Chronic Kidney Disease:
A growing public health problem affecting 26 million Americans

An estimated 26 million adults in the United States now have chronic kidney disease (“CKD”), but most are unaware of it, undercutting efforts to prevent irreversible kidney failure requiring dialysis or a transplant.

This alarming number, reported in the November 2007 issue of Journal of the American Medical Association, increases the most recent estimates of the prevalence of CKD to over 13% of American adults. In other words, 1 in 9 of all Americans is suffering from CKD. The study’s authors note that increases in diabetes, hypertension, obesity, and the aging U.S. population explain at least some of the increase.

“Our study demonstrates chronic kidney disease in the United States is more common than previously appreciated. However, less than 1 in 10 individuals with kidney disease is aware they have a problem,” said Josef Coresh, MD, PhD, lead author of the study and professor in the Departments of Epidemiology and Medicine at Johns Hopkins University. “The medical community is starting to realize that chronic kidney disease is a serious concern, similar to the increased awareness of hypertension in the 1970s and diabetes in the 1990s.”

The human cost of CKD

Healthy kidneys remove wastes and fluid, help regulate the body’s water and other chemicals in the blood, remove drugs and toxins, and release hormones to help regulate blood pressure, make red blood cells and promote strong bones. In people with CKD, the kidneys are less able to perform these vital functions that help maintain a person’s overall health. People with CKD often develop complications such as high blood pressure, anemia, weak bones, malnutrition and nerve damage.

People at increased risk for CKD include those with diabetes, high blood pressure, cardiovascular disease and a family history of kidney disease, as well as people over the age of 60. Certain ethnic groups such as African-Americans, Hispanics, and Native Americans are also at increased risk.

The Impact of CKD on the public health system

Kidney disease raises the risk of early death, heart attack, stroke, and high blood pressure. CKD causes anemia, bone disease and malnutrition and can lead to kidney failure, which requires ongoing dialysis or a kidney transplant to maintain life. According to the National Institute of Health’s U.S. Renal Data System, over 100,000 Americans started dialysis in 2005 while a total of over 485,000 received ongoing dialysis treatment or a
kidney transplant, at a cost of $32 billion. The NIH estimates that by 2020 nearly 785,000 people will be receiving treatment for kidney failure, costing an estimated $53.6 billion.

**Raising public awareness of CKD**

Chronic kidney disease is often silent until the late stages when it can be too late to head off kidney failure, thus leading an individual to face the prospect of dialysis or a kidney transplant. However, evidence indicates that if CKD is detected early, action may be taken to delay or prevent kidney failure. Unfortunately, there is a lack of awareness in the general public, and to some extent in the medical community, about the prevalence of CKD.

The Kidney TRUST is hoping to change this mindset by raising public awareness of CKD through community outreach and education. There is a growing recognition in the kidney disease community that widespread testing could have a profound impact on the progression of CKD in the population. The Kidney TRUST’s new rapid-testing program is one of a growing number of initiatives that are focused on raising awareness about CKD in the general population and providing opportunities for testing to the general public.

In an effort to reach a broader segment of the U.S. population, The Kidney TRUST has developed an innovative methodology for screening the general population in non-medical settings that will make it feasible to greatly increase the number of Americans tested for CKD.

**The TRUST’s rapid-testing program**

The goal of the TRUST’s rapid-testing program, which will provide accurate and immediate information about CKD to participants, is to identify individuals who have signs of kidney impairment. Along with their screening results, participants will receive materials that offer education about CKD and its prevention, encouraging them to seek medical follow-up. This innovative public screening program will be carried out in non-medical settings such as large employer workplaces and community health fairs. Through partnerships with employers and health care providers this screening program is being made available around the United States throughout 2008.

The stakes are high – a successful method to greatly increase the coverage of CKD testing and follow-up could forestall or delay the need for dialysis or kidney transplants for thousands of Americans. In doing so, there is the potential for saving lives, improving the quality of life for those affected by CKD, while dramatically easing the economic impact that CKD has on our public health system.