

Special Task Force on Chronic Kidney Disease Report

April, 2007





STATE OF ALABAMA DEPARTMENT OF
PUBLIC HEALTH

Donald E. Williamson, MD
State Health Officer

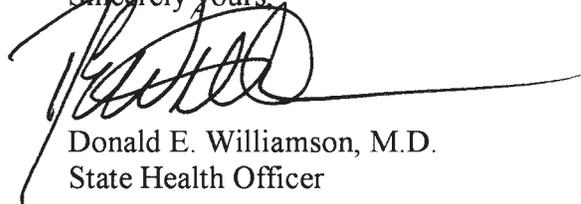
Dear Fellow Alabamians:

It is my pleasure to provide you with this plan for promoting education about chronic kidney disease in Alabama. I served as Chairman of the Special Task Force on Chronic Kidney Disease. Chronic kidney disease poses a major public health problem to Alabamians.

Alabama ranks in the top five states for deaths from chronic kidney disease. African Americans develop chronic kidney disease at younger ages, as compared with the white population. Another disturbing problem is that major risk factors for chronic kidney disease--high blood pressure, diabetes, and obesity--are highly prevalent among our adult population. The current levels of these risk factors and projections for increases in their levels in the future will also result in an increase in the numbers of persons at risk for chronic kidney disease.

We need to make major changes in reducing the risk for chronic kidney disease in our population, as well as improving the early management of those at high risk. If you have high blood pressure, diabetes mellitus, or are overweight, you may already have early chronic kidney disease and not know it, as symptoms do not usually develop until the advanced stages. If you have early stage chronic kidney disease, you are at high risk of complications such as heart disease, including heart attack and heart failure, stroke, anemia, and fractures. I hope you find this plan to be informative and encourage you to find out whether you or any of your family are at risk for chronic kidney disease. If you are, I encourage you to make lifestyle changes to stay healthy and talk with your physician about any other steps that might help you.

Sincerely yours,

A handwritten signature in black ink, appearing to read "Donald E. Williamson". The signature is fluid and cursive, with a long horizontal flourish extending to the right.

Donald E. Williamson, M.D.
State Health Officer

Special Task Force on Chronic Kidney Disease Report

Introduction

The Legislature enacted Act Number 2006-502 creating the Special Task Force on Chronic Kidney Disease because of concerns about chronic kidney disease in Alabama. The State Health Officer was designated as chair. The following tasks were assigned to the task force:

- Study all facets of chronic kidney disease and its complications and how it affects the citizens of Alabama
- Study best practices based on the Kidney Disease Outcomes Quality Initiative (K/DOQI) Clinical Practice Guidelines or other medically recognized clinical practice guidelines for chronic kidney disease
- Make recommendations on the implementation of a cost-effective plan for early screening, diagnosis, and treatment for the citizens of Alabama that are at risk for chronic kidney disease
- Present those recommendations to the Legislature not later than the first legislative day of the 2007 Regular Session

Chronic Kidney Disease Definition

The National Kidney Foundation's Kidney Disease Outcomes Quality Initiative Clinical Practice Guidelines (K/DOQI) define chronic kidney disease as:

- Kidney damage for greater than or equal to three months as defined by structural or functional abnormalities of the kidney, with or without decreased glomerular filtration rate
- Glomerular filtration rate less than 60 mL/mm/1.73 m² for greater than or equal to three months, with or without kidney damage

