CDC Data Show Declines in 5 Major Diabetes-Related Complications Among U.S. Adults

A CDC study shows that rates of five major diabetes-related complications have declined substantially in the last 20 years among U.S. adults with diabetes. The study, Changes in Diabetes Related Complications in the United States, 1990-2010, published in the current issue of the New England Journal of Medicine, used data from the National Health Interview Survey, National Hospital Discharge Survey, U.S. Renal Data System, and National Vital Statistics System. The study found that rates of lower limb amputation, end stage kidney failure, heart attack, stroke, and deaths due to high blood sugar (hyperglycemia) declined between 1990 and 2010.

Other key findings include:

- Cardiovascular complications and deaths from high blood sugar decreased by more than 60% each.
- The rates of both strokes and lower extremity amputations (including upper and lower legs, ankles, feet, and toes) declined by about half.
- Rates for end stage kidney failure fell by about 30%.
- Although all complications declined, the greatest declines in diabetes-related complications occurred for heart attack and stroke, particularly among people 75 years of age and older.

The study authors attribute the declines in diabetes-related complications to increased availability of healthcare services, risk factor control, and increases in awareness of the potential complications of diabetes. The authors also noted that while these declines represent progress, diabetes complications are still high and will continue without substantial progress in preventing type 2 diabetes.

Diabetes is a disease in which blood glucose levels are above normal. Diabetes can cause serious health complications including heart disease, blindness, kidney failure, and lower-extremity amputations. Diabetes is the seventh leading cause of death in the United States. Diabetes and its complications accounted for $176 billion in direct medical costs in 2012.

Because the number of adults reporting diabetes during this time frame more than tripled – from 6.5 million to 20.7 million – these major diabetes complications continue to put a heavy burden on the U.S. health care system. Nearly 26 million Americans have diabetes and an additional 79 million have prediabetes and are at risk of developing the disease.

Read the article in the New England Journal of Medicine, which was published April 14, 2014.