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# Chronic Kidney Disease is a Public Health Issue

*This article is the first in a series of 12 one-page articles about chronic kidney disease. This month's topic provides an overview of the series.*

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American Indians experience high rates of chronic kidney disease (CKD), often resulting in end-stage renal disease (ESRD). At the end of 1999, 5361 people identified as AI/AN were being treated for ESRD, reflecting a prevalence rate 3.5 times greater than that of white Americans. The incidence rate for ESRD was 2.7 times the white rate and increased at 8% per year during the period 1992-1996. During the 10-year period from 1988-1997 the number of AI/AN with ESRD tripled.

The epidemic of diabetes mellitus among AI/AN, which began in the middle of the 20th century, appears to be driving the increase in ESRD. More than two-thirds (68%) of AI/AN who initiated treatment for ESRD in 1999 developed kidney failure as a result of diabetes, virtually all type 2, while only 25% of whites and 42% of blacks with ESRD were patients with diabetes. The incidence rate for ESRD due to type 2 diabetes among AI/AN during 1996-1999 (349/million) was three times the white rate (99/million), and was higher than any other disease-specific rate for any US race. Some communities of the southwest have extraordinarily high rates of kidney failure. In Zuni Pueblo, a community of 10,000 in western New Mexico, the prevalence of ESRD is 17,400 per million population. This is 4.5-, 5.7-, and 21.3-fold higher than that for African Americans, American Indians, and European Americans, respectively.

The purpose of this series of articles to be published in *The Provider* is to help clinicians improve the care we provide to patients with chronic kidney disease by describing new standards of care developed by the National Kidney Foundation, the Renal Physicians Association, and other kidney-related professional groups. These guidelines cover evaluation, classification, and treatment of persons with CKD, as well as preparation for renal replacement therapy (dialysis and transplantation).

The guidelines are similar to information published in *The Provider* over the past fifteen years but comprise a more comprehensive approach. These guidelines are evidence-based, reviewed by multiple disciplines, and available for general review prior to final publication. These guidelines are not

intended as standards or mandates. Rather, they should be used to "make informed decisions for each individual patient." However, it is likely that these guidelines will become the "gold standard" for the care of patients with chronic kidney disease.

This series will focus primarily on chronic kidney disease guidelines developed by the National Kidney Foundation through the Kidney Disease Outcome Quality Initiative (K/DOQI) and published in *The American Journal of Kidney Disease*; they can also be found at [www.kidney.org/professionals/doqi/guidelineindex.cfm](http://www.kidney.org/professionals/doqi/guidelineindex.cfm). In the coming months, we will summarize guidelines for:

- Evaluation, classification and monitoring of patients with CKD
- Evaluation and treatment of hypertension in CKD
- Evaluation and treatment of anemia in CKD
- Assessment of nutritional status and intervention
- Bone disease and disorders of calcium and phosphorus in CKD
- Lipid management in CKD
- Reducing cardiovascular disease in patients with CKD
- Assessment of functioning and well being in patients with CKD
- Preparation for kidney replacement therapy (modalities)
- Vascular access
- Performance measures for IHS

## Why it matters

CKD is progressive and irreversible. Thus, the most effective interventions are those that identify patients as early as possible in the course of the disease and permit the institution of effective preventive measures. The patient care standards to be described in this series have the potential to significantly decrease the burden of CKD in the US population and among AI/AN. The public health model under which we operate and the high risk population we serve make the Indian health system an ideal model for implementation of these guidelines.