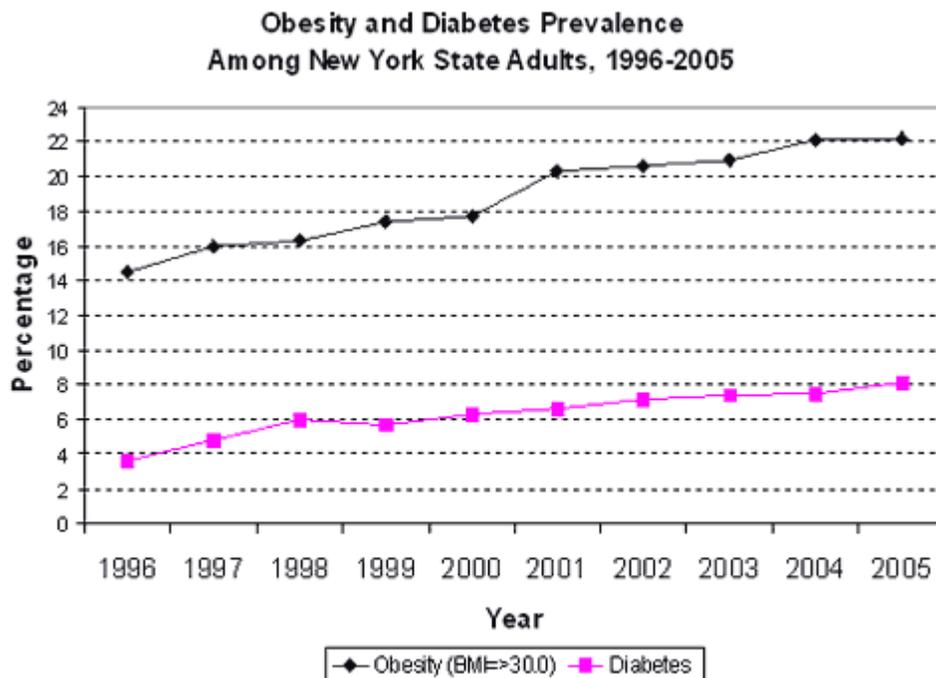


Diabetes: The Kidney Connection

New clinical guidelines to spot diabetes-related kidney disease earlier are aiming at stopping the steady increase of cases and reducing progression of chronic kidney disease in thousands of diabetes patients.

Diabetes is the most rapidly growing chronic disease of our time. Over one million people, or 7.7 percent of the population of New York State, have been diagnosed with diabetes. This represents nearly a 100 percent increase since 1994. Approximately one-third more have diabetes, but don't know it. Additionally, an estimated five million New Yorkers have prediabetes – a condition that predicts the likely onset of diabetes unless lifestyle changes are undertaken to prevent it.

This increase in type 2 diabetes goes hand-in-hand with the state's and nation's ever expanding waist line, especially among children. The incidence of type 2 diabetes, which typically has an adult onset, continues to increase at alarming rates in children and adolescents, especially in minority populations. Recent studies indicate that type 2 diabetes accounts for up to 45 percent of new cases of childhood diabetes. Yet, moderate diet changes and physical activity can delay and prevent type 2 diabetes.

