

### INTRODUCTION

Currently, about 1.9 million people are living with limb loss in the United States. People lose their limbs for many reasons. Of the 1.9 million, 54 percent lost their limb(s) due to complications related to vascular disease (including diabetes and peripheral arterial disease), 45 percent lost their limb(s) due to a traumatic accident, and less than 2 percent had an amputation due to cancer. Non-whites make up about 42 percent of the limb loss population in the United States. The number of people living with limb loss in the country is expected to double by 2050 due to growing rates of diabetes and vascular disease. (1)

Each year, an estimated 185,000 amputations are performed in the United States. (2) The leading causes of amputation in adults are vascular disease (including complications related to diabetes and peripheral arterial disease), trauma and cancer. According to the Centers for Disease Control and Prevention, in 2009 there were 68,000 amputations due to complications from diabetes (3).

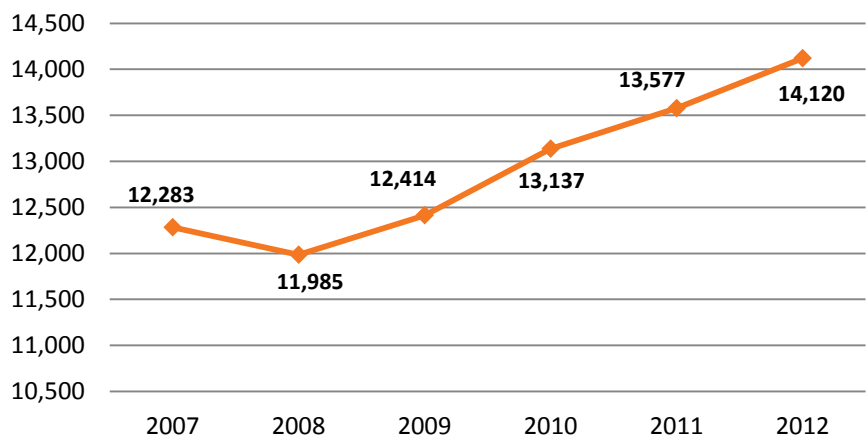
A total of 14,120 amputations were performed in Texas hospitals in 2012. This fact sheet discusses the trends and most current incidence of amputation in Texas.

### 1. AMPUTATION TRENDS (2007 – 2012)

According to national hospital discharge data, the number of amputations performed in Texas increased by 15 percent from 2007 to 2012 (see Graph 1.1). During this time period, the number of amputations performed in the United States increased by 8.4 percent.

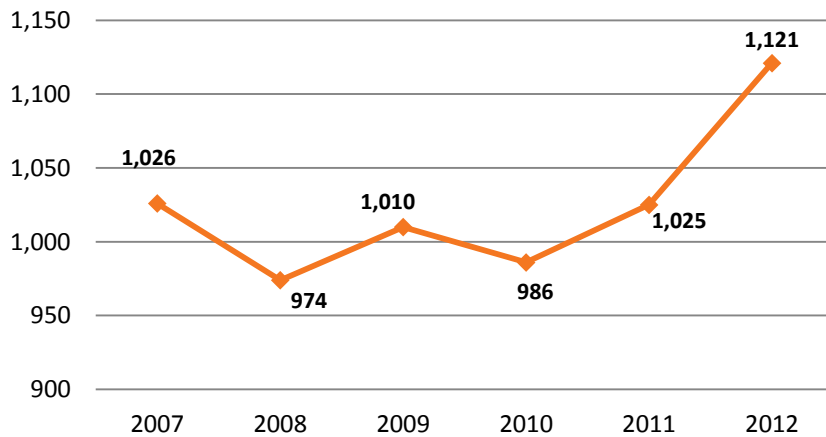
A total of 77,416 amputation procedures were performed in Texas from 2007 to 2012. This represents 9.2 percent of the 841,210 amputation procedures performed in the U.S. during this time period.

**Graph 1.1: Amputation Trends, Texas (2007-2012)**



Source: Healthcare Cost and Utilization Project HCUPnet database  
[hcupnet.ahrq.gov](http://hcupnet.ahrq.gov)

**Graph 1.2: Upper-Limb Amputation Trends, Texas (2007-2012)**



**Source:** Healthcare Cost and Utilization Project HCUPnet database  
hcupnet.ahrq.gov

From 2007 to 2012, the number of lower-limb amputations in Texas increased by 15.6 percent (see Graph 1.3). A total of 71,283 lower-limb amputation procedures were performed in the state of Texas in these years. This represents 92.1 percent of all amputation procedures performed in the state.

From 2007 to 2012, 780,020 lower-limb amputations were performed in the United States. The number of lower-limb amputation procedures performed in Texas represents 9.1 percent of this national total.

