

The American Society of Nephrology (ASN) is the world's largest organization dedicated to the study and practice of nephrology, the specialty that studies kidney disease.

## Kidney disease is serious, harmful, and far more common than people think

- Approximately 26 million Americans have some evidence of chronic kidney disease (CKD) and are at risk to develop kidney failure. Another 20 million are at increased risk for developing kidney disease.
- When chronic kidney disease progresses, it may lead to kidney failure or end stage renal disease (ESRD).
  - Approximately 505,000 Americans have been diagnosed with kidney failure, with that number expected to grow to 785,000 by 2020.
- Kidney disease disproportionately impacts ethnic minorities. African Americans, Hispanics, Native Americans, and Pacific Islanders are at higher risk for kidney disease than their Caucasian counterparts.
  - African Americans with CKD are four times more likely to progress to ESRD than Caucasians; Hispanics are twice as likely to progress.

## Various diseases place patients at increased risk for developing kidney disease

- The leading causes of kidney disease are **diabetes and hypertension**.
- Cardiovascular disease accounts for more than half of all deaths among people with kidney failure. Death from cardiovascular disease is **10 to 30 times more likely** in kidney dialysis patients than in the general population.
- Obesity is known to **triple** one's risk of chronic kidney failure. Nearly **two-thirds** of US adults, or 129.6 million people, are **overweight**.

## Treatment is costly and burdensome, and most often a temporary fix

- Dialysis is a life-saving process that artificially replaces the functions of the kidney. Even with the best therapy, the annual mortality rate for dialysis patients remains approximately 20%.
  - About two-thirds of all dialysis patients die within five years of initiating therapy, a survival rate worse than expected for most cancer patients.
- Kidney transplantation is the closest thing to a cure. In 2003, 16,043 patients received a transplant. Yet, 65,388 patients are currently waiting for a transplant; 3,886 patients died waiting in 2004.
- Treatment is incredibly expensive; seven percent of the Medicare population has been diagnosed with kidney disease, but account for almost 21% of total Medicare costs, or \$42 billion annually.

## Early detection improves patient life expectancy, while research may offer hope

- Early detection of CKD can help prevent its progression to kidney failure. At-risk patients need to be routinely tested by using simple, inexpensive tests: a blood test to estimate the level of remaining kidney function and a urine analysis to measure protein levels.
- The National Institutes of Health (NIH) spent \$448 million on kidney disease research in fiscal year 2008. Additional research is needed to:
  - Identify the causes of CKD.
  - Elucidate the mechanisms that lead to progression of CKD to ESRD.
  - Discover new treatments to prevent the long-term negative effects of CKD, ESRD, and other kidney diseases.

