





SITREP 02

NATIONAL MEASLES OUTBREAK 2019 Issued: 1500 hrs, 23 AUGUST 2019

IN CONFIDENCE

New information in red text

All information is current as of 23 August 2019

Situation

- 1. From 1 January 2019 to 23 August 2019 there have been 751 confirmed cases of measles notified across New Zealand (*Appendix* 1).
- 2. There is currently a significant measles outbreak in Auckland which commenced in March 2019. As at 23 August 2019, there have been 618 confirmed cases of measles in this region 423 of which have occurred in Counties Manukau District Health Board (CMDHB) (*Appendix 2*).
- 3. Laboratory analysis of measles cases shows that the outbreak in Auckland is actually several outbreaks caused by several different genotypes of the virus.
- 4. The Auckland outbreaks began in West Auckland but are now mainly occurring in South Auckland, Counties Manukau. In South Auckland, the cases have been mainly in the 0–4 and 20–29 year age groups and predominately in the Pacific population.
- 5. Fifty percent of cases have been hospitalised. This proportion is higher than previous New Zealand outbreaks where approximately 30 percent have been hospitalised. There are no clear reasons to account for this increase in hospitalisation.
- 6. The majority of cases have been in unvaccinated people or in those who don't know their vaccination status.
- 7. Contact tracing and case management remain the best approach to containing the spread of the disease when it is present in the community and this was the focus of the initial response by ARPHS at the beginning of the outbreak. However, despite intense efforts by ARPHS and the Auckland metropolitan DHBs to control the spread of measles, the number of new confirmed cases has accelerated over recent weeks. The focus is now to increase the immunity of the general population to protect against measles.
- 8. Vaccination is not typically the first response for an outbreak of measles as it takes 14 days to develop immunity in response to the vaccine. The vaccine can provide some protection if someone is exposed to measles but needs to be administered within 72 hours of contact to offer this protection. People who have contracted measles are infectious for 5 days prior to developing symptoms which means most people are unknowingly exposed.
- 9. Adherence to routine immunisation programmes and high community immunity are therefore the best way to prevent disease outbreaks occurring. There is some evidence however that immunisation campaigns can help shorten the length of time an outbreak persists.

- 10. Public Health Units outside of Auckland are being encouraged to manage measles cases and their contacts as per protocol, with isolation, contact tracing and quarantine to stop the spread of disease. Cases outside of Auckland are all currently linked to travel to or from the Metropolitan Auckland area.
- 11. Currently there are no issues or concerns with vaccine supply with 150,000 doses available in the National Store.
- 12. Since February 2019 a total of 17,020 doses of MMR vaccine have been distributed through Auckland.
- 13. There have been no deaths associated with this outbreak.

Key Actions

Auckland Region District Health Boards and Public Health Unit

- 14. The Auckland region have put in place a number of strategies to increase the population immunity against measles:
 - lowering the age of the first MMR vaccine in the Auckland region from age 15 months to 12 months
 - active recall of children who have not been vaccinated
 - opportunistic vaccination of older children and young adults when attending primary care
 - using outreach services to contact 'hard to reach' children
 - opportunistic vaccination at large medical centres and after hours clinics in Counties Manukau
 - public messaging on the outbreak about who is at risk and how to get vaccinated.
- 15. In response to the rising numbers of measles cases in Auckland, particularly in young Pacific populations in Counties Manukau, the Ministry has worked closely with CMDHB and ARPHS to finalise and implement a vaccination programme proposal.
- 16. The CMDHB proposal is aimed at improving the immunity to measles of the population in the Counties Manukau area. This proposal includes funding an additional five vaccinator nurses to deliver outreach services and opportunistic vaccination in Middlemore hospital. The Ministry has agreed to fund these nurses, a total of \$285,000.
- 17. A condition of this funding will be that CMDHB will provide reports to the Ministry detailing the targets and the evaluation of this campaign.
- 18. On the commencement of the campaign, CMDHB will provide daily vaccination data to the Ministry which will be including in future SITREPs.

Ministry of Health

- 19. The Ministry of Health has implemented a Measles Project Team to manage the ongoing activities in response to this outbreak.
- 20. The Ministry are working with ESR to align reporting and messaging of national measles cases in the Measles Weekly Report.

- 21. The Ministry will be convening a meeting with an expert advisory group on 10 September 2019 to discuss the options on the best way to improve immunity across the New Zealand population.
- 22. The following options are being considered, aligned with recent advice from our National Verification Committee, initial review of international evidence and previous approaches suggested for improving measles immunity in New Zealand:
 - improving the delivery of all routine childhood MMR immunisations to be on time i.e. given at the time they are due
 - bringing the first MMR forward to 12 months nationwide and the second MMR forward to 15 months
 - supplementary immunisation activities to address the known measles immunity gap (~15 year olds to ~29 year olds)
 - traditional and social media communications campaign targeting key communities and health professionals in support of agreed approaches, this should include targeting travellers into and out of New Zealand.
- 23. Vaccine availability, impact on existing services and cost implications will be taken into consideration for all options.
- 24. Although the expert advisory group will be considering the introduction of a 12 month visit for the earlier administration of the first MMR, the Ministry has already commenced conversations on how this can be implemented between teams within the Ministry. The Ministry will also be socialising the introduction of a 12 month old immunisation visit with key primary care players to ensure there is support for this from the sector.
- 25. The initial notification to the WHO of a measles outbreak centred on the Canterbury region was sent on 15 March 2019. An updated notification including the situation in Auckland and other regions was sent 22 August 2019.
- 26. The Ministry, CMDHB and ARPHS are working collaboratively to ensure public information management, agency communication and resource management activities are well coordinated. The Ministry is liaising closely and will provide further updates of any additional proposals as part of a broader response to the outbreak.
- 27. The Ministry is working with CMDHB to establish a scheduled reporting framework to capture the daily vaccination programme data and key information of their response activity for inclusion in the internal Ministry situation reports.

