

# Kidney and Urologic Diseases Statistics for the United States

## National Kidney and Urologic Diseases Information Clearinghouse



U.S. Department  
of Health and  
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NATIONAL INSTITUTE OF  
DIABETES AND DIGESTIVE  
AND KIDNEY DISEASES

## Kidney Problems

### Kidney disease

**Prevalence (1999–2004):** An estimated 11.5 percent of adults ages 20 or older (23 million adults) have physiological evidence of chronic kidney disease determined from data collected through the National Health and Nutrition Examination Survey.<sup>1</sup>

### End-stage Renal Disease (ESRD)

**Prevalence (2007):** 527,283 U.S. residents were under treatment as of the end of the calendar year.<sup>2</sup>

#### Resulting from these primary diseases:

**Diabetes:** 197,037  
**Hypertension:** 127,935  
**Glomerulonephritis:** 81,599  
**Cystic kidney:** 24,828  
**Urologic disease:** 13,139  
**All other:** 82,745

**Incidence (2007):** 111,000 U.S. residents were new beneficiaries of treatment.<sup>2</sup>

#### Resulting from these primary diseases:

**Diabetes:** 48,871  
**Hypertension:** 30,657  
**Glomerulonephritis:** 7,571  
**Cystic kidney:** 2,633  
**Urologic disease:** 1,554  
**All other:** 19,714

**Mortality (2007):** Among U.S. residents with ESRD, there were 157.3 deaths per 1,000 patient years.<sup>2</sup> There were 87,812 deaths in all patients undergoing ESRD treatment.<sup>2</sup>

**Cost for the ESRD program (2007):**

\$35.32 billion in public and private spending<sup>2</sup>

**Point prevalent ESRD treatment counts:**

**Dialysis treatment (2007):** 368,544 U.S. residents with ESRD received dialysis.<sup>2</sup>

**In-center hemodialysis:** 338,265

**Home hemodialysis:** 2,999

**Peritoneal dialysis:** 26,364

CAPD\*: 9,951

CCPD\*\*: 16,389

Other PD\*\*\*: 24

\*CAPD=continuous ambulatory peritoneal dialysis

\*\*CCPD=continuous cycler-assisted peritoneal dialysis

\*\*\*PD=peritoneal dialysis

**Uncertain dialysis:** 916

**Number of kidney transplants performed<sup>2</sup>:**

**2007:** 17,513

**2006:** 18,056

**2005:** 17,443

**2000:** 14,611

**1995:** 12,160

**1990:** 10,029

**1985:** 7,504

**1980:** 3,785

**Source of organ donations for kidney transplants performed (2007)<sup>2</sup>:**

**From deceased donor:** 11,446

**From living related donor:** 3,181

**From spouse/life partner:** 797

**From living unrelated donor:** 1,270

**Paired exchange:** 126

**Living-deceased exchange:** 90

**Unknown relationship:** 26

**Nondirected donation:** 79

**Number of people awaiting transplants**  
(March 16, 2010)<sup>3</sup>:

**Kidney (only):** 83,950  
**Kidney and pancreas:** 2,208

**Dialysis survival** (probability of patients surviving, from day 91 of ESRD, unadjusted)<sup>2</sup>:

**1 year** (2006–2007): 79.3  
**2 years** (2005–2007): 64.7  
**5 years** (2002–2007): 33.6  
**10 years** (1997–2007): 10.2

**Patient survival following deceased-donor transplant** (probability of recipients surviving, from day 1 of transplantation, unadjusted)<sup>2</sup>:

**1 year** (2006–2007): 94.9  
**2 years** (2005–2007): 91.2  
**5 years** (2002–2007): 81.2  
**10 years** (1997–2007): 60.6

**Patient survival following living-donor transplant** (probability of recipients surviving, from day 1 of transplantation, unadjusted)<sup>2</sup>:

**1 year** (2006–2007): 98.4  
**2 years** (2005–2007): 96.5  
**5 years** (2002–2007): 90.0  
**10 years** (1997–2007): 76.0

