

**Cocaine:** is a potent stimulant. It can cause your heart to race, and it can make you feel nervous and agitated. It can increase heart rate, breathing rate, and blood pressure.

Street names include coke, snow, nose candy, flake blow, big C, lady, and snow birds.

Cocaine increases the risk of major organ damage. It can cause stroke and even death in people with sickle cell disease.

**Crack:** is a solid (rock) form of cocaine that is smoked, which is known as freebasing. It has the same effects as cocaine in the body. It makes the blood vessels smaller and decreases blood flow throughout the body. This can increase blood pressure, body temperature, and heart rate. It also has the risks associated with smoking, including shortness of breath, chest pains, and lung damage. It is highly addictive. Often, harmful chemicals are added to crack to create the rock form.

In addition to the above street drugs, using prescription drugs without your doctor's advice can lead to addiction, severe damage to your body, and even death.

This brochure was produced by the Departments of Hematology, Patient Education, and Biomedical Communications at St. Jude Children's Research Hospital. It was reprinted with funds provided by the Plough Foundation.

This document is not intended to replace counseling by a trained health care professional or genetic counselor. Our aim is to promote active participation in your care and treatment by providing information and education. Questions about individual health concerns or specific treatment options should be discussed with your doctor. For general information on sickle cell disease and other blood disorders, please visit our website at [www.stjude.org/sicklecell](http://www.stjude.org/sicklecell).

Copyright © 2010 St. Jude Children's Research Hospital

*Finding cures. Saving children.*  
ST. JUDE CHILDREN'S RESEARCH HOSPITAL



**St. Jude Children's Research Hospital**  
ALSAC • Danny Thomas, Founder  
*Finding cures. Saving children.*

Department of Hematology  
262 Danny Thomas Place, Mail Stop 800  
Memphis, TN 38105-3678  
901-595-5700  
[www.stjude.org](http://www.stjude.org)

*Finding cures. Saving children.*

*Alcohol, Tobacco,  
Street Drugs and  
Sickle Cell Disease  
"A Harmful  
Combination"*



*Finding cures. Saving children.*  
ST. JUDE CHILDREN'S RESEARCH HOSPITAL  
*Finding cures. Saving children.*  
ST. JUDE CHILDREN'S RESEARCH HOSPITAL  
*Finding cures. Saving children.*

BMC—12/10 (G7600)

We understand that teens and young adults might feel more pressure from friends to drink, smoke, or take street drugs (*drugs not prescribed by a doctor and obtained illegally*). As a person with sickle cell disease, you need to know the extra health problems that alcohol, tobacco, and street drugs can cause in your body. We hope this fact sheet will help you make smart choices that will keep you as healthy as possible.

Alcohol, tobacco, and street drugs are harmful to everyone but especially to those with sickle cell disease. They can cause addiction and permanent damage to vital body organs. They can also disrupt your life in many ways.

Drinking, smoking, or the use of street drugs can lead to severe health problems for people with sickle cell disease (SCD).



**ALCOHOL: Beer, Wine, Liquor, etc.**

Alcohol is a depressant. This means it slows down the function of the brain. It causes you to urinate more often. This can cause you to lose too much fluid from your body, which can trigger a pain crisis. It is important for people with sickle cell disease to drink at least 8 glasses of water each day. When a person with sickle cell disease becomes dehydrated (low on fluids), the blood cells stick together and block blood vessels. The affected tissue becomes inflamed, and this causes pain.



**TOBACCO: Cigarettes**

Tobacco decreases oxygen flow to the lungs. This can affect tissues throughout the body. It can cause lung infection and permanent lung damage, such as chronic obstructive pulmonary disease (COPD) and emphysema.

In people with sickle cell disease, short-term and long-term lung problems are more common. When you smoke, you have a greater chance of having the following problems:

- Acute chest syndrome (includes fever and breathing problems),
- Pneumonia (infection of the lung),
- Pulmonary hypertension (increased pressure in the lung), and
- Stroke, as well as other life-threatening diseases.

Smoking causes blood vessels to become smaller, which can lead to a pain crisis. The nicotine in tobacco attaches to hemoglobin (the protein in the blood cell that carries oxygen throughout your body). This lowers the oxygen level in your blood and can trigger a pain episode. In people with sickle cell disease, smoking can also increase the risk of developing leg ulcers. Smoking tobacco increases the risk of cancer in the lungs, throat, esophagus, bladder, pancreas, and kidneys.

**SMOKELESS TOBACCO: Snuff, Chewing Tobacco**

Snuff is finely cut, processed tobacco. People who use snuff place a small amount between the cheek and gum. Chewing tobacco is also placed in the mouth. Both release nicotine into the body, which is absorbed by the lining of the mouth. In general, it can cause bleeding gums, mouth sores, as well as mouth cancer.



**STREET DRUGS:** All street drugs (*those not prescribed by a doctor*) can cause health problems in a person with sickle cell disease. Many of them have side effects that can worsen the symptoms of the disease. Even prescription drugs can be harmful if they are not taken as prescribed by the doctor. There are many types of street drugs. This brochure will discuss marijuana, cocaine, and crack, and the effects these drugs have on people with sickle cell disease.

**Marijuana:** Smoking marijuana may increase the risk of cancer more than smoking tobacco. Marijuana smoke contains 50–70 percent more cancer-causing chemicals than tobacco smoke. Street names include pot, weed, grass, bud, dope, and hydro.

Marijuana decreases short-term memory, concentration, attention, judgment, coordination, and balance. It increases a person’s heart rate, causes dry mouth, and increases appetite. It can also cause persistent coughing, bronchitis, and emphysema, as well as increase the risk of cancer to the head, neck, and lungs. Within a few minutes of inhaling marijuana smoke, a person’s heart begins beating more rapidly and the eyes appear red. All marijuana effects can severely hurt the body of a person with sickle cell disease.