

Immunization Facts

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Anyone who has watched TV or surfed the internet lately has probably heard some harsh words spoken against childhood immunizations. Vaccines have been blamed by self-proclaimed immunization "experts" (like former Playboy Playmate Jenny McCarthy, or Oprah Winfrey) for causing a variety of illnesses, including everything from autism to mercury poisoning. In reality, immunizations are very safe and effective (and ours don't even contain any mercury!). Vaccines have completely eradicated smallpox, and all but wiped out once feared, deadly diseases such as polio and diphtheria. Vaccines are the cornerstone of pediatric health and have probably done more to advance health than any other medical development in history. Following are a list and information on the immunizations we use to keep our Georgia kids healthy! For more information, visit the National Immunization Program (<http://www.cdc.gov/vaccines>), a reliable source for factual information. However, if you want to get your medical advice from Hollywood celebrities, you're on your own.

DTaP - Diphtheria, Tetanus, and Pertussis Vaccine

The "dee-tap" shot protects children against three bacterial diseases. Diphtheria causes a thick covering in the back of the throat, making breathing difficult, and can also cause heart damage. Tetanus, or Lockjaw, causes painful tightening of the muscles, including muscles used to swallow and breath, and kills about 10% of people infected. Pertussis, or Whooping Cough, causes such bad coughing spells that children can't breath or drink. These spells can last for weeks. DTaP is given at 2mo, 4mo, 6mo, 18mo, and 4 years.

HepA - Hepatitis A

The HepA vaccine prevents infection from the Hepatitis A virus. In general, Hepatitis A causes a mild infection, with flu-like symptoms, mild jaundice, diarrhea and stomach cramps. However, about 1 in 5 people infected develops a serious illness and has to be hospitalized. About 100 people die from Hepatitis A each year. Hepatitis A is given at the 12mo and 18mo visits.

HepB - Hepatitis B Virus Vaccine

The Hep-B shot prevents infection with the Hepatitis B virus. Hepatitis B can give you severe diarrhea and vomiting, muscle and joint pain, jaundice (yellow skin and eyes), weight loss and fatigue. Some people seem to have no problems when they're first infected, and may not even know they're infected. However, over several years, Hepatitis B may cause liver damage and liver cancer. 4000-5000 people die yearly from liver damage from Hepatitis B. HepB is usually given at birth, 2mo, and 6mo.

Hib - Haemophilus Influenzae B Vaccine

The Hib shot prevents disease due to the bacteria Haemophilus Influenzae B ("H-flu"). H-flu can cause all sorts of nasty infections, including infections of the blood, joints, bones, and lungs. Before the Hib shot, H-flu infections were the leading cause of bacterial meningitis (infection of the lining of the brain) in children less than 5 years old. Before the Hib shot, 20000 children a year developed serious H-flu meningitis, and 1000 died. Thanks to this shot, serious H-flu infections are now rare. Hib is typically given at 2mo, 4mo, 6mo and 15mo.

Flu - Inactivated Influenza Vaccine

The flu vaccine is recommended for children age 6mo to 5 years, and older children with chronic health problems. Often, the flu causes a moderate infection with fever, cough, chills, fatigue, and muscle aches. But some children can have serious infections from flu, especially young children, or children with chronic diseases like asthma, diabetes, sickle cell disease or heart disease. Flu kills about 36000 people yearly in

the US, mostly among the elderly. The flu shot is given yearly in the fall. Our clinic also offers a flu vaccine given as a nose-spray so your child won't even need to get a shot.

Gardasil

Gardasil is the newest vaccine on this list. It is a vaccine against four types of Human Papillomavirus, which cause genital warts and cervical cancer. This vaccine is expected to decrease the rate of life-threatening cervical cancer by about 70%. This vaccine is given to females at the 11 year visit. At some point in the future, this vaccine will also be recommended for males.

Menactra - Meningococcal Vaccine

Menactra provides immunity to *Neisseria meningitidis* ("Meningococcus"), an extremely nasty bacteria that is the leading cause of meningitis in children from 2 to 18 years of age. About 2600 people get meningococcus each year in the US. Ten to 15% of these people die, in spite of treatment with antibiotics. Of those who live, 10-20% lose their arms or legs, or lose their hearing, or suffer brain damage, seizures or strokes. This shot is given around 11 years of age.

MMR - Measles, Mumps and Rubella Vaccine

The MMR shot is the shot most often wrongly accused of "causing autism" in children. The reason this idea has come about is that this shot is typically given at 1 year of age, and most children with autism are diagnosed around 15-18 months of age. People think that since the MMR came before the diagnosis of autism, it must have caused the autism. The fact is that there have been dozens of research studies involving thousands of children to try to find a link between MMR and autism, and no such link has been shown. Although we don't know what causes autism, we can say that this shot does not appear to be involved. MMR protects children against Measles, which can cause pneumonia, seizures and brain damage; Mumps, which can lead to deafness, viral meningitis, and sterility; and Rubella, which can cause birth defects in unborn children. MMR is given at 1 year with a booster at 4-5 years.

IPV - Inactivated Polio Virus Vaccine

Polio has almost been eradicated from our planet. However, it is still common in some parts of the world. In 2005, an outbreak of polio occurred in unvaccinated children in Minnesota, so vaccination is still recommended! Polio usually causes a mild illness, but in some children and adults can cause paralysis (inability to move), including paralysis of the breathing muscles leading to death. You might have seen old pictures of children in giant breathing machines called Iron Lungs - those children suffered from polio infections. (Fortunately, today's breathing machines can fit in a small suitcase!) Polio vaccination was begun in 1955, when there were 20000 cases in the US. Due to the success of the polio vaccine, by 1979 there were only 10 cases. Before the outbreak last year, a case of "wild polio" had not been seen in this country for 20 years. IPV is given at 2mo, 4mo, 6mo, and 4 years.

Pevnar

Streptococcus pneumoniae ("Pneumococcus") can cause infections of many tissues and organs, including the blood, brain and lungs. In fact, pneumococcus disease kills more people in the United States each year than all the other vaccine-preventable diseases combined. Pevnar protects children against severe infections from this bacteria. As an added bonus, children who get this shot often have fewer ear infections from pneumococcus and require ear tubes less frequently. Pevnar is typically given at 2mo, 4mo, 6mo, and 15mo.

Rotateq

Rotateq protects infants and children against Rotavirus. Rotavirus causes severe vomiting and diarrhea, and often leads to dehydration. About 55,000 young children each year in the US are hospitalized due to rotavirus, and around 100 die. Over 600,000 children die annually worldwide due to rotavirus. The original

rotavirus vaccine, Rotashield, was taken off the market for safety concerns. Rotateq, however, was tested on over 70,000 children before being released and is very safe. This is an oral vaccine and is given at 2mo, 4mo, and 6mo.

Tdap - Tetanus and Pertussis Booster

Tdap is a booster of the tetanus and pertussis shots that are given in infancy (see above). This is given around 11 years to make sure immunity to these two diseases doesn't fall.

Varivax

Varivax protects children against Varicella Zoster, or Chicken Pox. Believe it or not, chicken pox hospitalizes 12000 people each year in the United States, and kills about 100 each year. Chicken pox can cause scars, skin infections, pneumonia and brain damage. It can also lead to a painful rash called shingles in later life. Varivax prevents these problems, and also cuts down on the rate of shingles in later years. Varivax is given at 1 year with a booster at 4-5 years.