The decision to vaccinate is important and you want to make the best decision for your child. An informed decision requires comparison of the benefits and risks. Your child's healthcare provider can recommend reliable materials and websites.

The risks of vaccination are very minor. The most common side effect of a vaccine is soreness at the injection site. The risk of any serious reaction is about 1 in a million doses given. Vaccines are very safe. They continue to be monitored carefully even after licensure. Immunization provides protection without your child having to experience a disease and any of its complications.

Most parents have never seen a child with a serious vaccine preventable disease. Before the vaccine era, parents saw children hospitalized, permanently harmed, and killed by these diseases. Vaccination has almost eliminated these diseases in the United States. You probably know very little about these diseases.

Without knowledge, you may not recognize the risk of not protecting your child with vaccination. These diseases are still around. We are seeing outbreaks of measles, mumps, pertussis (whooping cough), and meningitis across the U.S.

Travelers bring disease back from other countries where they are common. An unimmunized child continues to be in danger of serious preventable diseases.
**Hepatitis B**
- Symptoms are similar to hepatitis A but can become chronically infected for life
- Chronically infected pregnant women have a 90% chance of passing it to baby during delivery
- Many don’t know they are infected
- The chronically infected are 300 times more at risk for liver cancer

**Human Papillomavirus (HPV)**
- Causes genital warts and painless infection in the genital tract
- Causes 70% of cervical, 90% of anal, 40% of genital, and 10% of oral and throat cancers
- Prevention by vaccination is the key to saving lives

**Measles**
- Three of every 10 cases have complications (more in children under 5 and adults over 20)
- Pneumonia is the most common cause of death in children (60%)
- One in 4 has permanent damage to the nervous system

**Meningococcal disease**
- The most common form is meningitis: infection of the covering of the brain and spinal cord
- The death rate is 12% for meningitis and 40% if the blood stream is infected
- One in five survivors has hearing loss, permanent damage to the nervous system, or amputation of fingers, toes, or limbs

**Pertussis (whooping cough)**
- Infants under 6 months are at highest risk of serious complications or death
- Coughing can cause cracked ribs, collapsed lungs, hernias, or bleeding in the brain
- One child in 20 has nervous system damage, one in 80 has seizures

**Pneumococcal disease**
- Infection in the bloodstream is most common in children, death rate is 1 in 5
- Pneumonia causes 175,000 hospitalizations annually
- Children and elderly are most at risk for serious complications (brain infection, irritation of heart muscle, lung abscess, collapse of the lung) and death

**Rotavirus**
- Survives on toys and hard surfaces for weeks or months without disinfection
- Can have infection more than once, first time is usually the most severe
- It is the most common cause of diarrhea in children requiring medical care

**Rubella (German measles)**
- Rubella in a pregnant woman can cause premature delivery, spontaneous abortion, or fetal death
- If the infant survives, 80% have birth defects: deafness, eye, heart, nervous system, or mental retardation

**Influenza (the ‘flu’)**
- Even healthy people can become seriously ill
- Pneumonia is the most common complication
- Most deaths occur in infants, young children, adults 65 and older, and people with chronic medical conditions, like heart disease

**Mumps**
- One in twenty has one-sided hearing loss
- Up to 15% have heart muscle irritation and EKG changes
- Inflammation of testes or ovaries, sterility is rare

**Polio**
- Polio is rare in the U.S. but international travelers bring it back from other countries
- 1 in 100 cases results in paralysis
- In children the death rate is 2-5 of 100 cases and in adults, 15-30 of 100 cases

**Tetanus**
- Causes persistent, painful, severe muscle spasms for weeks with a 1 in 10 death rate
- Can be very difficult to eat, swallow, or breathe

**Varicella (chickenpox)**
- Pneumonia is the most common complication in children.
- If a pregnant woman gets varicella near delivery, 1 in 3 infants die
- Adult death rate is 25/100,000 cases which is 10 times that of 15-19 year olds