

CHILDHOOD VACCINATIONS

POLIO

Polio is a serious viral disease following gastro-intestinal infection, which can cause severe muscle pain and can lead to paralysis of one or more limbs and may make it difficult to breathe without the aid of a machine. Mild cases of polio may last only a few days and may cause the person to have a fever, sore throat, stomach ache and headache. There is no cure for polio and most people who have been paralysed by polio will have some weakness in an arm or leg for the rest of their lives. Many of these people will be seriously disabled.

Disease Risk:

Polio continues to occur in many developing countries, especially in Africa, Indonesia, the Middle East, and the Indian subcontinent. Transmission is spread through the faecal – oral route. It is important to be protected with the polio vaccine so that you cannot acquire the disease when someone brings the virus into areas that are considered to be 'polio-free' or when you travel abroad to countries where polio is a problem.

Vaccination:

Vaccination is the only reliable protection against polio. Polio is spread by close contact with infected persons (by contact with mucus from the nose or throat, or by contaminated water or food). Following standard precautions with food and beverages can reduce your risk of exposure to polio.

A primary course of polio vaccine is commenced at 2, 4 and 6 months of age. From November 2005 Inactivated Polio Vaccine is given as an injection as the previous oral drops have been discontinued in Australia. Travellers who will be going to areas where wild poliovirus poses a risk should have a booster dose of polio vaccine.



VARICELLA

Varicella (chickenpox) is a common viral childhood disease, it is usually mild, but it can be serious in young infants and adults. It can be spread through the air, or by contact with fluid from the chickenpox blisters. It can cause a rash, itching, fever and tiredness. It can also lead to severe skin infection, scars, pneumonia, brain damage or death. A person who has had chickenpox can get a painful rash called shingles years later.

Disease Risk:

By the age of 12 years, about 75% of children will have had varicella. There are 240,000 cases, 1,200 hospitalisations and 4.2 deaths in Australia each year from varicella.

Vaccination:

Varicella vaccine can prevent chickenpox. If someone who has been vaccinated does get chickenpox, it is usually very mild, they will have fewer spots, less likely to have a fever and will recover faster.

Children between 12 months and 13 years of age can have one dose of varicella vaccine. A blood test can be performed on adolescents and adults to determine immune status, it is recommended and cost effective prior to vaccination as many will be immune to varicella without a history of clinical disease. Adults need two doses 6 weeks apart.

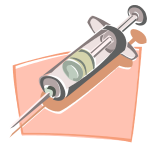
DIPHTHERIA AND TETANUS AND PERTUSSIS



Diphtheria is an acute bacterial disease involving primarily the tonsils, pharynx, larynx, nose and occasionally other mucous membranes of the skin. The characteristic lesion is marked by a patch or patches of an adherent grayish membrane with surrounding inflammation. It can lead to breathing problems, paralysis, heart failure and even death.

Tetanus is an acute disease induced by a toxin from the tetanus bacillus, which can enter open wounds and minor cuts. The disease is characterised by painful muscular contractions and convulsions, usually all over the body. It can lead to 'locking' of the jaw so the person cannot open his mouth or swallow. Tetanus can lead to death.

Pertussis (whooping cough) is a highly infectious bacterial respiratory infection. Pertussis causes coughing (the characteristic whoop) so bad that it is hard for infants to eat, drink or breathe. This can last for weeks and is often associated with vomiting. The illness often causes much family disruption and dysfunction. Pertussis can lead to pneumonia, seizures, brain damage and death.



Disease risk:

Diphtheria remains a serious disease throughout the world. In particular, large outbreaks of diphtheria occurred in the 1990's throughout Russia and the independent countries of the Soviet Union. Most cases occurred in unimmunised or inadequately immunised people.

Tetanus is a global health problem. Clostridium tetani spores can be found in soil and can enter wounds. Any wound, even superficial, that may be contaminated by dust, soil or manure can lead to tetanus. Tetanus can occur in an unvaccinated person anywhere in the world.

Pertussis occurs primarily in children and is common in countries where immunisation is not generally provided. Pertussis can also occur in adults after immunity from vaccines has waned. It is highly communicable, is often associated with complications, and has a relatively high case-fatality ratio in infants.

Vaccination:



A primary course is required at 2, 4 and 6 months of age, 18 months and 4 years of age with booster doses every 10 years (5-10 years depending if a tetanus prone injury has occurred). Travellers to countries where health services are difficult to access should be adequately protected against tetanus prior to departure. Due to recent outbreaks of Pertussis in Western Australia, vaccination boosters with Boostrix is recommended for teenagers, and adults in close contact with young children. Boostrix covers all three infections: diphtheria, tetanus and pertussis.

MEASLES, MUMPS AND RUBELLA

Measles is an acute, serious, highly communicable viral disease. It causes high fever, cough, eye irritation, rash and can last for 1 to 2 weeks. Measles can be complicated by middle ear infections or diarrhoea. It can also lead to convulsions, hearing loss and mental retardation. The disease can be severe, with bronchopneumonia or brain inflammation leading to death in about 2 of every 1,000 cases.

Mumps is an acute viral disease characterised by fever, swelling and tenderness of one or more salivary glands, usually the parotid and sometimes the sublingual or submaxillary glands. Nerve deafness is one of the most serious of the rare complications. Testicle infection has been reported in up to 20% of cases in post-pubertal males and can lead to sterility. It can also lead to meningitis and rarely death.



Rubella is an acute viral disease that can affect susceptible people of any age. Although generally mild in infants and children, rubella can be associated with significant morbidity in adults and is associated with a high rate of fetal abnormalities if contracted in the early months of pregnancy. Symptoms can include rash, swollen glands and aching joints.

Disease risk:

All three diseases are reported world-wide, and are transmitted by the airborne route or direct contact. While these diseases rarely occur in developed countries because of successful vaccination programs, they are considered to be a major health risk in developing countries, where universal immunisation is difficult to achieve.

Vaccination:

Vaccination is recommended for all children as a routine childhood immunisation. Two doses of MMR vaccine are given, the first at 12 months and the second at 4 years of age. Adults not immune to any of these 3 infections should also get the combination MMR vaccine: generally anyone 18 years of age or older who was born in or after 1950 should get at least one dose of MMR vaccine, unless they can show that they have had either the vaccines or the diseases. Blood tests can be performed to check whether someone already has natural immunity. All women of childbearing age should be immune to rubella. Non-pregnant women of childbearing age who are not immune should be vaccinated with Rubella or MMR vaccine (in not contraindicated) and should not become pregnant for 3 months following immunisation.

