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# New Zealand : Mumps Outbreak

Kathryn Evans

*Augustana College, Rock Island Illinois*

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## New Zealand Statistics:

**Population:** 4,510,327  
(Central Intelligence Agency [CIA], n.d.)

**Government:** Parliamentary Democracy under a Constitutional Monarchy (CIA, n.d.)

**Challenges:** Significant consumer of amphetamines, economic issues (gap between rich and poor), government/public policy/human rights (housing affordability and homelessness) (Your NZ, n.d.) Has troops currently deployed in six countries (NZ Army, n.d.)

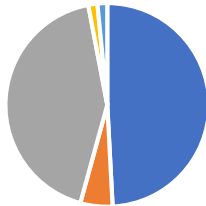


From <http://the-geography.blogspot.com/2016/10/political-map-of-new-zealand.html>

## MUMPS OUTBREAK

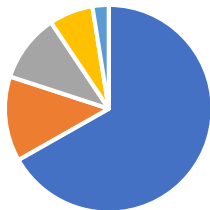
A mumps outbreak struck New Zealand during the summer of 2017. Auckland has had more cases this year than the last sixteen years combined, with over 300 reported cases from January to September (NZ Herald, September 2017). The illness seems to have affected those in the Pacific Island community the most, with 60% of cases being Pacific people (Ford, 2017). Another population affected by the mumps outbreak in New Zealand has been the ten to nineteen-year-old age group (NZ Herald, July 2017). One teenager developed meningitis, which occurs in ten percent of all mumps cases (M of H, n.d.), and was sent to the hospital. Several males reported pain and swelling of the testicles and several females reported ovarian inflammation, both of which can occasionally result in infertility (New Zealand Herald, July 2017). As of July 2017, 80% of mumps patients were not fully vaccinated (NZ Herald, July 2017).

Religion in New Zealand



■ Christian ■ Hindu, Buddhist, Islam ■ No Religion ■ Maori Christian ■

Race/Ethnicity in New Zealand



■ European ■ Maori ■ Asian ■ Pacific Islander ■ Other ■

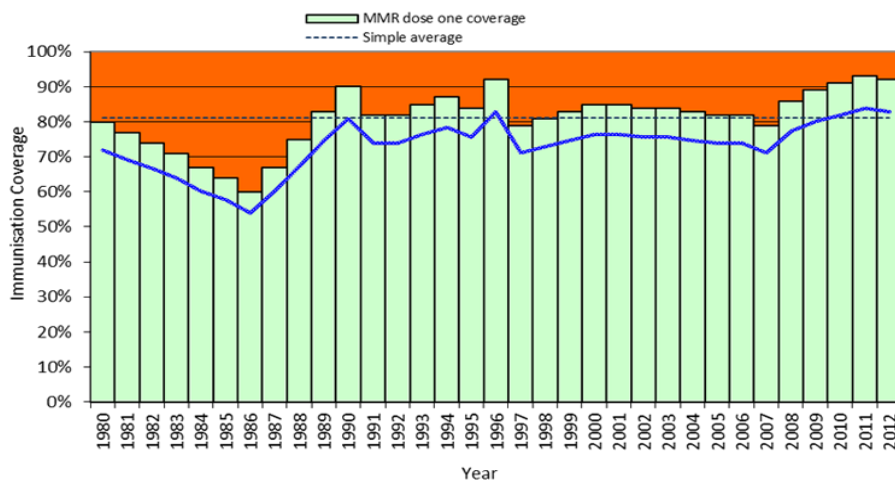
(CIA, n.d.)

## Mumps Symptoms and Epidemiology

Results in swelling of the glands around the face, and it can also include pain in the jaw, a fever, and a headache (Ministry of Health NZ, n.d.). It spreads easily through the air via breathing, coughing, or sneezing, or through saliva. Patients may be contagious before they even feel sick because they are infectious starting about one week before swelling appears (M of H, n.d.). In fact, before the MMR (measles, mumps, rubella) vaccine, almost every child contracted mumps at some point, and it is still a common ailment in developing nations (Lowth, 2013).

## Preventing Future Outbreaks

An easy fix to the latter of the two main immunization issues is to keep the ages for the MMR1 and MMR2 doses the same, so that there is not another group who miss out on completing their vaccinations. New Zealand its highest coverage ever for the first dose of MMR in 2011 (Ministry of Health NZ, 2013). This could be due to the more widespread knowledge that the vaccine will not cause autism or any other illness. Health campaigns targeted at the Pacific Islands that promote immunizations and remind parents of the lack of risks associated should help to increase rates. Another way of increasing coverage in the Pacific Islands would be to offer immunizations at school at a free or reduced cost so that time, money, and transportation would not be a factor in children not being vaccinated.



Source: WHO Report 2012(data as of 12-Jul-2013).

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## MMR VACCINATIONS

Unsurprisingly, the most affected groups also have some of the lowest vaccination rates. In 1991, only 45% of Pacific children got their MMR vaccine (NZ Herald, September 2017). Additionally, there was a so called "lost generation" of people now aged ten to twenty-nine, encompassing the age group most affected, who were not vaccinated at as high of rates as other generations. These statistics indicate a correlation between lower immunization rates and higher rates of disease.

The downward trend for MMR vaccines ten to twenty years ago can be contributed to a number of factors. One is the autism controversy that occurred in the 1990s. A study was done attributing MMR immunizations to autism (World Health Organization, 2003). This is the time when many of those in the ten to twenty-nine-year-old age group would have been born and vaccinated. Another issue that may have caused families to not complete MMR vaccinations for their children was the change in timing for the second dose of MMR. In 1996, MMR1 was given at fifteen months and MMR2 was given at eleven years. Then, by 2001, the ages had changed to twelve months and four years for the doses (Hayman, Marshall, French, Carpenter, Roberts & Kierdrzynski, 2017). The immunization rates for MMR2 are lower than those for MMR1, which could be due to the gap in coverage created when the dose was moved (Ford, 2017).