

KIDNEY DISEASE—RENAL INSUFFICIENCY

Overview:

Renal insufficiency (or failure) is a somewhat generic term that refers to a *reduction of kidney functions*. This includes an insufficient ability to filter waste products from the blood and excrete them in the urine, to control the body's water and salt balance, and to regulate blood pressure. Renal insufficiency, also referred to as *kidney failure*, thus often leads to a buildup of waste products and related chemical disturbances in blood and tissues. There are a variety of disorders of the kidney, many of which show some level of renal insufficiency or failure. Renal failure can be sudden (acute) or develop over time (chronic).

Acute renal failure is often experienced by individuals with severe injury, leading to a rapid loss of blood. Others are seriously ill with some underlying acute disease and are suffering from physiological shock. Heart attack or an infection of the pancreas are sometimes the culprit. Since kidneys are particularly susceptible to reduced blood flow, any condition that restricts blood flow to the kidneys may cause damage to the kidney's sensitive filtering units. Similarly, obstruction to the flow of urine, perhaps as a result of a kidney stone, bladder tumor, or (in men) an enlargement of the prostate gland, can also lead to acute renal insufficiency. Acute renal failure is usually reversible. Once the underlying cause is treated and removed, kidney functions typically recover to normal levels.

Chronic renal failure often leads to progressive and irreversible damage. While the onset of acute renal failure is sudden and immediate, chronic renal failure develops often over the course of years. The condition is often caused by diseases such as uncontrolled *high blood pressure* (which can be both a cause and result of kidney insufficiency), *diabetes*, *Polycystic Kidney Disease*, or *amyloidosis*. Chronic renal failure often progresses over years to an advanced form of life-threatening kidney failure, called *end state renal failure*. In end-stage renal failure, *long term dialysis* or perhaps a *kidney transplant* are the only satisfactory forms of treatment.

Impact on Life Underwriting:

An extensive battery of kidney function tests (KFTs) has become routine for even small amounts of life underwriting. Lab findings indicating the possibility of kidney disease include protein in the urine (*proteinuria* or *albuminuria*); blood in the urine (*hematuria*); or elevated levels of *creatinine* and/or *blood urea nitrogen (BUN)*.

Once kidney function tests show an abnormality, and if there is no known cause, an underwriter will typically request two additional urine specimen taken on different days. If the findings for one or both of these tests are abnormal, a further work is normally requested to be done by the proposed insured's personal physician or a specialist.

Additional testing is normally approached in stages, with additional tests being dictated by the most recent laboratory findings. The gold standard of kidney function testing is a 24 hour urine test. This test analyses urine chemistry for all urine collected over a 24 hour period of time and compares the collected data with the range of normal expected values. Ultimately, the most definitive tests for identifying kidney disease and damage via renal biopsy or arteriography.

Individuals with one bout of *acute renal insufficiency* with complete recovery are often offered insurance as applied, including preferred. *Chronic renal failure* will be rated based on the underlying cause/disease. Standard rates are not likely with chronic renal failure; a rating should be expected. Postponements and declines are common for *end stage renal failure*. Offers of insurance become available again even for patients with end stage renal failure following successful renal transplant. Standard or low table rates, with a flat extra in the \$10 - \$15 per \$1,000 of death benefit are to be expected for about five years following successful transplant. The following table lists some of the more common conditions that can lead to renal insufficiency. SB 04/25/2001

Disorder	Comment	Disorder	Comment
Polycystic Kidney Disease	Genetic disorder leading to multiple cysts in both kidneys.	Kidney stone or urinary tract stone	Often due to a metabolic disorder or related disease.
Diabetes	Can lead to obstruction of blood flow through the kidneys.	Infection	Often caused by obstruction to the flow of urine out of the urinary tract.
Nephrotic syndrome	Infection of the filtering units; typically shows significant proteinuria.	Renal insufficiency due to drug use	May be allergic reaction; long term use of pain killers; certain antibiotics.
Tumors	May be benign or malignant but are relatively rare.	Physiological shock	Blood supply to kidneys reduced due to loss of blood pressure.