In preparation for “Back to School”, one of the most important items on the list of every parent are immunizations. The requirements for school entry can be confusing as there are several changes to consider for 2007-2008.

**DTP (diphtheria, tetanus, pertussis)**
There are six doses at 2, 4, 6 and 15-18 months, 4-6 years and a booster dose (tdap) at 11-12 years. Thereafter, a booster dose is required every 10 years. Diphtheria is spread from person to person via the respiratory route and causes a thick coating to the back of the throat which can lead to difficulty breathing, paralysis, heart failure or death. Tetanus infection is contracted through an open cut or wound and causes the muscles of the body to tighten which can lock the jaw resulting in the inability to open the mouth or swallow. Pertussis is spread via the respiratory route and results in a whooping cough. Pertussis can lead to severe coughing spells making it difficult to breath and can result in pneumonia, seizures or death.

**IPV (inactivated polio vaccine)**
There are four doses at 2, 4, 6-18 months and 4-6 years. Polio is caused by a virus which enters through the mouth and can result in paralysis of the body or death by interfering with the ability to breath.

**MMR (measles, mumps, rubella)**
There are two doses at 12-15 months and 4-6 years. The measles virus is spread person to person via the respiratory route. It causes a rash which may be accompanied by cold symptoms, conjunctivitis and fever. Mumps is also spread via the respiratory route and can cause swollen glands, fever, meningitis or swelling of the ovaries and testicles. Rubella causes a rash, fever and arthritis but if contracted by a pregnant woman, it could result in miscarriage or birth defects.

**Varicella (chicken pox)**
There are two doses at 12-15 months and 4-6 years old. Children who have not had chicken pox by the age of 13 will also need two doses separated by 4 weeks. The chicken pox virus is spread via the respiratory route and also via contact with fluid from blisters. The severity of chicken pox can range from being mild with rash and fever to very serious causing pneumonia, skin infection or death. If a child gets chicken pox after the vaccine, it is usually milder with less blisters, fever and not as many days missed from school.

**Hib (haemophilus influenzae type b)**
There are three or four doses at 2, 4, 6, and 12 – 15 months. The dose given at 6 months may not be necessary, depending on the brand of vaccine. Haemophilus influenzae is a bacterium which is spread from person to person. This bacterium can cause meningitis,
deafness, pneumonia, swelling of the throat to the point of not being able to breath or death.

**Hepatitis A**
Can be given to children 12 months or older. It is recommended for all children born after 1/1/2006) or who live in or are about to travel to a high risk area. Two doses are given 6 months apart. The hepatitis A virus can be found in the stool of infected persons and can be transmitted by eating food or drinking water contaminated with this virus. Hepatitis A can cause jaundice(yellow) of the skin and eyes, stomach ache, diarrhea and a flu-like illness. This virus is easily transmitted in settings such as daycare, cafeterias and households. Hepatitis A virus can cause severe liver disease.

**Hepatitis B**
This is a three dose series with the first dose given at birth, the second dose is given at 1-2 months and the third dose is given at 6-18 months. Four doses of Hepatitis B may be given if combination vaccines are used after the birth dose. For adolescents who did not receive the primary series or are catching up should receive the first dose, the second dose at least one month later followed by the third dose at least two months after the second and at least four months after the first. Infants must be at least six months when they receive the third dose. The hepatitis B virus can affect the liver causing cirrhosis, liver cancer or death and occurs more often in those who contract the virus as infants or children. This virus is also characterized by jaundice(yellow) of eyes and skin, diarrhea, vomiting and loss of appetite with these symptoms being seen more when infected as an adult. It is spread by person to person contact through blood or other bodily fluids. It can also be sexually transmitted or spread to an infant upon contact with an infected mother’s blood or bodily fluids.

**HPV/Gardisil (Human Papilloma Virus)**
This vaccine is recommended to be given to females at 11-12 years old but may be given as early as 9 years. Three shots are given within a 6 month period. The human papilloma vaccine can prevent genital wart infections and cervical cancer. This vaccine is active against four types of HPV which includes two types responsible for 70% of cervical cancer and two types responsible for 90% of genital warts. The human papilloma virus is sexually transmitted and affects greater than 50% of sexually active men and women. A major implication of this vaccine is that again it protects against strains of this virus responsible for 70% of cervical cancer which is the second leading cause of cancer deaths among women.

**Menactra (meningococcal vaccine)**
It is recommended for those 11-12 years old, entering high school or college and for military recruits. Meningococcal infection is one of the leading causes of bacterial meningitis in children 2-18 years of age. One out of ten who become infected with this bacteria die despite treatment with antibiotics. Of those who survive, up to 20% lose their arms or legs, suffer from deafness or seizures or become mentally deficient. This vaccine protects 90% of those vaccinated. Those who have had Guillain-Barre Syndrome should speak with their physician before receiving this vaccine.
**Prevnar (pneumococcal vaccine)**
This vaccine is given at 2, 4, 6 and 12 months or older. The pneumococcal vaccine protects against the Streptococcus pneumoniae bacteria which is the leading cause of bacterial meningitis in the United States. This bacterium can also cause serious blood infections, ear infections and pneumonia. It is also spread from person to person contact.

**Rotateq (rotavirus)**
It is recommended for children at 2, 4 and 6 months of age. The first dose should be given by the age of 3 months and all doses should be completed by 8 months. Rotavirus most commonly affects infants and children and results in severe diarrhea, dehydration or death. This vaccine is oral and decreases the severity of infection if affected. Approximately 74% of those who receive the vaccine do not get rotavirus.

**Immunization changes for the school year 2007-2008**

Children entering childcare centers, Pre-K or Head Start:
- Children less than five years of age must be immunized against pneumococcal disease (Prevnar)
- Children born on or after January 1, 2006 must be immunized against hepatitis A

Children entering kindergarten, 6th grade or students entering a Georgia school for the first time in any grade:
- Two doses of varicella vaccine or provider documentation of immunity from disease history or serologic proof of immunity
- Two doses of a mumps containing vaccine or serologic proof of immunity

**In light of the new vaccine requirements for varicella and increased demand for the vaccine, offices are currently experiencing a shortage. Schools have been made aware of this issue and have been instructed not to deny entry to students unable to receive the second dose of varicella before school starts.

For more information, please visit the Decatur Pediatric Group or [www.cdc.gov](http://www.cdc.gov).

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