

CRITICAL CARE MEDICINE Blueprint

For traditional, 10-year Maintenance of Certification (MOC) exam

ABIM invites diplomates to help develop the Critical Care Medicine MOC exam blueprint

Based on feedback from physicians that MOC assessments should better reflect what they see in practice, in 2016 the American Board of Internal Medicine (ABIM) invited all certified Critical Care Medicine specialists to provide ratings of the relative frequency and importance of blueprint topics in practice.

This review process, which resulted in a new MOC exam blueprint, will be used on an ongoing basis to inform and update all MOC assessments created by ABIM. No matter what form ABIM's assessments ultimately take, they will need to be informed by front-line clinicians sharing their perspective on what is important to know.

A sample of approximately 300 Critical Care Medicine specialists similar to the total invited population of Critical Care Medicine Specialists in age, gender, time spent in direct patient care, and geographic region of practice, provided the blueprint topic ratings. ABIM used this feedback to update the blueprint for MOC assessments (beginning with the Spring 2017 administration of the traditional, 10-year MOC exam).

To inform how assessment content should be distributed across the major blueprint content categories, ABIM considered the average respondent ratings of topic frequency and importance in each of the content categories.

To determine prioritization of specific assessment content within each major medical content category, ABIM used the respondent ratings of topic frequency and importance to set thresholds for these parameters in the exam assembly process (described further under *Detailed content outline* below).

Purpose of the Critical Care Medicine MOC Assessments

The MOC exams are designed to evaluate whether a certified Critical Care Medicine specialist has maintained competence and currency in the knowledge and judgment required for practice. The MOC assessments emphasize diagnosis and management of prevalent conditions, particularly in areas where practice has changed in recent years. As a result of the blueprint review by ABIM diplomates, MOC assessments place less emphasis on rare conditions and focus more on situations in which physician intervention can have important consequences for patients. For conditions that are usually managed by other specialists, the focus is on recognition rather than on management.

Assessment format

The traditional, 10-year MOC exam contains up to 220 singlebest-answer multiple-choice questions, of which approximately 50 are new questions that do not count in the examinee's score. Examinees taking the traditional, 10-year MOC exam will have access to an external resource (i.e., UpToDate[®]) for the entire exam.

ABIM's Longitudinal Knowledge Assessment (LKA™) for MOC, slated to launch in 2023, is a five-year cycle in which physicians answer questions on an ongoing basis and receive feedback on how they're performing along the way. More information on how assessments are developed can be found at abim.org/ about/exam-information/exam-development.aspx.

Most questions describe patient scenarios and ask about the work done (that is, tasks performed) by physicians in the course of practice:

- **Diagnosis:** making a diagnosis or identifying an underlying condition
- Testing: ordering tests for diagnosis, staging, or follow-up
- Treatment/Care Decisions: recommending treatment or other patient care
- Risk Assessment/Prognosis/Epidemiology: assessing risk, determining prognosis, and applying principles from epidemiologic studies
- Pathophysiology/Basic Science: understanding the pathophysiology of disease and basic science knowledge applicable to patient care

ABIM is committed to working toward health equity and believes that board-certified physicians should have an understanding of health care disparities. Therefore, health equity content that is clinically important to each discipline will be included in assessments, and the use of gender, race, and ethnicity identifiers will be re-evaluated.

Clinical scenarios presented take place in inpatient settings as appropriate to a typical critical care medicine practice. Clinical information presented may include various media illustrating relevant findings, such as diagnostic imaging studies. Some questions require interpretation of pictorial material, such as pressure tracings, ultrasound scans, magnetic resonance imaging scans, electrocardiograms, radiographs, computed tomograms, radionuclide scans, and photomicrographs.

Tutorials for the MOC exam, including examples of question format, can be found at abim.org/maintenance-of-certification/ exam-information/critical-care-medicine/exam-tutorial.aspx.

Content distribution

Listed below are the major medical content categories that define the domain for the Critical Care Medicine traditional, 10-year MOC exam and the LKA assessments. The relative distribution of content is expressed as a percentage of the total exam. To determine the content distribution, ABIM considered the average respondent ratings of topic frequency and importance. Informed by these data, the Critical Care Medicine Approval Committee and Board have determined the medical content category targets, shown below.

CONTENT CATEGORY	Target %
Renal, Endocrine, and Metabolic Disorders	15%
Cardiovascular Disorders	17.5%
Pulmonary Disease	20%
Infectious Disease	12%
Gastrointestinal Disorders	5%
Neurologic Disorders	9.5%
Hematologic and Oncologic Disorders	5.5%
Surgery, Trauma, and Transplantation	7%
Pharmacology and Toxicology	4.5%
Research, Administration, and Ethics	2%
Critical Care Ultrasound Scanning	2%
Total	100%

Assessment questions in the content areas above may also address clinical topics in general internal medicine that are relevant to the practice of critical care medicine (including some general pediatrics with an emphasis on adolescent medicine).

How the blueprint ratings are used to assemble the MOC assessment

Blueprint reviewers provided ratings of relative frequency in practice for each of the detailed content topics in the blueprint and provided ratings of the relative importance of the topics for each of the tasks described in *Assessment format* above. In rating importance, reviewers were asked to consider factors such as the following:

- High risk of a significant adverse outcome
- Cost of care and stewardship of resources
- Common errors in diagnosis or management
- Effect on population health
- Effect on quality of life
- When failure to intervene by the physician deprives a patient of significant benefit

Frequency and importance were rated on a three-point scale corresponding to low, medium, or high. The median importance ratings are reflected in the *Detailed content* outline below. The Critical Care Medicine Approval Committee and Board, in partnership with the physician community, have set the following parameters for selecting MOC assessment questions according to the blueprint review ratings:

- At least 70% of questions will address high-importance content (indicated in green)
- No more than 30% of questions will address mediumimportance content (indicated in yellow)
- No questions will address low-importance content (indicated in red)

Independent of the importance and task ratings, no more than 15% of questions will address low-frequency content (indicated by "LF" following the topic description).

The content selection priorities below are applicable beginning with the Spring 2017 traditional, 10-year MOC exam and are subject to change in response to future blueprint review.

Note: The same topic may appear in more than one medical content category.

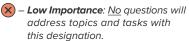
Detailed content outline for the Critical Care Medicine traditional, 10-year MOC exam

- High Importance: At least 70% of questions will address topics and tasks with this designation.

- Medium Importance: No more than 30% of questions will address topics and tasks with this designation. Low Importance: No questions will address topics and tasks with this designation.

RENAL, ENDOCRINE, AND METABOLIC DISORDERS (15% of exam)		Diagnosis	Testing	Treatment/ Care Decisions	Risk Assessment/ Prognosis/ Epidemiology	Pathophysiology/ Basic Science
SODIUM-WATER BALANCE (2% of ex	am)					
Hyponatremia						
Syndrome of inappropriate antidiuretic hormone secretion		\bigcirc	\bigcirc	\bigcirc		\checkmark
Cerebral salt wasting	LF					\checkmark
Psychogenic polydipsia	LF					$\mathbf{\times}$
Hypothyroidism						
latrogenic				\bigcirc		
Exercise-induced	LF				\mathbf{X}	$\mathbf{\times}$
Hypernatremia						
Central diabetes insipidus	LF					
Nephrogenic diabetes insipidus	LF					
Osmotic diuresis						×
Primary hypodipsia	LF	×	\mathbf{x}	×	×	×
Dehydration		\checkmark	\checkmark	\bigcirc		
Gastrointestinal fluid losses		\bigcirc	\bigcirc	\checkmark		
Hypervolemia		\bigcirc	\bigcirc	\bigcirc	\bigcirc	
Hypovolemia		\bigcirc	\bigcirc			





LF – Low Frequency: No more than 15% of questions will address topics with this designation, regardless of task or importance.

