MYSTERIOUS AIDS-LIKE ILLNESS IS TARGETED

SAN FRANCISCO - The federal government is launching a study to determine whether a mysterious, AIDS- like illness can be transmitted by blood transfusion, researchers said recently.

The study is being undertaken even though researchers believe there is almost no chance the disease can be transmitted through blood.

"If it weren't for AIDS, people probably wouldn't be interested in this," said a doctor involved with the study. He spoke on condition he not be identified.

"People are sensitized," he said. "Blood banks are being sued every day, and their lawyers are nervous."

The illness, first described in July, produces symptoms like those of AIDS but without evidence of infection by the HIV virus that causes AIDS.

Dr. E. Shannon Cooper, president of the American Association of Blood Banks, said it was unlikely the illness was caused by an infectious agent carried in blood,

"We're trying to take the most cautious and pro-active approach we can," he said at the association's annual meeting, where the study was announced.

Cooper did not know the cost, but the contribution from the federal Centers for Disease Control and Prevention - one of three government agencies supporting the study - is about $100,000, a CDC official said.

In other research presented, CDC doctors said they have calculated the risk of getting AIDS from a transfusion of one pint of blood at about one in 225,000.

"This is the lowest estimate yet," said Dr. Lyle Petersen of the CDC, the study's principal author.

Petersen and colleagues calculated that as of 1990, there was an average 45-day "window" during which a person can pass along the AIDS virus but not test positive for the infection.

Blood donations made during that period can transmit the AIDS virus, Petersen said.

But the evidence showed the risk is extremely low, probably even lower than his one-in-225,000 estimate.Newer, more sensitive AIDS antibody tests put in use this year can detect infection as soon as 30 days after the person is exposed, Petersen said. That would produce a corresponding drop in the risk, he said.

Petersen said 68 cases have been found in the United States.

HEALTH

NEW TEST IDENTIFIES NEWBORNS WITH SICKLE CELL ANEMIA

HOUSTON—A DNA-based test is identifying newborns with sickle cell anemia and decreasing deaths caused by the devastating blood disease.

"We are saving lives by starting treatment earlier," said Dr. Edward McCabe, developer of the test and professor of molecular genetics at Baylor College of Medicine in Houston.

Sickle cell anemia mainly affects African-Americans and is an inherited blood disease that causes the red blood cells to become sickle shaped instead of round. The sickle cells can block blood vessels in almost any part of the body, causing sudden pain as well as damage to tissue and organs. There is no cure.

Since July 1991, the State of Texas has used a DNA test as a second level of newborn screening. Sickle cell screening is mandatory in Texas, and all positive or unclear tests are sent to Baylor for DNA confirmation.

McCabe hopes the test will be adopted nationally.

"This new test has allowed us to shorten the time it takes to confirm sickle cell to about 1.7 months of age," McCabe said. "The middle range for confirmation used to be between 4- and 5- months-old because a second blood test was needed."

The immediate treatment for infants is daily antibiotics.

"The disease causes the baby's spleen to become blocked and damaged,' McCabe said. "Normally, the spleen functions as part of the body's defenses against infection by removing bacteria from the bloodstream."

Once the spleen is damaged, infections can be fatal. McCabe added that these children must rely on antibiotics, such as penicillin, as the "first line of defense."

Although babies with sickle cell disease often look healthy, McCabe cautions parents to remember that this is a life-threatening disease. "The babies who die from sickle cell are the ones who are not on penicillin."

A pediatrician can teach parents to recognize the early symptoms of serious complications, such as a fever over 101 degrees, enlargement of the spleen, and swelling and pain in the hands and feet.

Detecting sickle cell earlier is making follow-up with families easier, says McCabe.

"There is less chance that a family will have moved, and families are much more receptive because they get a definite answer rather than a request for a second blood test," he said.

About one in 400 black infants is born with sickle cell anemia, which occurs only when both parents carry the sickle cell gene and pass it to the baby. When both parent are carriers, each child will have a 25 percent chance of having sickle cell disease. People with one sickle cell gene and one normal gene are carriers and do not have the disease. It is estimated that one out of 10 blacks carry the trait.

"Sickle cell screening is available from the Sickle Cell Association, physicians or county health clinics," McCabe said. "Pre-natal diagnosis is also available for at-risk couples.