

What to Know About Your Baby's Immune System

As we go through our daily lives, we rarely stop to think how amazing our bodies are. Our immune system works 24/7, always at the ready to resist diseases.

The immune system is the reason we can send our kids to school and community events, travel around the country (</English/safety-prevention/on-the-go/Pages/Safe-RV-Travel-with-Children.aspx>) or splash around the public swimming pool (</English/safety-prevention/at-play/Pages/Swim-Lessons.aspx>)—knowing their bodies will do their best to protect them from infectious diseases.



But is your baby born with an immune system primed to protect them, or does immunity develop as they grow? How does their immune system "learn" which germs are harmful? And how can you support your child's immune system, so they can thrive now and in the future?

Read on to learn how the immune system works when **babies are born (</english/ages-stages/prenatal/delivery-beyond/pages/default.aspx>)**, how it changes over time, and how to best ensure your baby can grow, play and learn throughout their life.

How does the immune system work?

We use our senses—touch, smell, sight, hearing and taste—to recognize what happens around us and learn how to react. Our immune system works in a similar way. It collects information about what happens when we are exposed to different germs (</English/health-issues/conditions/prevention/Pages/Germ-Prevention-Strategies.aspx>).

Every day, germs travel around communities in the air we breathe, the food we eat and the people we touch. Some of them may cause infections.

During an infection, the immune system makes special memory cells, called antibodies. They keep track of harmful germs and how to neutralize them. That way, the next time our body bumps into those germs it already knows what to do.

Your baby's first immune protection comes from you

Before your baby's immune system is ready to identify germs and keep infections at bay, it needs to learn a few things from you.

What is passive immunity and how does your baby get it?

- **Maternal antibodies that pass through the placenta.** Your immune system passes antibodies down to the baby to help give them a healthy start. These memory cells travel through the placenta and reach the baby in the womb. They are a source of information about germs for the baby's young immune system.

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- **Antibodies you pass to your baby through breast milk.** Antibodies also reach the baby through breast milk. It not only delivers antibodies. It also has proteins and sugars that can help keep infections away. (See "Breast Milk Benefits Your Baby's Immune System (/English/ages-stages/baby/breastfeeding/Pages/Breastfeeding-Benefits-Your-Babys-Immune-System.aspx).")

But while your baby gets a head start from your immune system and breast milk, that early protection doesn't last forever. This "passive immunity" is not able to keep all harmful germs away.

Your baby's immune system learns & adapts with your support

Your baby's immune system needs help to learn how to recognize and resist germs on its own.

People and objects harbor germs that might not be harmful to adults, but can make your baby sick. Your baby's immune system is still learning, and that leaves them at risk of illness.

Babies younger than one year old can easily get infected with diseases like whooping cough (/English/health-issues/conditions/chest-lungs/Pages/Whooping-Cough.aspx), flu (/English/health-issues/conditions/flu/Pages/protecting-babies-and-young-children-from-flu-what-parents-should-know.aspx) and measles (/English/safety-prevention/immunizations/Pages/how-to-protect-your-children-during-a-measles-outbreak.aspx). They are also more likely to develop complications from those infections that require hospital care.

But with the your care and support of your family, community (/English/safety-prevention/immunizations/Pages/Vaccine-Protection-How-Healthy-is-Your-Community.aspx) and pediatrician, your baby's immune system will learn and grow as they do. Childhood immunization plays a key role in this support system.

Building immunity is like learning to read

Vaccines (/English/safety-prevention/immunizations/Pages/how-vaccines-are-developed-tested-for-safety-and-approved-step-by-step.aspx) are the beginner books that teach your baby's immune system to recognize and resist serious diseases.

Depending on the vaccine, they contain either a weakened version, or just parts (/English/safety-prevention/immunizations/Pages/Vaccine-Ingredients-Frequently-Asked-Questions.aspx) of the germ. These "practice versions" of the germ don't cause illness. Instead, they provide a key learning experience for the immune system.

The immune system responds to vaccines by creating antigens with information about the germ and how to neutralize it. When your child encounters an active and full-size version of the germ, their immune system will already know what it looks like and how to resist it.

As you follow the American Academy of Pediatrics recommended immunizations schedule (/English/safety-prevention/immunizations/Pages/Recommended-Immunization-Schedules.aspx) for your baby, their immune system continues to learn about viruses and remember them. Getting one or more doses of a vaccine gives the memory cells a boost, so the immune system doesn't forget what to do.

Find out how the immune system can learn to resist germs in this short video explainer.

Immunity in Action: Learning to Resist Viruses | AAP



How to support your baby's immune system

The support your baby needs to stay healthy and develop a strong immune system comes in many forms. These include making sure your health is cared for, following the recommended immunization schedule (</English/safety-prevention/immunizations/Pages/Recommended-Immunization-Schedules.aspx>), creating a safe space or "cocooning" (</English/safety-prevention/immunizations/Pages/How-to-Cocoon-a-Newborn-Only-an-E-Mail-Away.aspx>) newborns from germs, breastfeeding (</English/ages-stages/prenatal/delivery-beyond/Pages/How-Your-Body-Prepares-For-Breastfeeding.aspx>) if possible, regular checkups (</English/ages-stages/Your-Childs-Checkups/Pages/default.aspx>) with your pediatrician and good hygiene (</English/health-issues/conditions/prevention/Pages/Hand-Washing-A-Powerful-Antidote-to-Illness.aspx>).

Childcare centers and preschools are close-knit communities full of curious children, caring teachers and involved families. That's why it's so easy for contagious diseases to spread. When enough people are vaccinated (</English/safety-prevention/immunizations/Pages/Your-Babys-First-Vaccines.aspx>), it's much harder for germs to travel from child to child. That means fewer sick days and more time for kids to learn, play and just be kids.

More information

- [How to Cocoon a Newborn: Family & Friends Can Protect Baby From Germs](#)
(</English/safety-prevention/immunizations/Pages/How-to-Cocoon-a-Newborn-Only-an-E-Mail-Away.aspx>)
- [Your Child's Checkups](#) (</English/ages-stages/Your-Childs-Checkups/Pages/default.aspx>)
- [All About the AAP Recommended Immunization Schedule](#) (</English/safety-prevention/immunizations/Pages/Recommended-Immunization-Schedules.aspx>)
- [Breastfeeding Benefits Your Baby's Immune System](#) (</English/ages-stages/baby/breastfeeding/Pages/Breastfeeding-Benefits-Your-Babys-Immune-System.aspx>)
- [Vaccines for Children Program: Free Immunizations When Cost is a Barrier](#) (</English/safety-prevention/immunizations/Pages/vaccines-for-children-program-free-immunizations-when-cost-is-a-barrier.aspx>)

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