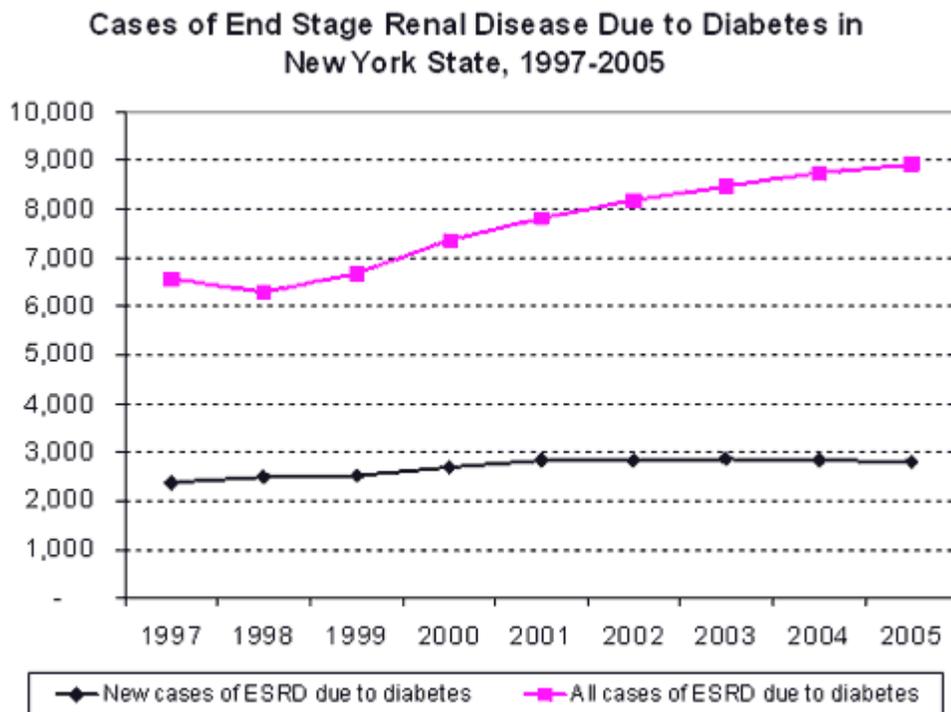


Diabetes Leading Cause of ESRD

Diabetes can cause many preventable, often life-threatening complications, including kidney failure.

In the U.S., diabetes is the leading cause of end stage renal disease (ESRD), accounting for 45 percent of new cases. In 1980, fewer than 50,000 people in the United States needed dialysis; today, there are more than 350,000, including roughly 24,000 in New York.

In 1980, diabetes was the primary cause of kidney failure for fewer than 6,000 dialysis patients in the U.S.; today, the figure is about 150,000.



Source: Chronic Kidney Disease Network of New York

African Americans, American Indians, and Hispanics/Latinos develop diabetes, nephropathy, and kidney failure at rates higher than Caucasians. Scientists have not been able to explain these higher rates.

Nor can they explain fully the interplay of factors leading to diabetic nephropathy—factors including heredity, diet, and other medical conditions, such as high blood pressure. They have found that high blood pressure and high levels of blood glucose increase the risk that a person with diabetes will progress to kidney failure.

New Guidelines Stress Early Detection and Treatment

Emerging scientific evidence supports the view that early detection and appropriate treatment can reduce the incidence and progression of chronic kidney disease.

Scientists have made great progress in developing methods that slow the onset and progression of kidney disease in people with diabetes. Drugs used to lower blood pressure can slow the progression of kidney disease significantly. Two types of drugs, angiotensin-converting enzyme (ACE) inhibitors and angiotensin receptor blockers (ARBs), have proven effective in slowing the progression of kidney disease.

The American Diabetes Association (ADA) has recently revised its Clinical Practice Recommendations to increase early detection of kidney disease and now recommends that serum creatinine be measured at least annually for the estimation of glomerular filtration rate (GFR) in all adults with diabetes.

GFR is the best test to measure the level of kidney function and determine the stage of kidney disease. A physician can calculate it from the results of a blood creatinine test, age, race, gender and other factors.

This revised Clinical Practice Recommendation will hopefully result in the early identification of diabetes-related kidney disease and facilitate swift access to the interventions that can prevent its progression.

Good diabetes management including tight blood sugar control resulting in a hemoglobin A1C measurement of less than 7, and blood pressure less than 130/80 can make a difference in preventing complications like ESRD.

Training on New Guidelines Planned

The New York State Department of Health Diabetes Prevention and Control Program (DPCP) in collaboration with the National Kidney Foundation (NKF) is implementing a pilot provider education initiative to educate healthcare professionals on this latest evidence-based clinical practice guideline through grand round trainings in five hospitals throughout New York State.

Physicians, residents, medical students and clinicians who practice in and out of the hospital setting attend grand rounds, a primary source for obtaining Continuing Medical Education credit. Additionally, grand rounds attendees will receive provider office materials including patient resources from the NKF Kidney Learning System and the DPCP's new Diabetes Prevention and Management Toolkit.

Training locations have not yet been determined, but will be announced shortly.