



Meningococcal disease and vaccination IMPORTANT INFORMATION FOR HEALTH PROFESSIONALS

Health professionals may see patients with an atypical presentation of serious meningococcal disease.

An increase in meningococcal disease cases caused by a very virulent *Neisseria meningitidis* group W (previously W135) sequence type (ST-11) has been seen in Canada in 2014–2016, and in Australia and the United Kingdom (UK) over 2016–2017.

Clinical illness with the hypervirulent meningococcal strain tends to be severe. Cases may present with atypical symptoms, including gastrointestinal symptoms, which may contribute to delayed diagnosis and could possibly explain high fatality rates.

Overall case numbers of meningococcal group W are still low in New Zealand. However, there is a trend showing an increase in disease caused by meningococcal group W, including cases of the hypervirulent type ST-11, in 2016 and 2017.

Meningococcal groups B and C continue to be the most likely causes of disease in New Zealand. In 2016, around two-thirds (67%) of meningococcal disease was caused by group B and around one-tenth (11%) by group C.

In New Zealand, infants and children aged under 5 years, adolescents aged 15–19 years, Pacific people and Māori have the highest rates of meningococcal disease. Other risk factors include:

- » Exposure to tobacco smoke, binge drinking, or having another respiratory infection, e.g. influenza.
- » Living in close proximity to others, e.g. in a crowded household, in boarding school, in university halls of residence, in long-term institutional care.
- » Being a household or other close contact of someone carrying the bacteria or with the disease, e.g. those who have been intimate, or infants and children attending an early childhood education centre.
- » Having a medical condition or receiving treatment that reduces the immune response to encapsulated bacteria, e.g. functional asplenia, post-splenectomy, HIV infection, taking some immunosuppressive medicines.

Case management

- » Parenteral antibiotics should be administered to all cases as soon as meningococcal disease is suspected before admission to hospital.
- » Suspected meningococcal disease must be notified to the local Medical Officer of Health.
- » Refer to the Communicable Disease Control Manual for more information, available from <https://www.health.govt.nz/publication/communicable-disease-control-manual>.

Close contact management

- » Antibiotic prophylaxis should be given, preferably within 24 hours of diagnosis of the case.
- » Offer meningococcal vaccination with an appropriate vaccine. One dose is funded for close contacts.
- » Refer to the Immunisation Handbook 2017 2nd Edition for more information, available from <https://www.health.govt.nz/publication/immunisation-handbook-2017>.

Meningococcal vaccines

There are no vaccines to protect against meningococcal group B currently available in New Zealand.

Continued in next column...

Meningococcal vaccines continued

Meningococcal vaccines available in New Zealand:

- » Protect against group C only
 - » NeisVac-C® – funded for eligible patients or available for purchase
- » Protect against groups A, C, Y, and W
 - » Menactra® – funded for eligible patients or available for purchase
 - » Nimenrix® – not funded, available for purchase

A list of references is provided on page two.

2018 National Immunisation Workshop Thursday 13 September 2018

Naumi Hotel Auckland Airport

The National Immunisation Workshop is designed for front-line vaccinators, healthcare workers and Immunisation Coordinators.

Visit the 2018 Immunisation Workshop
webpage for more details

www.immune.org.nz/2018-immunisation-workshop

Registrations are open. Places are limited.



Well Child
Tamariki Ora

Well Child Symposia 2018/2019

The Well Child Tamariki Ora (WCTO) Programme Promotion Team at the Immunisation Advisory Centre is committed to supporting WCTO providers in their promotion and delivery of the WCTO programme.

Following on from our successful first Well Child Symposium in November 2017, over the next 12 months we are holding a series of four Well Child Symposia across the country.

- » **August 16, 2018: Christchurch Golf Club.** For more information visit the Symposium webpage www.immune.org.nz/2018-well-child-symposium
- » **November, 2018: Midland** (date and venue to be confirmed)
- » **First half of 2019: Auckland and Central**

Going forward, we will look at other opportunities to help you develop effective, quality-driven services.

We invite you and your colleagues to join the Well Child email list by clicking the subscribe button below.

[Subscribe to the Well Child newsletter](#)

Have a question? Education and Training

Call 0800 VTC UPD (0800 882 873) for help with course queries, test results, lost certificates, invoice, payment and anything else relating to IMAC education. You could also email imacadmin@auckland.ac.nz.

Cold chain

Call your Immunisation or Cold chain Coordinator for help with data logger downloads, cold chain breaches, excursions or failures, refrigerators, and any questions relating to cold chain.

Vaccines or vaccine preventable diseases

Call 0800 IMMUNE (0800 466 863) for help with clinical questions relating to non-travel vaccines, vaccination or vaccine preventable diseases.



