Typhoid Vaccines

What You Need to Know

1 What is typhoid?

Typhoid (typhoid fever) is a serious disease. It is caused by bacteria called *Salmonella* Typhi.

Typhoid causes a high fever, fatigue, weakness, stomach pains, headache, loss of appetite, and sometimes a rash. If it is not treated, it can kill up to 30% of people who get it.

Some people who get typhoid become “carriers,” who can spread the disease to others.

Generally, people get typhoid from contaminated food or water. Typhoid is rare in the U.S., and most U.S. citizens who get the disease get it while traveling. Typhoid strikes about 21 million people a year around the world and kills about 200,000.

2 Typhoid vaccines

Typhoid vaccine can prevent typhoid.

There are two vaccines to prevent typhoid. One is an inactivated (killed) vaccine gotten as a shot, and the other is a live, attenuated (weakened) vaccine which is taken orally (by mouth).

3 Who should get typhoid vaccine and when?

Routine typhoid vaccination is not recommended in the United States, but typhoid vaccine is recommended for:

- Travelers to parts of the world where typhoid is common. (NOTE: typhoid vaccine is not 100% effective and is not a substitute for being careful about what you eat or drink).

- People in close contact with a typhoid carrier.

- Laboratory workers who work with *Salmonella* Typhi bacteria.

4 Some people should not get typhoid vaccine or should wait.

Inactivated Typhoid Vaccine (Shot)

- One dose provides protection. It should be given at least 2 weeks before travel to allow the vaccine time to work.

- A booster dose is needed every 2 years for people who remain at risk.

Live Typhoid Vaccine (Oral)

- Four doses: one capsule every other day for a week (day 1, day 3, day 5, and day 7). The last dose should be given at least 1 week before travel to allow the vaccine time to work.

- Swallow each dose about an hour before a meal with a cold or lukewarm drink. *Do not chew the capsule.*

- A booster dose is needed every 5 years for people who remain at risk.

Either vaccine may safely be given at the same time as other vaccines.
Live Typhoid Vaccine (Oral)
• Should not be given to children younger than 6 years of age.
• Anyone who has had a severe reaction to a previous dose of this vaccine should not get another dose.
• Anyone who has a severe allergy to any component of this vaccine should not get it. Tell your doctor if you have any severe allergies.
• Anyone who is moderately or severely ill at the time the vaccine is scheduled should usually wait until they recover before getting it. Tell your doctor if you have an illness involving vomiting or diarrhea.
• Anyone whose immune system is weakened should not get this vaccine. They should get the typhoid shot instead. This includes anyone who:
  - has HIV/AIDS or another disease that affects the immune system,
  - is being treated with drugs that affect the immune system, such as steroids for 2 weeks or longer,
  - has any kind of cancer,
  - is taking cancer treatment with radiation or drugs.
• Oral typhoid vaccine should not be given until at least 3 days after taking antibiotics.

Ask your doctor for more information.

What are the risks from typhoid vaccine?

Like any medicine, a vaccine could cause a serious problem, such as a severe allergic reaction. The risk of typhoid vaccine causing serious harm, or death, is extremely small. Serious problems from either typhoid vaccine are very rare.

Inactivated Typhoid Vaccine (Shot)

Mild Reactions
• Fever (up to about 1 person in 100)
• Headache (up to about 1 person in 30)
• Redness or swelling at the site of the injection (up to about 1 person in 15)

Live Typhoid Vaccine (Oral)

Mild Reactions
• Fever or headache (up to about 1 person in 20)
• Stomach pain, nausea, vomiting, rash (rare)

What if there is a serious reaction?

What should I look for?
Any unusual condition, such as a severe allergic reaction or a high fever. Signs of a severe allergic reaction can include difficulty breathing; hoarseness or wheezing; swelling of the throat, lips or tongue; flushing; hives; dizziness; sweating; fast heart beat; weakness; or nausea and vomiting. It would occur within a few minutes to a few hours after the vaccination.

What should I do?
• Call a doctor, or get the person to a doctor right away.
• Tell your doctor what happened, the date and time it happened, and when the vaccination was given.
• Ask your doctor to report the reaction by filing a Vaccine Adverse Event Reporting System (VAERS) form. Or you can file this report through the VAERS website at www.vaers.hhs.gov, or by calling 1-800-822-7967.

VAERS does not provide medical advice.

How can I learn more?
• Ask your doctor.
• Contact the Centers for Disease Control and Prevention (CDC):
  - Call 1-800-232-4636 (1-800-CDC-INFO) or
  - Visit CDC’s website at www.cdc.gov/ncidod/dbmd/diseaseinfo/typhoidfever_g.htm