

National Chronic Kidney Disease Fact Sheet, 2017

Chronic kidney disease (CKD) is a condition in which the kidneys are damaged or cannot filter blood as well as healthy kidneys. Because of this, excess fluid and waste from the blood remain in the body and may cause other health problems.

CKD Is Common Among Adults in the United States

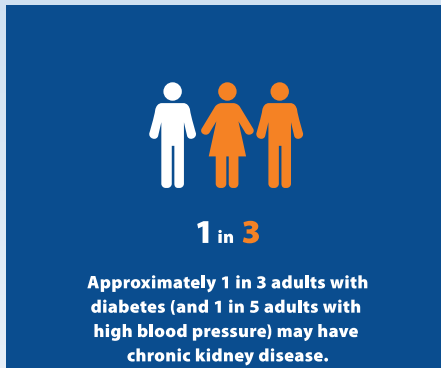
Fast Stats

- 30 million people or 15% of US adults are estimated to have CKD.*
- 48% of those with severely reduced kidney function but not on dialysis are not aware of having CKD.
- Most (96%) people with kidney damage or mildly reduced kidney function are not aware of having CKD.



Risk Factors for Developing CKD

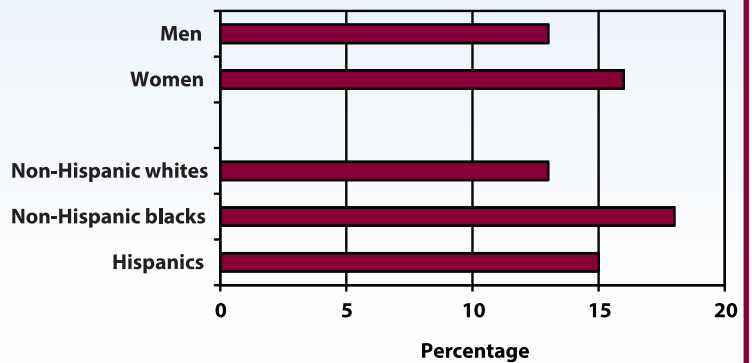
Adults with diabetes, high blood pressure, or both have a higher risk of developing CKD than those without these diseases. Other risk factors for CKD include heart disease, obesity, and a family history of CKD.



Keep your kidneys healthy by controlling your blood sugar and blood pressure.

- CKD is estimated to be more common in women than in men (16% vs 13%).*
- CKD is also estimated to be more common in non-Hispanic blacks than in non-Hispanic whites (18% vs 13%).*
- 15% of Hispanics are estimated to have CKD.*

Prevalence* of CKD Among US Adults Aged 18 Years or Older, By Sex and Race/Ethnicity



*Prevalence (percentage) of CKD stages 1–5 among US adults aged 18 years or older using data from the 2011–2014 National Health and Nutrition Examination Survey and the CKD Epidemiology Collaboration (CKD-EPI) equation. These estimates are subject to variability and do not account for persistence of albuminuria or creatinine as indicated by the Kidney Disease Improving Global Outcomes recommendations. Estimates by sex, race, or ethnicity were age-adjusted using the 2000 US standard population.

Symptoms, Testing, and Treatment

- People with CKD may not feel ill or notice any symptoms. The only way to find out for sure if you have CKD is through specific blood and urine tests. These tests include measurement of both the creatinine level in the blood and protein in the urine.
- Once detected, CKD may be addressed through lifestyle changes, including making healthier choices about what you eat and drink, and can often be treated with medications. These approaches and treatments may keep CKD from getting worse and may prevent additional health problems such as heart disease.
- People with diabetes or high blood pressure who are diagnosed with CKD should talk to their doctor about treating these conditions to keep their blood sugar and blood pressure under control and lower their risk for kidney failure.

Health Problems Caused and Affected by CKD

Kidney Failure

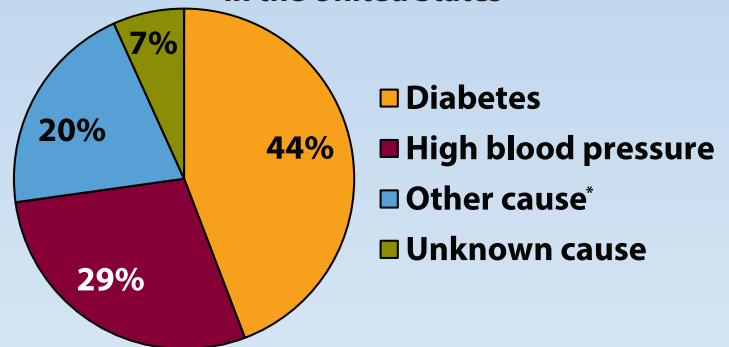
- Kidney disease usually gets worse over time though treatment has been shown to slow progression. When the kidneys stop working, dialysis or kidney transplant is needed for survival. Kidney failure treated with dialysis or kidney transplant is called end-stage renal disease (ESRD). Not all patients with kidney disease progress to kidney failure and, in some patients, kidney disease progresses to kidney failure even with proper treatment.

Renal is a medical term meaning “having to do with the kidneys.”