**Graft survival following deceased-donor transplant** (probability of transplanted kidney surviving, from day 1 of transplantation, unadjusted)<sup>2</sup>:

**1 year** (2006–2007): 90.3  
**2 years** (2005–2007): 84.8  
**5 years** (2002–2007): 68.4  
**10 years** (1997–2007): 42.9

**Graft survival following living-donor transplant** (probability of transplanted kidney surviving, from day 1 of transplantation, unadjusted)<sup>2</sup>:

**1 year** (2006–2007): 96.0  
**2 years** (2005–2007): 92.1  
**5 years** (2002–2007): 80.7  
**10 years** (1997–2007): 58.5

**Hemolytic Uremic Syndrome, Postdiarrheal**

**Incidence**

**2008:** 330 cases in 40 states<sup>4</sup>  
**2007:** 292 cases in 36 states<sup>5</sup>  
**2006:** 288 cases in 38 states<sup>6</sup>  
**2005:** 221 cases in 34 states<sup>7</sup>  
**2004:** 200 cases in 30 states<sup>8</sup>  
**2003:** 178 cases in 32 states<sup>9</sup>  
**2002:** 216 cases in 33 states<sup>10</sup>  
**2001:** 202 cases in 28 states<sup>11</sup>

## Urologic Problems

### Interstitial Cystitis

**Prevalence (2004):** Of 1,218 women in a study group, 154 (12.6 percent) had likely interstitial cystitis, based on results of the Pelvic Pain and Urgency/Frequency Patient Symptom Scale. In the same study group, only 13 (1.1 percent) were classified as having interstitial cystitis by the O’Leary-Sant IC Symptom Index and Problem Index. The authors of the published research article suggest that the true prevalence lies somewhere between these two extremes.<sup>12</sup>

**(1988–1994):** More than 1.3 million (1,218,631 women and 82,832 men) adults ages 20 or older self-reported having been diagnosed with interstitial cystitis.<sup>13</sup>

### Urinary Stones

**Prevalence of kidney stones:** The percent of adults ages 20 to 74 who self-reported ever having had kidney stones:

**(1988–1994):** 5.2 percent of adults (6.3 percent of men and 4.1 percent of women)<sup>14</sup>

**(1976–1980):** 3.2 percent of adults (4.9 percent of men and 2.8 percent of women)<sup>14</sup>

**Inpatient hospital stays:** The estimated number of hospital admissions among adults ages 20 or older with “calculus of kidney and ureters” as a primary diagnosis:

**(2006):** 166,000 hospital stays<sup>15</sup>

**(2004):** 171,000 hospital stays<sup>16</sup>

**(2000):** 177,496 hospital stays<sup>17</sup>

**Physician office and hospital outpatient visits combined:** The estimated number of doctor visits and outpatient hospital visits by adults ages 20 or older with “calculus of kidney and ureters” as a listed diagnosis:

**(2000):** 2 million visits with urolithiasis as the primary diagnosis<sup>17</sup>

**(2000):** 2.7 million visits with urolithiasis listed as any diagnosis<sup>17</sup>

**Cost (2000):** \$2.07 billion expended for evaluation and treatment<sup>17</sup>

### Urinary Tract Infections (UTIs)

**Prevalence (1994):** Percentages and counts of women and men who had a UTI in the past 12 months:

**Women:** 13.3 percent (12.8 million)<sup>18</sup>

**Men:** 2.3 percent (2 million)<sup>19</sup>

**Inpatient hospital stays:** The estimated number of hospital admissions among adults ages 20 or older with UTI or cystitis listed as a diagnosis:

**(2006):** 479,000 hospital stays<sup>15</sup>

**(2004):** 429,000 hospital stays<sup>16</sup>

**(2000):** 367,246 hospital stays (121,367 men; 245,879 women)<sup>18–19</sup>

**Physician office and hospital outpatient visits combined:** The estimated number of doctor visits and outpatient hospital visits by patients ages 20 or older with UTI or cystitis listed as a diagnosis:

