



ACIPC

Australasian College
for Infection Prevention and Control

ACIPC Position Statement Measles Vaccination

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Executive Summary

There has been a significant increase of measles cases worldwide in 2023, that is continuing into 2024, increasing the risk of local transmission and outbreaks.

ACIPC recommends:

- All people are vaccinated with 2 doses of the Measles, Mumps and Rubella (MMR) vaccine.
- People born between 1966 and the 1992 who have received one MMR vaccine are strongly recommended to receive a catch-up dose.
- Occupational groups such as healthcare workers have an increased risk of exposure and are recommended to provide evidence of 2 MMR vaccinations or serological immunity to measles upon employment.

Introduction

Globally cases of measles have risen sharply with Europe reporting 941 cases in 2022, and over 30,000 cases in 2023¹, with more than half of these cases within the European region being hospitalised². In the US there have been 141 cases reported to date in 2024, surpassing the total number of cases (58) reported during 2023³. The Western Pacific Region has experienced a 255% increase in measles cases from 2022 to 2023, with the World Health Organization (WHO) linking this increase to gaps in vaccination coverage and travel into the region from people in countries experiencing outbreaks⁴. As large outbreaks continue in a number of countries around the world, people travelling overseas or those coming to Australia can bring measles with them, causing outbreaks within the community, and recent cases in Queensland, Victoria and New South Wales have been reported⁵.

An increase in measles cases is a clear sign that there has been a breakdown in immunization coverage². Declining vaccination coverage has been widely reported due to COVID-19 pandemic related delays, and it has been estimated that 3.6 million children in the Western Pacific Region missed routine vaccinations during 2020 – 2022⁴, increasing the risk of outbreaks within this region and around the world.

Literature Review

Measles is a highly contagious and devastating vaccine-preventable disease that can cause significant illness and complications⁶, and it can be eliminated through effective vaccination programs⁷. Measles is spread through viral particles and can remain suspended in the air and on surfaces for up to 2 hours after a person with the disease has left a room⁸. Measles cases can occur at any time and can enter countries where there have previously been no cases, through travelers entering from regions experiencing outbreaks, leading to local transmission and outbreaks.

Symptoms of measles include prodromal fever, cough, conjunctivitis and coryza, occurring 2-4 days before the onset of a maculopapular rash⁶. Complication of measles can be severe and include otitis media, pneumonia, encephalitis, and increased risk of miscarriage⁶. Those at risk of complications include the immunocompromised, children younger than 5 years of age and pregnant women⁶. Cases are considered to be infectious from 24 hours prior to the onset of symptoms, and until 4 days after the rash appears⁶.

People are at risk of measles infection if they are not fully immunised or do not have immunity from a previous infection. Vaccine coverage of 95% is required to provide herd immunity to those who are unable to be vaccinated and to prevent transmission during local outbreaks⁸.

Countries within the Western Pacific region are working towards measles elimination by 2025, with Australia and New Zealand verified as having eliminated measles⁴. The Pacific Island countries have reported no local transmission of measles since 2020, following a large outbreak in 2019 that saw increased efforts to improve vaccination and surveillance activities⁴.

Surveillance activities and rapid detection of cases and contacts is imperative to limit the spread of disease, and to maintain elimination. Identification of sources of infection and transmission risks is labor intensive and requires the allocation of sufficient resources to ensure rapid identification of contacts. Maintaining accurate and complete records of immunity in high-risk occupational groups will assist in facilitating a rapid contact tracing response.

Recommendations

Vaccination

Vaccination is the most effective strategy to prevent measles. Serological testing is not recommended before or after routine vaccination of the two-dose schedule. However, serological testing can be considered useful if a person has an unknown history of disease or vaccination.

All people born in or after 1966, should have documentation of two doses of the MMR vaccine or serological evidence of immunity to measles⁹.

Catch up vaccinations for those born between 1966 and 1992

People born prior to 1966 are considered immune to measles, however adults born between 1966 and prior to 1992 are likely to have received one dose of MMR, as was recommended at the time. Catch up doses are recommended for this cohort, without serological testing, to complete the recommended two-dose schedule⁸.

Occupational groups

People who work in healthcare, emergency and essential service providers, and home and community settings are at an increased risk of exposure and transmission of measles to vulnerable groups. As such all-healthcare workers, carers and people who work in these settings are recommended to have their vaccination status assessed and recorded prior to commencing

employment and are recommended to have documentation of 2 doses of the MMR vaccine, or serological evidence of immunity to measles.



References

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9. Australian Technical Advisory Group on Immunisation (ATAGI). *The Australian Immunisation Handbook*. Australian Government Department of Health and Aged Care; 2022.

Version

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1.0	May 2024	New position statement	IPC Clinical Nurse Consultant	PGC ACIPC Board