RENAL, ENDOCRINE, AND METABOLIC DISORDERS continued (15% of exam)	Diagnosis	Testing	Treatment/ Care Decisions	Risk Assessment/ Prognosis/ Epidemiology	Pathophysiology/ Basic Science
POTASSIUM DISORDERS (<2% of exam)					
Hyperkalemia					
Pseudohyperkalemia					
Drug-induced			\checkmark		
Adrenal insufficiency		\checkmark			
Hypokalemia					
Vomiting			\checkmark		×
Diarrhea	\bigcirc	\checkmark	\checkmark		×
Renal losses					
Drug-induced	\checkmark				

ACID-BASE DISORDERS (4.5% of exam)

Metabolic acidosis					
Increased anion gap					
Lactic acidosis	\checkmark	\bigcirc		\checkmark	\checkmark
Ketoacidosis	\checkmark	\bigcirc		\checkmark	\checkmark
Hypoalbuminemia					
Normal anion gap					
Diarrhea			\checkmark		
Saline resuscitation-associated	\checkmark	\checkmark	\bigcirc		
Drug-induced					
Decreased anion gap in multiple LF				×	$\overline{\mathbf{x}}$



/ – Medium Importance: No more than 30% of questions will address topics and tasks with this designation.

X – **Low Importance**: <u>No</u> questions will address topics and tasks with this designation.

LF – Low Frequency: No more than 15% of questions will address topics with this designation, regardless of task or importance.

continuedRisk Assess(15% of exam)DiagnosisTestingTreatment/ Care DecisionsPrognosi Epidemiol	s/ Pathophysiol	
--	-----------------	--

ACID-BASE DISORDERS continued... (4.5% of exam)

Metabolic alkalosis					
Diuretic-induced (contraction alkalosis)	\bigcirc	\bigcirc	\bigcirc		\bigcirc
Other metabolic alkalosis topics (parenteral nutrition-induced, complications of citrate anticoagulation)		\checkmark		\bigotimes	\bigotimes
Mixed acid-base disorders	\checkmark	\bigcirc	\checkmark		
Respiratory acidosis	\checkmark	$\langle \mathbf{V} \rangle$	\checkmark	\checkmark	\checkmark
Respiratory alkalosis	\checkmark	\bigcirc	\checkmark		

TOXIC INGESTIONS (<2% of exam)

· · · · · · · · · · · · · · · · · · ·						
High osmolar gap						
Ethanol			\checkmark		\checkmark	
Methanol	LF		\checkmark			
Isopropyl alcohol	LF		\checkmark			×
Ethylene glycol	LF	\bigcirc	\checkmark	\bigcirc		
Propylene glycol	LF					\bigotimes
Normal osmolar gap						
Salicylates	LF	\checkmark	\bigcirc	\bigcirc		
CALCIUM, PHOSPHATE, AND	MAGNESIUM D	ISORDERS (<2	% of exam)			
Hyperphosphatemia					×	×
Hypophosphatemia			\checkmark			×
Hypercalcemia						
Hypocalcemia		\bigcirc	\checkmark	\bigcirc		
Hypermagnesemia	LF				×	×

Hypomagnesemia

 \bigcirc

 \bigcirc

 \bigcirc

 (\mathbf{X})

 \bigcirc



✓ – Medium Importance: No more than 30% of questions will address topics and tasks with this designation.

× – Low Importance: <u>No</u> questions will address topics and tasks with this designation.

LF – Low Frequency: No more than 15% of questions will address topics with this designation, regardless of task or importance.

RENAL, ENDOCRINE, AND METABOLIC DISORDERS continued				Treatment/	Risk Assessment/ Prognosis/	Pathophysiology/
(15% of exam)		Diagnosis	Testing	Care Decisions	Epidemiology	Basic Science
HYPERAMMONEMIA <2% of exam)						
Hyperammonemia						
DIABETES MELLITUS (EXCLUDING D	IABETI	C KETOACIDOSI	S) AND ENERG	Y METABOLISM (<	2% of exam)	
Hyperglycemic hyperosmolar state		\bigcirc	\bigcirc	\bigcirc	\checkmark	
Hyperglycemia		\bigcirc	\checkmark		\bigcirc	
Hypoglycemia		\bigcirc	\checkmark			
THYROID DISORDERS (<2% of exam)						
Hypothyroidism		\bigcirc	\checkmark	\bigcirc		
Hyperthyroidism	LF	\bigcirc	\checkmark			
Nonthyroidal illness syndrome						
PARATHYROID DISORDERS (<2% of e	exam)					
Parathyroid disorders	LF				\mathbf{x}	×
ADRENAL DISORDERS (<2% of exam,)					
Adrenal insufficiency						
Relative adrenal insufficiency in critical illness		\bigcirc	\checkmark	\bigcirc		
Adrenal excess	LF					×
Addison disease*	LF	\bigcirc			×	×
PITUITARY DISORDERS (<2% of exam	ı)					
Pituitary disorders	LF				\mathbf{x}	×
TUMOR-RELATED SYNDROMES (<29	% of exa	n)				
Tumor-related syndromes					×	×
ACUTE KIDNEY INJURY (<2% of exan	n)	I				
Contrast-induced		\bigcirc	\checkmark	\checkmark	\checkmark	
Pigment-induced	LF				×	×
Oncology-related	LF					×

*This topic was added or revised after the blueprint was reviewed by the Critical Care Medicine diplomates; it has been provisionally rated by the Critical Care Medicine Approval Committee, pending the next blueprint review.



× – Low Importance: <u>No</u> questions will address topics and tasks with this designation.

RENAL, ENDOCRINE, AND METABOLIC DISORDERS continued (15% of exam)	Diagnosis	Testing	Treatment/ Care Decisions	Risk Assessment/ Prognosis/ Epidemiology	Pathophysiology/ Basic Science
ACUTE KIDNEY INJURY continued (<2% o	f exam)				
Pre-renal disease		\checkmark	\bigcirc		
Intrinsic disease					
Glomerulonephritis LF					×
Interstitial nephritis					
Rhabdomyolysis	\bigcirc	\checkmark	\checkmark		
Acute tubular necrosis	\checkmark	\checkmark	\checkmark	\bigcirc	
Renal replacement therapy	\bigcirc	\checkmark	\bigcirc	\bigcirc	\bigcirc
CARDIOVASCULAR DISORDERS (17.5% of exam)	Diagnosis	Testing	Treatment/ Care Decisions	Risk Assessment/ Prognosis/ Epidemiology	Pathophysiology/ Basic Science
ACUTE CORONARY SYNDROMES (<2% of e Unstable angina pectoris and non-ST-seg		ocardial infar	ction (NSTEMI)		
Unstable angina pectoris	\bigcirc	\checkmark			
NSTEMI	\bigcirc	\checkmark	\checkmark	\checkmark	
ST-segment-elevation myocardial infarctic					
-					
Diagnosis		\bigcirc		Not Applicable	
	-			Not Applicable	
Diagnosis	-	 ✓ ✓ 		Not Applicable	
Diagnosis Complications					
Diagnosis Complications <i>Heart failure, cardiogenic shock</i>			-		
Diagnosis Complications Heart failure, cardiogenic shock Ventricular septal defect LF		 <td></td><td> <td></td></td>		 <td></td>	
Diagnosis Complications Heart failure, cardiogenic shock Ventricular septal defect LF Acute mitral regurgitation		 <td>Ø Ø</td><td> <td></td></td>	Ø Ø	 <td></td>	
Diagnosis Complications Heart failure, cardiogenic shock Ventricular septal defect Acute mitral regurgitation Ventricular wall rupture LF Electrical conduction		 <	 <td> <td> </td></td>	 <td> </td>	
DiagnosisDiagnosisComplicationsHeart failure, cardiogenic shockVentricular septal defectLFAcute mitral regurgitationVentricular wall ruptureLFElectrical conduction abnormalities		 <	 <td> <</td><td></td>	 <	



- Low Importance: No questions will address topics and tasks with this designation.

