Rheumatic Fever Report

July 2015 to June 2016

This report provides an overview of rheumatic fever in New Zealand in 2015/16 using both notification data from EpiSurv and hospitalisation data from the National Minimum Dataset (NMDS). The information presented is based on data recorded on EpiSurv as at 13 September 2016 and on the NMDS as at 21 September 2016.

Notifications for initial episodes of rheumatic fever with an onset date between 1 July 2015 and 30 June 2016 were linked with first episode rheumatic fever hospitalisations (as defined by the Better Public Services (BPS) rheumatic fever target) with a discharge date between 1 July 2015 and 30 June 2016. Cases that did not match were followed up to see whether they met the case definition for rheumatic fever (as per the Communicable Disease Control Manual). Those that did not meet the definition were excluded.

Once the hospitalisation and notification data was matched, there were 106 cases that met the definition of first episode rheumatic fever between 1 July 2015 and 30 June 2016, giving a rate of 2.3 per 100,000 population. This number includes cases that were not hospitalised, cases that had another diagnosis whilst in hospital but were later diagnosed with rheumatic fever, and cases that were notified in 2015/16 but discharged from hospital after 1 July 2016. Cases that were diagnosed with rheumatic fever whilst in hospital but later found not to meet the case definition for rheumatic fever are not included in this number.

Table 1 shows the number and incidence rate per 100,000 population for first episode rheumatic fever cases by age group and ethnic group in 2015/16.

Table 1. First episode rheumatic fever cases by ethnicity and age group, July 2015 to June 2016

Ethnic group (prioritised)	0–4 years		5–14 years		15–24 years		25+ years		Total	
	Number	Rate[1]	Number	Rate[1]	Number	Rate[1]	Number	Rate[1]	Number	Rate[1]
Māori	0	-	33	28.8	3	-	4	1.4	**40**	**7.1**
Pacific peoples	1	-	43	72.5	14	25.2	4	2.9	**62**	**21.8**
European or Other	0	-	1	-	2	-	1	-	**4**	**0.1**
Total	**1**	**-**	**77**	**12.7**	**19**	**2.9**	**9**	**0.3**	**106**	**2.3**

[1] Rate per 100,000 population. The denominator data used to determine disease rates for ethnic groups is based on the proportion of people in each ethnic group from the usually resident 2013 census population applied to the 2015 mid-year population estimates.

Note: For categories with ≤10 cases rates are considered unstable and should be interpreted with caution. Rates have not been calculated where there were fewer than four cases in a category.

Current initiatives in the Rheumatic Fever Prevention Programme include the provision of free sore throat services in the community and in primary schools in high incidence areas. These programmes target 4–19 year olds and 5–12 year olds respectively. Table 2 shows the number and incidence rate per 100,000 population for first episode rheumatic fever for these age groups by ethnic group for 2015/16.

Table 2. First episode rheumatic fever cases by ethnicity and age groups targeted by current initiatives, July 2015 to June 2016

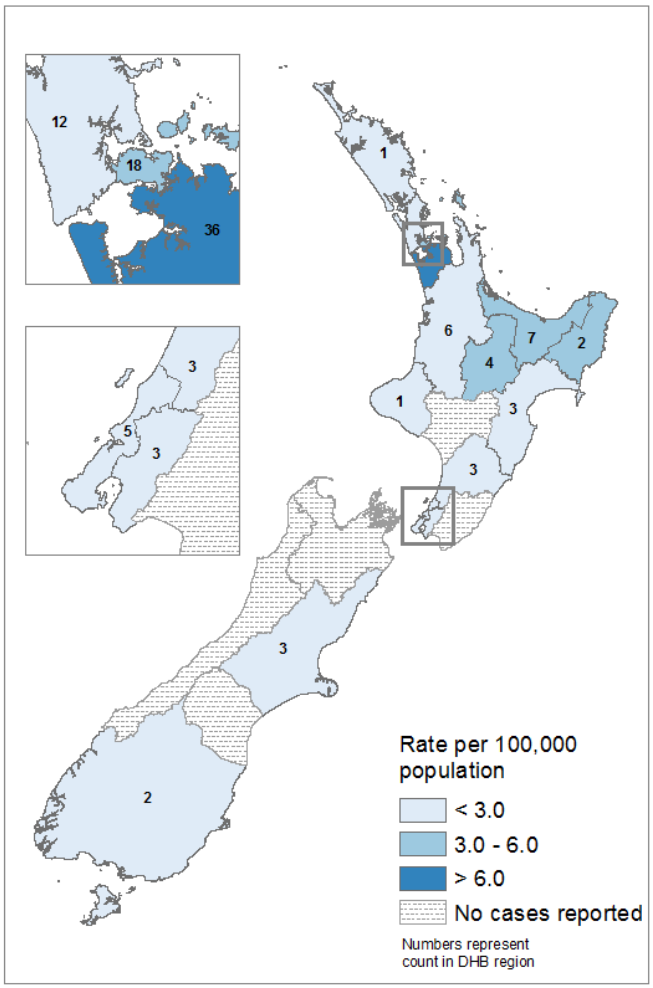
Ethnic group (prioritised)	5–12 years		4–19 years	
	Number	Rate[1]	Number	Rate[1]
Māori	28	30.2	34	18.9
Pacific peoples	32	66.7	51	54.2
European or Other	1	-	2	-
Total	**61**	**12.4**	**87**	**8.8**

[1] Rate per 100,000 population. The denominator data used to determine disease rates for ethnic groups is based on the proportion of people in each ethnic group from the usually resident 2013 census population applied to the 2015 mid-year population estimates.

Note: For categories with ≤10 cases rates are considered unstable and should be interpreted with caution. Rates have not been calculated where there were fewer than four cases in a category.

Figure 1 shows the geographical distribution of first episode rheumatic fever cases for July 2015 to June 2016.

Figure 1. First episode rheumatic fever cases by district health board, July 2015 to June 2016



For DHBs with ≤10 cases rates are considered unstable and should be interpreted with caution.

First episode rheumatic fever hospitalisation rates are used to monitor the Better Public Services target. The following graphs show the trend in the rate of hospitalised cases since 2002 for the total population and since 2009 for Māori and Pacific peoples.

Figure 2. First episode rheumatic fever hospital discharge rates, 2002–June 2016

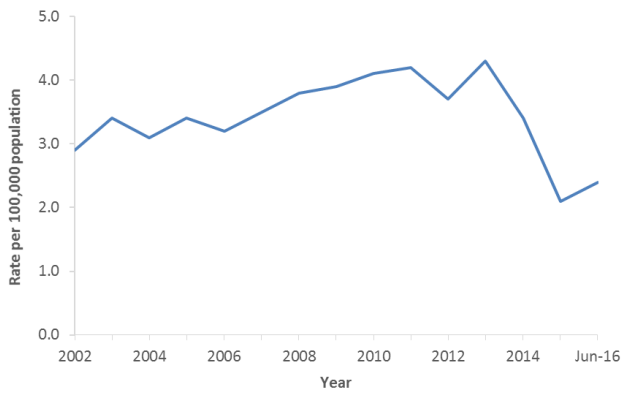


Figure 3. First episode rheumatic fever hospital discharge rates for Māori and Pacific peoples, 2009–June 2016