UPDATES FROM US HEALTH AGENCIES

Recent activity in government and non-government agencies may affect readers of *Ethnicity & Disease* and other healthcare professionals working with ethnic minority and under-served populations. Below are some current items of interest.

FROM THE NATIONAL INSTITUTE OF DIABETES AND DIGESTIVE AND KIDNEY DISEASES (NIDDK)

Diabetes Rates Are Increasing Among Youth

While most children and young adults with diabetes have type 1, soaring obesity rates are making type 2 diabetes, a disease that used to be seen primarily in adults over age 45, more common among young people. To help young people diagnosed with diabetes and their parents, the National Diabetes Education Program (NDEP) is introducing a new series of tip sheets and an online quiz specially created for teens to help them manage their disease and reduce their risk for complications. NDEP is jointly sponsored by the National Institutes of Health and the Centers for Disease Control and Prevention.

NDEP's new Tips for Teens with Diabetes series, which encourages youth to take steps to manage their disease for a long, healthy life, includes topics such as What is Diabetes?, Be Active, Make Healthy Food Choices, Stay at a Healthy Weight, and Dealing with the Ups and Downs of Diabetes. NDEP also has a tip sheet addressing teens at risk for type 2 diabetes, called Lower Your Risk for Type 2 Diabetes. In addition, NDEP has developed an interactive online quiz for teens with diabetes based on information found in the tip sheets, using a question-and-answer format, with direct links to the new series of tip sheets. All of the tip sheets are available at no charge from the NDEP.

NDEP's new resources support youth with diabetes and their families to ensure their health and well-being now and into adulthood. For more information about NDEP's free resources for children and teens, visit www.YourDiabetesInfo.org or call 1-888-693-NDEP (6337).

FROM THE NATIONAL INSTITUTE OF DIABETES AND DIGESTIVE AND KIDNEY DISEASES (NIDDK)

Chronic Kidney Disease Rises While Most People with the Condition Remain Unaware

A growing number of Americans have chronic kidney disease, but most remain unaware of it, hampering efforts to prevent irreversible kidney failure that requires dialysis or a transplant, according to a study funded by the National Institutes of Health.

An estimated 26 million people—approximately 13% of the U.S. population—now have chronic kidney disease, say researchers at Johns Hopkins University in Baltimore, Tufts-New England Medical Center in Boston and Cleveland Clinic Foundation. This new report increases by 3% the previous estimate of 20 million people with the disease in 1994.

"Increases in diabetes, hypertension, obesity, and the aging US population explain at least some of the increase," says Paul W. Eggers, PhD, director of kidney disease epidemiology at NIDDK. "We don't know what may be responsible for the rest."

The study analyzed and compared National Health and Nutrition Examination Survey data on adults age 20 or older from 1988 to 1994 and 1999 to 2004. More than 15,000 and 13,000 adults, respectively, were interviewed at home and had a physical exam and blood and urine tests. The surveys were conducted by the National Center for Health Statistics, part of the Centers for Disease Control and Prevention.

Awareness of chronic kidney disease is up, but most people who have the condition still don't know it. Between 1999 and 2004, survey participants were asked if they had been told they had "weak or failing kidneys." The authors report that only 11.6% of men and 5.5% of women with moderate (stage 3) kidney disease knew it. Awareness increased to 22.8% among participants with stage 3 disease and albumin in the urine. Awareness was highest among people with severe (stage 4) kidney disease, only 42% of whom knew they had the condition. Stage 5 is kidney failure.

Kidney disease raises the risk of early death, heart attack, stroke, and high blood pressure; causes anemia, bone disease, and malnutrition; and can lead to kidney failure. In 2005, at least 107,000 Americans learned they had kidney failure. That year, more than 485,000 had dialysis

or a kidney transplant, costing $32 billion, according to the NIH's US Renal Data System. The data system predicts that by 2020, nearly 785,000 people will be receiving treatment for kidney failure, costing $53.6 billion.

FROM THE NATIONAL HUMAN GENOME RESEARCH INSTITUTE (NHGRI)

Low Maternal Cholesterol Tied to Premature Birth

Pregnant women who have very low cholesterol may face a greater risk of delivering their babies prematurely than do women with more moderate cholesterol levels, according to a team led by the NHGRI. A study confirmed previous findings that very high levels of maternal cholesterol can increase the risk of premature birth. However, in a surprising new twist, the researchers found that low maternal cholesterol levels, which may be related to a woman's genetic makeup, diet, or other health factors, also may lead to adverse birth outcomes, including premature birth and low birth weight.

"Based on our initial findings, it appears that too little cholesterol may be as bad as too much cholesterol during pregnancy, but it is too early to extrapolate these results to the general population. More research is needed to replicate this outcome and to extend it to other groups," said Dr. Muenke, the study's senior author and chief of the Medical Genetics Branch in NHGRI's Division of Intramural Research. "For now, the best advice for pregnant women is to follow the guidance of their healthcare providers when it comes to diet and exercise."

Premature birth is a major cause of infant death and raises the risk of many potentially disabling conditions, including cerebral palsy, cognitive impairment, blindness, deafness, and respiratory illness. Factors contributing to premature birth include maternal genetics, fetal genetics, and environmental components, such as nutrition, stress, and infection.

In their study of 1058 South Carolina women and their newborns, researchers found approximately 5% of the women with cholesterol levels in the moderate range of 159–261 mg/dL gave birth prematurely. In contrast, white women with the lowest cholesterol levels—<159 mg/dL—had a 21% incidence of premature births. Interestingly, no increase in premature births was observed among African American women in the low-cholesterol category. However, full-term babies born to both White and African Americans with low cholesterol weighed 5 ounces less on average than did full-term babies born to women with moderate cholesterol.

"The right amount of cholesterol is fundamental for good health, both before and after birth," explained Dr. Muenke. "During pregnancy, cholesterol is critical for both the placenta and the developing baby, including the brain."

As in past studies, the new research showed very high cholesterol levels (>261 mg/dL) to be a major risk factor for premature birth. Approximately 12% of White and African American women with very high cholesterol levels gave birth prematurely.

The study involved pregnant women between the ages of 21 and 34 who were referred to South Carolina clinics for routine prenatal care between 1996 and 2001. According to their medical records, they were all nonsmokers without diabetes who were carrying just one child. The study looked at cholesterol levels from their second trimester of pregnancy. Premature birth was defined as delivery before 37 weeks of gestation.

Taking into account the natural rise in maternal cholesterol during pregnancy, researchers examined the effects of maternal cholesterol levels on rates of premature delivery, impaired fetal growth, and birth defects. In addition, they analyzed measurements of newborn weight, length, and head circumference. No differences were seen in the rate of birth defects, but researchers did detect a trend towards smaller head sizes among babies born to women with very low cholesterol.

Besides the South Carolina study, Dr. Muenke and his colleagues have undertaken a number of other investigations aiming to determine the role of cholesterol in embryonic development. They have identified genes that affect congenital brain defects and established the role that cholesterol plays in modulating the actions of such genes.