

HEALTHY CHOICES, HEALTHY CHILDREN

WHY VACCINATIONS ARE A HEALTHY CHOICE FOR A STRONG IMMUNE SYSTEM!

Pediatricians of Ontario (Pediatrics Section, Ontario Medical Association) recognize that some parents have concerns about vaccines. That's why the Pediatricians Alliance of Ontario asked more than 130 pediatricians what parents were asking them about vaccinations. This handout talks about what they heard from parents and offers information from the pediatricians themselves.

MYTH 1: Vaccines can cause disorders such as autism.



THE FACTS

Vaccines help to build your child's immune system so it can resist harmful diseases. Because children are vaccinated at around the same age as autism is often diagnosed, some people think vaccinations and autism are linked . . . but they're not! **Vaccines do not cause autism.**



WHAT DOES THIS MEAN FOR ME AND MY FAMILY?

Here's what pediatricians say:

- Autism is a complex neurological disorder. Many studies – **involving millions of children** – have found **no connection between vaccination and autism.**
- Many people continue to **mistakenly** believe that there is a link between vaccines – in particular the measles, mumps and rubella vaccine – and autism based on a discredited study that was conducted by Dr. Andrew Wakefield and published in The Lancet in 1998. This paper was later retracted by the journal. In 2010, the General Medical Council in the United Kingdom removed Dr. Wakefield from the physician register and he is no longer licensed as a physician in the UK.

MYTH 2: A few of the materials used in vaccines are unsafe.

THE FACTS

In Canada, we have very strict guidelines for making vaccines. Safety tests are carried out by the Biologics and Genetic Therapies Directorate of Health Canada. Certain materials – such as thimerosal, formaldehyde and aluminum – are used to kill bacteria and make vaccines as safe and effective as possible.

WHAT DOES THIS MEAN FOR ME AND MY FAMILY?

Here's what pediatricians say:

- The minimal amounts of thimerosal (a mercury-based preservative), formaldehyde and aluminum contained in vaccines are necessary for their safety and effectiveness. These materials occur naturally in the environment, and the amounts contained in vaccines are much lower than your children are exposed to on a day-to-day basis.
- Many studies – conducted with millions of patients – have shown the safety of vaccines.
- Millions of vaccines are given every day! This is the best evidence we have that vaccines are safe and effective.

MYTH 3: Multiple injections will overwhelm my baby's immune system.



THE FACTS

Vaccines are designed to protect your baby as soon as possible against more than one disease. Rather than overwhelming your baby's immune system, vaccines make the immune system stronger. Babies do not experience more side effects when more than one vaccine is given at a time.



WHAT DOES THIS MEAN FOR ME AND MY FAMILY?

Here's what pediatricians say:

- The immune system is very powerful, and normally fights off millions of germs on a daily basis.

MYTH 4: "Natural" immunity is better than vaccine immunity.

THE FACTS

Natural infection from certain diseases can kill or seriously harm your child before his/her body is able to develop a strong immune system. Vaccines use harmless or inactive virus or bacteria to trigger the body's natural immune response to provide long-term protection against a disease, **without the risk of getting the disease**. Vaccination is like a rehearsal for the immune system, so it is prepared if your child is exposed to the "real" disease.

WHAT DOES THIS MEAN FOR ME AND MY FAMILY?

Here's what pediatricians say:

- Vaccines are the best way to protect children, and the diseases that we choose to vaccinate against are those where we know that the risk of disease for your child is greater than the risk of the vaccine.
- Measles, for example, continues to be one of the leading causes of death in children globally, even though a safe and cost-effective vaccine is available.

MYTH 5: Vaccine-preventable diseases don't exist in Canada anymore, so there is no need for my child to be immunized.

THE FACTS

We are lucky! Our immunization programs have reduced the number of cases of and deaths resulting from many serious diseases in Canada. Even if the chances of contracting them in Canada are quite small, these diseases still exist in other parts of the world and can infect anyone who is not protected. Vaccination continues to provide the best protection against these diseases.

WHAT DOES THIS MEAN FOR ME AND MY FAMILY?

Here's what pediatricians say:

- People in Canada travel a lot! We travel, for business and pleasure, to places where vaccine-preventable diseases still exist. We, and other travellers, can bring these illnesses back with us and infect people who are not vaccinated. That's why it's important for your child – **and all children** – to be vaccinated!

MYTH 6: Many people who are immunized still get the disease, which proves that vaccines don't work.



THE FACTS

Sometimes a person does not develop immunity to the disease after being vaccinated. However, it is important to note that the vaccine does not cause the disease. As well, if a person who is vaccinated develops the disease, it will be less severe.



WHAT DOES THIS MEAN FOR ME AND MY FAMILY?

Here's what pediatricians say:

- Vaccines are not 100 per cent effective. However, if a child who has been vaccinated gets the disease, the illness will be much less severe and the risk of complications is lowered.
- The bottom line is that vaccines work, and they save lives! We are lucky to have a national vaccine strategy and such sound research and oversight to support the safety and effectiveness of vaccination programs.

MYTH 7: A healthy lifestyle and breastfeeding are enough to protect me and my child.

THE FACTS

A healthy lifestyle is important to help maintain your overall good health. Breastfeeding gives babies a great start but it will not protect your child against all of the specific diseases that can be prevented with vaccination.

WHAT DOES THIS MEAN FOR ME AND MY FAMILY?

Here's what pediatricians say:

- Breastfeeding reduces ear infections, diarrhea and respiratory infections, and pediatricians support it. However, breastfeeding is not enough to protect your child from serious diseases that can be prevented by vaccines.
- Although children are protected by your immunity for the first 6 months of life, after that they have to make their own protective immunity – vaccines help babies build their natural defense against diseases.

CONCLUSIONS

Vaccines are safe and effective, and immunization programs in Canada help protect you and your family from vaccine-preventable diseases. It is very important that you talk to your health care provider about any concerns regarding vaccines. Health care providers are passionate about protecting children and will take the time to discuss your concerns and share their knowledge about how vaccines work to build your child's immune system! A healthy immune system is the key to wellness.

RESOURCES

The following list of online resources will help you learn more about vaccines. Remember, when looking for information, it is important to consider the source. Check to see if the website is sponsored by a government or non-profit organization, or a doctor or other health care professional.

Immunize Canada

<http://www.immunize.cpha.ca>

Ontario Ministry of Health and Long-Term Care – Immunization

<http://www.health.gov.on.ca/en/public/programs/immunization>

Caring for Kids / Canadian Paediatric Society

<http://www.caringforkids.cps.ca/handouts/immunization-index>

Pediatricians of Ontario / Pediatrics Section, Ontario Medical Association

<http://www.pedsontario.com>

The Hospital for Sick Children

<http://www.aboutkidshealth.ca>

***Your Child's Best Shot*, by Dr. Ronald Gold**

This Canadian handbook – written by a pediatrician – can be purchased from the Canadian Paediatric Society website:

<https://bookstore.cps.ca/stock/details/your-childs-best-shot-a-parents-guide-to-vaccination-3rd-edition>