Magnitude of the Problem

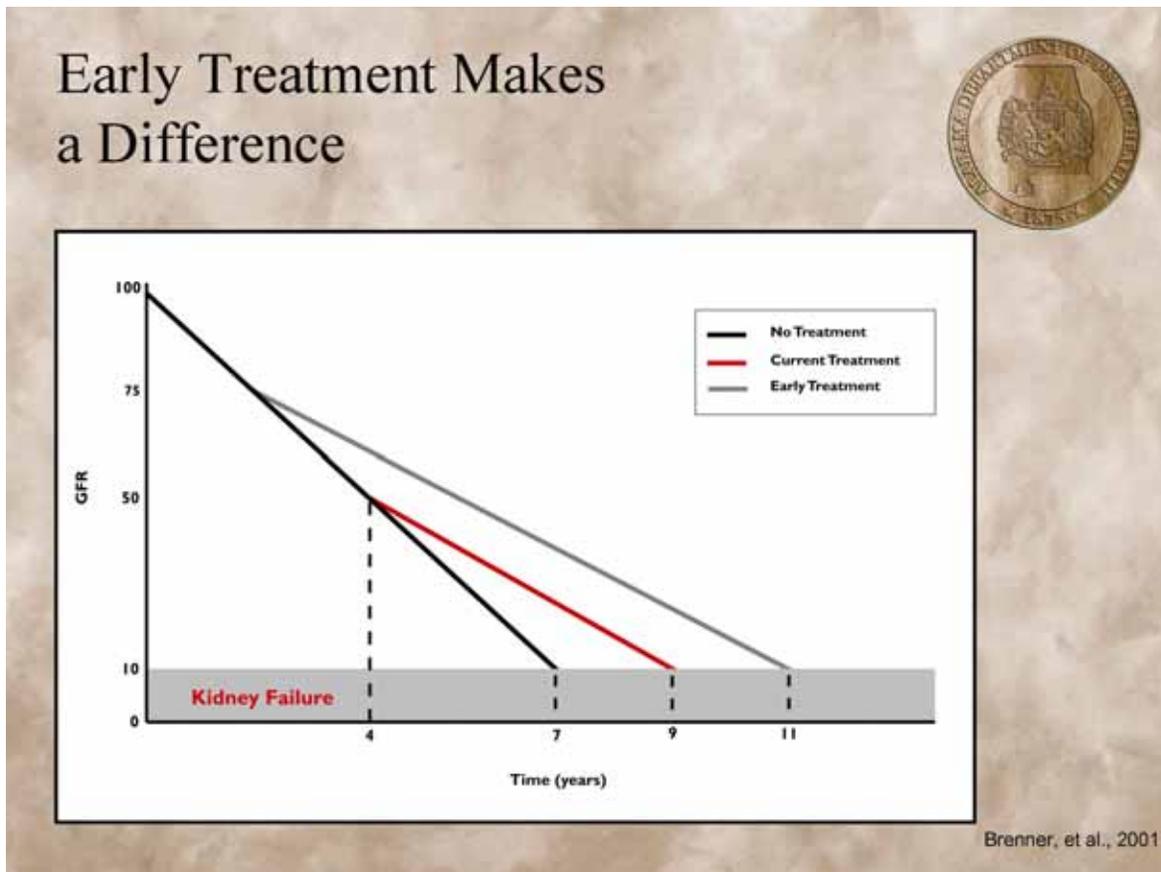
The National Institutes of Health's (NIH) National Kidney Disease Education Program states that there are more than 20 million Americans with kidney disease. Early kidney disease has no symptoms. If undetected, it can progress to kidney failure, known as end stage renal disease, which may require dialysis or a kidney transplant. The program states that the number of persons on dialysis has tripled since 1988. Public and private spending to treat persons with kidney failure in the U.S. in 2003 was \$27.3 billion, an increase of over \$5 billion from 2001.

According to the National Kidney Disease Education Program, the main risk factors for kidney disease are: (1) diabetes, (2) hypertension, (3) a family history of kidney failure, (4) cardiovascular disease, (5) obesity, (6) presence of proteinuria, abnormal serum creatinine, or other markers of disease, and (7) being a member of certain ethnic minority

groups, specifically African Americans, American Indians, and some Asian/Pacific Islanders. The most common causes of kidney failure are diabetes and high blood pressure, accounting for about 70 percent of new cases.

