Monovalent adsorbed Pertussis Vaccine is now available. This vaccine is a suspension of killed organisms of strains of *B pertussis* expressing antigens Types 1, 2 and 3 and is prepared by the Commonwealth Serum Laboratories.

**INDICATIONS FOR USE**

The vaccine is recommended for the active immunisation of infants and young children against whooping cough where for any particular reason, DTP has been omitted from the immunisation of the child and only CDT has been used.

Monovalent vaccine may be used in children up to four years of age, but is specifically important for protection of children below two years of age because of the increased risk of severe morbidity and mortality from this disease in younger children.

**DEFERMENT OF VACCINATION**

Vaccination should not be given to a child during the course of an acute febrile illness and should be postponed until the child has recovered.

**CONTRAINDICATIONS**

Pertussis vaccine is contraindicated if there has been history of a major reaction (a fever > 40.5°C occurring within 48 hours of injection) or any one of the following occurring within 72 hours of vaccination:

- anaphylaxis
- bronchospasm
- laryngeal oedema
- generalised collapse
- prolonged hypotonic hyporesponse episode, convulsions, prolonged inconsolable screaming, encephalopathy, thrombocytopenia or a severe local reaction.

Children known to have an active or progressive neurological disease should not be given pertussis vaccine.
PRECAUTIONS

Do not administer by any route other than by deep intramuscular injection. Injections given subcutaneously are believed to increase the risk of local reactions.

Under no circumstances should pertussis vaccine be used for the treatment of actual whooping cough infection.

ADVERSE REACTIONS

Local

Local reactions manifested by redness and induration with or without tenderness are common. Such local reactions are usually self-limiting and require no therapy. A nodule may be felt at the injection site for a few weeks. Abscess formation at the site of injection has been reported occasionally.

Severe

An extensive area of redness and swelling which becomes indurated involving most of the anterolateral surface of the thigh or a major part of the circumference of the upper arm. This reaction may increase in severity with each subsequent injection.

General

Mild to moderate fever accompanied by irritability or malaise may occur within several hours of administration and persist for one or two days. A severe constitutional reaction may occasionally follow an injection of pertussis vaccine; persistent screaming with or without vomiting, shock and collapse have been known to occur on rare occasions, the symptoms commencing about one to four hours after vaccination and subsiding in a few hours. Convulsions are said to occur in about 0.1% of cases but it is difficult to relate this entirely to the vaccine. Encephalopathy is an exceedingly rare sequel of pertussis immunisation. A causal relationship between encephalopathy and the vaccine has been disputed.

If a severe constitutional reaction occurs no further doses of pertussis vaccine should be administered.

DOSAGE AND ADMINISTRATION

The dosage of monovalent pertussis vaccine is three injections, each of 0.5ml at two month intervals. The dose and dosage schedule is the same for all ages up to four years.

Injections should be given by deep intramuscular injection into the anterolateral aspect of the thigh or the deltoid region of the arm.

As recommended with DTP, paracetamol in age appropriate doses should be recommended to be taken in four doses for 48 hours following vaccination.

METHOD OF ADMINISTRATION

There is some suggestion that injection technique may contribute to the severity of local reactions including abscess formation at the injection site as a result of the
antigen seeding the needle track. Therefore when withdrawing the antigen into the syringe avoid any residue on the outer surface of the needle.

**STORAGE**

The vaccine should be stored between 2°C to 8°C and protected from light. The vaccine should not be frozen.

**PRESENTATION**

Adsorbed monovalent pertussis vaccine is issued in 0.5ml containers.

**AVAILABILITY**

The vaccine is available from the Central Immunisation Clinic at 16 Rheola Street, West Perth, telephone (09) 321 1312. Only small quantities of the vaccine are maintained in stock as it is expected that DTP will be appropriately promoted at all times to eligible children.

Peter J Brennan  
COMMISSIONER OF HEALTH