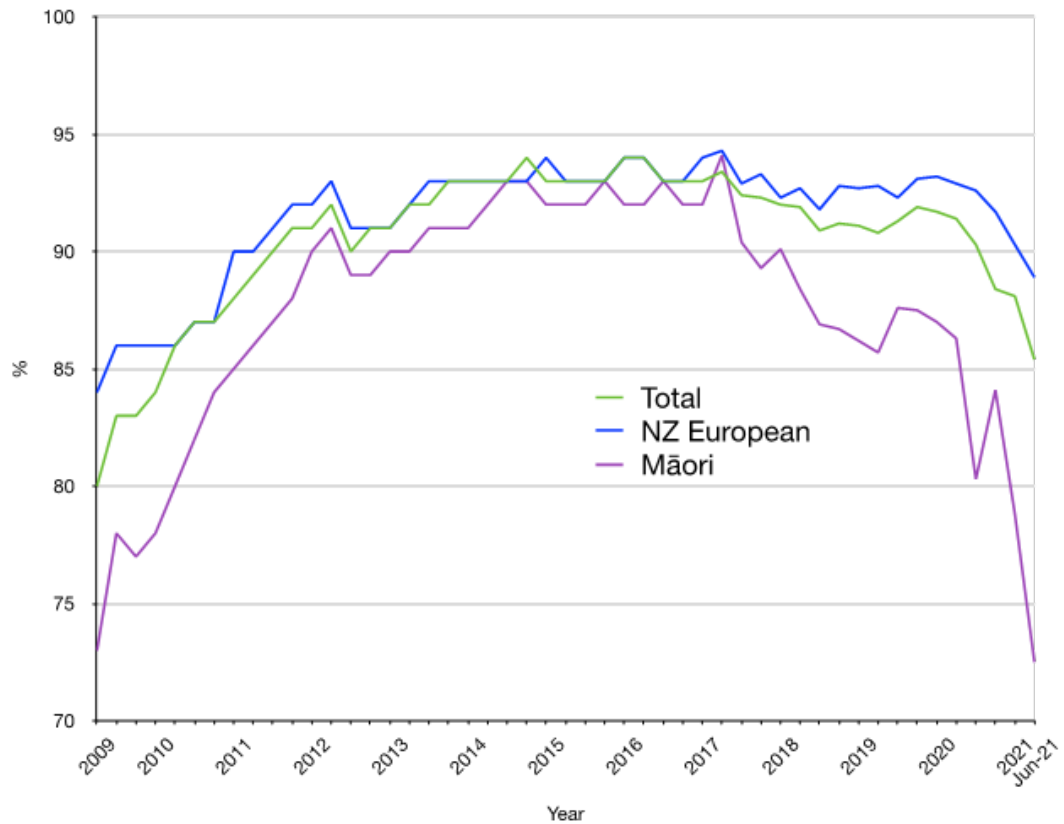
These age six-months immunisation coverage data show that immunisation

coverage levels at age six-months peaked at a meagre 85% for Europeans and that the ethnic gap in coverage between New Zealand European and Māori has never narrowed (Figure 2). Māori immunisation coverage rates at age six months peaked in 2015 at 71%. More disturbingly, the data show that, since 2017, immunisation coverage rates have been declining and the ethnic gap has been widening at all age points. The current age six-months immunisation percentage for Māori is a dire 54%.

From a population health perspective, the age two-years time point is much less relevant than the age six-months time point. The majority of serious and lethal vaccine preventable disease occurs in the very young. The age two-years time point also ignores the crucial element of timeliness of the primary infant immunisation series.^{5,6} Receiving the age six-weeks immunisation on time (which is not recorded in New Zealand) has significant disease prevention benefits to each young infant. Immunisations remain the premier medical intervention of all time.^{7,8} It has saved countless lives and has economic benefit surpassing any other medical intervention.^{9,10} The dangers of immunisation-preventable disease remain, pertussis epidemics still occur and measles is resurgent. Eighty-three Samoans, mainly children, died when measles was imported from New Zealand in 2019.¹¹⁻¹³

