



## The Spleen

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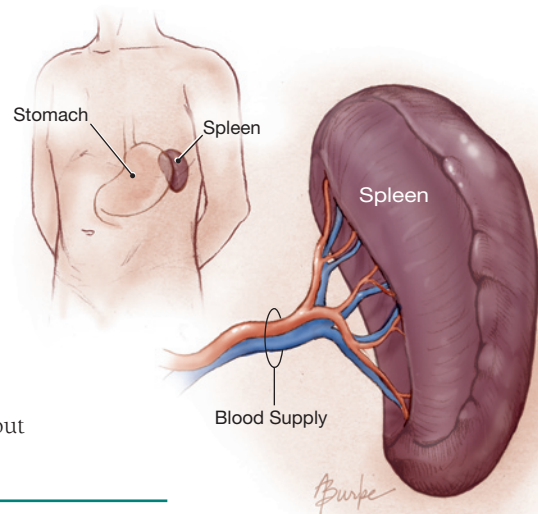
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# The Spleen

The **spleen** is an organ that lies behind the stomach on the left side of the abdomen. It serves as a graveyard for old or flawed **red blood cells** (oxygen-carrying cells) and as a storage site for blood and **platelets** (essential for clotting). The spleen also clears bacteria and is important for proper immune function, especially in fighting bacteria. Diseases associated with impaired spleen function include **sickle cell anemia** (a disease that causes irregularly shaped red blood cells) and **malaria** (a parasite infection of the blood). Some people may need removal of the spleen to prevent deadly bleeding that can occur after an injury, to treat diseases that cause disruption of blood cells, or to treat cancers involving the spleen.

The November 23/30, 2005, issue of JAMA includes an article about children who sustain an injury to the spleen.



## REMOVAL OF THE SPLEEN

If part of the spleen is removed, the spleen may regenerate. If a patient undergoes a **total splenectomy** (removal of the entire spleen), it will not regenerate, but many functions of the spleen are taken over by other organs. However, absence of a functioning spleen increases the risk of bacterial infection. These infections can be serious and life-threatening. Those at greatest risk are young children who lose their spleen and other persons of any age during the first 2 years after splenectomy.

## VACCINES

Persons who do not have a functioning spleen or have undergone a splenectomy should be given a **pneumococcal polysaccharide vaccine** (a vaccine that prevents a bacterial infection of the lungs and other organs), a **meningococcal polysaccharide vaccine** (a vaccine that prevents a bacterial infection of the brain lining and other organs), and a **Haemophilus influenzae type b vaccine** (a vaccine that prevents a bacterial infection of the brain lining, ear, and other organs). After a splenectomy, discuss with your doctor when you should be vaccinated. Also, keep a record of when you received these and other vaccines.

## ANTIBIOTICS

**Antibiotics** (medications that fight bacteria) are needed daily to help prevent bacterial infections in infants and children without a functioning spleen. Adults usually do not need daily antibiotics. However, if someone without a functioning spleen develops a fever, antibiotics may be needed. In addition, persons without a functioning spleen are susceptible to certain serious infections from dog bites or scratches and deer tick bites. Seek medical care if you develop a fever or other illness and have impaired spleen function or have undergone splenectomy. Discuss with your doctor the need for antibiotic prescriptions for home and for travel. Also, you should wear a medical alert bracelet stating you do not have a spleen.

## FOR MORE INFORMATION

- Centers for Disease Control and Prevention National Immunization Program  
800/232-4636  
[www.cdc.gov/nip](http://www.cdc.gov/nip)
- National Library of Medicine and the National Institutes of Health—MEDLINE Plus  
[www.nlm.nih.gov/medlineplus](http://www.nlm.nih.gov/medlineplus)

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