Some Facts About ESRD

- In 2014, 118,000 people in the United States started treatment for ESRD, and 662,000 were living on chronic dialysis or with a kidney transplant.
- Men are 64% more likely than women to develop ESRD.
- African Americans are 3 times more likely than whites to develop ESRD.
- Hispanics are 35% more likely than non-Hispanics to develop ESRD.
- In US adults aged 18 years or older, the main reported causes of new cases of ESRD are diabetes and high blood pressure.
- In US adolescents aged 13 to 17 years, the main reported cause of new cases of ESRD is glomerulonephritis (inflammation of the kidneys).

Reported Causes of New Cases of ESRD in the United States



N=118,014 (all ages, 2014)
Source: US Renal Data System

*Includes glomerulonephritis and cystic kidney disease, among other causes.

Heart Disease and Stroke

- Having kidney disease increases the chances of also having heart disease and stroke.
- Managing blood pressure, blood sugar, and cholesterol levels—all risk factors for heart disease and stroke—is more difficult, but much more important in the presence of CKD.

Other Health Consequences of CKD

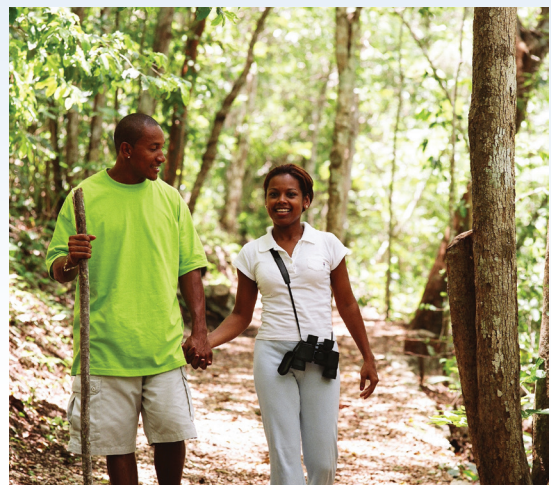
- Anemia or low number of red blood cells can cause fatigue and weakness.
- Infections can occur because of a weakened immune system.
- Low calcium levels and high phosphorus levels in the blood can cause bone problems.
- High potassium levels in the blood (hyperkalemia) can cause an irregular or abnormal heartbeat.
- Loss of appetite or eating less.
- Excess fluids in the body causing high blood pressure, swelling in the legs, or shortness of breath because of fluid in the lungs (a condition known as pulmonary edema).
- Depression or lower quality of life.

Risk of Dying

Premature death from both heart disease and from all causes is higher in adults with CKD compared with adults without CKD.

Opportunities to Prevent CKD and Lower the Risk for Kidney Failure

- *Control* risk factors for CKD that can be modified.
 - High blood pressure.
 - High blood sugar levels.
- *Test* for kidney disease among people who are at high risk for developing CKD.
 - Testing people with diabetes or with high blood pressure has been shown to be a cost-effective way of identifying people with CKD.
- *Manage* CKD.
 - Make lifestyle changes (e.g., healthy eating) to prevent more kidney damage.
 - Use medications (e.g., drugs to lower blood pressure) to slow CKD progression.
 - Avoid conditions or exposures that can harm the kidneys or cause a sudden drop in kidney function (called acute kidney injury) and may quicken CKD progression.
 - Kidney infections.
 - Medications.
 - ♦ Over-the-counter pain medicines like ibuprofen and naproxen.
 - ♦ Certain antibiotics.
 - Herbal supplements.
 - Dyes that are used to make the blood vessels or organs visible on X-rays or other imaging tests.
- *Learn* about kidney disease from your health care team to make sure your treatment is optimal and also to help improve outcomes after beginning ESRD treatment.



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Acknowledgments

The following organizations* collaborated in developing and reviewing this fact sheet:

- Centers for Disease Control and Prevention <http://www.cdc.gov/ckd>
- Centers for Medicare and Medicaid Services <http://cms.hhs.gov/>
- US Department of Defense <http://www.health.mil/>
- US Department of Veterans Affairs <http://www.va.gov/health>
- Kidney Interagency Coordinating Committee <https://www.niddk.nih.gov/about-niddk/advisory-coordinating-committees/kidney-urologic-hematologic-diseases-interagency-coordinating-committee/federal-response-to-ckd/Pages/federal-response-to-ckd.aspx>
- National Heart Lung and Blood Institute of the National Institutes of Health <http://www.nhlbi.nih.gov/>
- National Institute of Diabetes and Digestive and Kidney Diseases of the National Institutes of Health <http://www.niddk.nih.gov/>
- National Kidney Disease Education Program <http://www.nkdep.nih.gov/>
- American Society of Nephrology <http://www.asn-online.org/>
- National Kidney Foundation <http://www.kidney.org/>
- United States Renal Data System <https://www.usrds.org/>
- University of California, San Francisco, and University of California, San Francisco Center for Vulnerable Populations <http://www.ucsf.edu/>
- University of Michigan, Division of Nephrology, Department of Internal Medicine, and University of Michigan Kidney Epidemiology and Cost Center <http://www.med.umich.edu/intmed/nephrology/>

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