



MEDICAL MOMENTS

Why Black Americans are at higher risk of chronic kidney disease.

Several factors contribute to this, but there are ways to reduce your risk.

Chronic kidney disease is a condition where your kidneys lose their ability to filter waste and fluid from your blood. This can lead to serious health problems such as heart disease, stroke, and kidney failure. The Black community faces a higher risk of chronic kidney disease. This can be due to genetics, higher rates of hypertension and diabetes, and socioeconomic issues such as access to healthcare and structural racism.

Dr. Ivan Porter II, a Mayo Clinic nephrologist, says these factors create a cycle that increases the risk of chronic kidney disease. And there are ways to help reduce the risks. “There are multiple factors that correspond to African Americans, Black individuals having more chronic kidney disease,” says Dr. Porter. That includes diet—which also plays a role in diabetes and high blood pressure, the leading causes of chronic kidney disease. “If you have a population that is affected more by those socioeconomic circumstances, certainly they’re going to have worse health outcomes because of it,” says Dr. Porter.

There is also a genetic factor. An estimated 13% of Black Americans have a gene variation that puts them at higher risk. “APOL1 is a genetic variant that’s been recognized. It’s an abbreviation of apolipoprotein L1,” he explains. Not everyone who has the gene variation has kidney disease, but the presence makes the risk of chronic kidney disease more likely. “Those socioeconomic factors, and hypertension and diabetes, make someone with those genetic factors more likely to develop kidney disease as well,” Dr. Porter says.



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Symptoms

Signs and symptoms of chronic kidney disease develop over time if kidney damage progresses slowly. Loss of kidney function can cause a buildup of fluid or body waste or electrolyte problems. Depending on how severe it is, loss of kidney function can cause:

- Nausea
- Vomiting
- Loss of appetite
- Fatigue and weakness
- Sleep problems
- Urinating more or less
- Decreased mental sharpness
- Muscle cramps
- Swelling of feet and ankles
- Dry, itchy skin
- High blood pressure (hypertension) that’s difficult to control
- Shortness of breath, if fluid builds up in the lungs
- Chest pain, if fluid builds up around the lining of the heart

Signs and symptoms of kidney disease are often nonspecific. This means they can also be caused by other illnesses. Because your kidneys are able to make up for lost function, you might not develop signs and symptoms until irreversible damage has occurred.

Preventing chronic kidney disease

That’s why awareness can lead to prevention. “We can’t change our genetics. We certainly can control our blood pressure. We can make a difference with our diabetes control. We can try to eat healthier. We can try to exercise—all things that we know correspond to less diabetes, less hypertension and, because of that, less kidney disease,” says Dr. Porter.

Test for gene mutation

Dr. Porter says there are tests for the APOL1 gene through your primary care clinician or nephrologist. He says knowing if you have the gene can help with early detection and disease medication. “Getting that testing done will hopefully make an impact in how we treat the disease and how outcomes in the disease affect our populations,” says Dr. Porter.