National Limb Loss Information Center Fact Sheet

Amputation Statistics by Cause
Limb Loss in the United States

by NLLIC Staff
Revised 2008

INTRODUCTION

In the United States, there are approximately 1.7 million people living with limb loss.[1] It is estimated that one out of every 200 people in the U.S. has had an amputation.[2]

Each year, the majority of new amputations occur due to complications of the vascular system (of or pertaining to the blood vessels), especially from diabetes. These types of amputations are known as *dysvascular*. Although rates of cancer and trauma-related amputations are decreasing, rates for dysvascular amputations are on the rise. Incidence of *congenital* (present at birth) limb difference has seen little or no change.

Incidence data represents the occurrence or number of people who become an amputee each year. This fact sheet represents this type of data. *Prevalence* data represents the total estimated number of people living with limb loss, both new cases of amputation and those living with the limb loss for many years.

Recent Trends in the United States

- Between 1988 and 1996, there was an average of 133,735 hospital discharges for amputation per year.[3]
- Dysvascular amputations accounted for 82 percent of limb loss discharges and increased at a rate of 27 percent over the period studied.
- Rates of trauma-related and cancer-related amputations have both declined by approximately half over the past 20 years.
- The incidence of congenital limb difference has remained stable over the past 30 years.

Dysvascular-Related Amputations: (see Figure 1)

- Amputations due to *vascular* disease - problems associated with the blood vessels - accounted for the majority (**82 percent**) of limb loss discharges and increased from 38.30 per 100,000 people in 1988 to 46.19 per 100,000 people in 1996.

- Lower-limb amputations accounted for **97 percent** of all dysvascular limb loss discharges:
    - **25.8 percent** at above-knee level

[1] Kathryn Ziegler-Graham, PhD, et al. "Estimating the Prevalence of Limb Loss in the United States - 2005 to 2050," Archives of Physical Medicine and Rehabilitation 89 (2008):422-429.
[2] Patricia F. Adams, et al, "Current Estimates from the National Health Interview Survey, 1996," Vital and Health Statistics 10:200 (1999).
[3] Timothy R. Dillingham, MD, et al, "Limb Amputation and Limb Deficiency: Epidemiology and Recent Trends in the United States," Southern Medical Journal 95 (2002): 875-83.

- **27.6 percent** at below-knee level
- **42.8 percent** involving numerous other levels.

- In all age groups, the risk of dysvascular amputation was highest among males and individuals who are African American.

Trauma-Related Amputations: (see Figure 1)

- Upper-limb amputations accounted for the vast majority (**68.6 percent**) of all trauma-related amputations occurring during the study period.

- Males were at a significantly higher risk for trauma-related amputations than females.

- For both males and females, risk of traumatic amputations increased steadily with age, reaching its highest level among people age 85 or older.

Cancer-Related Amputations: (see Figure 1)

- Limb amputations resulting from cancer most commonly involved the lower limb; above-knee and below-knee amputations alone accounted for more than a third (**36 percent**) of all cancer-related amputations.

- There were no notable differences by sex or race in the age-specific risk of cancer-related amputations, though rates of limb loss due to cancer were generally higher among individuals other than African Americans.

Congenital-Related Incidences: (see Figure 1)

- Rates of congenital limb anomalies among newborns were at 26 per 100,000 live births, relatively unchanged over the study period.

- Upper-limb differences accounted for **58.5 percent** of newborn, congenital limb anomalies.

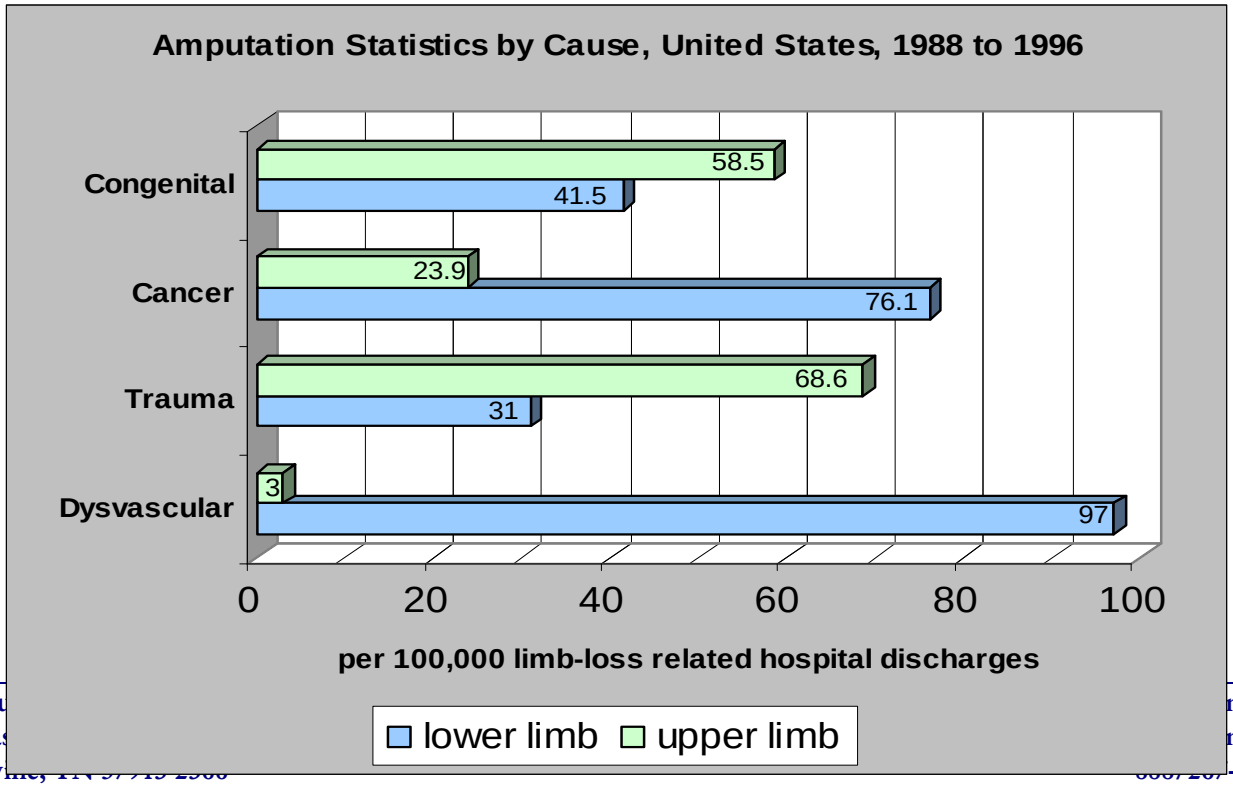

Figure 1