**(2000):** 8.27 million visits (1.41 million men; 6.86 million women) with UTI as the primary diagnosis<sup>17</sup>

**(2000):** 11.02 million visits (2.05 million men; 8.97 million women) with UTI listed as any diagnosis<sup>17</sup>

**Cost (2000):** \$3.5 billion (\$1 billion for men; \$2.5 billion for women) expended for evaluation and treatment<sup>17</sup>

## Urinary Incontinence

**Prevalence (1999–2000):** Urinary incontinence affects an estimated 38 percent of women ages 60 or older.<sup>20</sup> Urinary incontinence affects an estimated 17 percent of men ages 60 or older.<sup>21</sup>

**Inpatient hospital stays:** The estimated number of hospital admissions among adults ages 18 or older with urinary incontinence listed as a diagnosis:

**(2000):** 47,802 hospital stays (1,332 men; 46,470 women)<sup>17</sup>

**Physician office and hospital outpatient visits combined:** The estimated number of doctor visits and outpatient hospital visits by patients ages 20 or older with urinary incontinence listed as a diagnosis:

**(2000):** 207,595 visits (men) with UI as the primary diagnosis<sup>17</sup>

**(2000):** 1.16 million visits (women) with UI as the primary diagnosis<sup>17</sup>

**(2000):** 353,065 visits (men) with UI listed as any diagnosis<sup>17</sup>

**(2000):** 2.13 million visits (women) with UI listed as any diagnosis<sup>17</sup>

**Cost (2000):** \$463.1 million annually (\$10.3 million for men; \$452.8 million for women) in hospital stays and visits to office-based physicians, hospital outpatient clinics, and emergency rooms by adults<sup>17</sup>

## Other Related Problems

### Enlarged Prostate (Benign Prostatic Hyperplasia [BPH]) and Lower Urinary Tract Symptoms (LUTS)

**Prevalence (2000):** 6.5 million of the 27 million Caucasian men ages 50 to 79 in the United States were expected to meet the criteria for discussing treatment options for BPH.<sup>22</sup>

BPH/LUTS (AUA Symptom Score of 7 or greater) prevalence estimates for different ages:

**40–49:** 24 percent

**50–59:** 31 percent

**60–69:** 36 percent

**70–up:** 44 percent<sup>22</sup>

**Doctor visits:** The estimated number of doctor visits by men ages 20 or older with “hyperplasia of the prostate” listed as a diagnosis:

**(2000):** 4.4 million visits with “hyperplasia of the prostate” listed as the primary diagnosis<sup>17</sup>

**(2000):** 7.8 million visits with “hyperplasia of the prostate” listed as any diagnosis<sup>17</sup>

**Cost (2000):** \$1.1 billion annually in direct expenditures for medical services provided at hospital inpatient and outpatient settings, emergency departments, and physicians’ offices<sup>17</sup>

### Erectile Dysfunction (Impotence)

**Prevalence (2000):** Complete erectile dysfunction—never able to achieve an erection—prevalence estimates for different ages, based on data from the National Health and Nutrition Examination Survey:

**20–29:** 1.8 percent

**30–39:** 0.4 percent

**40–49:** 1.2 percent

**50–59:** 4.0 percent

**60–69:** 16.7 percent

**70–74:** 21.5 percent

**75–up:** 47.5 percent

**Total:** 6.2 percent<sup>23</sup>

### Prostate Cancer

**Incidence (2000):** Incidence rates for prostate cancer by race and age:

**Caucasian men younger than 65:** 62 cases per 100,000 population of men

**African American men younger than 65:** 114 cases per 100,000 population of men

**Caucasian men older than 65:** 935 cases per 100,000 population of men

**African American men older than 65:** 1,396 cases per 100,000 population of men<sup>24</sup>

**Cost (2000):** \$1.3 billion<sup>24</sup>

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