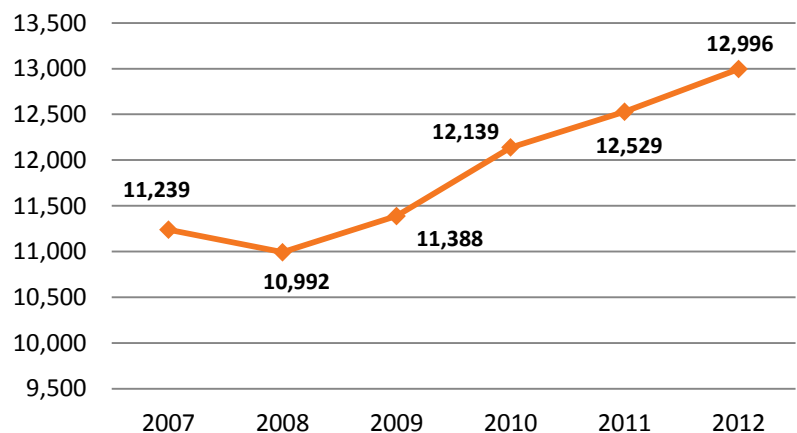
The leading causes of lower-limb amputation are complications resulting from dysvascular diseases such as diabetes, and the number of people who lose a limb due to diabetes is expected to almost triple by the year 2050 (1, 4).

From 2007 to 2012, a total of 6,142 upper-limb amputation procedures were performed in the state of Texas (see Graph 1.2). This represents 7.9 percent of all amputations performed in the state during this time period.

From 2007 to 2012, 61,189 upper-limb amputations were performed in the United States. The number of upper-limb amputations performed in Texas represents 10 percent of this national total.

Upper-limb amputations increased 9.3 percent in Texas in these years. The leading causes of upper limb loss are trauma, cancer, and congenital anomaly (1, 4, 5).

**Graph 1.3: Lower-Limb Amputation Trends, Texas (2007-2012)**



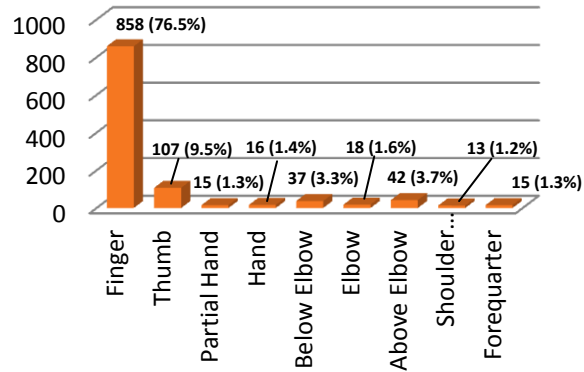
**Source:** Healthcare Cost and Utilization Project HCUPnet database  
hcupnet.ahrq.gov

## 2. INCIDENCE OF AMPUTATION (2012)

A total of 14,120 amputation procedures were performed in the state of Texas in 2012, including 1,121 upper-limb amputations (4.9 percent) and 12,996 lower-limb amputations (92 percent).

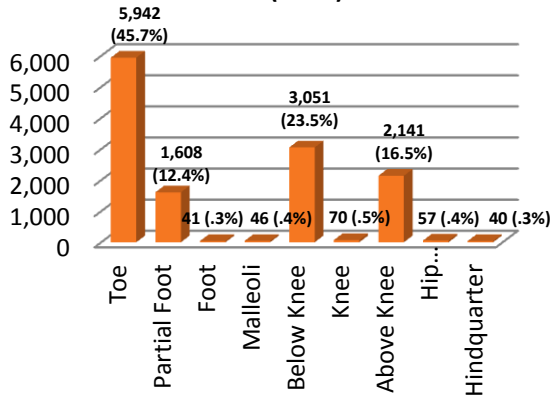
Most upper-limb amputations involved the fingers (76.5 percent), followed by amputations of the thumb (9.5 percent) (see Graph 2.1).

**Graph 2.1: Upper-Limb Amputations, Texas (2012)**



Source: Healthcare Cost and Utilization Project HCUPnet database [hcupnet.ahrq.gov](http://hcupnet.ahrq.gov)

**Graph 2.2: Lower-Limb Amputations, Texas (2012)**



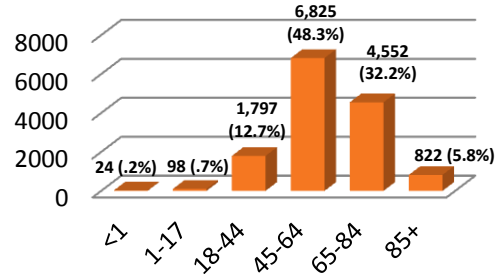
A total of 12,996 lower-limb amputations were performed in 2012. Almost half involved the toes (45.7 percent). Below-knee amputations accounted for 23.3 percent and above-knee amputations accounted for 16.5 percent of the lower-limb amputation procedures performed in the state in that year (see Graph 2.2).

