

# March is **National Kidney Month**

Get to know your hard working kidneys

## 6 WAYS KIDNEYS KEEP YOU HEALTHY



Regulate fluid levels

Activate Vitamin D for healthy bones

Filter wastes from the blood

Directs production of red blood cells

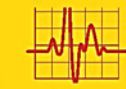
Regulate blood pressure

Keep blood minerals in balance

## 8 PROBLEMS KIDNEY DISEASE CAN CAUSE



Nerve damage



Cardiovascular disease



Heart attack



Stroke



Anemia/ low red blood cell count



Weak bones



High blood pressure



Kidney Failure

## 4 RISK FACTORS

Diabetes

High blood pressure

Age 60+

Family history

## 7 SYMPTOMS



Swelling: face, hands, abdomen, ankles, feet

Blood in urine  
Foamy urine

Puffy eyes

Difficult, painful urination

Increased thirst

Fatigue

## 2 TESTS YOU CAN TAKE (BLOOD AND URINE)



**Urine albumin-to-creatinine ratio** estimates the amount of a type of protein, albumin, that you excrete in your urine.

**Glomerular Filtration Rate (GFR)** tells how well your kidneys are working to remove wastes from your blood. It is the best way to check kidney function. Doctors measure blood creatinine (waste build up) levels and perform a calculation based on race, age and gender.



National  
Kidney  
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Learn more at [kidney.org](http://kidney.org)

# Six-Step Guide to Protecting Kidney Health

Chronic kidney disease (CKD) is a major public health concern. CKD often goes undetected until it is very advanced (when someone would need dialysis or a transplant). But when it is diagnosed early through very simple tests, progression of CKD can be slowed or even stopped. Know your kidney score! Regular testing for everyone is important but it is especially important for people at risk. Follow these 6 steps to learn more about kidney disease, your risk, and how to prevent kidney disease.

<b>Step 1: Know These Facts</b>	
<b>6 Things Healthy Kidneys Do:</b>	
<ul style="list-style-type: none"> <li>Regulate the body's fluid levels</li> <li>Filter wastes and toxins from the blood</li> <li>Release a hormone that regulates blood pressure</li> </ul>	<ul style="list-style-type: none"> <li>Activate Vitamin D to maintain healthy bones</li> <li>Release the hormone that directs production of red blood cells</li> <li>Keep blood minerals in balance (sodium, phosphorus, potassium)</li> </ul>
<b>8 Problems CKD Can Cause:</b>	
<ul style="list-style-type: none"> <li>Cardiovascular disease</li> <li>Heart attack and stroke</li> <li>High blood pressure</li> <li>Death</li> </ul>	<ul style="list-style-type: none"> <li>Weak bones</li> <li>Nerve damage (neuropathy)</li> <li>Kidney failure (end-stage renal disease, or ESRD)</li> <li>Anemia or low red blood cell count</li> </ul>
<b>Step 2: Assess Your Risk</b>	
<b>4 Main Risk Factors:</b>	
<ul style="list-style-type: none"> <li>Diabetes (self or family)</li> <li>High blood pressure (self or family)</li> <li>Cardiovascular disease (self or family)</li> <li>Family history of kidney disease or diabetes or high blood pressure</li> </ul>	
<b>10 Additional Risk Factors:</b>	
<ul style="list-style-type: none"> <li>African-American heritage</li> <li>Native American heritage</li> <li>Hispanic, Asian, Pacific Islander heritage</li> <li>Age 60 or older</li> <li>Obesity</li> <li>Low birth weight</li> </ul>	<ul style="list-style-type: none"> <li>Prolonged use of NSAIDs, a type of painkillers, such as ibuprofen and naproxen</li> <li>Lupus, other autoimmune disorders</li> <li>Chronic urinary tract infections</li> <li>Kidney stones</li> </ul>

## Step 3: Recognize Symptoms

### 8 Possible Trouble Signs:

Most people with early CKD have no symptoms, which is why early testing is critical. By the time symptoms appear, CKD may be advanced, and symptoms can be misleading. Pay attention to these:

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|---|---|
| <ul style="list-style-type: none"> <li>• Fatigue, weakness</li> <li>• Difficult, painful urination</li> <li>• Foamy urine</li> <li>• Pink, dark urine (blood in urine)</li> <li>• Increased thirst</li> </ul> | <ul style="list-style-type: none"> <li>• Increased need to urinate (especially at night)</li> <li>• Puffy eyes</li> <li>• Swollen face, hands, abdomen, ankles, feet</li> </ul> |
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## Step 4: Get Tested

If you or a loved one belong to a high-risk group, ask your primary-care physician about these tests—and be especially insistent about the last one. Your doctor may want to perform other tests as well.

### 4 Simple, Life-Saving Tests:

What:	<b>Blood Pressure</b>
Why:	High blood pressure can damage small blood vessels (glomeruli) in the kidneys. It is the second-leading cause of kidney failure after diabetes.
Good Score:	Below 140/90 is good for most people. Below 130/80 is better if you have chronic kidney disease. Below 120/80 is best.
What:	<b>Protein in Urine</b>
Why:	Traces of a type of protein, albumin in urine (albuminuria) is an early sign of CKD. Persistent amounts of albumin and other proteins in the urine (proteinuria) indicate kidney damage.
Good Score:	Less than 30 mg of albumin per gram of urinary creatinine (a normal waste product)
What:	<b>Creatinine in Blood</b> (Serum Creatinine)
Why:	Healthy kidneys filter creatinine (a waste product from muscle activity) out of the blood. When kidney function is reduced, creatinine levels rise.
Good Score:	0.6 to 1.2 mg per deciliter of blood, depending on other variables
What:	<b>Glomerular Filtration Rate</b> (GFR)
Why:	This is the <i>most sensitive and accurate</i> gauge of kidney function. Doctors measure blood creatinine levels and perform a calculation based on age, race, and gender.
Good Score:	Over 90 is good. 60-89 should be monitored. Less than 60 for 3 months indicates CKD.

## Step 5: Stay Healthy

### 6 Things People with CKD Should Do:

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| <ul style="list-style-type: none"> <li>• Lower high blood pressure</li> <li>• Keep blood-sugar levels under control if diabetic</li> </ul> | <ul style="list-style-type: none"> <li>• Reduce salt intake</li> <li>• Avoid NSAIDs, a type of painkillers</li> </ul> | <ul style="list-style-type: none"> <li>• Moderate protein consumption</li> <li>• Get an annual flu shot</li> </ul> |
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### 9 Things Everyone Should Do:

<ul style="list-style-type: none"><li>• Exercise regularly</li><li>• Control weight</li><li>• Follow a balanced diet</li></ul>	<ul style="list-style-type: none"><li>• Quit smoking</li><li>• Drink only in moderation</li><li>• Stay hydrated</li></ul>	<ul style="list-style-type: none"><li>• Monitor cholesterol levels</li><li>• Get an annual physical</li><li>• Know your family medical history</li></ul>
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## Step 6: Learn More

Do you need a kidney health check? Come to the National Kidney Foundation's *KEEP Healthy* program and find out. One in three Americans is at risk for developing kidney disease. *KEEP Healthy* will help you learn if you're the one. For more information, **click here**. To learn more about CKD risk factors, prevention and treatment, visit **[www.kidney.org](http://www.kidney.org)**.