CARDIOVASCULAR DISORDERS continued (17.5% of exam)	Diagnosis	Testing	Treatment/ Care Decisions	Risk Assessment/ Prognosis/ Epidemiology	Pathophysiology/ Basic Science
ACUTE CORONARY SYNDROMES continue	d (<2% of exam)				1
Cocaine-related ischemia LF					
ARRHYTHMIAS (<2% of exam)					
Supraventricular tachycardia					
Atrial fibrillation	\bigcirc	\checkmark	\bigcirc	\bigcirc	
Atrial flutter	\bigcirc	\checkmark	\checkmark		
Multifocal atrial tachycardia	\bigcirc				
Pre-excitation syndromes LF				×	×
Paroxysmal supraventricular tachycardia (atrioventricular [AV] nodal reentrant tachycardia)	\checkmark			\bigcirc	
Ventricular arrhythmias					
Nonsustained ventricular tachycardia	\bigcirc	\checkmark	\bigcirc		
Monomorphic ventricular tachycardia	\bigcirc	\bigcirc	\bigcirc	\checkmark	
Polymorphic ventricular tachycardia	\bigcirc	\checkmark	\bigotimes	\checkmark	
Ventricular fibrillation	\bigcirc	\checkmark			
Accelerated idioventricular rhythm					
Long QT syndrome	\bigcirc				
Brugada syndrome LF				\mathbf{X}	$\overline{\mathbf{x}}$
Bradyarrhythmias					
Sinus bradycardia	\checkmark	\checkmark	\bigcirc		
Sinoatrial exit block LF				×	×
Atrioventricular block	\bigcirc				
Pacemakers and defibrillators					



- Low Importance: No questions will address topics and tasks with this designation.

CARDIOVASCULAR DISORDERS					Risk Assessment/	
continued (17.5% of exam)		Diagnosis	Testing	Treatment/ Care Decisions	Prognosis/ Epidemiology	Pathophysiology/ Basic Science
HEART FAILURE (3.5% of exam)		·				'
Heart failure with reduced ejection fraction (HFrEF)		\bigcirc	\bigcirc	\bigcirc	\bigcirc	\checkmark
Heart failure with preserved ejection fraction (HFpEF)		\bigcirc	\checkmark	\bigcirc		
HEMODYNAMIC MONITORING (5.5% d	of exam)					
Interpretation of arterial catheterization						
Pulmonary arterial catheterization	LF				\mathbf{x}	
Central venous catheterization		\bigcirc	\checkmark	\bigcirc		
Non-invasive hemodynamic monitoring		\bigcirc	\checkmark	\bigcirc	\mathbf{x}	$\overline{\mathbf{x}}$
VASCULAR DISORDERS (<2% of exam))					
Aortic dissection and aneurysm						
Aortic dissection	LF	\bigcirc	\checkmark	\checkmark		
Aortic aneurysm and transection	LF	\bigcirc	\checkmark	\bigcirc		
Shock		\bigcirc	\checkmark	\bigcirc		\bigcirc
Hypertensive emergency and urgency		\bigcirc	\bigcirc	\bigcirc	\bigcirc	
VALVULAR HEART DISEASE (<2% of ex	xam)					
Mitral stenosis	LF					
Aortic stenosis		\bigcirc	\checkmark	\checkmark		
Aortic regurgitation		\bigcirc				
Mitral regurgitation		\bigcirc	\checkmark			
Endocarditis		\bigcirc	\checkmark	\bigcirc		
Structural defects						
Atrial	LF					×
Ventricular	LF					$\overline{\mathbf{x}}$



 Eow Importance: No questions will address topics and tasks with this designation.

CARDIOVASCULAR DISORDERS continued (17.5% of exam)		Diagnosis	Testing	Treatment/ Care Decisions	Risk Assessment/ Prognosis/ Epidemiology	Pathophysiology Basic Science
PERICARDIAL DISEASE (<2% of exam	n)					
Pericarditis		\bigcirc				
Cardiac tamponade		\bigcirc	\checkmark	\bigcirc		
MYOCARDIAL DISEASE (<2% of exam	ı)					
Myocarditis	LF					×
Hypertrophic cardiomyopathy	LF					
Peripartum cardiomyopathy	LF					×
Stress cardiomyopathy						
MECHANICAL CIRCULATORY SUPPO	DRT (<2	% of exam)				
Intraaortic balloon pump (IABP) counterpulsation		\bigcirc		\checkmark		
Extracorporeal membrane oxygenation (ECMO)	LF					
Ventricular assist devices (VADs)	LF					
TRANSPLANTED HEART (<2% of exar	m)					
Transplanted heart	LF					\mathbf{x}
PULMONARY DISEASE (20% of exam)		Diagnosis	Testing	Treatment/ Care Decisions	Risk Assessment/ Prognosis/ Epidemiology	Pathophysiology Basic Science
RESPIRATORY FAILURE (2% of exam)		·				·
Hypoxemic		\bigcirc	\bigcirc		\bigcirc	\bigcirc
Hypercapnic		\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
MECHANICAL VENTILATION (6% of e.	xam)					
Initiation and maintenance of mecha	anical v	entilation				
Endotracheal intubation and tracheostomy		\bigcirc		\bigtriangledown	\bigcirc	
Modes		\bigcirc	\checkmark			\bigcirc
Oxygenation		\checkmark	\checkmark			\checkmark



/ – Medium Importance: No more than 30% of questions will address topics and tasks with this designation.

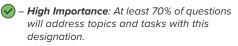
× – Low Importance: <u>No</u> questions will address topics and tasks with this designation.

PULMONARY DISEASE			T	Risk Assessment/	Dathankusisheer
(20% of exam)	Diagnosis	Testing	Treatment/ Care Decisions	Prognosis/ Epidemiology	Pathophysiology/ Basic Science
MECHANICAL VENTILATION continued (69	6 of exam)				
Initiation and maintenance of mechanical	ventilation continu	ued			
Ventilation (CO2)	\bigcirc	\checkmark			
Waveforms	\checkmark				
Respiratory system compliance (lung mechanics)	\bigcirc				
Complications of mechanical ventilation					
Barotrauma	\bigcirc	\checkmark			
Bronchopleural fistula	\bigcirc	\checkmark			
Ventilator-induced lung injury	\bigcirc	\checkmark		\checkmark	
Dynamic hyperinflation (auto-PEEP)	\bigotimes		\bigotimes	\bigcirc	\bigcirc
Intracardiac shunt LF					
Complications of endotracheal tubes and tracheostomy	\bigcirc	\checkmark	\bigcirc		
Liberation from mechanical ventilation	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Noninvasive ventilation	\bigcirc	\checkmark		\bigcirc	\bigcirc
AIRWAY DISEASE (2% of exam)					
Upper airway disease					
Upper airway obstruction	\bigcirc	\bigcirc			
Tracheoesophageal fistula	\bigcirc	\checkmark	\checkmark		

Intubation-related laryngeal edema	\checkmark		\checkmark		
Anaphylactic airway edema and increased negative inspiratory LF pressure	\checkmark	\bigcirc	\bigcirc		
Airway control	\checkmark	\bigcirc	\bigcirc		
Asthma	\bigcirc	\bigcirc	\checkmark	\checkmark	
Chronic obstructive pulmonary disease (COPD)	\bigcirc	\bigcirc	\bigcirc	\bigcirc	

 — Medium Importance: No more than 30% of questions will address topics and tasks with this designation.
 - Low Importance: No questions will address topics and tasks with this designation.