The NIH Program states that blood and urine tests are the only way to detect kidney disease. Kidney disease can be effectively treated if detected early with angiotensin-converting enzyme inhibitors or angiotensin receptor blockers; these are medications which prevent or slow progression of kidney disease to kidney failure. Figure 1, adapted from the NIH Program, shows the impact of treating or not treating persons at risk for early kidney disease by following the glomerular filtration rate measurements over time. Without treatment, when the glomerular filtration rate has decreased to 50 percent, the person is in kidney failure three years later. With treatment initiated at that same 50 percent level of glomerular filtration rate, kidney failure is delayed an additional two years. Even better, with early treatment initiated at a glomerular filtration rate level of 75 percent, kidney failure is delayed until 11 years later. The intensive management of blood glucose is also very important for people with diabetes, especially if they have early stages of kidney disease.

FIGURE 1

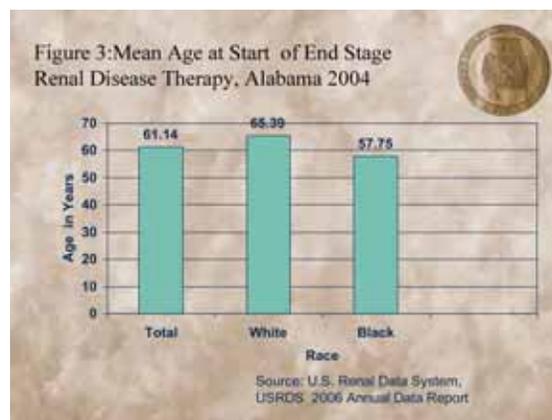


The National Kidney Disease Education Program recommends education about chronic kidney disease for two target groups: (1) people at risk for the disease and (2) health care providers. The Program recommends educational messages which inform people at risk and health care providers that chronic kidney disease is a serious, common, costly, but preventable and manageable public health problem whose incidence is on the rise. The program states that persons at high risk should get tested because early stage treatment slows disease progression. The Program acknowledges that chronic kidney disease is under diagnosed and under treated, but there are effective treatments primary care providers can use.

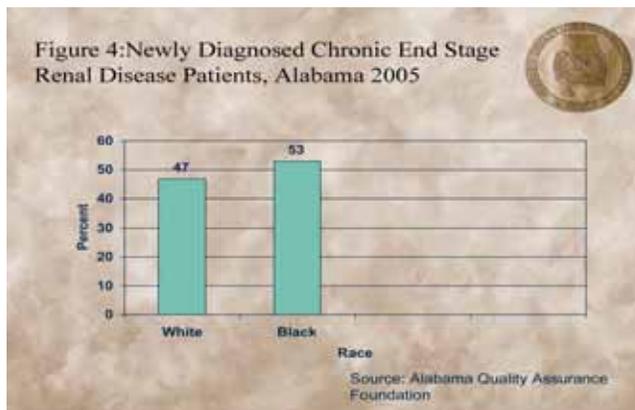
Alabama Chronic Kidney Disease Mortality

Alabama’s Center for Health Statistics analyzed mortality from chronic kidney disease deaths in Alabama from 1999-2005. The number of kidney disease deaths in 1999 was 980 and increased to 1022 in 2005. The rate of kidney disease deaths per 100,000 has varied from 23.5 in 1999 to 22.4 in 2005. For 2004, Alabama had the third highest death rate for kidney disease within the U.S. There was a disparity in death rates with African American males and females having higher rates compared to white males and females. The rates and deaths may be underrepresented as persons with chronic kidney disease are older and tend to have other major health problems. Those other problems may be entered as the cause of death instead of kidney disease.

The U.S. Renal Data System is a national reporting system which collects, monitors, and prepares reports on patients with end stage renal disease who begin dialysis treatment. Figure 2 shows the mean age of entry for persons in Alabama who start dialysis is 61.14 years compared to the mean age for the U.S. of 63.07 years. Figure 3 shows the mean age of entry into dialysis in Alabama for African Americans and whites. African Americans begin dialysis almost eight years earlier at a mean age of 57.75 years compared to 65.39 years for whites.

