

4 November 2019

Email: [ailsac@adhb.govt.nz](mailto:ailsac@adhb.govt.nz)

**Re: Official Information Act request – Hospitalisation rates of measles cases**

I refer to your Official Information Act request dated 12 October 2019 requesting the following information.

I've been through data I've been given that relates to nationwide cases, but given the large percentage of cases in Auckland I suspect the data is reliable for applying to Auckland.

Data I have suggests that the high rates of hospitalisation only apply to cases that have been vaccinated or unknowns which mostly are probably vaccinated, but don't have documentation. The hospitalisation rates where subjects vaccination is known to be 'not vaccinated' for over 2 years of age shows a hospitalisation rate somewhat less than 10% whereas the hospitalisation rates for those receiving 1 or 2 doses of a measles vaccine shows hospitalisation rates of well over 35%.

In other words, the hospitalisations rates for vaccinated are over four times higher than unvaccinated patients.

To confirm this applies in Auckland can you provide me with the following for 2019?

1. The number of confirmed cases of measles for age groups <12m, 12-24m, and >24m vaccination status of not vaccinated, 1 dose of any measles vaccine, 2 doses of any measles vaccine, and unknown.
2. The number of confirmed cases of measles hospitalised (uncomplicated) for age groups <12m, 12-24m, and >24m vaccination status of not vaccinated, 1 dose of any measles vaccine, 2 doses of any measles vaccine, and unknown
3. The number of confirmed cases of measles hospitalised (complicated) for age groups <12m, 12-24m, and >24m vaccination status of not vaccinated, 1 dose of any measles vaccine, 2 doses of any measles vaccine, and unknown

The table below shows the number of measles cases notified for the three Auckland region District Health Boards as at 12 October 2019, together with the hospitalisation rate and the proportion of hospitalisations that were uncomplicated or complicated.

Table: Number of cases of measles recorded from 1 January 2019 to 12 October 2019.

Source: case and immunisation data from PHiMS, complications data from DHB systems, Immunisation status is by documented vaccinations based on age at notification in months, and only includes confirmed cases.

Age (months)	Immunisation status	Complications			Hospitalised		Total cases	Proportion Hospitalised	Proportion complications from hospitalised
		Yes	No	Not known	Yes	No			
0-12m	First MMR post exposure	0	0	1	1	0	1	100%	-
0-12m	First MMR within 2 weeks of rash	2	1	4	7	6	13	54%	67%
0-12m	Too young	35	71	40	146	79	225	65%	33%
0-12m	Unknown / Uncertain	0	1	0	1	1	2	50%	0%
<b>0-12m</b>	<b>Total</b>	<b>37</b>	<b>73</b>	<b>45</b>	<b>155</b>	<b>86</b>	<b>241</b>	<b>64%</b>	<b>34%</b>
12-24m	Age-appropriately immunised	1	6	4	11	10	21	52%	14%
12-24m	First MMR post exposure	1	1	2	4	1	5	80%	50%
12-24m	First MMR within 2 weeks of rash	2	2	0	4	3	7	57%	50%
12-24m	Preventative MMRO	0	0	0	0	2	2	0%	-
12-24m	Too young	5	15	5	25	13	38	66%	25%
12-24m	Unimmunised	5	15	7	27	24	51	53%	25%
12-24m	Unknown / Uncertain	0	0	0	0	6	6	0%	-
<b>12-24m</b>	<b>Total</b>	<b>14</b>	<b>39</b>	<b>18</b>	<b>71</b>	<b>59</b>	<b>130</b>	<b>55%</b>	<b>26%</b>
24m+	Age-appropriately immunised	0	3	2	5	2	7	71%	0%
24m+	Born 1969-1981 and had one immunisation	0	1	0	1	1	2	50%	0%
24m+	First MMR post exposure	0	1	2	3	17	20	15%	0%
24m+	Fully immunised	1	6	4	11	73	84	13%	14%
24m+	Not applicable (born before 1969)	1	3	4	8	8	16	50%	25%
24m+	Partially immunised	1	4	7	12	37	49	24%	20%
24m+	Unimmunised	12	64	29	105	215	320	33%	16%
24m+	Unknown / Uncertain	26	120	50	196	422	618	32%	18%
<b>24m+</b>	<b>Total</b>	<b>41</b>	<b>202</b>	<b>98</b>	<b>341</b>	<b>775</b>	<b>1116</b>	<b>31%</b>	<b>17%</b>
<b>All ages</b>	<b>Total</b>	<b>92</b>	<b>314</b>	<b>161</b>	<b>567</b>	<b>920</b>	<b>1487</b>	<b>38%</b>	<b>23%</b>

\* % of complications is calculated for those where we know whether the hospitalisation was complicated, i.e. it excludes those hospitalised cases with Complicated = Unknown.

The immunisation status data is the data recorded in the Public Health information Management System (PHiMS) used by Auckland Regional Public Health Service (ARPHS). Cases born before 1969 are assumed to have been exposed to measles in their childhood so are therefore recorded as 'not applicable'.

I trust this information answers your questions.

You are entitled to seek a review of the response by the Ombudsman under section 28(3) of the Official Information Act. Information about how to make a complaint is available at [www.ombudsman.parliament.nz](http://www.ombudsman.parliament.nz) or freephone 0800 802 602.

Please note that this response, or an edited version of this response, may be published on the Auckland DHB website.

Yours faithfully



Ailsa Claire, OBE  
Chief Executive