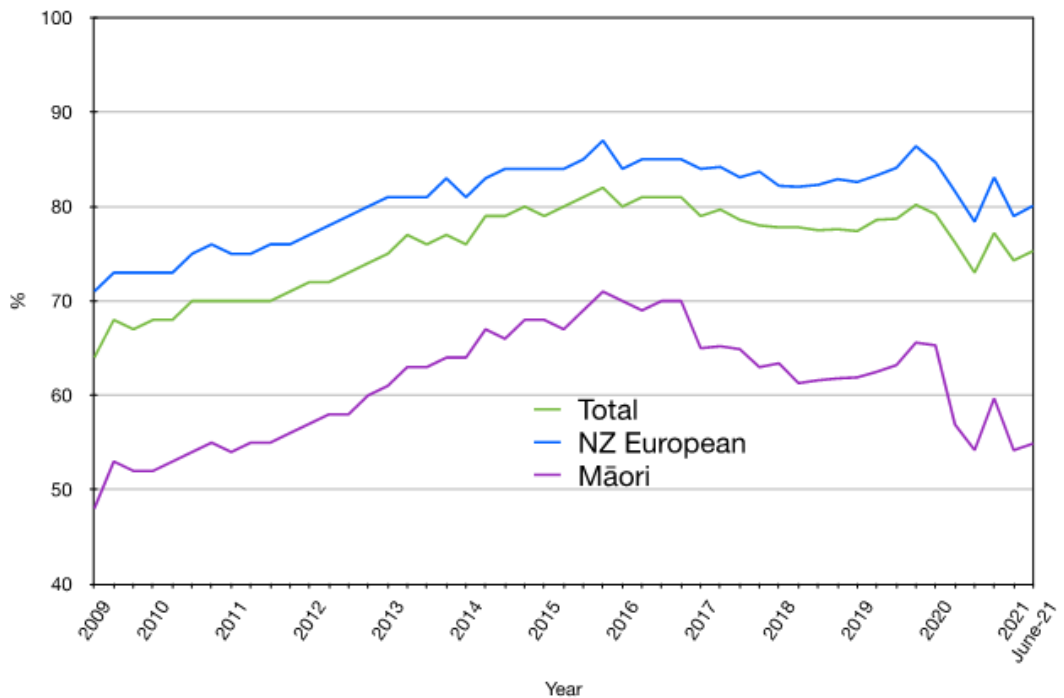
Targeted immunisations of at-risk groups with active facilitation is a valid strategy for achieving on-time immunisations and eliminating inequalities. It is well known which groups are at risk of under immunisation and, with almost all births in New Zealand occurring in hospitals, they could be easily

Figure 1: Immunisation coverage in New Zealand children aged two years by ethnicity.



Source Ministry of Health⁴

Figure 2: Immunisation coverage of New Zealand children aged six months by ethnicity.



Source Ministry of Health⁴

identified at the time of birth. A coordinator working between DHBs and primary care could manage the process. The number of infants is not overwhelming. For example, in Hawke's Bay DHB, achieving 95% immunisation coverage in Māori would require 95 extra tamariki to be immunised in a three-month period.⁴ This system would contrast starkly against the current one that waits for failure and therefore can never succeed.

There has only been one study in Aotearoa into how immunisations are given at the primary care level. The study identified primary care practice and practitioner factors associated with immunisation coverage and timeliness in New Zealand.^{6,14} Although there was variation in how well practices immunised their communities, all primary care practices had a significant ethnic disparity with respect to completed immunisations. When economic deprivation was factored into the multiple variable models, these practice-level differences in immunisation coverage by ethnicity disappeared. This is consistent with the observation that poor people in New Zealand have difficulty accessing quality primary care.¹⁵ In Aotearoa, 50% of Māori live in households in the lowest three neighbourhood deciles of socioeconomic status.¹⁶ Despite childhood immunisations being free, there are costs associated with getting to a primary care practice and real barriers for lower socioeconomic people with respect to transport, time off employment and family members owing money to the primary care practice.¹⁴

Socioeconomic factors appear to account for much of the ethnic differences in immunisation coverage at a primary care practice level. But they do not explain why the ethnic gaps in immunisation coverage have not narrowed over the past 12 years and, in infants, appear to be increasing (Figure 2); they do not explain why the immunisation process has not changed to address the barriers Māori face in accessing childhood immunisations; and lastly, socioeconomic factors do not explain why a Pākehā-dominated health system has done nothing to address this systematic failure. The only explanation that ties all of these threads together is systemic racism and the colonialist practises of a Pākehā health system. Such systemic racism is now well docu-

mented across the New Zealand health system as a cause of ethnic disparities in health outcomes.

The immunisation system in New Zealand is not fit for purpose. It has never achieved the goal of 95% immunisation for all, let alone the on-time immunisation that is required to protect the most vulnerable in New Zealand. It has entrenched ethnic disparities and has resulted in both New Zealand and exported preventable morbidity and mortality. The current approach to providing immunisation, based in primary care, is fundamentally flawed and will never be sufficient. In this system immunisations are being given by a wide group of individual organisations that makes coordination impossible. The for-profit nature of primary care does not favour preventative medicine and has resulted in a passive approach that waits for missed immunisation rather than on-time delivery. It is also a system that is exquisitely vulnerable to denominator inaccuracies and a lack of clarity regarding, for example, who is responsible for the immunisation of "casual patients." It is a disappointing conclusion that the individual, private nature of primary care means they do not have the ability or willingness to lead and address under immunisation at a national level. The continued failure of immunisation delivery in New Zealand means there needs to be a total ground-up reworking of how immunisations are delivered. This can only be achieved through direction and coordination from the Ministry of Health to convince or require all players to deliver the most effective medical intervention of all time. Our children deserve this.

Ethnic inequalities should be completely unacceptable in Aotearoa, particularly when they are a direct threat to our tamariki. The benefits of eliminating inequities are huge. That all of the organisations responsible for providing immunisations have stated a commitment to the principles of Te Tiriti o Waitangi^{17,18} makes the persistence of, and especially the increase in, ethnic disparities, without action, morally corrupt. As we embark on an immunisation programme to address the biggest public health threat of our generation, the only unknown for Māori is how big the disparity will be.

Competing interests:

Nil.

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