

by NLLIC Staff (Revised 2008)

The CDC estimates that 23.6 million Americans currently have diabetes—7 percent of the U.S. population—up from 18.2 million in 2003.¹ As this number rises, diabetes continues to be the leading cause of nontraumatic lower-extremity amputations (LEAs) in the United States.

- Recent statistics reveal that over 80,000 amputations are performed each year on people with diabetes. Approximately half of these diabetes-related LEAs occur among people 65 years or older.²
- More than 60 percent of nontraumatic LEAs in the United States occur among diabetics.³
- The LEA rate in African Americans with diabetes is more than twice that of non-Hispanic whites with diabetes.⁴
- From 9 to 20 percent of people with diabetes, who had already experienced an amputation, underwent a second amputation within 12 months of the first surgery. Five years after the first surgery, 28 to 51 percent of diabetic amputees had undergone a second amputation.⁵

Two factors influence amputations among persons with diabetes:

- diabetic neuropathy in the feet and legs - loss of sensation
- poor circulation in the feet and legs

All people with diabetes, whether they have undergone amputation or not, should develop daily self-management practices. Early detection and treatment are the keys to preventing amputation.

Despite evidence that preventive foot-care programs can decrease the incidence of lower-extremity ulcers and amputations by 44 to 85 percent, there are still many people with diabetes, young and old, who have no access to preventive services for routine foot care or diabetes management.⁶

Most ulcers that lead to amputation can be prevented through daily foot inspection and care, regular visits to your physician and podiatrist, foot-care education, wearing proper shoes and early recognition and treatment of any suspected trouble areas.

All individuals with diabetes should receive an annual foot examination to identify high-risk foot conditions. This examination should include assessment of protective sensation, foot structure and biomechanics, vascular status and skin integrity. All healthcare providers of people with diabetes should be able to conduct a simple screening exam of the neurological, vascular, dermatological and musculoskeletal systems. Modification of certain risk factors by patients and health professionals may reduce the risk for amputation and thus decrease the human and dollar costs that accompany limb loss in this prevalent chronic disease.

- [1] Centers for Disease Control and Prevention. 2007 National Diabetes Fact Sheet. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, 2008.
- [2] CDC. “Hospital Discharge Rates for Nontraumatic Lower Extremity Amputation by Diabetes Status—U.S., 1997,” *MMWR Weekly* 50 (2001): 954-8, <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5043a3.htm>.
- [3] CDC. “National Diabetes Fact Sheet: General Information and National Estimates on Diabetes in the United States, 2002, Dept. Health and Human Services, CDC, 2003.
- [4] Charles A. Patout, et al., “Effectiveness of a Comprehensive Diabetes Lower-Extremity Amputation Prevention Program in a Predominantly Low-Income African American Population,” *Diabetes Care* 23 (2003): 1339-42.
- [5] Gayle E. Reiber, PhD, et al., “Lower Extremity Foot Ulcers and Amputations in Diabetes,” in *Diabetes in America*, eds. Maureen I. Harris, PhD, et al., 2 nd ed., 409-28 (Bethesda, MD: National Institutes of Health publication, 1995).
- [6] D. E. Bild, et al., “Lower-Extremity Amputation in People with Diabetes. Epidemiology and Prevention,” *Diabetes Care* 12 (1989): 24-31.