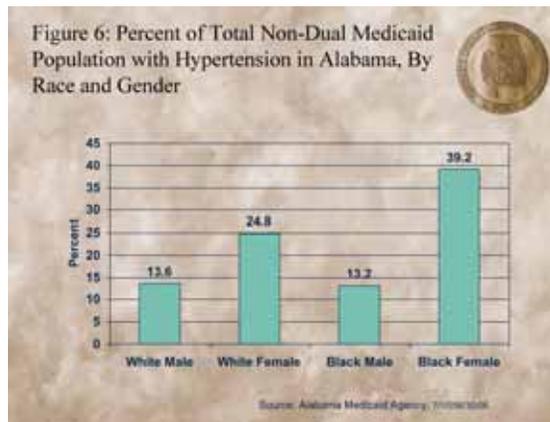
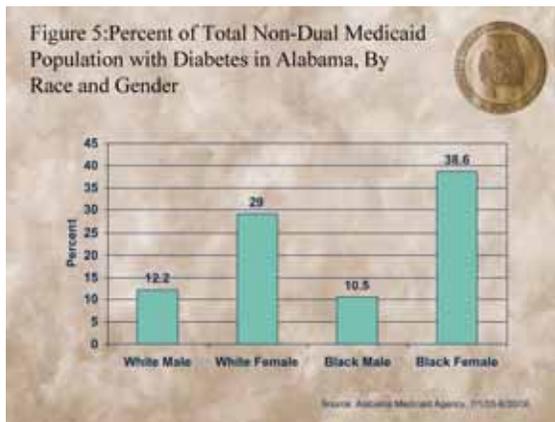


The Alabama Quality Assurance Foundation is the state’s peer review organization which works with health care institutions and providers to conduct quality improvement initiatives on disease management for Medicare enrollees in Alabama. The foundation provided data in Figure 4 depicting the percentage by race of Alabama Medicare recipients who were newly diagnosed with end stage renal disease for 2005. Approximately 53 percent of enrollees were African American compared to 47 percent who were white.



Alabama Risk Factors

The Alabama Medicaid Agency provided information about adult Medicaid recipients classified by race and sex who had either hypertension or diabetes. Figures 5 and 6 demonstrate a higher prevalence for both conditions among African Americans compared to whites, increasing their risk of developing early chronic kidney disease.



The Alabama Department of Public Health’s Behavioral Risk Factor Surveillance System collects self-reported data from adults about healthy lifestyles by random telephone surveys conducted statewide. This is representative of the state’s population. The system collects and provides reports on three risk factors for chronic kidney disease--hypertension, diabetes, and obesity. Two of these (hypertension and diabetes) account for

over 70 percent of all cases of chronic kidney disease, and obesity is a condition commonly associated with them.

A. Hypertension

The percentage of Alabama adults with hypertension was 31.2 percent in 2005, according to the risk surveillance system. Hypertension was higher in African American females compared to white females and was higher in white males compared to African American males. The Health Department's report, "Chronic Disease in Alabama, Past, Present, and Future Trends," released in 2004, projected an additional 312,000 persons will have hypertension by 2020.

B. Diabetes

The percentage of Alabama adults with diabetes was 9.8 percent in 2005, according to the risk surveillance system. Diabetes was higher in African American females compared to white females, and was higher in African American males compared to white males. The Health Department's chronic disease report projected an additional 105,000 persons will have diabetes by 2020.

C. Obesity

The percentage of Alabama adults with obesity was 28.9 percent in 2005, according to the risk surveillance system. Obesity was higher in African American males and females compared to white males and females. The Health Department's chronic disease report projected an additional 137,000 persons will be obese by 2020.

