Questions & Answers About Adult Immunization

Immunization provides the most effective protection against disease, and the need for vaccines does not go away with age. In fact, immunity acquired from childhood immunizations can decrease over time. Also, you may be traveling to other countries and need protection from diseases not normally seen in Canada. The vaccines you need as an adult are determined by many factors including your age, lifestyle, health condition, and which vaccines you've received during your life.

If you need more information, talk with your doctor, nurse, pharmacist or local public health office.

1. WHY DO ADULTS NEED IMMUNIZATIONS?

Vaccines are not just for children. Many parents are careful about protecting their children with vaccines but forget about protecting themselves. Adults continue to need immunizations for several reasons:

- Some vaccines do not provide lifelong protection.
 In order to be protected against tetanus and diphtheria, all adults need a booster shot every 10 years. All adults should get the influenza vaccine each year, especially those with medical conditions putting them at high risk, the elderly, and people who provide essential community services. Experience in other countries has shown that if large numbers of people do not keep their immunizations up to date, serious outbreaks of disease can occur. For example, in Russia there were 5,000 deaths due to diphtheria in 1994 after the organized immunization system broke down.
- Some adults did not get all the vaccines recommended in childhood.

People who have lived in another country as a child may not have received all the immunizations that are recommended in Canada. There may be other reasons for a person not receiving all of the routine vaccines for children - for example, leaving school before graduation.

Some diseases, such as measles, that were once rare are now re-emerging because not everyone is immunized. If an outbreak of measles occurs in a community, adults who did not receive all their shots as children may be at high risk for serious disease. Another example: pregnant women who are not protected against rubella (German measles) may become infected and pass the infection on to their baby, causing serious birth defects. Other adults who are not protected against rubella can spread the disease to unprotected pregnant women.

- New vaccines have become available in recent years.
 Vaccines which protect against shingles are among several new vaccines now available for adults. It is important to talk to your doctor about whether you need any of the new vaccines.
- Adults may need vaccines when they travel to other countries.

Most Canadians are not protected against diseases that do not exist in Canada – such as yellow fever, typhoid fever, and Japanese encephalitis. Other diseases such as hepatitis A and hepatitis B are more common in other countries than

they are in Canada. Before you travel to other parts of the world, you should find out what diseases may be a risk for you. The vaccines you need will depend on where you are travelling and what you plan to do there. For example, some tropical diseases may be a risk in rural areas of a country but not in a city. To get current information on which vaccines are required or recommended for travel, contact a travel health clinic or your local public health office. You can also find out more from your doctor and from the Public Health Agency of Canada (https://travel.gc.ca/travelling/health-safety/vaccines). You can obtain the vaccines you need from a travel health clinic.

 Some jobs or lifestyles put people at risk for specific diseases that can be prevented by vaccines.

Health care workers, emergency responders, laboratory workers and students training for these jobs are at risk of exposure to communicable diseases because of their contact with people or specimens from people who may carry disease. These workers and students also have a responsibility to protect themselves against communicable disease because they could pass it on during their work to sick or injured people who are at risk of serious complications from disease. All of these workers and students should be immunized against diphtheria, tetanus, measles, mumps, pertussis, polio, rubella, hepatitis B, influenza, and chickenpox (if they do not already have immunity). Other vaccines may also be recommended for laboratory workers, health care workers or for other occupations.

People who live or work in residential institutions should also be immunized against meningococcal, diphtheria, tetanus, measles, polio, rubella, hepatitis B, and influenza.

People who use street drugs and people with multiple sexual partners have a lifestyle that puts them at risk for certain diseases. Anyone who works with people with these lifestyle or environmental risks can help prevent disease by encouraging these people to get the vaccines they may need.

2. WHICH IMMUNIZATIONS DO ADULTS GENERALLY NEED?

Diphtheria and tetanus: Adults need a tetanus-diphtheria booster shot every 10 years. The vaccines against diphtheria and tetanus are combined into one shot. Tetanus (lockjaw) is caused by bacteria that live in soil and causes painful

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tightening of the muscles, permanent damage, and death in about 3 out of 10 cases. Every adult needs to be vaccinated against tetanus because there is no protection from "herd immunity" with this disease. Diphtheria is a contagious disease that causes a thick coating at the back of the throat, and can lead to breathing problems, heart failure and nerve damage. Immunization has greatly decreased this disease but remains essential to keep diphtheria under control. Serious outbreaks of diphtheria have occurred in countries where immunization programs lapsed or were interrupted.

Pertussis (whooping cough): Immunity to whooping cough is not lifelong, either following natural infection or following immunization in childhood. This means that adults can develop whooping cough (a prolonged illness with persistent cough and respiratory distress) if exposed to the disease. This may happen at an age when adults are new parents or new grandparents. They can then transmit whooping cough to babies who are too young to be fully immunized. Whooping cough can be a life-threatening illness for young infants. A single dose of pertussis vaccine (in Canada this is combined with the tetanus and diphtheria booster) can prevent illness in adults and therefore protect young infants.

