

Typhoid Vaccine Information Sheet

What is typhoid?

Typhoid fever is caused by the bacteria, *Salmonella typhi* (*S. typhi*). This bacteria infects only humans and frequently causes severe illness. Typhoid fever, commonly referred to as typhoid, is a public health concern in developing countries, with school-aged children between 5 years and 15 years being mostly affected and with a small number ending in death. Between 2% and 5% of typhoid cases become chronic carriers shedding *S.typhi* bacteria in their stool for more than a year or possibly years. In developed countries such as Canada, where standards of sanitation are high, typhoid only occurs sporadically and is mainly associated with foreign travel to countries with a high number of cases such as those in South Asia.

How is typhoid spread?

Typhoid is spread by the fecal-oral route through food and water contaminated with feces or urine from people with typhoid. Sources of typhoid include, but are not limited to: shellfish, particularly oysters taken from sewage-contaminated beds, raw fruits and vegetables with human waste-infected fertilizer, contaminated milk and milk products.

What are the symptoms of typhoid?

Typhoid symptoms can range from mild illness to severe disease with prompt appropriate treatment reducing severity. Symptoms usually start slowly and progress. Symptoms can include:

- fever, cough, headache and tiredness
- poor appetite, abdominal pain, and liver or spleen enlargement
- rose-coloured spots on the abdomen
- diarrhea or constipation
- intestinal (gut) bleeding can occur especially if left untreated.

How can typhoid be prevented?

Typhoid vaccine does not give complete protection against disease, rather it is one prevention strategy. The greatest risk of typhoid for Canadians occurs when Canadians travel to areas of the world where sanitation is likely to be poor and may visit street vendors, market stalls and family settings. These people should receive typhoid vaccine prior to travelling. However, care in selection of food and water while travelling to these areas of the world remain important prevention strategies. Talk with your public health nurse or health care provider for more information.

It is recommended that those people who have typhoid disease or who are typhoid carriers follow strict hand washing practices after using the bathroom and before handling food.

Is the vaccine safe?

Yes. In Canada, all vaccines must undergo laboratory and field-testing. They must pass a rigorous licensing procedure with the federal government before they can be used. Once a vaccine has been approved for use, every lot is tested for safety and quality.

The bacteria in provincially funded typhoid vaccines are killed. Therefore, a person cannot get this disease from the vaccine.

Who should get typhoid vaccine?

Typhoid immunization should be considered for:

- household or intimate contacts of typhoid carriers
- laboratory workers who work with the *S. typhi* bacteria
- travelers to areas of the world with poor sanitation. Vaccine must be purchased as it is not provincially funded for travelers. Talk with your public health nurse or health care provider.

Who should not get the vaccine?

Typhoid vaccine should not be given to people who:

- have a history of severe allergic or severe unusual reaction (anaphylaxis) to this vaccine or any component of the vaccine
- children under 2 years of age.

What are the possible side effects to typhoid vaccine?

Most people have no reactions to the vaccine. Reactions that do occur are typically mild. They usually occur within 6 to 12 hours after the immunization and commonly disappear within 24 to 48 hours.

Possible reactions include:

- redness, pain and swelling where the needle was given.
- fever
- loss of appetite, nausea
- headache, irritability, aching muscles and tiredness.

As with any immunization, unexpected or unusual side effects can occur including a severe allergic reaction (anaphylaxis).

What should you do if you have a reaction?

- Apply a cool moist cloth to the area where the needle was given to reduce the pain and swelling
- Take a medication such as acetaminophen (e.g. Tylenol®) to reduce the pain or if a fever develops).
 - Aspirin® (ASA) is not recommended for individuals under 19 years of age.
- Report any unusual reactions described above to Health Link Alberta

Where can I get the typhoid immunization?

Routine typhoid immunization is not recommended in Canada but is offered through the publicly-funded provincial immunization program in Alberta to those people with specific risks of acquiring disease.

Travelers to areas of the world where there is poor sanitation and requiring individually paid vaccine should talk with their public health nurse or health care provider.

For health advice and information 24 hours a day, seven days a week, call **Health Link Alberta** at

- 403-943-5465 in Calgary
- 780-408-5465 in Edmonton
- Toll free 1-866-408-5465 elsewhere in Alberta

Or visit www.MyHealth.Alberta.ca for health information online.

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