

Module Two: Chronic Kidney Disease



By completing Module Two: Chronic Kidney Disease, you will have a better understanding of the larger picture of CKD, its progression, outcomes and impact on the patient, the physician and the healthcare system,

Upon completion of this module, you will be able to:

- Describe the common risk factors and causes of CKD (diabetes, hypertension, genetics, trauma, glomerulonephritis, and amyloidosis).
- Distinguish between the various clinical manifestations and assessment approaches of CKD including creatinine clearance, GFR, urinalysis, serum phosphorus, serum calcium, and bone alkaline phosphatase.
- Explain how the clinical practice guidelines define CKD and its progression from its early stages through to end stage renal disease.
- Understand the experience of living with CKD and its complications from the perspective of the patient.

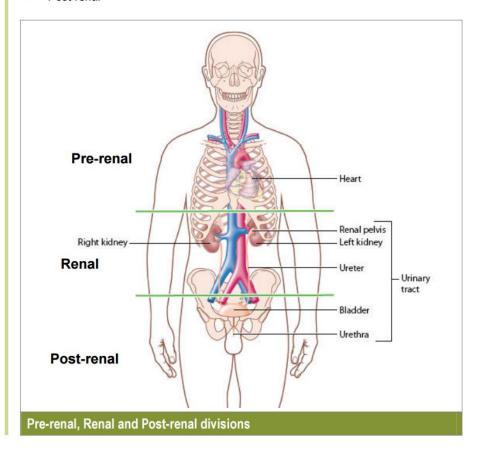
## Section One: Risk Factors and Causes of CKD

## Introduction to Risk Factors and Causes

As people age, their kidney function naturally and slowly declines. In addition, a wide range of diseases can also give rise to an accelerated loss of kidney function. Diabetes, high blood pressure, and vascular disease are the most common causes of kidney damage. Glomerulonephritis, vasculitis, interstitial nephritis and genetic and congenital disorders, are also significant contributors.

Keep in mind that risk factors and causes for CKD can be broken down in accordance with the following categories:

- Pre-renal
- Renal (intrinsic to the kidneys)
- Post-renal





## Section Five: Progress Check

Congratulations! You have completed Module Two: Chronic Kidney Disease of the Nephrology Learning System.

Check to see what you learned by completing the Progress Check. The goal is for you to feel confident with the material so you can begin the next module effectively. With this in mind, you may find it useful to revisit sections of the module when necessary.

It should take you approximately 15 minutes to answer the Progress Check questions. After completing the questions, compare your answers with the Progress Check Answer Key that follows. Please circle the one correct response for each question.



## **Progress Check**

- The current accepted term for reduced kidney function is:
  - a) Chronic renal failure (CRF)
  - b) End stage renal disease (ESRD)
  - c) Chronic nephron failure (CNF)
  - d) Chronic kidney disease (CKD)
- 2. Which of the following terms best describes a patient with a GFR of 45 mL/min/1.73 m<sup>2</sup>?
  - a) Stage 3 chronic kidney disease (CKD)
  - b) Chronic renal insufficiency (CRI)
  - c) Predialysis
  - d) Normal kidney function
- The first indication of kidney damage in patients with diabetes, hypertension or glomerular disease is:
  - a) Albuminuria
  - b) Decreased GFR
  - c) Microalbuminuria
  - d) Increased serum creatinine