Measles: Any adult in Canada born in 1970 or later who has not already had measles disease or a measles vaccine should get a measles shot. The measles virus is very contagious. It usually causes a rash and fever but can also lead to pneumonia or a serious brain infection (encephalitis). Usually just one shot is needed to protect adults against measles. This is given as a combined measles, mumps, and rubella (MMR) vaccine.

Rubella (German measles): Rubella is rarely a serious disease for adults but it causes birth defects if a woman gets rubella in early pregnancy. There is a high chance her baby will be born with blindness, deafness, heart disease, or intellectual disability. All women of childbearing age and all health care workers should get the rubella vaccine, unless they are immune. This is given as a combined measles, mumps, rubella (MMR) vaccine.

Influenza: The flu is a serious respiratory disease, especially for older adults and anyone with certain medical conditions that may leave them vulnerable to complications from flu. The flu should not be confused with the "common cold", which is a less serious disease and for which there is no vaccine. Flu kills thousands of adults every year in Canada. All adults should receive influenza vaccine each year, especially those over the age of 65, and those less than 65 years of age who have underlying medical conditions. Adults who want to reduce their chance of catching the flu, or of passing it on to others, can benefit from the flu vaccine. A new shot is needed each year, and it is best to get it between October and mid-November.

Varicella (chickenpox): Any adult who has never had chickenpox should consider getting this vaccine. Complications from chickenpox are more common and often more serious when adults get the disease, compared to children. Some children as well as adults die from chickenpox every year in Canada. Besides protecting themselves, chickenpox vaccine is also recommended for adults who could transmit the disease to vulnerable people. Adults who should particularly consider chickenpox vaccine include:

- Women of child-bearing age (getting chickenpox during pregnancy can pose a risk to the mother and baby)
- People who live with someone with a suppressed immune system
- Day care workers and teachers of young children
- Health care workers
- New immigrants from tropical climates where chickenpox is much less common compared to Canada.

Pneumococcal disease: This is a group of bacterial infections that infect the lungs (pneumonia), the blood (bacteremia), and the covering of the brain (meningitis). All adults over 65 and anyone with a medical condition that increases their risk of serious infection should get immunized.

3. WHAT OTHER VACCINES SHOULD I CONSIDER?

There are other vaccines that adults should consider depending on their particular circumstances. Your job, your travel plans, your health, your sexual activity – these are some of the factors that can put you at higher risk of diseases which vaccines can prevent. Below are just a few of the other vaccines from which you can benefit. If you fall into a high-risk category, check with your doctor, nurse, pharmacist, or local public health office. These vaccines are recommended for any adult wishing to decrease his or her risk of vaccine-preventable disease.

- **Hepatitis A vaccine -** people with medical, occupational or lifestyle risks and anyone who wants protection from hepatitis A
- **Hepatitis B vaccine -** people with medical, occupational or lifestyle risks and anyone who wants protection from hepatitis B
- Meningococcal vaccine people with specific medical conditions and people living in communal residences, including students and military personnel
- HPV vaccine females and males 9-26 years (vaccines may be administered to females or males 27 years and older at ongoing risk of exposure)
- Herpes Zoster vaccine people 50 years of age and older; people who have had a previous episode of shingles

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4. HOW OFTEN SHOULD MY IMMUNIZATION STATUS BE REVIEWED?

Adults should talk to their doctor or nurse about their immunization status. Important times to review your vaccines are:

- When you see a new doctor
- If you are thinking of having children or pregnant
- If you work with young children
- If you are beginning work in health care or emergency response
- If you develop a chronic disease
- If you are having sexual contact with multiple partners
- If you use intravenous drugs
- Before you travel to an area that has diseases different from those where you usually live
- If you are 65 or older
- At least every 10 years.

5. WHAT ARE THE POTENTIAL RISKS OF VACCINES?

As with any medicine, there are very small risks. The vaccines recommended for adults will provide protection against serious diseases. They are among the safest medical interventions, and they are subjected to vigorous safety and quality control standards.

If you have any questions or concerns about vaccines, talk with your doctor, nurse, pharmacist, or local public health office.

REFERENCES

Canadian Immunization Guide at https://www.canada.ca/en/public-health/services/canadian-immunization-guide.html

National Advisory Committee on Immunization at https://www.canada.ca/en/public-health/services/immunization/national-advisory-committee-on-immunization-naci.html

RECOMMENDED WEBSITES

Immunize Canada - immunize.ca

Public Health Agency of Canada https://www.canada.ca/en/public-health/topics/immunization-vaccines.html

Government of Canada: Travel

https://www.canada.ca/en/public-health/topics/immunization-vaccines.html

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