Cardiovascular Disease in American Indians
Dear Fellow American Indian:

Heart disease is the leading cause of death of American Indians and appears to be increasing in many if not most Indian communities. In order to understand more about this important cause of death of Indians, the National Heart, Lung, and Blood Institute is funding an investigation, called the Strong Heart Study. This study will determine the seriousness of heart disease for each study community and will provide the basis for the development of programs to reduce heart diseases for current and future generations of Indians. The Strong Heart Study is supported from National Institutes of Health research funds and does not involve health care funds from the Indian Health Service. The Indian Health Service fully endorses this study and is cooperating enthusiastically. I hope each of you will do the same.

To each eligible person from the selected study communities in Oklahoma, Arizona, and the Dakotas, I strongly encourage your fullest participation in the Strong Heart Study. The success of this project will be important to future success in the fight against heart disease for American Indians.

Everett R. Rhoades, M.D.
Assistant Surgeon General
Director
Description of the Study

What is the purpose of the project?

This project is studying cardiovascular (heart) disease in three Indian populations. It will measure how much heart disease is present currently, and also how much has occurred in the recent past. It will also measure various physical characteristics and behaviors that are generally associated with a greater chance of having heart diseases.

Who is conducting the project?

The Principal Investigators are:

Dr. Barbara Howard of the Medlantic Research Foundation of Washington, D.C. for the Gila River and Salt River Indian Communities in Arizona.

Dr. Elisa Lee of the University of Oklahoma for the Seven Tribes of Southwestern Oklahoma.

Dr. Thomas Welty of the Aberdeen Area Indian Health Service for the Sioux in the Dakotas.

The program is funded by the National Heart, Lung, and Blood Institute, which is part of the National Institutes of Health in Bethesda, Maryland. This program has received strong cooperation and support from the Indian Health Service.

Who will participate?

Native Americans from 12 tribes in three different states will participate. Included are Seven Tribes from Southwestern Oklahoma (Apache, Caddo, Comanche, Delaware, Fort Sill Apache, Kiowa and Wichita), the Pima/Maricopa communities from Arizona (Salt River and Gila River) and 3 Sioux Tribes from the Dakotas (Oglala Lakota, Cheyenne River and Devil's Lake). The study will focus on the adult population in which heart disease is more likely to occur.

How will the amount of heart disease be determined?

There are three main components to the project as follows:

1. Physical examinations of persons aged 45-74 years;
2. Medical record reviews for previous hospital and clinical visit for the years 1984-1988 for people 45-74 years of age;
3. Death record reviews for deaths occurring during the years 1984-88 for people 35-74 years of age;

When is the project being done?

The entire three-year project is from October 1988 through September 1991. The physical examinations will be done during a two-year time span beginning in June 1989.

What will be included in the physical examination?

Body measurements: hip and waist circumference, height, weight and body fat.
Blood pressure and pulses in arms, legs and feet.
Listening to heart and lung sounds
Laboratory tests: glucose tolerance test, urinalysis, blood tests.
Electrocardiogram (EGG)
Health history and personal interview
What will the project find and how can this information be used?

The project will measure the amount (rate) of heart disease in each community and tell us if it is higher in some Indian communities than others. Also, by looking at past diseases, the project will determine if heart disease is becoming more common through time.

By looking at risk factors, such as diet, physical activity, and smoking, and comparing these factors to heart disease rates, recommendations can be made that can decrease chances of developing heart problems. This will be important to participants and even more important to future generations.

Also, because the examination includes tests for blood pressure, cholesterol and diabetes as well as an electrocardiogram, the project will show how many of the people participating have existing diseases. Individuals will be referred to their local health care center for treatment and follow-up if indicated.

Finally, another important part of this project is that special measurements will be done on the blood samples to show if genetic factors are related to heart disease. If this is true, it could have a major impact on the prevention of heart disease.

**** Prevention is the basic goal for conducting this heart project. ****

Participants will be advised how they can reduce their risk of heart disease. The Indian communities that participate will receive excellent baseline information. This will provide a basis for community programs that will lead to overall improvements in health.

Who can I contact for more information?

Write to or call collect

Dr. Elisa Lee, Principal Investigator, or
Dr. David R. Risser, Project Coordinator.

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