New Zealand Paediatric Surveillance Unit

ACUTE FLACCID PARALYSIS PROTOCOL

Aim:
To establish and maintain high quality surveillance of acute flaccid paralysis (AFP) in New Zealand to demonstrate the absence of wild polio virus. This is necessary so that New Zealand can be regarded by the World Health Organization as polio free.

Objectives:
To determine:
1. The incidence of acute flaccid paralysis (AFP) in children in New Zealand.
2. Whether any cases of AFP in New Zealand are caused by polio.

CASE DEFINITION AND REPORTING INSTRUCTIONS
Any child aged under 15 years with acute onset of flaccid paralysis in one or more limbs or acute onset of bulbar paralysis.

To streamline the process of investigation for polio virus we require all cases of AFP be notified immediately.

This should be done by telephone to the NZPSU (027 526 7714) as soon as possible after the diagnosis is made or by emailing NZPSU directly to nzpsu@otago.ac.nz. If this is out of hours, or the phone is unattended, please leave a message and your call or email will be returned as soon as possible.

On receipt of a notification, NZPSU will inform the National Reference Laboratory to expect your samples.

A short questionnaire requesting clinical details will be emailed to all reporting clinicians, followed by another seeking information 60 days after the onset of paralysis.

Background:
There are many causes of AFP including trauma, the Guillain-Barre syndrome, transverse myelitis, and poliomyelitis. It is important for registration of New Zealand as free from wild polio that all cases of AFP are investigated for polio virus infection and reported to the NZPSU, even when the clinician is convinced that polio is not the cause. The adequacy of the surveillance system will be judged by WHO on the number and distribution of incident cases of AFP reported, and the proportion appropriately investigated for polio.

All cases of AFP must have a full clinical, epidemiological and virological investigation, including the collection and analysis of a nasopharyngeal swab and 2 adequate stool samples, and a clinical follow up 60 days after the onset of paralysis.

Adequate stool samples are considered to be 2 specimens collected at least 24 hours apart, taken within 14 days of the onset of the paralysis, arriving at the laboratory with proper documentation, with ice or cold packs present, and in sufficient quantity for laboratory analysis. If stool samples cannot be obtained for clinical or other reasons, two rectal swabs may be used as a substitute (inferior).

New Zealand, like other countries, is seeing increased incidence of Enterovirus infection (including D68) with acute flaccid paralysis/ acute flaccid myelitis. Please also obtain a nasopharyngeal swab for Enterovirus testing with note on the request form “as discussed with Sue Huang for AFP cases”.

Please note that faecal samples and the nasopharyngeal swab should both be sent to ESR for analysis via your local laboratory or send to WHO National Poliovirus Reference Laboratory,

Institute of Environmental Science and Research, Wallaceville Science Centre, 66 Ward St, Wallaceville, Upper Hutt.

The final classification of cases of AFP is:

1. Poliomyelitis: A case of AFP with wild polio virus isolated.
2. Non-polio AFP: A case of AFP with adequate stool samples testing negative, or with no residual paralysis (unless wild polio virus isolated).
3. Polio-compatible: A case of AFP with residual paralysis, died or lost to follow up, and for whom stool specimens were either not taken, or were inadequate.

Investigators:

Professor Peter McIntyre, Epidemiologist
Professor Ben Wheeler, Paediatrician,
University of Otago, Dunedin P.O. Box 913
Tel: 03 556 6024
Email: nzpsu@otago.ac.nz

THANK YOU FOR YOUR HELP AND SUPPORT

THE RESULTS OF THIS SURVEILLANCE WILL BE INCLUDED IN THE ANNUAL REPORT OF THE NZPSU WHICH WILL BE AVAILABLE ON THE NZPSU WEBSITE AND CAN BE REQUESTED DIRECTLY FROM NZPSU