news THE UNIVERSITY OF TEXAS HEALTH SCIENCE CENTER AT DALLAS
southwestern medical school ▪ graduate school of biomedical sciences ▪ school of allied health sciences

November 29, 1976 Contact: Chris Land

******Medical school researchers studying high blood pressure in DISD eighth graders.*

DALLAS--Hypertension, or high blood pressure, is known as "the silent killer" because it often produces no symptoms until it is well-advanced. But researchers at The University of Texas Southwestern Medical School are joining forces with Dallas public school officials to screen teenagers for hypertension, in an effort to detect early in their lives those with a high risk of developing the disease.

Headed by Dr. David Fixler, associate professor of pediatrics at Southwestern, the current study aims to determine the prevalence of high blood pressure in adolescents and the incidence of heart abnormalities in these young persons.

In the Dallas Independent School District, where the study is being conducted, parents of some eighth graders recently received letters asking permission for Dr. Fixler's research team to re-check their children's blood pressures. In an earlier routine examination by their school nurses, these children were in the five per cent of DISD eiththh graders with the highest initial blood pressure measurements.

Dr. Fixler stresses that although a child is picked to be rechecked, he or she does not necessarily have high blood pressure.

Previous studies have shown that it is necessary to check several times in order to identify those with hypertension.

"Many times the child is nervous or excited and this affects the blood pressure reading," Dr. Fixler explains.

Those students whose parents return the letter giving consent will be rechecked in the school nursing office by Dr. Fixler's special team, which includes a public health nurse and two licensed vocational nurses. The results of these examinations will be sent to the students' parents and will be made available to their physicians.

--more--

5323 HARRY HINES BLVD. ☐ DALLAS, TEXAS 75235 ☐ TEL. (214) 688-3404

The Dallas School District has been checking student blood pressures for many years as part of a routine examination. Since all children are required by law to attend school, it provides a good opportunity to conduct follow-up screening for hypertension.

"This is the one time in life when we have a fixed population--everyone has to go to school," Dr. Fixler says.

The study will provide important information on racial differences in blood pressure because DISD has nearly equal numbers of whites and blacks. Adult blacks are known to have a higher susceptibility than whites to hypertension.

Cooperation between the school district and Dr. Fixler's research team has been excellent, he says. "It is a good example of a medical center and a school district cooperating for the better health of their children."

Hypertension is important because of its adverse effects on the heart and blood vessels which may result in stroke, heart attack or kidney failure. About 12 per cent of all deaths are a direct result of hypertension and about 20 per cent of all people can expect to have high blood pressure at some time during their lives.

The increase in prevalence of hypertension appears to occur during adolescence, Dr. Fixler says. "We are studying adolescents so we can catch the changes early when we still can do something about them."

Blood pressure readings in children are lower than in adults, but they gradually increase during childhood and adolescence to adult levels.

"The question is what represents high blood pressure for children of a certain age?" Dr. Fixler says. "In other words, how high is too high?

"And what level causes abnormal changes in a child's heart muscle?"

He explains that if blood pressure is too high, it forces the heart to work harder and may cause the heart muscle to become thicker. Hypertensive children with such heart abnormalities may need treatment.

In the eighth grade screening program, students having blood pressure readings in the upper fifth percentile during the first three examinations will be tested for heart abnormalities.

"At that point, the parents will be notified that their child has borderline hypertension," Dr. Fixler says, "and that with their permission, we want to thoroughly evaluate the child's cardiovascular status."

--more--

second add hypertension

The purpose and specific procedures involved in the diagnostic tests will be explained to the parents and informed consent will be obtained prior to any testing.

Some of the testing will be conducted by Dr. Pennock Laird, assistant professor of pediatrics at UT Southwestern Medical School. Dr. Laird is director of the pediatric echocardiographic laboratory at Children's Medical Center.

Echocardiography will be used to detect changes in the children's heart muscle. The technique uses echoes from pulses of high frequency sound waves to produce what is similar to a sonar picture of the heart. Echocardiography is a safe, non-invasive imaging technique which involves no exposure to radiation.

In another series of tests, the children's blood pressure will be measured during various levels of exercise to see if they respond normally to this kind of stress.

The project also aims to find out if children with relatively high blood pressure go on to develop high blood pressure as adults. To accomplish this, the children will be checked again in the tenth and twelfth grades.

"By recording individual blood pressures twice a year over a five year period, we may be able to determine whether pressures in early adolescence can predict subsequent levels," Dr. Fixler says.

##

PHOTO AVAILABLE ON REQUEST