PULMONARY DISEASE continued (20% of exam)		Diagnosis	Testing	Treatment/ Care Decisions	Risk Assessment/ Prognosis/ Epidemiology	Pathophysiology/ Basic Science
PARENCHYMAL LUNG DISEASE (5	% of exam)				
Acute respiratory distress syndrome (ARDS)		\bigcirc	\checkmark	\bigcirc	\bigcirc	\bigtriangledown
Pneumonia						
Community-acquired pneumonia	(CAP)					
Typical bacterial		\checkmark	\checkmark	\bigcirc	\bigcirc	
Atypical bacterial		\bigcirc	\checkmark	\checkmark		
Aspiration		\bigcirc	\checkmark	\checkmark	\checkmark	
Viral		\checkmark	\checkmark	\bigcirc		×
Fungal	LF					
Hospital-acquired pneumonias a	nd immu	nocompromised	l hosts			
Ventilator-associated pneumon (VAP)	ia	\bigcirc		\bigcirc	\bigcirc	\checkmark
Hematogenous pneumonia	LF					×
Aspergillus pneumonia	LF					×
Non-Aspergillus pneumonia	LF					×
Pneumocystis jirovecii pneumonia	LF	\bigcirc	\checkmark	\bigotimes		
Viral pneumonia						$\overline{\mathbf{X}}$
Noncardiogenic pulmonary edema	a					
Neurogenic	LF	\checkmark				
Tocolytic	LF				\mathbf{x}	×
Negative-pressure	LF					×
High-altitude	LF				×	\bigotimes
Interstitial lung disease	LF	\bigcirc				
Diffuse alveolar hemorrhage		\checkmark	\checkmark			
Atelectasis		\bigcirc	\checkmark	$\overline{\mathbf{A}}$		



× – Low Importance: <u>No</u> questions will address topics and tasks with this designation.

PULMONARY DISEASE continued (20% of exam)	Diagnosis	Testing	Treatment/ Care Decisions	Risk Assessment/ Prognosis/ Epidemiology	Pathophysiology/ Basic Science
PULMONARY VASCULAR DISORDERS (2	% of exam)				
Pulmonary thromboembolism					
Deep venous thrombosis (DVT)	\bigcirc			\bigcirc	\bigcirc
Pulmonary embolism (PE)	\bigcirc	\bigcirc	\checkmark	\bigcirc	\checkmark
Nonthrombotic embolism					
Air Li	=	\bigcirc	\bigcirc		×
Tumor	=	\checkmark			\mathbf{X}
Septic	\bigcirc	\bigcirc	\checkmark		$\overline{\mathbf{x}}$
Pulmonary hypertension	\bigcirc	\bigcirc	\bigcirc		
Acute chest syndrome in sickle cell Li disease	=				\mathbf{x}
Pulmonary vasculitis		\checkmark			
Hepatopulmonary syndrome	\bigcirc	\checkmark			
HEMOPTYSIS (<2% of exam)					
Massive L	-	\bigcirc	\bigcirc		
Submassive	\bigcirc	\bigcirc			
PLEURAL DISORDERS (2% of exam)					
Pleural effusion					
Infectious (empyema)	\bigcirc	\checkmark	\checkmark		
Noninfectious		\bigcirc	\checkmark		
Pneumothorax	\bigcirc	\bigcirc		\bigcirc	
Hemothorax	\bigcirc	\bigcirc			



/ – Medium Importance: No more than 30% of questions will address topics and tasks with this designation.

X – **Low Importance**: <u>No</u> questions will address topics and tasks with this designation.

INFECTIOUS DISEASE (12% of exam)		Diagnosis	Testing	Treatment/ Care Decisions	Risk Assessment/ Prognosis/ Epidemiology	Pathophysiology/ Basic Science
SYSTEMIC INFECTIONS (<2% of example a strength of example a strength of example a strength of the strength of	m)					
Sepsis and septic shock		\bigcirc	\bigcirc	\bigcirc	\bigcirc	
Bacterial infections (typical and aty	pical)					
Tuberculosis	LF	\bigcirc	\checkmark	\bigcirc		
Atypical mycobacterial infections		\checkmark	\checkmark	\bigcirc		
Nocardiosis	LF					×
Listeriosis	LF					×
Brucellosis	LF	×	×	×	×	×
Typhoid fever	LF				×	×
Tularemia	LF	×	$\mathbf{\times}$	×	×	×
Plague	LF				×	×
Rickettsial or Rickettsial-like infection	ons					1
Rocky Mountain spotted fever	LF					×
Erlichiosis/Anaplasmosis	LF		×	\mathbf{x}	×	×
Spirochetal infections						
Lyme disease	LF	\checkmark				×
Leptospirosis	LF	×	×	×	×	×
Fungal infections		\checkmark	\checkmark	\bigcirc	\bigcirc	
Viral infections		\bigcirc	\checkmark			
Parasitic diseases						
Malaria	LF		\checkmark	×	×	×
Babesiosis	LF				×	×
Strongyloides hyperinfection syndrome	LF		\bigotimes	\bigotimes	\bigotimes	\bigotimes
Giardiasis	LF				×	×



/ – Medium Importance: No more than 30% of questions will address topics and tasks with this designation.

× – Low Importance: <u>No</u> questions will address topics and tasks with this designation.

INFECTIOUS DISEASE continued (12% of exam)		Diagnosis	Testing	Treatment/ Care Decisions	Risk Assessment/ Prognosis/ Epidemiology	Pathophysiology/ Basic Science
CENTRAL NERVOUS SYSTEM INFECT		<2% of exam)		l	1	
Meningitis						
Bacterial	_					
Meningococcal		\checkmark	\checkmark	\bigcirc	\bigcirc	
Pneumococcal		\checkmark	\checkmark	\checkmark	\bigcirc	
Syphilitic	LF					×
Listerial	LF	\checkmark	\checkmark	\bigcirc	\mathbf{X}	×
Fungal	LF			\bigcirc		×
Mycobacterial	LF					×
Encephalitis						
Viral						
Herpes simplex virus		\checkmark	\checkmark	\checkmark		×
West Nile virus	LF				×	×
Rabies	LF				×	×
Parasitic	LF			×	\mathbf{x}	$\overline{\mathbf{x}}$
Brain abscess	LF					×
Epidural abscess	LF	\checkmark	\checkmark	\bigcirc		×
HEAD, NECK, AND UPPER AIRWAY IN	IFECTI	ONS (<2% of exa	m)			
Eye and orbit	LF			\mathbf{x}	\mathbf{x}	×
Septic cavernous sinus thrombosis	LF				\mathbf{x}	×
Soft tissue infections of the head and neck		\bigcirc			\bigotimes	×
Sinusitis	LF	\checkmark	\checkmark	\mathbf{x}	$\overline{\mathbf{X}}$	×
Epiglottitis	LF	\checkmark	\checkmark			×



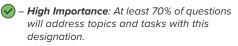
× – Low Importance: <u>No</u> questions will address topics and tasks with this designation.