Public Information Management / Media

- 28. The Ministry website has been updated with a call-to-action stating "There are currently outbreaks of measles in New Zealand. Immunisation is your best protection against measles and the MMR vaccine is available free from your GP. Make sure you and your whanau are protected if you are under 50 years and have never had a measles vaccine get vaccinated today."
- 29. A draft press release has been produced for the Minister on the funding provided to CMDHB to support their outreach activities.
- 30. The Ministry has updated its advice to primary care providers that they should consider vaccinating children from 12 months of age if they are travelling to Auckland.
- 31. A Health Advisory will be released early next week with information for those travelling to Auckland. The advisory will contain the advice that infants who will be travelling to

Auckland should receive an MMR vaccine at 12 months, and this should be done 2 weeks prior to travel.

- 32. A press release will be developed to go alongside this Health Advisory.
- 33. The Public Service Association have requested the Ministry of Social Development provide advice on measles to front line Work and Income staff. Draft advice will be produced by the Ministry for this purpose.

Next situation report

34. The next situation report will be via email at 1500 hrs on Monday 26 August 2019.

Prepared by: Tara Swadi, Intelligence

Approved by: Sarah Reader, Response Manager

Appendix 1: Cumulative tally of measles cases across New Zealand

| | DHB | Cumulative cases reported 2019 to date (23 August) | New cases reported in the last 2 weeks (5 August to 23 August) |
|-----------------------------------|--------------------------|--|---|
| DHBs with active measles cases | Northland | 24 | 1 |
| | Auckland | 618 | 261 |
| | Waikato | 17 | 1 |
| | Bay of Plenty & Lakes | 25 | 0 |
| | Taranaki | 2 | 0 |
| | Hawkes Bay | 2 | 0 |
| | Mid-Central | 1 | 0 |
| | Wellington | 19 | 0 |
| | Canterbury | 41 | 0 |
| DHBs with no recent measles cases | Southern | 2 | 0 |
| | | Total: 751 | Total in last two weeks: 264 |

Appendix 2

Figure 1. Cases of measles to 23 August and percent increase in cases per day in the Auckland region

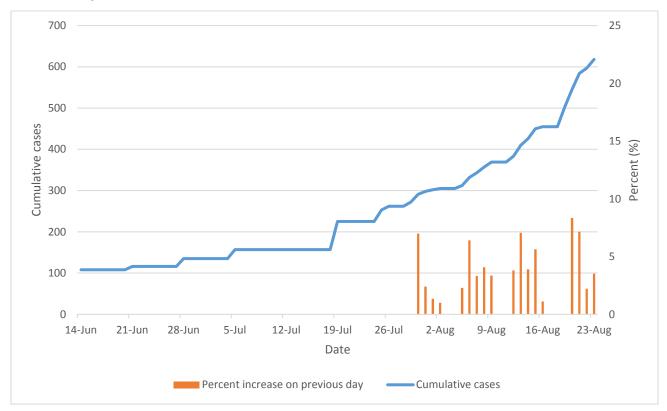


Figure 2. Exponential modelling of cases in Auckland per week up to 7 September

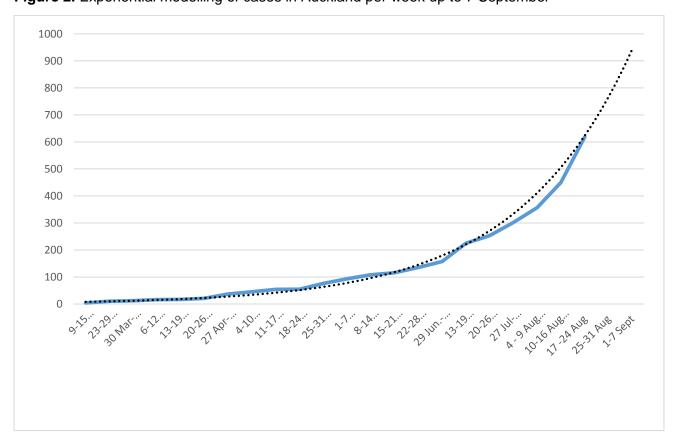


Figure 3. Mathematical modelling of measles outbreak in Auckland (current and expected)

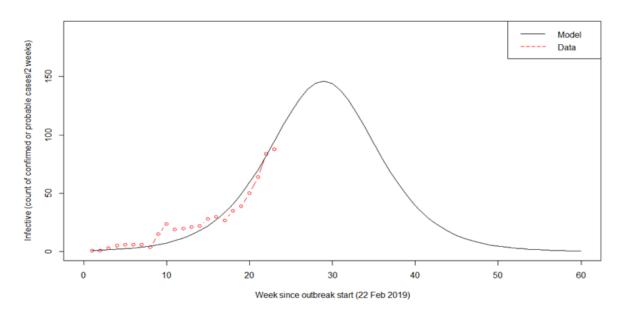


Figure 4. Number of cases of measles confirmed per day. *Please note that cases over the weekend are cumulatively notified to the Ministry on a Monday.*