Chronic Kidney Disease in Alabama

The National Kidney Foundation of Alabama provided facts sheets about chronic kidney disease in Alabama. According to the Foundation, Alabama has one of the highest rates of chronic kidney disease in the U.S., with the number of people in Alabama with kidney disease being more than twice the national average. Approximately 400,000 Alabamians, one in eleven, have chronic kidney disease, and most of those persons are unaware. An additional 400,000 persons are at increased risk. About 6,000 Alabamians with chronic kidney disease are on dialysis, with 3,000 persons having had a kidney transplant. Approximately 2,300 persons are waiting for a kidney transplant, and Alabama has one of the highest growth rates in the U.S. for the number of dialysis units.

The Foundation has conducted community screenings for early kidney disease for those at high risk. A person at high risk is offered blood and urine testing at no expense, and is given a sheet with his/her results, and the estimated glomerular filtration rate (eGFR). The person is advised to take the results of the screening test to his/her physician and discuss the results. Screening results have identified many persons at risk for chronic kidney disease who were not aware of their risk.

Special Task Force on Chronic Kidney Disease Discussion

The task force deliberated about the problem of chronic kidney disease in Alabama in several meetings. Information was made available to the members from the National Kidney Disease Education Program, the National Kidney Foundation of Alabama, the National Kidney Foundation's Kidney Disease Outcomes Quality Initiative Clinical Practice Guidelines (KDOQI), the Health Department's Center for Health Statistics, Diabetes Prevention and Control Program, Cardiovascular Health, Steps to a HealthierAlabama, and Behavioral Risk Factor Surveillance System programs. Additional information was obtained from the Alabama Medicaid Agency, the Alabama Quality Assurance Foundation, the U.S. Renal Data System, and the National Kidney Foundation of Michigan.

The task force was supportive of increasing public awareness about chronic kidney disease and risk factors through existing community programs, including those at the Health Department and other organizations and agencies. The task force agreed that the community screenings done by the National Kidney Foundation were important and encouraged support of those screenings, especially those done in the Black Belt. The task force wanted the concept of "Know your number!", referring to the estimated glomerular filtration rate (eGFR), promoted to both health care professionals and the public.

Alabama Chronic Kidney Disease Education Plan: Goals

Following are the two major goals that the Special Task Force on Chronic Kidney Disease recommend as the main components for a cost effective educational plan to reduce the risk of chronic kidney disease in Alabama: Each goal has a listing of activities which could be done to help reduce the risk of developing disease.

1. For the public:

- Encouraging individuals to seek earlier diagnosis and learn about good management of their health before and after seeing their physician. Specific activities could include:
- Encouraging persons with diabetes to better manage their blood glucose control
- Encouraging persons with high blood pressure to keep their blood pressure controlled
- Creating public service announcements to promote awareness about chronic kidney disease and its risk factors
- Helping identify persons at risk for chronic kidney disease by Health Department programs and National Kidney Foundation of Alabama

working together to promote community screening with KEEP (Kidney Early Evaluation Program), a program of the National Kidney Foundation

- Promoting chronic kidney education for those at risk in ongoing or planned activities by Health Department programs. These include:

Cardiovascular Health Branch

- Adding chronic kidney disease awareness to “Search Your Health,” a project with the American Heart Association to promote risk reduction for cardiovascular disease in eight churches in the African American faith community in Montgomery
- Incorporating chronic kidney disease awareness into “Go Red,” a campaign involving the American Heart Association, the Health Department’s Office of Women’s Health and Office of Minority Health, to inform women in the month of February to know their blood pressure and cholesterol levels
- Incorporating chronic kidney disease awareness and information about risk factors into news releases about hypertension and heart disease released by the Cardiovascular Health Branch

Diabetes Branch

- Incorporating information about chronic kidney disease risk and “Know your number!” into “Project Power,” a project with the American Diabetes Association, a faith-based initiative with ten African American churches
- Incorporating chronic kidney disease education into three “Diabetes Today” coalitions in Jefferson, Mobile, and Houston counties, which are evidence-based approaches to promote diabetes education
- Adding information about chronic kidney disease resources to the Diabetes Branch’s resource directory
- Adding a link from the National Kidney Foundation to the Diabetes Branch’s Web site
- Incorporating awareness about chronic kidney disease risk factors into news releases disseminated by the Diabetes Branch

