

Your Baby's Immune System and Vaccines

**Protect your children. Get all their shots on time. The shots are free.
Call your local public health unit or doctor to make an appointment.**

Check what you know.

Circle yes or no to the following sentences about vaccines and the immune system.

I know why it is important for my baby to get all shots on time.	Yes	No
I know why my child can safely get more than one shot at a time.	Yes	No
I know that getting my baby vaccinated is the best way to protect them from serious diseases.	Yes	No
I know how the immune system works.	Yes	No
I know how the shots work with the immune system.	Yes	No

If you have answered 'no' to any of the above read on to learn more.

What is the immune system and how does it work?

You may have heard the words viruses and bacteria, often called germs. Bad germs that enter your baby's body can make your baby very sick. The job of the immune system is to protect your baby from germs.

Your baby's immune system is made of organs and cells that work together to make special blood cells. Two kinds of special blood cells are antibodies and memory cells.

Antibodies kill the germs that can make your baby sick, and memory cells act fast to let the antibodies know each time a bad germ is in the body and needs to be killed.

Memory cells will watch for bad germs for the rest of your baby's life. For example, after your child gets their two shots for measles, mumps and rubella, the memory cells they develop will protect them against these diseases, even if they are exposed many times during their life.

What is a vaccine and how does it work?

Vaccines prompt a baby's natural immune system to make antibodies that will attack bad germs. A vaccine has parts of germs or whole germs that have been killed or made weak. These allow the body to make antibodies without getting the real disease. The only way your baby's body can make antibodies is by getting the vaccine or the real germs.

Can my baby's immune system handle more than one vaccine at a time?

Yes. Your baby's immune system is amazing. Every day from birth a baby's body naturally defends itself against thousands of germs you cannot see. Germs are in food, in the air, in water, and on objects.

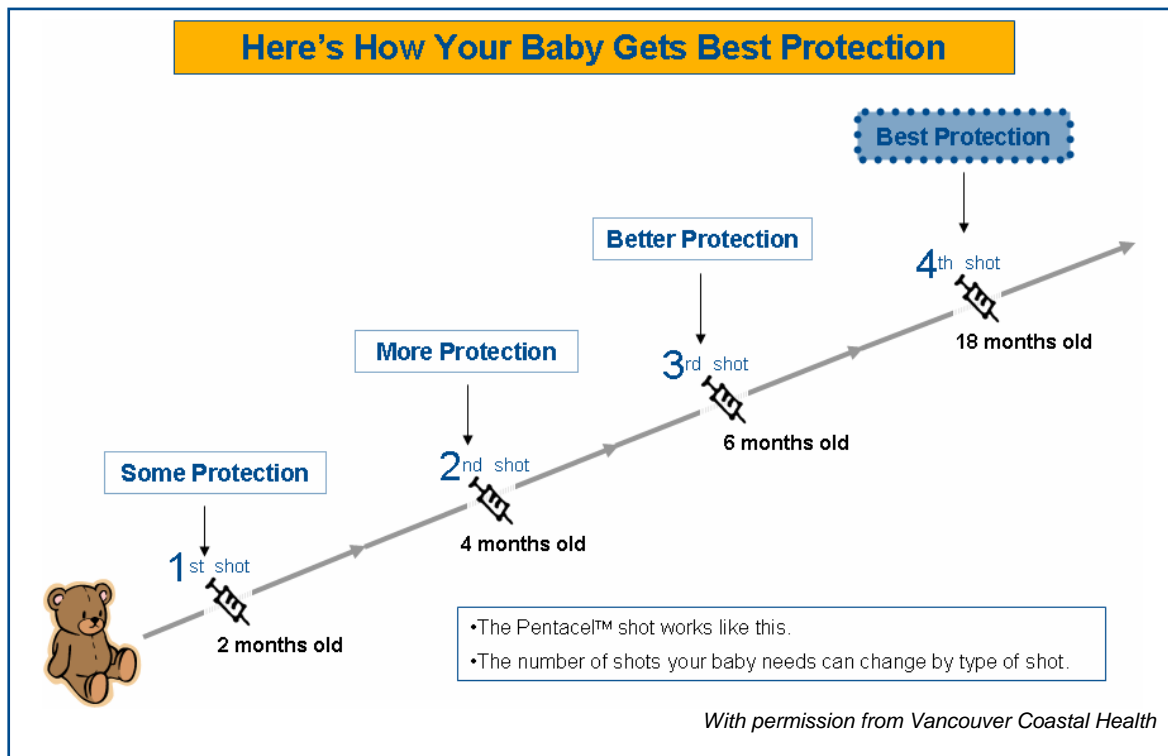
Getting four shots at one time uses only a very small part of your baby's immune system for a short while, so it can guard against all the other germs too.

Getting more than one shot at a time does not wear out the immune system. Your baby's immune system works so well that your baby can get shots even when they have a cold, ear infection, low fever, or skin infection.

Why is it important for my baby to get shots on time?

Vaccines work best when the shots are given on time. To protect your baby as soon as possible,

shots start at two months of age. Some shots need to be given more than once to build your baby's best defense system. The shots will be given over a period of time. For example, whooping cough is a deadly disease for babies. Babies need the first shot when they are two months of age to begin building their immune system defenses against whooping cough. But they do not have their best protection until they have had all four shots by the time they are 18 months old.



For more information

Public Health Agency of Canada:
www.phac-aspc.gc.ca/im/index.html
National Institute of Allergy and Infectious Diseases/National Institutes of Health (NIAID):
www3.niaid.nih.gov/default.htm

More BC HealthFiles on childhood immunization:

[#50b The Benefits of Vaccinating Your Child](#)
[#50c Childhood Vaccines are Safe](#)
[#50d Childhood Vaccines: What is in the Vaccines and Why](#)
[#50e Getting Ready for Your Child's Shots](#)
[#50f Childhood Vaccines: Questions and Answers](#)

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www.bchealthguide.org/healthfiles/index.stm,
or visit your local public health unit.

Call the BC NurseLine to speak to a registered nurse, available 24-hours every day:

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- In BC, call toll-free 1-866-215-4700
- Deaf and hearing-impaired, call 1-866-889-4700
- Pharmacist available 5pm to 9am every day
- Translation services in over 130 languages upon request.

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