

ATAGI statement on IFNAR1 deficiency and MMR vaccine

Please distribute to all doctors and immunisation staff in your practice



- 1. A recent study has found that IFNAR1 deficiency, a rare inherited condition, is associated with severe adverse events following live-attenuated vaccines, including the MMR vaccine**
- 2. The Australian Technical Advisory Group on Immunisation recommends that all people in Australia, including people of Tongan, Samoan, and Niuean heritage, continue to receive the MMR vaccine**
- 3. Children of Western Polynesian heritage who are very unwell 1-2 weeks after MMR vaccination should be referred to an immunologist**
- 4. The Australian Technical Advisory Group on Immunisation has released the attached detailed statement**

- IFNAR1 deficiency is a rare inherited condition affecting some people in Australia of Western Polynesian heritage including Tongan, Samoan, and Niuean people.
- It is associated with severe illness and death from certain viral infections and also potentially from live-attenuated virus vaccines, including the measles, mumps, and rubella (MMR) vaccine.
- Currently, the diagnosis of IFNAR1 deficiency prior to vaccination is difficult unless a person has been diagnosed following a severe illness secondary to a viral infection in early childhood. There is no screening genetic test currently available for IFNAR1 deficiency.
- The Australian Technical Advisory Group on Immunisation (ATAGI) has prepared a statement on IFNAR1 deficiency. The statement does not recommend any changes to the National Immunisation Program.
- ATAGI recommends that all people in Australia, including people of Tongan, Samoan, and Niuean heritage, continue to receive the MMR vaccine given that illness from measles and mumps infections is more severe in unvaccinated individuals, including those with undiagnosed IFNAR1 deficiency.
- People with IFNAR1 deficiency can safely receive the rotavirus vaccine and non-live vaccinations, including the influenza and COVID-19 vaccines.
- Healthcare providers need to be aware that children of Western Polynesian heritage who present for medical attention and are very unwell in the 1-2 weeks following MMR vaccine may need further investigation by an immunologist to assess for an immune deficiency.
- Family members of individuals who have had a severe reaction to a live-attenuated virus vaccine, or are related to someone with known IFNAR1 deficiency, should be referred to an immunologist for consideration of the MMR vaccine prior to vaccination.

ADVERSE EVENTS FOLLOWING IMMUNISATION

- Any suspected adverse event following immunisation should be reported to the local public health unit on **1300 066 055**.

SPECIALIST IMMUNISATION ADVICE

- For specialist immunisation advice, contact the NSW Immunisation Specialist Service via email on schn-nswiss@health.nsw.gov.au

Regards

A handwritten signature in black ink, appearing to read 'Richard Broome'.

Dr Richard Broome

A/Executive Director Health Protection NSW

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