Steps to a HealthierAlabama

- Including chronic kidney disease awareness and “Know your number!” into community education programs for seniors conducted by health professionals, known as “Lunch and Learn”

- Adding chronic kidney disease awareness to New Leaf weight loss classes in Montgomery, Macon, Lowndes, and Pike Counties in programs involving diabetes and cardiovascular risk
- Including chronic kidney disease information in Mission Meltaway, a weight loss support program in Troy, when discussing diabetes and heart health

Nutrition and Physical Activity Division

- Including include chronic kidney disease awareness with the Alabama Hospital Association’s “Scale Back Alabama” initiative with the Department of Senior Services’ education programs on weight loss for seniors
- Including information about chronic kidney risk on the Health Department’s Obesity Web site

Other Partners

- Informing other Health Department programs about the problem of chronic kidney disease and asking them to include it in their education program, if appropriate
- Educating partners external to the Health Department, such as the Alabama Cooperative Extension System and state universities, about chronic kidney disease and asking them to incorporate information about it in their community education programs
- Asking members of the Black Belt Health Committee to include promotion of chronic kidney disease awareness in their activities within the Black Belt

2. For health care providers:

- Encouraging physicians to identify persons with chronic kidney disease earlier and improve the management of diseases which reduce the progression of disease
- Involving and making patients aware of the necessity of better control of diseases and risk factors

Specific activities could include:

- Working with the Alabama Quality Assurance Foundation to develop an educational initiative for primary care physicians focused on outcomes of better management of early chronic kidney disease

- Providing a DVD about identification and management of early chronic kidney disease with continuing medical education and continuing education credits and send it to primary care physicians and nurse practitioners
- Asking Blue Cross/Blue Shield to send laminated cards to physicians with current recommendations about management of risk factors for early chronic kidney disease to physicians and track medication prescribing changes
- Establishing a pilot project in a small community in the Black Belt to promote public and health care professional awareness about chronic kidney disease, ways to reduce the risk, and improve management of early chronic kidney disease
- Promoting the use of the estimated glomerular filtration rate (eGFR) as a tool for early identification of chronic kidney disease. Make sure health care professionals ordering and reviewing the test understand how to interpret it
- Composing short articles about chronic kidney disease for the Alabama MD newsletter, a publication of the Medical Association of the State of Alabama
- Incorporating chronic kidney disease education for health professionals in Health Department programs. These include:

Cardiovascular Health Branch

- Incorporating chronic kidney disease education into “Get with the Guidelines,” a quality improvement initiative in ten hospitals, with the American Heart Association, to use this educational tool to help promote appropriate medications and lifestyle counseling for persons discharged with stroke or heart disease
- Incorporating chronic kidney disease education into “Power to End Stroke,” a project with the American Heart Association and the Alabama Primary Health Care Association to promote reduction of risk factors for stroke among African American clients

Diabetes Branch

- Working with the Cardiovascular Health Branch and the Alabama Primary Health Care Association to conduct a satellite television training program for health care professionals about chronic kidney disease

- Working with the Alabama Primary Health Care Association to develop a collaborative project to track chronic kidney disease measures of performance
- Asking the Cardiovascular Health, Diabetes, and Steps to a HealthierAlabama programs to work with the National Kidney Foundation to discuss potential joint activities for community education in the Black Belt.

Steps to a HealthierAlabama Branch

- Adding training on chronic kidney disease awareness about “Know your number!” to case management for persons with diabetes and cardiovascular disease released from the emergency departments in Montgomery with a medical home
- Including chronic kidney disease education in “Lunch and Learn” sessions for the community conducted by health care providers

Nutrition and Physical Activity Branch

- Including chronic kidney disease education in obesity training workshops for health professionals conducted by the Obesity Task Force’s Health Provider subcommittee

Special Task Force on Chronic Kidney Disease Members

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