

# *The Immune System*

Protect your baby   Protect your family   Protect your community

Your baby is now living in the protected environment of your womb. While in the womb and during the first months of life, your baby relies on your immune system for protection against germs because theirs is not ready yet. To understand how your baby is protected it is helpful to understand how the body fights illness.

## **What is an immune system?**

Your immune system is a complex internal system that protects you against germs like bacteria and viruses. The parts of the immune system that work hard to keep your body safe and healthy include the white blood cells, the skin, and the mucous membranes in your mouth, nose, and stomach. The white blood cells are the front line of attack against the harmful germs.

When you get sick because of a bacteria or virus, your body fights it off and then remembers how to fight that infection if it comes back again. The part of your immune system that remembers how to fight off the infection is called Memory Cells. The first time the body encounters a germ, however, it will not have the defensive white blood cells or memory cells to fight off infection. It can take several days to make and use all the germ-fighting tools needed to get over the infection.

## **How do vaccines work?**

A vaccine is a fluid that contains parts of the germ that causes infection. The amount of germ in the vaccine will not get you sick, but your body's helpful bacteria and defensive white blood cells attack it. This attack happens so that your memory cells remember how to fight the germ in the future. Once the memory cells develop against a disease, you will be protected from that disease. Vaccines protect.