As a parent, you want to keep your child safe and healthy. Whether installing child-proof door latches in your home or child safety seats in your car, you take the steps necessary to ensure the safety of your child. In the same respect, vaccines work to safeguard children from illnesses and death caused by infectious diseases. Vaccines protect children by helping prepare their bodies to fight often serious, and potentially, deadly diseases.

Myths and misinformation about vaccine safety can confuse parents who are trying to make good decisions about their children’s healthcare. This brochure provides the truth behind many of the vaccination myths found on the internet and in the media. If you have any questions about vaccination please talk to your healthcare provider or contact your local health department.
MYTH #1: Childhood vaccinations cause disease.

Here are the FACTS:
• Vaccines are very safe. A child is far more likely to be injured by one of these diseases than by any vaccine.
• Most children will have no reaction to vaccines. Few children may have a mild reaction like a sore arm or mild fever.
• If there were no vaccines there would be many more cases of disease and deaths.

Resources
http://www.cdc.gov/vaccines/vac-gen/6mishome.htm#Vaccinescause

MYTH #2: Children do not get these diseases anymore, so why get the vaccine?

Here are the FACTS:
• The only vaccine-preventable disease that no longer exists is smallpox.
• In areas of the world where vaccines are not available, vaccine-preventable diseases still sicken and kill many people, especially children.
• Some diseases occur in other parts of the world and travelers bring these diseases into the United States. These diseases quickly spread among unvaccinated people.

Resources
www.cdc.gov/vaccines
http://www.vaccineinformation.org/stats.asp
http://www.vaccineinformation.org/autism.asp

MYTH #3: Parents/guardians should have the freedom to decide whether or not their children will receive vaccinations.

Here are the FACTS:
• Doctors talk with parents/guardians about the vaccinations your child needs. Very few children will not be able to receive vaccines for medical reasons.
• States laws require students to be vaccinated to attend public schools. This helps protect the student who is vaccinated and his classmates who may not be able to be vaccinated for medical reasons.
• State laws protect parents’ freedom of religion if their religion does not allow vaccinations.

Resources
http://www.chop.edu/consumer/jsp/division/generic.jsp?id=79354

MYTH #4: Getting the “natural” disease is better than the vaccination.

Here are the FACTS:
• The price paid for “natural” disease can include paralysis, brain damage, cancer, deafness, blindness, or even death. Vaccination is the safer choice.
• When children get sick “naturally” they can pass on the disease to others who may be harmed.
• When children get sick from vaccine-preventable diseases they miss school and can cause parents to lose time from work. These diseases also result in doctor’s visits, hospitalizations, and even premature deaths.

Resources
http://www.immunize.org/carg.dl/p4025.pdf

MYTH #5: Vaccines cause many harmful side effects, illnesses, and even death.

Here are the FACTS:
• Vaccines are actually very safe.
• Most vaccine side effects are minor and temporary, such as a sore arm or mild fever.
• Serious side effects from vaccine are very rare, while serious side effects from the diseases they protect against are far more common.

Resources
http://www.cdc.gov/vaccines/vac-gen/6mishome.htm#Givingachildmultiple

MYTH #6: Too many vaccines will overwhelm an infant’s immune system.

Here are the FACTS:
• Scientific data show that vaccination with multiple vaccines at the same time has no harmful effects on the normal childhood immune system.
• Vaccinating children as early as possible gives them protection during the early months of their lives when they are most at risk for illness.
• Giving several vaccinations at the same time will mean fewer office visits for vaccinations, which saves parents both time and money and may be less traumatic for the child.

Resources
http://www.cdc.gov/vaccines/vac-gen/6mishome.htm#Givingachildmultiple
MYTH #7: Children receive too many vaccines.

Here are the FACTS:

• Our children are exposed to many diseases that could do them harm. Vaccines are the best way to protect against those diseases.
• Scientific data show that vaccination with multiple vaccines at the same time has no harmful effects on the normal childhood immune system.
• Children sometimes need additional shots (booster doses) of a vaccine to make sure they are still protected from the disease.

Resources
http://www.aap.org/immunization/index.html

MYTH #8: Healthcare providers give vaccines regardless of the child’s health.

Here are the FACTS:

• A healthcare provider checks whether a child is healthy enough to receive a vaccination.
• There are times when a vaccination may not be given to a child. This can include times when they are ill with a fever or other health problems.
• Parents are provided with Vaccine Information Statements to better understand the vaccination’s purpose and the potential risks and side effects.

Resources
http://www.cdc.gov/vaccines/pubs/vist/default.htm
www.cdc.gov/vaccines/pubs/ACIP-fact.htm

MYTH #9: There is NO scientific proof that immunization prevents disease.

Here are the FACTS:

• Scientific studies have shown that vaccines prevent many infectious diseases that were once common in this country, including polo, measles, diphtheria, pertussis (whooping cough), rubella (German measles), mumps, tetanus, and Haemophilus influenza type B (Hib).
• Vaccines have decreased deaths and hospitalizations by at least 90 percent. In the case of smallpox, diphtheria, and polio vaccines, deaths and hospitalizations related to these diseases have declined by 100 percent.
• In areas of the world where these vaccines are not available, vaccine preventable diseases still sicken and kill many people.

Resources
www.cdc.gov/vaccines/recs/schedules/child-schedule.htm

MYTH #10: Polio would have gone away without vaccines.

Here are the FACTS:

• Before polio vaccine was available, as many as 20,000 new cases were reported each year.
• Polio has been eliminated in the United States but continues to be present in other countries with lower vaccination rates.
• Stopping vaccination before polo is eliminated worldwide would result in a return of polo in the United States.

