Complications (such as stroke or lack of blood flow to the arms, legs or vital organs) can develop quickly.

**Diagnosis**
Various tests are used to diagnose DIC, including blood tests to determine if platelet and clotting factor levels have decreased, and tests to measure whether blood takes a long time to clot.

**Treatment**
The top priority is to identify and treat DIC’s underlying cause. Treatment may include:
- Antibiotic medication
- Supplemental oxygen
- Surgery or other therapies
- Blood transfusions to replace lost blood, platelets and clotting factors
- Supplemental nutrition and fluids (IV or oral)
Anticoagulant (blood-thinning) medications occasionally are used to help prevent clot formation in people who have chronic DIC.

Research into the causes and improved treatment of DIC continues. Some people choose to participate in a clinical research study as part of their treatment. If you would like more information about clinical research studies, talk to your health care provider.

**Contacting your health care provider**
If you have questions about DIC or this information, call the appropriate Mayo Clinic number and ask for your health care provider.

- **Mayo Clinic Arizona**
  - 480-301-8000
- **Mayo Clinic Jacksonville, Fla.**
  - 904-953-2000
- **Mayo Clinic Rochester, Minn.**
  - 507-284-2511

BARBARA WOODWARD LIPS PATIENT EDUCATION CENTER
Mrs. Lips, a resident of San Antonio, Texas, was a loyal patient of Mayo Clinic for more than 40 years. She was a self-made business leader who significantly expanded her family’s activities in oil, gas and ranching, even as she assembled a museum-quality collection of antiques and fine art. She was best known by Mayo staff for her patient advocacy and support.

Upon her death in 1995, Mrs. Lips paid the ultimate compliment by leaving her entire estate to Mayo Clinic. Mrs. Lips had a profound appreciation for the care she received at Mayo Clinic. By naming the Barbara Woodward Lips Patient Education Center, Mayo honors her generosity, her love of learning, her belief in patient empowerment and her dedication to high-quality care.
throughout the body, not just at injury sites. Because abnormal clotting depletes the body’s supplies of clotting factors and platelets, not enough are left to form clots at injury sites. Uncontrolled bleeding can result.

DIC also may increase the body’s production of clot-dissolving substances, leading to widespread clot breakdown (fibrinolysis) and further bleeding.

In summary, DIC is a combination of simultaneous clot formation and clot breakdown which leads to simultaneous bleeding and thrombosis.

DIC is rare, and the severity of symptoms varies. The disorder does not occur alone, but results as a complication of a serious underlying disease, or following trauma or surgery. If the underlying condition is successfully treated, DIC often will stop. DIC can damage organs and other body tissues and can be life threatening. If DIC occurs with severe sepsis (a serious infection), shock (a condition caused by reduced oxygen delivery to the body) or multiple organ failure, the chance of survival decreases greatly.

Risk factors
While the exact cause of DIC is unknown, certain conditions appear to increase the chance of developing the disorder. DIC has acute and chronic forms.

Introduction
Disseminated intravascular coagulation (DIC) is a disorder of the blood-clotting system. DIC is sometimes called intravascular coagulation and fibrinolysis (ICF). Disseminated means widespread; intravascular means within blood vessels; coagulation means clotting; and fibrinolysis means clot breakdown.

This information provides an overview of DIC, including risk factors, symptoms, diagnosis and treatment.

Normal coagulation
During coagulation, blood changes from a liquid to a solid state to stop bleeding. Blood flowing through the body normally does not clot (coagulate) unless injury has occurred. Injury to a blood vessel causes a release of chemicals that activate the coagulation system.

The coagulation process begins when blood cells (platelets) attach to a blood vessel at the injury site. Blood proteins (clotting factors) then produce a weblike network that holds the platelets in place to form a clot, which helps prevent excess bleeding.

Disseminated intravascular coagulation (DIC)
If a person develops DIC, the chemicals that activate the coagulation system are released throughout the bloodstream. Clots then form in small blood vessels

Acute DIC appears suddenly and is associated with:
- Injury, such as burns, major trauma or some snakebites
- Pregnancy complications
- Medical conditions, such as certain infections (for example, severe sepsis), liver disease, shock or multiple organ failure
- A reaction to a medical procedure, such as surgery, anesthesia or a blood transfusion

Chronic DIC develops more slowly and is associated with certain cancers (especially leukemias) or liver disease. Chronic DIC may not produce abnormal bleeding or other symptoms. Often, the condition is found when blood tests are done for other reasons.

Symptoms
DIC symptoms can include:
- Easy or excessive bruising
- Unexplained bleeding, particularly from the mouth, nose, rectum or an intravenous (IV) site
- Prolonged bleeding from cuts or injuries or after surgery
- Blood in urine or stools
- Back, chest or abdominal pain
- Shortness of breath
- Increased heart rate
- Fever
- Distended (swollen) abdomen
- Confusion