

## The Kidney and Heart Disease Connection

Kidney disease is both a cause and a consequence of cardiovascular disease, the number one killer of all Americans. Cardiovascular disease, or heart disease is the primary cause of death for the more than 20 million people in the U.S. with chronic kidney disease. Having chronic kidney disease amplifies the risk of death from cardiovascular disease, whether or not other risk factors for heart disease are present.

The mortality connection between these two diseases is clear; however more research is necessary to learn how to prevent premature death in patients as a result of these conditions.

### Facts

- Cardiovascular disease accounts for more than half of all deaths among people with kidney failure.
- Even early or mild kidney disease places a person at higher risk of heart attacks and heart ailments, as well as heart disease-related death.
- Death from cardiovascular disease is 10 to 30 times more likely in kidney dialysis patients than in the general population.
- Hypertension (high blood pressure) and diabetes are major risk factors for chronic kidney disease and heart disease. The development of chronic kidney disease in persons with diabetes or hypertension further increases the risk of developing cardiovascular disease.
- Hypertension increases the risk of cardiovascular disease, and severe hypertension can cause extensive and rapidly progressive kidney damage. Newer medications that better treat blood pressure and kidney disease, however, can slow the rate of kidney damage only by about 50 percent.
- Kidney disease by itself increases the risk of cardiovascular disease, even with concurrent diabetes, hypertension and high cholesterol.
- Recent studies show that kidney disease accelerates heart disease, even before the kidneys are damaged to the point of needing dialysis or transplantation.

### There needs to be more research designed exclusively for patients with both and chronic kidney disease cardiovascular disease.

- How kidney disease causes cardiovascular disease is still largely unknown.
- Most major cardiovascular disease trials have excluded patients with kidney disease.
- Nine out of 10 cardiovascular disease trials do not provide adequate information on the kidney function of enrollees – even though studies have proven that kidney disease plays a major role in increasing the risk of death from cardiovascular disease.

Heart disease is the primary cause of death for the more than 26 million people in the U.S. with chronic kidney disease (CKD).

For more information about the ASN or kidney disease, visit [www.asn-online.org](http://www.asn-online.org) or call 202-659-0599.

