APPENDIX 7: GLOSSARY OF TECHNICAL TERMS

Adjuvant
a preparation which may be added to a vaccine to improve the immune response to that vaccine.

ADT
adult diphtheria and tetanus vaccine (also referred to as dT). Trade name used for diphtheria-tetanus vaccine previously made by CSL for use in adults.

Adverse event following immunisation (AEFI)
an unwanted reaction following administration of a vaccine, which may or may not be caused by the vaccine; adverse events may be at the site of injection, or may be a general illness or a general allergic reaction.

Anaphylaxis
a sudden and severe allergic reaction, which results in a serious fall in blood pressure and/or respiratory obstruction and may cause unconsciousness and death if not treated immediately.

Attenuation
the process of modifying a virus or bacteria to reduce its virulence (disease-inducing ability) while retaining its ability to induce a strong immune response (immunogenicity).

Bacteria
microorganisms that are smaller than a blood cell but bigger than a virus; examples of bacterial infections are diphtheria, tetanus, pertussis, Hib and tuberculosis.

BCG
Bacillus of Calmette-Guérin, a vaccine that protects against tuberculosis.

Carrier
a person who has an infection which, although not necessarily causing symptoms, may still be active and may spread to others; the carrier state may last for years; examples of infections that can result in the carrier state are hepatitis B and typhoid.

Conjugate
some bacterial vaccines (eg. Hib and pneumococcal conjugate vaccines) are made from the chemical linking (conjugation) of a tiny amount of the 'sugar' (correctly known as the polysaccharide) that makes up the cell coat of the bacteria with a protein molecule, in order to improve the immune response to the vaccine.

Contraindication
a reason why a vaccine or drug *must* not be given.

Corticosteroid
a drug used to reduce inflammation and other immune responses.

dT
diphtheria-tetanus vaccine for use in adults (ADT).

DTP/DTPa
a vaccine that protects against diphtheria, tetanus and pertussis (whooping cough). The DTP used in Australia and many other industrialised countries is DTPa, which contains an acellular pertussis component made of refined pertussis extracts instead of inactivated whole pertussis bacteria. The acronym DTPa, using capital letters, signifies child formulations of diphtheria, tetanus and acellular pertussis-containing vaccines, and denotes the substantially larger amounts of diphtheria toxoid and pertussis antigens in these formulations than in the adolescent/adult formulations.

dTpa
adolescent/adult formulation diphtheria-tetanus-acellular pertussis vaccine. dTpa contains substantially lower concentrations of diphtheria toxoid and pertussis antigens than the child formulations (which are signified by using all capital letters (DTPa)).

Effectiveness
the extent to which a vaccine produces a benefit in a defined population in uncontrolled or routine circumstances.

Efficacy
the extent to which a vaccine produces a benefit in a defined population in controlled or ideal circumstances.

Encephalitis
inflammation of the brain.

Encephalopathy
a general term to describe a variety of illnesses that affect the brain, including encephalitis.

Endemic
endemic infections are present all the time in a community.

Epidemic
epidemic infections are those that spread rapidly in a community; measles and influenza viruses are common causes of epidemics in Australia; small epidemics are often called outbreaks.

Febrile
related to a fever, as in febrile illness and febrile convulsions.

HAV
abbreviation for hepatitis A virus, the cause of hepatitis A, a common food-borne infection in travellers to developing countries.

HBsAg
hepatitis B surface antigen; a marker in the blood that indicates that the person is a carrier of active hepatitis B virus infection.

HBV
abbreviation for hepatitis B virus, a virus that is spread in body fluids in various ways including blood-to-blood contact through sharing injection equipment, and through sexual intercourse.

Hepatitis
an inflammation of the liver; can be caused by viral infections.

Hib
Haemophilus influenzae type b; a bacterium that causes meningitis and other serious infections in young children.

HIV
human immunodeficiency virus, or the AIDS virus; people with HIV infection may have weakened immunity and need special vaccinations to protect them against other infections.

Human papillomavirus
a group of viruses, some of which have been associated with some forms of cervical cancer; some can also cause genital warts.

Hypotonic-hyporesponsive episode (HHE)
a rare adverse event which may follow some hours after DTPa vaccination; the child becomes pale, limp and unresponsive; the condition may last from a few minutes to hours but causes no long-term serious problems.

Immunisation
the process of inducing immunity to an infectious agent by administering a vaccine.

Immunity
the ability of the body to fight off certain infections; immunity can result from natural ('wild') infections or from vaccination.

Immunogenicity
the ability (or the degree) to which a particular substance, in this context a vaccine, may provoke an immune response.

Immunoglobulin
a protein extract from blood, sometimes called 'antibody', which fights off infection; injection of immunoglobulins provides temporary immunity against certain infections.

Incubation period
after a person is infected with bacteria or viruses, it often takes days or weeks for the infection to cause an obvious illness; the time between exposure to the infectious agent and development of the disease is called the incubation period.

Infection
an infection occurs when bacteria or viruses invade the body; if the body cannot fight the infection, it may cause an illness.

Intradermal injection
an injection into the surface layers of the skin; this is used for the administration of BCG, the tuberculosis vaccine.

Intramuscular (IM) injection
an injection into the muscle; vaccines are usually injected into a muscle of the upper outer thigh, or a muscle in the upper arm.

IPV
inactivated poliomyelitis vaccine; an injectable vaccine formerly known as Salk vaccine.

Invasive disease
this term is often used when talking about pneumococcal or meningococcal disease. This term means that the bacteria (or germs) have been found in the blood, spinal fluid or another part of the body which would normally be sterile (or germ free).

Jaundice
yellow skin colour that may result from severe hepatitis.

JE
Japanese encephalitis; a viral encephalitis.

MMR
measles-mumps-rubella vaccine.

MMRV
measles-mumps-rubella-varicella vaccine.

OPV
oral poliomyelitis vaccine; also known as Sabin vaccine. This vaccine is no longer routinely used in Australia.

Pandemic influenza
a global epidemic that results when a new strain of influenza virus appears in the human population. It causes more severe disease in the population because there is little immunity to this new strain.

Paracetamol
a medicine that helps reduce fever; it may be given to minimise fevers following vaccination.

Pertussis
whooping cough, an illness caused by a bacterium, *Bordetella pertussis*.

Polysaccharide
a group of complex carbohydrates (sugars) which make up the cell coating present in some bacteria.

Polyvalent vaccine
a combination vaccine which protects against more than one disease; examples are DTPa and MMR.

PRP-OMP
a type of Hib vaccine.

PRP-T
a type of Hib vaccine.

Rotavirus
a virus that is a common cause of diarrhoea (and often vomiting as well) in young children. The diarrhoea can be severe in very young children, such that they may need intravenous fluids (ie. through a vein in the arm) in hospital.

Rubella
a viral illness, sometimes also known as German measles.

Subcutaneous (SC) injection
an injection into the tissue between the skin and the underlying muscle.

Vaccination
the administration of a vaccine; if vaccination is successful, it results in immunity.

Vaccine
a product often made from extracts of killed viruses or bacteria, or from live weakened strains of viruses or bacteria; the vaccine is capable of stimulating an immune response that protects against natural ('wild') infection.

Varicella
chickenpox, an infection caused by the varicella-zoster virus.

Virus
a tiny living organism, smaller than a bacterium, that can cause infections; measles, rubella, mumps, polio, influenza and hepatitis B are examples of viruses.

Zoster
an abbreviation for herpes zoster infection (also known as shingles); a painful rash and illness caused by the varicella-zoster (chickenpox) virus.