# Critical Nursing Assessment & Intervention Practice Questions

This presentation covers key nursing assessment questions frequently tested on exams. Each slide presents a different clinical scenario requiring critical thinking and application of nursing knowledge. Use these practice questions to evaluate your understanding of post-administration monitoring, emergency recognition, lab value interpretation, and specialized patient care.


# Post-Administration Assessment of IV Morphine

## Question

What is the most appropriate action after administering IV morphine?

- Monitor heart rate
- Assess for urinary retention
- Recheck pain level in 30 minutes
- Increase IV fluids

## Explanation

The correct answer is: **Recheck pain level in 30 minutes**

While all options have merit in post-opioid administration, evaluating the effectiveness of the intervention is paramount. IV morphine typically reaches peak effect within 20 minutes, making the 30-minute mark optimal for reassessment.

This follows the nursing process: after implementation (giving the medication), evaluation must occur to determine if further intervention is needed.

# Cast Complications: Recognizing Emergencies

## 1 Question: Which finding in a patient with a casted leg requires immediate attention?

The correct answer is: **Pale toes and diminished pulse**

## 2 Compartment Syndrome: A Medical Emergency

This potentially limb-threatening condition occurs when pressure within a confined space compromises circulation and tissue viability.

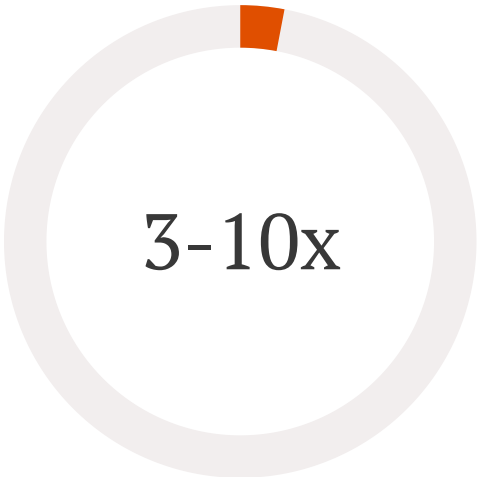
The 6 P's of compartment syndrome:

- Pain (disproportionate to injury)
- Pallor (pale appearance)
- Pulselessness (diminished pulse)
- Paresthesia (numbness/tingling)
- Paralysis (late sign)
- Pressure (tight feeling)

## 3 Immediate Interventions

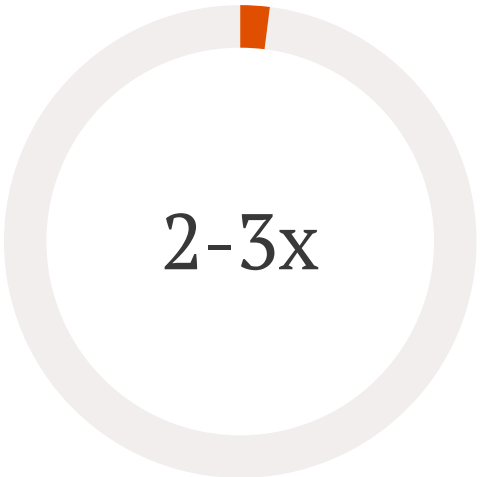
If suspected, notify provider immediately, elevate limb to heart level, loosen/split cast if ordered, and prepare for possible fasciotomy.

# Critical Lab Values in Pancreatitis



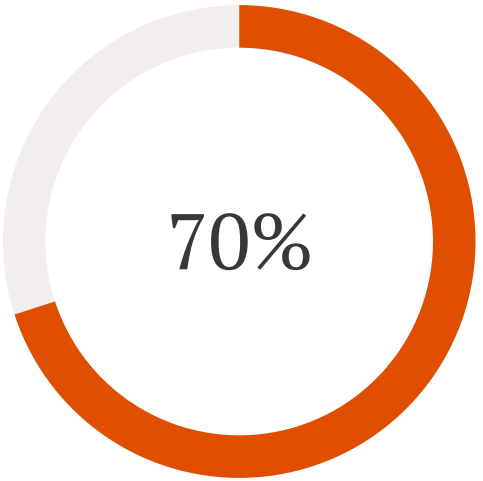

## Elevated Lipase

The most specific laboratory indicator for pancreatic inflammation, typically rising to 3-10 times normal levels within 4-8 hours of symptom onset




## Elevated Amylase

Less specific than lipase but rises faster; typically 2-3 times normal levels




## Hypocalcemia

Present in approximately 70% of severe cases due to calcium soap formation in areas of fat necrosis

When assessing pancreatitis, elevated lipase is the most specific indicator. Unlike amylase which is produced by multiple organs, lipase is primarily pancreatic in origin, making it the gold standard for diagnosis. Levels typically remain elevated longer than amylase, providing a longer diagnostic window.

# Ileostomy Care and Monitoring

An ileostomy creates an opening from the ileum to the abdominal wall, bypassing the large intestine where water absorption normally occurs.

## Critical Nursing Considerations

The correct assessment focus is: **Liquid stool and fluid loss**

Ileostomy output characteristics:

- Consistency: Liquid to paste-like
- Volume: 500-800 mL/day initially
- Color: Yellow-green to brown
- Odor: More pronounced than colostomy

Complications of excessive output include dehydration, electrolyte imbalances (particularly sodium and potassium), and acid-base disturbances. Accurate intake and output monitoring is essential.