LF – Low Frequency: No more than 15% of questions will address topics with this designation, regardless of task or importance.

INFECTIOUS DISEASE continued					Risk Assessment/	
(12% of exam)		Diagnosis	Testing	Treatment/ Care Decisions	Prognosis/ Epidemiology	Pathophysiology/ Basic Science
CARDIOVASCULAR INFECTIONS (<2%	of exa	ım)				
Pericarditis		\checkmark	\checkmark	\bigcirc		
Endocarditis		\bigcirc	\bigcirc		\bigcirc	
Device-related infections		\checkmark	\checkmark	\bigcirc	\bigcirc	
Catheter-related infections (peripheral, central venous, arterial, pulmonary artery)		\bigcirc	\bigcirc		\bigcirc	
GASTROINTESTINAL AND INTRA-ABE	OOMIN	AL INFECTIONS	(<2% of exam)			
Esophageal	LF				×	\mathbf{X}
Liver	LF					\mathbf{X}
Gallbladder and biliary		\checkmark	\checkmark	\bigcirc		
Pancreatitis						
Necrotizing (infected)		\bigcirc	\checkmark			
Pancreatic abscess	LF		\checkmark			$\overline{\mathbf{x}}$
Gastroenteritis						
Community-acquired bacterial		\checkmark	\bigcirc	\checkmark		
Colitis and diverticulitis						
Clostridioides (Clostridium) difficile-associated		\bigcirc	\checkmark	\bigcirc	\bigcirc	
Parasitic	LF			×	×	×
Necrotizing enterocolitis (typhlitis)	LF					$\mathbf{\times}$
Cytomegalovirus colitis	LF					\mathbf{X}
Peritonitis		\checkmark	\checkmark			
Small intestine and appendix						$\overline{\mathbf{x}}$
GENITOURINARY TRACT INFECTIONS	S (<2%	of exam)				
Cystitis, including catheter-related		\bigcirc	\checkmark	\bigcirc		\mathbf{x}
Pyelonephritis		\bigcirc	\checkmark	\checkmark		
Perinephric abscess	LF					×

JANUARY 2025

*This topic was added or revised after the blueprint was reviewed by the Critical Care Medicine diplomates; it has been provisionally rated by the Critical Care Medicine Approval Committee, pending the next blueprint review.



- Low Importance: No questions will address topics and tasks with this designation.

INFECTIOUS DISEASE continued (12% of exam)	Diagnosis	Testing	Treatment/ Care Decisions	Risk Assessment/ Prognosis/ Epidemiology	Pathophysiology, Basic Science
SOFT TISSUE, BONE, AND JOINT INFE	CTIONS (<2% of exam)				
Bites	LF 🖉				×
Septic arthritis	LF 🖌	\checkmark	\bigcirc		×
INFECTIONS ASSOCIATED WITH NON	ASCULAR TRANSCUT	ANEOUS CATI	HETERS (<2% of ex	am)	
Infections associated with nonvascular transcutaneous catheters					\bigotimes
ANTIMICROBIAL THERAPY AND RESIS	TANCE (<2% of exam)				
Nonallergic toxicity					×
Allergic reactions		\checkmark			
Resistant organisms	· · · ·				
Gram-positive organisms		\checkmark			
Gram-negative organisms	\bigcirc	\checkmark		\bigcirc	
Fungi and inherent susceptibility patterns and resistance			\bigcirc	\bigcirc	×
PHARMACOKINETICS (<2% of exam)					
Pharmacokinetics	Not Applicable				
INFECTIONS IN IMMUNOCOMPROMIS	ED HOSTS (<2% of exa	m)		1	1
Opportunistic infections in human immunodeficiency virus (HIV) infection	\bigotimes	\checkmark	\bigotimes		
Neutropenia		\checkmark			
Transplantation					
Solid organ	LF				×
Hematopoietic cell	LF 🖉				×
Asplenia	LF 🖉	\checkmark			\mathbf{x}
Corticosteroid immunosuppression					



- Low Importance: No questions will address topics and tasks with this designation.

INFECTIOUS DISEASE continued (12% of exam)	Diagnosis	Testing	Treatment/ Care Decisions	Risk Assessment/ Prognosis/ Epidemiology	Pathophysiology/ Basic Science
VIRULENCE FACTORS (<2% of exam)					
Toxic shock	\checkmark	\bigcirc	\bigcirc		
BIOTERRORISM (<2% of exam)					
Bioterrorism LF	\bigcirc				×
HOSPITAL INFECTION CONTROL (<2% of ex	(am)				
Hospital infection control	\bigcirc	\checkmark	\checkmark	\checkmark	
GASTROINTESTINAL DISORDERS (5% of exam)	Diagnosis	Testing	Treatment/ Care Decisions	Risk Assessment/ Prognosis/ Epidemiology	Pathophysiology/ Basic Science
ESOPHAGUS (<2% of exam)					
Corrosive injury LF					×
Perforation and rupture	\checkmark	\bigcirc	\bigcirc		\mathbf{x}
Fistula LF				×	×
STOMACH (<2% of exam)					
Peptic ulcer disease	\checkmark	\bigcirc	\bigcirc		
Non-peptic ulcer disease					
Perforation LF	\checkmark	\bigcirc	\bigcirc		×
Mechanical disorders					×
SMALL INTESTINE (<2% of exam)					
Perforation	\checkmark	\bigcirc	\bigcirc		$\overline{\mathbf{x}}$
Hemorrhage	\checkmark	\bigcirc	\bigcirc		$\overline{\mathbf{x}}$
Mechanical and motility disorders				\mathbf{x}	\mathbf{x}
Inflammatory bowel diseases					$\overline{\mathbf{x}}$



/ – Medium Importance: No more than 30% of questions will address topics and tasks with this designation.

X – **Low Importance**: <u>No</u> questions will address topics and tasks with this designation.

LF – Low Frequency: No more than 15% of questions will address topics with this designation, regardless of task or importance.

GASTROINTESTINAL DISORDERS continued (5% of exam)	Diagnosis	Testing	Treatment/ Care Decisions	Risk Assessment/ Prognosis/ Epidemiology	Pathophysiology/ Basic Science
LARGE INTESTINE (<2% of exam)					
Perforation	\checkmark	\checkmark			\bigotimes
Hemorrhage	\checkmark	\checkmark			$\overline{\mathbf{X}}$
Mechanical and motility disorders				×	×
Colonic ischemia	\bigcirc	\bigcirc			

LIVER (<2% of exam)

Hepatitis						
Viral						×
Autoimmune	LF				×	×
Alcohol- and drug-induced	·	\checkmark	\checkmark	\checkmark		
Toxin and solvent exposure	LF				×	×
Ischemic (shock liver)	·	\checkmark	\checkmark	\checkmark		
Budd-Chiari syndrome	LF				×	×
Portal hypertension						
Esophageal variceal hemorrhage		\checkmark	\bigcirc	\bigcirc	\checkmark	
Gastric variceal hemorrhage	·	\checkmark	\checkmark	\checkmark		
Spontaneous bacterial peritonitis	·	\checkmark	\checkmark	\checkmark		×
Hepatorenal syndrome	·	\checkmark	\checkmark	\checkmark		
Hepatopulmonary syndrome	LF					
Portopulmonary hypertension						×



/ – Medium Importance: No more than 30% of questions will address topics and tasks with this designation.

× – Low Importance: <u>No</u> questions will address topics and tasks with this designation.

LF – Low Frequency: No more than 15% of questions will address topics with this designation, regardless of task or importance.

