Blood Disorders

Protecting and Improving the Health of People with Blood Disorders

NCBDDD works to prevent and reduce complications experienced by people with certain blood disorders. Blood disorders affect millions of people each year in the United States, cutting across the boundaries of age, race, sex, and socioeconomic status. Men, women, and children of all backgrounds live with the complications associated with these conditions, many of which are painful and potentially life threatening. While millions of Americans carry genes for bleeding and clotting disorders, and hemoglobinopathies (a genetic defect), most will lead normal lives without experiencing any harm.

Our focus includes:

- **Venous thromboembolism (VTE)**
  Preventing death and disability associated with clotting disorders like venous thromboembolism (VTE), deep vein thrombosis (DVT), and pulmonary embolism (PE).

- **Sickle Cell and Thalassemia**
  Preventing and controlling complications resulting from hemoglobinopathies.

- **Hemophilia and Von Willebrand Disease**
  Preventing and controlling complications resulting from bleeding disorders.

**Venous Thromboembolism**

NBCDDD’s work focuses on nonmalignant blood disorders such as deep vein thrombosis, or DVT, and pulmonary embolism, or PE. Together they are known as venous thromboembolism or VTE. It is estimated that 300,000-600,000 or more cases of VTE occur in the United States each year with a high case fatality rate. There are prevention opportunities that are not being fully taken advantage, particularly those associated with hospitalization and surgery.
Sickle Cell

Another important public health issue is sickle cell disease (SCD), a hemoglobinopathy. Hemoglobinopathies are a group of blood disorders and diseases that affect red blood cells. These inherited disorders include both SCD and thalassemia and can cause lifelong disabilities and reduce life expectancy. People who have SCD have a 20-30 year lower life expectancy than people without SCD. This gap could be significantly diminished if there was continuity of care for these individuals over time.

Hemophilia

Bleeding disorders such as hemophilia can cause life and limb threatening bleeding. In addition, 15-20% of people with hemophilia develop an inhibitor (an antibody that prevents the action of clotting factor used to treat bleeding). Having an inhibitor increases hospitalization and the risk of an intracranial hemorrhage, compromises physical functioning, further limits joint mobility, and substantially increases the cost of care.

NCBDDD’s comprehensive public health approach to blood disorders includes data collection, research to identify preventable or modifiable risk factors, and activities to develop, evaluate, and ensure widespread adoption of effective prevention strategies.

View "Division of Blood Disorders: Building a Better Tomorrow" Video