...from the phones

Addressing some of the questions we receive on the 0800 IMMUNE phone line

Evidence of immunity

Measles, mumps and rubella

- DO NOT do serology
- Born prior to 1969
- Born 1969 or later with two documented doses MMR vaccine

Varicella

- DO NOT do serology
- Aged 50 years or older & grew up in NZ
- Clear history of varicella disease
- Two documented doses varicella vaccine
- Doctor confirmed shingles

Hepatitis B

- Three documented hepatitis B vaccine doses
 - Do serology
- Less than three documented vaccine doses
 - DO NOT do serology
 - Administer hepatitis B vaccine doses to complete a documented three dose course, with a minimum interval of 4 weeks between each dose
 - Do serology 4 weeks after final dose

Hepatitis B serology results

- AntiHBs ≥ 10 IU/L
 - Immunity for life
 - Keep record
 - No more serology
- AntiHBs < 10 IU/L
 - One challenge dose hepatitis B vaccine
 - Repeat serology 4 weeks later
 - If repeat serology is non-immune, call 0800 IMMUNE for advice

GET THE FACTS ON IMMUNISATION



Meningococcal disease and vaccination

Reference list

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- » Institute of Environmental Science and Research Ltd. New Zealand public health Surveillance report March 2018. Wellington: Institute of Environmental Science and Research Ltd (ESR); 2018.
- » Lopez L, Sherwood J. The epidemiology of meningococcal disease in New Zealand 2013. Wellington: Institute of Environmental Science and Research Ltd (ESR); 2014. Report No.: FW14023.
- » McCall BJ, et al. Risk factors for invasive meningococcal disease in southern Queensland, 2000–2001. *Intern Med J*. 2004;34:464-8.
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- » Ministry of Health. *Immunisation handbook 2017 2nd edition*. Wellington: Ministry of Health; 2017
- » Musher DM. How contagious are common respiratory tract infections? *N Engl J Med*. 2003;348:1256-66.
- » Stephens DS, et al. Epidemic meningitis, meningococcaemia, and *Neisseria meningitidis*. *Lancet*. 2007;369:2196-210.

COLD CHAIN MATTERS ...



Data loggers

Using data loggers to monitor vaccine refrigerator temperatures provides us with invaluable data on the temperatures reached and the duration of those temperatures.

Since the implementation of the *National Standards for Vaccine Storage and Transportation for Immunisation Providers 2017* (the Standards), there has been a noticeable reduction in the number of cold chain excursions as a result of the weekly downloading of data loggers.

While the Standards do not outline the following, our cold chain advisors strongly recommend that providers move their data loggers to a different shelf in their refrigerator every month. Doing this systematically, and documenting where in the refrigerator the logger was placed, allows the practice to be familiar with the normal temperature variations that are seen within the refrigerator and to help pick up if there are any airflow changes. This is outlined in the IMAC fact sheet *The essential data logger*. The data logger should be placed in the centre of the shelf away from any solid surfaces and vents.

Vaccine ordering and stock management

All providers should have documented minimum and maximum vaccine stock levels that they need to maintain appropriate to the population they are vaccinating. With extra pressure on refrigerator space with both the influenza and zoster vaccines, it is very important that providers ensure they do not over order and make use of the opportunity during April to June to order more frequently from ProPharma. This will also minimise loss of vaccine stock if problems with the fridge temperatures, e.g. power outages, occur.

Cold chain breaches

If you have a cold chain breach where the refrigerator temperature is above +8°C but below +12°C for less than 30 minutes for a known reason, e.g. stocktake or busy day with lots of door opening, you do not need to report this to the Immunisation/ Cold Chain Coordinator.

For all other breaches, you need to ensure that your vaccines are stored within the cold chain (between +2°C and +8°C) but held in quarantine until you advised by your Coordinator on whether they are able to be used or need to be returned for destruction.

Vaccines have varying tolerances to temperature outside the +2°C to +8°C range and each situation needs individual assessment. The Coordinators are able to access specific thermostability information for common cold chain breach scenarios, but if it is a complicated situation, e.g. extended power cut or multiple breaches, the Coordinators may need to access additional information and specialist advice, which can take extra time.

Community pharmacies and cold chain compliance

On 1 February 2018, cold chain management in pharmacies became regulated within the pharmacy licensing framework administered by Medicines Control.

Vaccinating pharmacies are still required to meet all of the requirements in the *National Standards for Vaccine Storage and Transportation for Immunisation Providers 2017*.

Immunisation Coordinators will continue to provide community pharmacies with cold chain advice, assistance with cold chain breaches, excursions or failures, three yearly spatial logging of pharmaceutical refrigerators and vaccinator clinical assessments.

More information is available on the Ministry of Health cold chain

web page:
www.health.govt.nz/coldchain.

Contact the editorial team:
Fax: 09 373 7030
Email: immnuz@imac.org.nz