GASTROINTESTINAL DISORDERS continued (5% of exam)		Diagnosis	Testing	Treatment/ Care Decisions	Risk Assessment/ Prognosis/ Epidemiology	Pathophysiology/ Basic Science
LIVER continued (<2% of exam)						
Fulminant hepatic failure						
Infection	LF	\bigcirc	\bigcirc			×
Alcohol- and drug-induced		\bigcirc	\bigcirc	\bigcirc		
Tumor	LF				×	×
Infiltrative diseases and nonalcoholic steatohepatitis (NASH)			\bigcirc			\bigotimes
Toxin exposure	LF				×	×
Encephalopathy		\bigcirc	\bigcirc	\bigcirc		
Cerebral edema		\bigcirc	\bigcirc			
Hypotension		\checkmark	\bigcirc			

PANCREAS (<2% of exam)

Pancreatitis						
Infectious	LF				×	×
Gallbladder disease		\checkmark	\checkmark	\checkmark		×
Tumor	LF				×	×
Alcohol- and drug-induced		\checkmark	\checkmark	\checkmark		
Toxin exposure	LF				×	×
Hypertriglyceridemia-induced	LF				×	×
Complications		\bigcirc	\bigcirc	\checkmark		×

GALLBLADDER AND BILIARY TRACT (<2% of exam)

Cholecystitis, calculous and acalculous	\bigcirc	\bigcirc	\bigotimes	\bigcirc	
Cholangitis	\bigcirc	\bigcirc	\bigcirc		$\overline{\mathbf{X}}$



/ – Medium Importance: No more than 30% of questions will address topics and tasks with this designation.

× – Low Importance: <u>No</u> questions will address topics and tasks with this designation.

NEUROLOGIC DISORDERS (9.5% of exam)	Diagnosis	Testing	Treatment/ Care Decisions	Risk Assessment/ Prognosis/ Epidemiology	Pathophysiology/ Basic Science
BRAIN DEATH (<2% of exam)					
Brain death	\checkmark	\checkmark	\checkmark	\bigcirc	
CEREBROVASCULAR DISEASE (2.5% of exal	n)				
Ischemic stroke	\checkmark	\bigcirc	\bigcirc	\bigcirc	
Intracerebral hemorrhage	\bigcirc	\checkmark	\bigcirc		
Subarachnoid hemorrhage and aneurysm					
Complications					
Vasospasm	\checkmark	\checkmark	\bigcirc		
Other subarachnoid hemorrhage and aneurysm topics (hydrocephalus)	\bigotimes	\checkmark	\bigcirc		
Cerebral vein and sinus thrombosis LF					×
SEIZURES AND STATUS EPILEPTICUS (<2%	of exam)			1	
Seizures complicating critical illness					
Seizures during critical illness	\bigcirc	\checkmark			
Pre-existing epilepsy in critically ill patients					$\overline{\mathbf{x}}$
Status epilepticus					
Generalized convulsive status epilepticus	\bigcirc	\bigcirc	\bigcirc	\checkmark	
Nonconvulsive status epilepticus	\bigcirc	\checkmark			
Electroencephalogram (EEG) monitoring in the intensive care unit (ICU)					\bigotimes
Repetitive seizures					×
NEUROGENIC PULMONARY EDEMA (<2% o	f exam)				
Neurogenic pulmonary edema					×



× – Low Importance: <u>No</u> questions will address topics and tasks with this designation.

LF – Low Frequency: No more than 15% of questions will address topics with this designation, regardless of task or importance.

NEUROLOGIC DISORDERS continued (9.5% of exam)		Diagnosis	Testing	Treatment/ Care Decisions	Risk Assessment/ Prognosis/ Epidemiology	Pathophysiology Basic Science
NEUROMUSCULAR RESPIRATORY	FAILURE	(<2% of exam)				I
Guillain-Barre syndrome	LF	\bigcirc	\checkmark			
Critical illness myopathy		\bigcirc	\bigcirc		\bigcirc	
Critical illness polyneuropathy		\bigcirc	\bigcirc			
Tetanus	LF					×
Myasthenia gravis	LF	\bigcirc	\bigcirc			×
Botulism	LF				×	×
INCREASED INTRACRANIAL PRES	SURE (<2	% of exam)		·		
Increased intracranial pressure		\bigcirc	\bigcirc			
HEAD TRAUMA (<2% of exam)						
Nonpenetrating head trauma						×
Penetrating head trauma	LF	\checkmark			×	×
SPINAL CORD INJURY (<2% of exar	n)					<u>`</u>
Cervical spine injury	LF					×
Thoracic spine injury	LF					×
COMA, ENCEPHALOPATHY, AND D	ELIRIUM	(<2% of exam)				
Anoxic/hypoxic brain injury		\bigcirc	\checkmark	\checkmark	\bigcirc	×
Metabolic encephalopathy		\bigcirc	\bigcirc	\bigcirc	\bigcirc	
Drug-induced encephalopathy		\bigcirc	\bigcirc	\bigcirc		
Drug and alcohol withdrawal		\bigcirc	\checkmark	\bigcirc	\bigcirc	
ICU-related delirium		\bigcirc	\checkmark	\bigcirc	\bigcirc	
Targeted temperature manage- ment*		\bigcirc	\checkmark	\bigcirc	\bigcirc	\bigcirc
ANALGESIA, SEDATION, AND NEU	ROMUSC	ULAR JUNCTION	N BLOCKADE (2	2% of exam)		
Analgesia		\bigcirc	\checkmark			
Sedation		\bigcirc	\bigcirc			

Neuromuscular junction blockade

*This topic was added or revised after the blueprint was reviewed by the Critical Care Medicine diplomates; it has been provisionally rated by the Critical Care Medicine Approval Committee, pending the next blueprint review.

 \checkmark

 \checkmark



/ – Medium Importance: No more than 30% of questions will address topics and tasks with this designation.

× – Low Importance: <u>No</u> questions will address topics and tasks with this designation.

LF – Low Frequency: No more than 15% of questions will address topics with this designation, regardless of task or importance.

HEMATOLOGIC AND ONCOLOGIC DISORDERS (5.5% of exam)	Diagnosis	Testing	Treatment/ Care Decisions	Risk Assessment/ Prognosis/ Epidemiology	Pathophysiology/ Basic Science
RED BLOOD CELL DISEASES (<2% of exam)		·		·
Anemias	\bigcirc	\bigcirc	\bigcirc		
Polycythemias LF					×
Hemoglobinopathies LF				×	×
WHITE BLOOD CELL DISEASES (<2% of exa	am)				
Leukopenia (immune, drug-related)					\mathbf{X}
Leukemias LF					×
Lymphoma					×
Multiple myeloma LF					×
PLATELET DISORDERS (<2% of exam)				1	1
Thrombocytosis					×
Thrombocytopenia	\bigcirc	\bigcirc		\bigcirc	
Platelet dysfunction					
COAGULOPATHIES (<2% of exam)	·,			,	
Disseminated intravascular coagulation (DIC)	\bigcirc	\checkmark	\bigcirc	\bigcirc	\checkmark
Factor deficiencies LF		\checkmark			$\mathbf{\times}$
Anticoagulant associated coagulopathy	\bigcirc	\checkmark	\bigcirc	\bigcirc	
Hypothermia					
Hemorrhagic shock	\bigcirc	\bigcirc	\bigcirc	\bigcirc	
HYPERCOAGULABLE STATES (<2% of exam	n)				
Proteins C and S, and antithrombin deficiency	\bigcirc		\bigcirc		×
Factor V Leiden mutation					
Malignancy	\bigcirc	\checkmark	\checkmark		×
Hormone replacement therapy and oral contraceptives	\checkmark			\bigotimes	\bigotimes
Antiphospholipid antibody LF					×

*This topic was added or revised after the blueprint was reviewed by the Critical Care Medicine diplomates; it has been provisionally rated by the Critical Care Medicine Approval Committee, pending the next blueprint review.



