

Letter to the Editor

Investment in cross-jurisdictional relationships results in a streamlined and efficient response by public health units to an imported case of measles in Far North Queensland and the Northern Territory, Australia, 2025

Tonia Marquardt, Juliet Esmonde, Jacqueline Murdoch, Anthony Draper, Kimberley McMahon

We describe the multi-jurisdictional collaborative approach employed in response to an imported case of measles in August 2025. This report highlights the importance of a rapid, coordinated response to measles across borders.

Measles is a highly infectious viral disease with significant morbidity and mortality.¹ The World Health Organization (WHO) verified Australia's measles elimination status in 2014.² Early identification and response to imported cases can prevent transmission and outbreaks.³ In the last decade, most measles notifications in Australia were overseas acquired or import related.⁴

Australia has recently seen timely vaccination coverage rates falling, increasing the importance of rapid responses to cases.⁵

Ethics exemption for this letter was obtained from the Far North Queensland Human Research Ethics Committee (1993LE).

The outbreak

On 24 July 2025 a person who had travelled to Far North Queensland from Indonesia, via the Northern Territory, was notified to the Cairns Public Health Unit (CPHU) with suspected measles. Staff interviewed the person while test results were pending. Based on clinical signs, travel and vaccination history, the pre-test probability of the case being confirmed through laboratory testing was considered high; in anticipation, staff began to identify multiple exposure sites in both Queensland and the Northern Territory (NT) while the person was potentially infectious. These included healthcare facilities, tour groups, flights, hotels, and backpacker accommodation. A joint outbreak management team commenced on the same day using established public health networks between Darwin, Alice Springs and Cairns.

Venue identification and potential contact tracing began while awaiting confirmatory laboratory testing results for measles, which was conducted in Brisbane. Distance to diagnostic laboratories and delays due to transport are shared challenges across all three northern Australian jurisdictions. On 25 July (24 hours after collection), the case was confirmed as measles by polymerase chain reaction (PCR).

The swift preparation and early contingency planning by public health units at the NT Centre for Disease Control (NT CDC), CPHU and Cairns Hospital enabled rapid and efficient contact tracing upon confirmation. The use of short message service (SMS), data management systems, and public communications was undertaken locally by each unit. Provision of vaccinations for contacts at risk was also provided locally. No further transmission occurred from this single imported case.

Discussion

Early identification, strong established professional networks and local approaches ensured a united and efficient public health response occurred. The NT CDC, Kimberley Public Health Unit (Western Australia) and Northern Queensland public health units have held quarterly meetings since 2023. These meetings have fostered increased knowledge of similar (and different) public health issues, challenges and strengths, and have facilitated an atmosphere where jurisdictions feel comfortable to contact and include each other early in responses or outbreaks. Communication of a clear and accurate case travel history was established using local knowledge of exposure sites. The inclusion of the NT CDC in the initial outbreak response meeting was crucial for engagement with exposure sites and developing tailored communication strategies to address community needs. This was particularly important as it occurred a day before a public holiday in the Northern Territory, which enabled rapid gathering of information and a risk assessment.

A debriefing served as a platform to discuss responses and identify areas of improvement. Sharing of tools and information further enhanced the effectiveness of the response. This engagement also has the potential to strengthen collaboration for future disease responses across jurisdictions.

Conclusion

We show that investment in developing strong cross-jurisdictional relationships in areas with shared public health challenges is beneficial in the early identification, communication and coordinated public health response to an imported measles case. Containment of measles, a highly infectious disease, was possible through early, accurate and effective contact tracing and venue identification. This is vital particularly for contacts in potentially remote locations. The wide cross-jurisdictional distribution of exposure sites underlined the appropriateness of the public health response taken, which was enhanced by previously established cross-jurisdictional relationships.

Author details

Tonia Marquardt,¹

Juliet Esmonde,¹

Jacqueline Murdoch,¹

Anthony Draper,^{2,3,4}

Kimberley McMahon²

1. Cairns Public Health Unit, Queensland Health, Queensland, Australia
2. Centre for Disease Control, Northern Territory Government Department of Health, Darwin, Northern Territory, Australia
3. National Centre for Epidemiology and Population Health, College of Law, Governance and Policy, Australian National University, Canberra, Australian Capital Territory, Australia
4. Global and Tropical Health Division, Menzies School of Health Research, Charles Darwin University, Bidau Lecidere, Dili, Timor-Leste

Corresponding author

Dr Tonia Marquardt

Public Health Physician, Cairns Public Health Unit, William McCormack Building 5b Sheridan St, Cairns, Qld 4870

Phone: +61 7 4226 5555

Email: tonia.marquardt@health.qld.gov.au

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Communicable Diseases Intelligence (CDI)
Australian Centre for Disease Control
GPO Box 798, Canberra ACT 2601

Website: cdc.gov.au/cdi

Email: cdi.editor@cdc.gov.au

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