CARDIOVASCULAR DISEASE IN AMERICAN INDIANS
PHASE III EXAM
THANK YOU FOR YOUR PAST PARTICIPATION IN THE PHASE I AND PHASE II EXAMINATIONS OF THE STRONG HEART STUDY!

You are part of the largest multi-center study of American Indians ever undertaken by the National Institutes of Health. Because of your participation in the Strong Heart Study (SHS), each of the three centers, Arizona (AZ), Oklahoma (OK) and the Dakotas (DK), reached its goal of 1500 examinations of adult American Indian men and women in Phase I. Your continuing participation in Phase II resulted in an 88% retention rate for the second examination. Many of you are aware of some of the findings from previous exams because of the newsletters and community meetings during the study. For individuals who did not attend those meetings or read the newsletters, a brief summary of the findings is presented at the bottom of this page.

The success of the SHS through phases I and II was based on your interest and effort. Your family, your community, and the next generation of American Indians will benefit because you took the time to participate in this study. The data from the SHS will provide accurate measures of the health problems linked to heart disease, diabetes, high blood pressure, high cholesterol, and many other diseases among American Indians, which will be useful to your community and all American Indians. You should be proud to be a part of this effort. The SHS investigators appreciate your contribution.

WHAT WERE SOME OF THE FINDINGS FROM PHASES I AND II?

The purpose of Phase I was to measure the extent of heart disease and heart disease risk factors among the three SHS centers. The Phase II examination provided data on additional measures of heart and lung disease.

Data from the previous examinations indicate:

- Heart disease rates are lower in Indians than the U.S. population
- Heart disease is highest in DK and lowest in AZ
- Cigarette smoking is 49% in DK, 34% in OK, and 19% in AZ
- Blood pressure are highest in AZ and lowest in DK
- Cholesterol levels are low for Indians, much lower in AZ
- Diabetes is high in all centers, twice as high in AZ vs. OK, DK
- Obesity is high in all three centers
- Peripheral arterial disease (circulation in the legs) is about the same among centers
- Asthma occurs in Indians as often as in the non-Indian population
- Mortality is high in all three centers; due primarily to heart disease and diabetes

Degree of Indian blood is highest among Arizona Indians and may be associated with lower risk of heart disease but higher rates of diabetes. Diets appear to be quite different among the three centers. Other data indicate Oklahoma Indians consume less alcohol than those in the other two centers.
INVITATION TO PARTICIPATE IN THE PHASE III EXAMINATION OF THE STRONG HEART STUDY

The success of the SHS demonstrated that studies of American Indians can be successful and can teach us much about the causes of heart disease. As a result, the National Heart, Lung, and Blood Institute has funded a third examination of the Strong Heart Study.

If you were a participant in exam I of the SHS, you are invited to participate in the third examination which will begin in 1998 and extend for about two years. All individuals who participated in the first examination will be invited to participate in the third examination even if you missed the second examination.

The third examination will include many of the tests of the previous examinations but also will include some new tests that are not routinely done by your usual health care provider. Your Phase III exam should be done about 5 years after the second exam; you will be contacted at the appropriate time. Answers to many of the most frequently asked questions about the next exam are provided below. If your questions are not answered, or you would like to make an appointment for your examination, please call the study coordinator or principal investigator at your center using the telephone numbers provided on page 4 of this brochure.

WHAT IS THE PURPOSE OF THE PHASE III EXAMINATION?

Most of the information about factors that increase the risk of heart disease comes from non-Indian populations. We assume that the same factors contribute to heart disease in Indians. To be sure of which factors contribute to heart disease in Indians it is necessary to do more after the first examination. The second and third examinations will also show whether these risk factors are changing with time. In addition, there are new measurements that will help us better understand heart disease and lung disease among American Indians. These objectives can be strengthened with an additional examination.

WHO WILL CONDUCT THE PHASE III EXAMINATION?

The investigators and many of the staff from the previous examinations will also be conducting the third examination. You will be familiar with the people and many of the measurements.

WHAT ABOUT INCLUDING YOUNGER PEOPLE?

A pilot study of families of selected participants from the current exam is planned for 1997. About ten families will be invited to participate from each center. Parents, siblings and children over age 18, of selected previous participants, will be given an opportunity to have the same examination to determine if risk factors for heart disease have a family or genetic component. If this pilot is successful, an effort to get approval for a larger study of more families is planned.
WILL THERE BE ANYTHING NEW IN THE THIRD EXAMINATION?

The third examination will be like previous examinations in that the following measurements and tests will be repeated:

- Electrocardiogram (ECG, heart tracing)
- Dietary Intake Questionnaire
- Body measurements: waist & hip size, height, weight and body fat
- Blood pressure; pulses in arms, legs and feet
- Urine and blood tests for factors related to heart disease
- Health history interview

New exam items will include:

- New lung function (breathing) measurements
- Blood vessel pictures taken from outside your body using sound waves
- New lifestyle interviews and questionnaires
- Asthma tests for those with symptoms

WHAT WILL THIS PROJECT FIND AND HOW CAN THIS INFORMATION BE USED?

This project provides an opportunity to determine which factors are most important in causing heart disease in American Indians and if these factors are changing over time.

For individuals, this examination will provide more detailed information on their health status. All participants will receive a report of their results. This information can be placed in their medical record for future reference or for immediate medical care if it is needed. If genetic testing results are useful to improving your health, information will be provided to you through your physician.

For the communities, this examination will provide better estimates of the health problems to determine the most effective use of health care funds to improve the health of American Indians.

WHO CAN I CONTACT FOR MORE INFORMATION?

Elisa Lee, PHD  
Principal Investigator  
Center for American Indian Health Research  
College of Public Health  
University of Oklahoma HSC  
P. 0. Box 26901, COH 112  
Oklahoma City, OK 73190  
(405) 271-3090

Tauqeer Ali, MD, MPH  
Project Coordinator  
USPHS Indian Hospital  
1515 NE Lawrie Tatum Road  
Lawton, Ok 73507  
( 405) 353-0350 x 486