/ – Medium Importance: No more than 30% of questions will address topics and tasks with this designation.

× – Low Importance: <u>No</u> questions will address topics and tasks with this designation.

HEMATOLOGIC AND ONCOLOGIC DISORDERS continued	;			Treatment/	Risk Assessment/ Prognosis/	Pathophysiology,
(5.5% of exam)		Diagnosis	Testing	Care Decisions	Epidemiology	Basic Science
TRANSFUSION MEDICINE (<2% of exa	ım)					
Blood products		\checkmark	\checkmark	\bigcirc	\bigcirc	
Apheresis	LF					×
Adverse effects		\bigcirc	\checkmark	\bigcirc		
Massive blood transfusion		\bigcirc	\checkmark	\bigcirc	\checkmark	
Transfusion refusal	LF	×	×		×	Not Applicable
SOLID TUMORS (<2% of exam)						
Solid tumors						×
ONCOLOGIC SYNDROMES (<2% of ex	am)					
Superior vena cava syndrome	LF	\checkmark	\bigcirc	\bigcirc		
Tumor lysis syndrome	LF	\bigcirc	\bigcirc	\bigcirc		
Spinal cord compression	LF	\bigcirc	\bigcirc	\bigcirc		
Hyperviscosity syndrome	LF					×
Hypercalcemia			\checkmark	\bigcirc		
HEMATOPOIETIC CELL TRANSPLANT	ATION	(<2% of exam)				
Graft-versus-host disease	LF				\mathbf{x}	×
Hepatic sinusoidal obstruction syndrome (veno-occlusive disease)	LF	\bigcirc			\bigotimes	\bigotimes
Respiratory distress		\bigcirc	\checkmark	\bigcirc	\bigcirc	
COMPLICATIONS OF IMMUNOSUPPF	ESSIV	E DRUGS AND C	HEMOTHERAP	Y (<2% of exam)		
Cyclosporine	LF				$\overline{\mathbf{X}}$	×
Corticosteroids		\checkmark	\bigcirc		\bigcirc	
Alkylating agents	LF		×	×	$\overline{\mathbf{X}}$	×
Methotrexate	LF					×



X – Low Importance: <u>No</u> questions will address topics and tasks with this designation.

LF – Low Frequency: No more than 15% of questions will address topics with this designation, regardless of task or importance.

HEMATOLOGIC AND ONCOLOGIC DISORDERS continued (5.5% of exam)	Diagnosis	Testing	Treatment/ Care Decisions	Risk Assessment/ Prognosis/ Epidemiology	Pathophysiology/ Basic Science
---	-----------	---------	------------------------------	--	-----------------------------------

COMPLICATIONS OF IMMUNOSUPPRESSIVE DRUGS AND CHEMOTHERAPY continued... (<2% of exam)

Sirolimus	LF		×	\mathbf{x}	×	\bigotimes
Tacrolimus	LF				×	×
Mycophenolate mofetil	LF				×	×
Azathioprine	LF				\mathbf{x}	\bigotimes
SURGERY, TRAUMA, AND TRANSPLANTATION (7% of exam)		Diagnosis	Testing	Treatment/ Care Decisions	Risk Assessment/ Prognosis/ Epidemiology	Pathophysiology/ Basic Science

CARDIOVASCULAR AND VASCULAR SURGERY (<2% of exam)

Cardiac	\bigcirc	\checkmark		
Mediastinal disease				$\overline{\mathbf{x}}$
Vascular, aortic and peripheral				$\overline{\mathbf{x}}$
Thoracic	\bigcirc			\bigotimes

ABDOMINAL AND GASTROINTESTINAL (<2% of exam)

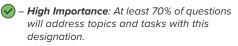
Acute abdomen	\bigcirc	\checkmark	\checkmark	\checkmark
Postoperative complications	\checkmark	\checkmark	\checkmark	
Mesenteric ischemia and ischemic colitis	\bigcirc	\bigcirc	\bigcirc	\bigotimes
Abdominal compartment syndrome LF	\bigcirc	\checkmark	\checkmark	

GENITOURINARY AND OBSTETRIC EMERGENCIES (<2% of exam)

Urologic		×	×
Obstetric LF		$\overline{\mathbf{x}}$	$\overline{\mathbf{x}}$

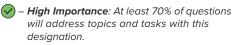
SKIN AND SOFT TISSUES AND EXTREMITIES (<2% of exam)

Soft tissue infections		\checkmark	\checkmark	\checkmark	\mathbf{x}
Crush injury, myonecrosis, and rhabdomyolysis		\bigcirc	\bigcirc	\bigcirc	\bigotimes
Necrotizing fasciitis	LF	\checkmark	\checkmark	\checkmark	
Acute compartment syndrome	LF	\bigcirc	\bigcirc	\bigcirc	×



 Eow Importance: No questions will address topics and tasks with this designation.

SURGERY, TRAUMA, AND TRANSPLANTATION continued (7% of exam)		Diagnosis	Testing	Treatment/ Care Decisions	Risk Assessment/ Prognosis/ Epidemiology	Pathophysiology/ Basic Science
ENVIRONMENTAL INJURY (3.5% of ex	am)					
Inhalation injury	LF	\checkmark				×
Hypothermia	LF	\checkmark	\bigcirc			
Submersion injury, near-drowning, and diving trauma	LF				\bigotimes	\bigotimes
Altitude injury	LF				\mathbf{X}	$\overline{\mathbf{X}}$
Electrical injury and lightning strike	LF		×		×	\mathbf{x}
Radiation injury	LF				×	×
Bioterrorism, noninfectious	LF				×	×
Heatstroke	LF					×
Burn injury	LF					
GENERAL POSTOPERATIVE MANAGE	MENT	(<2% of exam)				
General postoperative management		\checkmark	\checkmark	\checkmark		
TRAUMA (<2% of exam)				1		
Flail chest	LF	\bigcirc	\bigcirc	\checkmark		
Pulmonary contusion		\checkmark				
Hemothorax		\checkmark	\bigcirc	\bigcirc		×
Great vessel injury	LF	\bigcirc		\bigcirc		×
Airway injury, tracheobronchial laceration and rupture	LF	\bigcirc	\bigcirc	\bigcirc		
Foreign body aspiration	LF	\checkmark	\checkmark	\checkmark		
Blunt myocardial injury	LF				×	×
Fat embolism syndrome	LF					×
Intra-abdominal injury	LF					×
Massive bleeding		\bigcirc	\bigcirc	\checkmark		
Shock		\checkmark	\checkmark			\bigcirc



- Low Importance: No questions will address topics and tasks with this designation.

LF – *Low Frequency*: No more than 15% of questions will address topics with this designation, regardless of task or importance.

