



Nephrology

Certification Examination Blueprint

Purpose of the exam

The exam is designed to evaluate the knowledge, diagnostic reasoning, and clinical judgment skills expected of the certified Nephrologist in the broad domain of the discipline. The ability to make appropriate diagnostic and management decisions that have important consequences for patients will be assessed. The exam may require recognition of common as well as rare clinical problems for which patients may consult a certified Nephrologist.

Exam content

Exam content is determined by a pre-established blueprint, or table of specifications. The blueprint is developed by the Subspecialty Board on Nephrology and is reviewed annually and updated as needed for currency. Trainees, training program directors, and certified practitioners in the discipline are surveyed periodically to provide feedback and inform the blueprinting process.

The primary medical content categories of the blueprint are shown below, with the percentage assigned to each for a typical exam:

Medical Content Category	% of Exam
Sodium / Water	8%
Acid-Base / Potassium	10%
Calcium, Phosphorus, Magnesium, Stones	4%
Chronic Kidney Disease (No transplant)	20%
Hypertension	10%
Tubular, Interstitial and Cystic Disorders	4%
Glomerular / Vascular Disorders	12%
Kidney Transplantation	10%
Pharmacology	8%
Acute Kidney Injury / ICU Nephrology	14%
Total	100%

The blueprint can be expanded for additional detail as shown below. Each primary medical content category is listed again, with the *percentage of the exam* devoted to this content area. Below each major category are the content subsections and their *percentages within the major category*. Please note: The percentages below describe content of a *typical* exam and are approximate; actual exam content may vary.

Sodium / Water 8% of Exam	Approximate % within Sodium / Water
Hyponatremia	31%
Hypernatremia and hyperosmolality	12%
Salt excess (edema)	31%
Salt depletion	13%
Polyuria	13%

Acid-Base / Potassium 10% of Exam	Approximate % within Acid-Base / Potassium
Acid-base physiology and homeostasis	10%
Metabolic acidosis (normal anion-gap)	15%
Metabolic acidosis (elevated anion gap)	15%
Metabolic alkalosis	10%
Respiratory acid-base disturbances	5%
Mixed acid-base disturbances	10%
Potassium physiology and homeostasis	5%
Hyperkalemia	15%
Hypokalemia	15%

Calcium, Phosphorus, Magnesium, Stones 4% of Exam	Approximate % within Calcium, Phosphorus, Magnesium, Stones
Disorders of calcium metabolism	38%
Disorders of phosphate metabolism	25%
Disorders of magnesium metabolism	12%
Nephrolithiasis	25%

Chronic Kidney Disease (No transplant) 20% of Exam	Approximate % within Chronic Kidney Disease (no transplant)
Assessment	7%
Diabetic kidney disease	3%
Non-diabetic kidney disease	5%
CKD complications	7%
Stage IV and Stage V CKD	5%
ESRD	45%
Mineral bone disease of CKD/ESRD	20%
Miscellaneous CKD: Epidemiology, Nutrition, Ethical Considerations, Pregnancy, Labs	8%

Hypertension 10% of Exam	Approximate % within Hypertension
Essential hypertension	35%
Secondary causes of hypertension	40%
End organ damage of hypertension	10%
Hypertension in special situations	15%

Tubular, Interstitial and Cystic Disorders 4% of Exam	Approximate % within Tubular, Interstitial & Cystic Disorders
Renal tubular disorders and Fanconi's syndrome	12%
Tubulointerstitial nephritis	50%
Renal cystic disease	25%
Renal mass	13%

Glomerular / Vascular Disorders 12% of Exam	Approximate % within Glomerular / Vascular Disorders
Nephritic glomerular disorders and vasculitis/vasculopathy	42%
Nephrotic/Heavy-proteinuric glomerular disorders	42%
Thin basement membrane nephropathy/Alport syndrome	4%
Thrombotic microangiopathies	4%
Hemolytic uremic syndrome	8%

Kidney Transplantation 10% of Exam	Approximate % within Kidney Transplantation
Pre-transplant	15%
Transplantation	15%
Post-transplantation	70%

Pharmacology 8% of Exam	Approximate % within Pharmacology
Pharmacology	19%
Drug selection and dosing in kidney disease	13%
Nephrotoxicity of medications	31%
Nephrotoxicity of illicit drugs	6%
Nephrotoxicity of environmental and occupational agents	6%
Drug interactions/adverse effects (other than nephrotoxicity)	13%
Dialysis and other treatment for poisonings	12%

Acute Kidney Injury / ICU Nephrology 14% of Exam	Approximate % within Acute Kidney Injury / ICU Nephrology
Hemodynamic (pre-renal) AKI	25%
Parenchymal (intrinsic) AKI	28%
Post-renal AKI	4%
Renal replacement therapy	29%
ICU nephrology	14%

Exam questions in the content areas above may also address clinical topics in adolescent medicine, critical care medicine, clinical epidemiology, geriatric medicine, and nutrition that are important to the practice of Nephrology.

Exam format

The exam is composed of single-best-answer multiple-choice questions, predominantly describing patient scenarios that occur in practice settings. Clinical information presented may include various media illustrating relevant findings, such as diagnostic imaging studies. Questions pose tasks such as the following:

- making a diagnosis
- determining a treatment or management plan
- ordering diagnostic tests
- recognizing clinical features of a disease
- determining means of prevention, screening, staging, or follow-up

Exam tutorial

A tutorial including examples of ABIM exam question format can be found at <http://www.abim.org/exam/prepare.aspx>.