

## **Typhoid Vaccine: What you need to know**

### **1. What is Typhoid?**

Typhoid 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.

### **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.

The other is a live, attenuated (weakened) vaccine which is taken orally (by mouth).

### **3. Who should get typhoid vaccine and when?**

- Travelers to parts of the world where typhoid is common.
- People in close contact with a typhoid carrier.
- Laboratory workers who work with *Salmonella* Typhi bacteria.

#### **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.

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

### **Inactivated typhoid vaccine (shot)**

- Should not be given to children younger than 2 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.
- Anyone who is moderately or severely ill at the time the shot is scheduled should usually wait until they recover before getting the vaccine.

### **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.
- 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 certain antibiotics.

## **5. 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
- Headache
- Redness or swelling at the site of the injection

### **Live typhoid vaccine (oral)**

#### **Mild reactions**

- Fever or headache
- Stomach pain, nausea, vomiting, rash

## **6. What if there is a serious reaction?**

### **What should I look for?**

- Look for anything that concerns you, such as signs of a severe allergic reaction, very high fever, or behavior changes.

Signs of a severe allergic reaction can include hives, swelling of the face and throat, difficulty breathing, a fast heartbeat, dizziness, and weakness. These would start a few minutes to a few hours after the vaccination.