SURGERY, TRAUMA, AND TRANSPLANTATION continued (7% of exam)		Diagnosis	Testing	Treatment/ Care Decisions	Risk Assessment/ Prognosis/ Epidemiology	Pathophysiology/ Basic Science
TRANSPLANTATION (<2% of exam)						
Heart	LF		×		×	×
Lung	LF				×	×
Liver	LF				×	×
Kidney	·				×	×
Pancreas and intestines	LF	×	×	×	×	×
Organ donation		\bigcirc		\bigcirc		×
PHARMACOLOGY AND TOXICO (4.5% of exam)	LOGY	Diagnosis	Testing	Treatment/ Care Decisions	Risk Assessment/ Prognosis/ Epidemiology	Pathophysiology/ Basic Science
BASIC PHARMACOLOGIC PRINCIP	L ES (<2	% of exam)		'	•	
Pharmacokinetics		Not Applicable		\bigcirc		
Dosing adjustments for disease sta	ates	\bigcirc	\bigcirc	\bigcirc		
DRUG-DRUG INTERACTIONS (<2%	of exam)				
Drug-drug interactions		\checkmark		\checkmark		
ADVERSE EFFECTS OF DRUGS (<29	% of exa	m)				
Immunologic allergic reactions						
Anaphylaxis	LF	\checkmark		\bigcirc		
Thrombotic thrombocytopenic purpura	LF	\bigcirc		\bigcirc		
Stevens-Johnson syndrome	LF	\checkmark		\checkmark		$\overline{\mathbf{X}}$
Nonimmunologic adverse effects c	of drugs	3				
Electrolyte and metabolic		\checkmark	\bigcirc		\bigcirc	\bigcirc
Hyperthermia	LF					
Neurologic			\bigcirc	\bigcirc		
Renal		\checkmark	\bigcirc		\bigcirc	
Hematologic		\checkmark	\bigcirc			
Cardiac		\checkmark	\bigcirc		\bigcirc	

JANUARY 2025

*This topic was added or revised after the blueprint was reviewed by the Critical Care Medicine diplomates; it has been provisionally rated by the Critical Care Medicine Approval Committee, pending the next blueprint review.



/ – Medium Importance: No more than 30% of questions will address topics and tasks with this designation.

X – **Low Importance**: <u>No</u> questions will address topics and tasks with this designation.

PHARMACOLOGY AND TOXICOL continued (4.5% of exam)	.OGY	Diagnosis	Testing	Treatment/ Care Decisions	Risk Assessment/ Prognosis/ Epidemiology	Pathophysiology/ Basic Science
TOXICOLOGY, DRUG OVERDOSE, AN	ND POI	SONING (<2% of	exam)			
Acetaminophen		\checkmark		\checkmark		
Beta-adrenergic blockers		\checkmark		\checkmark		
Calcium channel blockers		\checkmark		\checkmark		
Cyanide	LF			\checkmark		$\overline{\mathbf{x}}$
Tricyclic antidepressants				\checkmark		
Nitroprusside	LF				\mathbf{X}	×
Oral antihyperglycemic agents		\checkmark		\checkmark		
Organophosphates	LF					×
Salicylates	LF	\checkmark		\checkmark		
Sarin (nerve) gas	LF	$\overline{\mathbf{x}}$	×	×	\mathbf{X}	×
Selective serotonin reuptake inhibitors (SSRIs)		\bigcirc	\bigcirc	\bigcirc	\checkmark	
Additional psychotropic drugs						
Scombroid food poisoning	LF	$\overline{\mathbf{X}}$	×	\mathbf{x}	\mathbf{X}	\mathbf{x}
Muscle relaxants	LF					\mathbf{x}
Xanthines	LF	×	×	×	\mathbf{X}	×
Iron toxicity	LF	\mathbf{x}	×	×	×	×
Antibiotic toxicity		\checkmark		\checkmark		
Carbon monoxide	LF	\checkmark		\checkmark		
Methemoglobinemia	LF	\checkmark		\checkmark		



- Low Importance: No questions will address topics and tasks with this designation.

RESEARCH, ADMINISTRATION, AND ETHICS (2% of exam)	Diagnosis	Testing	Treatment/ Care Decisions	Risk Assessment/ Prognosis/ Epidemiology	Pathophysiology/ Basic Science	
INTENSIVE CARE UNIT (ICU) ADMINISTRATI	ON (<2% of exam))				
Regulatory issues	– Task not otherwise specified					
Intensive care unit (ICU) physical LF design		/ – T	ask not otherwise	specified		
Continuous quality improvement and patient safety		 ✓ – T. 	ask not otherwise	specified		
Isolation	\bigcirc	\bigcirc			$\overline{\mathbf{x}}$	
STAFFING ISSUES (<2% of exam)						
Physician extenders in the intensive care unit (ICU)		/ – T	ask not otherwise	specified		
Interactions between hospitalists and intensivists		- T	ask not otherwise	specified		
MEDICOLEGAL INTERACTIONS (<2% of example 2%)	n)					
Medicolegal interactions		() – T	ask not otherwise	specified		
ETHICAL CONSIDERATIONS (<2% of exam)						
Patient autonomy	\checkmark	\checkmark	\bigcirc	\bigcirc		
Legal surrogates	\bigcirc	\bigcirc				
Informed consent for medical procedures	\bigcirc	\checkmark	\checkmark			
BRAIN DEATH (<2% of exam)						
Brain death	\bigcirc	\bigcirc	\bigcirc			
CONFLICT OF INTEREST (<2% of exam)						
Conflict of interest LF						
ADVANCE DIRECTIVES (<2% of exam)						
Advance directives	\bigcirc	\bigcirc				
PATIENT CONFIDENTIALITY AND HEALTH IN (<2% of exam)	SURANCE POR	TABILITY AND	ACCOUNTABILITY	ACT (HIPAA) REG	ULATIONS	
Patient confidentiality and Health Insurance Portability and Accountability Act (HIPAA) regulations	\bigotimes	\bigcirc	\bigcirc	\bigcirc		



× – Low Importance: <u>No</u> questions will address topics and tasks with this designation.

RESEARCH, ADMINISTRATION, AND ETHICS continued (2% of exam)		Diagnosis	Testing	Treatment/ Care Decisions	Risk Assessment/ Prognosis/ Epidemiology	Pathophysiology/ Basic Science	
END-OF-LIFE ISSUES (<2% of exam)							
End-of-life issues		\bigcirc	\bigcirc	\checkmark	\bigcirc	\checkmark	
ORGAN DONATION (<2% of exam)							
Organ donation							
MEDICAL FUTILITY (<2% of exam)							
Medical futility		\checkmark	\checkmark	\bigcirc	\bigcirc		
MEDICAL RESEARCH (<2% of exam)							
Clinical trial design	LF						
Statistical analysis	LF						
Institutional review boards	LF						
TEACHING AND EDUCATION (<2% of	exam)						
Teaching formats	LF	– Task not otherwise specified					
PSYCHOSOCIAL ISSUES (<2% of exar	n)						
Professionalism				\bigcirc		Not Applicable	
Intensive care unit (ICU) burnout				\checkmark		Not Applicable	
Impaired health-care professional	LF					Not Applicable	



- Low Importance: No questions will address topics and tasks with this designation.

CRITICAL CARE ULTRASOUND SCANNING (2% of exam)	Diagnosis	Testing	Treatment/ Care Decisions	Risk Assessment/ Prognosis/ Epidemiology	Pathophysiology/ Basic Science
CARDIAC (<2% of exam)					
Cardiac	\bigcirc	\checkmark	\bigcirc		
PULMONARY (<2% of exam)					
Pulmonary	\bigcirc			×	
ABDOMINAL (<2% of exam)					
Abdominal					$\overline{\mathbf{x}}$
NEUROLOGIC (<2% of exam)					
Neurologic LF	\mathbf{x}	×	×	×	\bigotimes
VASCULAR (<2% of exam)					
Vascular	\bigcirc	\bigcirc	\bigcirc		