



The Immune Response

August 2002

SPONSORED BY

CSL

Vaccines

Please copy and distribute to all immunisation providers in your practice or health centre. Thank you.

Measles in Byron

Just three cases of measles have been reported in the area to date, the only ones reported in NSW this year. Please be sure that all your children and young adults (18 to 30 years) are appropriately vaccinated.

Who should be vaccinated?

Children receive MMR vaccination at 12 months and four years as per the current schedule. If a child is participating in a 'catch up' schedule, please consider giving MMR as a matter of priority. It can be given at the same time (different injection and site) as any of the other vaccinations on the schedule. The second MMR can be given one month later (p 45 of Handbook).

Adults who have not received a second dose of MMR or have not had the disease should be vaccinated. Classically, these are males between 18 and 32 years. The vaccine is the same vaccine used for children and is free. Please consider screening all of your patients, but especially those wanting travel vaccinations, or men who have pregnant partners. If a patient is unsure of his immune status, suggest vaccination with MMR to be certain. "There are no ill effects from vaccinating those with pre-existing immunity to one or more of the three diseases." (p156)

In the case children older than 12 months and under four years who are about to travel overseas, or are at high risk of exposure during an outbreak, the second dose can be brought forward to one month after the initial dose. (p 158) Another injection at four years is not needed and the schedule will reflect that the child has had the second dose. For babies under 12 months, see 'Vaccination during an outbreak' p 158. Note

that these initiatives are guided by the local public health authority, which at this stage does not see the need to vaccinate the under 12 months.

Vaccine side effects

About 1 in 10 have discomfort, local inflammation or fever. About 1 in 100 develops a non-infectious rash. 1 in 1 million recipients may develop encephalitis. (back page of Handbook)

The effects of measles

Besides the discomfort, fever, coughing, sore eyes, and feeling lousy for several weeks, withdrawal from social and work activities and potentially ruining holidays are also a consideration. Also passing the virus to others who may be less healthy, young or pregnant, and who may then develop serious complications.

Complications of measles

1 in 25 children with measles develops pneumonia * 1 in 2,000 develops encephalitis * For every 10 children who develop measles encephalitis, 1 dies and up to 4 have permanent brain damage * About 1 in 25 000 develops SSPE which is always fatal. (Back of Handbook) * 2.5% develop otitis media and some also conjunctivitis. (p 154)

Incubation period

Measles incubation period is 10 to 14 days. Infection usually starts with fever, cough, conjunctivitis and head cold symptoms. The rash may not appear until day four and usually starts on the head and neck radiating to the rest of the body.

Immune response to vaccination

After first dose of MMR, sero-conversion studies reflect a 95% coverage with 99% of recipients sero-converting after the second vaccination. Those exposed to measles can receive vaccination of MMR up to 72 hours post exposure to bolster the patient's own immune system.

Contraindications to MMR

Please see the handbook (p 160) for a complete description. Contraindications should always be checked before the administration of any medication or therapy.

"Egg allergy, even anaphylactic egg allergy, is NOT a contraindication to vaccination with measles vaccine or MMR.400 children who had a history of egg allergy and a positive skin prick test [were vaccinated]. Only four children had minor reaction and none had any adverse events that required treatment. Children with egg allergy can safely be given MMR vaccine provided this is done under close supervision, with adrenaline ready for injection. If there is genuine concern.... a paediatrician should be consulted...." (p 160-161)

OPV can be given at the same time as MMR and therefore its administration is not a contraindication.

Reporting

All suspected cases should be reported to the Northern Rivers Division of Population Health. Cases need to be confirmed by a blood or urine and throat swab. The DPH will advise which is the most appropriate as some will not be effective at certain stages of the disease.

Gae McDonald, Immunisation Project Officer,
Northern Rivers DGP

BRIEFS

Free national vaccine program to combat meningococcal disease

A national vaccination program will provide free meningococcal vaccine to all children aged 12 months and 15 years from next year. 16 and 17 years olds will also be included in the first year

of the program. The vaccine will protect against type C meningococcal, which causes about 32 per cent of all meningococcal cases in Australia. Further information: www.health.gov.au/-mediare1/yr2002/kp/kp02077

Direct billing

When patients are direct billed, an additional charge can be raised against the patient by the

practitioner ONLY where the patient is provided with a vaccine/s from the practitioner's own supply. This exemption applies to GPs and other non-specialist practitioners in association with attendance items 3 to 96 (inclusive) and only relates to vaccines that are not available to the patient free of charge through government funding arrangements or the PBS. The

additional charge must only cover the supply of the vaccine (as outlined on page 11 at 7.5.4 of the 1 November 2001 MBS).
Source: HIC

Useful websites

Reliable vaccination information for parents
www.vaccination.org.au
Excellent travel medicine site:
www.who.int/ith