# Post-Operative Abdominal Surgery Complications

## No Urine Output in 6 Hours

Most concerning finding requiring immediate intervention

May indicate:

- Acute kidney injury
- Hypoperfusion
- Urinary retention
- Obstructed catheter

## Assessment Findings

Check for:

- Bladder distention
- Vital sign changes
- Signs of dehydration
- Kinks in urinary catheter

## Interventions

Immediate actions:

- Notify provider stat
- Check catheter patency
- Review fluid status
- Prepare for possible bladder scan

While other post-operative findings like mild nausea, hypoactive bowel sounds, and pain are common and expected, oliguria or anuria represents a true emergency that requires prompt intervention to prevent permanent kidney damage.

# Medication Safety: Furosemide Administration

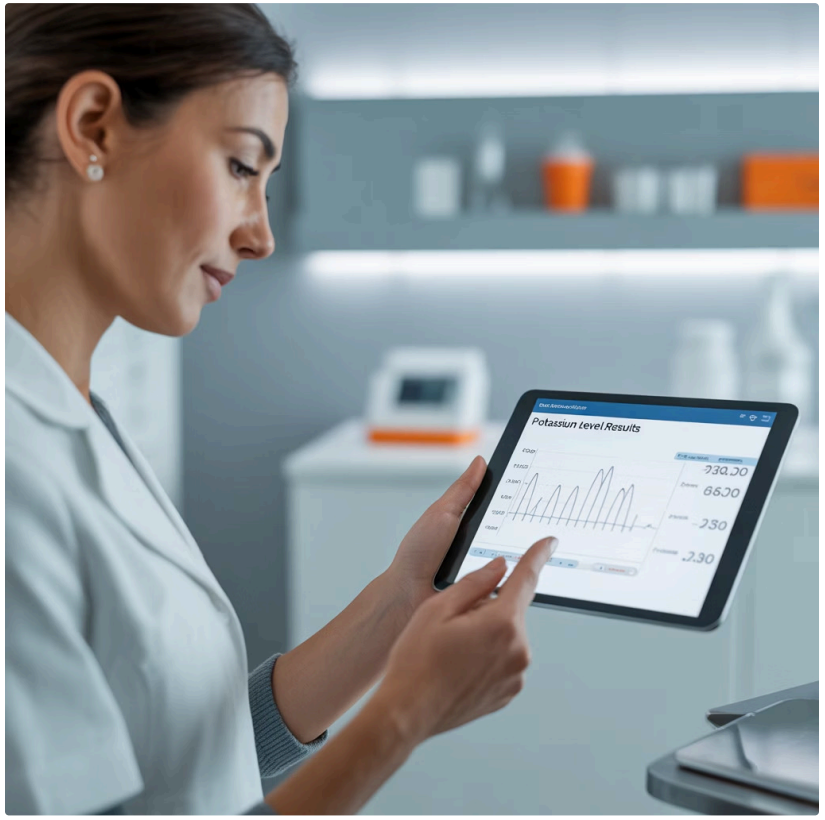
## Prioritizing Laboratory Monitoring

The correct pre-administration assessment is: **Check potassium level**

Furosemide (Lasix) is a loop diuretic that inhibits sodium and chloride reabsorption in the ascending loop of Henle, leading to significant electrolyte losses, particularly potassium.

## Critical Nursing Considerations:

- Monitor for hypokalemia (muscle weakness, cramps, cardiac arrhythmias)
- Assess for hyponatremia, especially in elderly patients
- Evaluate renal function before administration
- Assess for orthostatic hypotension due to volume depletion




Hypokalemia symptoms include muscle weakness, cramping, paralysis, respiratory depression, and cardiac arrhythmias including fatal dysrhythmias.

# Early Warning Signs of Colorectal Cancer


## Change in Bowel Habits

Persistent changes in stool consistency, frequency, or shape (particularly narrowing) that last more than a few weeks

## Rectal Bleeding

Blood in stool or toilet bowl, ranging from bright red to very dark

## Unexplained Weight Loss

Unintentional weight loss of 10+ pounds without dietary changes

A change in bowel habits is often the earliest detectable sign of colorectal cancer. Patients may report alternating diarrhea and constipation, a feeling of incomplete evacuation, or pencil-thin stools. The American Cancer Society recommends screening beginning at age 45 for average-risk individuals.

# Tuberculosis: Proper Infection Control Measures

## Required Personal Protective Equipment

The correct PPE requirement is: **N95 respirator and negative pressure room**

Tuberculosis is caused by *Mycobacterium tuberculosis* and spreads through airborne droplet nuclei when infected individuals cough, speak, or sneeze. These particles can remain suspended in air for hours.

### Complete Airborne Precautions Include:

- NIOSH-approved N95 respirator (or higher)
- Negative pressure isolation room
- Minimum 6-12 air exchanges per hour
- Air exhausted directly outside or HEPA-filtered
- Door kept closed at all times


Standard surgical masks are insufficient protection against TB. N95 respirators must be properly fit-tested annually to ensure effective protection.

# Electrolyte Imbalances: Recognizing Hypokalemia

<3.5

mEq/L Serum Level

Normal potassium range is 3.5-5.0 mEq/L; levels below 3.5 indicate hypokalemia

20%

Hospitalized Patients

Approximately 20% of hospitalized patients develop hypokalemia, often due to medications or GI losses

2.5

Critical Level

Levels below 2.5 mEq/L are considered severe and life-threatening

## Clinical Manifestations of Hypokalemia

### Neuromuscular Effects

- Muscle weakness and cramping
- Fatigue
- Paralytic ileus
- Respiratory depression

### Cardiovascular Effects

- Irregular heart rate/arrhythmias
- ECG changes (U waves, flattened T waves)
- Hypotension
- Increased digoxin sensitivity

Common causes include diuretics, GI losses (vomiting, diarrhea), renal losses, poor intake, and certain medications. Treatment focuses on potassium replacement and addressing the underlying cause.