Source: Healthcare Cost and Utilization Project HCUPnet database [hcupnet.ahrq.gov](http://hcupnet.ahrq.gov)

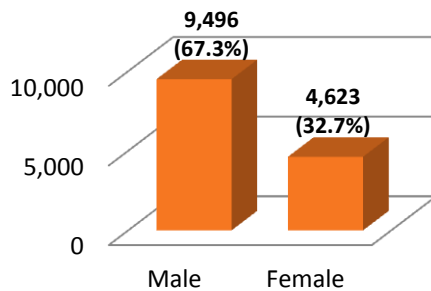
## 3. WHO LOSES A LIMB? (2012)

In 2012, almost half of the amputations in Texas were performed on individuals aged 45-64 years old (48.3 percent), followed by the age group of 65-84 year olds (32.2 percent) (see Graph 3.1). These trends largely reflect the aging population, and cases of amputations resulting from dysvascular conditions, especially diabetes, which are more common in older individuals (1).

**Graph 3.1: Amputations by Age Group, Texas (2012)**



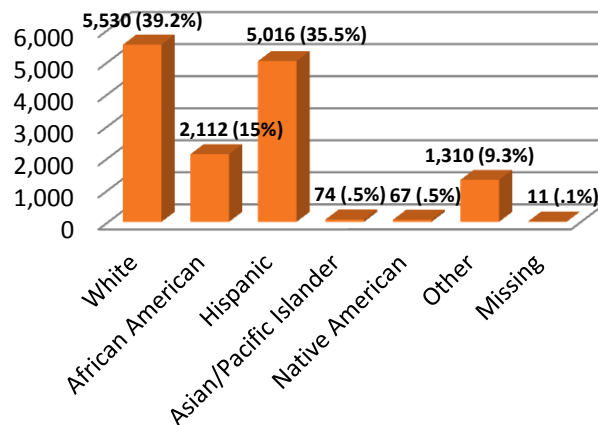
**Graph 3.2: Amputations by Sex, Texas (2012)**



There were 2 times more amputations performed on male patients in Texas than on female patients (see Graph 3.2).

In 2012 most of the amputations in the state of Texas were performed on patients who were White (39.2 percent), Hispanic (35.5 percent), or African American (15 percent) (see Graph 3.3).

**Graph 3.3: Amputations by Race/Ethnicity, Texas (2012)**



Many studies have published research that shows evidence for inequalities in terms of amputation incidence among minorities when compared to the *proportion* of amputations in the White population. A few studies offer suggestions for why this happens, such as certain ethnic populations being genetically more likely than others to experience diseases such as diabetes that can lead to amputation. Various socioeconomic factors and a population's access to healthcare can also affect these numbers. (4, 6, 7)

**Source:** Healthcare Cost and Utilization Project HCUPnet database  
[hcupnet.ahrq.gov](http://hcupnet.ahrq.gov)

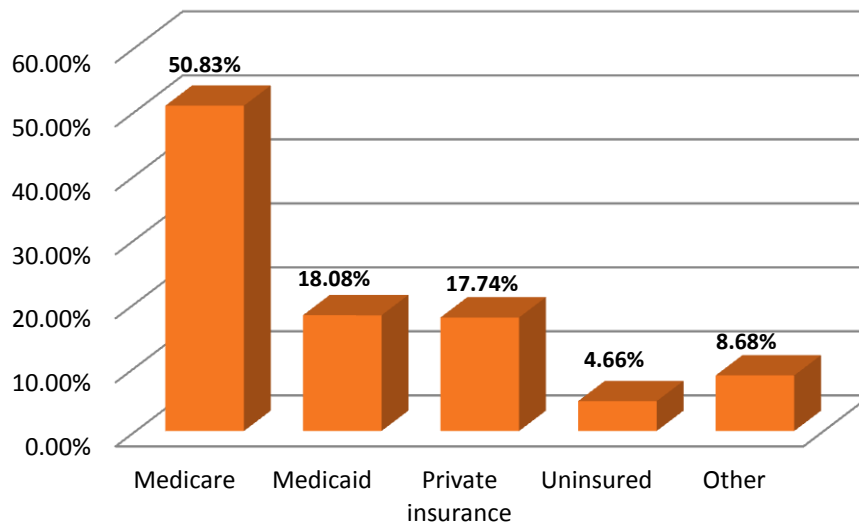
## 4. AMPUTATION COSTS

Paying for an amputation can place a large burden on the patient. For people with a unilateral lower-limb amputation, the two-year healthcare costs, including initial hospitalization, inpatient rehabilitation, outpatient physical therapy, and purchase and maintenance of a prosthetic device, is estimated to be \$91,106. The lifetime healthcare cost for people with a unilateral lower-limb amputation is estimated to be more than \$500,000. (8)

Many factors contribute to the variation in healthcare costs for people with limb loss. Having a higher amputation level and multiple amputations can lead to increased costs for prosthetic devices. For example, the two-year healthcare costs for a person with an above-knee amputation are estimated to be \$110,039, compared to \$86,244 for a person with a below-knee amputation (8).

For 2012, the burden of costs associated with limb loss were largely experienced by Medicare, which paid for half of the amputation procedures performed in the State of Texas (see Graph 4.1).

**Graph 4.1: Amputations by Payer Type, Texas (2012)**



**Source:** Healthcare Cost and Utilization Project HCUPnet database  
[hcupnet.ahrq.gov](http://hcupnet.ahrq.gov)

## 5. REFERENCES

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