



**NATIONWIDE CHILDREN'S**  
*When your child needs a hospital, everything matters.*

**Helping Hand™**

*Health Education for Patients and Families*

## Impaired Spleen Function

The spleen is an organ that helps prevent and control some infections. Asplenia is when you don't have a spleen. Asplenia may result from:

- having your spleen removed, called a splenectomy.
- being born without a spleen, called congenital asplenia.
- the spleen not working well due to a medical condition such as sickle cell disease.

People with asplenia are at a lifelong, increased risk for certain infections, especially bacterial infections that can be prevented by vaccines. You are also at risk for other less common germs from insects or pet bites that can cause infections.

### Signs and symptoms

Symptoms of a possible infection in patients with asplenia may include:

- fever – temperature of 100.5° Fahrenheit (F) or 38° Celsius (C) or higher
  - This may be the only symptom of infection. **Contact your health care team right away if you have a fever. This is a medical emergency, and you need to be seen within 1 hour.** These infections may progress very quickly and cause organ failure, called sepsis. Some people may not have fever.
- chills, sweating
- dizziness, passing out
- vomiting, diarrhea, belly pain
- cough or trouble breathing
- severe headache, neck pain, being confused, having seizures
- concerns for meningitis
- skin that looks bruised or wounds that are red, swollen, or have drainage

**Ways to reduce the risk of infections when you have asplenia include:**

## **Vaccines**

- Vaccines reduce and prevent the risk of some bacterial infections.
  - Stay up to date with all age-appropriate vaccines.
  - This includes the annual inactivated flu and COVID-19 vaccines.
- If you are having your spleen removed:
  - get your age-appropriate vaccines a minimum of 2 to 4 weeks before surgery.
  - if this can't be done, get them 2 to 4 weeks after the surgery.
- The Nationwide Children's Hospital Infectious Disease Host Defense clinic will give you vaccine recommendations. They will also let your primary healthcare provider know what vaccines you need.
- When you have asplenia, it is important that everyone in your household and close contacts also be up to date with their age-appropriate vaccines. Talk to your health care provider about what vaccines your family needs to protect you.

## **Antibiotics**

You will need to take antibiotics each day by mouth to prevent infections caused by some bacteria. Antibiotics given to prevent infections (known as prophylaxis) include penicillin, cephalexin, or erythromycin.

- You need to take your antibiotic each day for at least 1 year after having your spleen removed.
- Some children need to take the antibiotic for a longer time, up to 5 years after splenectomy.
- Keep taking the antibiotic to prevent infections until your health care provider tells you it's time to stop. Although antibiotics reduce the risk of infection, the risk is never zero.
- Antibiotics do not prevent infections caused by all bacteria, viruses, or parasites.

## **Safe living recommendations**

- Wear a medical alert bracelet or carry a medical card that tells health care providers that you have asplenia. Keep your medicine list and vaccination records with you at all times.
- Some infections are passed from person-to-person. Other infections occur from exposures in the home and outside, including from pets or recreational activities.

- **Always practice good handwashing using soap and water or alcohol-based hand sanitizers.**
  - Good hand washing is the #1 way to prevent infections.
  - Wash your hands before preparing meals or having food or drinks, after using the restroom, after sneezing, coughing, or touching your nose, eyes, mouth, or any wounds, after touching pets, and when visiting other people.
- Avoid contact with people who are sick. This includes those with fever, cough, runny nose, vomiting, diarrhea, or rash.
- If you need to have any sinus or airway surgery, contact your health care team **BEFORE** the procedure to discuss antibiotic needs.
- Your skin is your first barrier to infection.
  - Keep your skin free from cuts or scrapes. This keeps germs from entering and causing infections.
  - Avoid elective procedures that may break down the skin barrier, including piercings, tattoos, injection drug use, etc.
- **Animals and pets** can cause infections.
  - Limit contact with animals, even household pets. They can lead to scratches, bites, or licks that may cause infections.
  - Wash any open cuts or wounds right away with soap and water and seek medical care. Dog bites can lead to serious blood infections and sepsis. Get medical help right away after any animal bite.
  - Do not bring new or exotic animals into the home.
- **Travel**

If you plan to take a trip, let your health care provider know **before** you go.

  - This is very important if you go to areas with infections like:
    - malaria (e.g., tropical countries, areas in Africa)
    - babesiosis (New England, Wisconsin, and Minnesota)
  - Depending on where you go, you may need to get additional vaccines.
  - Take a list of your medicines with you.
  - Be sure to take enough medicine in the original prescription bottles for the entire trip (plus some extra).
  - Store the medicines and a letter about your asplenia in your carry-on luggage. Never put medicines in checked luggage.
  - Before you go, find the nearest children's hospital in the area where you will be traveling, and carry the contact and medical information with you in case you get ill.

- **Mosquitoes and ticks** can transmit infections that are harmful to patients with asplenia. Always practice good mosquito and tick prevention, which includes:
  - avoiding stagnant water
  - wear proper protective clothing like long pants and shirts with long sleeves
  - use insect repellent (DEET) with no more than 30% DEET on children during outdoor activities

Call your medical team or the Infectious Diseases Host Defense Clinic at (614) 722-4452 with questions or concerns related to infectious diseases.