

## Description of diseases against which we have vaccines:

- \* **Diphtheria** is a respiratory illness caused by a bacteria that causes a membrane to form in the back of a child's throat causing severe respiratory distress and heart problems and often death. Although virtually eliminated in the United States, some countries (such as the former soviet republics) experienced epidemics of diphtheria when they stopped immunizing their children against it, resulting in the deaths of thousands of children. There have been several outbreaks in the southern United States in recent years.
- \* **Pertussis** is also known as whooping cough. Although this bacteria is the cause of many coughs of more than three weeks duration in adults, it is deadly to young infants under 6 months of age. As children approach adulthood, immunity against pertussis wanes. Adults may therefore act as unwilling reservoirs of infection to un-immunized or under-immunized infants! To help protect yourself and children you may want to ask your own Dr. if you need a tetanus/pertussis booster.
- \* **Tetanus** is also known as lockjaw, because it is characterized by uncontrollable contractions of body muscles, especially the jaw. It results from a toxin produced by bacteria that can infect dirty wounds. Immunity wanes with time so repeated doses are needed throughout life to protect against this deadly infection which is still common in infants in many underdeveloped countries of the world. It is carried in spores in the soil. . Adults need boosters of this shot every 10 years.
- \* **Polio** is a virus still problematic in some countries of the world, where it can cause paralysis and even death. Polio vaccine has saved millions of children's lives. Oral vaccine is given worldwide but in developed countries we now give the injectable vaccine because of its improved safety profile and the ability to give it to the entire population.
- \* **Hib** – Haemophilus influenza, type B is an invasive bacteria that can cause a variety of deadly diseases including meningitis, epiglottitis (swelling in the back of the throat), skin and and serious eye infections.
- \* **Pneumococcus** (streptococcus pneumoniae) is another invasive bacteria that can cause meningitis, pneumonia, as well as serious infections of the blood.
- \* **Varicella** virus, also known as chicken pox, is generally a benign illness, but can be quite serious. Children of any age can develop encephalitis (swelling of the brain), pneumonia, or serious skin infections from this virus. Although rare, these complications can result in death.
- \* **Measles** – is a highly contagious viral infection that causes fever, rash, cough, and red eyes. Some cases result in encephalitis (swelling of the brain) and even death. Because this disease is so contagious, a large percentage of the population needs to be immunized to protect the community as a whole. Some children do not obtain complete immunity after a single immunization. A few years ago, immunization rates against measles dropped in both the United States and certain parts of Europe. Because of this decline in immunizations, measles outbreaks occurred in the U.S., Great Britain and Ireland, resulting in several children's deaths. Recently, immunization rates in Great Britain have returned to safe levels (above 95%) and measles infections have correspondingly declined.
- \* **Mumps** is another contagious viral infection causing swelling of the parotid (salivary) glands. Other manifestations include testicular swelling in boys, and meningitis/encephalitis (swelling of the brain).
- \* **Rubella**, or German Measles, is a virus that causes a rash similar to measles. Although the illness is usually benign, exposure to rubella during pregnancy can result in spontaneous abortions or severe birth defects.
- \* **Hepatitis A** - is a viral disease most often transmitted through contaminated food products. The disease causes its' sufferers to become quite ill with fever, vomiting, abdominal pain, weight loss and jaundice (resulting from liver damage). The illness can last several weeks and require prolonged hospitalization.
- \* **Hepatitis B** is a virus that can lead to chronic liver failure and death. It is transmitted through blood and body fluids and has a very high transmission rate from mothers to newborns.
- \* **Meningitis** is an inflammation of the membranes that surround the brain. It can be caused by several different viruses and bacteria. Bacterial meningitis is generally more severe than viral meningitis and is often fatal. Because bacterial meningitis progresses so quickly, there is often little warning that a patient is becoming very sick. It is also difficult to treat. Currently, children are immunized against three different types of meningitis: Prevnar and HiB vaccines are given to infants, and Menactra is given to teenagers to protect children at the ages that they are considered at most risk.
- \* **Human Papilloma Virus** has been implicated in causing cervical cancer in women in addition to common warts. There are a number of strains of the virus, some cause cervical cancer and others cause common warts.