Resources
http://www.cdc.gov/vaccines/recs/schedules/child-schedule.htm
http://www.cdc.gov/vaccines/recs/schedules/polio-schedule.htm

MYTH #11: Vaccines contain thimerosal which causes autism.

Here are the FACTS:

• No valid studies have ever shown that thimerosal causes autism. To address public concerns, thimerosal has been removed from most childhood vaccines.
• Since 1999, the use of thimerosal in vaccines has greatly declined. However, the rates of autism since 1999 have only increased.
• Numerous scientific studies have been conducted that show no link between autism and thimerosal.

Resources
http://www.cdc.gov/vaccinesafety/concerns/thimerosal/index.html
http://www.aap.org/immunization/families/aap_VaccinesStudies.pdf

MYTH #12: My child does not need the HPV vaccine because s/he is not having sex.

Here are the FACTS:

• For best protection, children should get the vaccine between the ages of 11 and 12 years of age before they are sexually active and have been exposed to HPV.
• HPV is extremely common and can lead to cervical cancer and genital warts.
• The HPV vaccine does not cure an HPV infection if someone has already been infected with HPV.

Resources
http://www.cdc.gov/hpv/

MYTH #13: Vaccines don’t work.

Here are the FACTS:

• Years of careful study have shown that vaccines, while not always 100% effective for everyone, are our best protection against disease.
• Before vaccines, many children died from diseases that vaccines now prevent such as whooping cough, measles, and polio.
• Being vaccinated not only protects the child but also protects the community. People who are unable to be vaccinated themselves will be less likely to be exposed to disease if those around them are vaccinated.

Resources
http://www.cdc.gov/vaccines/recs/schedules/child-schedule.htm

MYTH #14: Booster shots prove that vaccines don’t really work.

Here are the FACTS:

• One dose of a vaccine may not be enough to provide full protection against a disease forever.
• Over time, some vaccines lose their ability to protect you against disease.
• Booster shots may be needed periodically to “boost” the immune system so that you will continue to be protected against disease.

Resources
www.cdc.gov/vaccines/recs/schedules/child-schedule.htm

MYTH #15: Vaccines cause Sudden Infant Death Syndrome (SIDS).

Here are the FACTS:

• Studies have shown that vaccines are not a risk factor for SIDS.
• Most SIDS deaths are caused by other factors such as newborns sleeping on their stomachs, sharing a bed, exposure to cigarette smoke, and mild respiratory infections.
• There have been fewer deaths from SIDS since the American Academy of Pediatrics’s recommendation to place healthy babies on their backs to sleep even through vaccination rates have remained the same.

Resources
http://www.cdc.gov/sids

MYTH #16: Vaccines are full of unnecessary and harmful chemicals.

Here are the FACTS:

• Preservatives stop vaccines from becoming contaminated by germs.
• Adjuvants are substances added to a vaccine to strengthen your body’s immune response to the vaccine.
• Additives are substances added in small amounts to stop vaccine from breaking down and sticking to the sides of the vial.
• These chemicals added to the vaccine have been tested for safety and contribute to the effectiveness of the vaccine.

Resources
http://www.cdc.gov/vaccinesafety/
http://www.cdc.gov/vaccines/recs/schedules/child-schedule.htm

MYTH #17: The live virus in the measles and mumps vaccine (MMR) causes brain swelling.

Here are the FACTS:

• No. All well done studies on this issue have found no connection between the MMR vaccine and brain swelling.
• The CDC, which tracks possible bad reactions to vaccines, reports that brain swelling rarely happens after receiving the MMR vaccine.
• Unvaccinated children infected with the measles virus run the risk of severe brain swelling which can result in brain damage.

Resources
http://www.cdc.gov/vaccinesafety/Activities/Meas.html
http://www.cdc.gov/vaccinesafety/Vaccine_Monitoring/Index.html
http://www.vaccine.gov/edu/

MYTH #18: Vaccines are harmful to my child.

Here are the FACTS:

• Vaccines go through careful safety studies before they are actually used. This process can take 10 years or longer. Vaccines must be proven to be safe and effective in children.
• The Vaccine Adverse Event Reporting System (VAERS) monitors and investigates any harmful reactions from vaccine. Any problems identified result in additional investigation.
• Serious side effects from vaccines are very rare, while serious side effects from the diseases they protect against are far more common.

Resources
http://www.cdc.gov/vaccinesafety/Activities/Meas.html
http://www.cdc.gov/vaccinesafety/Vaccine_Monitoring/Index.html
http://www.vaccine.gov/edu/

MYTH #19: Vaccinations have caused the increase in autism.

Here are the FACTS:

• To date, there is no definite, scientific proof that any vaccine or combination of vaccines can cause autism.
• The well-known study that linked autism and vaccination has since been proven to be a fraud.
• Just because the symptoms of autism begin to occur around the same time as the child’s vaccinations does not mean that one caused the other.

Resources
http://www.aap.org/advisory/releases/autismfactsforparents.pdf
http://www.bmj.com/content/342/bmj.c492

MYTH #20: Hepatitis B Vaccine is not necessary for infants.

Here are the FACTS:

• Hepatitis B is a real and serious risk for infants and young children that can go undetected. The younger you are when you get Hepatitis B, the greater the chance you will develop liver damage and cancer later in life.
• Newborns can get Hepatitis B from their mother during childbirth or contact with contaminated blood and bodily fluids.
• Hepatitis B vaccine is a safe way to protect against this dangerous disease.

Resources
http://www.cdc.gov/vaccines/vpd-vac/hepb/default.htm
http://www.cdc.gov/vaccinesafety/Activities/Meas.html
http://www.cdc.gov/vaccinesafety/Vaccine_Monitoring/Index.html
http://www.vaccine.gov/edu/